MEETING

STATE OF CALIFORNIA

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BOARD OF ADMINISTRATION

INVESTMENT COMMITTEE

OPEN SESSION

ROBERT F. CARLSON AUDITORIUM

LINCOLN PLAZA NORTH

400 P STREET

SACRAMENTO, CALIFORNIA

MONDAY, AUGUST 19, 2019 9:00 A.M.

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

## APPEARANCES

## COMMITTEE MEMBERS:

- Mr. Rob Feckner, Chairperson
- Ms. Theresa Taylor, Vice Chairperson
- Ms. Margaret Brown
- Mr. Henry Jones
- Ms. Fiona Ma, also represented by Mr. Matthew Saha
- Ms. Lisa Middleton
- Mr. David Miller
- Ms. Stacie Olivares
- Ms. Eraina Ortega
- Ms. Mona Pasquil Rogers
- Mr. Jason Perez
- Mr. Ramon Rubalcava
- Ms. Betty Yee

## STAFF:

- Ms. Marcie Frost, Chief Executive Officer
- Mr. Michael Cohen, Chief Financial Officer
- Mr. Doug Hoffner, Deputy Executive Officer
- Mr. Matt Jacobs, General Counsel
- Dr. Yu (Ben) Meng, Chief Investment Officer
- Mr. Brad Pacheco, Deputy Executive Officer
- Mr. Eric Baggesen, Managing Investment Director
- $\operatorname{Mr.}$  Dan Bienvenue, Interim Chief Operating Investment Officer

## APPEARANCES CONTINUED

#### STAFF:

- Ms. Kit Crocker, Investment Director
- Ms. Caitlin Jensen, Committee Secretary
- Ms. Kristin LaMantia, Assistant Chief, Enterprise Strategy and Performance Division
- Mr. John Rothfield, Investment Director
- Mr. Kevin Winter, Managing Investment Director

# ALSO PRESENT:

- Ms. Peggy Bernardy
- Ms. Margarita Berta-Avila, California Faculty Association
- Mr. Greg Brucker, Jewish Action NorCal
- Ms. Alex Cole-Weiss, California State University, Sacramento, Queer and Trans Faculty and Staff
- Mr. Al Darby, Retired Public Employees Association
- Ms. Rose Dean, Wilshire Associates
- Ms. Mya Dosch, California Faculty Association
- Ms. Joanne Fanucchi
- Ms. Sharon Flicker, California Faculty Association
- Ms. Emily Goldman, Educators for Migrant Justice
- Mr. Steve Hartt, Meketa Investment Group
- Ms. Ruth Ibarra, NorCal Resist
- Ms. Miriam Joffe-Block, California Alternative Energy and Advanced Transportation Financing Authority
- Mr. Neal Johnson, Service Employees International Union

# APPEARANCES CONTINUED

# ALSO PRESENT:

- Ms. Marlyn Jones, California Faculty Association
- Mr. Andrew Junkin, Wilshire Associates
- Mr. Ali Kazemi, Wilshire Associates
- Ms. Jessica Lawess, California Faculty Association
- Mr. Steve McCourt, Meketa Investment Group
- Mr. Mark Ocegoeden, California Faculty Association
- Ms. Janeth Rodrigues, California Faculty Association
- Ms. Melanie Saeck, California State University, Sacramento, Queer and Trans Faculty and Staff
- Ms. Heidy Sarabia, California State University, Sacramento, California Faculty Association
- Ms. Sara Theiss, Fossil Free California
- Mr. Tom Toth, Wilshire Associates
- Ms. Maria Vargas, Center on Race and Immigration and Social Justice

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CHAIRPERSON FECKNER: Good morning. We'd like to call the Investment Committee meeting to order. The first order of business will be to call the roll.

COMMITTEE SECRETARY JENSEN: Rob Feckner?

CHAIRPERSON FECKNER: Good morning.

COMMITTEE SECRETARY JENSEN: Theresa Taylor?

VICE CHAIRPERSON TAYLOR: Here.

COMMITTEE SECRETARY JENSEN: Margaret Brown?

COMMITTEE MEMBER BROWN: Here.

COMMITTEE SECRETARY JENSEN: Henry Jones?

COMMITTEE MEMBER JONES: Here.

COMMITTEE SECRETARY JENSEN: Fiona Ma?

COMMITTEE MEMBER MA: Here.

COMMITTEE SECRETARY JENSEN: Lisa Middleton?

COMMITTEE MEMBER MIDDLETON: Present.

COMMITTEE SECRETARY JENSEN: David Miller?

COMMITTEE MEMBER MILLER: Here.

COMMITTEE SECRETARY JENSEN: Stacie Olivares?

COMMITTEE MEMBER OLIVARES: Here.

COMMITTEE SECRETARY JENSEN: Eraina Ortega?

COMMITTEE MEMBER ORTEGA: Here.

COMMITTEE SECRETARY JENSEN: Jason Perez?

COMMITTEE MEMBER PEREZ: Here.

COMMITTEE SECRETARY JENSEN: Mona Pasquil Rogers?

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COMMITTEE MEMBER PASQUIL ROGERS: Here.
1
             COMMITTEE SECRETARY JENSEN: Ramon Rubalcava?
2
             COMMITTEE MEMBER RUBALCAVA:
                                           Here.
 3
             COMMITTEE SECRETARY JENSEN: Betty Yee?
             COMMITTEE MEMBER YEE: Here.
 5
             CHAIRPERSON FECKNER: Thank you.
 6
             Item 2 is the approval of the August 19th
7
8
    Committee timed agenda. Any discussion on the --
9
             VICE CHAIRPERSON TAYLOR: Move approval.
             COMMITTEE MEMBER MILLER: Second.
10
             CHAIRPERSON FECKNER: It's been moved by Taylor,
11
   seconded by Miller.
12
             Any discussion on the motion?
1.3
             Seeing none.
14
             All in favor say aye?
15
16
             (Ayes.)
             CHAIRPERSON FECKNER: Opposed, no?
17
             Motion carries.
18
             Item 3, is swearing in ceremony for our new
19
20
   member.
             Mr. Jones, please.
21
             COMMITTEE MEMBER JONES: Thank you, Mr. Chair.
2.2
23
             Before we get started I'd like to extend my
    congratulations to our newest Board member, Stacie
24
25
    Olivares. Ms. Olivares, was recently appointed by
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Governor Newsom as an insurance industry representative.
1
    She is currently the Chief Investment Officer of
2
    Lendistry.
 3
             As it is customary, we will now have a brief
 4
    ceremonial swearing in of our new member. Ms. Olivares,
5
   would you join me at the mic.
6
7
             COMMITTEE MEMBER JONES: Okay. Would you please
8
   raise your right hand.
             And, I, state your name --
9
             COMMITTEE MEMBER OLIVARES: I, Stacie Olivares --
10
             COMMITTEE MEMBER JONES: -- do solemnly swear
11
   that I will support and defend the Constitution of the
12
   United States --
1.3
             COMMITTEE MEMBER OLIVARES: -- do solemnly swear
14
   that I will support and defend the Constitution of the
15
16
   United States --
             COMMITTEE MEMBER JONES: -- and the Constitution
17
   of the State of California --
18
             COMMITTEE MEMBER OLIVARES: -- and the
19
20
   Constitution of the State of California --
             COMMITTEE MEMBER JONES: -- against all enemies
21
   foreign and domestic --
2.2
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             COMMITTEE MEMBER OLIVARES: -- against all
    enemies foreign and domestic --
24
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COMMITTEE MEMBER JONES: -- that I will bear

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truth faith and allegiance --
1
             COMMITTEE MEMBER OLIVARES: -- that I will bear
2
3
    true faith and allegiance --
             COMMITTEE MEMBER JONES: -- to the Constitution
 4
    of the United States and the Constitution of the State of
5
    California --
 6
             COMMITTEE MEMBER OLIVARES: -- to the
7
8
    Constitution of the United States and the Constitution of
9
   the State of California --
             COMMITTEE MEMBER JONES: -- that I take this
10
    obligation freely --
11
             COMMITTEE MEMBER OLIVARES: -- that I take this
12
    obligation freely --
1.3
14
             COMMITTEE MEMBER JONES: -- without any mental
   reservation or purpose of evasion --
15
16
             COMMITTEE MEMBER OLIVARES: -- without any mental
   reservation or purpose of evasion --
17
             COMMITTEE MEMBER JONES: -- and that I will well
18
   and faithfully --
19
20
             COMMITTEE MEMBER OLIVARES: -- and that I will
   well and faithfully --
21
2.2
             COMMITTEE MEMBER JONES: -- Discharge the duties
23
   upon which I am about to enter.
             COMMITTEE MEMBER OLIVARES: -- discharge the
24
    duties upon which I am about to enter.
25
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COMMITTEE MEMBER JONES: Thank you for
1
    acknowledging this ceremony. Thank you very much.
2
             (Applause.)
 3
             COMMITTEE MEMBER JONES: And we appreciate your
 4
    call to service to our 1.9 million member -- 1.0 million
5
   members, and our confidence that you will do all you can
6
7
    to represent their best interests.
8
             So thank you again.
             COMMITTEE MEMBER OLIVARES: Thank you.
9
             CHAIRPERSON FECKNER: Thank you, Mr. Jones.
10
11
             Congratulations.
             The next order of business is the Pledge of
12
   Allegiance. I've asked Mr. Rubalcava to please lead us in
1.3
    the pledge.
14
             (Thereupon the Pledge of Allegiance was
15
16
             recited in unison.)
             CHAIRPERSON FECKNER:
17
                                   Thank you.
             Item 5, the Executive Report for the Chief
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19
    Investment Officer, Mr. Meng.
20
             CHIEF INVESTMENT OFFICER MENG: Good morning, Mr.
    Chair, members of the Investment Committee.
21
             CHAIRPERSON FECKNER: Good morning.
2.2
             CHIEF INVESTMENT OFFICER MENG: We have full
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    agenda this morning. We start with two standard
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25
    reoccurring items. With item 6 is action consent item,
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which is to approve the meeting minutes of the Investment Committee on June 17th.

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Then Item 7 covers five information consent items. Item 8 is the only action agenda item today, which is to approve the suggested interview process for the Board investment consultants and to determine the finalist firms to be interviewed by the subcommittee.

Then in Agenda Item 9 -- can I have the next page please. So in 9A, my colleague, Eric Baggesen, Dan Bienvenue, and John Rothfield will provide you with a trust level review, where we'll provide you with the past involvement -- investment performance, as well as the current risk positioning of the portfolio, and concluded by an economic update -- economic outlook update by John Rothfield.

In agenda 9b, where your primary investment consultant, Wilshire, will provide a performance report, as well as Meketa, and Pension Consulting Alliance will provide comments specific to private equity, real assets, and infrastructure.

In Agenda Item 9c, my colleague Kit Crocker and Dan Bienvenue will lead a discussion to seek your review and direction on the proposed update and revision to the Investment Policy.

In Agenda Item 10, your -- again, your primary

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pension consultant, Wilshire, will provide an annual
1
    program review of two of the total fund level investment
2
   programs, which are the Trust Level Portfolio Management
 3
    Program and Opportunistic Strategy Program.
             In Agenda Item 11, you'll be provided with an
5
    annual evaluation of your investment -- of your investment
 6
7
    consultants.
8
             So with that, back to you, Mr. Chair.
9
             CHAIRPERSON FECKNER: Thank you.
             Seeing no other requests.
10
             Moving on to Agenda Item 6, the Investment
11
    Committee open meeting minutes from June 17th.
12
             What's the pleasure of the Board -- Committee?
1.3
             VICE CHAIRPERSON TAYLOR: Move approval
14
             CHAIRPERSON FECKNER: Moved by Taylor.
15
16
             COMMITTEE MEMBER JONES:
                                       Second.
             CHAIRPERSON FECKNER: Seconded by Jones.
17
             Any discussion on the motion?
18
             Seeing none.
19
20
             All in favor say aye?
             (Ayes.)
21
             CHAIRPERSON FECKNER: All opposed, no?
2.2
             Motion carries.
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request to remove Item 7e and f. So that leaves us A

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Item 7, Information consent item. I do have a

through D. No other requests to move those off.

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So we will go to Item 7e and f. And I'm going to call on Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman. And thank you, Mr. Meng, for introducing the item with respect to the informational item that will follow by the consultants. I thought that maybe perhaps appropriate just to have a bit of a discussion on these two items. It's the first I think I recall that these have been put on consent without kind of a public discussion. And rather than hear it for the first time from the consultants, whether we could just have a brief presentation with respect to both of these reviews.

CHIEF INVESTMENT OFFICER MENG: Let me call on my colleague, Eric Baggesen.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay.

Good morning. Eric Baggesen, Managing Investment Director
for Trust Level Portfolio Management.

Perhaps, Ms. Yee, what I would ask first is if you have any specific questions or would you just like to cover some of the material in general.

COMMITTEE MEMBER YEE: No, just cover some of the material. And I'm mindful of some of my newer colleagues on the Board. And I don't remember this being agendized as a consent item in the past, where we've had an

opportunity to ask questions as the presentation has been before us.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay.

I don't know. Is it possible to load up the PowerPoint that is attached to Item 7e?

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MANAGING INVESTMENT DIRECTOR BAGGESEN: Oh there. Perfect.

(Thereupon an overhead presentation was presented as follows.)

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay.

Let me step through some of this material hopefully pretty quickly, and then we can get on to the next segment, which is the Opportunistic Program review, which I think also you had some questions about.

--000--

MANAGING INVESTMENT DIRECTOR BAGGESEN: Let's see. I think I'll move past the outline. So first the Trust Level Portfolio Management Program is basically positioned to be the collection point for almost everything that we talk about when we talk about the total fund. So, that -- this area is responsible for moving the strategic asset allocation work that we do with this Board. The last iteration of that work was completed at the end of 2017. And over the last year, we've been implementing the structures and the decisions that the

Board made in relation to that strategic asset allocation work.

2.2

The other dimension that we are working on is TLPM, or trust level portfolio management, is also one of the areas where we depend on to try to build a total fund culture and collaboration. So that's one of the primary functions of the entire team that I work with on a daily basis is to really bring people from across the Investment Office and across the organization to work on the big questions, and the big topics, and projects that are of importance to the organization.

An example of that is shown in number 2, where we basically work on, what we call, the ALM process, the asset liability management process. And that is a collaborative effort that goes on and involves the Finance Office, the Actuarial Office, the Investment Office, as well as folks in Public Affairs to basically bring in external stakeholder communication and perspective into that process. But that's just an example of the kind of collaboration that this team really tries to foster in all of the work that it does.

The major accomplishments over the last fiscal year or the primary accomplishment is moving the structure of the asset allocation to what was approved by the Board in December of 2017. There were quite a lot of changes

that happened in the structure of the investment portfolio.

1.3

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There was almost \$150 billion of trading activity that took place over the year of 2018-19. And it has pretty much been completed at this point in time as of the end of the last fiscal year.

Our big initiatives for the next coming year really revolve around trying to continue to sort out the, what we call, active risk in the program. And I think that maybe just to help illuminate what we mean by that terminology, active risk, when the Board approves the strategic asset allocation, that, in essence, creates a target allocation to various parts of the marketplace. And those parts of the marketplace are typically proxied by some kind of a benchmark. And that benchmark tends to represent what we think that market opportunity set is.

So the very first job of the staff is to basically invest the capital into that market opportunity set. So that's the sort of must-do job for the staff to basically get the capital deployed into the market as close to what that market opportunity set is, then to the extent that you as a Board provide some risk tolerance.

And risk tolerance can be expressed in a couple of different ways. It is expressed in ranges around the target asset allocation. So, for example, the target

allocation to global equity of approximately 50 percent has a range where the global equity exposure can be as -- drift through a plus or minus 7 percent variance from that target allocation. So that range is an expression of a risk tolerance.

2.2

You also provide a risk tolerance attached to the utilization of leverage. So we'll have some more discussion about that I think in the Total Fund Policy later on. But there is some leverage that is provided within the structure of our current policy construct. And the other risk tolerance is around tracking error or tracking variance.

So currently, the range of tracking that we are allowed to deviate from the strategic asset allocation is limited to 150 basis points. And that tracking variance, in all of these risk tolerances, open up the potential for the staff to choose to do something other than perfectly mirror this -- the strategic asset allocation. And the staff should only choose to do something different than mirroring the strategic asset allocation if we have a reasonable belief that by doing so we can improve the outcome to the fund.

And that improvement could be represented in higher rates of return, or it could also be represented in basically risk mitigation, or lower degrees of volatility.

But that's what that risk tolerance gets into. So when we talk about much of the material in both this part of the program and in the trust level review that comes later in today's agenda, we basically talk about the beta representing the market opportunity set, and then we talk about active risk, which is the utilization of some of that risk tolerance that has been provided by this Board in the past.

Is -- are there any questions in relation to that? Is that more or less understandable and How -- CHAIRPERSON FECKNER: We have one question.

Ms. Brown.

2.2

COMMITTEE MEMBER BROWN: Well, I had a question about the table on page 12. I don't know if we're going to get to that or if we go to that now.

Okay. Great.

And you know we've spent a lot of time, my -- almost my whole term on the Board talking about private equity and private equity returns. And so I see our net return for private equity is listed at 7.7 percent, but the benchmark return is 4 percent. And I'm wondering why that is. Am I reading that wrong or...

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah.

The benchmark for private equity is basically a benchmark that represents what we consider to be the opportunity

cost.

2.2

And when I say opportunity cost, if we were not deploying capital into private equity, the likely place where that capital would be deployed is into the public equity portfolio. So the benchmark for private equity is linked back to the public equity portfolio, plus an incremental margin of 150 basis points of extra return.

But that benchmark is also it's lagged, because of the lagged nature of returns to private equity. So what you're seeing is the return that happened on a lagged basis. So the return at the end of the fiscal year really represents the return to both private equity and the public equity benchmark through the end of March of 2019.

Does that answer your question, Ms. Brown, on that?

COMMITTEE MEMBER BROWN: Yeah, it does. I just had a question about that.

And then on page 14, I don't -- what is completion overlay and it says pilot? I just don't know what that is.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Sure.

Yeah, these -- page 14 represents the collection of programs that do not fit neatly into any of the existing asset classes, if you will. So trust level portfolio management has become a collection point for a number of

different things.

2.2

What you see in this, for example, we're now in the process of collecting together the emerging manager programs, which is the top line of this chart. So this represents the public equity emerging managers. The external MAC Program is the Multi-Asset Class Manager Program that was originally started by Joe Dear. And trust level portfolio management is basically trying to restructure that program and make it relevant.

But the completion overlay is an effort to, in essence, use a derivative overlay to try to represent the entire structure of the asset allocation, but do so in a way that helps us actually manage the liquidity profile of the fund. So that's a program that has been being run in a pilot form. As you see, there's about 500 to 600 million dollars that was deployed in this. So it's relatively de minimis as far as the size of the program.

But that completion overlay was exactly that. It was a -- it's a tool to be used to help us manage the liquidity profile of the fund.

COMMITTEE MEMBER BROWN: And what manager is running that program?

MANAGING INVESTMENT DIRECTOR BAGGESEN: That's being managed internally, one of the staff members Todd Eichman is the person who's primarily responsible for

that.

2.2

COMMITTEE MEMBER BROWN: Thank you.

CHAIRPERSON FECKNER: Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

Eric, can we go to slide 13. I did have a question. And I think it's something I'm just having a hard time getting my head wrapped around where you talk about the contributors to the underperformance -- the 5-year underperformance, one due to negative contributions from private assets, but then also a second factor was the underweight to private assets, which required substituting public assets.

So I guess the question is if the private asset return contributed to the underperformance, why would an underweight to the same asset class also contribute?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah. So I think -- you know, there's -- that's an interesting couple of questions. So the private assets creat quite a problem in the structure of the asset allocation, in that we have a fixed target to the private assets, and yet we do not have the ability to just push money into or out of the private asset areas.

So you inevitably -- as the rest of the portfolio bounces around in value, you inevitably have periods of time when you may be overweighted to private assets or

periods of time when you would be underweighted to private assets. And those over and underweights then create a performance attribution exposure.

2.2

So when we're underweight to the private assets, there is, by definition, the equivalent of a proxy. So if the money is not invested, for example, in private equity -- like currently right as of last Friday, our private equity exposure was approximately 7 percent of the fund. Our target allocation to private equity is 8 percent of the fund, so we have a 1 percent underweight to private equity.

That underweight though is invested in other parts of the portfolio. So it's not money that's just sitting around in cash. What that means is that that money is spread into public equities or fixed income or other parts of the portfolio, so there's -- it, in essence, this defaulted proxy asset.

Private equity happens to be our highest expected return asset class. So a systematic underweight to private equity is constantly causing the expectation of a negative performance impact because of that. So --

CHIEF INVESTMENT OFFICER MENG: If I may, there are really two layers to this effect. Your observation is very right. But there are two layers. One is the asset allocation effect. It means that from the total fund

level, as Eric just mentioned, that our desired target of private equity is 8 percent, but we cannot get to 8 percent. So we're currently at 7 percent. That 1 percent underweight to the desired allocation target, because private equity relative to other asset classes is the best performing asset class. So when you're underweight to the best performing asset class, so from the asset allocation effect, we take a hit on the performance.

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And then the other -- the second bullet point you see is private equity relative to its own benchmark.

That's the second layer. The first layer is allocation to private equity. We under-allocate -- we underinvested relative to the targets.

The second layer is that private equity itself against its benchmark it underperform. So that's a second layer that's where you see negative contribution from underweight -- under -- sorry, the first point, negative contribution from private assets, because private equity underperformed its own benchmark.

And then the second bullet point from the asset allocation perspective, we underallocated or underinvested to the best performing asset class. So these two both added to our underperformance.

COMMITTEE MEMBER YEE: That's helpful. Thank you.

CHAIRPERSON FECKNER: Ms. Brown.

COMMITTEE MEMBER BROWN: Sorry, I had one more question about slide 14. I'm trying to read my own handwriting. We have a category, a program also called Absolute Return Strategies. And is this hedge funds, and if it is, why are we still in them?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah.

That's basically the residual of hedge fund program that's still being worked through on the wind down, Ms. Brown.

So that program has been transferred in again to this total fund collection point, if you will. But that's just part of that exposure that still resides and is illiquid basically. So we're still working down through that.

COMMITTEE MEMBER BROWN: We're winding that down soon?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes. Well, we'll wind it down as fast as the manager can rationally sell that exposure without taking too much of an economic hit.

COMMITTEE MEMBER BROWN: Too much of a loss.
Okay. Thank you.

CHAIRPERSON FECKNER: Ms. Ma.

COMMITTEE MEMBER MA: No, I didn't hit anything

24 on purpose.

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2.2

CHAIRPERSON FECKNER: Okay.

1 Mr. Jones.

1.3

2.2

COMMITTEE MEMBER JONES: Yeah. Thank you, Mr. Chair.

Yeah. Eric, you may also comment on the hedge fund how large it was in terms of your ability to wind down from the -- and indicate what it is right now. That's the first comment.

And then I have another question.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah.

No. That's -- that's -- Mr. Jones is exactly right. At the time the decision was made to stop participating in the Absolute Return Program, the Hedge Fund Program, that program added up to -- I'd have to check the number explicitly, but it was probably 6 or 7 billion dollars, if not even maybe a little bit more in exposure. So there's been a lot of wind down. But this is sort of the stub of the illiquid assets that are left.

COMMITTEE MEMBER BROWN: Thank you.

CHIEF INVESTMENT OFFICER MENG: And if you remember, in the past, we talk about this can be part of the legacy asset review.

COMMITTEE MEMBER BROWN: Trying to get rid of that.

Thank you.

COMMITTEE MEMBER JONES: Okay. Thank you.

Yeah. My question goes to your comment about the private equity where you say we were underweight and you explained the implications of being underweight in private equity. And I think it would -- it's important to comment that that wasn't a Board decision to be underweight or have resources in this. It's inability to allocate additional funds into private equity.

2.2

And so as the fund grows, and if you stay at the same amount, the percentage is going to get large -- smaller and smaller. So if you can comment on that concept.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah.

No. Mr. Jones is exactly right about that is with the private assets, if we have a marketplace where the public assets are doing reasonably well and the public equity portfolio, for example, has done reasonably well over the last few years and really since the financial crisis, that expansion of value means that you're almost, by default, going to be underweight to private assets, such as real estate and private equity, simply because of that inability to just push money into those asset classes.

And on the converse of that, when -- if the market is falling rapidly, you tend to be overweighted to those private assets. Also, because their value does not tend to decline as rapidly as we've seen, for example, in

the public equity portfolio in the past. So you're absolutely right.

CHIEF INVESTMENT OFFICER MENG: Yeah. And if I may, on that note, as you know, that we have been working very actively to find all the ways -- possible ways to increase our exposure to private equity. In addition to the Pillar 3 and Pillar 4, we have been working on, we're also looking to the existing commingled fund. And also as you know, in public, we discussed co-investment strategies.

So later, you will see in Item 9c part of the Total Fund Policy revision is to enable us to tap into these different ways to increase our exposure to private equity. And also, I'm very pleased to share with you that our new head of Private Equity, Greg Ruiz, joined us a few weeks ago.

So where is Greq?

MANAGING INVESTMENT DIRECTOR RUIZ: (Raises

19 hand.)

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(Laughter.)

CHIEF INVESTMENT OFFICER MENG: So he has been leading the team very tirelessly from day one, even before he joined us. He has been working with the team very tirelessly looking to all the possible ways in our existing fund model, commingled fund model, co-investment,

as well as the new model we're proposing, the Pillar 3 and Pillar 4.

CHAIRPERSON FECKNER: Thank you.

Ms. Taylor.

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VICE CHAIRPERSON TAYLOR: Yes. Thank you.

Overview. I just was a little curious, and I appreciate the report, when we get down to the last total program 50 -- is it, 62 FTEs full-time positions. Thirty-four -- the last one, 34 support staff classifications, 6 SSMs, 9 AGPAs, 6 SSAs, 20 OTs, 11 SCs. And for those folks who don't know what those are, we've got Staff Service Managers, Associate Government Program Analysts, Staff Service Analysts, Office Techs, and Seasonal Clerks.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Seasonal Clerks, yes, that's correct.

VICE CHAIRPERSON TAYLOR: Why do we have seasonal clerks?

MANAGING INVESTMENT DIRECTOR BAGGESEN: That's basically a program that's in transition. These are folks that came and have worked in the organization. I think the organization is tying to eventually work down and remove the seasonal clerk exposure basically. But those are folks that are basically contributing to the administrative work of the office still.

VICE CHAIRPERSON TAYLOR: So you're working those -- shouldn't those be Office Tech positions.

Because I'm a little confused, Seasonal Clerks are Seasonal Clerks. So we use them at the department I work in, so -- for the season.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: I think the -- yeah, I think Dan can help with that discussion.

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Sure. Dan Bienvenue.

So we have used the Seasonal Clerks when we stopped doing an intern program. So years back we used to have an intern program. We started using Seasonal Clerks for that, where they would be students, because we got rid of the student intern. This gave us sort of an extended interview period with these, sort of, student-level part-time positions.

To be fair, the State has moved -- migrated towards not wanting us to do that. And so we're migrating way from that -- from that practice.

VICE CHAIRPERSON TAYLOR: So both the student and the Seasonal Clerk?

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Basically looking to go back to an intern like
program of some sort and stop the Seasonal Clerk Program,
because Seasonal Clerks in the State organization are

really intended for things like lifeguards and things like that.

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VICE CHAIRPERSON TAYLOR: Well, we use them for tax season, for --

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Or for tax, exactly. For various high
seasons, but they're seasonal by definition. And we have
not -- candidly, we have not used them seasonally -VICE CHAIRPERSON TAYLOR: Right.

INTERIM CHIEF OPERATING INVESTMENT OFFICER

BIENVENUE: -- which is why we're going to -- we're going to reduce that usage.

VICE CHAIRPERSON TAYLOR: Okay. So -- and then I would assume -- so you're saying they're going to be interns. What's our -- what is our definition of interns and are they paid?

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: We are working our way through it. But our
definition of interns will be -- they have been paid
historically. And my sense is that they will be paid
going forward.

VICE CHAIRPERSON TAYLOR: Are they a State classification?

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: I'm getting the look of death.

CHIEF INVESTMENT OFFICER MENG: Let me take that one. So this topic is very topical now in the Investment Office. Just as Friday, John Cole and a few student interns -- we have five interns this summer in the office. Myself, John Cole, and Scott Greenberg and Lauren Rosborough together with the five student interns, so I hosted a lunch last Friday to talk about their experience and our desire to restart a formal internship program.

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If you look around the Investment Office, we have had quite some success from the internship program. We have a number of very good employees. They came out our internship program. And if you recall my presentation to you in the July offsite, we talk about building the pipeline, the succession plan, the talent management.

And for us, we are not in global financial center. For us, we really need to start early and start local. So once people get to know CalPERS, get to know our purpose, what we do, and how we treat people, and the hope is that it will -- once they buy into our culture and mission, they are likely to stay locally. And hopefully, they'll come back to work in our office for full-time -- on a full-time basis.

So again, we will look around the past couple years, we have had great success, and for some reasons -- somehow we stopped the internship program. So as --

again, as I said, as Friday at noon, we're having this discussion to restart the internship program. And ideally, they should be paid. Currently, it is unpaid.

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But we're looking into ways to pay them to have a formal internship program. And we're working with HR very closely on this.

VICE CHAIRPERSON TAYLOR: So -- and I do not approve of unpaid internships. I just want to make that very clear.

Are you working with any organizations, like Mayor Steinberg's organization, for interns?

DEPUTY EXECUTIVE OFFICER HOFFNER: Hi. Doug Hoffner, Calpers team member.

Yes, to your point. So we have the five you were talking about, the high school students from the five-county region around Sacramento are through the Mayor's program. Those are paid internships. They're clear -- they'll be going back to school now, at this point, given --

VICE CHAIRPERSON TAYLOR: Sure.

DEPUTY EXECUTIVE OFFICER HOFFNER: We have had folks working through Sac State, through the internship program as well, again, while they're not in school, looking to -- and they will be paid as well. So that's part of our program is to bring people in early on, get

that summer experience or longer, if they can work part time while they're here in the Sacramento area, and then hopefully have a longer term experience with CalPERS once they do graduate. So it's kind of a layered approach.

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VICE CHAIRPERSON TAYLOR: Okay. How do we get away from the summer program, since they're all working summer programs? Are we like -- because if you -- 11 of them, which are currently seasonal clerks, you need 11 interns, but they can only work in the summer. So what -- who take -- who picks up their load of work at that point?

DEPUTY EXECUTIVE OFFICER HOFFNER: So I think the Seasonal Clerks that's in addition. So we're talking about this student internship program. The Seasonal Clerks could work at different times throughout the year. The ones in the internship program are typically based in the summer when they're not in school. But they could work as well, depending on their schedules and school classes

VICE CHAIRPERSON TAYLOR: So is that how you're paying them is to call them Seasonal Clerks.

DEPUTY EXECUTIVE OFFICER HOFFNER: No, I think we're talking about two different things.

VICE CHAIRPERSON TAYLOR: Okay.

DEPUTY EXECUTIVE OFFICER HOFFNER: We have an internship program and then we have Seasonal Clerks in the

organization that are paid employees as well that work on a seasonal basis. I think to -- what I heard earlier was we're looking to move away from the Seasonal Clerks more to a traditional and build that internship program.

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Right now, we have approximately five in the high school level and maybe seven in the -- sort of the, you know, Sac State college level at this point.

VICE CHAIRPERSON TAYLOR: So you're using those in addition to the Seasonal Clerks currently in the investment office.

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Correct.

DEPUTY EXECUTIVE OFFICER HOFFNER: Yes.

VICE CHAIRPERSON TAYLOR: So then you've have to move 11 more positions into those -- no?

I'm very confused. Okay.

I'm just trying to figure this out, so that we aren't avoiding using State workers, which is my concern here.

CHAIRPERSON FECKNER: Mr. Miller.

COMMITTEE MEMBER MILLER: Yeah. Thanks. And again, kind of my return to my mantra, I'm really glad to see that we're thinking about that pipeline in terms of a kind of strategic workforce planning in a longer term sense. And it's something we can certainly talk about a

little bit more.

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But in my experience, in regulatory agencies, we've had very good results working with university -- like the Hornet Foundation for example to bring on, you know, year-round interns both at the undergrad and graduate level. And they were really quite fairly compensated and it really became a useful pipeline to get people interested in public service and get them in the door.

So I'd encourage you to continue to pursue those opportunities to, you know, cultivate and bring in more talent to public service.

CHAIRPERSON FECKNER: Thank you.

Ms. Olivares.

COMMITTEE MEMBER OLIVARES: Thank you, Mr. Chair.

I'd like to take us back to page 12, please. And this has to go with the discussion that Ms. Brown mentioned regarding the benchmark one-year return for private equity being 4 percent and that being tied to the opportunity cost relative to, if it -- those funds were invested into public equities. But I see that the 1-year benchmark for public equity is actually 6.2 percent. So I'm not really sure how that works.

And then the other point I wanted to mention, typically, what I'm used to seeing, and maybe it's

different on the pension side than insurance companies or investment funds, but when we're looking to benchmark performance of private equity, we're doing it based upon using services like PitchBook, those types of things, looking at top quartile returns based on the strategy.

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So I'm wondering if we've ever looked at doing some type of weighted return based upon the strategies?

CHIEF INVESTMENT OFFICER MENG: So your first question, the benchmark for private equity. And that's a public equity benchmark. And your observation that why is it different from the public benchmark return from the same period?

So as Eric mentioned, that the private equity benchmark is lagged by one quarter. So that's the 4.0 percent return is lagged one quarter public equity return plus 150.

And then the public equity, the benchmark 6.2 return, this is current quarter return, not lagged. So that's the difference.

COMMITTEE MEMBER OLIVARES: How does that compare with other pensions and how they benchmark one-year performance for private equity?

CHIEF INVESTMENT OFFICER MENG: So I will speak to that and then we can call our consultant as well. So generally speaking, there two ways to benchmark private

equity, one is to benchmark the peer group to a private equity universe. But the challenge there that, as you may know well, there's not really a good comprehensive private equity index out there. So it suffers from a number of biases, such as survivorship bias, self-reporting biases. And sometimes we don't -- we only see the benchmark return. We do not really see the details of an unaligned strategy. So we cannot really compare apple to apple. So this is one way to benchmark private equity is to your own private equity peers.

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And the other way to benchmark private equity as what we do now, as Eric mentioned, if we benchmark against opportunities cost. So if you look at private equity is -- by and large is to gain the same exposure as public equity, but with illiquidity. So we benchmark against our opportunity cost, which is public equity plus 150 bps to compensate for the illiquidity.

So you will see if you talk to other pension funds, and other global peers, you probably will see most of their practice fall into these two categories, either benchmark against private equity peer or a benchmark to a public equity plus a spread -- plus a premium approach.

COMMITTEE MEMBER OLIVARES: So this is then the public equity benchmark return less the liquidity or illiquidity.

CHIEF INVESTMENT OFFICER MENG: So public equity benchmark plus illiquidity, 150 bps.

COMMITTEE MEMBER OLIVARES: Yes.

CHIEF INVESTMENT OFFICER MENG: So you see 6.2, so that is the one year ending June --

COMMITTEE MEMBER OLIVARES: Um-hmm.

CHIEF INVESTMENT OFFICER MENG: -- June 30th.

The 4.0 is the one year ending March plus 150.

COMMITTEE MEMBER OLIVARES: Um-hmm.

CHIEF INVESTMENT OFFICER MENG: And if you recall, the first quarter over the second quarter and for the last quarter last year, so the difference is mainly between one quarter, the second quarter of this year.

COMMITTEE MEMBER OLIVARES: It's a different way of displaying than I've seen before.

Thank you.

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CHAIRPERSON FECKNER: Mr. Hartt.

MR. HARTT: Yeah. Steve Hartt from Meketa
Investment Group, private equity consultant. As Ben was
explaining, in the industry there's essentially two
methodologies used for the benchmarking. CalPERS is
choosing to use the public equity benchmark plus a spread
for all time periods. Other pension plans use a peer
index to augment that to show. But there's issues with
regards to using that peer index, in that, you know,

several issues with benchmarking generally, but getting that benchmark in terms of its portfolio composition to look similar to what the CalPERS benchmark -- portfolio is is a real challenge, and all sorts of issues about whether it's investable and things.

There's lots of issues in using peer benchmarks as well. And, you know, that can be information that could be provided, but it's -- there's just challenges in just doing private equity benchmarking just generally.

COMMITTEE MEMBER OLIVARES: Thank you.

CHAIRPERSON FECKNER: All right. Thank you. Seeing no other requests.

Mr. Baggesen.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay.

Let's see, well, we've gone through an array of different topics so far this morning. Perhaps, the only other element that I might just point to or just to quick -- very quickly just touch on two slides. One, this is basically the ALM cycles. This is shown on page 15 of the attachment.

The next activity where we'll be bringing information to you as a Board will be pretty much just about a year from now when we do our mid-cycle review. And this will be a topic that the TLPM team is working on over this -- the coming year.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: I think the only other place where I might just spend a moment would be just reiterating some of the work that was done in the last strategic asset allocation. One of the elements that came out in that work was to try to understand relative to the portfolio priorities, which were another adoption by this Board -- and I think we've got some information on that in the Total Fund Program review in Agenda Item 9a. But one of the concerns that we had in that asset allocation work was the potential exposure to significant drawdown risk. And that drawdown risk typically emanates from the public equity portfolio. And that's obviously what we experienced in the financial crisis in 2008 and '09.

When we did the asset allocation work, we looked through the lens of equity drawdown risk and tried to ask ourselves where there are different interpretations of what could constitute the market that might mitigate some of that drawdown risk. And the Investment Committee made the decision to add some market segments, both into the public equity asset class, where we have a market factor exposure that experiences an improved risk profile and equity drawdowns, and in the fixed income area, where we have discrete allocations to both long-dated or

long-duration U.S. treasury securities. We have a high yield component with high yield acting almost as an equity substitute, and also then residual of fixed income, which is called the long-spread bucket.

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But those allocations into these market segments were implemented over the course of the last year. And when we do the total fund review, we'll get a little bit into some of the performance of those segments. But we were encouraged that the segments performed in accordance with our anticipation on the pattern of performance that they would generate.

So I think with that, maybe I would just stop at this point add see if there's any further questions. And we'll touch on this in the Total Fund review also.

CHAIRPERSON FECKNER: Mr. Jones.

COMMITTEE MEMBER JONES: Yeah. Thank you, Mr. Chair.

Yeah. Eric, the public equity factor-weighted comments, I really would like for you to, not now, but when we get to that report expand on that to show how that has enhanced our returns and also protected us for any potential drown.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes We'll be covering that, Mr. Jones, in the Total Fund review.

CHAIRPERSON FECKNER: Ms. Olivares.

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COMMITTEE MEMBER OLIVARES: I'd like to understand better the liquidity range. It seems quite broad.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah. The liquidity range basically -- and this is where you see actually the ability to utilize leverage in the fund. So the liquidity target that came out of the last strategic asset location is one percent, the range being positive three to negative six. So around that one percent target, what that implies is that we could basically have as much as four percent positive allocation to liquidity or as much as a negative five percent allocation.

That negative five percent equates to a topic that we discussed with the Board, oh, a number of years ago called borrowed liquidity, where if we were experiencing real stress in the marketplace that we could utilize some of the collateral and other capital that we have dedicated, but that would constitute an actual leveraging of the fund.

So that's been authorized to be used on basically a short-term basis to deal with market disruption and things of that nature. But that's what that represents. This is where that would be accounted for.

COMMITTEE MEMBER OLIVARES: Thank you.

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CHIEF INVESTMENT OFFICER MENG: And later in item
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    9c part of the Total Fund Policy revision and update, part
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    of the recommendation is related to the leverage policy.
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    So the leverage used to be run at asset class level.
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    as many of you know that as we are moving to a total fund
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    approach, one team/one culture, we're centralizing all the
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    decisions at the total fund level instead of at each asset
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    class level.
             COMMITTEE MEMBER OLIVARES: Thank you.
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             CHAIRPERSON FECKNER: No other requests.
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             Mr. Baggesen.
             CHIEF INVESTMENT OFFICER MENG: So now I would
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    like to call on Kevin Winter, the Managing Investment
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    Director of the Opportunities Strategies Program.
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             (Thereupon an overhead presentation was
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16
             presented as follows.)
             CHIEF INVESTMENT OFFICER MENG: Can you load the
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    slide, please.
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             MANAGING INVESTMENT DIRECTOR WINTER:
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                                                    Good
   morning. Kevin Winter --
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             CHAIRPERSON FECKNER: Microphone.
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             MANAGING INVESTMENT DIRECTOR WINTER: Oh, sorry.
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             Good morning, Kevin Winter, Opportunistic
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Opportunistic strategies has mainly three areas

Strategies.

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of focus for this past year. First was managing the low liquidity enhanced return portfolio, secondarily was executing most of the public market securities transactions for the various strategic asset allocation targets that we changed this year, and finally working on leveraging liquidity at this -- the total fund level.

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In the low liquidity enhanced return, this year, we added roughly six basis points to the equity portfolio. We continued to work on finding additional securities that meet the goals of that program. The goals of that program being low probability of capital loss. We're giving some, liquidity but we know we'll get our capital back in the future.

On the ESS group, this past year, we've executed roughly \$150 billion in transactions to change the strategic allocations of the total fund. One of the big wins for the year was we had a separate target -- or strategic target for high yield. We thought the timing -- or the amount of time it would take to execute that strategy was going to take a lot longer that we actually did. We came up with a very interesting, innovative way to get that exposure and it worked very, very well.

Finally, we've done a lot of work this year on leverage and liquidity management. We've changed our funding mix. We've brought the management up to the total

fund level. Opportunistic has worked very, very closely with TLPM to work on a framework for developing how we -- how much -- how we -- how much leverage we have, where we source our leverage, and how that fits in with our liquidity profile of the fund. We will continue to do more work on this this year, and further streamline that program.

With that, I'm open to questions.

CHAIRPERSON FECKNER: Seeing none. Thank you.

MANAGING INVESTMENT DIRECTOR WINTER: Thank you.

CHAIRPERSON FECKNER: Okay. So that takes care of information items.

That brings us to Action Item 8, Independent Oversight.

Mr. Bienvenue.

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INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Yes, sir, Mr. Feckner. Thank you.

As Ben mentioned earlier, Item 8a is our lone action item for today's agenda. It is regarding the selection of the Board's Investment consultants. And we have three desired outcomes from this item.

First is to approve the suggested interview process. Second is to request that the IC Chair establish a subcommittee to conduct interviews, recommend the selection, and come back to an open session of the

Investment Committee to actually ratify that selection, and then finally, to determine the finalist firms that will be included in those interviews.

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By way of background, in March of this year,

CalPERS issued an RFP to select up to four consultants.

One in the area of general pension and then three in each

of the private -- three for the private assets, one in

each private asset class. It's worth noting that as part

of the RFP, the firm that is awarded the general pension

contract cannot be awarded anyone of the private asset

classes.

So in front of you, you have the firms in each category that pass the technical criteria, which these -- these could be your finalists, as well as the proposed process for selection, including direction to the Chair to establish a subcommittee, to conduct interviews, to notice an open meeting where those interviews would occur, and the direction to come back to the IC with the recommended chosen firms.

So staff's recommendation is to follow this process. We'll follow your lead in terms of selecting the interview -- the finalists for interview. And from there, Mr. Feckner, I'll turn it back to you. Happy to take any questions.

CHAIRPERSON FECKNER: Thank you.

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Seeing no questions.
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             I do need to call on Mr. Jones and get
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    authorization from the President to create a subcommittee.
             Mr. Jones.
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             You went away.
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             There you are.
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             COMMITTEE MEMBER JONES: Okay. Thank you, Mr.
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    Chair. You are authorized to establish a subcommittee.
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             CHAIRPERSON FECKNER: Thank you. Appreciate
           I would recommend authorizing a five-member
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    subcommittee. It would be the Chair and Vice Chair,
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    Controller Yee, Ms. Middleton, and Mr. Perez.
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             What's the pleasure of the Committee?
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             VICE CHAIRPERSON TAYLOR: So moved.
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                                        Second.
             COMMITTEE MEMBER MILLER:
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             CHAIRPERSON FECKNER: Moved by Taylor seconded by
    Miller.
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             Any discussion on the motion.
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             Seeing none.
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             All in favor say aye?
             (Ayes.)
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             CHAIRPERSON FECKNER: Opposed, no?
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             Motion carries.
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             Anything else, Mr. Bienvenue?
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             INTERIM CHIEF OPERATING INVESTMENT OFFICER
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BIENVENUE: No, sir. Thank you.

CHAIRPERSON FECKNER: Great. Thank you.

That brings us to Agenda Item 9. 9a, the

CalPERS --4

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INTERIM CHIEF OPERATING INVESTMENT OFFICER

BIENVENUE: I'm sorry. I'm sorry. We need to select the finalists.

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CHAIRPERSON FECKNER: Oh, that's right.

INTERIM CHIEF OPERATING INVESTMENT OFFICER

BIENVENUE: That's a great point. So I think we've got

the process figured.

CHAIRPERSON FECKNER: Very good.

INTERIM CHIEF OPERATING INVESTMENT OFFICER

BIENVENUE: We just need to -- need to finalize the

finalists. 15

CHAIRPERSON FECKNER: All right. You have the

recommendation in front of you, Board members. 17

Ms. Ma. 18

COMMITTEE MEMBER MA: Can I just ask on the next 19 page, there's a proposed fees for three years. So is this 20

tied to any type of performance or we're going to pay this 21

regardless of what the funds do?

INTERIM CHIEF OPERATING INVESTMENT OFFICER

BIENVENUE: The consultant fees are not performance based. 24

25 They are based on a flat fee. And they should be part of -- they are a part of the scoring criteria and they will be part of what's taken into account by the subcommittee making a recommendation on finalists -- on the selection.

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COMMITTEE MEMBER MA: So I'm just asking. I'm not on the Committee, but the fees are a lot. And is that normal to have so many consultants at this level of fees?

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: The fees -- agreed, the fees are high.
Investment consulting costs are high. It's actually intentionally not part of performance, because there's a potential conflict that's created there. So we've intentionally from a governance standpoint kept those as flat fees, but they are expensive services, but they do quite a bit of service for Calpers.

I mean, we're a big complex organization. And there are only so many consultants that can actually take on our business.

COMMITTEE MEMBER MA: Okay.

CHAIRPERSON FECKNER: Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

I think to Treasurer Ma's question, I would just encourage my colleagues to remember these are Board consultants and we should fully utilize them. It's not what they're charging.

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CHAIRPERSON FECKNER: Very good. So the
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    recommendation of the finalists is in your Board packet.
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    What's the pleasure of the Committee?
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             COMMITTEE MEMBER BROWN: Move approval.
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             CHAIRPERSON FECKNER: Moved by Brown.
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             COMMITTEE MEMBER MILLER:
                                        Second.
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             CHAIRPERSON FECKNER: Seconded by Miller.
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             Any discussion on the motion?
             Seeing none.
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             All in favor say aye?
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             (Ayes.)
             CHAIRPERSON FECKNER: Opposed, no?
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             Motion carries.
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             Anything else, Mr. Bienvenue? We got it this
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   time?
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             INTERIM CHIEF OPERATING INVESTMENT OFFICER
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                No, sir. Thank you.
17
   BIENVENUE:
             CHAIRPERSON FECKNER: Very good. Thank you.
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             Moves us to Agenda Item 9, information agenda.
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    9a is the CalPERS Trust Level Review.
             Mr. Meng.
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             (Thereupon an overhead presentation was
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             presented as follows.)
             CHIEF INVESTMENT OFFICER MENG: Thank you.
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   will take it -- I will turn it over to Eric Baggesen again
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to cover the Trust Level Program Review.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay.

Good morning. Eric Baggesen again, Managing Investment

Director for Trust Level Portfolio Management. And we
also have John Rothfield down on the end next to Mr.

Bienvenue. And John will be providing an economic update
after we get through some of the other items in relation
to the total fund.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: So we have the Executive Summary. I think the main points in the Executive Summary are basically the performance for the fiscal year, the return for the fund in fiscal year ending 2019 was 6.7 percent. You see the 5- and the 10-year numbers. The 5-year return was 5.8 percent, and did 10-year number 9.1 percent.

And I would mind the Committee that the 10-year number is basically almost exactly from the bottom of the financial crisis, which is one of the reasons for the -- that level of return is coming up out of a significant hole. So that was kind of the rebound in the marketplace.

One of the dimensions on performance also, it's the sort of second bullet point down in the summary, which is the excess return or the active return. And this is a topic that our Chief Investment Officer, Ben Meng, has

been speaking about quite frequently. Our relative return was negative 42 basis points. So that is -- again, we're utilizing active risk. We are basically taking variances from the structure of the strategic asset allocation. That could be the utilization of managers that are doing things such as picking stocks or bonds. It can also be very -- weight variances from the target weights in the strategic asset allocation.

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Again, the discipline on this should be that we're only using active risk if we believe, or have a reasonable belief, that somehow that variation is going to result in a positive return. For the fiscal year, that did not happen. It resulted in a negative return.

So one of Ben's significant projects that we're undertaking is really a review of the utilization of active risk in the plan with the intent to be very disciplined about the deployment of active risk only in areas where we have a great conviction that we're going to have a positive outcome. So there's a lot of activity that's happening with the Investment Office currently on this topic. And I'm sure you'll be hearing more about that in the future.

Just on the risk bullet point, and we'll get into this a little bit more, but the risk in the plan is considered to be the volatility or the variability in

returns that are generated away from the expected return. And again, our expected return on a long-run basis is approximately 7 percent. And that's also the discount rate for the fund.

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The variability around that return though -- our return, for example, this year was almost exactly on the 7 percent. That's a very unusual outcome. Typically, the returns will either be significantly higher than the expected return or significantly lower or even negative. So it's actually very unusual to have a return that almost sits exactly on top of the discount rate.

But that variability in risk that is generated predominantly by the amount of exposure that we have to equity-related assets.

And that is a facet again that impacted the structure of the asset allocation work that was done ending up with a decision in 2017 and we'll get some more into the segment work in a minute.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: But if we go on to performance on page four of the attachment, you see basically this is the Public Employees' Retirement Fund, the PERF, which is obviously the fund that every one thinks of when they think of CalPERS, but you also have listed out all of the affiliate funds.

What you'll notice is that the returns of the PERF shows the effect of that active risk. Typically, the majority of the affiliate funds are run with very, very little active risk. But you also see the variation that happens because of exposure to the private assets. So if you look, for example, on a 5-year or a 3-year basis, you'll see, for example, the 3-year return for the PERF was 8.8 percent. That return is higher than any of the affiliates of the CERBT Strategy 1 being the next closest return to that. But that is basically the effect of actually having things like private equity and real estate in the portfolio.

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Those private assets can work to the organization's benefit or it can work to the organization's detriment, just depending on what's happening in the marketplace.

I would also call your attention to the 1-year return column, the column on the far right, where you see, for example, the Public Employees Fund had a 6.7 percent return. That was exactly the same return as in the Judges System II Fund. But what's very interesting is that the funds that have predominantly fixed income-related investments, things such as the CalPERS Health Care Bond Fund, actually had a higher rate of return than the PERF did for the fiscal year ending June of 2019.

So the marketplace over our last fiscal year was quite unusual in the respect that fixed income instruments had higher rates of return than almost every other part of the portfolio, with the exception of some of the segment work that we did in public equities and, to some extent, private equity.

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So that's a fairly unusual outcome when you have -- and that is not the way our asset allocation is established to really benefit in a time period where fixed income generates higher returns than equity exposure. The belief that equities will have higher rates of return than bonds is one of the fundamental belief sets that underlie the structure of our strategic asset allocation. So it was fairly unusual in that regard.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: The next page into the material shows the cumulative returns. And again, these are basically a 10-year period. And you see how the 10-year cumulative return, the very top line is the CalPERS benchmark, the line right below that is the actual outcome of the fund, and then the third line down is grayish line, represents the discount rate.

So what you're seeing over a 10-year period, both the benchmark and the fund have generated returns higher than the discount rate. And again, that comes from almost

exactly the bottom of the financial crisis. So this is the spring-back in valuation of assets that have happened.

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But this represents the benchmark return cumulatively is about 146 percent over that 10-year period. For the fund, it was about 139 percent. And for the discount rate, it's about 107, 108 percent, somewhere in that ballpark.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: The next slide in the material gets into again some of the absolute returns. And these — the solid horizontal bars are the 10-year return numbers. And then the sort of hashed bars or the shaded bars basically right below it represent the 1-year returns. So you can actually see the variance between 1-year and 10-year outcomes. If you look at the 1-year outcomes, for example, down pretty much two-thirds of the way down the page, you get into the fixed income related areas, so total income, the long spread, long treasury, high yield.

And you see all of those numbers for a 1-year basis range between about 8 and a half up to 10 and a half percent for the long treasury portfolio. Those numbers outperform pretty much everything in the equity space, with the exception of the factor-weighted equity portfolio. And the objective of the factor-weighted part

of the equity exposure is to try to mitigate against the drawdown risk.

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And we'll see a chart later on in this material that shows that it will trace the re -- how returns were generated over the course of the fiscal year. And what you'll see is that the areas where we incorporated these segments to try to minimize equity drawdown, actually were successful in doing that to some degree or another, and improved the overall outcome to the fund for the fiscal year.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: This chart shows -- and this is at page 7 of the material. This chart shows the actual excess returns of the active returns. And that's exactly what we were just speaking about. So you see for fiscal year 2019, you see that bar dropping down below the 0, that's the negative 42 basis points.

For the last few years, we have not had a good outcome to active risk taking. It has not been adding value to the degree that we believe that it should. But you also see, for example, that we haven't been experiencing anything like what we saw in the time period immediately after the financial crisis. That big bar in fiscal year 2010 -- so again, that would have represented

the time period from June of 2009 through June of 2010, that represents a time period where we started getting walloped on the real estate portfolio and having significant drawdowns in the valuation of those assets.

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And there's been just a huge amount of work that has happened in the 10 years since then to restructure the entire way that we approached the real estate markets.

That was started by Ted Eliopoulos and is carried on by Paul Mouchakkaa and the real estate team to this day to try to avoid that kind of an outcome in the future.

But this is a keen area of focus for our new Chief Investment Officer is to try to basically really apply more discipline in the utilization of active risk in the program.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: The next page shows 5-year and 1-year active return results. The areas where we've had the most consistent positive contributions from active risk taking have been the areas attached to the fixed income portfolio. Again, you see this about two-thirds of the way down the page in both the solid bars and the hashed bars. You see exactly how - on, I don't know - how variable the outcome to private equity can be.

That sits right about the middle of the page. So

on a 10-year basis, we had a negative active return. But again, that was predicated and measured against a public equity benchmark plus a 300-basis point margin.

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So this shows it underperforming by 80 basis points. But that, in essence, represents a return that was still more than 200 basis points ahead of what we generated in the public equity marketplace over the same time period.

So even though it was a negative relative return against the expectation, it was still a positive return that is not easy for us to gain from any other exposures that we have available to us.

And then you see for the 1-year number though, the private equity portfolio outperforming by almost 370 basis points. So that's a significant outperformance.

One of the areas that we're working on pretty hard at the moment is in the area of the public equity portfolio. You see these small negative contributions, You know, they're very small in the span of active return outcomes. But nonetheless, they tend to be negative. And public equities represent a significant amount of this portfolio being almost 50 percent of the allocation. So that's an area that we're concerned with.

But one dimension of these pieces of information that you have to recognize is that our benchmarks do not

represent any cost of actually maintaining that exposure. So the benchmarks are a purely theoretical construct that do not infer or impute any trading costs or turnover costs, which actually has to be incurred basically as our benchmark gets reconstituted periodically.

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So there's a degree of turnover in just maintaining even an index portfolio and that turnover costs money. So the tendency of this asset class, even if you were taking absolutely no active risk, is to have some degree of underperformance attached to it, simply in the cost of maintaining the portfolio.

And that's one of the realities that I -- you know, again, Ben has mentioned in some of his discussions on trying to actually make these bench marks represent the real opportunity set inclusive of some of the cost that is required to maintain it.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: We get into again -- this is a repeat of this -- some of the slide material that we had some questions about earlier in the Trust Level Portfolio Management Program. But on a 5-year basis, our predominant positive contributions -- and this again is excess or active return. This is not just the absolute outcomes that are happening to the fund. But it really just shows again the positive areas on a

5-year basis have come predominantly from the fixed income related parts of the portfolio.

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The private assets part of that again is just an underweight to some of the asset classes and also basically just adverse selection in the relative outcomes that have happened in some of those private assets.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: Just on the topic of risk. You see two pie charts on this page. So one pie chart actually represents -- the one on the left-hand side of the chart, represents the actual asset allocation. So you can see, for example, we have -- on the right-hand side of that pie, we have public equity cap weighted 35.5 percent. We've got the factor weighted 14.6 percent. But basically that makes up half the portfolio, equity-related assets. And that's not even yet including the assets that are invested in private equity, which also have similar kinds of risk exposures. So we have an aggregate, you know, pushing towards close to 60 percent of the portfolio invested in equity-related asset areas.

If you look at the pie chart, though, on the right-hand side, that's the risk contribution proportion. So what you see is that the equity exposures, both -- all the public equity exposures add up to almost three-quarters of the actual risk outcome. So the risk

impact of the equity investing is significantly higher than the actual asset allocation attached to that. And that's just been a facet that has been driving the outcome to this fund for decades, as long as we've had significant equity investing, which really started taking place in kind of about the -- oh, sort of the 1970 into 1980 time period, where we had significant amounts of equity investing.

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The line chart on the bottom of the page just traces the outcomes to the public equity portfolio versus the outcome to the total fund. And you can see how closely those lines fall relative to each other.

So what happens in the equity markets tends to drive what happens to the fund. And that's going to be the case as long as we have the proportion of equity investing that we do have. And this is not a typical for virtually every public pension fund in the United States, and honestly, many of them around the world as well.

All of these portfolios have tended to migrate to a space where there's a lot of equity concentration as we attempt to keep the expected returns up into an area sufficient to provide enough return to be able to afford the pension benefits that have been promised.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: This gets

into some of the material that both, our Chief Investment Officer has referenced - Ben has used this drawdown chart in some of his other presentations with you as a Board - and also the questions that Mr. Jones had about the rationale as to what was some of the considerations that were driving the selection and the utilization of market segments in the strategic asset allocation work as it was last done.

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And what you see in this chart is just the magnitude of periodic drawdowns that happen in the equity markets. And this traces all the way back into The Depression and the financial crisis that happened starting in the late 1920s and continued on through most of the 1930s. And honestly didn't -- didn't ever come back to even until we get into almost the year I was born in the 1950s. So it took literally a 20-year plus time period to get back to the place that it had started from before that happened.

More recently, you see the two big drawdowns that we had in the 2000s the dot-com crisis, you know, in the sort of 2002 time period, 2003 time period, and then the financial crisis that happened. And obviously the financial crisis is one of the worst drawdowns -- or I think it is the worst drawdown that happened since The Depression. So that was a pretty significant event.

And the sensitivity to what these drawdowns can do to both the funded ratio of the fund and the impact on contributions to the employers is the reason that when we went through the last strategic asset allocation work, we focused through the lens of trying to mitigate some of that equity drawdown potential.

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Now, it is not possible to eliminate all the exposure to equity drawdown when you have an equity-centric portfolio. But nonetheless, we tried to look through that lens of equity drawdown and say are there other ways that we could define the marketplace that would mitigate or minimize, to some extent, the potential effect of those kinds of equity drawdowns?

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MANAGING INVESTMENT DIRECTOR BAGGESEN: And that's what led us to this concept of asset segments. And this is a body of work that we spent a significant amount of time over the year 2017 communicating with the Board, both in agenda items, workshops, and a number of other venues going through the public asset classes saying are there other types of benchmarks or structures that could serve to reinforce this concept of drawdown protection, or greater diversification, because basically those are on almost the same terminology.

Where we ended up with, and the decision you as a

Board made in the asset allocation was to break the fixed income portfolio into three segments. Again, it's a long treasury segment. Treasuries tend to be a protective asset when you have severe market dislocation, or stress, or financial crisis, or whatever you care about, because there typically is a flight to quality. So treasuries tend to be an asset that not only hold their value but oftentimes actually appreciate in value, if you're having a severe problem in the financial marketplace.

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We also added a high-yield segment. And high yield is very similar to the kinds of returns that we expect from equity investing, but it actually is based on a promise or a fixed income instrument. So we felt that having a specific segment and a specific exposure to high yield acts as a bit of a substitute to some of the equity risk in the portfolio, which serves to maintain some of the expected rate of return, but also has a slightly different drawdown profile.

High yield does tend to get hit if there's a big sell off in the equity market, but it does not get hit to the same degree, for example, as typically like a market cap-weighted equity benchmark. And then everything else in the fixed income portfolio is lumped into the category of what's being called long spread. So that's corporate bonds, it's mortgages, and a number of other types of

instruments basically that did not display characteristics significant enough to warrant their called -- being called out as a separate segment.

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Then in the public equity space, and if -- I don't know if you recall some of those diversification charts, the smile charts, where we have lines that bend up, and lines that bend down, and all that kind of stuff. What we determined was that using a market factor type of an index, where it is exposed to a different -- well, let me back up.

Our basic benchmark for public equities is a market capitalization global benchmark. So we use the FTSE All World All Capitalization benchmark.

Market capitalization is just simply the number of shares outstanding times the price of the shares that creates a market value for a company. And that market value with a few adjustments then determines its proportional weight in the overall benchmark.

So market cap benchmarks tend to represent the financial marketplace or the equity markets in aggregate as to the returns that will be generated.

There are a number of market factors which are viewed as dimensions or parameters that categorize securities in a way different than market capitalization. So these factors, there's a whole array and a whole gamut

of them. We looked at an array of different factors, and we decided on adding another market segment to the public equity exposure that was designed to be as different in its performance characteristics -- and when I say different, I mean different relative to the market capitalization weighted benchmark. So we're trying to maximize the degree of difference, even those these things are both equity exposure. So they tend to have very common patterns of performance, but the magnitude can be somewhat different.

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When we assembled these -- when we assembled these market segments and we went through the asset allocation, we incorporated an allocation -- the target allocation to the equity factor-weighted segment is 15 percent of the total fund, which represents a pretty significant allocation. We have, I believe, a 10 percent allocation to the long treasury exposure, and we have a 3 percent allocation to high yield, and then, you know, all of the other asset allocation exposures derive from those numbers.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: When we actually look at the outcome that happened -- and remember, the year of 2018-19 was the year of transition. So we're basically acquiring these exposures. We were

moving money out of the market capitalization-weighted part of public equities and into the market factor-weighted part of public equities. And again, that represents 15 percent of the fund. So that was a lot of turnover activity that happened over the course of the year.

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What you see on this chart, page 14 of the attachment, is the variation that -- and the outcome that happened. So the lower line on this chart is the line that represents the outcome that would have happened had there been no changes to the asset allocation. So if we had just kept the asset allocation structure that we had at the end of 2017 and carried that all the way through the last fiscal year, this is the -- the red line on this chart, or the lower line, is the outcome that would have happened. And that represents a return of approximately 6 percent.

The top line is the outcome that did happen. And that had a return of 6.7 percent. That means that the implementation of the asset allocation, even though it took the entire year to complete that work, did have a positive effect on the fund that added approximately two and a half billion dollars to the overall market value of the fund, or 70 basis points. And that's a pretty significant achievement.

But what's even -- you know, that's an outcome that was fortuitous. But these things are different -- these market segments are different than the places that we came from in the asset allocation. So there is an environment where those market segments could actually underperform as well.

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But what we were actually most gratified by was the pattern of returns, because you see that, for example, the big differences, the biggest gaps were when the market was in selling off. So we had the market selling off into the end of December 2018, and you see that there was a significant gap that opened up between the two lines at that point. Then the market rallied going into April of 2019, and that gap slightly closed. So again -- but it still maintained a positive increment. And then we had another severe sell-off, or significant sell-off, going into May of 2019. And again, the gap opened up basically.

That gap opening up is reflective of the fact that these assets are not selling off as badly into a drawdown situation as the asset allocation that we started with. So these markets segments performed pretty much exactly in alignment with what we thought would happen basically going into this exercise.

So even though this is just a 1-year period, which doesn't really mean much of anything, we're

nonetheless gratified by the fact that at least the characteristics that we thought would come through this segment work actually evidenced itself in a year that had significant volatility attached to it.

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And I think that basically completes the comments that I would have. And I'd just ask if you have any questions before we turn it over to John for his economic update.

CHAIRPERSON FECKNER: We do. Mr. Jones.

COMMITTEE MEMBER JONES: Yeah. Thank you, Mr.

Chair.

Yeah. Thank you, Eric for expanding on this segment, because I think it's very important that we get a clear understanding of the outcome of that strategy.

And I'm looking at this chart of 14 of 17 here. But I'm also comparing it to -- or not comparing it, but also using it to look at chart 11 of 17. And I was just -- see if I'm interpreting this correctly.

Looking at the portfolio allocation compared to the contribution to volatility and looking at the public equity weighted at 35.5 percent on the allocation and then it jumps to 53.9 percent on the risk of volatility. But then I see you called out the risk factor -- the factor-weighted public equity and that was like 14.6 percent of the allocation. But it only added to the risk

up to 16.9.

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So am I seeing that if you had not carved out that piece, then we would have had a bigger drawdown, because it's not as risky?

MANAGING INVESTMENT DIRECTOR BAGGESEN: That's exactly right, Mr. Jones. I mean, you're basically putting your finger on exactly the element. What we're hoping that the market factor segment does is it -- while participating in the market doing well, we want it to basically act as a buffer on the drawdown. And the fact that it does do that, basically results in its lower -- or relative lower risk contribution compared to, for example, the capitalization-weighted equity portfolio, so you're exactly right.

COMMITTEE MEMBER JONES: Okay. Thank you.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Just in reference to that, let me just back up for one second to our performance -- to our performance chart.

One of the -- if you look, this is the absolute returns, you know, 10-year and 1-year, but really it's the 1-year number. The factor-weighted segment of -- in public equities over the fiscal year actually had a return of 13.4 percent. That was over 800 basis points in excess of what the market capitalization return was. So this thing had a significantly positive outcome in the

valuation of the fund.

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Now, that actually though is a fairly unusual -- I mean, that 800 basis points -- this portfolio operates and it has tracking error or tracking variance relative to capitalization weighting of somewhere around 400 basis points, somewhere in that ballpark, Dan?

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: (Nods head.)

MANAGING INVESTMENT DIRECTOR BAGGESEN: So an 800 basis point outperformance would actually constitute almost a two standard deviation outcome. So that's -- this outcome is even better than what you would actually expect in a normal set of circumstances.

So again, we're not keying off the return difference so much, but we definitely are encouraged by the pattern of returns that were generated. And I just happen to generate a very good outcome in the last fiscal year.

CHIEF INVESTMENT OFFICER MENG: If I may, just one comment to that. So as Eric said, the factor-weighted segment of public equity has performed exactly as we anticipated. So when there is market volatility, it should outperform the cap-weighted benchmark. So on the flip side, when the market is calm and start rallying from here, we probably expect some underperformance of this

segment. So just as a word of caution, it does not perform this well in all market environments.

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But in the down market, we need it to perform better than other asset class, in which it has done. But when the market rallies, most likely this segment will underperform.

CHAIRPERSON FECKNER: Ms. Ma.

COMMITTEE MEMBER MA: Yeah. If we can go back to slide -- page 4, performance summary. So do we manage all of these other funds beside --

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes, we do. Yes.

COMMITTEE MEMBER MA: And are there target or benchmarks that they're suppose to hit as well?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes, exactly. This board has approved basically the asset allocation for all these affiliate funds, Ms. Ma. That's a piece of work that happened subsequent to the decision on the asset allocation for the PERF basically. So that happened over the time period -- I'm trying to think when was the last decision? Yeah, April, May, and June basically. So that -- that typically follows on right behind the strategic asset allocation for the PERF.

COMMITTEE MEMBER MA: So if we're managing the funds, are all of these folks in these different funds

also getting reports from us on a -- I mean, like, we only usually just talk about our own fund, right -- so

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INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Ms. Ma, your questions are music to my ears,
because we've been talking about how the affiliates -- we
owe the same fiduciary duty to those funds as we do the
PERF. And we tend to focus on the PERF, because it's a
\$370 billion pot. But this still \$20 billion, which is a
large asset management function for many organizations.

So, yes, we run them through the same allocation process. And as Eric said in April, May, and June, Christine Reese and Alison Li were here working the Board through the -- you know, the various allocations to each of the trusts.

We do -- in the case of the defined contribution, we not only -- you know, we have an administrator do it on our behalf. We hot only provide reports to the employers, but we actually provide reports to the defined contribution participants. But so, yes, we -- you know, we do do very similar reporting, and as I as say, the fiduciary standard.

COMMITTEE MEMBER MA: And so is there like a three-part, right -- we have to hit a certain target, the 7 percent. There's a contribution by the participants, as well as local governments. How are these funds set up?

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Yes, each of them are different. So the
Judges' is actually a closed fund, the first one. Judges'
II is a separate fund for the judges. And, yes, it has a
set of contributions by both the judges themselves and
then also the employers. The same with the legislators.

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In the case of the three CERBT strategies, those are pre-funded health care largely. Those CERBT strategies are pre-funded health care, similar to CEPPT, which is pre-funded -- the one that we just recently launched, which was the pre-funded pension contributions. Then you've got the health care bond fund. That is just basically a reserve fund for health care needs.

Basically, costs that have not yet been incurred, but that are -- is there as reserve to pay those.

You've got the Long-Term Care Fund, and then the Terminated Agency Pool, which is actually technically part of the PERF, but it's for employers that have terminated their plan.

CHIEF INVESTMENT OFFICER MENG: Ms. Ma, just as

Dan just gave you some flavor, as Dan said that, you know,
each one of the program is different. Their different in
their mandate objectives. They have a very distinct
difference. And so their -- as you can see, their
portfolio is set up, the return, and the risk

characteristics are distinctly different as well.

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So that shows the complexity of our investment portfolio and the Investment Office. Very few of our peers run such a complex program. So we manage not just the PERF, we manage a number of other affiliated programs.

And as Dan said that, you know, we have the same level of fiduciary duty to each one of them. That goes to say when we talk about the budgeting of the Investment Office, the size of Investment Office, it is worthwhile keeping that in mind, when we benchmark ourself against our peers. Very few of our peers manage such a complex portfolio.

COMMITTEE MEMBER MA: Okay. Well, that's good to know. Like, when we were talking about the consulting contracts before, and I said they were high, you know, to be able to justify why they're so high compared to perhaps other pension funds across the nation, or, you know, it's just good to get that explanation on record that we're doing more than normal pension funds, and therefore, it requires a level of sophistication, or, you know, reporting. That's good for us to know, because as we're here thinking it's just -- for me, I just thought it was just the one fund. But now that we're managing all these other funds and have a responsibility -- a fiduciary responsibility as well to these other funds, it kind of

changes, I think, the way I think about these other funds, number one, and number two, the amount of work and complexity, right --

CHIEF INVESTMENT OFFICER MENG: Absolutely.

COMMITTEE MEMBER MA: -- that it takes to manage

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CHIEF INVESTMENT OFFICER MENG: Yeah. And this is only to the Investment Office. And if you look at the enterprise, led by Marcie, we also run the second largest health program in the nation after the federal government. So that is another level of complexity tend to be underestimated when we compare to our peers.

COMMITTEE MEMBER MA: Okay. Thank you.

CHAIRPERSON FECKNER: Mr. Jones.

COMMITTEE MEMBER JONES: Yeah. Thank you, Mr.

Chair.

Yeah, following up on Ms. Ma's question about notifying the agencies and the participants in these various funds, which of those, if any, are we required to report to the Legislature on an annual basis?

MANAGING INVESTMENT DIRECTOR BAGGESEN: You know, honestly, I'm not sure what is required to be reported to the Legislature, Mr. Jones. But we basically report -- in our consent reporting that happens every month, there is information on all of these affiliate funds attached to

that body of information. But I think we'd have to check.

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COMMITTEE MEMBER JONES: Yeah, I notice -- I remember seeing a report come through one of these committees to the Legislature and I'm trying to understand which ones.

DEPUTY EXECUTIVE OFFICER PACHECO: Mr. Jones,
Brad Pacheco, Calpers team. All of the funds that
gentlemen have been talking about are mentioned in our
annual financial report and that's submitted to the
Legislature once a year. So essentially the Legislature
gets information on all of these funds.

COMMITTEE MEMBER JONES: Okay. But I thought I saw an individual report to the Legislature not part of this CAFR.

DEPUTY EXECUTIVE OFFICER PACHECO: We can double check. There may be -- I see Michael is --

DEPUTY EXECUTIVE OFFICER PACHECO: Oh, there you go.

With Calpers. There are -- in particular, the actuarial reports that we do in the spring go to the Legislature. And those have cover letters I remember seeing and that sort of give a little bit of context regarding the particular funds. So there's the actuarial reports and kind of the -- these regular updates that the Investment

Committee gets. The Legislature certainly has access to information on all of these reports, but the actuarial reports may be what you're thinking of.

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COMMITTEE MEMBER JONES: Okay. Thank you.

CHAIRPERSON FECKNER: All right. Seeing no other requests. Mr. Baggesen.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Thank you very much. Let's turn it over to John Rothfield and he'll give us an economic update.

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INVESTMENT DIRECTOR ROTHFIELD: Thank you, Eric. My slides are pages 16 and 17. And I wanted to -- page 16 is kind of backward looking and tries to explain why, as Eric mentioned, we had more of an index like year for the return of assets despite what seemed to be a fairly turbulent year in terms of policy and economic trends, and the forward-looking piece is on page 17.

So getting back to page 16, if you look at the middle chart on the top, the main measure of U.S. economic growth is gross domestic product. That grew by 2.3 percent. And by the way, June represented a 10-year economic cycle, which is a record for the U.S. We just reached a record economic expansion. And 2.3 percent turns out to be the average of that entire expansion.

So again, while it seemed like a fairly volatile

year for the economy and for policy, we landed at about a 2.3 percent economic growth rate.

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Looking a little bit into the composition of some of that, which is the -- which is the blue bar, consumer spending actually had a good fiscal year. We had a very poor winter for consumer spending, but then a very strong recovery into the spring and the summer.

And it's quite good quality of consumer spending, because it happened not with consumers borrowing or running down their savings, but the savings rate in the economy actually increased to eight percent. And consumers were not taking out much debt, except in specific areas like credit cards and auto loans, but in things like home equity loans and mortgages, the new debt creation was relatively benign, unlike the early 2000s and what turned out to be the subprime crisis.

The -- that strong income growth that led to strong consumer came from employment growth of 188,000 workers per year in our fiscal year. And as a result of that, the unemployment rate fell from 4 percent to 3.7 percent, which is a nice low number for the unemployment rate.

The areas of the economy that didn't do too well are business CapEx and housing. A few reasons why business CapEx didn't well, energy prices came down, so

some of the mining investment in some of the fracking states came down. The problems with the Boeing aircraft led to reduced CapEx by the aircraft sector, and also, of course, because of the slow down in the global economy and the strong dollar, we had an earnings slow down in the U.S. So earnings growth essentially this year has been quite flat on a year-on-year basis. And one typically doesn't see much business CapEx in a weak earnings environment.

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Housing was also another sector, which has been quite weak. Some people worry about that, because housing is often a leading indicator of the next stage of the economic cycle. But essentially this has been a slow cycle for housing, really based upon the fact that there has been a preference for multi-dwellings and rentals.

And real estate commissions have been relatively low, because there hasn't been much turn in the housing market. So if you look at things like consumer plans to buy a house, and the Home Builders Association expectations for traffic coming through housing, housing has slowed down, but it's not probably something that's going to trigger a more serious problem in the economy.

And then finally government spending has actually been strong. State and local governments improved their finances to the degree that you've seen those

jurisdictions increase their construction spending and also their employment.

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And then if you look on the right-hand side of that chart, foreign trade has been very weak. That's partly because as our global trading partners have been -- have had weak economies, they're not buying many of our exports. Also, there was a rush of imports into the U.S. as a result of trying to front-run some of the tariffs. So there's been a lot of volatility in that part of growth that's been caused by the trade wars.

If you look at the right of that, you can see, what we call, the Atlanta Fed labor market spider, which suggests that a lot of labor market indicators are pushing toward the edge of tightness that they've experience over the last three or four business cycles, but there are still areas where there's a possibility of finding increased labor supply to keep the expansion going.

The two charts on the bottom indicate that one of the problems in the global economy right now is basically exports have dropped off, purchasing manager indices have dropped up for activity, particularly in the industrial sector, as opposed to the service sector. And leading indicators are suggesting that the global economy downturn is getting worse.

But overall, you know, one of the main drivers of

the market has been this -- the U.S. economy with the U.S. consumer sector, and the strong growth of employment over the past year. Things like jobless claims have been relatively low. And we haven't seen that shoe drop to the extent in the economy.

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INVESTMENT DIRECTOR ROTHFIELD: When you look through on the next page to the future, a couple of the messages is, you know, one of the other factors that has tended to hold up risk markets has been that central banks have turned from a tightening stance to an easing stance.

So the Fed quickly began to tell the market that it would stop raising rates and then on July 31 actually delivered a rate cut. The European Central Bank similarly. And, in fact, in a speech in Portugal in June, the European Cental Bank started to talk about doing whatever it takes to get the European economy going again. So the central bank pivots have been another reason for the strength of asset markets in the last fiscal year.

The message on the future when you look at macro is it is probably more difficult to continue to deliver these kind of returns, partly because central bank supportive action is already priced into the markets, to some degree, when you look at what's happened to much lower bond yields. Also, while optimists say that a China

trade deal would unlock pent-up activity in the U.S. money, an incremental trade truce that, for example, takes us through to the next election doesn't get over the fact that there's a lot of adjustment required by the U.S. corporate sector, which has 40 percent of its sales in foreign jurisdictions. They have to continue to adapt to the new reality of ongoing trade disputes and tariffs. And that is probably a longer term constraint on their CapEx.

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So, you know, while U.S. economic growth and risk market returns are not highly correlated, this doesn't seem to be a promising environment for aggregate returns in the period ahead.

One thing to remember is that the Fed has started to cut interest rates. There have been past episodes where a Fed rate cutting cycle like by Chairman Greenspan twice in the 1990s, Chairman -- Chair Yellen's pause on rates in 2016 were actually enough to prevent a recession happening and were actually good for risk assets. But right now, the bond market is telling you that it could well be too late for this easing cycled by the Fed, because what's happening globally and it's impact back on the U.S. Corporate sector. So the market is saying to be cautious in terms of adopting a risk posture in the markets.

Thank you.

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CHAIRPERSON FECKNER: Thank you.

Ms. Middleton.

COMMITTEE MEMBER MIDDLETON: Okay. Yes. I think all -- the big question that all of us are looking at in the general media is when is the next recession going to strike us?

So could you describe the activities that you've taken to stress test what will happen when there is a downturn in the economy? How many variables have you put into that in terms of the extent of that downturn? And most particularly, what will be the cash flow impacts for Calpers depending on the nature of the next downturn?

CHIEF INVESTMENT OFFICER MENG: Okay. That's a very good question. And it has been the focus of the Investment Office in the past 6 to 7 months.

So let me start going back a little bit. In the recent past, in the past two years or so, the organization, again led by the Board and the management team working together with stakeholders, who had took some really major steps to prepare the fund -- better prepare for the next drawdown. So I will go back first with the additional cash contribution from the State that we're just close to \$10 billion now.

So every penny of cash comes to the system

directly goes to the bottom line. So really helps the fund's ability to sustain the next downturn, and other decisions such as lowering discount rate and shorten amortization schedule. If you think of our Pension Buck, about \$0.60 of \$1 coming from Investment Office and the other \$0.40 coming from contributions.

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So when -- so by lowering the discount rate and shortening the amortization schedule helps on the investment side, the \$0.60 or the \$0.59 of the Pension Buck to sustain the downturn. But, of course, we'll try everything we can to minimize the pressure on agencies -- on the employers. So that helps.

And then the other thing as you can -- Eric just mentioned, if you go back to slide -- slide 6, as Eric just discussed, risk segment work. As you can see that for the factor-weighted risk segment plus the fixed income somewhere down in the second half, the long spread, long treasury, and high yield, they all outperformed during the recent volatile market environment. So that help us. Portfolio is much better positioned to survive the next drawdown. So these are more longer term strategic decisions.

And then the other point is that I want to say either June or May I led a discussion talking about the next drawdown and what we are doing in terms of planning

our -- preparing ourself by developing a plan, and so that when the crisis comes, we can keep calm and carry on. The reason we can keep calm and carry on, because we have predetermined plan, well thought-out plan.

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So on that note, I go back to liquidity
management. We talk -- we talked a Number of times. And
to the last part of your question about our cash flow
position, so our overall objective is to survive the
downturn and then thrive from it. And we are much better
positioned than when we were 2008. And under liquidity
dashboard -- we're developing a liquidity dashboard that I
shared with the management team. The first draft is
workable -- is in working -- is a workable solution now.
And the team has had three wargaming exercises to stress
test -- to your point, to stress test our liquidity
profile during the next downturn.

And then last Thursday evening, the senior team of the Investment Office, 35 to 40 of us, we had a long discussion to go over the plan again. So that was as recent as last Thursday evening.

So in terms of other scenarios, if you go to slide -- so if you go to slide 12, so those are the -- how do we stress test ourself -- slide 12, please. So these are the historical scenarios which stress test our liquidity profile. Can our fund survive if any of these

historical scenarios were to happen today, given our portfolio today, were we able to survive? So each one of these we stress test our portfolio.

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In addition to these historical scenarios, we also stress test some hypothetical scenarios in the future that may happen that we haven't seen in the past yet. So we also have a number of hypothetical scenarios to test our portfolio and to see do we have enough cash flow to survive first. And then in addition, as Eric mentioned, borrow the liquidity. And when we need, can we borrow liquidity, borrow money to deploy in the capital markets to take advantage of market dislocation during the downturn.

So we are confident to say that we are much better positioned than we were in 2008. There's still some additional to work. But given the action, the partnership between you, and us, and the stakeholders, all the steps you have taken, the management team and the Investment Office have taken, we feel much more comfortable where we are in terms of preparing ourself for the next downturn.

COMMITTEE MEMBER MIDDLETON: Thank you.

CHAIRPERSON FECKNER: Ms. Taylor.

VICE CHAIRPERSON TAYLOR: Thank you, Mr. Chair.

So thank you very much for your report, John. I

always enjoy your economic reports. So I just wanted to -- there's a -- just kind of wanted to go over a couple -- I think you mentioned four things -- or three things that we're showing some weakness, the housing slowed down, energy slowed down, there's a labor tightness -- oh, no, four things, exports are looking kind of weak.

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So our trade issue, you said -- it says something different here, but you said that the trade issue actually could be a long-term thing even past our current administration. Is that what you were saying?

INVESTMENT DIRECTOR ROTHFIELD: I think so. I think the point probably is that we could get a truce on tariffs, which could extend the tariff hold off until after the next election. But businesses have to plan with a CapEx and their supply chains for the long term, and there's really no guarantee that we're going to get into a situation where corporates can be comfortable about a certain environment going forward.

Now, whether that outlasts this administration, I'm not sure, but I think a temporary eye truce on tariffs is not enough to regain that certainty that the corporate sector is worried about in terms of both CapEx and supply chains.

VICE CHAIRPERSON TAYLOR: Got it. Okay. And

whether or not it survives the Trump administration or not. The reason I ask is because I read an article that Japan and South Korea now are having a trade issue. And I'm wondering if this just our administration starting these trade issues are beginning to spill over into the rest of the world, which could also be a problem with our markets. But I was wondering if that was part of this as well.

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INVESTMENT DIRECTOR ROTHFIELD: Yes, I think so. I think, you know, the probability of a no-deal Brexit, which would disrupt supply chains within Europe is another factor. And as you mentioned the South Korea/Japan issue goes back to, you know, prior World War II. But the fact that it's come up again right now may be related to the mercantilist trend in the world economy. And that does lead to some significant issues with supply chains, because of where -- the important place that South Korea and Japan both play in those supply chains.

VICE CHAIRPERSON TAYLOR: There's some commentary that I don't need to make, but it just seems like we started something that is a Pandora's box, because everybody has a long history of trade issues with each country that they deal with.

The housing slow down, which was an indicator of the previous recession, you didn't mention any -- I mean,

you said it wasn't really -- it didn't seem like it was going to be the same thing as the previous recession, but is it -- is it predicated on costs versus consumer ability to buy? What is it -- what is it predicated on?

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INVESTMENT DIRECTOR ROTHFIELD: Yeah. So if you look at the prior -- the prior housing bubble followed by the downturn, that was based on increased leverage, so the homeownership rate went up. Renters became owners. And you also had a large home equity loan withdrawal happening. That's just not happened this time around. And we just had a slow recovery in the housing market.

Part of it, as you mentioned, is probably title lending standards. And we do -- despite the fact that lower income -- the lower income cohorts have managed to engage in some catch-up recently in terms of income growth, we have had widening income dispersion, which has led to both a supply and demand constraint on taking out mortgages to actually buy homes, which has the greatest GDP impact.

So I think there's a combination of supply and demand factors there that have been involved. It has become more expensive to get the land and to build a house, because of, you know, lumber prices, the fact that we don't have enough construction workers right now. If you look at job vacancies, they're very high in the

construction sector. So it's been a slow grind in that sector as opposed to something that's gone out of control and then started to come back.

If you look at measures like housing affordability, they're about long-term average right now. We're not at a point right now where house prices, except in certain markets like the west coast, California and Northern and Southern California, we're not in a point right now where affordability issues are starting to impact the national housing market. And, in fact, consumers have said they're quite open to buying a house right now.

VICE CHAIRPERSON TAYLOR: Okay. Okay. And then you didn't -- so, of course, we all heard about this last week, you didn't mention the inverted yield curve.

(Laughter.)

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INVESTMENT DIRECTOR ROTHFIELD: Inverted yield curve. There's definitely a cottage industry in recession risk indicators based on inversion of the yield curve. So temporarily, the two-year rate fell below the 10-year rate. One interpretation of that is its foreign policy. The very weak an vulnerable Japanese and European economies, which are causing foreign capital to flow into long duration, U.S. bonds, and is forcing down U.S. long-term rates. And another story says that you have to

have a significant and sustained inversion of the 2- to 10-year yield curve in order to be a very good indicator of future recession.

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So some of these recession indicators, which I think are also being developed in conjunction with this liquidity effort that's going on in the fund are showing that there is something like a third chance of a recession within the next 12 months, a 33 percent chance roughly.

So the yield curve inversion is part of that, but there are some other indicators as well that are starting to turnover, like capital spending in the economy and just the tightness of the labor market.

VICE CHAIRPERSON TAYLOR: Okay.

CHIEF INVESTMENT OFFICER MENG: So under topic of inverted yield curve, I know that catch a lot of attention of the media recently. But it's hard to say, it is correlation or causality. So in the past, as John said, that when the curve inverted, particularly the 2-year and 10-year inverted, the probability of a recession in the next 12 or 18 months is higher than when the -- a curve inverted already in 3 -- if you use a 3-month T-bill as the front end of the curve.

So we don't really know it's a correlation or causality, for one. And for two, the only theory -- one of the theories -- the only plausible theory to me is that

when the curve inverted, it may harbinger of recession down the road, is that if you think of commercial banks, their business model is really to borrow money from us, as a retailer, deposit money, and then they lend out. So they borrow from us. They pay us on front end of the curve. When they lend out, they lend out on the long end of the curve. So the curve inverted means that they cannot earn enough to their cost of capital.

VICE CHAIRPERSON TAYLOR: Right.

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CHIEF INVESTMENT OFFICER MENG: So that will hinder the economic growth. If you think about commercial banks, they are the intermediary in the capitalism. So they facilitate the flow of capital and the creation of credit. But if they more — the more they do, facilitate the capital flow or the more credit creation they do, the more money they will lose, so naturally they wouldn't do it. So that's only one of the plausible reasons I see for the causality between inverted yield curve and the recession down the road, so — but still there's a lot of debate, is it correlation or causality?

VICE CHAIRPERSON TAYLOR: Right. Okay. I appreciate it. Thank you very much.

CHAIRPERSON FECKNER: Mr. Miller.

COMMITTEE MEMBER MILLER: Wow. So much to think about. A couple things that kind of strike me as -- you

know, we see a lot more participation in this tightening in the labor market, but we're not really seeing real improved -- big improvements or even modest improvements in wage growth and in income equality that seems to be driving things even in terms of global risk in the economy, and along with other big things like climate change and stuff.

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And it just seems to me -- it's been a long, long time since I was in business school, but the model back then seemed to be kind of oh, a recession modeling is kind of a V. You got the curve and it's somewhat symmetrical and it comes back and then moves on. Then it kind of seemed to be, well, we've still got this convex drop, but maybe it's more like a U. And then we see more recently it's like, well, we've still got the big convexity, but then it's like you -- but then it's not symmetrical, and it's taking a long, long time to recover. And so how do we look at things going forward thinking that that might be more the -- you know, the kind of picture we're going to see, particularly with there's not much room for monetary policy to maneuver now, unless we go into negative rates or some craziness?

And as a long-term investor, we certainly can weather even those longer recovery cycles where we've got this confluence of long-term business cycles, medium,

shorter term, all kind of -- this amplitude effect that causes that big drop, but the slow recovery.

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So do you see kind of is -- is the world and the thinking about recessions and recoveries changing in that way and how do we address it, if we're going to be thinking about how we use leverage and how we time our actions into that kind of recovery? Regardless of the politics of who's President, it seems like more it's a when not if kind of situation.

CHIEF INVESTMENT OFFICER MENG: So you had a number of questions. I take a stab and then turn it over to John. So in terms you were talking about the money and the policy and the effectiveness of it going forward. You're absolutely right that if you look at recent recessions, on average the Fed had to cut 5 percent to stimulate the economy to get out of the recession. Currently, the rate is about 2 percent, so we don't have 5 percent to cut, for one.

And for two, if the Fed started in a way underwriting the trade policy -- so if the Fed used the limited bullets to underwrite the Administration's trade policy, when the economy really needs help from the Fed, we may not have even the 2 percent left to stimulate the economy.

And the other one, your observation is that going

forward for the future if our established framework, analytical framework, still work or not. So yes and no. We are in -- we are -- absolutely, we are in a different environment in many sense.

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For example, the -- in terms of monetary policy, how effective monetary policy is going to be. We haven't seen that before. And also the quantitative easing, we have not done that such a scale before either, how to unwind it.

And other things, you know, the economy today -global economy today is different from the past. You
know, it's much more globalized. And if you look at U.S.,
U.S. is very much a consumer-based economy. As John just
mentioned, there's more than two-thirds our economy driven
by consumer. So even though we are experiencing a
manufacturer recession -- manufacturing industry or
industrial recession, but the consumers are strong bound
by the low unemployment rate and -- actually, the income,
growth the recent one, more than four percent wage growth.
So we see some wage growth as well.

But back to your question, we use -- one of the framework we use, you'll hear in the media talk about it is the Phillips Curve, the relationship between unemployment rate and inflation. And then another debate is the Phillips Curve still working or not?

But if we look at it, again, a different economy we are in now. The San Francisco Fed recently published a paper. The Phillips Curve in the service sector, actually well and alive, works pretty well. But in the manufacturer sector, because it more globalized manufacturer sector, so you don't see the effective in the Phillips Curve.

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So just one of the examples that we have to use established analytical framework in today's context. So that create a lot of difficulty and challenges for all of us to manage the portfolio when the next downturn comes.

So that's my two cents. I turn it over to John.

INVESTMENT DIRECTOR ROTHFIELD: Yeah, I agree with Ben there. If you look at the service sector, there are actually some signs that we're getting into a typical late cycle in terms of wage growth. So if you're -- if you stay in your job, the aggregate numbers are showing you're earning 4.2 percent on average more than a year ago. If you changed jobs, it's more like 4 and a half percent right now.

The reason the aggregate wage bill in the economy is growing only in the 3s is that the new workers being bought into the labor force right now don't have the kind of skill set as everybody else who'd been drawn in earlier in the cycle. So the entrants tend to be paid lower. So

the average stays down, so -- and the national accounts were actually recently revised to show that the wage and salary share of corporate gross value-added has gone up more quickly than we expected over the last 5 years with the revised numbers.

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So you are starting to see kind of more traditional margin compression coming out of -- coming out of this business cycle where we are. So it actually puts some of these recession risk indicators a little higher because you are starting to see labor scarcity being reflected in the price of labor, which is good for top line, but not necessarily good for profits.

And the other question about the Fed, you know, we -- the Fed has already decided not only that it's probably in a rate cutting cycle, but also that it's going to end its, you know, buyback -- you know, running down its balance sheet and is actually going to be in the business again of starting to buy bonds.

And, of course, we could get into a situation over the next few years where it has to start buying bonds again when the Fed fund's rate approaches the lower bound.

The problem with that right now is if you look at trajectories for U.S. debt, which is trillion dollar budget deficits plus over the next 10 years or so, it could get even worse if we go into recession. There's

going to be a lot of supply out there as well.

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So I think there are legitimate concerns, not only here, but abroad where, you know, the European Central Bank with negative rates is already talking about having to do more with rates starting negative and the same with Japan, that we are in a kind of constrained environment for what policy can do to generate much economic growth.

CHIEF INVESTMENT OFFICER MENG: And if you think about, we are starting at such a low level now, and when the next crisis comes, say if we get into negative yield territory for the U.S. as well, and again go back to my point just think about how capitalism works, at least in theory capitalism does not work well when capital is free, let alone when capital is negative, not only free, you had to pay the bank to take your money, to deposit your money.

And if you -- again, you think about banks as the intermediary of facilitating the capital flow and credit creation. So they -- if, say, the yield become negative, they take our deposits as negative yield, they will be okay, right? But they will not lend any money, because the more they lend, the more they lose. So in that case, in that scenario how capitalism really works, we don't know.

So again back to Mr. Miller's question, again,

we -- if that happens we will be in uncharted territory. And this -- all the risks longer term, even though we haven't seen it yet. But just recently we see a German bond, 30-year bond, nominal yield is negative now. So we have to prepare -- again, back to Ms. Middleton's question, we have to think about all these scenarios.

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This on the slide, you see the historical scenario we stress test ourself. But these are hypothetical future scenarios. It's not just a possibility. It may be -- become a probability. So we have to prepare ourselves for all the different scenarios as well.

But again, on the slide here, when we say we're trying to prepare ourselves better for the next drawdown, when this happens, we will not be immune from it. We'll still take a hit in the portfolio. But what we are trying to do is that we take a lesser extent of the hit, and more importantly, we can survive the downturn. And then on top of that, we still have additional liquidity on demand that we can deploy to take a advantage of the market dislocation during the next downturn. That's what we call the survive part. So we have to survive first and then thrive.

So that's the plan. But I don't want to give you the impression that when the next downturn comes, we have

been working on the all -- you know, we are firing on all cylinders to prepare ourself and there will be no impact on us. That's absolutely not the case. So we won't be immune from this but we'll be in a better position than what we were 10 years ago.

COMMITTEE MEMBER MILLER: Yeah. Thanks very much. A very helpful discussion. And just not a question, but just a little food for thought when it comes to Phillips Curve and the industrial economy in the U.S. and worldwide.

You might consider that the effect of the diminished role of organized labor has played in those marketplaces is a factor that's quite different from the effect in the service sector.

So thank you.

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CHIEF INVESTMENT OFFICER MENG: Yeah.

CHAIRPERSON FECKNER: Ms. Middleton.

COMMITTEE MEMBER MIDDLETON: Okay. I wanted to do -- again to the economic growth on housing. Question, is the trend national or are there significant regional differences, and very specifically how much is the downturn in the housing market in California contributing to these national numbers?

INVESTMENT DIRECTOR ROTHFIELD: It's harder to get a breakdown in terms of residential construction, that

big number in the aggregate within Gross Domestic Product, but I can certainly look at where that's coming from. If you look at housing starts, that has tended to be fairly broad based in terms of steadying rather than the growth we had earlier on in the cycle, but I'll get back to you with something regional on where that slow down in construction has come from.

COMMITTEE MEMBER MIDDLETON: Appreciate that.

And thank you for your answers to Mr. Miller. I am not sure if I feel better or not.

(Laughter.)

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CHAIRPERSON FECKNER: Mr. Jones.

COMMITTEE MEMBER JONES: Yeah. Thank you, Mr.

Chair. This -- the historical equity market drawdowns,

the implications of this -- I noticed a chart later. Are

you going to go over that chart to show what the

implications of these drawdowns are or is this the

appropriate time look at that, or are you going to go over

that later?

CHIEF INVESTMENT OFFICER MENG: Mr. Jones, we don't have that prepared for the meeting today, but we have done all the analysis, scenario by scenario.

COMMITTEE MEMBER JONES: Oh, the scenario chart later that shows what the scenario is and the portfolio return doesn't relate to this chart?

CHIEF INVESTMENT OFFICER MENG: No. These -- each of the scenario what happened in the past.

COMMITTEE MEMBER JONES: Um-hmm.

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CHIEF INVESTMENT OFFICER MENG: And what we did is pretend we -- our portfolio position today, and then we applied back what the use of the historical events and see what's the impact on our portfolio. But the impact on our portfolio from each one of the historical scenarios, we don't have it today prepared.

We have the number. We just don't have it here.

COMMITTEE MEMBER JONES: But I'm looking at something in attachment 2 that -- and that's what I wanted to know if you were going to get to that chart.

Attachment 2, page 3, that's -- and I was trying to

CHIEF INVESTMENT OFFICER MENG: Give us a second.

COMMITTEE MEMBER JONES: Some of the same scenarios.

understand if this ties to attachment 1.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah, I don't -- I don't know if we can put this one up on the screen or not. But as Mr. Jones said, basically, it's one of the -- it's one of the standard risk management summaries that get printed out. And literally, what you see on this chart -- and I think this is page 3 of 9.

COMMITTEE MEMBER JONES: Yes.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Is this the one you were looking at, Mr. Jones, with the horizontal lines and everything is basically, for the most part, moving to the left of the 0 line, which implies obviously a significant drawdown, if any of these situations plays itself out.

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As Ben said, we use these scenarios to hypothesize what would it actually take in order to try to maintain the target risk profile in the fund, because ultimately risk management for CalPERS is to be able to maintain what we believe is the appropriate risk profile as evidenced through the structure of the strategic asset allocation.

So how much money, for example, if you had the tech crash repeat itself and you're looking at a drawdown in the, you know, 20 percent, 22 percent range, for example - that's the fourth one down the page - what would it take to basically be able to put 50 percent of the money back into public equities, because the public equity portfolio would have declined pretty significantly relative to other parts of the portfolio?

So as Ben said, we look at these numbers and we hypothesize how much liquidity would have to be generated in order to reestablish the risk profile flowing or deriving from one of these kinds of events. And you can

see, for example, even the financial crisis in 2008 and '09 was an even bigger drawdown.

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I think we're fairly confident that if these scenarios were to repeat themselves, that we would basically be able to maintain the risk profile. The damage that was done to the fund in the -- particularly, the financial crisis was in -- in other words, there was enough capital commitments and contingent liabilities that it was unclear whether or not we would be able to satisfy those contingent liabilities and therefore we actually reduced the risk in the portfolio, and we raised probably excess cash. And that excess cash then created an opportunity cost to -- when the markets started to rebound after that.

The lesson that we've learned from that is that, one, we've changed the entire picture of those contingent liabilities. So, for example, the security lending portfolio going into the market crash in 2008 represented almost \$40 billion of exposure. The security lending portfolio today represents about \$15 billion of exposure. So it's about a third the size of what it was at that point in time.

The same thing with capital commitments to the private asset classes. We had approximately another 40 to 50 billion dollars of capital commitments. That number is

now -- you know, approximately half that. So those changes and also the changes in the actual cash investment pools, and buckets, and categories give us a lot more confidence that we have adequate liquidity to reestablish the risk profile, given any of these kinds of scenarios.

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But the reality of this is going to be that whatever happens in the marketplace, it's not going to be the same thing as exactly one of these things.

So all this stuff gives us indications of what we might think we can do. We're going to have to see exactly how it actually ultimately plays out. But that's what Ben says, we basically go through these exercises of replaying these kinds of events, saying, okay, here's the effect, here's what it's done to the asset allocation, where are we going to find liquidity in the marketplace to kind of reestablish the risk profile or maintain it?

An that is ultimately, at least in my own personal opinion, what risk management means to CalPERS is being able to maintain the strategic asset allocation almost irrespective of what's happening in the market environment, because we've determined that's the risk allocation that we think we like on a long-term basis. We now have to maintain that. I don't know if that directly answers your question.

COMMITTEE MEMBER JONES: Yeah. No. Yeah.

Thanks for clarifying that for me. I was going down the wrong path.

Okay. Thank you.

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CHAIRPERSON FECKNER: All right. Seeing no other requests, I have one from the audience. Mr. Darby.

Please identify yourself for the record and you'll have up to 3 minutes for your comments.

MR. DARBY: Good morning, Mr. Chair, Board members. Al Darby, President, Retired Public Employees Association.

About a year ago an imbalance was identified in a Wilshire report between U.S. public equities and non-U.S. stocks. In other words, the PERF had an imbalance far too much in the non-U.S. stocks.

The report showed that stocks -- U.S. stocks outperformed non-U.S. stocks in 2018-19. Wilshire showed heavy U.S. concentration in those non-U.S. stocks. If the imbalance in the PERF hasn't been corrected, the PERF underperformed in 2018-2019 pretty significantly, because 50 percent of the PERF is in equities.

Can you please inform us on this issue? The reports today don't indicate a difference or they don't indicate the commitment to non-U.S. stocks and U.S. stocks.

CHAIRPERSON FECKNER: Anybody?

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MR. DARBY: Can somebody inform us?
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             Thank you.
             CHIEF INVESTMENT OFFICER MENG: We're looking for
 3
    the Chairman's direction.
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             CHAIRPERSON FECKNER: You know, if you have the
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    information, let's share it. If not, let's bring it back
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   next month.
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             MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah.
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   We'll bring that information back to you in a report that
    shows the mix between U.S. and non-U.S. equity investing.
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             CHAIRPERSON FECKNER: Very good. Thank you.
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             Ms. Brown.
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             COMMITTEE MEMBER BROWN: That was my comment just
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   to -- could we please answer his question.
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             Thank you.
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             CHAIRPERSON FECKNER: All right. Seeing nothing
   else on this item, correct?
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             All right. Before we move on to the next item,
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    it's to take our break for the court reporter, so we'll
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   reconvene at 11:20.
             (Off record: 11:07 a.m.)
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             (Thereupon a recess was taken.)
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             (On record: 11:20 a.m.)
             CHAIRPERSON FECKNER: If we could take our seats,
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             The Board members could come forward.
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   please.
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Mr. Darby, we have an answer to your question.
Mr. Junkin is going to provide it.

Go ahead, Andrew.

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MR. JUNKIN: Good morning. I had to check the time. Sorry. Andrew Junkin with Wilshire.

So I believe Mr. Darby is speaking about our universe comparison where we stack CalPERS up against other peer funds. And on one of the measures is the allocation to U.S. stocks versus non-U.S. stocks.

CHAIRPERSON FECKNER: He's shaking his head yes.

MR. JUNKIN: Yeah. Okay. That's a report that we're brining back next month. We weren't passing judgment that it was right or wrong. It's just a difference between you and many of your peers. You are relatively overweight non-U.S. stocks compared to U.S. stocks, because of the decision of the Board to invest on a global Basis. So he's correct that there's been some performance impact, but we were not saying that's right or wrong. That's just how you are and here's how you stack up compared to your peers.

CHAIRPERSON FECKNER: Okay.

CHIEF INVESTMENT OFFICER MENG: Mr. Chair, before we start Agenda Item 9b, can I take a moment to acknowledge one of our global peers and one of the thought leaders in the industry, the CIO CalSTRS, Chris Ailman, is

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here today in the audience with 10 of the student interns
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    of the summer. So welcome to CalPERS.
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             CHAIRPERSON FECKNER: Welcome, Chris.
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             (Applause.)
             CHAIRPERSON FECKNER: Thanks for being here.
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             MR. AILMAN: Just so you know, you're my
 6
7
    retirement system.
8
             (Laughter.)
9
             CHAIRPERSON FECKNER: We got you covered.
             CHIEF INVESTMENT OFFICER MENG: With that, back
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   to you, Mr. Chair.
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             CHAIRPERSON FECKNER: Anything else, Mr. Junkin?
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             MR. JUNKIN: I suspect you probably want me to do
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   the consultant report on 9b.
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             CHAIRPERSON FECKNER: Correct.
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             MR. JUNKIN:
                         Okay.
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             (Laughter.)
             CHAIRPERSON FECKNER: I didn't know where we were
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19
    starting. So is that where you want to start, Mr. Meng?
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             CHIEF INVESTMENT OFFICER MENG: Yes.
                                                    So here is,
    you know, your primary investment consultant Wilshire will
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    provide a performance report followed by Meketa and
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    Pension Consulting Alliance to provide us comments
    specific to private equity, real assets and the
24
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    infrastructure.
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CHAIRPERSON FECKNER: Very good. Thank you.

Mr. Junkin.

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(Thereupon an overhead presentation was Presented as follows.)

MR. JUNKIN: Great. Thank you. I think I said this earlier, but I'm Andrew Junkin with Wilshire Consulting. 9b, we actually have two attachments, and so I've 99 page to cover.

(Laughter.)

MR. JUNKIN: Two of those pages are title pages, so really it's only 97.

(Laughter.)

MR. JUNKIN: So it should be fine.

I'm going to go pretty quickly. Staff has already covered a lot of this. We sort of take turns who goes first. So I'm going to try to pick on some spots where I think there's some differences and not just try to reiterate the same things that you've heard.

Thank you.

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MR. JUNKIN: This chart is a little bit hard to read here on page 2. This is our June asset class assumptions. We update these every quarter. These are 10-year forward-looking assumptions. Really, a couple of things I wanted to draw your eye to. One, the expected

returns for equities on a forward-looking basis continue to come down. So one way to think about that is as the market has continued to go up, and for most of this year it has, we would argue that the price is probably going up faster than the fundamentals area. If they'd sort of done up in lockstep, then we'd see that the expected returns haven't changed.

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So you're kind of pre-earning, if you will, some of the expected return over those 10 years early in these last two quarters and that's dragged down the expected returns.

Private equity, our expected return there is down to 8.35, which I think is the lowest that we've shown.

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MR. JUNKIN: Spend just a quick minute here on page 3. I was impressed that we made it as long as we did without talking about the yield curve inversion. So there should be a prize for Ms. Taylor for bringing that up, I think.

VICE CHAIRPERSON TAYLOR: Okay. What is it? (Laughter.)

MR. JUNKIN: I don't know what the prize would be. Well, maybe it's this comment that in addition to the yield curve inversion, we also had a brief patch last week where we had negative yields on the 10-year TIPS. And so

you really were in a state where, you know, the market had just said give me -- just give me most of my money back on an inflation-to-adjusted basis and that's good enough for the U.S. economy.

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So I think that says a lot about what the market thinks about the strength of the U.S. economy, but also the global economy. The break-even inflation point, so the difference between the nominal yield you could earn on traditional treasuries and the yield that you would pay on TIPS was about 1.6. So that's not a lot of implied inflation over the next decade.

One other point that -- with as many news letters as we're issued last week on inverted yield curves calling for the beginning of every recession, the New York Fed actually publishes a probability of recession, which is just based on a regression of a number of metrics. Right now, it's at 31 percent. It's never hit 40 and not predicted a recession. And there's only been one other time going back 50 years where it's been as high as 31 percent and not predicted a recession.

So I think the market -- the bond market and statistics would say it's a challenging time.

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MR. JUNKIN: Sorry. I've got my notes in a couple of places, and I've been sort of deleting as I go,

so I don't repeat staff.

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Here we go, page 7. So using our forecasted returns, which I just showed you on page 2 in your asset allocation, these are the forecasted returns that go with that. In addition to the 10-year forecasted returns, we have 30-year forecasted returns. So the first two bars here - and I'll just focus on the target allocation - show the forecasted returns over the next 10 years and over the next 30 years. Really, 30 is most meaningful for you. That return is still 7 and a quarter. But the next 10 years come in below 6 percent, 5.9.

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MR. JUNKIN: Skipping ahead to page 10, here, we've got total fund performance broken down by asset class. Staff has already covered I think a large part of this. But I did want to point out that as was noted during the conversation about attribution, private equity has been the best performing asset class. And so that is really one of the reasons that you continue to allocate to it. You can see it in our expected returns. It's still 2 and a half percent essentially above public equity, so it does play a significant role in most institutional investor's portfolios.

We'll talk a little bit about most of these asset classes as we go. I think Eric has really covered private

equity and the implementation of the factor approach there. And the timing was great. As he mentioned, the focus of the factor approach leaning on low volatility worked as expected -- worked better than expected. So it's nice to get off to a good start. I would encourage you all not to expect 800 basis points of outperformance from that strategy on a yearly basis, as Eric mentioned.

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We'll talk a little bit about real assets in more detail since there was some performance detracted there.

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MR. JUNKIN: I was going to spend just a minute on this attribution, since there were some questions earlier about how does this work? I think most of them were covered, but I try to break this down pretty simply. By asset class, what is the actual weight been over the last 12 months? So it's actually an average of the last 12 months of weights. That's the first column.

What's the return. The benchmark, what's the weight? And it changes over the last 12 months, because you've had asset allocation changes, so that's why some of those numbers look a little weird, like 41.41 percent. That's not really your target to public equities, but that's been the weighted average of the target and the return.

And then you can see the next two columns,

differences. That's just the mathematical difference between the weight columns and the return columns. And then you do some multiplication. The last three columns really are what matters here. What's driving the return difference between the policy benchmark and the portfolio? And you can see you underperformed, if you look at the bottom, by 42 basis points. And that was split 29 basis points due to actual allocation and 13 basis points due to active management.

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So actual allocation, if you are underweight an asset class that does really well, that's a drag on return. If you're overweight an asset class that does really well, that's a positive to returns in attribution space?

Flip that around as well, if you're underweight, one that does poorly, that actually adds to your returns from an attribution standpoint. If your overweight one that does poorly, that's a drag.

And then active management is did you beat your benchmark within that asset class. So as you scroll through here, you can see the allocation effects are really pretty small. The two that jump out, private equity for active management was a pretty significant tailwind adding 25 basis points at the total fund level and real assets detracted 34. And so we're going to talk

about that in a few more pages.

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Any questions on that? I know that was a really quick fly-by of the attribution. To me, it's kind of a report card. What do we need to dig into further?

Okay.

CHAIRPERSON FECKNER: Seeing no other requests. Thank you.

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MR. JUNKIN: Okay. Let me just jump to a couple of pages that we normally cover. So page 26, private capital dry powder. Here, this chart -- you have to really pay attention to the scale. The scale has gotten pretty significant. There's \$2 trillion with a T sitting on the sidelines waiting to be deployed in private asset classes. One trillion of that is in private equity. been committed, but not yet invested. So this says a lot about the private market landscape, right? It is verv competitive right now. If you were selling a business to a private equity investor, odds are you're going to get a pretty good price, because you're probably going to have a line of them around your office waiting to deliver their bids.

So that's one of the challenges in this space we're investors. And one of the reasons our returns -- our return expectation to private equity is as low as it's

ever been at 8.35 percent. There's so much competition for these assets.

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MR. JUNKIN: Go to page 28. So here's the corresponding chart that goes with it. This is private equity pricing covering a similar time period. You can see we were at about nine or ten times before the financial crisis. That dipped to kind of seven times after the financial crisis. And now we're back up to what is an all-time high of 11.2 times for private equity deals getting done in the buy-out space.

Let's see. I think we've talked plenty about interest rates. Let me just jump to real assets quickly.

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MR. JUNKIN: So page 41 here, the fundamentals behind real estate, the four large sectors here. The red line is essentially the vacancy rate. And fundamentally, vacancies are still down. So the real estate market is pretty healthy from a rent standpoint.

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MR. JUNKIN: If we jump ahead to page 44, here, you can see the performance. And I just draw your attention to the 1-year number, 3.7 percent for real assets, 6.5 percent for the benchmark. So some underperformance. So what happened?

Well, one number that's going to jump right out at you is forestland. And as you know, there was a big piece of forestland that was sold about a year ago, so it rolls into this fiscal year's performance. There was a mark down and that explains most of, if not all of, that underperformance for forestland there.

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Within the real estate market, some of the disparity came from your treatment of malls versus the universe or the index's treatment of malls. And when I say treatment, there's some decision to be made about how often an appraisal is made and how that flows into the valuations.

And I would argue that you all were pretty aggressive on pricing malls in that as -- I don't mean aggressive like inflating. I mean, aggressive in terms of writing it down quickly and facing what you thought was the truth in terms of mall pricing. And the index, which, in this case, is an index of peer funds, has been a little slower to write down malls.

So this is one of the tricks that you have to be careful with on private asset class performance. Shorter term time periods don't mean quite as much, right? So I suspect, and we'll see if I'm proven correct, that there will be some continued write-down on malls at the index level. Whereas, you've really kind of taken the bulk of

the hit. I think you'll see that mall section sort of become a relative tailwind over the next 6 to 12 months.

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And then the bit of good news on the page is forest -- sorry not forestland, definitely not forestland. Sorry. Infrastructure. I read the wrong word. With, you know, significant outperformance over the last year, but over every time period that's been a huge -- a huge win for a portfolio for CalPERS.

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MR. JUNKIN: One last thing I wanted to cover before we moved on. And this goes back to the TLPM strategies. So we're reporting on a number of strategies here. There's some really weird numbers on this page that I thought it was worth highlighting. So I'm looking at the TLPM Risk Mitigation Strategies. You have \$200 million exposed to those strategies, and you can see down 82 percent. That's seems awful.

Remember what those are there for. They are sort of tail-risk hedging strategies. In normal markets, or in markets that are slightly up, or slightly down, or even massively up, those strategies aren't going to do well.

But there could be a day when the market is down pretty significantly and we come in and we report that the risk mitigation strategies are up 1,000 percent. It's possible. So I just wanted to point out this one odd

aspect of the portfolio, because that's a big number in terms of the performance. It's a very small number in terms of the dollar values, but I wanted to call that out in advance.

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So when the day comes, there's a huge number and somebody says why didn't we do more of this? It's sort of an insurance premium. You pay a little bit when the market is normal, and then when the market sells off, it should help support the fund.

And I'll finish there. Happy to take any questions.

CHAIRPERSON FECKNER: Mr. Perez.

COMMITTEE MEMBER PEREZ: Thank you.

So if your projections -- the 10-year projections and so on, if they are without fees, is there anyway to determine what it would look like for us?

MR. JUNKIN: So the management fees for you for the bulk of your portfolio really would be -- the bulk of your portfolio has very little management fees, because it's internally managed. That's the way to say. Domestic equity -- public equity and fixed income is all managed internally. Where the bigger dollar value of fees are is in private equity in particular, and to some lesser degree, real assets.

Our assumptions on private equity, we make the

concession that you cannot invest in that asset class on a no-fee basis. All of the other things are essentially no fee. So what we assume there is that you're going to get top quartile returns net of fees and that leads to that 8.35 percent. So it is -- in that case, that's how we try to address the fee issue. So I would say that the forecast that we showed that numbered just right under 6 percent is essentially net of fees.

COMMITTEE MEMBER PEREZ: Okay. Thank you.

CHAIRPERSON FECKNER: Ms. Yee.

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COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

So you were calling out of the Risk Mitigation
Strategy just had me thinking about a couple things. One,
I guess from your perspective how well the total fund is
positioned to withstand an economic downturn and are there
additional measures that we ought to be thinking about in
addition to the ones we've already taken?

MR. JUNKIN: Yeah. I think Ben made the point right before we broke that you've spent a lot of time and done a lot of work in this area and you're better positioned than you were in 2008. And I agree with that. I think one of the big levers you had left to pull was the implementation of the low-volatility equity strategies and you did.

BOARD MEMBER YEE: Yeah.

MR. JUNKIN: That was -- that was the biggest one that was obvious to me.

I think, at this point, really if you're not comfortable with your downside volatility, the big lever left is to take equities out of the portfolio or reduce, right? I don't mean completely. But then you start another whole conversation about what are we doing to the discount rate? And so that's a bigger issue.

COMMITTEE MEMBER YEE: Right.

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MR. JUNKIN: So tactically, are there other things that you could be doing to mitigate drawdowns? I really think there's been a whole body of work done here within the TLPM group. And really, you've taken a look at everything that is possible. Things that are possible theoretically, in some cases are not possible because you're CalPERS and because you're trying to hedge, you know, \$180 billion --

COMMITTEE MEMBER YEE: Right.

MR. JUNKIN: -- worth of public equities. And that is too big a number in some cases.

So the answer is you've done as much as you can, but you still have a lot of equity risk in the portfolio that you just can't escape.

COMMITTEE MEMBER YEE: Right. Okay. Thank you. CHAIRPERSON FECKNER: Ms. Olivares.

COMMITTEE MEMBER OLIVARES: Thank you, Mr. Chair.

I'd like to better understand the makeup of the custom volatility premia benchmark and why the divergence between the results in the benchmark.

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MR. JUNKIN: I am honestly going to have to ask Eric Baggesen if he can explain that benchmark, because it's one of about 150 benchmarks that get plugged into the performance system.

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: So I'll start. I'm still wearing the MID of
Global Equity hat also and we manage that internally.

Andrew highlighted volatility. There's also some various other things that go into that, that basically the idea is to try to, as Eric said earlier, capture the equity risk premium. So capture markets, get something like full upside capture, while mitigating the downside capture. So trying to get lower drawdown in a down market. We can go as deep --

COMMITTEE MEMBER OLIVARES: I assumed that. I guess, can you explain the divergence then?

INTERIM CHIEF OPERATING INVESTMENT OFFICER BIENVENUE: The divergence between the two?

COMMITTEE MEMBER OLIVARES: So I'm looking at the benchmark here and it looks like it's negative 5.8 percent

for the 1-year. Are we seeing that in terms of performance too?

So, I'm sorry --

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INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Are you talking about cross-asset volatility
premia? So you're talking about the trust level -- so
that's not the factor-oriented portfolio.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Bear with me one second. I'm just trying to catch up with your question here. Let me see the material. Yeah. So basic -- what you're seeing with the cross-asset volatility premia, in other words, this is literally just an exercise or a trial portfolio, where we're attempting to see --

COMMITTEE MEMBER OLIVARES: Um-hmm. Um-hmm.

MANAGING INVESTMENT DIRECTOR BAGGESEN: -- can we, in essence, sell volatility and do that in a profitable way? And what you're basically seeing is that that effort, you know, over the past year and over the past quarter just -- obviously did not work. But this is almost -- you know, it's a de minimis amount of money that's deployed into that.

But it's -- you know, I would -- I'd have to check with Ron Lagnado who's the person who would -- in TLPM that really runs that. Honestly, I just don't have

the detail as to what makes up the benchmark for that, that negative 5.8 percent. That's an -- we can respond to that question to you after the fact and give you a response to that.

COMMITTEE MEMBER OLIVARES: Thank you.

CHAIRPERSON FECKNER: All right. Seeing no other requests, anything else?

All right. Mr. McCourt.

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MR. McCOURT: Good morning, Steve McCourt with Meketa Investment Group. Your private markets consultant, real estate, infrastructure, and private equity.

(Thereupon an overhead presentation was presented as follows.)

MR. McCOURT: I'm going to go through our reports that were provided in your packet under attachments 3, 4 and 5. I'm going to make some high level comments on each category. And I also have behind me, to save me for any tough questions on real estate and private equity, subject matter experts at Meketa as well, David Glickman on real estate, and Steve Hartt on private equity.

So I thought I'd start with just a very broad context that's been mentioned a few times before, which is the level of interest rates in the economy. And I bring it up in the private markets realm, because at the end of the day, long-term interest rates and the level of

long-term interest rates in the global economy is probably the most fundamental factor that drives forward-looking returns for all asset classes, including private markets.

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So when interest rates go down, it has generally the impact of elevating the prices of assets immediately, but then reducing the forward-looking return of assets, which is what Andrew had described. So all three of these asset classes in different ways have benefited from the decline in interest rates over the last 10 years or so.

Just looking at the last 5 years, where global equity markets over the last 5 years have returned roughly 7 percent annually, bond markets were up 3 or 4 percent annually, your private equity portfolio has returned nearly 10 percent per year over the last 5 years, your infrastructure portfolio nearly 13 percent per year over the last 5 years, and your real estate portfolio, 7.6 percent.

But if you X out the legacy assets in your real estate portfolio, you core real estate portfolio is up over 10 percent per year over the last 5 years. So all private market categories have done really well over the last 5 years. And that's partly due to the fact that lower interest rates encourage investors to invest in things other than bonds, as bonds yield less, and less, and less.

So these asset classes, like public equities, like high-yield bonds, and other credit instruments globally are really highly priced today. And that's just a reality that the Board should be aware of.

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As evidenced by the returns, the execution across these three categories has been fairly strong over the last 5, 10 years. The challenge though I think will be similar across all three, which is how to deploy assets at scale, in a way that maintains a reasonable level of expected return without expanding the amount of risk significantly that you're taking.

And building on Andrew's comments around how you're positioned today versus 2007, the one thing I'd want to make sure you walk away with from a structural perspective is that all three of these programs are very well diversified by property asset, geography, and manager. And in the case of real estate, your portfolio today is largely invested in much more economically defensive core properties than it was 12 years ago. Your infrastructure portfolio is predominantly invested in core defensive infrastructure properties.

So to date, staff has done a nice job maintaining and building on the focus of these programs being on the more economically defensive side of the spectrum of how you can build various private market programs. And we

would encourage staff to continue in that endeavor at this stage in the economic cycle.

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I'll start with, in terms of a couple of comments on each of the programs distinctly, I'll start with infrastructure, which has had for a long time now really, really strong returns. Arguably, this is the asset class that's benefited most from the decline of interest rates, because many global investors view infrastructure and core infrastructure in particular as a substitute for long-term bonds.

So when our 30-year treasury bond becomes yielding less than 2 percent, one can justify a much higher price on long-term contracts that have cash flows that exceed that.

Your returns, that being said, relative to anything I've seen in the marketplace are just in the stratosphere. 17.9 percent for 10 years in infrastructure is unheard of in the industry and your staff should be commended for that.

The other thing I want to highlight, when we came on again a couple of years ago as your Board infrastructure consultant, one of the issues we highlighted was the pace of investment infrastructure. Returns are great, but they don't really move the needle unless you can kind of increase the scale of the program.

Staff has done a nice job in the last couple of years of taking action to accelerate the pace of investment, again without unduly increasing the risk of the program.

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On the Real Estate Program, I want to highlight and reinforce Andrew's comment earlier on the retail space of real estate. While most of real estate has done well for many years, for the last couple of years, the retail space has been challenged by what's, you know, largely referred to as the Amazon effect. And retail, you know, represents a meaningful allocation to many core institutional real estate funds.

Your staff and their separate account managers have been responsible in pricing retail assets appropriately as cash flows and values of retail properties decline over time. The rest of the industry is not for agency reasons. Many commingled funds that own retail properties are averse to reducing prices before they absolutely have to, because they're competing in the marketplace for customers.

So from our perspective, your staff has been responsible in that regard and has sort of at a broader level continued to do a really nice job orienting the portfolio towards more of a core income-producing real estate portfolio from where it was a decade ago.

The final comments I want to make on private equity. Your private equity portfolio represents just a tad over 7 percent of your overall program today. As we've noted before, probably the biggest challenge in your private equity portfolio, much like infrastructure, has been getting more dollars out the door invested. To give you a sense of the scale of that problem -- and I might -- I might put quotations around the word "problem". Since 2011, your Private Equity Program has returned back to you \$33.6 billion in gains above and beyond the capital you've given back to the managers to invest on your behalf.

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It's really hard to keep your allocations up when the flow of capital coming back to you is at such scale. And that's something that has impacted many institutional investors. And your staff has started to react to that by elevating the amount that they're committing to private equity, and, as you know, looking at initiating at-scale, co-investment opportunities as well. So we're very pleased to see the pace of commitment increase over the last year, which is a nice step forward, and look forward to more deployment from there.

The returns of the private equity portfolio, staff went through a little bit. I just want to highlight a couple -- a couple of items.

As was noted for the last year, the Private

Equity Program returns 7.7 percent, which exceeded the new benchmark by a little over 3 percentage points. CalPERS, and this is not unusual for many institutional investors, periodically changes its benchmarks for a variety of reasons. And not unusual given human behavior, often those benchmark changes are made not at the best time. And so what ends up happening was when you link together a number of historical benchmarks, that linked benchmark has a much higher return than any of the legacy benchmarks that you used historically.

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And so I just wanted to highlight that over the last 10 years, your private equity portfolio has returned 14 percent per year on average over that time period, which is roughly in line with the new current benchmark over that time period, the FTSE all-world plus 150.

Your policy benchmark returns 16 and a half percent per year over the last 10 years. Because, as I mentioned, it's a composite benchmark that glues together several benchmarks that you had, there's literally not another usable benchmark in the industry that has a return as high as your historical policy benchmark, because that benchmark was changed at a time that wasn't propitious for you. And that just happens sometimes when you have a benchmarking policy where you don't retroactively change your benchmark, you simply append it to the legacy

benchmark. So I wanted to highlight that, as we have in the past as well.

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In our report, we get into a little bit of detail on areas that have done well, areas that have done not as well. I would summarize those comments that you've generally done well in -- over the long period of time that we're looking here in co-investments and funds, not as well in fund of funds and secondaries. And you've done better in core traditional private equity sectors like buyouts, and less well in credit strategies that you've invested in historically.

I also want to highlight that private equity is about, depending on how you measure it, 60 to 70 percent U.S. focused. So as a global asset class, it is a little more tilted towards the U.S., which also gives it a little more defensive characteristic, given what's going on in the world today.

And my final comment, you know, is with all the private market categories, I would suggest a degree of patience with judging performance versus benchmarks, because as was noted before, short-term benchmark comparisons can be very lump for valuation reasons. And more importantly, because these are not publicly listed prices for assets and they're subject to valuation, you really don't know what your return is until the cash is

returned to you. And in closed in funds, that cash doesn't get returned to you for 7, 8, 9, 10 years into the future. So to look at performance shorter than that, what you're really looking at more is valuation policy than you are actually -- actual return.

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And the returns that you see on these pages are, for the most part, time-weighted rates of return, where if we were to do a deep dive into specific sectors or strategies, we'd be looking at internal rates of return, which would make the numbers change a little bit as well. So just all reasons to take relative performance with a little more patience than with the public markets. And that concludes my remarks.

CHAIRPERSON FECKNER: Excuse me. Thank you. Seeing no requests.

Anything else on this item, Andrew?

MR. JUNKIN: I neglected to mention that

Treasurer Ma requested information on the affiliate funds.

That's in the second 49 pages of our report. It's from about page 25 of attachment 2 on. We report every 6 months on everyone of the affiliate funds. So if you could pass that along to her, Matthew, I'd appreciate it.

Thank you.

CHAIRPERSON FECKNER: Thank you.

CHIEF INVESTMENT OFFICER MENG: No, Mr. Chair,

it's Item 9c.

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CHAIRPERSON FECKNER: 9c, very good.

CHIEF INVESTMENT OFFICER MENG: Yes. So where we seek your review and direction on the proposed update and the revision of the Total Fund Investment Policy.

INTERIM CHIEF OPERATING INVESTMENT OFFICER BIENVENUE: All right. Thanks, Ben.

So this is Item 9c. As Ben said, this is a first reading of potential changes to the Total Fund Policy arising out of this year's review of our policy intending to maintain an accurate, current, and relevant policy framework. Joining me are Kit Crocker and Beth Richtman. And then also we have other members of staff, if we get into deep questions. This definitely is an opportunity for feedback from the Investment Committee on this proposed policy.

So this year's review generated changes in four main categories. First of all, strategic asset allocation, secondly the total fund leverage management, a refresh of our Governance and Sustainability Principles, and then finally some ad hoc changes.

Regarding strategic asset allocation, and this was referenced earlier and to Mr. Jones' questions, it was really about implementation of the asset segment work into the Total Fund Policy.

Regarding total fund leverage, and again to Ben's previous comment, it's about migrating to a centralized total fund leverage governance framework using an aggregate limit of 20 percent as opposed to the historical disparate asset class limits around leverage.

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The third main change again is the Governance and Sustainability Principles. And this draft reflects updated language on Board oversight of such things as corporate culture and labor practices, disclosure of such activities around lobbying, and then workforce demographic data, and then finally a refresh of our philosophy on executive compensation.

And then finally, I'll just highlight the most notable of the kind of general ad hoc changes, and that surrounds prudent person opinions, or PPOs, and the thresholds below which they will automatically be required for certain private market transactions.

So as mentioned, this is a first reading. We're seeking the Committee's feedback and questions. And I'll pause there. Mr. Chair, I'll turn it back to you. Happy to certainly take any questions or to hear what the consultants have to say, whatever is the pleasure of the Committee.

CHAIRPERSON FECKNER: Well, we have no questions yet, so let's hear what the consultants have to say.

MR. KAZEMI: Good afternoon. Ali Kazemi,
Wilshire Associates. I just wanted to address the first
reading of the proposed policy changes. As Dan mentioned,
there were approximately 90 changes that were reviewed. A
majority of those, around 80 percent, were low in terms of
their material nature.

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The area that we really kind of focused on had to do mostly with the leverage centralization that will be housed within the TLPM team. Leverage has, from a risk standpoint, the ability to really move the dial. And so we real wanted to focus on what those changes were.

We agree that the centralization makes sense from a policy standpoint, and these changes are appropriate. The one area that we discussed with staff was the removal of an appendix that had the leverage limits within the asset classes. We felt that those -- you know, as the policy was being constructed, that removing that would be potentially inappropriate for the time-being. So the decision was made to move it into an investment policy and procedures guideline, which still is under the purview of your consultant.

So with that change, including within this first reading, we are supportive of all the changes in the policy document, and are happy to address any questions.

CHAIRPERSON FECKNER: Thank you. We have a list

of questions now.

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Ms. Ortega.

COMMITTEE MEMBER ORTEGA: Yeah. I just wanted to talk a little bit about the change on the leverage. So I understand the point about centralizing it. I get -- understand that completely. What I would like a little more clarification on is if the results of this change to centralize is going to change behavior in terms of the use of leverage and the types of strategies that might be employed, because I'm kind of losing that nuance in the way it's being characterized.

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: So as Ali mentioned -- so the expectation
would be no, other than to think of leverage due to total
fund context. Much of what Ben is working is looking at
liquidity through the total fund context, active risk
through the total fund context, and leverage is another
one of those.

When you view these topics from the bottom up, they tend to come together in a suboptimal way, as opposed to when you view them from the total fund down.

So that would be the -- maybe the change that we expect. It would be a more optimal use of leverage.

However, to Ali's previous point, by including the legacy leverage limits within the IPG framework -- so that's what

comes to the Board consultants. It just doesn't come all the way to policy. We would expect that the limits will still be maintained, but there would be a more optimal use of the leverage by moving to centralized.

COMMITTEE MEMBER ORTEGA: Okay. Thank you.

CHAIRPERSON FECKNER: Mr. McCourt, did you have something to add before we take other questions?

MR. McCOURT: No.

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CHAIRPERSON FECKNER: Okay. Ms. Yee.

COMMITTEE MEMBER YEE: Thank you.

I -- the changes to the benchmark modification process, I guess I wanted to just get a sense of what this Committee can expect. So will that reduce the number of changes that will be brought before this Committee presumably? And then I just had a question about what -- how define a material change for this purpose?

MR. KAZEMI: Happy to address that first. So we reviewed those proposed changes in terms of what would come before the Committee and what would not. We felt that those were all reasonable from our perspective, so we're supportive of the those changes.

COMMITTEE MEMBER YEE: And then I guess how would you define a material change, I guess, within this context?

MR. JUNKIN: As the person who signs all of the

benchmark change forms from Wilshire, I decided I should probably jump up here.

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I don't think that we have a rigid set of strictures that we use to define materiality when it comes to a benchmark change. It would be a significant change in either the risk or the expected return profile of the benchmark, or if there would be a significant cost to implement it. So, for example, if you decided to change equity index fund providers, and it would cause, I don't know, 30 percent turnover in the portfolio - I'm trying to make something up that almost can't happen - but result in no significant change, why create all these transaction costs that you're never going to get paid back for.

So the way that process works, and to address one of the questions that you asked earlier, is this going to change the number of benchmark changes that you see? It's not, because you only see the material ones.

COMMITTEE MEMBER YEE: Okay.

MR. JUNKIN: Everything else comes to us, and we can either kick it back and say, no, we believe this is material and needs to come to the Board -- or the Investment Committee rather, or, yeah, okay, you're just changing the ticker on this benchmark for this reason, that's administrative. We sign off on it. It goes to State. It's implemented.

COMMITTEE MEMBER YEE: Okay.

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MR. JUNKIN: Does that hep?

COMMITTEE MEMBER YEE: So you're kind of memorializing what you're practicing.

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: Yeah. I was about to say that -- absolutely,
that what you've had in the past is we've been relatively
silent on benchmarks, and we've been engaging in these
practices, but we haven't had them codified in policy.

COMMITTEE MEMBER YEE Yeah.

INTERIM CHIEF OPERATING INVESTMENT OFFICER
BIENVENUE: The idea here is to actually memorialize them in policy, so that we're aware of what will come to you.
And again though, there's some judgment applied between, you know, staff and specifically --

COMMITTEE MEMBER YEE: Sure.

INTERIM CHIEF OPERATING INVESTMENT OFFICER

BIENVENUE: -- your independent consultants on whether

this is material and needs to come to the Board or whether

this is something that more falls within -- within the

purview of -- it doesn't change the expected risk and

return parameters. And so we think we can just do this as

a ministerial change.

COMMITTEE MEMBER YEE: Okay. That's great. And then just as an overall matter, very appreciative of the

inclusion of the carbon pricing language, which is getting a lot of national and global attention. So thank you for the work on that. And then the other changes that expand the financial reporting provisions I think are really strong as well. So thank you for the work on that.

CHAIRPERSON FECKNER: Thank you.

Ms. Brown.

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COMMITTEE MEMBER BROWN: Thank you.

I have just -- I think it's a simple question on page 23. There's a small change to the TAP investment program and maybe not. Maybe it's just a numbering changed that says. Now, you refer to tables 6 as opposed to 7. And I just want to make sure that it's just a renumbering is all that's happened to the TAP, that we're not changing the way we invest in -- or the money in the TAP, or if we are, we're not making it more conservative. And I had to look -- I had to look at the second attachment that had -- that showed the changes.

INTERIM CHIEF OPERATING INVESTMENT OFFICER

BIENVENUE: I'm sorry, Ms. Brown. Can you -
COMMITTEE MEMBER BROWN: I think it's 9c,

attachment 1, page, it's either 23 or 25. I can't read my
own writing. So hold on.

Let's see. I just want to make sure we're not doing anything to the TAP. If you want to tell me that,

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I'm happy with that.
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MR. JUNKIN: There's no asset allocation change to the Terminated Agency Pool. And it couldn't be --

COMMITTEE MEMBER BROWN: Right. It just --

MR. JUNKIN: It couldn't be made more conservative, since it's fully immunized.

COMMITTEE MEMBER BROWN: Right. I'd hope -- I would hope you would make it less conservative. It's number -- it's item D. It says restrictions prohibited -- prohibitions and authorized securities.

MR. JUNKIN: Yeah. I'm on the -- I'm on that page.

COMMITTEE MEMBER BROWN: So it says now it's appendix 6. And then the change it used to be appendix 7. So I just want to make sure nothing has changed in that appendix. I don't think so, but it's a very big report.

INVESTMENT DIRECTOR CROCKER: Kit Crocker,

Investment Office. I believe it's just a change in the numbering of the appendices, because we eliminated one appendix --

COMMITTEE MEMBER BROWN: That's all I wanted to hear. Thank you.

INVESTMENT DIRECTOR CROCKER: -- when we connected with leverage.

MR. JUNKIN: Yeah.

COMMITTEE MEMBER BROWN: It was hard to figure out on my own.

Thank you.

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CHAIRPERSON FECKNER: All right. Anything else, Ms. Brown?

COMMITTEE MEMBER BROWN: That's it. Thank you.

CHAIRPERSON FECKNER: All right. Seeing no other requests, anything else on this item?

INTERIM CHIEF OPERATING INVESTMENT OFFICER BIENVENUE: No, Mr. Chair.

CHAIRPERSON FECKNER: Very good. Thank you.

That brings us to 10a, consultant review of trust level management.

Mr. Junkin, Ms. Dean.

Oh, pardon me. I have two requests from the audience, Ms. Sara Theiss and Neal Johnson.

If you'll both please come forward, identify yourself for the record, and you'll have up to three minutes for your comments.

MS. THEISS: Hello. My name is Sara Theiss. I am a board member of Fossil Free California and a Calpers retiree. And as you know, I like to take advantage of my 3 minutes every month to raise a few things I've seen in the press about what's going on in the fossil fuel industry. This is relevant to our agency's mission

regarding the dangers that fossil fuels present to the future of the planet. And it's relevant to me personally in terms of having an interest in the pension fund being funded as well as possible for my retirement.

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So a just couple of things. You are all probably aware, this was alluded to in the discussion about problems in the energy sector. This is a particularly bleak financial outlook for the U.S. fracking industry. The losses continue to pile up. Shale companies are dropping in value. The debts continue.

And basically, there's also a problem that they're running out of good rock. So the future of that industry is even worse than you would think. Given this, it's not surprising that exploration and production bankruptcies are on the rise, as oil and natural gas prices are not doing well.

One particular leading light in the industry said some stakeholders have given up hope that resurgent commodity prices will bail everybody out. Given this, I found an article headlined, As Risky Finances Alienate Investors, Fracking Companies Look to Retirement Funds For Cash. So it is my hope that -- and I know everybody -- the staff, as has been talked about in this meeting, thoroughly do their homework that we won't be investing in that.

One, Pioneer Natural Resources CEO Scott

Sheffield recently told - I think this was the Wall Street

Journal - "We've lost the growth investors. Now, we've

got to attract a whole other set of investors". So those

are my -- oh, they're -- and they're planning on getting

40 percent of their capital for 2019 from private equity

funds.

So I'm just drawing your attention to these issues, which I think are just little benchmarks, so to speak, or signs in the -- what's the actual future of the oil and gas industry, which, in my opinion, is not good.

So thank you so much.

CHAIRPERSON FECKNER: Thank you.

Ms. Johnson.

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MR. JOHNSON: Neal Johnson representing SEIU today.

Chairman Feckner, members of the Committee, I thank you for your work on this important item. SEIU firmly believes that the systemic risks in the economy really need to be looked at with respect to sustainable investment. We support most of the recommendations made by staff and the redrafting of this item. They really reflect your fiduciary responsibilities.

Specifically, we like the calling out of corporate boards to take steps to ensure healthy, and

safe, and transparent corporate cultures, implement real compensation strategies that value the work of the workers, not just the top echelon managers, the data disclosing lobbying efforts, increased disclosure on demographics and diversity within the organization, and really, truly financial -- integrated financial reporting, and what are the potential human capital, and risks, and particularly what are the climate risks.

We are supportive of the work or the comments made by staff with respect to incorporation of environmental risk factors and labor practices.

So on behalf of the 2 million members of SEIU and our leadership, we thank you for continuing your role as a real fiduciary and leader among pension funds.

Thank you.

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CHAIRPERSON FECKNER: Thank you for your comments.

That brings to us Agenda Item 10a, Mr. Junkin, Ms. Dean.

CHIEF INVESTMENT OFFICER MENG: Mr. Chair, so in Agenda Item 10A and 10b, you'll hear from your primary investment consultant Wilshire to cover the annual program review of two trust level investment programs, which is the Trust Level Portfolio Management Program, as well as the Opportunistic Strategies Program.

The annual program review of the other four major asset classes, global equity, global fixed income, private equity, and real assets are to be covered in the following month.

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With that, I turn it over to Wilshire.

MR. KAZEMI: Ali Kazemi, Wilshire Associates. So as Ben alluded, these will be the first of several opinion letters that you will be receiving from your Board consultants on the various teams within PERF.

Today, first, we're covering the Trust Level
Portfolio Management team. The purpose of the opinion
letter is to -- really to provide a summary of the due
diligence that we perform on the various CalPERS teams.
And it's similar to what we would perform on any
investment management organization -- third-party
organization.

The goal of that due diligence is really to help evaluate, whether TLPM is organized to be a value-add contributor towards CalPERS' long-term objectives. And so I think it's worth reiterating some of those objectives.

One is generating a return that exceeds the actuarial rate of return. Secondly, employing meaningful diversification without -- throughout the portfolio, maintaining compliance with the asset allocation policy ranges, as well as ensuring adequate liquidity. And then lastly,

generating positive excess returns through asset -- active allocation decision.

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So, in our review with staff this year on TLPM, it was clear that the recent emphasis on total fund performance has had a material impact on TLPM, as that group has had its mandate expanded from 3 core functions to 5 core functions.

The previous three functions were in relation to strategic asset liability management, dynamic asset allocation, as well as portfolio strategy we research. The new additional functions relate to the Investment Manager Engagement program, which has now been centralized within TLPM. And so that's the team that manages external manager selection, process, including the Emerging and Transition Manager Programs.

The 5th addition to the core functions of TLPM include the integration of the total fund business and analytical services team. So that team delivers business, analytical, and administrative services to the Investment Office and throughout the enterprise.

Wilshire feels that this expansion is consistent and makes sense with the emphasis on total fund performance and it makes sense to warehouse that within TLPM. However, we do want to note that any time you have change with an organization, that can create some

short-term uncertainty. And that was one of the things we did discuss with staff. As some of the projects within TLPM were reprioritized as part of some of the new functions of TLPM, we think that's natural. We just think as the vision of the CIO is implemented maintaining strong communication as part of that is appropriate -- appropriately manage any issue with uncertainty.

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In terms of our scoring for TLPM, it's actually detailed in the memo. As I mentioned at the onset, we compare CalPERS to any investment management organization out there via this qualitative framework. It's consistent with how we evaluate all managers. And rather than step through every component of the scoring, I wanted to just highlight some of the strengths, and then some of the areas for potential improvement.

First and foremost, I want to discuss, you know, the firm score relative to last year. There have been some changes overall within the firm as everyone is aware. So part of that is Ben's hire and his inclusion now in driving the overall vision of the team. We view that as a positive. And for that, we increase the score overall from a firm standpoint.

But it also did reflect the overall score of the departure of the COIO over the last year as well. So there was some positives an some negatives overall with

regards to the firm. But overall the score did increase.

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Team score didn't change with regards to just the TLPM team. We dressed earlier today the discussion about staff size within the TLPM. That has increased over the last year. A lot of that increase has to do with the expanded functions that I mentioned earlier on.

And so we feel that team is certainly adequately staffed to support all the initiatives that TLPM is currently working on.

In terms of information gathering, Eric talked about it during the discussion this morning about the examination of active risk within the overall portfolio, and that being centralized within TLPM as part of the portfolio research function. We were very impressed with that project and how it's being implemented.

You know, looking at active risk holistically at the total fund level, makes a lot of sense from multiple reasons. And so for that, we increased the depth of information score within the research category.

From an implementation standpoint, over the last year, the new asset allocation was implemented. We felt that that was done in a very organized and smooth process. For reason, we also increased the score from an implementation and trading standpoint. And that was reflected in the overall scoring framework.

The last strength I wanted to highlight was the overall emphasis on attribution. You know, Ben mentioned that at his first presentation in January at the offsite, that attribution is going to be a big component of measuring performance throughout the fund.

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You really can't manage, if you don't measure properly. And so that emphasis on measuring -- using attribution is something we are fans of, and we definitely support. So for that reason, we increased both scores with regards to attribution and it's something we'll continue to monitor going forward.

In terms of areas for improvement, the only area that there was a slight degradation in the score was with regards to forecasting success. That category -- there -- you know, when Andrew looked at the attribution in the review, one of the areas we saw is a slight decrease in performance, about 9 basis points, coming from the external strategies that are in the TLPM program.

And so that highlighted some of the challenges in regards to tactical asset allocation. So you have certain partnerships with managers that employ tactical asset allocation as part of their process and those underperformed relative to benchmark for the year. And so that resulted in a 9 basis point loss.

We view TLPM as certainly still in the ramp-up

phase. It's really been only two years that we've been reviewing this program. So with the long-term view, we don't look at that as a material impact in terms of the nine basis point. But it's something that we wanted to factor into our scoring. So that was one area for improvement that we'll continue to watch.

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I would also note that in terms of areas for improvement. The firm score, while still kind of at an average ranking, there can still be some room for improvement there, as we continue to see stability at the senior level. And we hope that that's the case going forward.

I would note that compared to the investment management organizations out there, it's probably not going to be realistic for the firm score to be at an A level, at any given point, because CalPERS is always going to be somewhat constrained in terms of what they can do relative to large investment management organizations.

For example, being able to give employees direct equity ownership, that's not something that's going to be possible. So that we really try to compare you all as a large investment management organization.

So just in conclusion, 2 years into the process, Wilshire views the build out of TLPM in a very positive light. The functions of the team continue to expand

consistent with the overall vision of the new CIO. The team is well staffed to handle the expansion of duties.

And as long as there are strong and clear communication going forward, with regards to the role of TLPM, you know, we think it's positioned to add value over the long term.

So with that, I will stop and see if there are any questions.

CHAIRPERSON FECKNER: Thank you.

Mr. Jones.

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COMMITTEE MEMBER JONES: Yeah. Thank you, Mr. Chair.

Yeah. Thank you for your report. And while you indicated that the -- Wilshire views this expansion as a logical next step, but you go on to say that this has created some uncertainty within the existing team about the role of the TLPM. Could you expand on that?

MR. KAZEMI: So in our discussions with staff, it was noted that some of the projects that they were previously working on had been put on hold, as some of the vision and some of the focus for this overall total fund performance focus was implemented. So that affected some of the existing projects that the TLPM team was working on. So that was the uncertainty that I was alluding to there was a discussion about when those projects would be restarted.

So we don't really view it as a material level of uncertainty. But as I said, with any level of change, there will be some uncertainty as people try to understand what their roles are within the team going forward. And so it's not material in nature, but we wanted to address and highlight it as one of the things that we found in our discussions with staff.

COMMITTEE MEMBER JONES: So as you go forward, is that something that you will continue to be looking at to assess whether it's deteriorated?

MR. KAZEMI: Yes, absolutely, 100 percent.

COMMITTEE MEMBER JONES: Okay.

CHAIRPERSON FECKNER: All right. Seeing no other requests.

Anything else?

It's on.

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MS. DEAN: Good afternoon. Rose Dean again from Wilshire Associates. I will be going over our program review for the Opportunistic Strategies.

Ali just finished describing the changes in score for the TLPM from last year. So unlike other programs, this -- for the Opportunistic Strategy Program, this was the first year that we have scored -- or given scores for this program because this program was launched in 2017. And this past year was the first full year that it was in

play. So we didn't have a score last year. Our review last year was an abbreviated version with no official scoring.

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This year, we have provided a score of 4th decile for Opportunistic Strategies Program. It's a relatively high rating. Given the fact that it's still in the build-out phase and going forward, what we will be focusing on in future reviews will be how the full build-out of the program will be implemented.

But just to give a little more detail about the program, given there are some new Board members here, there are three main substrategies within the Opportunistic Strategies Program.

So the first is the Execution Services and Strategy. So this is the centralized trading hub for the entire CalPERS Investment Office. The function or the goal of the ESS team is to reduce operational risk by having the execution be siloed in asset classes, as well as to increase efficiencies -- any efficiencies that could be had by cooling all those -- or being -- centralizing the trading executions across different asset classes.

And they also manage the sec lending, and also support the TLPM team, and the Leverage and Liquidity Management Initiative.

The second portion is the enhanced beta team,

which Kevin, the MID of the program, mentioned. And this is that low liquidity but short-dated -- relatively short-dated investment opportunities that provide enhanced returns in -- within this program.

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The third part, which is not -- which the portion that I mentioned has not been fully built which is the truly opportunistic part of the program. And these are opportunities that present themselves across asset classes, where there may be some structural anomalies in the market or there's a meaningful dislocation in the market. And then the opportunistic strategies we be funded across asset classes where you can really enhance the total fund risk-adjusted return profile. So that is still being built out. So our review really focuses on the first two sections -- portion of the Opportunistic Strategies Program.

A few highlights in our scoring here. The firm score is the same for this program as across all the programs that we -- and Ali had alluded to that score. The team for the OS Program, the score is very high. It earns an A rating. The team makeup has been relatively stable throughout the time, given the fact that it's still ramping up and things are still in flux. We give credit to the fact that the team has remained stable. And also, they bring deep experiences and relatively -- you know, in

each sector of the program, under the guidance of the MID. So we rate that score very high.

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On the investment approach, which includes information gathering, forecasting, et cetera, all of those scores are relatively high. But in particular, we gave a high score to implementation. And that has to do with what Kevin also mentioned in terms of the effectiveness of the ESS team and their participation of transitioning the asset allocation to the new targets, and particularly on the high-yield side as Kevin mentioned.

So at times through this process, the team was sort of stretched in its resources. But it also provided an opportunity for them to really work across asset classes and really solidify centralizing that trading hub practices and capabilities. So we rate that relatively high.

In terms of the, you know, overall effectiveness of the program, once -- I think, you know, there are a lot of initiatives that we talked about in terms of total fund focus. So as this total fund focus is going to -- part of that initiative is setting up a centralized research and strategy group. And we believe that the success of the Opportunistic Program is really related to the success of that group, where, you know, people from different asset classes come together, generate ideas, and think about how

to efficiently fund those ideas from the total fund perspective and how the governance of that group can be effectively implemented will affect, you know, the success of the Opportunistic Program overall. So that's what we'll be focusing on in our future reviews.

And with that, I'll take any questions you may have.

CHAIRPERSON FECKNER: Thank you.

Ms. Olivares.

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COMMITTEE MEMBER OLIVARES: Hi. Thank you very much. I wanted to understand the correspondence between the deciles and the letter scores?

MS. DEAN: So we -- this is a Wilshire manager research rating scale. So what we consider to be A would be above third decile for all of the investment management companies and products that we rate. And then the next B rating would be above 6 decile I believe -- 4th decile. Fourth and above would be a B rating.

MR. TOTH: Just one quick -- Tom Toth with Wilshire Associates just to elaborate on that. The rationale for having the decile ratings and the letter ratings is really just to be -- the ability to be a bit more granular with the decile ratings. But the A, B, C and below ratings are just a -- I think a little bit more intuitive. So -- and you think about the grades you get

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in school, A's and B's pretty good, C, roughly average, and then below obviously needs improvement.

So that's the rationale between having two types of scores shown here.

COMMITTEE MEMBER OLIVARES: Thank you. Can we go through the rest of the scores. I was given 1 through 6? What about 7 through 10?

MS. DEAN: I'm sorry?

COMMITTEE MEMBER OLIVARES: Assuming it's the full decile spectrum. Is it on a 1 to 10 basis?

MS. DEAN: Yes.

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COMMITTEE MEMBER OLIVARES: So would 7 and 8 then be a D, and then 9 and 10 would be an F, or do you not grade below a C.

MS. DEAN: We do rate below a C.

MR. TOTH: Yes. We absolutely do, but none of the components here, as scored for either of the programs, merited that rating.

COMMITTEE MEMBER OLIVARES: Thank you.

MR. TOTH: Um-hmm.

CHAIRPERSON FECKNER: Thank you.

Ms. Yee.

COMMITTEE MEMBER YEE: Thank you.

Thank you for the continuing work to develop the framework on how we're going to pursue further

opportunities. My question -- two questions. One, do you think you have enough resources to do that or do we need to actually think about giving you more resources to build out the framework going forward?

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CHIEF INVESTMENT OFFICER MENG: I assume that'sa question for me, in the resources. I wanted to comment on Ali's question that's a question from Mr. Jones about the confusion in TLPM. So as, you know, Rose mentioned that we're creating a new group, the Research and Strategy Group. And that group is really to further, as you'll see in the TLPM Program review, the only area market rate as C is our ability of forecasting. So in order to beef up that capability, we're creating another new group, the Research and Strategy Group, which is really to focus on our forecasting ability and also to facilitate centralized total fund approach in terms of allocating risk budgeting. So that's -- I almost wanted to say the source of confusion, quote, unquote, was really from us -- from me particularly, because we're creating a new group. when we're making changes, naturally there is -- there will be some period of unsettling issues, where we're working through these issue.

Now, directly back to your question, do we need more resources, yes and no. So the yes part are we need the right people for the right function. So we're --

currently, we are looking internally. Kevin Winter, again MID of Opportunity Strategies -- Strategy Group has stepped up to be the interim head of the new group.

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And so we're looking -- first of all, we're looking internal talents from the macroeconomic research, and down to the asset class research, and then to the governance, how do we make investment decisions, how do we monitor investment decision after being made, and how do we hold people accountable for the investment decisions. So these all fall under the new group and the functions that somehow we overlook in the past.

So we'll need some resources. We're looking from internal first. And at some point, we have to go out to look -- find the best talent that we can find to come to Sacramento to work for Calpers.

COMMITTEE MEMBER YEE: Yeah. Okay. Good. And then what's the likelihood for any additional opportunities over the next 18 months or so, given the increased market volatility?

CHIEF INVESTMENT OFFICER MENG: Very good question. We -- normally, when there's market volatility, we see market dislocation. There's some opportunities. So we're trying to foresee potential opportunities and get ourself ready both in terms of governance investment decision-making framework, and also the liquidity, so

making sure when this happens we -- first, we can identify these opportunities and then we can react to these opportunities quickly.

So these are all part of our drawdown in liquidity management plan. So we do foresee some opportunity. For example, when the crisis comes, usually the distressed shows up in the credit markets and we're trying to prepare ourself to take advantage of the distressed credit opportunities when the opportunity comes.

COMMITTEE MEMBER YEE: Good.

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MS. DEAN: And I would just make one additional comment. From our discussions with the staff with the creation of this new centralized research and strategy group, what we think is important is how people from -- or resources from different asset classes will work together and make it a collaborative effort to really identify where these opportunities may come in the market dislocation.

COMMITTEE MEMBER YEE: Yeah. Good. Thank you.

CHAIRPERSON FECKNER: All right. Seeing no other requests. Anything else on this item?

CHIEF INVESTMENT OFFICER MENG: No.

CHAIRPERSON FECKNER: All right.

Moves on to Item 11, information item on

independent oversight. 11a, the review of the survey results of the independent consultants.

Ms. LaMantia.

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(Thereupon an overhead presentation was presented as follows.)

ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT

DIVISION CHIEF LaMANTIA: Okay. And thank you, Mr. -thank you and good afternoon, Mr. Chair and Committee
members. Kristin LaMantia, Calpers team member.

I'm here today to go over the annual evaluation survey results of your Board investment consultants. As stated by Mr. Feckner, shown in the agenda item, the Enterprise Strategy and Performance -- sorry, Division, or ESPD, acts as a neutral third-party administrator of the Board investment consultant surveys.

The questions asked this year are the same as in last -- as in previous years. The number of Committee members responding to each consultant group's survey were varied. For Wilshire Associates, general pension investment, we had nine responses. Both of the Pension Consulting Alliance surveys, real estate, and general investment, and Responsible Contractor Program, 8 responses. Meketa Investment Group, infrastructure, 8 responses. And Meketa Investment Group, private equity survey, there were 10 responses.

For comparison, we had displayed the survey results for both 2018 and 2019. I would like to take a moment to highlight a survey calculation example. May I ask you to turn to slide number 6 of your attachment, which is Wilshire Associates question number one.

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As a reminder this year, there were nine

Committee members that responded to this survey. In 2018

10 Committee members responded to this survey. I'd like
to provide the Committee member equivalent to the
percentages you see listed here.

So for question number one, accurately analyzes issues and provides timely and objective information, the blue bar chart represents 2018, 50 percent, or five Committee members rated very satisfied; 30 percent, or three Committee members, rated satisfied; and 20 percent, or two Committee members, rated neutral.

For 2019, which is the gray bar chart, we have 56 percent, or five Committee members, rated very satisfied; 33 percent, or three Committee members, rated satisfied; 11 percent, or One committee member, rated neutral.

When considering this specific question, this year, 89 percent of Board members who took the survey rated very satisfied or satisfied. Last year, the percentage was 80.

The comprehensive results for all consultant

group surveys are included in your materials in the form of charts representing the various answers selected by participating Committee members.

With that, I will pause and ask if there are any questions?

CHAIRPERSON FECKNER: There are none.

ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT

DIVISION CHIEF LaMANTIA: Thank you.

CHAIRPERSON FECKNER: Anybody?

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Okay. All right. Thank you very much.

Hold on. Oh, we have one now. Late bloomer.

13 Mr. Jones.

(Laughter.)

COMMITTEE MEMBER JONES: Thank you. I let her come back.

This is a -- just get your thoughts on interpreting data, as a result of the changes in the makeup of the Board. I don't know, maybe five of these responses were new members to the Board with a very limited period of time and didn't have the benefit of seeing the changes from the prior year, et cetera.

What are your thoughts about interpreting data when you have that kind of turnover among your base?

ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT

DIVISION CHIEF LaMANTIA: So comparing different response rates year over year, is that kind of what you're asking?

COMMITTEE MEMBER JONES: Yeah.

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ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT

DIVISION CHIEF Lamantia: So industry standard for benchmarking dictates that the majority of respondents are participating year for year. And so that provides the confidence that the data and the opinions are in the majority.

I do understand that there is a different makeup of the Board, so that probably dictates into the response rate of where we are in it. Hopefully, next year, we'll have a greater response rate for the questions.

COMMITTEE MEMBER JONES: Okay. Thank you.

CHAIRPERSON FECKNER: Mr. Miller.

COMMITTEE MEMBER MILLER: This also relates to the response rate. I've noticed on a few of the surveys, not just this one, we pretty consistently will have two, three, four or more members who do not participate on this Board. And I want to challenge my fellow Board members, this stuff is important. If three or four people didn't participate because they were unhappy with our consultants, that would be a huge information gap that we don't have when you don't take a few minutes and do these things. So please let's all challenge ourselves to

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provide the feedback. That's part of our job. We need to do it.

Thank you.

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4 CHAIRPERSON FECKNER: Good point. Thank you, Mr. 5 Miller.

That's -- no, we have another one now. Ms.

Brown.

(Laughter.)

COMMITTEE MEMBER BROWN: So, of course, I did my survey, but we did have quite a few new Board members and didn't feel confident expressing their opinions. And so I don't know if there's a slot for that or maybe they would just put neutral. But I do know that we had many new Board members that didn't have enough experience, and so that's why they didn't participate. But I do agree with Mr. Miller there are other times when everyone has been here and could have given their answers, like to Ms. Hopper's surveys.

So thank you.

CHAIRPERSON FECKNER: Thank you.

No others requests. Thank you.

That brings us to Item 12, Summary of Committee Direction. Mr. Meng.

CHIEF INVESTMENT OFFICER MENG: Yes, Mr. Chair.

So I noted on two, one is from Ms. Middleton on the

housing market, region by region. And the second is from Ms. Olivares on the benchmark of the cross-asset volatility premium. So those are the two items -- follow-up items that I noted.

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CHAIRPERSON FECKNER: All right. Thank you.

Item 13 is public comment. The first one we have is Mr. Neal Johnson.

MR. JOHNSON: Neal Johnson, SEIU.

The other day I was reading Agenda Item 10a, which dealt with the Total Fund Investment Policy and there was a discussion of staffing and the support staff. And there are what looks like 11 seasonal clerks. And Mr. Feckner and Mr. Jones I think are the only two that were here when we went through the my|CalPERS buildup and the problem with Accenture, but you wound up having to hire a bunch of temporary employees to handle workloads and that process.

And then seeing these seasonal clerks made me wonder. So I looked back at records and find out that this Board has roughly 100 seasonal clerks. That is more than our -- only the Franchise Tax Board, which has a sort of classic tax season, hires more of these employees. They are -- these are temporary employees. We are supposedly a long-term fund. We had the gentleman from STRS that made the comment that PERS is their investment

vehicle.

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Yet, you're hiring temporary employees who do not get benefits unless they've acquired them from some other appointment. And it's sort of amazing that you are the -- have the second largest number of these temporary employees in the system.

Thank you.

CHAIRPERSON FECKNER: Thank you.

Okay. Now, we do have a number of requests, I assume all on the same topic. I want to remind you all that we're butting up against the court reporter's mandated of time, so I'm going to implore him to maybe go an extra 10 minutes longer than his normal time, and I think we can push through this.

But please, if you can all be as concise as possible and not repeat one another, that will certainly help in the process.

The first one I have is Emily Goldman.

MS. GOLDMAN: Are we not doing a few people at the same time?

CHAIRPERSON FECKNER: Pardon?

MS. GOLDMAN: Are we not doing a few people at the same time come up?

24 CHAIRPERSON FECKNER: I'm going to do you first.

And then I understand there were a number of them that

just wanted to speak their name for the record. I'm going to have them come forward and put their names in the record, and then we'll go through your speakers.

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MS. GOLDMAN: Okay. So my name is Emily Claire Goldman. I am the founder and director of Educators for Migrant Justice, as many of you know.

I want to start out by saying welcome to the new Board member and thank you all for your continued engagement and attention to the important issue of CalPERS' investments in for-profit prisons and other companies involved with the immigrant abuse crisis that is currently ongoing.

Just to give a short recap of what's been going on since the last Board meeting. CoreCivic and GEO Group's stock prices have plummeted more tan 30 percent, and that's a two year low, while the S&P 500 has risen over 20 percent. So that means that they have both underperformed the market by nearly 50 percent.

Since last month's Board meeting, more banks have pulled out and committed to no longer providing anymore loans to these companies. That now includes JP Morgan, Wells Fargo, Bank of America, SunTrust, BNP, Fifth Third Bank, with PNC and Barclay's both stating they don't plan to provide any future loans. These eight banks account for more than 87 percent of CoreCivic and GEO Group's term

loans and lines of credit. And this increasingly restricted access to capital recently lead Fitch's rating agency to downgrade CoreCivic from BB+ to a BB.

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CoreCivic and GEO also recently lost sell-side coverage, while Vanguard, GEO's largest shareholder announced that they will be pulling GEO from their ESG funds.

In the latest SEC filing, CoreCivic admits that the decisions by some of the company's largest banks have affected their capital markets for their securities, and that this could have a material impact on their business financial condition and results of operation.

GEO, in their latest filing, acknowledges similar risks, and for the very first time notes the potential adverse impact to its share price. GEO is now calculating that their market value of its stock options, assuming a stock volatility of more than 40 percent, which is rather large.

So on top of that, while in past SEC filings, GEO has discussed the three class action lawsuits they're currently facing, their most recent filing admits that they may not actually have insurance for any of the employment-related claims, which are the basis of those three class action lawsuits. And I cannot underscore the risk that that poses. One of those class action lawsuits

represents 60,000 people.

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Moreover, in the latest SEC filing for CoreCivic, they are actually boasting about the fact that privatization of U.S. prisons quote, "allows government to avoid long-term pension obligations for their employees". That should raise concerns considering CalPERS is concerned with their funding status and having funding drained that would otherwise be going there.

Last but not least, I would like to remind the Board that we are also looking at other companies, including General Dynamics. I know there's been a significant change in your holdings in General Dynamics which is providing contracting services for the Homestead child detention facility. And it's important to follow-up on that.

CHAIRPERSON FECKNER: Thank you very much.

MS. GOLDMAN: Thank you.

CHAIRPERSON FECKNER: Now, those of you that are only going to put your name into the record, could you please come forward to the microphone and give us your name and your affiliation.

MS. BERNARDY: Good afternoon, Board members. My name is Peggy Bernardy. I'm a member of CalPERS. And I'm going to say one thing in addition to just my name and my support of what Claire had to say.

I retired recently from DWR after working there for 26 years and I am a CalPERS member. I urge CalPERS to sell its holdings for the for-profit prison companies, CoreCivic and GEO Group, and to use their leverage to pressure General Dynamics and United Rentals to provide access for redress to those adversely impacted by their operations and to end their material support for the detention of migrant children and families.

I would like to remind you, my feeling is that investing in these companies with knowledge of their role in the migrant abuse crisis makes CalPERS and its members complicit in these activities and I urge you to take action to stop these investments.

Thank you very much.

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CHAIRPERSON FECKNER: Thank you.

MS. SARABIA: Hello. My name is Heidy Sarabia.

I'm a faculty member in the Department of Sociology at Cal

State -- California State University, Sacramento. I have

been a CalPERS member since 2014, CFA member, and a member

of the Task Force for Center on Immigration, Race, and

Social Justice at Sac State. And I also encourage you all

to consider divesting from migrant detention centers.

It's a humanitarian crisis and we need to take action.

Thank you.

CHAIRPERSON FECKNER: Thank you.

MR. OCEGOEDEN: Hello. My name is Mark

Ocegoeden. I'm a faculty member at California State

University, Sacramento. I'm here to support my colleagues
to call on CalPERS to stop investing in CoreCivic and GEO

Group. GEO's detention center in Adelanto was
particularly notorious for their abuse of migrant
detainees before the City of Adelanto ended their contract
with this profit prison company. I urge CalPERS to divest
in these companies, because they are destroying families,
killing our most vulnerable, causing terrible trauma that
will last generations. And these repercussions will be
felt for many years to come.

Recently, members of Congress documented the inhuman and horrifying conditions of these detention centers, noting that detainees were forced to drink water out of toilets, noted psychological abuses, and in most extreme cases, migrant prisoners have died under these conditions.

CalPERS investment in these companies reinforces and legitimizes the de-humanizing treatment of immigrants. Each day that you continue to invest and empower these companies with the funds of public employees, you are actively complicit in these atrocities. For these reasons, I urge you to divest now.

Thank you.

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CHAIRPERSON FECKNER: Thank you.

MS. JONES: Good afternoon. My name is Marlyn Jones. I'm a professor in the Division of Criminal Justice of California State, Sacramento. And I have been a member of CalPERS since 2001. I am here in support of my colleagues to call on CalPERS to stop investing in CoreCivic and GEO Group.

Thanks.

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CHAIRPERSON FECKNER: Thank you.

MS. COLE-WEISS: Good afternoon, members. My name is Alex Cole and I'm a staff member at CSU Sacramento. I've been a CalPERS since 2016. I'm also here representing membership of the Queer, Trans Faculty, and Staff Association at Sacramento State. And I'm here to urge you to please stop investing in CoreCivic and GEO Group.

Thank you.

CHAIRPERSON FECKNER: Thank you.

MS. LAWLESS: Hi. Good afternoon. My name is Jessica Lawless. I work for the California Faculty Association. My spouse is a cook UC Berkeley and has been a member of Calpers since 2014. I am here in support of my colleagues, neighbors, and friends to call on Calpers to stop investing in CoreCivic and GEO corps.

CHAIRPERSON FECKNER: Thank you.

MS. RODRIGUES: Good afternoon. My name is

Janeth Rodrigues. I'm here with the California Faculty

Association in support of my colleagues asking the Board
to stop investing in GEO Group and CoreCivic.

CHAIRPERSON FECKNER: Thank you.

MS. FLICKER: Hi. My name is Sharon Flicker.

I'm a faculty member at CSU Sacramento. And I've been a member of CalPERS for one year. I'm also here to support my colleagues to call on CalPERS to stop investing in CoreCivic and the GEO Group. As a clinical psychologist, I really want to emphasize the traumatic and long-lasting effects of separating children from their caregivers.

Thank you.

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CHAIRPERSON FECKNER: Thank you.

MS. JOFFE-BLOCK: Good afternoon. My name is
Miriam Joffe-Block. I'm a manager at the California
Alternative Energy and Advanced Transportation Financing
Authority in the State Treasurer's office. A member here
in my individual membership capacity supporting my -- the
folks who spoke previously and supporting divestment from
CoreCivic a GEO Corps.

Thank you.

CHAIRPERSON FECKNER: Thank you.

Now, I'll go through what I think I have left on my list. And if call you, please come forward. Joanne

Fanucchi, Ruth Ibarra, Greg Brucker.

Any of them?

I'll remind you, you have up to three minutes to speak and please give us your name and your affiliation.

MS. FANUCCHI: Good afternoon --

CHAIRPERSON FECKNER: You can sit at the other two microphones. They're lit up.

MS. FANUCCHI: Pardon?

CHAIRPERSON FECKNER: I'm telling the other two people behind you, they can sit in the other two microphones there.

MS. FANUCCHI: Oh. Okay.

CHAIRPERSON FECKNER: Thank you.

MS. FANUCCHI: It's lit up when it's red?

CHAIRPERSON FECKNER: Correct. That means it's

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MS. FANUCCHI: Shouldn't it be green?

Okay. Anyway. Excuse me. I'm wearing

19 sunglasses because I forgot my other glasses. Okay. So

20 no offense.

My name is Joanne Fanucchi. I'm an independent ally of a lot of environmental groups in the Bay Area to stop all that. But I am here today to stand with Educators for Migrant Justice, and NorCal Resist, and all of the babies and all of the families at the different

borders.

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Okay. Now, I've been up here, I don't know, six times already and -- not just about this, but about fossil fuels. I'll see you in September. But I wrote -- after the last meeting, I emailed the Board and again reiterated my stand with these two organizations who are pushing so hard to make you see the light.

Here's the response I got. I may be preaching to the choir with some of you, but I feel it needs repeating. This is your response.

"Thank you for taking the time to write to us and for sharing your concerns. We do hold shares in both CoreCivic and GEO Group and others. We've expressed our concerns with the issues you raised in your email and continue to actively engage with both companies on several fronts.

"At CalPERS, we believe that engaging with companies is the most effective way to change policies and behavior that can impact financial performance. Divesting from these companies would require us to give up our voice at the table and sell our shares to another investor who may not share our values".

Your values are murdering people. We want you away from this table. This is the same response that you gave fossil fuels last year. This is the same exact

response that you'd given us before. You are not moving on this. You are not understanding. You're denying. We exist. These people on the borders exist right now. There is no more time.

I don't know what I have to do or what anybody has to do to get you guys out of the process you're in and try something knew.

Now -- okay. So that's enough of that.

Last time I was here, I asked you to please provide us with a chart, risk and reward. How much risk are you guys willing to take? How many people have to be injured, have to be abused, have to be -- have to die of neglect of medical care before your rewards outweigh that? How many? How many children?

I didn't get the chart. I left you my email.

This is what I got back. You're negligent in your duties.

We are telling you this is what has to happen. Your

stocks are already going down. It's a sinking ship. Wake

up.

Thank you.

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MS. IBARRA: Good afternoon. My name is Ruth Ibarra. And I have been a CalPERS member for 12 years. And I'm also a local activist helping asylum seekers who are being released from these concentration camps. I see the trauma that they've gone through on a daily basis.

I'm here today to demand that the use of my retirement funds be immediately divested from companies that are profiting from the immoral act of caging people. Individuals have died, children have died, trans folk have died, our most vulnerable members of our community, at these concentration camps. And thousands of children and women are currently reporting mass -- mass abuse, sexual base.

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Investing in companies such as GEO Group and CoreCivic is complicit with these heinous crimes against humanity. It's time for CalPERS to stop putting profits over people. It's time to divest from corporations that treat people as disposable objects. Stop putting blad -- blood on CalPERS -- sorry. Stop putting blood on CalPERS members' hands. Enough is enough. You must divest today. Thank you.

MR. BRUCKER: Good morning. My name is Greg
Brucker. I am here dependently. I first want to thank
you for the time. I am a CalSTRS member. I am a teacher
in our K-12 system in this State. And I strongly demand
you to follow in the suit of CalSTRS in divesting from
even putting one penny of the general public's money into
investing in child prisons, family separations.

I am also here with a -- representing Jewish

Action NorCal, a group of Jews from the larger area who

demand that these camps are closed, that this government stops treating our refugees and immigrants, also known as our ancestors, if this were another time, in a way that we find morally appalling. And that we see as very much along the lines of what happened before the Nazis started their death camps. We see it very clearly.

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Families were separated. People were put into Camps. And you know what, a lot of the people that died, it wasn't because they were gassed. It was because they did of disease, of poor conditions, of the fact that they were denied the ability to keep themselves clean and be given basic things like soap, as is happening right now.

And we despise the fact that there is money from any public sector supporting even one penny of investment into groups that do this, that have directly fled -- led and are making money off of the backs of these children dying, families being separated, people that just a few years ago would come to our country for -- to be -- as refugees, because of the horrible things they're dealing with in their country.

When did we stop caring about those people? When did we stop saying that those people don't matter? Would you have said that about the Jews in the 30s?

Because that's what you're saying about these people now no matter where they're coming from. That it

don't matter. They just instated in the federal government a public charge rule. This goes right along with it. That led to people being denied the ability to come into this country who are subsequently then killed in the holocaust.

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How many people have died because of the fact that money is being invested in companies which are creating these camps, which are making people either leave or go -- want to not come here or be turned away as we know lots are, that are then dying.

Is that what you want to fund? Is that how you want to take care of the people's money? Because that's how I see it working.

Thank you very much for your time.

CHAIRPERSON FECKNER: Thank you.

I have Margarita Berta-Avila, Mya Dosch, and Melanie Saeck.

I only called three. How did we get five.

MS. BERTA-AVILA: Just support.

CHAIRPERSON FECKNER: Go ahead.

MS. BERTA-AVILA: Good morning. I am Margarita Berta-Avila. And I'm a professor of education at Sacramento State University, as well as a proud member of the California Faculty Association. Our union collectively serves as the voice of the California State

University System's more than 28,000 professors, lecturers, librarians, counselors, and coaches.

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And I'm here on their behalf to advocate on the topic about which we are unequivocally united. Your continued investment in CoreCivic and GEO Group, two of the largest corporations in the private prison industry, as well as the operators of the largest migrant detention centers in the country.

This marks the third consecutive CalPERS Board meeting that CFA representatives have attended during the last three months. Previously, you heard impassioned comments from my colleagues. But those appeals have unfortunately yet to make a difference. That is why I have 200 of these postcards that I am hoping to submit to you today after I speak with hundreds more on the way from CFA members at our 23 campuses statewide.

We want you to hear us loudly and clearly on this matter. As you know, the political climate in our nation has developed into a boundless pit of hate fueled daily by morally bankrupt leaders whose only goal appears to be to take Americans further down this black hole, mirroring this dynamic in CalPERS continued investment in CoreCivic and GEO Group, whose business models are based on the caging of children and the tearing apart of families.

But I do not have to tell you about it, because

like me, you have read the heart-wrenching stories and seen the dreadful footage capturing the savage tactics that private prisons employ at our southern border. They are human right abusers on par with the most corrupt and villainous regimes around the world.

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If CalPERS was a private investment firm, I would still be here today to speak out on this issue. The frustrating Reality though is that your investment in these corporations is being done with the pension funds of CFA's 28,000 members, as well as those of roughly 1.4 million other public employees.

Your isolated decision to continue investing in CoreCivic and GEO Group has made us all complicit in this unethical venture. As a teacher, I take heart the enormous responsibility I have in the classroom. It is a privilege to play a part in the intellectual development of succeeding generations of leaders.

But tell me this, how can I look my students in the eye with even a shred of integrity when my pension, which is paid in part of their tuition dollars, is being used to sustain businesses that perpetuate such callous atrocities. I can't.

As 19 years CalPERS member, how can I look at you in the eye, not only for initially making this investment, but for also failing to stop it. Finally, as a

compassionate person, how can I look at myself in the mirror knowing that some percentage of every dollar I earn per hour, per day, per week, per month is enabling this corporate campaign eye of abuse? I can't.

Like so many other times, the country and the world are looking to California for leadership that resists and inspires on the host of issues.

CHAIRPERSON FECKNER: Your time is up. Thank you.

MS. BERTA-AVILA: Thank you.

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MS. DOSCH: Good afternoon. My name is Mya Dosch. Thank you very much for your continued engagement. I'm a CalPERS member in my role as an assistant professor of art at Sacramento State. And I'm here on behalf of 66 Sacramento State Faculty and staff and CalPERS members who make up the Queer and Trans Faculty and Staff organization on campus.

Last month, our board, with the support of our membership, voted to urge you all to not invest our retirements in CoreCivic and GEO Group.

We are collectively appalled by the human rights abuses committed by these corporations against all migrants. And we're particularly motivated by those against our LGBTQ siblings. There are at least five transgender women in our Sacramento community who are --

who were incarcerated in CoreCivic's Cibola prison. All of these women are here legally with strong asylum cases.

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The women survived horrific violence for being LGBTQ in their home countries, some with gunshot wounds or scars to prove it. They escaped to the United States to save their lives. Yet, the word Cibola is still spoken among them in hushed tones, as it is synonymous with systemic abuse, punishment, and disrespect for their basic rights as human beings.

These women witnessed so much violence and abuse in their home countries, but their time in Cibola stands out as among the darkest periods of their lives.

CoreCivic actually lost its Cibola contract with the Federal Bureau of Prisons in 2016 due to medical and safety failures. This is exactly when ICE swooped in with its Cibola contract. And these CoreCivic medical and safety failures killed transgender woman Roxana Hernandez last year. She died because of medical neglect. Treating her would have cut into CoreCivic's profits. They didn't treat her.

These vulnerable LGBTQ people come to the U.S. In hopes of escaping violence, and instead found worse violence at the hands of a U.S. corporation. So we as Queer and Trans CalPERS members in solidarity with LGBT members of our community demand that you use your power to

take our money out of these corporations.

Thank you.

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CHAIRPERSON FECKNER: Thank you.

MS. SAECK: My name is Melanie Saeck. I am a staff member at Sacramento State University. I'm also the logistics coordinator for Queer and Trans Faculty and Staff who, of course, voted for the divestment cause.

We're appalled at the conditions. The overcrowding of cells. Detainees sleeping on bare floors without real bedding, lights kept on at all times, almost no access to a shower, or toothbrushes, or toothpaste, which were confiscated from the detainees upon their arrival, grown women being told to drink from the toilets, inadequate amounts of food, children separated from parents, children having to represent themselves in court without support or guidance from lawyers or parents, babies who soil themselves and are not given clean cloths or diapers, trans women, in many cases, being detained in men's facilities.

In one case a trans woman detainee reported being literally chained up in a men's facility for hours. Or, of course, there's Cibola, in which case there was a letter signed by 29 refugees imprisoned there talking about the verbal and psychological abuse that the guards perpetrated against them on a daily basis. This letter

was signed by asylum seekers from Central America primarily. And they reported that there was no medi -- adequate medical attention for people with disabilities, HIV, people with skin infections that they acquired in their detainment, and lack of medication overall, which, of course, I remind you that asylum seeking is not a crime.

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Trans women across the board were not given razors for their basic dignity, lack of medical care across the board, lack of hormones for trans detainees, and other crucial medications for all of the detainees, asylum seekers, and refugees. Several detainees, including children, are transferred to hospitals only after they are so sick that they die almost immediately upon arrival.

And there have been recent reports that the camps are becoming work camps on top of this where detainees are being forced to work for almost no money. These conditions are concentration camp conditions. I come from a Jewish family and my Ph.D. research focuses mid-20th century history. So I have extensive knowledge of what constitutes a concentration camp. We currently have concentration camps.

These are not Sac State's values. I hope, I truly hope, that these are not your values. This is why

I'm strongly urging CalPERS to divest from the concentration camps.

Thank you.

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CHAIRPERSON FECKNER: Thank you.

All right, next, I have Maria Vargas and Alex Cole-Weiss.

MS. BERTA-AVILA: We're just going to stay with her for support as Maria speaks.

CHAIRPERSON FECKNER: Okay.

MS. VARGAS: Yes. Good afternoon. My name is Maria Vargas. I am here representing the Center on Race and Immigration and Social Justice. It is important to humanize migrant children and families who are often dehumanized in the news where their brown suffering bodies are sensationalized through the camera lens for the voyeuristic gaze of American society, who does not understand why they are here.

Darlyn Cristabel Cordova, Jakelin Caal, Felipe Gómez, Juan de León Gutiérrez, Carlos Hernandez, Wilmer Josué Ramírez, who was 2 and a half years, all of these children, five from Guatemala and one from El Salvador, have died in federal custody since September 2018, three of them from the flu.

The deaths of these children have resulted in outrage from human rights groups and law makers who

denounce the humane condition and medical neglect in detention centers. Earlier this month, doctors wrote a letter to Congress calling for an investigation into health care at the border.

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The doctors stated quote, "We suspect that the Department of Homeland Security may not be following best practices with respect to screening, treatment, isolation and preventions of influenza", end of quote. However, even with the advocacy of immigrant rights groups, Congresswoman Alexandria Ocasio-Cortez and reputable doctors that chat -- that challenge the normalization of children dying at our borders, many Americans blame the parents and criticize them for fleeing with their children and inserting them into dangerous situations.

However, according to recent studies, El Salvador, Honduras, and Guatemala know as a country of the Northern Triangle account for the highest homicide rates in Latin America, as well as the most murderous countries for feminicidios, or the killing of women due to their gender.

In 2011, in El Salvador alone, 524 cases, in Honduras 466 feminicides where women's bodies were found mutilated and tortured with signs of sexual assault that were found. Feminicide not only targets adult women, but a larger percent of victims are actually girls under the

age 15, which why many fathers and mothers fleeing from the Northern Triangle say that during these times they would never leave their children behind, especially their daughters.

What Americans have failed to see is that the Central American State or government has failed to protect their most vulnerable children, women, indigenous people. Five of the six children that I read, five of them are indigenous children, Maya children, who the Guatemalan State in 1984 committed genocide against with the help and intervention of the CIA and the U.S. government.

Again, these other salients are not -- salient -- salient factors are race, ethnicity, and poverty, right?

I, again with my colleagues, urge you to divest from these genocidal companies.

Thank you.

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CHAIRPERSON FECKNER: Thank you. Anyone else that I did not call down yet?

Very good. We'll --

20 MS. BERTA-AVILA: Can I ask to submit the 200 cards?

CHAIRPERSON FECKNER: Pardon?

MS. BERTA-AVILA: We have the 200 cards that -- from our faculty from CSU across the State to submit to you all as a Board.

CHAIRPERSON FECKNER: Okay. Just hand them over here to staff, please.

We thank you all for coming and for your comments today and understand that we take your concerns as serious as you do. We're looking at it through different lenses, but you will see some action at some point in time. We are addressing the concerns.

So we thank you very much.

And this adjourns the open session meeting.

(Thereupon California Public Employees'

Retirement System, Investment Committee meeting open session adjourned at 1:13 p.m.)

CERTIFICATE OF REPORTER

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 22nd day of August, 2019.

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James 4 Patter

JAMES F. PETERS, CSR
Certified Shorthand Reporter
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