VIDEOCONFERENCE MEETING

STATE OF CALIFORNIA

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BOARD OF ADMINISTRATION

INVESTMENT COMMITTEE

OPEN SESSION

ZOOM PLATFORM

TUESDAY, FEBRUARY 15, 2022 9:00 A.M.

JAMES F. PETERS, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 10063

## APPEARANCES

COMMITTEE MEMBERS:

David Miller, Chairperson

Rob Feckner, Vice Chairperson

Fiona Ma, represented by Frank Ruffino

Lisa Middleton

Eraina Ortega

Jose Luis Pacheco

Theresa Taylor

Shawnda Westly

#### STAFF:

Betty Yee

Marcie Frost, Chief Executive Officer

Dan Bienvenue, Interim Chief Investment Officer

Matt Jacobs, General Counsel

Kelly Fox, Chief, Stakeholder Relations

Pam Hopper, Committee Secretary

Simiso Nzima, Managing Investment Director

Arnie Phillips, Interim Deputy Chief Investment Officer

Lauren Rosborough Watt, Investment Director

# APPEARANCES CONTINUED

ALSO PRESENT:

Sandy Emerson, Fossil Free California

Carrie Gibbs

Steve McCourt, Meketa Investment Group

Jim McRitchie

Sarah Theiss, Fossil Free California

Tom Toth, Wilshire Associates

Dr. Teddy Usude

Jim Xu

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## PROCEEDINGS 1 CHAIRPERSON TAYLOR: This is opening the open 2 3 session of the Investment Committee. And first order of business is roll call, please. Ms. Hopper. 5 COMMITTEE SECRETARY HOPPER: Theresa Taylor? 6 CHAIRPERSON TAYLOR: Here. 7 8 COMMITTEE SECRETARY HOPPER: Rob Feckner? 9 COMMITTEE MEMBER FECKNER: Good morning. COMMITTEE SECRETARY HOPPER: Frank Ruffino for 10 Fiona Ma? 11 ACTING COMMITTEE MEMBER RUFFINO: Present. 12 COMMITTEE SECRETARY HOPPER: Lisa Middleton? 1.3 COMMITTEE MEMBER MIDDLETON: Present. 14 COMMITTEE SECRETARY HOPPER: David Miller? 15 16 COMMITTEE MEMBER MILLER: Here. COMMITTEE SECRETARY HOPPER: Eraina Ortega? 17 COMMITTEE MEMBER ORTEGA: Here. 18 COMMITTEE SECRETARY HOPPER: Jose Luis Pacheco? 19 20 COMMITTEE MEMBER PACHECO: Present. COMMITTEE SECRETARY HOPPER: Ramon Rubalcava? 21 CHAIRPERSON TAYLOR: Excused. 22 23 COMMITTEE SECRETARY HOPPER: Shawnda Westly? COMMITTEE MEMBER WESTLY: Here. 24 25 COMMITTEE SECRETARY HOPPER: Betty Yee?

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COMMITTEE MEMBER YEE: Here.
1
             COMMITTEE SECRETARY HOPPER: Madam President, I
2
   have all in attendance with Ramon Rubalcava being excused.
3
             CHAIRPERSON TAYLOR: Thank you, Ms. Hopper.
             Our next order of business is the election of the
5
    Chair and the Vice Chair. Oh, Mr. Feckner, go ahead.
6
7
             Oh, I am taking nominations -- I know what you're
8
    doing.
           I'm taking nominations for the Chair of
9
    Investments.
             COMMITTEE MEMBER FECKNER: Thank you very much.
10
    I'd be honored to nominate David Miller for Chair of the
11
    Investment Committee.
12
             CHAIRPERSON TAYLOR: All right. We have David
13
   Miller has been nominated for Chair of the Investment
14
    Committee. Are there any other nominations?
15
16
             Any other nominations?
17
             Any other nominations?
             Okay. Seeing no other requests for nominations,
18
    I'd like to have someone make a motion for David Miller as
19
20
    Chair by acclamation.
             COMMITTEE MEMBER PACHECO: I'd like to make that
21
2.2
   motion. Jose Luis.
             CHAIRPERSON TAYLOR: Okay. It's been made by
23
    Jose Luis.
24
             I need a second.
25
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COMMITTEE MEMBER MIDDLETON: Second.
1
2
             CHAIRPERSON TAYLOR: Seconded by Ms. Middleton.
             And then, Ms. Hopper, can you call roll, please.
 3
             COMMITTEE SECRETARY HOPPER: Rob Feckner?
             COMMITTEE MEMBER FECKNER: Ave.
 5
             COMMITTEE SECRETARY HOPPER: Frank Ruffino for
 6
    Fiona Ma?
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8
             ACTING COMMITTEE MEMBER RUFFINO: Aye.
             COMMITTEE SECRETARY HOPPER: Lisa Middleton?
9
             COMMITTEE MEMBER MIDDLETON: Aye.
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             COMMITTEE SECRETARY HOPPER: David Miller?
11
             COMMITTEE MEMBER MILLER: Aye.
12
             COMMITTEE SECRETARY HOPPER: Eraina Ortega?
1.3
             COMMITTEE MEMBER ORTEGA: Aye.
14
             COMMITTEE SECRETARY HOPPER: Jose Luis Pacheco?
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16
             COMMITTEE MEMBER PACHECO: Aye.
             COMMITTEE SECRETARY HOPPER: Ramon Rubalcava?
17
             CHAIRPERSON TAYLOR: Excused.
18
19
             COMMITTEE SECRETARY HOPPER: Shawnda Westly?
             COMMITTEE MEMBER WESTLY: Aye.
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             COMMITTEE SECRETARY HOPPER: Betty Yee?
21
             COMMITTEE MEMBER YEE: Aye.
2.2
             COMMITTEE SECRETARY HOPPER: Madam President, I
23
   have a motion being made by Jose Luis Pacheco, seconded by
24
25
    Lisa Middleton for the election of the Chair and the
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Investment Committee, David Miller.
1
             COMMITTEE MEMBER TAYLOR: Thank you.
2
3
    Congratulations, Mr. Miller. And here's your virtual
    gavel. You are now in charge of Investment Committee.
 4
             CHAIRPERSON MILLER: Thank you very much. I
5
    appreciate everyone's support.
6
             And I quess that brings us to the election of the
7
8
   Vice Chair. So I will call for nominations.
9
             ACTING COMMITTEE MEMBER RUFFINO: I got my hand
   raised.
10
             CHAIRPERSON MILLER: There you go. Mr. Ruffino.
11
             ACTING COMMITTEE MEMBER RUFFINO: Thank you.
12
    Congratulations, Mr. Chair. It's our pleasure to nominate
1.3
    Rob Feckner as the Vice Chair of the Investment Committee.
14
             CHAIRPERSON MILLER: Okay. I will second that
15
16
   nomination.
             Are there any other nominations?
17
             Any other nominations?
18
             Any other nominations?
19
20
             Seeing none, I'll call for a motion. Would you
    like to put forth a motion to that effect, Mr. Ruffino?
21
             ACTING COMMITTEE MEMBER RUFFINO: Yes.
2.2
23
             CHAIRPERSON MILLER: Okay. I will second that
   motion and we'll take a roll call vote, Ms. Hopper.
24
             COMMITTEE SECRETARY HOPPER: Rob Feckner?
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COMMITTEE MEMBER FECKNER:
                                        Aye.
1
             COMMITTEE SECRETARY HOPPER: Frank Ruffino for
2
    Fiona Ma?
 3
             ACTING COMMITTEE MEMBER RUFFINO:
             COMMITTEE SECRETARY HOPPER:
                                          Lisa Middleton?
 5
             COMMITTEE MEMBER MIDDLETON: Aye.
 6
             COMMITTEE SECRETARY HOPPER:
7
                                          Theresa Taylor?
             COMMITTEE MEMBER TAYLOR: Aye.
8
             COMMITTEE SECRETARY HOPPER: Eraina Ortega?
9
             COMMITTEE MEMBER ORTEGA: Aye.
10
             COMMITTEE SECRETARY HOPPER: Jose Luis Pacheco?
11
             COMMITTEE MEMBER PACHECO: Aye.
12
             COMMITTEE SECRETARY HOPPER:
                                          Ramon Rubalcava?
1.3
             COMMITTEE MEMBER TAYLOR: Excused.
14
             COMMITTEE SECRETARY HOPPER:
15
                                          Shawnda Westly?
16
             COMMITTEE MEMBER WESTLY: Aye.
             COMMITTEE SECRETARY HOPPER:
                                         Betty Yee?
17
             COMMITTEE MEMBER YEE:
                                    Aye.
18
             COMMITTEE SECRETARY HOPPER: Mr. Chair, I show
19
20
    all ayes with the excused for Ramon Rubalcava, motion
   being made by Frank Ruffino for Fiona Ma, seconded by
21
    David Miller for the election of the Vice Chair of the
2.2
23
    Investment Committee, Rob Feckner.
             CHAIRPERSON MILLER: Great.
24
                                          Thank you.
25
    Congratulations, Rob. And I'm certainly happy to have you
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on board as the Vice Chair to help me along.
1
             So with that, we'll move to the Item 3, approval
2
    of the February 15th, 2022 Investment Committee timed
3
    agenda. Do I have a motion?
             COMMITTEE MEMBER TAYLOR: Move approval.
5
             CHAIRPERSON MILLER: Moved by Theresa Taylor.
 6
             ACTING COMMITTEE MEMBER RUFFINO:
7
                                               Second.
8
             CHAIRPERSON MILLER: Seconded by, who was that?
9
   Mr. Ruffino.
             ACTING COMMITTEE MEMBER RUFFINO: Ruffino.
10
             CHAIRPERSON MILLER: Okay.
11
             COMMITTEE SECRETARY HOPPER: I'm sorry, Mr.
12
   Chair, who was -- who seconded that motion?
13
             CHAIRPERSON MILLER: Mr. Ruffino.
14
             COMMITTEE SECRETARY HOPPER: Okay.
15
                                                  Thank you.
16
             CHAIRPERSON MILLER: So I'll call for the
   question.
17
             COMMITTEE SECRETARY HOPPER: Rob Feckner?
18
19
             VICE CHAIRPERSON FECKNER: Aye.
20
             COMMITTEE SECRETARY HOPPER: Frank Ruffino for
   Fiona Ma?
21
             ACTING COMMITTEE MEMBER RUFFINO: Aye.
2.2
             COMMITTEE SECRETARY HOPPER: Lisa Middleton?
23
             COMMITTEE MEMBER MIDDLETON: Aye.
24
             COMMITTEE SECRETARY HOPPER:
25
                                          Theresa Taylor?
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COMMITTEE MEMBER TAYLOR: Aye.
1
             COMMITTEE SECRETARY HOPPER: Eraina Ortega?
2
             COMMITTEE MEMBER ORTEGA: Aye.
 3
             COMMITTEE SECRETARY HOPPER: Jose Luis Pacheco?
             COMMITTEE MEMBER PACHECO: Ave.
 5
             COMMITTEE SECRETARY HOPPER: Ramon Rubalcava?
 6
7
             Excused.
8
             Shawnda Westly?
             COMMITTEE MEMBER WESTLY: Aye.
9
             COMMITTEE SECRETARY HOPPER: Betty Yee?
10
             COMMITTEE MEMBER YEE: Aye.
11
             COMMITTEE SECRETARY HOPPER: Mr. Chair, I have a
12
   motion being made by Theresa Taylor, seconded by Frank
13
    Ruffino for Fiona Ma, all ayes, in the -- on the Agenda
14
    Item 3, approval of the February 15th Investment Committee
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16
    timed agenda.
             CHAIRPERSON MILLER: Okay. The motion is
17
   approved.
18
             Brings us to Item 4, the executive report from
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20
   our Interim Chief Investment Officer. And for that, I'll
    ask Mr. Bienvenue to take the floor.
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             INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:
                                                           All
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23
   right. Good morning, Mr. Chair, members of the Investment
    Committee. Congratulations Mr. Chair on your nomination
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as Chair of this Committee.

CHAIRPERSON MILLER: Thank you.

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INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: So normally I would discuss our portfolio performance and positioning as part of this opening report, but we have our semiannual trust level review scheduled for this meeting, so we can take that topic up in more detail in Agenda Item 7a and 7b.

So given that we do have the Board meeting following this Committee, I'll keep my comments somewhat brief and just give an overview of what's before us today. We're going to lead off with obviously the Committee's routine consent items. And from there, then we'll move on to three information items that we have on our agenda.

First, your general pension consultant, Wilshire, and your private asset consultant, Meketa, will provide their semiannual independent trust level reviews, including coverage of market conditions and portfolio performance. From there, Lauren Rosborough Watt will join Arnie and me to present you with the Investment Office's internally developed trust level review, where we'll cover portfolio performance and risk, we'll cover an operational update, and then economic conditions.

And finally, we'll be joined Simiso Nzima, our MID, Managing Investment Director, for Global Equity. And he'll be giving an update on proxy voting and corporate

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engagement activities. This item, of course, is presented annually just ahead of the proxy season to give the Investment Committee a preview of the sustainability topics which we'll be focusing on during the upcoming proxy season here in 2022, but then also sharing the outcomes of the 2021 proxy season.
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And that concludes my opening remarks, Mr. Chair. And that, I'll turn it back to you to take us through the agenda.

CHAIRPERSON MILLER: Great. Thank you very much. And I'm sure we'll all really looking forward to the reports on the fine work of the team.

So next item is our action consent items. What's the pleasure of the Committee?

VICE CHAIRPERSON FECKNER: Move approval.

CHAIRPERSON MILLER: Moved by Feckner.

COMMITTEE MEMBER PACHECO: Can we --

CHAIRPERSON MILLER: Seconded by Ms. Taylor?

COMMITTEE MEMBER TAYLOR: Yes. But Mr. Pacheco,

you want to make a comment?

COMMITTEE MEMBER PACHECO: Yes, separate the items, because of the minutes. I'm sorry.

CHAIRPERSON MILLER: Okay.

COMMITTEE MEMBER PACHECO: Thank you, Chair.

25 | Thank you.

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CHAIRPERSON MILLER: Okay. Ms. Hopper, then
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   we'll call the roll for 5a.
2
            COMMITTEE MEMBER TAYLOR: They're both -- I'm
 3
    sorry. They're both for November, so we don't really need
 4
   to separate it.
5
             COMMITTEE MEMBER PACHECO: Thank you for the
6
7
    Clarification. Thank you.
8
             CHAIRPERSON MILLER: Okay. So we'll call the
9
   roll.
             COMMITTEE SECRETARY HOPPER: Okay. Mr. Chair,
10
   can you reconfirm the motions on those, please?
11
             CHAIRPERSON MILLER: It was moved by Mr. Feckner,
12
   I believe, and seconded by Ms. Taylor.
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             COMMITTEE SECRETARY HOPPER: Thank you.
14
   we're taking both items together?
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16
             CHAIRPERSON MILLER: Yes, I believe so.
             COMMITTEE SECRETARY HOPPER: Okay. Rob Feckner?
17
             VICE CHAIRPERSON FECKNER: Aye.
18
             COMMITTEE SECRETARY HOPPER: Frank Ruffino for
19
20
   Fiona Ma?
             ACTING COMMITTEE MEMBER RUFFINO: Aye.
21
             COMMITTEE SECRETARY HOPPER: Lisa Middleton?
2.2
23
             COMMITTEE MEMBER MIDDLETON: Aye.
             COMMITTEE SECRETARY HOPPER: Theresa Taylor?
24
25
             COMMITTEE MEMBER TAYLOR: Aye.
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COMMITTEE SECRETARY HOPPER: Eraina Ortega?
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2
             COMMITTEE MEMBER ORTEGA: Aye.
             COMMITTEE SECRETARY HOPPER: Jose Luis Pacheco?
 3
             COMMITTEE MEMBER PACHECO: Abstain.
             COMMITTEE SECRETARY HOPPER: Thank you.
 5
             Ramon Rubalcava.
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7
             CHAIRPERSON MILLER: Excused.
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             COMMITTEE SECRETARY HOPPER: Shawnda Westly?
             COMMITTEE MEMBER WESTLY: Aye.
9
             COMMITTEE SECRETARY HOPPER: Betty Yee?
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             COMMITTEE MEMBER YEE: Aye.
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             COMMITTEE SECRETARY HOPPER: Mr. Chair, I have
12
    all ayes, one abstention made by Jose Luis Pacheco, motion
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    being made by Rob Feckner, seconded by Theresa Taylor for
14
15
   Agenda Items 5a and 5b.
16
             CHAIRPERSON MILLER: Thank you, Ms. Hopper.
   motion carries.
17
             Go on to our information consent items.
18
19
    no requests to pull either of those. So with that, we'll
20
   move on to our information agenda items. And we'll go to
   our CalPERS trust level review and our fine consultants
21
   from Wilshire.
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23
             INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes.
    Thank you, Mr. Chair. And can I ask that Tom Toth and
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Steve McCourt be brought forward in the presenters queue,

please. And this is the first trust level review of 2022. And the Committee may recall that your staff and your Board consultant alternate who presents first, with the consultants going first for the calendar year results in February or March, and then staff taking the lead with the fiscal key results in September.

So this is the consultant's turn to go first, so with that, I'll turn it over to Tom Toth to lead us off and take us through Wilshire's portion of the presentation. Tom, over to you.

MR. TOTH: Thanks, Dan.

2.2

(Thereupon a slide presentation.)

MR. TOTH: Good morning. Tom Toth with Wilshire Advisors.

It's our pleasure to start off the trust level performance discussion this morning. And we'll start with some comments on the market, move through Wilshire's forward-looking asset class expectations, and then we'll wrap up with some comments on the portfolio's performance, with a particular focus on the calendar year 2021.

Inflation has become a focal point for most investors, consumers, and central bankers, as inflation, which had been dismissed by many, including the Federal Reserve, as being transitory, only six or so months ago, is now viewed as potentially stickier.

And if we look at page 21 of our deck, you can see that illustrated with CPI up seven percent. Oh, I'm sorry, page two of our deck, page 21 of the PDF. I'll refer to our deck numbers from now on. Thanks very much.

2.2

So you can see on the upper left-hand side, the Consumer Price Index up seven percent. And, in fact, that is actually one reading out of date just last week. We received a more updated one with a reading that was even higher at 7.5 percent. And you can really see, you know, inflation in many places, the Produce Price Index up over 12 percent; home prices, which don't flow directly into the inflation calculation, but can be a leading indicator, up over 18 percent; and commodities up north of 27 percent.

And although consensus growth and inflation forecasts still point to a mean reversion back towards pre-COVID levels over time, central bank guidance is increasingly reflecting concern that this could prove persistent. And accordingly, we've started to see financial conditions tighten, albeit admittedly from very accommodative levels.

If we move forward to page three.

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MR. TOTH: Economic growth has recovered strongly, but employment has not kept pace and remains

well below pandemic levels -- pre-pandemic levels.

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On the next slide, 23 -- I'm sorry page four --

MR. TOTH: -- we can see that there is persistent friction in the employment market. And in the upper left-hand side you can see the job openings are elevated relative to the total unemployed, which implies a shortage of labor that has led to increased wage inflation. And that can play through the measured CPI increases.

Employers can continue to struggle to get employees back to work. And the employment market is increasingly competitive.

On the next slide --

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MR. TOTH: -- you can see that the labor force participation rate on the left-hand side has retraced less than half of the decline compared to the pre-pandemic time period. And it's likely that some of that decline is permanent due to accelerated retirements from some workers. But rising wages and changes in COVID case counts could presage some improvement in that participation rate. And you can see on the right-hand side, the upward trajectory in average hourly earnings.

If we jump ahead to page seven --

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MR. TOTH: -- fortunately most major economies are forecast to deliver strong levels of real GDP growth in 2022, although at lower rates than we saw in 2021 for the most part. Furthermore, particularly in the U.S., strong household balance sheets and higher wages are supportive of personal consumption, even in the face of higher inflation. And while the global economy continues to grapple with those inflationary pressures, it's also important to recognize that short-term cyclical factors have meaningfully contributed to these pressures. And these include supply chain disruptions, labor shortages, and those persistently high COVID-19 case rates.

Unfortunately, those same factors have begun to weigh on sentiment, most notably in the services sector, as service PMIs have been softening across many major developed markets, while still signaling expansion. We did see fortunately that fourth quarter U.S. GDP growth came in higher than expectations due to strong personal consumption, particularly of services, as well as strong private domestic investment.

On page eight --

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MR. TOTH: -- and this gets into the current market environment, as well as then our outlook, we've labeled 2022 as a year of transition. And the question

that we ask is simply if much of the rally that we've seen in capital markets has been due to very accommodative policy and fiscal support. When that support is withdrawn, what should we expect from markets?

2.2

And the decline in equity and fixed income markets and an increase in both equity and interest rate volatility to start 2022 is reflective of a market that's increasingly focused on monetary policy with hawkish guidance coming from global central banks as they look to contain inflation as economic growth recovers. And in fact, as we look forward, the futures market for short-term interest rates are pricing in nearly five interest rate increases in 2022, which would imply a policy rate at the end of the year of approximately 1.25 percent. And that also includes an increased possibility of a 50 point -- 50 basis point hike in March, which would be the first time a 50-basis point increase in interest rates has occurred going back to, I believe, the early 2000s.

2022 has also seen market volatility rise in response to other factors, including geopolitical concerns over tensions in Ukraine with Russia, and the potential rolling economic impact of different COVID variants.

Now that being said, we believe the Feds and other central banks' hawkish tone regarding monetary

policy is warranted. And looking at their -- their statements that will remain data dependent and nimble In implementation, we think that is appropriate. We think there -- as we sit now with rising rates, we're seeing a necessary repricing of U.S. bonds, as real yields have been distorted by central bank actions. And despite this rise in recent yields, nominal bonds remain mispriced relative to inflation and economic growth.

And, for example, today, real yields sit at negative 60 basis points, while the longer term average of real yields has been just below one percent positive over periods of time where we've seen far lower economic growth relative to inflation -- consensus expectations for 2022.

On page nine --

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MR. TOTH: -- we've provided a summary of Wilshire's forward-looking asset class expectations. And these asset class expectations are one of the building blocks for asset allocation discussions that we have with clients. And they incorporate both the impact of shifting monetary policy, inflation expectations, as well as equity market valuations.

And just to hit on a couple of highlights here.
Rising interest rates, while a head wind for fixed income returns over the shorter term time period actually do

increase our return expectation for core fixed income over the full 10-year time horizon. That going in yield at a higher level is one of the pre -- the big determinants of the total return expected over that 10-year horizon. A simple way to think about it is you have some price impact at the beginning of the period, but the reinvestment over the full period actually moderately increases the total return.

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We do expect rising inflation to be beneficial for real assets, such as real estate. And I'll have a few comments on that a bit later. And then finally, from a summary perspective, elevated equity valuations, particularly in the U.S., have reduced the expected risk premium for equities relative to bonds from 3.7 percent at the start of 2021 to its current level at two and a half percent.

If we flip to the next page 10.

--o0o-- to the

MR. TOTH: We've talked a bit about the increase in market expectations for short-term interest rates as measured by the Fed fund's rates, so you can see sort of the pace of increase there, and the shifting yield curve on the upper right-hand side relative to where we were a year ago, which is the red line there in the upper right-hand side. You can see a shift across the curve

most recently.

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And then if you compare just last quarter to this quarter, you can see particularly at the shortened zero to five years, a meaningful increase in the yield curve at the -- from the current period relative to just one quarter ago. On the bottom right-hand side, that gives you a sense for where credit spreads sit. And you can see that they remain tight by historical standards, almost no matter where you look, whether it be at investment grade or below investment grade securities.

Turning to page 11 --

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MR. TOTH: -- and equity markets. This provides some detail on the models that we utilize to forecast equity market returns. In the upper right-hand side, you can see the head wind that we expect from valuations, which are built into one of those models, which we called the Income Growth and Valuation, or IGV model. You can see that all of the components here, whether it's dividends, inflation, or real EPS growth are projected to be lower than historical experience, but the real standout here is that valuation with changes in the price-to-earnings ratio forecast to normalize and detract three and a half percent from the expectation.

As you look at the other components there, you

can see that we also utilize a dividend discount model, which is a slower moving model for forecasting equity returns, as well as a cyclically adjusted price-to-earnings ratio as another -- as another model. And all of that comes together to forecast an expected return for global equities at just over five percent, with U.S. equities forecasted to return four and a half, and non-U.S. equities at 5.5 percent, given differences in relative valuation.

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Now, strategically, and this is critical as we start to talk about the PERF portfolio and the discussions that we've had around asset allocation, we flip to page 12 --

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MR. TOTH: -- investors really need to balance the impact of higher interest rates against earnings growth and a relatively strong global economy, particularly as we look at the muted return expectations on this slide. And simply going back to the early 80s, you can see that across asset classes, expected returns have declined materially.

Now, using those asset class expectations on page 13, we show the PERF portfolio's expected return over multiple horizons over both 10- and 30-year horizon.

Please keep in mind that these are based on the previous

asset allocation targets and they'll be updated as we move through the implementation of the targets approved by the Board in November.

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But with this snapshot, over the 10-year period, expected returns hover around five percent, while over the long term 30-year horizon, returns are expected to be higher at around six and a half to 6.6 percent.

So as the Board thinks about strategic asset allocation, I thought this would be an opportune time to just make a couple of points. Given the uncertainty we've discussed around the markets and the economy, diversification remains a critical building block for portfolio construction. The introduction of leverage in the new asset allocation is explicitly meant to maintain a level of diversification while allowing the portfolio to meet its expected return targets.

This diversification is also evident in the target allocation for sovereign and emerging market debt. The increase in the real asset target could benefit from higher inflation expectations as rents for the underlying investments adjust. And in addition, as we think about the investments in private debt, many of those investments are structured with floating interest rates. And so they don't have the same interest rate sensitivity as other parts of the fixed income universe. So as we see rising

interests rates, that actually should somewhat cushion the impact to the portfolio within the private debt allocation.

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With a challenging return environment in equity markets, increasing private equity provides an opportunity to drive higher portfolio returns, albeit with higher expected levels of risk. And that was built into the modeling, which was part of the asset allocation discussion. Implementation is going to be critical in terms of driving success there, with consistent deployment of capital being one of the most important facets, something we've talked about with the -- with the Board in the past.

Before we move on to performance, I wanted to see if there are any questions from the Board on either the market or forward-looking expectations.

CHAIRPERSON MILLER: Okay. I'm not seeing any requests in the chat. And I can only see a few -- oh, I see, it looks like Controller Yee has a question.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman. Congratulations on your assuming the Chairship.

I did have one question, and I don't know, Tom, I may have missed it, and that is has the market already started pricing in the expected Fed increases?

MR. TOTH: Ms. Yee, yes, they have.

COMMITTEE MEMBER YEE: Okay.

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MR. TOTH: The market is starting to price that in, that's why you're seeing primarily the shifting yield curve.

COMMITTEE MEMBER YEE: Okay. Okay. Got it. Thank you.

MR. TOTH: And, in fact, that's I think one of the key reasons you've seen the 10-year treasury remove up to about two percent, which is the first time it's been there since 2019.

COMMITTEE MEMBER YE: Got it. Okay. Thank you.

MR. TOTH: Um-hmm.

CHAIRPERSON MILLER: I have Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you, Mr.

15 | Miller and congratulations on your Chairmanship.

Mr. Toth, I had a couple questions, I think it was back on - hold on - slide two and five. Let's start with slide two. So I was wondering, are we pricing in -- I mean, are we looking at the fact that inflation could be also impacted by how the supply chain is having problems because of climate disruption. So I recently read something on how lumber has gone just exponentially expensive among other things. But is this part of inflation inflationary pressures as well? Are you guys looking at that and are we, as a Board and as CalPERS,

making sure that we're pricing that in, because of climate disruptions?

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MR. TOTH: Ms. Taylor, it's a -- that is a -that is a great question. I think broadly speaking, yes,
you're incorporating that into the analysis, and that's
undoubtedly a risk associated -- that could impact
inflation going forward. So that is something that we're
cognizant of. And when we think about climate change and
the impacts to the portfolio, that's the lens that we
utilize. It's one of risk management and trying to
incorporate that into our analysis. So short answer to
your question is, yes, that is incorporated here.

It's hard to tease out the specific impacts of, for example, the bottom right-hand side there, the impact that -- how much of that 27 percent increase is from -- COMMITTEE MEMBER TAYLOR: Right.

MR. TOTH: -- those the -- what you brought up, but it's undoubtedly a risk. And it's something we want to be cognizant of from a portfolio standpoint?

COMMITTEE MEMBER TAYLOR: And then sadly, I read another article that was calling out the fact that larger corporations are using this time frame to artificially drive their prices up and hiding it within the inflation index that's coming, you know, and drive -- and thereby driving inflation up, so -- and for the life of me, I

can't find that article now, but I believe one of them was General Mills. It's -- and -- I know as an organization we can't do anything about that, but what would you say to that and how does that impact us? Is that just normal?

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MR. TOTH: I think it's important to keep in mind that generally speaking, these organizations are working in a competitive environment, and there's -- they don't really have the ability to raise prices without reason. Otherwise, they would do that even when there wasn't supply chain disruptions.

So, I -- it's certainly rising prices. I mean, by definition, it goes into that CPI calculation, but I I'd be hard pressed to tease out that as being uncompetitive pricing, and try to attribute that to these figures.

COMMITTEE MEMBER TAYLOR: Yeah. That's a shame, because these -- there were quotes from CEOs saying, yeah, we're taking advantage of this on purpose. So that's really hurtful. And I think that's something we also need to focus on in the future, maybe in proxy voting, I don't know.

And then on slide 5, we were talking about the labor force and the labor dynamics. And I just want to -- I think that we need to really take into account the

impacts of COVID on our workers, right? So people -- I think you said something about retirement early retirements, et cetera, but also I think people are out of work because of long COVID. I think a lot of folks aren't coming back to work, because they don't -- they're afraid to get sick, and there's a lot of, you know, dropping of policies that we had at the beginning of the pandemic, and so now there's no sick leave for folks, and the conditions are strained.

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And then maybe we should pay better. Maybe this is what the problem is, a lot of these strained labor force is always in our service industry and those are the lower paid jobs. So I think that's something that we need to take into account, that our workers, you know, need sick leave. And I wouldn't want to -- if I had to go back into work during COVID, I don't know that I'd want to either.

MR. TOTH: Ms. Taylor, absolutely fair points.

And the right-hand side of the chart on the right shows that you are seeing wage pressures. And then we can -- we can have a discussion of whether it's sufficient or not, and that's a market-clearing exercise. But you're undoubtedly right, that it's not just retirements driving this labor force participation. It is the, you know, caring for sick relatives, child care, any number of other

issues impacting the labor force. And that's why I would expect this participation number to continue to grind higher.

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I don't know that it's going to get back to that pre-pandemic level, because of the retirement dynamic.

But I do think it's going to continue to improve.

CHAIRPERSON MILLER: Okay. Oh, you're muted, Theresa.

COMMITTEE MEMBER TAYLOR: I just want to also bring up the fact that this country doesn't have a very good sick leave policy for, you know, Americans. Especially in the service industry it's just not there and I think that we need to continue to work with folks as an organization, whether that's through rulemaking or whatever to make sure our workers are covered when they're sick, because, you know, part of the reason that -- and I'm hearing it at my own worksite, right? So I'm hearing a lot of people who are like I don't want to go back into work. I don't want to be sick. I've already had COVID, so -- and if they don't -- and some of these workers are new workers, so they don't have any sick leave saved up. Imagine what it's like at McDonald's or, you know, someplace like, where there is no sick leave policy.

So I think that's something that as we move forward as an organization, we need to -- that's part of

our "S" in our ESG, and that is putting strain on the labor force right now as well.

But thank you.

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CHAIRPERSON MILLER: Yeah. This is certainly a question of whether it's really a labor shortage or whether it's a wage shortage, especially in the service sector is a worthy question.

So next, I have Ms. Middleton.

COMMITTEE MEMBER MIDDLETON: Mr. Chair, Thank you, and again congratulations.

Tom, a couple of questions. And I'm looking at slide 13, the one that you finished with.

Yeah, thank you.

The target allocation, the actual allocation, if I heard you correctly that you have here, is based on the ALM previous to November of last year and does not incorporate yet the changes that were authorized in November, is that correct?

MR. TOTH: That is correct.

COMMITTEE MEMBER MIDDLETON: And have you taken and done a similar chart that would incorporate those changes from last November?

MR. TOTH: We have looked at those figures.

Actually, when we were going through the asset liability management process, one of the checks that we utilized as

your independent consultant was to model those portfolios using Wilshire's expectations. I don't have those figures at the tip of my fingers right now, but I can certainly provide them to the Board. They would generally be that you would see them move higher, but I don't want to -- I don't want to just hazard a guess here without pulling those figures up.

COMMITTEE MEMBER MIDDLETON: Okay. Then I won't ask you to guess, but I would appreciate seeing those.

MR. TOTH: I will follow up with those, absolutely.

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COMMITTEE MEMBER MIDDLETON: So without dating myself too much, for those of us in my generation, and this is a much broader question, we spent the first 25, 30 years of our adult lives with inflation being rather constant. And now, we've enjoyed almost two decades with very little to no inflation.

I find myself struggling to believe that this turn in inflation is simply a temporary blip brought on by a combination of COVID and the supply chain issues. But what kinds of leading indicators would you suggest that we should be looking at as we try to determine whether or not we're going to be measuring these inflationary pressures that we're seeing now in months, years or decades?

MR. TOTH: Get questions, Ms. Middleton. I think

Producer Price -- the Producer Price Index as an input to the consumer is a good leading indicator, and then the Home Price Index as well. This gets a little bit wonky, so please excuse me, but the input into CPI is actually not home price -- home prices themselves, it's something called owners' equivalent rent. And it's a statistic that's meant to capture the increase in the value of the service that your home provides to you as a consumer, and that's not directly measured by home prices.

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But what economists have found is that home prices tend to be a leading indicator for that owners' equivalent rent, and it flows through at a 12-, to 18-, to 24-month kind of lead. And given where home prices are as we saw earlier in the presentation, home price increases, and I'm sure all of us in our individual lives have seen this just chatting with colleagues and friends, they're elevated and they're elevated really broadly across the nation. And that's likely to flow through the owners' equivalent rent as we move forward.

So I think those are two leading indicators you can watch for, deciding on the stickiness of inflation.

COMMITTEE MEMBER MIDDLETON: Home prices are certainly something that almost of us notice on a very regular basis, so thank you for that. But I do really believe that this is the fundamental question for us as an

organization over the next year and moving forward is how long is -- are we going to have the kind of inflation that we're looking at today?

Thank you.

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CHAIRPERSON MILLER: Thank you.

And next, I have Mr. Ruffino.

ACTING COMMITTEE MEMBER RUFFINO: Thank you, Mr. Chair and thank you, Tom, for the presentation. I've got a couple questions.

One -- the first one relating to the geopolitical events, and you alluded to, you briefly mentioned, i.e. the prospect of Russia invading Ukraine. Although, this morning, there was some hopeful news that he's starting to pull some of the troops and maybe wants to give diplomacy a chance. That remains to be seen. But, however, if the U.S. if they were actually were to lean the sanction against Russia or prevent Russian banks from doing business with the U.S. financial systems, what would that do to global trade, and what effect would that have on our investments?

MR. TOTH: Mr. Ruffino, thanks -- thank you for the question, and that's a challenging one. You know, the short-term impact would undoubtedly be higher levels of market volatility and a general I'll call it risk off sentiment from the market. And you tend to see this

around big geopolitical events historically. I would not expect this to be any different.

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I would caution the Board that trying to manage a portfolio the size of the PERF using that type of outlook and anticipating that is a challenge. And so thinking strategically, i.e. over a longer term time horizon, I think is going to be really important, and using those dislocations as opportunities to rebalance, as necessary, for the total portfolio. That's the best way to manage through those dislocations, because, as you pointed out, you get very quick sell-offs when geopolitical tensions increase.

But when we get reports, like we did this morning, that it seems to be lessening, you get rallies in the market and trying to -- trying to guess which one of those is going to occur and over what time frame, we don't think that's a very prudent course of action.

So something certainly that should be kept in behind, and monitored, and potentially utilize to rebalance, but I don't think a shift in strategy is warranted based on those concerns. Now, obviously, that needs to be continually evaluated as we move through it. And to the extent that we were to see an escalation in tensions, that would be a challenge.

And I also think it's important to keep in mind,

as we think about portfolio construction, that there are segments in the portfolio which are meant to cushion those drawdowns. So, for example, the factor weighted exposure within the equity portfolio, the dedicated treasury exposure, which tends to cushion risk market drawdowns, as another example of trying to cushion the portfolio in the event of these risk-off type of markets, we would expect that to be beneficial, in this instance, as it has been historically.

ACTING COMMITTEE MEMBER RUFFINO: Thank you for that. I have another question for you as well. Looking at the -- page eight, which is the year of transition, you named that page --

MR. TOTH: Um-hmm.

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ACTING COMMITTEE MEMBER RUFFINO: -- so given the volatility seen at the start of 2022, does that change your view on the recently adopted asset allocation?

MR. TOTH: The short answer is no. I think the discussion around ALM incorporated a certain level of uncertainty or volatility within the markets, and so the decisions that were made were predicated on some expectation of variability. And we're living through the downside variability now. And so I don't think it should drive a shift in strategic positioning going forward, so that's number one.

And then number two comes down to implementation of that strategic target, which we are going to be very judicious about. And so it's not turning a switch to the extent we can mitigate the market timing impact of shifting the asset allocation. So that's going to be -- it is, and will continue to be, a very thoughtful process, and we'll provide continued updates for the Board around that as we move through it.

ACTING COMMITTEE MEMBER RUFFINO: Excellent. Thank you. Thank you, Mr. Chair.

CHAIRPERSON MILLER: Okay. Thank you.

Next, we have Ms. Ortega.

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COMMITTEE MEMBER ORTEGA: Thank you, Mr. Chair.

I just wanted to return back to the sick leave

conversation. And while the sick leave benefit that the

federal government had provided prior has expired, the

Governor did sign a bill last year -- I mean, last week on

February 9th on SB 114 that prides workers in California

with up to 80 hours of additional supplemental paid sick

CHAIRPERSON MILLER: Yeah. It certainly is good news and certainly appreciate that from the Governor's leadership.

leave. So that's good news for California's workers.

Okay. Next, it looks like I have Jose Luis Pacheco.

COMMITTEE MEMBER PACHECO: Thank you. Thank you, Chair -- Chair Miller and congratulations again on your chairmanship on the Committee here. So my question is regarding the interest rates, and Mrs. Middleton had pointed out with leading indicators. It's my understanding that Chairman Powell from the Federal Reserve has indicated that there will be some increases in interest rates in the forthcoming -- in this forthcoming year. Would that affect -- as interest rates go up, would that affect housing prices? And in turn, if that's the case, would it -- will it decelerate the prices or do you suspect that -- or do nothing at all? I just want to have a better, clear understanding. And how would we -- how would we measure that with the -- if we use the owner equivalent index that you had mentioned earlier? you.

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MR. TOTH: Mr. Pacheco, a great question. The short answer is my expectation with rising rates -- rising interest rates is that would slow price appreciation in the housing market for the simple fact that it makes borrowing for housing more expensive. And that's obviously a budgeting exercise or any individual. But all else equal, at a high level, higher interest rates are likely to slow rising prices in the housing market. And that's -- it's not aimed at housing, but broadly speaking

for the economy me, that's their goal is to tame inflation by increasing interest rates. And that flows through so many facets of the economy from borrowing for houses, corporate borrowing, credit cards, what have you. All of those -- all of those interests rate levels are interconnected.

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COMMITTEE MEMBER PACHECO: Thank you for that -- for that answer. Thank you.

CHAIRPERSON MILLER: Okay. And it looks like I have another question from Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Sorry about that. And thank you, Mr. Chair.

Tom, I just -- when you were explaining to Ms.

Middleton the -- how the housing prices -- the high price of housing prices fit into inflation, what kind of made my brain go but, what, because housing prices have been exponentially growing for years. So why didn't that impact and cause inflation earlier? Because housing prices, not just in California but all over the country, have really skyrocketed. Yeah, in the pandemic, I think maybe some of it went a little higher, but, you know, I've been reading about the increase of housing prices year over year. I think, gosh, before the pandemic started, there was a 21 percent increase in housing prices just here in Sacramento. So how come that didn't impact

inflation before?

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MR. TOTH: Ms. Taylor, I think you highlight a really important part about the intricacies or the interconnectedness of the economy. So I would argue that the increase in housing likely did have inflationary impacts through the owners' equivalent rent, but it was offset by improvements in technology, which drove down other prices -- energy prices, which fell as a -- you know, pushes down inflation, improvements in agriculture, pushed down some food prices.

And the reason that we're currently seeing a spike is because, you know, you're actually seeing a broad based increase in inflation. It's not just housing.

That's a component. But it's also in energy. It's also in food stuff. It's in -- you've probably heard of used cars and supply chain issues causing increases in consumer goods, all of which, during quote/unquote normal times, would somewhat offset each other.

And then your -- I think we're also in a period of time -- this is looking over maybe a longer term time frame, coming out of the global financial crisis and the housing bust, construction of homes slowed down materially. And so now, we're at a point in time where demand for housing is outpacing supply, which is somewhat of a different dynamic than we've seen, you know, previous

to the housing bust where construction of new housing was moving ahead quite rapidly, builders understandably, I think, had been a little bit more hesitant, given potentially they were burned in the 2008, 2009, 2010 time period post credit crisis, so that there's that supply demand mismatch as well.

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COMMITTEE MEMBER TAYLOR: Okay. I get that. I appreciate that. And then I just wanted to bring up that I think our -- it was -- when I was talking about companies pricing -- taking advantage of inflation, one of them was, as I recall, Procter and Gamble. And they're making a huge profit, but still increasing prices and hiding it in inflation. And I think that is something that -- I don't know what we can do about that. But it just seems really, really wrong.

And part of it is because there isn't a lot of competition. I mean, Procter and Gamble owns everything, right, so -- and I think it's important that however we deal with this, whether it's through proxy voting or whatever, but this -- these are pressures on the American people that are causing inflationary issues and hurting lots of folks along with it, so -- but I wanted -- I remembered who it was, so I just wanted to let you guys know.

MR. TOTH: Appreciate that.

CHAIRPERSON MILLER: Thank you.

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I'm not seeing anymore requests to speak. If anyone does want to and I can't see them in my limited little screen, just speak up now.

Okay. I think that's it for questions from the Board and really appreciate the comprehensive report and really look forward --

MR. TOTH: Mr. Chair, we do have one final section I wanted to touch on --

CHAIRPERSON MILLER: Oh, okay.

MR. TOTH: -- which is actual performance for the PERF.

CHAIRPERSON MILLER: Oh, okay.

MR. TOTH: If I may?

CHAIRPERSON MILLER: Yes, please do.

MR. TOTH: Great. Let's flip forward to page 16.

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MR. TOTH: And then I will -- I will turn it over to Meketa for their comments.

So a couple things to highlight as we look at performance here. Performance for the year was quite strong, up 13.3 percent, with the quarter's performance -- so very strong fourth quarter, up 4.7 percent. And both returns handily outpaced both the policy benchmark and the actuarial rate, so outperforming by 1.2 percent relative

to policy over the year.

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The largest driver of returns in 2021 was private equity, which was up over 39 percent versus the benchmark return of 31.4 percent. The public equity allocation, which is the largest allocation in the PERF, was also up meaningfully almost 18 percent. Real assets returned 15.8 percent, outpacing its benchmark return of 13.4 percent.

And I also wanted to note the performance of Opportunistic Strategies about two-thirds of the way down the page, which now has one year's worth of performance, and was up 15.2 percent.

Meketa will have some more comments on the private equity and private real asset portfolios, so I won't belabor those points. But if we turn to attribution, the next couple of pages covered over different time frames. I'll actually ask that we turn to page 19, which is the one year attribution.

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MR. TOTH: For the benefit of the new members, performance attribution is meant to capture the relative performance impact of the underlying strategies within the portfolio. It takes into account both the relative weights, over and underweights, of the portfolio versus their target, as well as the returns of those strategies versus the benchmark returns.

And so that's what we're looking to dive into here is which particular parts of the portfolio contributed to the 1.2 percent in outperformance, and which were a drag. As you look kind of the far right-hand side of that page, that is the total relative performance attribution for the various segments. So at the upper right-hand side, you see 0.15. That indicates that public equity in aggregate drove 15 basis points of outperformance relative to the policy benchmark, so nice strong performance from private equity.

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As you move down the table, private equity contributed 64 basis point of return, which was the best relative contributor to performance across the portfolio. I want the Board to keep in mind that we should expect a reasonably high level of variability within the attribution for private markets as the valuations tend to move more slowly than we see in public equity, and they're -- the capital deployment and distributions are less predictable. And all of that is going to drive mismatches between the portfolio and the benchmark, which has an impact on that variability. So for calendar 2021, very strong positive performance from that portion of the portfolio.

Turning to fixed income, it was the biggest drag on absolute portfolio performance. It was down 1.4

percent in absolute terms. But as you can see from the attribution, in aggregate it did add seven basis points of relative return, driven, in many ways, by both strong issue selection in the spread segment, as well as an intra-segment underweight to treasuries and overweight to higher yielding spread sectors, which over time were beneficial to the fund.

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So moving further down, real assets contributed 25 basis points of active performance. It was another large contributor. And again, Meketa will have more comments on both private equity and real assets here in just a second.

And then the last point I wanted to make here is at the -- almost the bottom of the page there, the trust level financing line, which added 39 basis points of relative performance. And that might seem counterintuitive, because trust level financing does come at a cost. It's borrowing. So I wanted to point out for the Board that this is actually capturing the impact of utilizing that capital to invest in other assets that outperform the cost of financing. So that borrowing, in this case, was beneficial to performance to the tune of 39 basis points. And if you were to sum up all of those numbers in that total column, that's where you would get to that 1.2 percent excess return relative to the

benchmark.

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So the broad takeaway here, just to wrap-up and I'll turn it over to your private consultant, very strong absolute performance for 2021 and strong relative performance across the portfolio.

So I'll stop there and see if there are any questions on performance or we can move on to Meketa's comments.

CHAIRPERSON MILLER: Okay. Thanks for that very clear and comprehensive wrap-up. I really appreciate how easily understandable you made all this complexity for us.

So it looks like I have Ms. Taylor with a question.

COMMITTEE MEMBER TAYLOR: (Shakes head). My bad. Sorry.

CHAIRPERSON MILLER: Oh, no. Just a -- no worries. I'm not seeing other hands or questions in the chat. If I can't see you, because I can only see a couple of you at a time, just shout out?

Okay. I think that does it. Thank you, Mr. Toth. We'll move to Meketa. I believe Mr. McCourt.

MR. McCOURT: Great. Thank you, Mr. Miller and congratulations to you and Mr. Feckner on the leadership positions for this year. I won't be reviewing in detail the broader economic and capital market outlook as I go

through our reports, but just to summarize, these reports that we're going to be going through are as of December 31st. And a few weeks later, we found ourselves in potentially a different type of environment. So I say that largely because these are three quite positive reports that we have the pleasure of presenting to you today.

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We are your private markets advisor and we have three trust level reviews that we've submitted.

Attachment 3 is our private equity review, Attachment 4 to Item 7 is the real estate review, And Attachment 5 is our infrastructure review. In the interest of time, I'm going to summarize each of these in a few minutes each and then open it up for questions after getting through each of them, if that -- if that's okay with you, Mr. Miller.

CHAIRPERSON MILLER: Yeah. Sounds good.

MR. McCOURT: Great. So starting on private equity, the first thing I want to highlight is related to this and the real assets asset class. The most important dynamic with these asset classes relates to the new strategic asset allocation, which will require these asset classes to scale up quite considerably. In the case of private equity, the target allocation with the new asset allocation is increasing from eight percent to 13 percent. It has -- your investment team has discussed with you.

That's going to require significant expansion in the capital that's deployed annually into the private equity space.

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As of December 31st, the net asset value of your private equity portfolio was \$49 billion. That's an increase of about \$6.7 billion from six months earlier.

And that amount represented just shy of 10 percent of the total trust fund.

As Wilshire noted in their report, private equity had a spectacular year, both relative and absolute basis. Your private equity portfolio returned 39.3 percent. That was about eight percentage points above the policy benchmark. Will repeat what we say almost every six months, the benchmarking for both real assets and private equity is not precise, so these relative returns, as you've seen in recent six-month periods, can move up and down quite quickly.

That being said, over longer term periods, private equity has also performed well over the trailing three years. Your portfolio has returned just over 17 percent per year on average. That's nearly three percent per year higher than the benchmark. And over the prior five years, your private equity portfolio has returned 16 and a half percent per year on average over the trailing 10 years, 13.9 percent per year on average. So

extraordinary performance from this asset class over the last decade.

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What was interesting about 2021, is the calendar year within private equity, is the rising tide really lifted all boats, as you looked into the details of the portfolio. All of the major sectors of which you invested experienced strong gains: buyout strategies, which are by far the largest component sector of your private equity portfolio, were up 40 percent for the year; credit strategies up 27 percent; growth strategies up 41 percent; opportunistic strategies up 42 percent, and venture capital strategies up 32 percent. So very strong performance at the strategy level across the board.

Also, across the various vehicles and structures that you currently utilize to gain exposure to the private equity marketplace, all experienced strong gains.

Customized investment accounts produced aggregate returns of 32 and a half percent for the year, co-investments return 60 -- excuse me, 36.3 percent for the year, fund of funds were up 30.2 percent, and fund investments, which is the largest vehicle type you have today, up 42 percent. So really strong performance across structure.

And also across geography returns were quite strong. Most of your portfolios invested in U.S. private equity. And private equity in the U.S. for you was up

40.7 percent for the year, private equity in developed markets outside the U.S. were up 40 percent, and emerging market strategies were up 24.4 percent.

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I'll note that in the second half of 2021, your investment team made 34 commitments totaling \$7.5 billion. And for the full calendar year, it made 58 commitments totaling \$12.3 billion. That's a meaningful increase in scale of deployment over three to five years ago. And that type of scale will be continually necessary to achieve your new targets in private equity.

From a policy perspective, your Private Equity Program was invested in compliance with all key policy parameters.

So in conclusion on the private equity, really strong year in performance. Staff continues to execute a strategic plan in a very thoughtful and appropriate way.

Shifting on to real estate, which is Attachment 4 on Item 7, your real estate portfolio was valued at \$45.3 billion at the end of 2021. That represented about 82 percent of your total real assets portfolio and about nine percent of your total trust fund. The real assets portfolio also will see an increase in its target allocation related to the new strategic asset allocation. That target will be increased from 13 percent to 15 percent.

Performance for real estate was quite strong for the year. As like with other asset classes, real estate continued to rebound and improve from the pandemic during the year. For 2021, your real estate assets returned 16.5 percent outpacing their benchmark by 3.1 percentage points. Over the trailing three, five, and 10 years, your real estate assets returned 7.4 percent, 6.8 percent, and 9.6 percent respectively, over each period outperforming their benchmark.

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From an attribution perspective, certain sectors of real estate experienced strong appreciation during the year. And the fact that you have a very diversified real estate portfolio meant that you had strong exposure to some of those areas.

Your two core residential managers, which on a combined basis represented 25 percent of your core real estate portfolio, posted returns of 16 percent just for the fourth quarter. Industrial was another sector that experienced very strong returns during the year. And industrial portfolios represent about 29 percent of your real estate portfolio in aggregate. Your two industrial portfolios returned 11.8 percent and 11.1 percent for the quarter.

When we look at your returns, not just in the core real estate but in the value added and opportunistic,

returns are also positive over all trailing periods. The value-added investments over the trailing one year were up 12.8 percent an opportunistic up 10 percent.

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From a compliance perspective, your real assets portfolio was invested in compliance with all policy parameters. And just a quick note on the real estate market, largely as there was some conversation about inflation impacts, historically and going forward, perhaps more so than other asset classes, real estate, as an asset class, has had both strong winners and losers from the pandemic. Counting themselves in the group of the winners include property types like data centers, life sciences, industrial, housing, and properties in suburban locations. Property types that have been more challenged during the pandemic include hospitality, retail, and office and central business districts.

So as a -- asset class returns have been -- have recovered nicely across the real estate spectrum, there has been significant variety in returns, both positive and negative, among the various real estate sectors.

But in aggregate, we find that your real assets team is executing the existing strategy strongly in the real estate area and is poised to continue to execute well with the higher target allocation that they've been given with a new strategic allocation.

The final report I'll hit on is our infrastructure report, which is Attachment 5. At the end of December, your infrastructure portfolio was valued at \$9 billion. That was an increase of almost \$3 billion from just six months ago. This has been a fairly active area for your investment team. As of the end of the year, infrastructure represented 16 percent of your real assets portfolio and two percent of your total trust fund.

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Returns for infrastructure continue to be quite strong over both near- and long-term periods. For the calendar year ended December 31st, your infrastructure portfolio returned 14.9 percent. That was 1.6 percentage points above the return of its benchmark.

And over the trailing three-, five-, and 10-year periods, your infrastructure portfolio was up 7.1 percent, 10.1 percent, and 11 percent respectively, outperforming the real assets benchmark over each of those time periods.

The vast majority, over 90 percent, of your infrastructure portfolio is invested in core properties, which don't include significant economic GDP risk with them. They posted very strong returns during the year.

About 60 percent of your portfolio was invested in the U.S. and about 30 percent -- sorry, 40 percent invested outside the U.S. The U.S. market, much like we saw in other asset classes, produced stronger returns than

international markets within infrastructure, though both geographies produced positive returns for the period.

As noted, the infrastructure portfolio was invested in compliance with all key policy parameters. And your Investment staff continues to execute in the infrastructure space in a way that is aligned with its strategic planning and policies, and performance is reflecting quite favorably today.

So with that, I will close, and Mr. Miller hand it back to you for any questions. And I should note, I also have our resident experts on real estate, infrastructure, and private equity in David Glickman and Steve Hartt and Lisa Bacon that are available for questions as well.

Thank you.

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CHAIRPERSON MILLER: Thank you for that report. And I do see some hands up for questions. And I'm very encouraged by the strong performance and by the strong execution by our team. It's really good to hear that validated by our expert consultants.

And so I will move on to first Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you, Chair Miller. I wanted to thank you guys too I -- and our staff. This is a really excellent report on our commitments increasing, us being consistent, which is what

we want to be, and also, you know, just the performance in general. I'm very, very happy with this.

I had -- I wanted to also thank you Stephen for -- on page four of Attachment 4, you guys, at the very bottom here, talked about embracing your responsible contractor policies. And I just want to thank you for, you know, putting that risk in there, so that we are, you know, taking care of that risk within that -- within the portfolio. And we -- you know, as CalPERS is the industry leader in responsible contracting, I just -- I thank you very much for making sure that you mentioned that, but I also think it's important that we take these kinds of policies, responsible contractor workforce policies, that are risk issues and integrate them across our portfolio and across asset classes.

But again, thank you very much for the report.

And thank you for getting into our -- a little bit into our responsible contracting here.

Thank you.

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CHAIRPERSON MILLER: Okay. Thank you.

Next, I have Controller Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

Yes, I want to also thank Tom and Steve for the reports

this morning. And I guess, Steve, to your report on real
estate, so I guess the disposition of office buildings is

still kind of up in the air, kind of almost in a deadlock situation, but anything that you foresee that could help -- that could spur movement either in purchase or sales of these office buildings?

MR. McCOURT: Well, it's an interesting market, in that there's certainly a lot of weakness in what has historically been the strongest geographical parts of office, which are the big city centers, of course.

COMMITTEE MEMBER YEE: Right.

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MR. McCOURT: Across the whole sector of office, vacancy rates are actually still meaningfully lower than they were during the last two recessions in 2008 and 2002, but there's certainly a sense that both tenants and owners haven't quite figured out what office space needs and availability will be for the next decade.

So this might be a dynamic, Controller Yee, that we see unfold more slowly over time. It's certainly though -- the early, you know, feedback from the marketplace is that the incremental demand in office space is in suburban areas and the office in city centers may continue to -- demand may continue to languish for a while, but we'll have to see, of course, as the pandemic continues to unfold.

COMMITTEE MEMBER YEE: Sure. Okay. Thank you. And then I guess to both you and to Tom, do you foresee

any type of federal policy that you would expect to help mitigate the increased inflation rates on both companies and consumers? I mean, it's nothing solid yet, but certainly a lot of discussion. But do you foresee anything coming down from the federal government around that?

MR. McCOURT: So maybe I'll start, Tom, and then -- and then hand it off to you, if you have any comments. Inflation that is caused by supply factors is challenging to do --

COMMITTEE MEMBER YEE: Yeah.

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MR. McCOURT: -- much about, because governments don't have significant control over supply chains and the issues that are affecting supply chains. The Federal Reserve's reaction to inflation of increasing interest rates doesn't impact supply in the economy. It has the impact of reducing demand in the economy, which itself will certainly have a downward pressure on prices in the aggregate, but it also has a downward pressure on economic activity in the aggregate. So one has to be quite careful in how they deploy that tool.

I'm not aware of significant federal policies, you know, a part from releasing oil from our strategic reserves and things like that, that most administrations do when there's price volatility in certain sectors, that

are really targeted at resolving the supply chain issues at this stage. So I -- so my personal take is that inflation will continue to be a challenge at the public policy level, because it's mostly -- I don't want to say it's mostly, but it's certainly a large part of it is supply chain driven as opposed to demand driven.

COMMITTEE MEMBER YEE: Um-hmm.

MR. TOTH: And, Ms. Yee, I think I would echo a lot of what -- a lot of what Steve said. I'm not aware of particular programs. The things that have been done to try to help smooth out the supply chain is an example of where that could help on the margin. But to Steve's point, we'd agree that these are very complex linkages and there's unlikely one, you know, silver bullet from a policy standpoint that can fix the disruptions.

COMMITTEE MEMBER YEE: Okay. I appreciate both your perspectives. Thank you.

Thank you, Mr. Chairman.

CHAIRPERSON MILLER: Thank you.

And on to, it looks like next I have Lisa Middleton.

22 COMMITTEE MEMBER MIDDLETON: Thank you, Mr.

23 Chair.

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Steve, this may be a bit of a question that's better asked in closed session, since it goes to some

strategy. But looking at the real estate investments that we have, is this perhaps a time that home building should be a -- something that we get more heavily into, given where real estate home prices are going and the uncertainty in the office market?

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MR. McCOURT: Yeah. I think I would probably want your staff to take the lead in responding to that strategic question and deciding on whether that's more open or closed session. I will note one thing, Ms.

Middleton, on residential real estate, there is seemingly significant pent up demand for housing and the economy.

The -- but the constraining factor may not be capital.

The constraining factor may be laws that prevent development in higher density development in -- all across the country.

And so it's -- it's a -- it's a -- again, it's a supply chain issue. We don't have the supply of houses, because we don't have the -- we have regulations that prevent as much housing coming into the market than the market would demand at this point in time.

COMMITTEE MEMBER MIDDLETON: That's a really interesting observation, one I think I want to follow up later on.

MR. McCOURT: Great.

COMMITTEE MEMBER MIDDLETON: One of the good news

stories that I heard from you was our success in opportunistic strategies. And could you elaborate a bit more on why we have been successful in opportunistic and what lessons we can take from that?

MR. McCOURT: Yeah. I think I'll have Tom answer that, because that was under his report and purview.

MR. TOTH: Ms. Middleton, I'll be happy to. And, in fact, I think it dovetails well with the discussion that we had around the asset allocation process and the new targets. A significant portion of the underlying strategies within opportunistic strategies are private debt investments. And given structuring and the, I'll say, increased spreads there relative to public opportunities, that's one of the key drives of the strong performance there is judicious deployment of capital with high quality partners, and then the market re-pricing some spread tightening associated with those investments.

COMMITTEE MEMBER MIDDLETON: Thank you.

MR. TOTH: Um-hmm.

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CHAIRPERSON MILLER: Okay. I'm not seeing anymore hands up or requests to speak in the chat. So I will than Steve and Tom again for the presentations and the answers to our questions and I will turn it back to Mr. Dan Bienvenue, and Arnie Phillips, and Lauren Rosborough Watt for our CalPERS trust level review, which

is Item 7b.

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INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. Thank you, Mr. Miller. And Tom, Steve, thank you for the update. And, yes, that takes us to Item 7b, which is the companion item prepared by the Calpers Investment staff.

So can I ask could we please bring Lauren
Rosborough Watt forward to join Arnie and me here in the
presenter's area. And let's keep Tom and Steve here also
in case questions come up that dovetail their as well.

And if we could please get the slide deck up.

(Thereupon a slide presentation.)

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:
Okay. So as mentioned, this item is one of the two
semiannual trust level reviews that we conduct each year.
The goal of this item is really to provide the Committee
with information about the portfolios and their
performance, key business initiatives designed to support
and enhance our investment program, and then some of the
market and economic conditions within which we manage the
portfolio.

We've got three main parts for this item. I will start by giving an overview of the performance of the Public Employees Retirement Fund, or the PERF, and then also the affiliate trusts. From there, Arnie will provide

an update on some of the risk positioning in the portfolios, along with the Investment Office Operating Model. Then we'll finish with Lauren Rosborough Watt providing an update on global market and economic conditions.

So with that, let's get started looking at our performance.

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## INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Okay. So before we get into the details, I just want to draw your attention to a few key numbers surrounding our performance. As we've discussed before, the longer horizon numbers are really the important ones. And Mr. McCourt, you know, certainly alluded to this, is they are subject to really kind of less -- you know, the misleading swings that you can have, as they speak return generation over a period of time that more closely aligns with our liabilities and it smooths out some of those swings. And of course, when I say our liabilities, we know those are -- those are multi-generational liabilities.

So first let's look at absolute return, which is primarily the result of strategic asset allocation that we select together through the ALM process. And absolute

return, of course, is a critical number, because it's the absolute return that pays the benefits to our two million beneficiaries. And over the 10-year period, the PERF returned nearly 10 percent, coming in at 9.7 percent.

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Now, the second number I'll call your attention to is the excess return, which is a combination of the implementation of the strategic asset allocation along with active decisions taken by the Investment team. So this, too, is a critical number, as it measures really how staff is implementing the portfolio. And this is a number that staff has kind of greater directed influence over. And over the five-year period, the excess return, as of the end of December, was a positive 10 basis points, or one-tenth of one percent.

And then finally worth noting is that the affiliate trusts continue to perform in line with expectations, based on their respective asset allocations. And it is worth just kind of providing a quick reminder, that there are nearly \$30 billion in assets here. So performing in line with expectations is a really good thing and reflects the work of a really talented team of individuals managing these allocations daily.

So now that we've gone over a couple of highlights, let's keep going and look into some of the details. Can we get the next slide, please?

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INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: So as you look at this table, we can see that the PERF, and many of our affiliate program trusts reflected in their performance here.

So starting with PERF, returns exceeded seven percent across all periods, one year and longer, and really reflects the positive performance in all time periods except for 20 years, which still includes the effect of the Great Financial Crisis. And by positive, I mean positive relative return, certainly positive absolute returns across the board.

And we're looking at the Affiliate Funds, we're reminded of our investment beliefs really where Investment Belief 6 states that strategic asset allocation is the dominant determinant of portfolio risk and return, with the performance of these trusts really following the asset allocation of each one. For example, in the most recent say decade, we can see that the funds with the higher weighting to equities, similar to the PERF, have the highest returns, given the strength in the equity markets over this past decade.

So now let's turn to the next page and look at the PERF in more detail and there are a handful of things I'd like to highlight.

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INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Okay. So first starting at the bottom left of the table,
you can see that this end-of-the-calendar-year time period
is the first time period where we closed with more than
\$500 billion in assets, more than half a trillion dollars.
And this has to do with both contributions, but then also
importantly with buoyant markets.

And then second, I want to take a moment to highlight really some of the great work and great momentum we're seeing in our private asset classes. And I know Steve McCourt in his update talked about this, but, you know, I'll cover it briefly also.

So looking at private equity, the private equity allocation has gone from less than seven percent of the total portfolio just over a year ago to nearly 10 percent of the allocation. Now, part of that is due to strong performance. You know, with the asset class being up 40 percent in this past calendar year, that certainly increases the allocation. But part of that is also due to really good momentum in underwriting, committing, and then deploying capital.

A key mantra for the private markets teams across the board have been all about committing at scale, with high underwriting standards and then cost advantaged

economics. And that's what we're seeing get executive on.

That's a strategy we've talked about and that's really

quite gratifying.

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Moving on to real assets, its allocation also has increased significantly from less than 10 percent just at the beginning of the year to over 11 percent by the end of the year. And this, too, is the result of strong performance at 16 percent, but also to some really great work by the team and really broadening the ways that we commit and deploy capital and again that deployment at scale with high underwriting standards and cost advantaged economics, that's really critical to our strategy.

And then the final area of deployment, I'll call our -- I'll call attention to is opportunistic strategies, which I know we had a question on in the previous item. This is where we're building the private debt exposure that we know was added to the -- as an asset class with a five percent allocation in this most recent ALM cycle.

The exposure here increased more than fivefold over the year from less than a billion dollars this time last year to nearly \$5 billion at the end of December.

And this impressive level of deployment across all of our private asset classes really is clearly aligned with our strategy and our new strategic allocation, and it really represents some of the great work being done by, you know,

Greg, Sarah, and Jean, but really importantly also their entire teams in private equity, real assets, and then private date respectively. So I just really want to take a moment to acknowledge the really great work by the team.

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And in addition to the deployment of asset classes being very encouraging, another data point I'd like to call your attention to is the performance, both absolute and relative. We obviously look closely absolute returns, because as mentioned, it's the absolute returns that pay the benefits. And you can see that over all time periods, a year and longer, as mentioned the absolute return exceeds the target rate of return.

So that's very good knowing, of course, that that will pay the benefits to our two million members and beneficiaries. But in addition though, and this is the part where the team has greater influence over, you can see that on a relative or excess return basis, we've outperformed with lots of green numbers in the excess return columns.

Now with all time periods except the 20-year, which as mentioned, still includes the effect of the Great Financial Crisis, the PERF is outperforming the total fund benchmark, exceeding by 120 basis points at the one year, 40 basis points at the three years, 10 basis points at the five year, and then a basis point at the ten year.

And again, I'll remind us to maintain a long-term perspective, we really focus on the longer term numbers. Recall that that one-year number was a negative 40 basis points just six months ago at the end of June and is now a positive 120 basis points at the end of December. So those are those kind of potentially misleading swings that we were talking about.

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For this reason, it's the three-, five-, and 10-year numbers that tend to mute these swings, that we really like to focus on. And really, we've seen a great turnaround in the performance of those time periods. And that's really gratifying I think work and really great success of the team and something to really, you know, applaud the team for.

Now, down at the asset class level, it's a really similar story with returns exceeding benchmarks in most asset classes and most time periods. And I have to point out that in the case of the fixed income asset class, this report reflects outperformance at every time period, which really is great work by that part of the team.

Now, we know that we're a long-horizon investor and we have to stay focused on and continuing to generate absolute returns, both absolute and relative returns, to pay benefits to our two million beneficiaries. We can't and we won't get complacent. But again, these are really

encouraging data points reflecting some really great work by the entire team, every asset class, all the support functions. We know that it comes together and results like this come from a real team effort, so I did want to call your attention to it.

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INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Okay. As we've shared before, the PERF has a large allocation to growth-oriented assets, equity type assets, and therefore exhibit similar return patterns, really largely following equities, but with a smaller magnitude of moves given the diversification properties that we've put into the strategic asset allocation over the past five years or so and we've done that together.

When equities are up, the PERF will be up, but historically by about half as much. And when equities are down, the PERF will be down, but again historically by about half as much.

And I say -- as I say, this is due to the strategic asset allocation and the diversification we've put into that strategic asset allocation over the years. And the addition of leverage to the strategic asset allocation at the November Investment Committee meeting, which will be implemented over the next cycle, that really

furthers that work toward a more diversified and more defensive portfolio.

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So that covers my update on performance of the various trusts. At this point, I'm happy to take any questions, if they have -- if we have them on performance, or I can turn it over to Arnie to cover portfolio risks as well as our business model update.

CHAIRPERSON MILLER: I'm not seeing any hands up, so we will continue on then.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Sounds great. Arnie, over to you.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

Thank you, Dan. And good morning members of the Committee.

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INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

This slide here is the first one on the risk section. And as Dan mentioned, our performance is highly dependent on returns from equities and other growth oriented markets. A similar concept applies to our risk profile.

The PERF's risk is dominated by assets sensitive to economic growth, primarily equity risk, but we also have exposures in our credit portfolios and our real assets portfolios also. The middle part of the slide

shows our actionable tracking error. As you recall for members that have been on the Board for a while, at the September meeting last year, the Board approved an active risk metric of actionable tracking error. This measures the deliberate and controllable departures from the policy benchmark. It includes the impacts from public market strategies and asset allocation.

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Total Fund Policy actionable tracking error limit is 100 basis points. As this slide shows our current actionable tracking error is only 19 basis points, so a relatively modest level of active risk, and is actually date a little bit from last year's report when we were at 26 basis points of actual tracking error.

Finally, it's worth mentioning on this slide that the portfolio remains highly liquid, both in terms of having a great deal of liquidity on the balance sheet, but also having multiple pathways to create additional liquidity, if needed.

As we've discussed many times in prior IC meetings, centralized management of allocation, leverage, and liquidity has been a key area of focus for the Investment team in prior years and will continue going forward. As we had private assets, and considering the illiquid nature of those investments, maintaining our focus on liquidity and doing so in a centralized total

fund way remains critical.

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INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

So this slide illustrates the decomposition of risk and the relative size of the risks in the PERF portfolio starting with total fund tracking error and then showing the portion of total fund tracking error represented by actionable tracking error. We had committed, when we made the move to actionable tracking error, that we would still be showing and presenting total tracking fund error, and so we are showing that here. The pie chart on the left gives us the total volatility, which is 10.6 percent currently, down from 11 and a half percent last year when we went through this presentation.

Two key components of that. Volatility comes from the strategic asset allocation or the benchmark. And then the portfolio and how it differs from the benchmark, the composition of that equals total tracking error.

Moving to the middle pie chart, we can see total tracking error of 139 basis points. Now, this is actually up from 110 basis points last year. And total tracking error has been increasing due to the higher allocations to private assets that Dan elaborated on, especially private equity. Dan mentioned private equity went from seven

percent to nearly 10 percent last year and real assets increased a percent from 10 percent to 11 percent. So that impact on total tracking error is completely expected.

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As an example, private equity is benchmarked against the public equity benchmark. If we wanted a zero tracking error from private equity, we would have to actually invest in public equity, because tracking error shows how the portfolio differs from the benchmark. And since public equity is the benchmark, allocations to private equity increase tracking error. We invest in private equity to earn the expected return premium over and above what private equity -- or public equity returns. So as our allocations to private equity have increased for good reasons and a very good pace, we will see an increase tracking error totally expected.

And then moving to the right side of the chart here, we can see 19 basis points is what we would call actionable tracking error, meaning the result of decisions that the Investment team has intentionally made and that staff could change, if desired. Decisions that are controlled by staff contribute only a small amount to our total tracking error. Actual tracking error, as I mentioned, is actually down from last year when it was at 26 basis points.

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INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

This slide gives the Committee a snapshot of the

Investment Office's operating model and our aggregate risk
score, which is actually unchanged from last year. Our
risk level of 4 reflects a very mature operational control
framework. The majority of the functions and activities
are on average low to medium risk, which is a reflection
of the team's focus on proven processes and dedication to
continuous improvement.

Two key areas that we continue to work on, and it's hard to imagine we won't continue to work on them for quite foreseeable future, revolve around our operational infrastructure, specifically in the areas of technology management, and information security and data management functions.

With that, the reported risk portion of this deck is done. So I'll stop and see if there's any questions of either of those before we turn it over to Lauren to give a quick economic update.

CHAIRPERSON MILLER: Okay. Thank you, Arnie.

I'm looking and I'm not seeing any questions come up at this point. So we'll move on to Ms. Rosborough Watt.

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INVESTMENT DIRECTOR ROSBOROUGH WATT: Thank you, Mr. Chair. Good morning, everyone. Thank you again for having me here today. And so the plan today is to give you a brief summary of what we spoke around last time and then to shift to what we, meaning CalPERS, see happening in the global economy and what we see looking forwards.

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So many of the themes that I'm going to touch on today were spoken to by Ms. Thomas Toth and Mr. Steve McCourt. And I want to share with you more the framework by which we think through these issues and how they impact the economy.

So briefly, just looking back last year, I spoke about the global rebound from the pandemic-induced recession. And this rebound I said would continue into late last year, which we're seeing. Also spoke in 2020 around changes to the FOMC's mandate, specifically how they had moved to a flexible average inflation targeting regime and that the Fed would also assess the degree of labor market slack when making policy decisions. So compared to the old framework, we interpreted that meant the Fed would tolerate a stronger labor market and higher levels of inflation before tightening policy.

And then late last year, I spoke about the delicate balancing act of policy stimulus waning and how this would play into GDP growth normalizing and the risk

that this could result in some volatility in outcomes and asset markets as a result.

So that's sort of where we've come from. So where do we see the economy now and what's changed?

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So economic growth is reverting towards historical averages. So Q1 2022 is likely to be somewhat softer than what we've seen in recent quarters due to a timing effect, but over the 2022 calendar year, real economic activity is expected to grow around trend. And I'm sure you've experienced talking about the supply-side constraints. I certainly have. You know, this is one of the remnants of the pandemic and it looks to have quite a long tail on it, so, in particular, durable and intermediate goods, but one I do want to talk about is the supply of labor.

And just briefly, services spending, which plunged dramatically in 2020, has certainly improved. Although, just to point out, it still remains four percent below its pre-pandemic trend. So we have this restriction in supply. And that's what economists call a supply shock. And the result of that typically is to increase prices and to push down on real economic activity.

Now to Ms. Middleton's point, the labor share of output has increased from its 2010 low, but it still remains low compared to history. And more recently, the

latest figures on private sector average hourly earnings are up 5.7 percent on the year, but core personal consumption expenditure prices, so one of the core indicators that the Fed looks at, is up 4.9 percent in the same time.

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Households have also taken on a trillion dollars worth of more debt. So typically, we have this robust economy and rising ages, typically that encourages labor back into the workforce. The employment rate is at four percent. The wider U-6 measure that includes marginally attached workers is also near historical lows, but there are still 1.3 million workers less employed than we had before the pandemic. And there's an estimate suggesting there's been an excess retirement of around 2.4 million people.

Over the past six months, so the period when government support has been waning, we've had personal income growth at an annualized pace on par with the pre-pandemic trend. So we've got a supply of labor that has not yet normalized and yet we've got demand that remains robust. So more demand and less supply equals what we call an excess demand situation. And the result of this is pressure on wages and prices with activity to continuing to grow. So you can see the two frameworks I'm talking here.

To the next slide, please.

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INVESTMENT DIRECTOR ROSBOROUGH WATT: So the economy is no longer so weak. And yet, to Mr. Toth's point, real interest rates remain historically low. And as such, it's reasonable that the Federal Reserve has determined that the degree of policy support is no longer warranted. Although, I would want to widen that to global central banks in aggregate, you know, as other developed market central banks are either tightening policy or indicating that they plan to do so, and many emerging market central banks have been tightening policy for some time.

Now, I did want to highlight the chart here on the right-hand side. It is somewhat stale. The gray bars should be perhaps a quarter of a percent to half a percent higher. So the market has certainly priced in a greater degree of tightening over 2020 than what they did when this chart was prepared. So that's sort of where we're looking.

And when we think about what our role is here, you know, we look at the distribution of future macroeconomic outcomes. And what we tried to do is to understand the drivers and the assumptions that are driving these outcomes. Given all the information, what

is more or less likely to transpire, and what might changing one of these assumptions that will then change the likelihood of the outcomes. So it's this process of constantly critiquing and questioning.

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So to that end, when we look ahead, we see both upside and downside risks to both growth and to inflation. So the U.S. economy looks resilient to the Fed both raising interests rates and reducing the size of the balance sheet. The communication that the Fed undertakes could help this process or hinder financial market price and volatility. And we get the Fed minutes due to tomorrow that will help to provide us some insight into their expectations for this year.

There are some factors that give us pause as to the degree of policy tightening in the near term. So while employment is robust, but still not pre-pandemic levels, the distribution of employment outcomes still remains wide. Inflation is eroding the real purchasing power of the consumer. Until recently, asset prices have performed relatively well. And we have geopolitical events that are weighing on market sentiment, confidence, and now uncertainty going forward.

Happy to take any questions. Back to you, Dan CHAIRPERSON MILLER: Thank you for that presentation. And I'm looking -- I don't see any hands up

or questions in the chat. But this is very -- it's -- you know, there's encouraging and there's, you know, things to come. So we'll see what the future brings and appreciate your presenting this outlook, and we'll -- make sure -- yep, no questions and so we'll wrap up this section.

Any last words, Dan?

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INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: No. Thank you, Mr. Chair. And, Lauren, thank you for joining Arnie me on that and that does conclude our prepared remarks.

So absent any last questions, we can move on to the next item, if that's the desire of the Committee.

CHAIRPERSON MILLER: Thank you. I think we will and just with great appreciate for the hard work through all these ups and downs. From you and the entire team, it's keeping that focus on our strategic direction as long-term investors. It's nice when we're having the ups and seeing these fabulous results, but we also know that that constancy of purpose through the downs and the next set of ups is really what's going to keep us sustainable in the long run and really appreciate the -- all the hard work and dedication.

So let's move on to the next item then. And I want to introduce Simiso Nzima.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Yeah. Thank you, Mr. Chair and thank you for those -- for those comments. Agreed that, you know, with whether it's the pandemic, that pivot to remote, the now migrating back to the office, I think the team has done really great work. And to your point, you know, results are showing it now, but we can't and won't get complacent. We do know that it's a long horizon game, so -- you know, and I appreciate the comment on sustainability, which is well timed, being as we're moving on to our update on proxy voting and corporate governance. And I see that Simiso has been brought forward.

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You know, as mentioned with, you know, us being long-term investors, very long multi-generational time horizon type investors, we have to say focused on sustainability and the long-term performance of the fund. We know that corporate governance activities really are an integral part of managing the global equity portfolio and really the entire portfolio in that sustainable way, you know, to generate returns to pay benefits to those two million members and beneficiaries.

So this next update is a really critical one. And with that, I will turn it over to Simiso to walk us through our corporate governance and proxy voting and engagement update.

Simiso, over to you.

(Thereupon a slide presentation.)

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MANAGING INVESTMENT DIRECTOR NZIMA: Thank you,
Dan. And good morning, members of the Investment
Committee. And congratulations to Mr. Miller and Mr.
Feckner on your leadership role in the Investment
Committee.

So the agenda item in front of you is meant to do two things. The first thing is to provide you with a preview of the priority areas for the 2022 proxy season, and then the second thing really is to provide a summary of the 2021 proxy season outcomes.

Let's move to the next slide, please.

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MANAGING INVESTMENT DIRECTOR NZIMA: So here, there are four main priority areas that I'll talk through. And for the members who have been on the Investment Committee for a while now, these will seem really familiar, because we've been consistent in terms of working through these areas.

And I'll start with the executive compensation. Really here, we're looking at ensuring that the pay -- that we gave to executives at companies is aligned with the performance that they deliver. I think throughout this presentation, what you hear is that the work that we're doing in corporate governance, that the team is

doing, is really about investment returns. And as you all know, that \$0.60 out of every dollar that we pay out in benefits comes from investment returns. So this is really an important area and ensuring that executives only get paid when they deliver performance is something which is really important for us.

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On corporate board diversity, again, you know, another area where a growing body of evidence shows that diverse teams perform better than non-diverse teams and they lead to better performance returns and higher innovation. So really, it's important that we look at this again from an investment perspective. There maybe some ancillary benefits from a social perspective, but we're coming at it from an investment perspective.

And then on climate change, really here we're engaging companies in terms of getting them to incorporate their risk and opportunities that arise from climate change as they sit out their long-term strategy, and as well as capital allocation.

And then the last priority item here is investor rights. This gives us the ability really to hold boards accountable in any of these areas. So when we talk about proxy access, which is the ability for investors to put -- or to nominate directors on company boards, and then majority voting, which is where we vote for directors and

ensure that directors should get the majority of votes cast as opposed to on a plurality basis.

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And the four priority areas, you know, these are not the only things that are actually covered. We cover other things, except -- but I just wanted to, you know, to focus on these, because these are really the priority areas for the 2022 proxy season.

If we can move to the next slide, please.

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MANAGING INVESTMENT DIRECTOR NZIMA: So on this slide, we're summarizing the outcomes from the 2021 proxy season. Again, we have those four priority areas listed here. So on executive compensation, we voted against 55 percent of pay plans in the U.S. This is the highest number of against votes that we've ever recorded. We don't stop there with just 14 against, you know, the pay plans themselves. We also vote against members of the compensation committee to hold them accountable for some of these poorly designed pay plans. So we voted against over 3,000 compensation committee members in 2021.

On corporate board diversity, we -- the companies that we've engaged since July 2017, 75 percent of those companies have since added a diverse director to their board. And if we eliminate companies that have been de-listed or acquired, 83 percent of the companies that

we've engaged in have added diverse directors to their board. And again, as with executive compensation, we also vote against directors where we don't get any progress in terms of the engagements on corporate Board diversity.

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And on climate risk, CalPERS is a member of the Climate Action 100 steering committee, as well as the Chair of the Asia Advisory Group. And the Climate Action 100 has over 600 signatories as well with over 65 trillion in assets under management by now. And CalPERS leads on the engagement of 17 -- on 22 companies of the 167 companies, and 17 of those companies have now set a net zero target or ambition, net zero by 2050.

And then on enhanced investor rights, really this is again trying to make sure that we have those tools in our toolbox to be able to hold boards accountable where they're not aligning the direction of the company with investor interest.

I won't get into the appendix. The appendix has a lot of details covering each of these four areas, but I'll stop here and take any questions.

CHAIRPERSON MILLER: Okay. Thank you for that very encouraging report. And I have a question from Theresa Taylor.

COMMITTEE MEMBER TAYLOR: I know I'm always the person asking questions. I do want to thank - I didn't

say anything earlier - Dan, and Arnie, and everyone for their report. It was a very good report. I'm very pleased with the work of the Investment Office. And you guys are doing a fantastic job. So I just wanted to get that out. But for the report here, Simiso -- and again, thank. Although, as I understand it, this isn't your job anymore.

(Laughter.)

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COMMITTEE MEMBER TAYLOR: So congratulations on your new position, but thank you for reporting to us on this.

I had a question I think it can be for each of the -- whether it's corporate engagements for executive comp, or board diversity, or climate risk, as we -- I guess mainly climate risk. As we get these commitments, right, like the 17 of the 22 companies that have committed to net zero, what do we do -- do we proxy vote when we're seeing that they're not actually demonstrating that commitment? For example, I don't remember who it was, but one of the -- one large fossil fuel company continues to get licenses to drill, whether that's for shale or whatever, and they're not really demonstrating that they are coming up with a better -- a business plan that moves them to the net zero. So what do we do with that? Do we -- does that come out in proxy voting?

MANAGING INVESTMENT DIRECTOR NZIMA: Thank you,
Ms. Taylor, for that question. Yes indeed. So making a
commitment is just the basic. It's just the starting
point. And what we are doing is that we continue to
engage those companies and look for milestones in terms of
what are they actually doing on the ground in terms of
trying to get net zero by 2050. We all know that, you
know, 2050 is still a couple of decades away. And, you
know, a lot of those maybe CEOs who may be making those
commitments now may not be in -- you know, in those
positions by then. So we look for intermediate
milestones.

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And as you may know, the Climate Action 100+ came out in March 2020 with a net zero benchmark. And the first time we used that benchmark was in March 2021, when we benchmarked all the companies in there. And the second iteration of that benchmark is going to come out in March this year. So we're actually using that benchmark to measure progress in terms of what companies are doing.

And as we -- as we measure that progress, that translates into our proxy voting. So we -- you know, if we see a company that's not making progress, we vote against, you know, members of the board, either members who are responsible for climate action or the board in general. And what we've also done over the years, and we

continue to do, is that even where other investors file 1 shareowner proposals that aligned with the objectives of 2 the Climate Action 100, we actually ran proxy 3 solicitations, you know, to get other investors to support 4 those proposals, which is -- we did that last year. 5 done that over the number of years. But everything I 6 7 think goes back to proxy voting, and that's something that 8 we continue to do. I think we have -- for this proxy season, we have explicitly come out and updated our proxy 9 10 voting quidelines to state that we'll be, you know, voting against directors where companies are not making progress 11 on climate change. 12

COMMITTEE MEMBER TAYLOR: Okay. Thank you. And I see that that is also the case with corporate diversity and accountability. You've actually stated that in here, so I do appreciate that.

And thank you again for the report and the hard work.

MANAGING INVESTMENT DIRECTOR NZIMA: Thank you. It's all the team. I'm just -- I'm just doing the presentation.

(Laughter.)

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CHAIRPERSON MILLER: Yeah. And we certainly appreciate all the work of the team, just the sheer volume of work that's been done in this area is pretty amazing.

So next I have Controller Yee.

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COMMITTEE MEMBER YEE: Thank you, Mr. Chairman. Thank you, Simiso to you and your team for all this outstanding work. Just to follow up on Ms. Taylor's question, I was curious, I guess on slide nine, I guess it just struck me that, you know, we're kind of mentioning net zero targets and ambitions in the same line. And I'm just trying to figure out how the role of Climate Action 100+ in ensuring that a company's ambition actually becomes a target. And so can you speak to that? And I guess maybe that's really the nature of the engagement that you're having.

MANAGING INVESTMENT DIRECTOR NZIMA: Yeah. Thank you for the question, Controller Yee. The engagement is meant to move the company from that ambition to target. And the net zero benchmark, which really has, you know, the short-term, the medium-term, and the long-term targets is helping us in terms of that. So we're able to, you know, engage with a company, but also measure, you know, the company's progress based on what's in the benchmark.

And the companies have an opportunity, once the benchmark has been populated, which is populated by a third party, that each company is sent, you know, what has been populated and they can correct anything if they think that there's something wrong, but it has to be something

which is verifiable.

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So really this is an ongoing activity. And what we're looking at is working with the companies, and the companies, which are really progressive in trying to do the right thing and incorporate the ability to survive under a low carbon economy. And then there are laggards. And with those laggards, we'll be seeing more against votes. Not just from us, I think other investors, you know, are really taking this issue seriously, as they should, since it affects, you know, the returns of these companies over the long term.

COMMITTEE MEMBER YEE: Right. Right. Okay. Good. Appreciate that.

And then really applaud you and the team for just the progress we're seeing with respect to corporate board diversity. And certainly CalPERS has been on the forefront of that for a very, very long time.

In terms of engaging companies on human capital management issues, can you speak to other issues that are the subject of engagement besides the say-on-pay proposals?

MANAGING INVESTMENT DIRECTOR NZIMA: Yeah. So on human capital management -- and we work on this issue with Board Governance and Sustainability. I think James Andrus is the Interim Managing Director in that group, but we

work together. And some of the issues that we look at around company culture, you know, sexual harassment misconduct, worker safety, and so forth really at the end of the day, most of our work is based on understanding the evidence which shows really that a happy employee is a more productive employee. We all know that when -- you know, when we're happy, that's when we do our best. And so we approach all these areas and all these issues based on that.

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And so there's lot of work that is going on there, both from actually engagement with companies, but also in terms of interaction with the legislators and regulatory bodies in terms of having better disclosures on issues around human capital management.

COMMITTEE MEMBER YEE: Okay. Okay. I appreciate that. And thank you. And I'll just say, thank you, Ms. Frost. I know we've been involved in some conversations about this. And I was curious -- or actually interested in maybe having a more deeper dive on just some of the things that we're looking at, particularly with companies that are doing well with respect to investment returns for us right now, but in the long term, and just given what's happening in the economy with the future of work, and just kind of worker issues generally, I just question the sustainability of performance with some of the practices

of companies. And so we just did send over a letter and I look forward to that discussion coming back to the Board after the staff takes a look at it.

CHIEF EXECUTIVE OFFICER FROST: Got it. We'll have Dan take that down as Committee direction, if it's okay with the Chair.

CHAIRPERSON MILLER: Sounds good.

COMMITTEE MEMBER YEE: Great. Thank you.

CHAIRPERSON MILLER: Okay. I'm not seeing anymore questions or hands up. Oh, is that Ms. Middleton? Lisa. Okay.

COMMITTEE MEMBER MIDDLETON: This is going to be really quick and it's basically me too. But I think the point that Controller Yee was making with regard to human capital management is something that we really do need to emphasize, and I want to add my voice to that.

Thank you.

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CHAIRPERSON MILLER: Thank you, Lisa Middleton.

And I'm not seeing anymore hands or questions. I believe we do have a public commenter on this Item 7c.

Mr. Fox.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Mr. Chair. We have one caller on Item 7c. Mr. Jim McRitchie.

CHAIRPERSON MILLER: Go ahead, Mr. McRitchie, you have the floor.

MR. McRITCHIE: Okay. I heard the buzz.

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Well, thank you very much. I'd like to say that overall, it looks like great work with engagements really paying off. I do have a few questions. When voting on equity compensation plans, is any consideration given to ensure that incentives are broad based, like going to all or most employees rather than just named executives or directors, and if so, does CalPERS have anyway of tracking how those incentive shares were actually awarded below the CEO and Board level, do you have milestones? For example, in my own proposal, I'm asking for disclosure by EEO1 categories of those broad based incentives. There's plenty of evidence that shows that shifting some incentive awards from the top towards the bottom would help address wealth inequality while raising productivity and overall GDP.

The second concern is it's great to see the votes against CEO pay not aligned with performance and comp committee members as well. That's very important to include votes against comp committee members. Is CalPERS doing anything to avoid the automatic rationing of executive compensation due to annual surveys and boards, assuming their CEO is above average? Usually, it's like 75th percentile. So every year that average goes up because of that rationing surveys.

And another concern is board diversity. So at unresponsive companies, it looks like the hammer has been vote-no campaigns. And I'm just curious are those aimed solely at the nominating committee or are others sometimes involved, and if others are involved, then how are they selected?

And then the last thing I'd like to bring up is on proxy access, I notice that CalPERS is filing proposals with a group limit of 20 in their proxy access proposal. And as you may know, proxy access has only been used once, so -- and I think it's probably due to that 20-member group limit on those wishing to file under proxy access provisions. Typically limiting to 20 members, you can't get three percent held for three years. So I would advise either lifting that cap altogether or at least lifting it to 50-year or higher. And I've been somewhat successful in those efforts, but, of course, if CalPERS is doing, there would be much more success in that area.

Thank you.

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CHAIRPERSON MILLER: Thank you, Mr. McRitchie.

I think that concludes all our public comments,

Mr. Fox?

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Mr. Chair for now. The next public comment is on 7e.

CHAIRPERSON MILLER: Okay. So I don't know if

you want to -- if you had anything you wanted to add, Simiso or Dan?

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INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: No.

I think -- I think that covers our item. You know, Mr.

Chair, if you direct, we're happy to reach out to Mr.

McRitchie and answer some of his questions and, you know, kind of engage directly with him.

CHAIRPERSON MILLER: I think that would be -- that would be helpful.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Okay. We'll take that as Committee direction then also.

CHAIRPERSON MILLER: Okay. And so -- yeah, so anything -- I guess summary of committee direction.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: It sounds great. And really quickly before I get to that, I do just want to thank, first of all, Ms. Taylor for her kind comments, but then also really thank -- you know, I was probably remiss in not mentioning the support of the Board is critical to us being able to execute and stay focused. So I definitely want to just express a sincere appreciation to you all for all the support that you give us and -- you know, and doing what we're here to do.

Let's see, I've got two Committee directions that I took. First of all, we will reach out to Mr. McRitchie.

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But then second of all to Controller Yee's request, we
will plan on bringing back more information possibly with
the -- with the educational item in July, but we'll bring
back an item on HCM and how -- you know, how all of that
feeds into sort of corporate management and how we're --
and how we're thinking about all of those to drive
investment returns.
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And those are the two bits of Committee direction that I have.

CHAIRPERSON MILLER: Okay. Sounds about right.

So at this point, I think we have another public commenter for the Item 7e, public comment. Mr. Fox.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Mr. Chair. We have four callers. The first is Teddy Usude.

15 CHAIRPERSON MILLER: Okay. Commenter, you have 16 the floor.

STAKEHOLDER RELATIONS CHIEF FOX: Mr. Chair, apparently, he stepped away. I'll return to him and I'll go to the next one.

CHAIRPERSON MILLER: Okay.

STAKEHOLDER RELATIONS CHIEF FOX: Next, we have Carrie Gibbs.

23 CHAIRPERSON MILLER: Okay. Mr. Gibbs, you have the floor.

> MS. GIBBS: Hello. Hi. This Carrie. Good

morning.

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CHAIRPERSON MILLER: Good morning.

MS. GIBBS: Can you hear me?

CHAIRPERSON MILLER: Yes, you have the floor.

MS. GIBBS: Hi. Good morning. Can you hear me

okay?

CHAIRPERSON MILLER: Yes, we can hear you fine. Go ahead with your comments.

MS. GIBBS: Okay. Great. Okay. Hello. Good morning. My name is Carrie Gibbs. I'm a resident of Santa Rosa, California. You are committed to responsible investing and I'm here to discuss a gross failure, which victimizes myself and many other Californians and people around the country.

Apollo Management, a significant external manager, is a controlling investor in the Hertz Car Rental company holding much of its stock, and appointing a Senior Portfolio Manager to Hertz board. Other external managers may have significant investments in Hertz. Hertz has a national practice falsely reporting to police that a car it can't find or whose rental it believes to have expired was stolen by the last customer to rent the car.

Its internal records are a mess and their filings are incomplete and unverified reports for the purpose of using the police as a taxpayer funding repo service.

Apollo and other controlling investors know these false police reports cause the arrest, often at gun point, of customers who've returned their vehicles, renewed the rentals, or at most disagreed about when or where a car has to be returned. These are the worst civil payment disputes.

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Victims and their families often suffer the physical, emotional, and economic traumas of days, weeks, or even months in jail. Much of it falls on people of color. Many false reports are made in California are against Californians. I had an insurance rental from Hertz Grass Valley and Truckee locations in 2019. exchanged the vehicle several times and was in contact with the company during the rental. Despite this, I was arrested, jailed, and then prosecuted in Grass Valley for a year, until the case was dismissed in 2020. I thought it was over, but the passport applications kept getting I finally was told in late 2021 that Hertz had another warrant against me in Reno, Nevada, the same rental, even though I never rented a car there. I have an active warrant pending for my arrest in a state I never even rented a car from, even though I beat the Hertz case.

I, and hundreds of other victims, have filed claims against Hertz and its bankruptcy. Apollo and other control investors have let Hertz do nothing but deframe --

defame victims and impose procedural obstacles to fair treatment of claims.

Just as bad, Apollo and other controlling investors are making new victims by committing Hertz to continue making false police reports. If this doesn't change, Hertz securities should be restricted from all your portfolios, and Apollo and other managers, who directly permit continued misconduct, influence should be redeemed and barred from future RFPs. The moral imperative is more than enough, but retirees must also be protected from impacts from the inevitable, commercial, and regulatory consequences will have upon Hertz securities.

Thank you.

CHAIRPERSON MILLER: Thank you for your comments.

Mr. Fox, next caller.

MS. GIBBS: Thank you.

18 STAKEHOLDER RELATIONS CHIEF FOX: Yes, Mr. Chair.

The next caller is Sarah Theiss from Fossil Free

20 California.

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CHAIRPERSON MILLER: Okay. Sarah Theiss you have the floor.

MS. THEISS: Hi. You all know -- you all know me. Sarah Theiss at Fossil Free California and grateful CalPERS retiree.

Today, I'm commenting on fiduciary -- on the fiduciary duty training in January specifically about diversification, whether divestment is merely political and your reliance on experts.

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Ms. Richardson stated that if you divest, you are less diversified. However, I think a literal interpretation of the word is a mistake and the California Constitution doesn't require this. As Ms. Taylor pointed out, exclusion can be strategic. And as I'm sure your researchers know, there is literature supporting the fact that you can exclude one sector from a portfolio and do fine. Various institutions around the world have committed to fossil fuel divestment. This includes the Dutch Pension fund ABP -- ABP with 650 million -- billion AUM, New York State, Ireland's pension fund, London, and New York City. Caisse de dépôt et placement du Québec has 308 billion in assets and selling off its oil companies. The Norwegian Sovereign Wealth Fund, which has one trillion in assets is unloading 13 billion worth of its fossil fuel.

So the question is have the trustees of all these pension funds abandoned their fiduciary duty? The answer is no. As BlackRock and Meketa separately concluded last year, investment funds have experienced no negative impacts from divesting from fossil fuels and, in fact,

have found some evidence of modest improvement in fund returns.

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The next point, the view of Ms. Richardson, and at least some on the Board, is that divestment is political. It's true that in the U.S. divestment and anti-divestment activities are tide to blue and red states, but it's worth asking first whether one can dismiss the divestments just described as solely political.

Second, what underlies this characterization?

How much of this is due to the now well known decades-long campaign of climate denying and lies by the fossil fuel industry and the massive amounts of money this industry spends on lobbying and contributions to political campaigns -- to political campaigns of our representatives? Just about all of it I would say.

And finally, reliance on experts. Ms. Middleton alluded to the fact that all of CalPERS' experts are in favor of CalPERS' approach, that is engagement over exclusion. But as Controller Yee commented, it's hard to have a conversation when those advocating for divestment are not present. I urge the Board to fully exercise its duty of care and bring in -- bring consultants into this conversation who understand how divestment can help improve a portfolio. Thanks so much for your attention

and listening.

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CHAIRPERSON MILLER: Thank you for your comments.

Mr. Fox, our next caller.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Mr. Chair.

The next caller is Sandy Emerson from Fossil Free

California.

CHAIRPERSON MILLER: Sandy Emerson, you have the floor.

MS. EMERSON: Thank you. I moved to Charleston, South Carolina as I was finishing high school. That historic city still had a shopping area called the Old Slave Mart. With its souvenir shops and craft boutiques, this plaza had been completely transformed from its (inaudible) as part of an economy of trafficking in enslaved African.

The economic system of slavery was overturned, although its sordid legacy continues. The old slave mart is an example of an economic system that was overturned from moral reasons. People don't overtly invest in slavery anymore, just as CalPERS now restricts investments in Sudan, in tobacco, assault weapons, and a small number of thermal coal companies.

As you know, CalPERS equity investments are controlled by a benchmark driven by the market as a whole, and CalPERS custom index uses the whole market to

determine its fossil fuel equity investments -- in fact, all equity investments. CalPERS portfolio managers make many investment decisions, but not about equity. About half of CalPERS total assets are managed passively according to the whims of the global market.

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Like all investors, CalPERS returns have been lifted by the hyperactive market of the last few years and fossil fuels have recently experienced the expected post-pandemic surge. But should investment decisions on something as important as our future be left to the market as a whole?

CalPERS knows from its engagement experiences that the fossil fuel industry is highly resistant to change and continues to spin elaborate schemes to reach net zero by means of using unproven technologies to produce lower carbon intensity products rather than moving to transform its business to lower total carbon emissions, as required by the IPCC scientists.

Big oil's expansion plans guarantee that we won't reduce emissions at the scale and speed required to stop overheating the planet. Will CalPERS remain a slave to the market or will it take control of its equity investing and restrict investing in fossil fuels? That's the burning question.

Will you use your power as a board to stop

enabling polluters? We have about eight years to reduce emissions by 50 percent by any and every means necessary. Many large pension funds and other institutions have concluded that the right thing to do is to divest and stop financing fossil fuel investments.

Thank you.

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CHAIRPERSON MILLER: Thank you for your comments.

Mr. Fox, do we have one more caller or more than
that?

STAKEHOLDER RELATIONS CHIEF FOX: Mr. Chair, we have two callers, if we get the previous caller back.

CHAIRPERSON MILLER: Okay.

STAKEHOLDER RELATIONS CHIEF FOX: First, we have Jim Xu.

CHAIRPERSON MILLER: Okay. Mr. Xu, you have the floor.

MR. XU: Good morning, everyone. Thank you for your great presentation. I just simply have two quick questions. The first one is where is your return year to date? And the second one is what's your outlook for the remainder of the fiscal year, especially for the currently downward stock marketing and the most likely the Fed will increase the interest rate in March.

Thank you.

CHAIRPERSON MILLER: Okay. Thank you for your

comments. Those were covered in presentations, but anybody want to jump in and recap that.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: We certainly can, Mr. Miller. Although my guess is that there's maybe -- that's more of a question of the current year, given the recent volatility.

CHAIRPERSON MILLER: Yeah.

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INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: So why don't we treat that one the way that we -- that we did with Mr. McRitchie and we'll just ask someone to reach out and engage with the caller.

CHAIRPERSON MILLER: Great. Thank you. That would be appreciated.

And, Mr. Fox, our final caller, are they back available?

STAKEHOLDER RELATIONS CHIEF FOX: We'll check,
Mr. Chair. We'll put them on now. This is Teddy Usude.

DR. USUDE: Yes. Hi. Good after -- good morning, everyone. My name is Dr. Teddy Usude. I'm a Dentist and resident of Santa Clara, California.

I'm calling in on regarding the Hertz car rental company. Sometime in June of 2020 -- 2020 at the height of the pandemic, I took up -- I took up a job at rural hospital in Laytonville, California. I did get a long-term rental from Hertz on or around June 15th, 2020.

I made the payments when due. I was in con -- I was in constant communication with the Hertz Rental Company all throughout the duration of the rental.

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And then sometime in December of 2020, I -- actually, on December 16th of 2020, I had communicated with Hertz Rental that there was a COVID outbreak at the hospital where I worked, you know, which was -- which is right on the California-Oregon border. We agreed that I was going to return the car on Saturday the 16th of December 2020.

The car -- the rental was fully paid for. There was no money to have. There was no case of -- there was no issue of the car being stolen, because it had to be pretty well that I'm a dentist and I'll be paying for the car on a monthly basis.

Anyway to cut a long story short, I drove about seven hours from Laytonville, which is like 300 miles outside of San Francisco. And then just got off the 505 -- the 5 north freeway and drove into Santa Clarita. A few minutes later, I noticed a cop right behind me, a squad car. And then basically, I was pulled over, and then had about seven, eight squad cars pull up -- pull up around me after me. And then basically went through the procedure of asking me to step out of the car right in the center of Bouquet Canyon Road. That's the road that I was

pulled over on.

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And then I was asked to step out of the car with about seven, eight squad cars with cops, guns all drawn, you, you know, and then I was arrested. And I was told that Hertz had reported the car stolen.

I did explain to the cops that, you know, well, the car is not stolen. I showed them documents of the rental agreement. I showed them a history of payment.

And I told them actually my dental office was just a couple of blocks around -- away from where I was arrested.

And then I was basically told that there was nothing they could do anyway, because Hertz had declared the car stolen and that I would have to be arrested and taken over to the Santa Clarita Police station.

I was taken there and I was detained overnight for about 24 hours. And then the following morning, I was given -- I was given a ticket, which basically says that they (inaudible) from the Hertz rental company, and I was asked to appear in court to answer on a certain date. So in a week --

CHAIRPERSON MILLER: If you could wrap up, please. Your time is running out.

MR. USUDE: Okay. Yeah. Yeah. Yes. So -yeah. So the following week we went around the courthouse
look for a history of the file of the case -- of the

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case -- the case that was filed in court and we couldn't
1
    find any, you know? And then, like I said, it's -- I
2
    think it's a problem where a company like Hertz, you know,
 3
    reports people for cars, you know, that are basically in
    my case, you know, not stolen. You know that car wasn't
5
    stolen. It was paid for. I was in constant communication
6
7
    with them.
                I didn't have any problems until I was just
8
    basically pulled out, guns drawn by, you know, over eight
    squad cars. And believe me, it was about 7 p.m. at night.
9
10
    I could have been easily shot if I took the wrong step.
    They asked me to -- because they asked me to take three
11
    steps back, and stuff like that, lay on the floor. I
12
    could have been easy shot and killed there just for
13
    absolutely no reason.
14
15
             CHAIRPERSON MILLER: Okay. Thank you for
16
    comments, sir. We appreciate it, and your time has
17
    expired.
                    Any further --
             Okay.
18
19
             MR. USUDE: Okay. Thank you very much.
             CHAIRPERSON MILLER: -- further public comments,
20
   Mr. Fox?
21
             STAKEHOLDER RELATIONS CHIEF FOX: That concludes
2.2
23
   public comment, Mr. Chair.
             CHAIRPERSON MILLER: Okay. Well, that pretty
24
25
   much -- we'll recess into closed session for items one to
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four from the closed session agenda. The open session
1
    Investment Committee will reconvene following closed
2
 3
    session.
             And let's take about a about -- how about a
 4
    10-minute break and reconvene in closed session at 11:40.
5
           See you all there.
    Okay.
6
             (Off record: 11:29 a.m.)
7
8
             (Thereupon the meeting recessed
             into closed session.)
9
             (Thereupon the meeting reconvened
10
             open session.)
11
             (On record: 12:14 p.m.)
12
             CHAIRPERSON MILLER: Thank you for joining us.
13
    We will be taking a break for lunch and then the Board of
14
    Administration will convene at 1 p.m.
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16
             So we'll see you all then.
             (Thereupon, the California Public Employees'
17
             Retirement System, Investment Committee
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             meeting open session adjourned at 12:14 p.m.)
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## CERTIFICATE OF REPORTER

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I, JAMES F. PETERS, a Certified Shorthand
Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Public Employees' Retirement System,

Board of Administration, Investment Committee open session meeting was reported in shorthand by me, James F. Peters,

a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by computer-assisted transcription;

I further certify that I am not of counsel or attorney for any of the parties to said meeting nor in any way interested in the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 21st day of February, 2022.

James & Title

JAMES F. PETERS, CSR

Certified Shorthand Reporter

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