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

TUESDAY, SEPTEMBER 15, 2015 9:16 A.M.

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

APPEARANCES

COMMITTEE MEMBERS:

- Mr. Henry Jones, Chairperson
- Mr. Bill Slaton, Vice Chairperson
- Mr. Michael Bilbrey
- Mr. John Chiang, also represented by Mr. Frank Moore
- Mr. Richard Costigan
- Mr. Rob Feckner
- Mr. Richard Gillihan, represented by Ms. Katie Hagen
- Ms. Dana Hollinger
- Mr. J.J. Jelincic
- Mr. Ron Lind
- Ms. Priya Mathur
- Ms. Theresa Taylor
- Ms. Betty Yee

STAFF:

- Ms. Anne Stausboll, Chief Executive Officer
- Mr. Doug Hoffner, Deputy Executive Officer
- Ms. Cheryl Eason, Chief Financial Officer
- Mr. Ted Eliopoulos, Chief Investment Officer
- Mr. Matthew Jacobs, General Counsel
- Mr. Dan Bienvenue, Managing Investment Director
- Mr. John Cole, investment Director

APPEARANCES CONTINUED

STAFF:

- Ms. Cheryl Edwards, Committee Secretary
- Ms. Kimberly Malm, Chief, Operations Support Services Division
- Mr. Don Pontes, Investment Director
- Mr. Craig Rhines, Investment Officer
- Ms. Anne Simpson, Investment Director
- Mr. Wylie Tollette, Chief Operating Investment Officer

ALSO PRESENT:

- Ms. Julia Bonafede, Wilshire Consulting
- Mr. Allan Emkin, Pension Consulting Alliance
- Mr. Steve Foresti, Wilshire Consulting
- Mr. Andrew Junkin, Wilshire Consulting

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1 PROCEEDINGS 2 CHAIRPERSON JONES: I'd like to call the 3 Investment Committee meeting to order. The first order of 4 business is roll call, please. COMMITTEE SECRETARY EDWARDS: Henry Jones? 5 6 CHAIRPERSON JONES: Here. 7 COMMITTEE SECRETARY EDWARDS: Bill Slaton? 8 VICE CHAIRPERSON SLATON: Here. 9 COMMITTEE SECRETARY EDWARDS: Michael Bilbrey? 10 COMMITTEE MEMBER BILBREY: Good morning. COMMITTEE SECRETARY EDWARDS: John Chiang? 11 COMMITTEE MEMBER CHIANG: Good morning. 12 13 COMMITTEE SECRETARY EDWARDS: Richard Costigan? 14 COMMITTEE MEMBER COSTIGAN: Good morning. 15 COMMITTEE SECRETARY EDWARDS: Rob Feckner? 16 COMMITTEE MEMBER FECKNER: Good morning. 17 COMMITTEE SECRETARY EDWARDS: Richard Gillihan 18 represented by Katie Hagen? ACTING COMMITTEE MEMBER HAGEN: 19 Here. 20 COMMITTEE SECRETARY EDWARDS: Dana Hollinger? 21 COMMITTEE MEMBER HOLLINGER: Here. COMMITTEE SECRETARY EDWARDS: J.J. Jelincic? 22 COMMITTEE MEMBER JELINCIC: Here. 23 2.4 COMMITTEE SECRETARY EDWARDS: Ron Lind? 25 COMMITTEE MEMBER LIND: Here.

COMMITTEE SECRETARY EDWARDS: Priya Mathur? 1 COMMITTEE MEMBER MATHUR: Good morning. 2 3 COMMITTEE SECRETARY EDWARDS: Theresa Taylor? COMMITTEE MEMBER TAYLOR: Here. 4 COMMITTEE SECRETARY EDWARDS: 5 Betty Yee? 6 COMMITTEE MEMBER YEE: Here. 7 CHAIRPERSON JONES: Okay. Thank you. 8 The next item on the agenda is the Chief 9 Investment Officer's Briefing. Mr. Eliopoulos 10 CHIEF INVESTMENT OFFICER ELIOPOULOS: Terrific. Mr. Chair, members of the Committee, good morning. 11 12 Last week, CalPERS hosted our annually Emerging 13 Transition and Diverse Manager Day here in Sacramento. 14 And this event here in the CalPERS Investment Office 15 provided the unique opportunity for emerging and 16 transitional firms to participate in small 45-minute 17 meetings with senior CalPERS Investment staff, consultants, and advisors. More than 80 firms 18 19 participated in the areas of global equity, real estate --20 excuse me -- and private equity. 21 The following day, we held our Diversity Forum, 22 entitled Making the Difference in Business and Finance. 23 And I think for all of us that attended I think you will 24 all agree that it was a tremendous success.

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More than 330 individuals attended the day long

forum at the convention center, which included some really insightful and terrific panels and opportunities for excellent networking. I'd like to thank Laurie Weir and her amazing TIP team for their hard work on both the emerging, transition, and diversity day here in the Investment Office, as well as putting on the diversity forum at the convention center, as well as all the other divisions that supported us, importantly including the Stakeholder Relations Division. Incredible work putting that together.

And lastly, I'd also like to thank the Chair, the Treasurer, and the Controller for participating in the event, for moderating panels, and all the Board members who were able to attend and participate in the day. Thank you very much.

I'd like to end my report by addressing some of the attention that our presentation last month on private equity received. Our intended presentation on asset management fees and carried interest led to a series of questions on some more complex features of the private equity commingled fund structure. We recognize that we did not do a good job of explaining these features, and answering the questions.

In fact, when asked about the management fee offsets, we provided an incorrect answer. Staff simply

misunderstood the line of questioning as there were a series of questions asked that alternated between a specific fund and some very general questions in nature. Our error was regrettable, but human.

To correct the record, let me use the hypothetical example that was used last month. We were asked if a management fee is \$100, and the fee from the portfolio company is \$50, and there is a 100 percent offset to the limited partner, will the general partner ultimately collect the \$100?

The answer is yes. We should have answered yes instead of no. Fees collected by the general partner, whether offset or not, and whether from the limited partner or the portfolio company do equal 100 percent of the management fee.

We know that many of you have additional questions about private equity industry, our role as an investor, and the inner-workings of private equity commingled fund structures. In November, we are planning an educational session for the Board on private equity that will be presented by staff and invited industry experts. This will be concurrent with our annual review of our Private Equity Program.

It's important I think that we don't let this recent attention on our presentation eclipse CalPERS

long-standing commitment to financial transparency and reporting, and in particular, the significant steps we have taken recently to address what has been a challenge for the entire industry.

We just launched one of the first ever and most comprehensive reporting systems in the country, our Private Equity Accounting and Reporting Solution, or PEARS. It's the result of a three plus year effort that will enable us to more comprehensively track our private equity investments, including carried interest going forward.

This is just the latest step in a very long history of efforts to increase transparency since we began investing in private equity 25 years ago. We look forward to more discussions on this topic in November.

Mr. Chair, I thank you. That concludes my report and we're ready to take up the agendas.

CHAIRPERSON JONES: We do have a couple of questions or comments.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Ted, I appreciate you correcting the misinformation. But -- this is actually to the Chair. They gave us misinformation. They evaded questions. I asked you to reagendize it, so that we had all the material in front of us and had a chance to have a

discussion, and you declined to create that opportunity. And yet, you just allowed him to walk back part of the misinformation. And I just think that, you know, it either should have been agendized or, you know, it shouldn't have been part of this report.

CHAIRPERSON JONES: Mr. Jelincic, I'm not going to get in a back-and-forth conversation on this, because I've sent you a letter, I remember, or an email indicating what steps we're going to take. And in that email, I did indicate to you that if we found that there was an error in the response, we would correct the record, and that's what this -- the purpose of this was. So I'm not going to continue to discuss -- go back and forth with you about how we go from here.

COMMITTEE MEMBER JELINCIC: And that's fine. I just want it on record that I though declining it was inappropriate, especially when you then allowed him to address some of the issues.

CHAIRPERSON JONES: Mrs. Mathur.

COMMITTEE MEMBER JELINCIC: And just of some of the issues.

CHAIRPERSON JONES: Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Yes. You know, I was just at an ILPA-sponsored event, and there's much talk about the leadership that CalPERS and our staff has

demonstrated in this issue in particular and in the industry more broadly. And I just wanted to recognize that this is a very complex issue. This is something that we are -- we are, I think, at the forefront of getting our arms around among institutional investors globally, and that we -- that I am so grateful for the really important efforts of you, Ted and Réal Desrochers and his whole team in trying to make progress on this issue, which clearly is a very relevant issue for us and for other investors, but not one that's going to be solved overnight.

So I just wanted to share that.

Thank you.

CHAIRPERSON JONES: Thank you.

Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Ted, I wanted to say two things. One, I really appreciate the diversity forum. That was awesome. So it was a great event. I'm glad we had so many people participating.

And then two, I just wanted to add that since I have been on the Committee, I have seen nothing but everyone working really hard for what we want, which is to be as transparent as possible. I feel terrible that an error was made, but I think that Eric and his shop has done a really good job at trying very hard to make sure that we are getting this very complex information out to

the Board, as well as to the public. So I want to tell you I appreciate that.

CHAIRPERSON JONES: Mr. Slaton.

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VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.

I just wanted to reiterate thank you for this report this morning and for the correction. I know that the whole issue of transparency, including fees, when it comes to private equity is challenging, but must be worked on. And I have confidence that you and your staff are working on this, and that we'll get to where we need to be. But I think all of the attention I want to make sure doesn't overshadow the performance.

And on our website you can find the fact sheet on the Private Equity Program with performance from one year all the way to 20 years that exceeds our expected return overall for the fund. So I think that performance which over 20 years is 12.3 percent reflects that this is an important part of our portfolio, and that it is helping us achieve what we need to achieve to provide retirement security to our members.

So I thank you for your work. And look forward to November, and when we can add additional clarity to this issue.

Thank you.

CHAIRPERSON JONES: Mr. Costigan.

COMMITTEE MEMBER COSTIGAN: Thank you, Mr. Jones.

Mr. Eliopoulos, thank you very much for acknowledging what occurred last month. I just want to again -- I've been on the Board almost five years now. And I really want to say the transformation that I have seen -- we don't always get it right. There's a lot of information. I think too often what the public and the folks in this room don't see is actually what goes on in preparation for the Board meeting, what goes on between the last Board meeting and this current Board meeting. We just don't spend 15 minutes discussing these items. They're very complex.

I think the workshop is a great idea, just continuing to keep us informed, continuing to keep the public and the transparency issue. But again, I just want to reiterate what Slaton said. These are complex issues, but I do know a couple simple facts every day. I know that you guys come to the office with two goals in mind, to achieve the highest rate of return possible for our member in the most cost efficient manner.

And I think knowing that each day that you start that way, and knowing that there is not an incentive not to get that right, that you're trying your best. And I know we're only half way through this journey. When I look at -- and this is something I've often raised at

Finance and Admin. When I look at the resources we direct to your office, and then I do look what the private equity managers make, and that their goal everyday isn't getting the best return for our members. Their goal is to get the best return for themselves, so that at the end of the day, they achieve the highest rate possible for themselves.

And I know that each day you guys are working towards that. I know it when we see the monthly statements. I see it in the firms that we get rid of. I see it in the Diversity Forum that you guys did last month. So while I understand the back and forth last month was extremely difficult, and I know the questions fly, and it's hard to be anticipate every question, and oftentimes we do -- I've got some questions later in the presentation we'll see if you guys are ready for.

But from that standpoint, I do know each day that when guys come in the office that you've got the goals of our members, this Board, the returns in doing what's right.

So again, thank you, Ted, really for you and Réal for others to acknowledging -- last month was difficult -- but again, I think putting this forward, and I look forward to the workshop.

Thank you, Mr. Jones

CHAIRPERSON JONES: Thank you.

Mrs. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

I also wanted to add my really congratulations and really a job well done on the diversity forum. And it really demonstrated I think publicly CalPERS commitment to our program and just the array of firms that were represented. It was really quite stellar.

On the private equity issue, I just wanted to make a suggestion, if I could. And I'm so happy you brought up the PEARS system, because the fact of the matter is we're not a Johnny-come-lately with respect to how we're tracking all of these transactions. And during the Educational Forum in November, I think what might be helpful, because certainly the tenor of the inquiries we've been getting from the media and others is that there's quite a bit of misunderstanding on all fronts.

And if we could really just dial it back and have -- even walk us through what a typical private equity fund transaction looks likes, so that all can have a common understanding about where management fees become an issue, where carried interest becomes an issue, where the offset takes place, I think that would be very, very helpful, so we have just a foundational understanding about how these transactions work.

CHAIRPERSON JONES: Thank you.

Mr. Feckner.

COMMITTEE MEMBER FECKNER: Thank you, Mr. Chair.

Ted, I just wanted to thank you and your staff and everybody that you named as far as the diversity conference went. Dana and I were in another conference in Southern California, so we weren't able to be here, but we getting updates on how well the conference was going from external sources, not from our own folks.

So I just wanted to tell you that that did transcend. And I know that there have been problematic areas in the past, but this was very well received. And all of the information we were getting back was very positive. So thank you and everybody involved.

CHAIRPERSON JONES: Okay. Thank you.

And -- yeah, and I also attended the Diversity

Forum, and I just want to also congratulate you and
especially Ms. Laurie Weir on a job well done. All during
the evening at the conclusion of the forum, many
participants were coming up and said they're so glad that
CalPERS took the leadership to put on such a forum. So I
just want to thank you and your staff for that. And also,
on the private equity piece, again that the -- I think
that Mrs. Yee's comments are right on. And a matter of
fact, the CIO and I have already discussed the issue. And
you're right on, because that's what we was planning to

bring. And so we appreciate Ted having the foresight to think ahead and be prepared to do that. So we want to thank you.

Okay. I'm not going to allow a second round. Ι see a couple people up for asking for a second round, but I think we need to move on, because we have the -- a number of items on the agenda, so I'm not going to -unless, it's not regarding this issue. Is it?

COMMITTEE MEMBER JELINCIC: I just wanted to comment on the diversity forum.

> CHAIRPERSON JONES: Okay. Okay.

COMMITTEE MEMBER JELINCIC: I also attended the Diversity Forum. I thought it was excellent. The biggest complaint I had was that the chairs were noisy on the cement floor. And if that's your biggest complaint, it's a hell of a success. So thank you.

> CHAIRPERSON JONES: Thank you.

Okay. We will now move on to the next item on the agenda, consent items for action. We have -- we need a motion to approve the consent items.

COMMITTEE MEMBER FECKNER: Move approval.

COMMITTEE MEMBER MATHUR: Second

CHAIRPERSON JONES: Move approval by Mr. Feckner, seconded by Mrs. Mathur.

Questions?

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Seeing none. 1 All those in favor say aye? 2 3 (Ayes.) 4 CHAIRPERSON JONES: Opposed, say no? 5 COMMITTEE MEMBER JELINCIC: And I'm abstaining. 6 CHAIRPERSON JONES: And one abstain -- Mr. 7 Jelincic abstains. So the item passes. 8 We now move to the consent items for information. 9 I have had no requests to move anything off of that 10 agenda, so we will on to the next Item, 5, Contracts Administration: Real Estate Board Investment Consultant 11 12 RFP initiation. 13 CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: 14 Thank you, Mr. Chairman. Good morning. CHAIRPERSON JONES: Good morning. 15 16 CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: 17 Wylie Tollette, CalPERSed Investment staff. 18 I'm joined here by Kim Malm from our OSSD group. Staff is 19 requesting Committee approval to release an RFP for the 20 selection and procurement of a new contract for the real 21 estate Board investment consultant for a term up to five

It's worth noting that this is the Board's independent real estate consultant. Staff's role in this is to facilitate the selection process on behalf of the

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years.

Investment Committee.

This selection process that we're proposing here with this item remains largely consistent with past RFPs. However, recently OSSD has worked with the Board to make two changes that are worth noting. The first is that the evaluation by staff is no longer a point score. It's now pass/fail. And then second, for the Committee interview, the Committee provides a consensus based score, rather than a compendium or average of each individual separate score.

That's a process that was pioneered recently with a separate RFP. And Kim can provide details around that, if you're interested.

Finally, I would highlight that prior to the finalist interviews, the Board receives a draft list of the questions that you will ask during the interview session. So if you want to add or change the list of questions that are requested of the proposal -- proposers to the RFP, you'll have a chance to edit that final list of questions prior to the interview.

The next steps in this process are that we should be receiving -- releasing the RFP, and then receiving the proposals, followed by the technical evaluations this fall. And we expect that the interviews will take place sometime in the spring.

And we're -- part of the reason we're bringing this agenda item now is so that those interviews take place during the spring Investment Committee calendar, which tends to be a little bit lighter than the fall. The fall tends to be very busy, so combining a busy fall Investment Committee Calendar with those interviews makes for some very long days. So part of our objective here in bringing this a bit early is to have that occur in the spring.

So with that, I'll pause and see if there are any questions.

CHAIRPERSON JONES: Yes, we do have a couple.

Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you. You know, I think we, as an Investment Committee, need to hold our consultants -- all of our investment consultants to a higher standard when it comes to consideration of long term systemic risks, like environmental, social, and governance issues, which I believe have a real -- will have a real long impact on our long-term performance and our ability to deliver benefits to our beneficiaries.

So I've asked that that be incorporated into the questionnaire. And I think, Wylie, you've said that that will be. And I think we should keep that focus in future solicitations as well.

1 So with that, I will move staff's recommendation.

CHAIRPERSON JONES: Okay. It's been moved by

3 Mrs. Mathur.

COMMITTEE MEMBER TAYLOR: Second.

CHAIRPERSON JONES: Second by Mrs. Taylor.

We have a question.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: On Attachment 1, page two of three, and you don't actually have to look at it, we make reference to the SIO. And we've changed those titles. And so we ought to update that.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

COMMITTEE MEMBER JELINCIC: The other point I wanted to raise is I recently went through the -- one of the auditor RFPs where we looked at the two Board members who were kibitzing on the staff evaluation.

The way the RFP had been written, nobody on the Board could see the responses. And so when Ron and I participated, we didn't see the technical responses, which didn't allow us to really prepare questions. And it was agreed that that shouldn't have happened, but I just want to make sure that we write the RFP in such a way so that at least those members of the Board who are going to be kibitzing have a chance to see it.

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OPERATIONS SUPPORT SERVICES DIVISION CHIEF MALM:
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             Understood.
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             COMMITTEE MEMBER JELINCIC: Thank you.
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             CHAIRPERSON JONES: Okay. Thank you. So, okay,
    ready for the vote.
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             All those in favor say aye?
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             (Ayes.)
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             CHAIRPERSON JONES: Opposed?
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             None.
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             The items passes. Thank you very much.
             CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
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             Great.
                     Thank you.
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             CHAIRPERSON JONES: And we move to the next item
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    on the agenda, Investment Beliefs Implementation Findings.
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             (Thereupon an overhead presentation was
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             presented as follows.)
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             CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
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             Thank you, Mr. Chairman. Again, Wylie Tollette,
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    Investment Office staff. I'm joined here by Ted and Anne
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    Simpson.
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             And this is an update on -- or a follow-up item
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    to our July off-site discussion around this topic. So a
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   bit of background. The development of the Investment
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   Beliefs began in 2012 through a disciplined and
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    collaborative effort facilitated by Towers Watson.
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of 10 Beliefs were adopted in September of 2013. An update on Beliefs integration activities was provided to the Committee in the -- August of 2014, including the results of an Investment Office staff survey and the revision of our annual program review templates.

Following the 2014 item, the Committee directed staff to conduct an in-depth review of the implementation of our beliefs since adoption, and return with findings this year. And so the review undertaken by Roger Urwin with Towers Watson began in March of this year. And today's item follows Mr. Urwin's presentation of his findings to this Committee in May in an interactive session held at the July off-site that I just remembered -- that I just noted. And you may remember the clickers that we used during the May session.

Our goal today is to recap on the outcome of the July off-site, discuss the proposed path forward on the key recommendations proposed by Towers Watson.

Unfortunately, due to prior scheduling, Mr. Urwin can't be here, but his review and comments are definitely reflected in both our spoken as well as the written materials.

The off-site session focused on areas where the interpretations of the Beliefs was not leading to what Roger calls a settled position. These include Beliefs related to risk, and those would be Investment Beliefs

number 1 and 9, and environmental, social, and governance issues. Those are Investment Beliefs 2, 3, and 4. Towers Watson noted that risk and ESG remain the most challenging subjects for leading funds everywhere to address. So we're not the only pension fund or asset owner to wrestle with these same topics.

So with that, I'm going to turn to the slide deck and cover the risk items. And then I'm going to turn it over to Ted, who will cover the ESG items. And this presentation is bit of a recap of the results of our clicker exercise. You may recall that in July, we went through those results very quick, so we thought it would be worthwhile to cover those results in a bit more -- with a bit more time and attention.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So the first slide highlights the fact that overall Towers Watson found that our -- Calpers overall is actually done an above-average job. And it's always good to be above average, but when you're -- when you seek excellence, you tend to focus on the areas where you still have to work. And that's what we'll be doing a bit of today.

And I think you'll see in these results that staff and Board and our consultants and the executives who participated were actually very largely aligned on many

topics and many of the subjects that we covered. And Towers Watson noted that as well.

So we have solid alignment overall, but we're going to explore some of the areas where there were differences in the voting results.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So the first thing, and you can see this is one area where there was very strong alignment, was the importance and the impact of a future global financial crisis as a significant risk to the fund. And you can see there was very strong agreement that that is a significant risk to the fund.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

This is a bit of a low and inside pitch, if you know what I mean. Kind of a gimme. But it's worth noting that you'll see the results here if you look in the details between Board, staff, and consultants. I think we all agree that that's something we do need to think about and worry about.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That resource constraints and the limits to growth are significant risks to the fund. Again, pretty

good consensus around that between the different voting participants at the July off-site.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: The fifth question that Calpers will find it difficult to attain the actuarial required rate of return on its PERF assets in the next decade or so.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Also, strong consensus from this, both from staff, our consultants and the Board. So I think we all agree that that's an area that we should remain vigilant on.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: The Board receives an appropriate and effective feed of risk information on Calpers funds.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

This was an interesting. And you can see from the roughly bell shaped distribution of the results, that there was actually some dispersion in results here. So this is one of the areas where there wasn't exactly clear consensus on.

And the interesting thing there is the Board

actually thought we were doing a better job than the staff did.

(Laughter.)

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: And the staff is the one reasonable for preparing those risk reports and providing them. The consultants were reasonably aligned with staff that we could do a better job. And as we've discussed in previous Committee meetings, part of the challenge here is that return, sort of the good side of the ledger, is relatively easy to measure, and everyone understands what it means. It's a return, dollars in the bank.

Risk is a much more nebulous topic. We can measure volatility, and so we do measure volatility extensively. But we also recognize, and one of our Investment Beliefs indicates that volatility -- risk is more than just volatility. There are many other elements to risk, but they're difficult to measure, and they're difficult to communicate in a concise way.

So we have roadmap -- several roadmap initiatives underway within the Investment Office to really try to explore this exact topic, and bring some additional clarity and some additional reporting tools to measuring and looking at those other types of risks that we eventually hope to bring to the Investment Committee.

But this is a struggle that not just CalPERS faces. This is a struggle that all investors face as to how to define, measure, and report on risk, particularly longer term risks that are just very difficult to boil down into a concise two-page, three-page dashboard. But that's what we're shooting for. It's an ambitious goal, but we think we can -- we can get there, but it's taking some time for us to work on that.

You'll be hearing more about those roadmap initiatives when we come back in November with our annual Target Operating Model and roadmap update.

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CHAIRPERSON JONES: Maybe this is a good time to -- we have a couple of questions.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: Certainly.

CHAIRPERSON JONES: Mrs. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

I really appreciated the involvement of staff and the consultants and the Board at the off-site in this area. And I think what has struck me since we've been through the exercise is just how much attention there still is focused on this whole notion of investment risk and how we view, I guess, investment value also, from the consideration of ESG factors.

And this may be premature, but I just wanted to -- a comment I think we've had I think a lot more literature that's kind of presented itself that at least suggests that as fiduciaries that we should be heightening our attention to ESG factors. And I know this is a matter that's quite unsettled for, not just us, but for a lot of different funds.

And given the -- all the parties that are involved with respect to our asset allocation and certainly looking at our liabilities and risks going forward, I just wanted to see -- and I appreciate the staff suggesting that this work continue obviously in the studies and the SIRI effort I think has been very, very valuable and more to come.

But, Mr. Chairman, I wanted to take this opportunity to see if we could perhaps look at setting a marker during our January off-site to really put some concerted effort into looking at how we, as a Board, can embark upon a short-term strategic planning process around these issues.

I think what's becoming clear is that we're all getting hit by literature that speaks to both sides -- all sides of this issue. But really as we continue to look at how we provide strategic direction about our investments, with respect to how the Investment staff looks at ESG --

and we've done a lot. I want to just again Anne Simpson you and your team have been doing a lot in this arena. But it just seems to me that when we have some time together in a concentrated, focused manner, and certainly as we continue to look at our Investment Beliefs that the January off-site may be a good time to have some help from an outside consultant to come in and have us embark upon a strategic planning process on the broader ESG front.

And I wanted to just put that forth. And I know this is an informational item, but I would like to see this memorialized in terms of direction to the staff.

CHAIRPERSON JONES: Yeah. And I think that that's consistent with the thought processes that we've used. And, Mr. Eliopoulos, you heard the comments that we've already talked about the off-site being a target date to expand on these issues. And I think the two additional items is -- that I heard from the Controller is the strategic planning process, so if we could incorporate that as -- in our off-site as we go forward in dealing with the consultant to come in and maybe help us in that regard, I think that would be helpful.

COMMITTEE MEMBER YEE: Yeah. And, Mr. Chairman, thank you. I don't see this process as being very protracted. I think there's a lot of information out there. I think the role of the consultant is to really

help bring us focus with all this. So hearing from some of the thoughts leaders and others who have really begun to look at this in more depth, maybe have had some experience with respect to the application of some of these principles.

But also, as we move forward, I would like to also suggest that part of the January off-site be a public forum where some of the external stakeholders can have a bit of time to come in and express their views that may help us shape our own conversation during the planning possess about what are priorities areas that we may want to focus our attention.

CHAIRPERSON JONES: Yes, I think that's also a good suggestion. And a number of these major issues we've had invited guests to come in and give their views on the direction that we're going, and to give us some feedback on the direction we're going. So I think that's appropriate also.

COMMITTEE MEMBER YEE: Okay.

CHAIRPERSON JONES: Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: As I said in the briefing, I thought that slides that were most valuable were those where you put all three groups on the same slide. And when I look at slide 8, which is the resource constraints, the staff skews further to the right than the

other groups. Any sense on why they don't think resource constraints are a significant risk or they think -- at least think so less than everybody else?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I would have to explore that further to provide a cogent answer, Mr. Jelincic. The overall kind of looking at the bigger picture, it looks like the groups are generally aligned. There's a little bit of skew to the right from the staff, but not a huge one. So I'm not sure. I think I'd have to explore that more fully to track it down.

COMMITTEE MEMBER JELINCIC: Okay. And then on slide 12, which was the appropriate feed of risk and information, you pointed out that, you know, the staff was more negative than the rest of it. And that's probably because they actually understand it a little better. But you limited it really to the non-investment -- or the other forms of risk other than volatility.

And one of the concerns I have is not getting risk information in a much broader sense. As we get policies that come forward and proposals, I know that staff has had some really rigorous debates in the best sense of the word on whether we ought to do A or B or some combination of, and, you know, why we shouldn't do C, but that's a risk discussion that, quite frankly, the Board is not being exposed to at all. And so that's -- that's one

of the areas that I found, you know, very distressing, and I'm probably the disagree on the Board.

So it was really a question of I understood the question to be different. And I wanted to raise that and -- so that -- and those were the points I wanted to raise.

But, you know, we need a bigger real discussion of risks. You know, we now have the benefits and risks in each of the agenda items. But the risk that we always see is, well, if you don't do it, you don't get the benefits. But there are real risks in deciding not to do B, C, or D. And I just think that needs to come forward more.

CHAIRPERSON JONES: Okay.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you.

So on page five, it talks about the global financial crises being a significant risk to the fund, and you sort of like a lob question, and it is. But what's not a lob is how challenging it is to actually address that issue at a -- in a systemic way. And I think this is the crucial issue facing us as stewards of this important fund for the very, very, very long term.

I mean, our members theoretically are perpetual, right? We always -- we have new members coming in, and

they will live their long lives hopefully, and be around to receive benefits when they retire.

And so this again sort of highlights to me the real crucial point that we're at, where we need to address and be thinking strategically about how we can engage around the real systemic risks facing us and other institutional investors, other investors in the markets.

And that's, of course -- you know, climate change is one. There are lots of issues. Too big to fail financial institutions is another area that I think we have had -- since the last financial crisis, we've had further consolidation among our financial institutions, and they really are too big to fail now. It's even worse in Europe.

High frequency trading is an increasingly large component of trading on our -- in our financial markets. And that leads to volatility that can trigger a crisis. So these are all things that I think we need to be thinking of and how they interact with each other and what role we can play in helping to mitigate those -- those risks.

So I very much appreciate Controller Yee's suggestion that we embark on a short strategic planning effort around some of these systemic risks. I think it's the right time to do it, and we -- while I totally

recognize the resource constraints of the Investment
Office and all of the good work that you are all trying to
do, I think it's worth having a conversation about what
resources would be necessary to really play a meaningful
role here.

So I thank you for that and I thank the Chair for directing that we embark on that effort.

Thank you.

CHAIRPERSON JONES: Mrs. Hollinger.

COMMITTEE MEMBER HOLLINGER: Thank you.

This is kind of a continuum off Ms. Yee, Ms.

Mathur. What I realize, or recognize, I think to move the needle on Wall Street in terms of ESG, somehow it's got to impact shareholder value and pricing. So maybe when we're looking to commit our resources, if we came up with a methodology to factor that into shareholder pricing, I think that that would be meaningful, and have an impact on Wall Street. Because I think until they see those risks factored into price -- the price of a share, it's not going to move the needle. So maybe there's a methodology that we can come up with that factors that into our price.

CHAIRPERSON JONES: Okay. Thank you. Okay.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you. Very relevant comments. And I think the financial crisis risk in particular I believe was the

underpinnings of some of the risk mitigation workshops that we have undertaken as a organization for the last year or so. And I'm quite hopeful that that proceeds apace. I think the Board is expecting to see a policy on that in October. And that's directly related to that risk consideration.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

The -- moving back to where we were, the long term materially different to the sum of multiple short-term periods, and therefore long-term risk management requires a different focus and set of measures.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Also, good consensus around this. I think in -both staff and the Board and our consultants all agree
that we do need to think about the long term. And it is
different than some of the shorter term things. But at
the same time, we can't take our eyes off the short-term,
because it can also affect the health of the plan.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So as I mentioned, we're going to be coming back to the Committee in November with an update on the roadmap initiatives we have tied to risk measurement and

management within the Investment Office.

In addition, we, as I mentioned, within I think the Finance and Administration Committee and the full Board will be seeing a policy on risk mitigation as a follow up to the workshop that was conducted last month.

And it sounds like we may be having a new agenda item at the January off-site around some of the longer term risks. Specific to those, I'm about to hand the clicker over to Ted who's going to cover the voting results that we saw related to the ESG questions. So thank you.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Great.

Terrific, Wylie. Thank you very much. And why don't we -- we'll move into the ESG related beliefs section.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: I am going to spend some time going through the slides. And Anne Simpson and I will try and, whenever you have questions, answer the questions in terms of things that we're already doing and could be doing and otherwise.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: But just to go to the actual clicker results. The first one where we had really quite explicit, you know, near unanimity amongst Board and staff is on the overall question of

carbon causing material climate change.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: There's strong agreement within the institution over that. And for those of us that were here at CalPERS, around CalPERS in the 2004/2005 time frame remember we had a workshop on this very topic. And it seemed very controversial at that time to take up the question whether or not carbon was causing material climate change. And it really was at that point in time -- I believe it was 2005 -- in that workshop that CalPERS came to the conclusion, based on the data that was available in 2005, that that evidence was there and -- and while not conclusory but material, and posed a risk.

So good to see now, flash -- flash forward 10 years to 2015, that unanimity around that topic prevails. Now, we'll be -- we didn't group the questions and answers in terms of areas we had complete unanimity and areas we had disagreement. So we'll move kind of back and forth as we go through each one, I think cause we'll see some of the questions, it unpacks or reveals some differences of opinion within the Board and staff and our consultants. So we'll start to see some of that.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: And on this

question whether or not there is evidence that high carbon fossil fuel companies are structurally overpriced, you start to see some differences of opinion amongst the Board and amongst the staff in terms of whether or not that is a true, or whether we agree with that or not.

You see more sort neutral and agreement amongst the Board. And you see some, you know, quite strong disagreement amongst staff that there is evidence of that overpricing. And that goes, I think, to the questions from the Controller and from Ms. Mathur that this is a good area to explore at our off-site in January. And indeed, that is one of the suggestions that we have is to further unpack this issue, because it's important for us to get to, if not a settled state, at least a state where we understand the evidence and understand where this differences of opinion are.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: Here is another question asking it a different way, is it likely that ESG factors have been priced into assets by the market, and the parenthetical is important, whether accurately or not.

And there you can see from the perspective of the Board members strong disagreement -- you know, disagreement and strong disagreement, where on the staff

side, the Investment staff side and somewhat in the investment consultant side, there's agreement in this.

Interesting, and again leads to, I think, one of the big takeaways is we need more time together as a group to probe these issues and understand and come to, if not an agreement, come to a mutual understanding around the underpinnings of this.

CHAIRPERSON JONES: Excuse me, Ted.

Mr. Jelincic has a question on this.

COMMITTEE MEMBER JELINCIC: Ted, do you have any insight as to why there's such a difference here between the Board and the staff?

CHIEF INVESTMENT OFFICER ELIOPOULOS: No. You know, that's the beauty of this clicker exercise. You know it gives -- I think it gives people some anonymity in expressing their views. But there isn't insight that comes from it, other than a very important insight that there's differing viewpoints certainly from the Board and the Investment staff on this topic.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Okay. Mr. Lind.

COMMITTEE MEMBER LIND: Thank you. Yeah, I'm -to that, I would just say, as one Board member, who's not
an investment professional, my thoughts on this question
were kind of intuitive, right? Kind of what I feel and

what I know and sort of the big picture. And the system that maybe they're not quite ready to price it in. So, you know, getting some data, some information from professionals on why they think it is or isn't is going to be very helpful at that off-site.

CHAIRPERSON JONES: Mr. Slaton.

VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.

It appears to me though on this particular -particularly this question, that it would be interesting
if we broke out ESG into the three components, how would
that have changed, and would we have closer views on some,
but not others --

CHIEF INVESTMENT OFFICER ELIOPOULOS: Right.

VICE CHAIRPERSON SLATON: -- because, you know, where we are, where the marketplace is, you know, we've done a lot of work in the governance area. There's a lot more visibility in that area than maybe in the others. So maybe that's something during the off-site we might want to explore, or maybe Ms. Simpson you have a comment about that?

INVESTMENT DIRECTOR SIMPSON: Yes. That's a very good point. This is Anne Simpson speaking. My thought here is that the market can only price what the market knows about. And the flow of data on governance, because of the good work of investors like Calpers and our many

sister and brother funds around the world demanded information on governance, independent directors, executive pay, share-holder rights.

We've had 20 years of hard work on that. And now it's regulated, it's audited, and I think we can all feel quite comfortable we've got data we can rest our hat -- you know, we can rest on.

On the environmental front, there is a growing amount of information, but we still don't have accounting standards. We have more regulated activity and filings around emissions and risk, but what we don't have is something that's coming out in a routine way in financial reports, or attached to the financial reports.

When we come to human capital, we're in even a more difficult position, because every company will tell you how people are our greatest asset, but we get precious little information on pay, conditions, recruitment, training, employee satisfaction, supply chain management, everything that would go into that, diversity.

So the work that we're doing with groups like the Sustainability Accounting Standards Board is to attempt to build those reporting standards, which we can then take to the SEC, take to FASB, take to the International Accounting Standards Board and say, look, the market can't possibly price this unless the market gets information.

So I think this will be an investor driven change, like it was with governance. But at the moment, we really are acting as, I think Ron Lind said, intuition. We're working on argument and evidence. An example, we don't have good data sets over decent periods of time, but that's because it's new.

I mean, I think we should appreciate that, you know, CalPERS is at the edge, the innovating edge at the moment, but we need to -- we do need to build this data and this evidence. It's very important.

CHAIRPERSON JONES: Thank you.

CHIEF INVESTMENT OFFICER ELIOPOULOS: That's a good lead-in for the next two questions, where there is real agreement amongst the Board and staff.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: And that is around whether or not there is sufficient evidence. And I'll phrase it the way the question is, the lack of evidence is a limitation to take systemic positions today.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: And you unpack that, and there's a broad agreement, both from Board and staff and consultants on that point that Ms. Simpson was raising.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: And then we see it again here in five in terms of whether or not the ESG metrics are relatively untested, can be subjective, and this acts as a limitation to ESG factors being significant investor's decisions. And again, this is another topic I think where it comes to an intuitive feel, as well as an evidence feel.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: And you can see here -- boy, it looks like almost an identical -- not quite identical dispersion amongst Board and staff, but very consistent, very close. So this is again underscoring more evidence, more data, more work together on these topics to feel comfortable that we have a strategic direction.

And that goes, I think, to the Controller's suggestion of taking up a, you know, strategic question, what should our strategy be, given the state and set of evidence and conditions that we have currently?

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CHIEF INVESTMENT OFFICER ELIOPOULOS: Here is an area where we had some dispersion or, you know, disagreement amongst the results from the Board members and the staff. And this I remember from the off-site did -- we had some conversation about this during the

clicker exercise. And this has to do with governance over the -- over the fund, governance over the portfolio in this case and governance over the accountability and responsibility for the various levels of decision that are made within the portfolio.

And what this question was getting at is if there are Board-directed policies, in other words, decisions that the Board would take on an investment decision, should that be captured in a reference portfolio. Should it be tracked what decisions are made at the Board level, and what decisions are made at the Investment staff level, so that that attribution and responsibility and accountability for various investment decisions can be clear?

I do believe at the off-site this was one where reading the question on the fly and answering on the clicker, and kind of the discussion from Roger and the Board and all of us, that it was a bit chaotic. So I don't know how much we can really read into the answers here to be honest. I think -- but I do think the topic and the point is a fundamental one, an essential governance point for the Investment Committee and for the Investment staff is that in tracking and making decisions around investment decisions, portfolio construction decisions, what and how, in this case, ESG is used within

the portfolio to make decisions?

There is -- it's an important governance topic to make sure that the accountability and responsibility for those decisions are clear, and articulated, and tracked, and measured.

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CHAIRPERSON JONES: Ted, could you unpack this question a little bit?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Sure.

CHAIRPERSON JONES: Because ultimately the Board or the Committee is adopting all of the policies of the institution. So I'm trying to understand where is the demarcation between a decision of the staff and ultimately the Board? I mean, because we've delegated -- I mean, we could always take the delegation back, but, I mean, it's always our decision, I think.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think the most perhaps pointed way to unpack it is certainly for decisions around divestment. That would be one area. And I do think our policies do a good job of isolating and placing responsibility for the decision to divest of a certain portion of the policy -- of the portfolio. That's one area that certainly making sure that the policies and the reference portfolio, in this case, are benchmarks identify at what level a decision was made to divest a

portion of the portfolio or not. That's one.

The second one where it gets murkier is on -- and we'll come to questions later -- is on tilting the portfolio, making active decisions within the portfolio.

The active decision making has been a province, an area, of staff decision making.

And I think particularly in the area of ESG, where there are good and valuable and necessary debates over how to take an account the risks that ESG factors pose in making active decisions around tilting the portfolio or not, I think we need to -- what this sentence is saying, what this question is saying, we need to be particularly, at least if -- from the staff's perspective on this, you can see the strongly agree category. The view is we need to be very articulate and very precise around whose decision that is, and who's accountable and responsible for that decision. I think those are the two clearest ways of putting it, and there are other -- there are probably other areas that we could unpack as well.

CHAIRPERSON JONES: Okay. Thank you. Hold on just a second.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah. Ted, I've raised the issue numerous times about the difference between investment risk and career risk. And, you know, I

am a very strong advocate, if the Board has directed staff to do something, the Board should own that. You know, if we tell you to not invest in coal, that's a Board decision. If we tell you get rid of cap-weighted indexes, which we would do if I were in charge, but that's a Board decision to stay with cap weighted index at this point. The staff should not own that. The Board needs to.

If we ask you to deviate from the rest of the world, that creates a certain career risk for you because you get compared to your peers. And if we directed it, we ought to own it. And I feel very strongly on that and would encourage the Board to really think about it.

Thank you.

CHAIRPERSON JONES: Okay.

Ms. Taylor.

COMMITTEE MEMBER TAYLOR: So following what J.J. said, I agree on one end that I think that -- I understand that you have to -- your staff has to take into account their career. But one of the things I'm having a little trouble with is you were taking about the institution of ESG into the -- into the portfolio, but I thought that that was part of our Investment Beliefs, so that we were looking for accountability on how the Investment Beliefs were being instituted in the portfolio through each asset class. So that's where I'm a little confused at this

question. And so if you can answer that, that would be good.

CHIEF INVESTMENT OFFICER ELIOPOULOS: That's a wonderful question, because it goes to exactly the heart of this agenda item, which is looking at the implementation of the Investment Beliefs. And in many -- in many of the Beliefs, there's unanimity around how to implement the Beliefs structure that's set out in the Investment Beliefs.

And two topics in particular, risk and ESG, there isn't unanimity amongst the Board and the staff. And there isn't a clear implementation path for I'll take ESG in particular. There isn't a clear precise menu, I'll call it, you know, a menu to follow, to implement the Belief. There's a wide range of decisions that could be made that would affect the portfolio in order to address this topic. And I don't say implement the Belief, I say address the topic, because there's differences, not only differences of opinion, but many different pathways we could go down to implement this particular belief.

So what this is trying to do is un -- is unpack and isolate those two areas, risk and now ESG, so that we can understand where the differences of opinion are. And in this case, on this governance topic, I think it will be very important as we move down a strategic path of looking

at these issues to make sure from a governance perspective that whatever strategic pathways we go down, whatever hierarchy of investment decisions that we make in this area, that it's clearly articulated at what level those decisions are being made, and that the responsibility and authority and accountability for those decisions are clear, given there's such a wide variety of paths we could go down.

And there's a, not just a disagreement, but a view that there is a -- we're entering a environment for sure with ESG where you have to make decisions with much uncertainty. That's true of the investment world in general. It's particularly true in the ESG factors, as we see the data here or the results of our survey that we're going to be for some time now today, January, next year and into the future, an area where we collectively need to make the best decisions for the institution without all of the information to prove any case with certainty. And so hopefully that's helpful.

COMMITTEE MEMBER TAYLOR: Well, it sort of -yes, it definitely was helpful. And I think what it helps
me understand is that we do need a strategy. So
Controller Yee's idea of coming together in January to put
together a short-term strategy for implementation of these
Beliefs is probably our best bet at this point, because

also as Ms. Mathur had said, I think we're looking at a global economy that is very close to another crisis. And I think that we need to take into account these risks as well as the ESG, so that we are looking at the whole picture here, but I appreciate it.

CHAIRPERSON JONES: Just a minute, Ted.

Mr. Lind.

COMMITTEE MEMBER LIND: Thank you. I was one of the strongly disagree on this one, and maybe it was just because the way it was asked, Ted. And this whole discussions around unpacking helps a little bit, because my concern when it came up at the off-site was, well, it kind of creates this us versus them sort of scenario. You know, I'd hate to be in a -- have a situation where, you know, I guess the -- maybe the worst or the best example is we have a year that we don't meet our actuarial assumption, and, you know, staff says, well, if that crazy Board hadn't been making us do this ESG stuff, maybe we'd have been better. You know, I know that would never happen, but that was kind of the way it ran through my mind.

I can understand specifics. If the Board takes an action that, you know, we need to divest from whatever that, you know, we'd have to take responsibility for that. So I guess it's different levels where it is, because

once -- you know, it seems to me once the Board sets a policy, which is our job, then it's up to staff to make sure that within that policy, everything happens, and, you know, we take all the risks, you know, into account and so on.

So I'm open-minded on this. That was my initial reaction to it, but looking forward to more discussion.

CHAIRPERSON JONES: One more. Mr. Slaton.

VICE CHAIRPERSON SLATON: Yeah. Thank you, Mr. Chair. I want to follow up on what Mr. Lind just said, because I was also toward the right-hand side in this particular question. And what concerns me from a governance standpoint is the words "isolation" and "attributed". You know, at the end of the day, and I think to repeat your words from a few moments ago, we collectively make the best decision we can make, and we're going to do that with, in some cases, imperfect information.

But at the end of the day, it's a decision the Board -- every decision is ultimately the Board's responsibility in terms of this portfolio. We delegate the specific executions to you and your staff, but I'm just -- I'm intellectually uncomfortable with trying to -- even if it's a divestment decision, you know, that's the world we live in. You know, we have to look at things

beyond just the pure investment issues, because that's -you know, we're a body that has to respond to legislative
actions and we're facing one coming up.

So I just -- to me, we use the best information we can get, and it's a collaborative process with the technical information presented by you and the staff, and then ultimately we have to vote on it. So I just have a level of discomfort with this quote isolate this decision and that becomes ours and the rest are yours.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think that it's wonderful commentary, and that's why addressing the uncomfortable items was really the job number one of this unpacking. So we're purposely taking the uncomfortable issues and topics that we've variously discussed over time and saying let's talk through them together collaboratively, but not avoid them.

I -- the -- of course, at the end of the day, the decision and the authority of this Board to act as a fiduciary on behalf of the System is the highest level of the hierarchy. And our job is to present alternatives.

I think in this -- what's underpinning the uncomfortableness in this question and the discussion, which I think will lead to the point where we have collaboration and unity, is given the level of differences of opinion on some of these topics, I think as we move

forward, especially if we want to move quickly or fastly on bringing new strategies, new ideas, we might come to a point where there is a choice for the Board to make on pursuing a path that your Investment staff comes to you with a number of alternatives, but we don't recommend one path. But that might be the path that the Board in its fiduciary judgment thinks is the best path for this system, which is exactly how the governance is meant to work.

We don't have to agree on every single investment item. So I think what this question is doing is calling out the fact that we're in a territory where there are differences of opinion, and that there is some unsettledness. And that to the extent that we move forward and take investment decisions sooner rather than later, given the level of disagreement, we're just going to have to articulate very clearly what staff's investment recommendation is, what other consultants -- professional consultants' opinions might be that are different to staff. And then the Investment Committee in its judgment at the top of the hierarchy will make the ultimate policy decision for the fund.

Once that happens -- once that happens, then we're all in alignment again, because our job is to effectuate and implement the decision of this Board in a

the best possible way for the System.

CHAIRPERSON JONES: Okay. One more. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: You know, in some ways, if this Board were to say, okay, we really want to de-risk the portfolio, and we're going 90 percent fixed income, I don't think staff would recommend that. But if the Board made that decision, staff would implement it. But we then shouldn't turn around and say, but staff, you failed to achieve 7½ percent.

So the -- in many ways, all of the asset allocation decisions really are kind of the decisions the Board has to own. The staff's job is to implement it. They have some discretion on, you know, how much they can deviate from the target. To the extent that they choose to deviate, that's on them, either positively or negatively. But the decision on where that original target is is ours. And that's the thing that we need to own.

CHAIRPERSON JONES: Okay.

COMMITTEE MEMBER JELINCIC: And you know, so I think asset allocation is probably an issue we deal with all the time that actually may be even better than just divestment, which you're right divestment tends to get imposed from the outside.

1 So thank you.

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Just to -I know we've taken quite a bit of time. I think we
covered most of the territory, including the next steps.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: Here is an area of strong agreement.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: And this goes to our current activities in ESG, which we've covered in many different forums. But a real strong agreement amongst the Board and the staff and our consultants on, you know, just the full panoply of efforts that we have on global governance. I'll move forward on that because we've covered it so many times.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: Again, another area of agreement. All the work we're doing on manager expectations on ESG, lots of agreement on amongst Board and staff that those are valuable and important and should continue.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: Here is an area, speaking of divestments, that we asked -- you know,

Roger asked a specific question whether CalPERS should do more with divestments?

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CHIEF INVESTMENT OFFICER ELIOPOULOS: And here there's a bit of dispersion. You can see from the Investment staff's position strong, you know, disagreement with that, and more curiosity and openness perhaps from the Board neutrality or openness. But I think on balance, though, when you put the pieces together, really consistent with the Calpers overall policy on divestment that we're -- you know, that we're opposed to it, except in specific fiduciary situations.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: Here is something we talked -- I mentioned briefly on strategic tilting, whether CalPERS should do more targeted ESG, you know, place more targeted capital, you know, tilt the portfolio or individual asset class more with a ESG methodology or not?

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CHIEF INVESTMENT OFFICER ELIOPOULOS: And here, there's some differences of opinion. So the staff disagrees to strongly disagrees with that. Although, there's some, you know, decent amount of agreement and

neutrality on the topic. And I think there's more agreement amongst the Board members that we should be doing -- we should be doing more of that.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: Boy, engagement.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: We're really good a engagement. I think we can --

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CHIEF INVESTMENT OFFICER ELIOPOULOS: We're in, I think, agreement. So really to get to the next -- next steps we put, you know, some of the conclusions in the materials. And we have an attachment that does that.

Wylie went over the risk related upcoming efforts that we have on ESG.

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CHIEF INVESTMENT OFFICER ELIOPOULOS: I think we have -- woops. We have next steps of one January. We'll have a discussion with the Board around ESG strategy and some of the underpinnings of the data and evidence around it. We have a phase 2 of our research initiative. You remember we had the first phase with UC Davis. And that will allow us to refresh all of the new data and evidence to go over that as well. And then as we note here, we

think this is an area that we'll work with the Investment Committee Chair to make sure we look for opportunities in the coming year as well to continue this dialogue and focus on the areas of interest to both staff and Board on these topics. So with that, that concludes our full presentation.

CHAIRPERSON JONES: Okay. Thank you for that presentation. And we have Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: On the divestment issue, the consultants were significantly different. Have you had any conversations with them to find out why at least two of them thought we ought to be doing more on divestments?

CHIEF INVESTMENT OFFICER ELIOPOULOS: You know I have not.

COMMITTEE MEMBER JELINCIC: Okay. Thank you.

CHAIRPERSON JONES: Mr. Lind.

COMMITTEE MEMBER LIND: Thank you.

Two issues, Ted, on the near-term path forward, I guess it's page 46. You know, noting that staff is establishing this subcommittee to the internal investment strategy group on governance and sustainability issues, a great idea. I like to hear that. I would note that it sort of parallels one of the things I've been advocating here for as a potential subcommittee of the Investment

Committee. And I know that's on our menu for the Ad Hoc Global Governance Committee to discuss, but I just wanted to comment there could be some good synergy there, if we decide to go in that direction.

The other thing I mentioned, I think, to a couple people, and I think -- I think on the briefing as well, one of the concerns I had from the off-site was when we did the whole clicker exercise and set priorities and all of that I think the way it was asked or set up or framed or whatever, I think we may have minimized the Board's interest in exploring income inequality as a long-term Investment risk.

I know we have our timeline and our -- you know, our approach and all that. I'm not suggesting at this point that we fiddle with it, but I would appreciate, you know, long before we come to the end of the process at the end of next year, at least an update on some of the research that's been done. I know we've had a dedicated intern and you know some of the resources. So it would be great, you know, at some point, if we could just kind of hear how that's going and what's there. So maybe, Anne, you could report to us at some point in the next few months.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Perhaps at our next regularly scheduled quarterly, you know, report

from the Global Governance.

COMMITTEE MEMBER LIND: That would be great.

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CHAIRPERSON JONES: Okay. Thank you for the report.

6 CHIEF INVESTMENT OFFICER ELIOPOULOS: Thank you.

CHAIRPERSON JONES: Okay. Now, we move on to the next item on the agenda, CalPERS Consultant Public Fund Universe Comparison Report.

Mr. Junkin.

MR. JUNKIN: Good morning. Andrew Junkin with Wilshire Consulting.

(Thereupon an overhead presentation was presented as follows.)

MR. JUNKIN: This is an annual report that compares CalPERS to the universe of large pension plans 10 billion and greater in asset value. There's some characteristics that are listed on the cover page from staff, which I'm going to -- I'll just leave those there and I'll flip through the report. I'm not going to hit every page. I'm just going to draw some highlights outs here.

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MR. JUNKIN: So first on page two, this is the total fund return. That's the little "t" in the graphs

here. I apologize for the graphics. They're pretty basic here. Most of these pages are going to work the same way, so I'm going to walk you through one of them sort of in greater detail, and then we can move rather rapidly through the rest of them.

If you come down to the bottom three lines there, that top line, total plan - composites, the T, the number in parentheses represents the percentile ranking. And the lower the number, the better the ranking. So you can see, for example, in the two-year ranking the Wilshire 5000 represents the first percentile. That would have been the best performing pension fund. Well, it's not a pension fun. It's an index. And it's all equities, and the equity market has been on quite a tear, so that doesn't -- that makes sense.

But pension funds are balanced. So you can see here then as we walk through the CalPERS returns, and I really don't like to focus on the shorter term returns. I won't even comment on shorter than one year. Over the last year, 79th percentile. Moving up into the top half for a series of years and then out to the five year number in the 60th percentile, the seven-year number, which really takes the brunt of the real estate number into account, the 96th percentile. And then over 10 years in the 77th percentile. The seven and the 10-year number

obviously both have that real estate year in it. So that cannot be overstated, I think.

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MR. JUNKIN: Moving on to page three -- so that format will repeat a number of times. If there are any questions on the format, I'm happy to take those at any point.

This chart is labeled risk versus total return on my copy. I have crossed that out. It now says volatility versus total return.

(Laughter.)

MR. JUNKIN: I will try to make that change.

Again, this graphics package, as you can see by our stellar looking "T" leaves something to be desired. So I'll try to get that edited.

But here, this is the three-year volatility versus total return. And the T is kind of embedded right near the middle. The cross-hairs of this graph would be the median, both the risk median and the return median. And you can see that CalPERS, if you look at the legend at the bottom, had a volatility value of 4 percent over the last three years, a little over 4. The median is right at 4, so effectively no difference. When you think that this is a standard deviation, those numbers are roughly the same.

That puts you in about the 36th percentile. In terms of return, you can see the return was 11.2 versus 11 from the median, so top half with roughly median risk.

That's the three-year chart.

Page four is the 5-year chart.

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MR. JUNKIN: Here, the risk is a bit lower, 6.75 versus 7.4. So below median risk. Slightly below median return, 10.94 versus the median return of 11.11. That puts you in the 60th percentile. You know you typically don't want to see higher risk, lower return. That's bad. Obviously, you'd love to see lower risk, higher return. That's ideal. Lower risk, lower return, Higher risk, higher return, I think those begin to make sense. And it just depends on what's the back story? Does the strategy sort of support that kind of ranking?

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MR. JUNKIN: Page five is the asset allocation. So this is the actual percentage allocation to each one of these categories. It's not performance. It's not volatility. A couple of things stand out here. One is the relatively low ranking of U.S. equity, and the relatively high ranking of international equity.

This is the elimination of the home country bias in your portfolio. So not to -- not to beat a dead horse,

but I'm going to go back to one of the discussions that just happened in terms of who owns what decisions. This was a strategic decision that the Board made upon recommendations from staff.

But to then say to staff we're going to measure your performance -- even though we've mandated that you have this globally balanced equity portfolio, we're going to just compare you to the Wilshire 5000 would be unfair, and it could create just problems in the system, right? They would be judged on things that are beyond their control.

So I just wanted to point that out. This is to Mr. Jelincic's point, you know, asset allocation, strategic decisions like this that are clearly the Board's decision, then staff can go implement them. To the extent that they deviate slightly is permitted by policy, staff owns that performance. That's Wilshire's view.

I won't touch on anymore there.

Moving on to page six.

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MR. JUNKIN: This is -- oops, sorry. This is total equity. So for most plans, that's the combination of domestic equity plus international equity. Most plans do have the home country bias. So what you're seeing filter through the performance here is the non-biased

portfolio. So you can see, over the last year, that performance of one percent ranks in the 93rd percentile.

But compare the Wilshire 5000 the broad U.S. market with a return of 7. And then EAFE, right below that, the broad non-U.S. developed market with a return of minus 4. By the way, emerging markets, which are part of your plan, were even worse than that. You can see how the decision to allocate more to international and less to domestic, all other things being equal, was a drag on performance. And that's been the case for a while.

If you go out to the five year, I think what's striking here is that -- and again, this is a total equity comparison across all of the plans, so it does include international plus domestic. The international index is the absolute worst performer and the domestic index is the absolutely best performer. So the more you tilt it towards the U.S., the better off you were. That's the takeaway here.

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MR. JUNKIN: I'm going to go to page eight. So we are going to take that apart now, and we're just going to look at U.S. equity performance, because we have the capability of doing that.

Over the one year, you can see CalPERS is in the 65th percentile; over five years, the 46th percentile;

- over 10 years, the 35th percentile, but very near the index. Again, the equity portfolio is not purely an index fund, but it is very tightly risk constrained to the index. Whether it's domestic, or global, or international, the components roll back up to that risk-controlled position. So not being far from the index
- here is not unexpected, but it has lead to and in domestic only since pretty good peer relative performance over the longer term periods.
- 10 CHAIRPERSON JONES: Hold on just a minimum, Mr. 11 Junkin. Mr. Jelincic has a question.
 - COMMITTEE MEMBER JELINCIC: The equity here is only public market equity?
- MR. JUNKIN: That's correct.
- 15 COMMITTEE MEMBER JELINCIC: Thank you.

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- MR. JUNKIN: International equity is on page 10. It's a bit messier, in that -- so as I mentioned, the U.S./non-U.S. split impacts total equity. The split here that matters is developed versus emerging.
- So let me just give you a couple of data points that are not on the page. If you look at the one-year number, the EAFE index was down 4.2. That's provided. Emerging markets were down about five percent, so in line, but a little bit worse. Over the last five years, EAFE up

9½, emerging markets up only four.

So plans, within the peer universe that had more allocated to emerging markets likely performed less well. And you can see the CalPERS peer rankings here. Pretty close to the median, except for the one-year number. The other confusing factor that's not easy to disentangle is if there's any currency hedging going on in the portfolios here, that will come through the returns of the universe as well.

And given the strength that we've seen in the dollar, that's been about a 20 percent head-wind if you have not hedged currencies. If you have, then you've had a tailwind relative to the peers.

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CHAIRPERSON JONES: Andrew, back to that chart a minute. Is it just a graphing error or is it saying something else? Look at the median on the 10-year, for example, and I compared that to the 25th percentile, it's very close, but on the others it seems to be spaced between.

MR. JUNKIN: I think what you're seeing is that really over the long term, international markets, developed emerging, hedged, non-hedged have performed reasonably similarly. But most recently, they've been wildly divergent. There's been a 10-point swing between

developed markets and emerging markets. There's been a 20-point swing between hedged and non-hedged returns.

But that's more recent in the last year or two.

And so that is showing up definitely in the one and the two-year that the height of that bar really represents the dispersion of the returns within the universe. But out at the longer term time periods, because everything has kind of converged, the bar is a lot shorter.

CHAIRPERSON JONES: Okay.

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MR. JUNKIN: Private equity is on page 14, and there's no index. There's no index in private equity. That makes sense. Really, I think the numbers here, again the shorter term time periods for private equity are challenging to evaluate. There's timing lags on when things get marked to market, but really above median performance everything, one year and beyond, I'd probably, you know, start looking at this at three years and really kind of start caring at about five years. And the five year and longer performance has been, you know, 21st percentile, 40th percentile, 37th percentile. So private equity, relative to your peers, has done well.

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MR. JUNKIN: Page 14, this is total fixed income. Peer group rankings here look good, particularly out at

the long term, five years, seven years, 10 years, top 15 percent, top 5 percent. That's been a good asset class. This is another space where you tend to look a little bit different than your peers, in that you have a slightly longer duration, and that has added to returns over that period of time.

So any time -- you know, this is the danger of peer groups. And I think one of the reasons we went to doing this once a year, rather than once a quarter, which is what we used to do, any sort of -- I'm going to put quote marks around this, even though that probably won't make it into the record -- "Maverick Risk" in your portfolio, any way you just happen to look different than your peers, is magnified in the short term.

Now, through the ALM process, we know that you're making the right asset allocation decisions for CalPERS.

That's what that entire two-year process is designed to do. But it leads you to a slightly different asset allocation than any particular peer fund in here. And so it may cause you to look slightly different. That's a risk.

That doesn't mean that it's the wrong thing for you all to do, or it doesn't mean that, you know, just because you've had a longer duration that you were necessarily smarter than everybody else. That was a

strategic decision that you all made a very long time ago, one that we've supported, it's been beneficial to returns.

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MR. JUNKIN: I'm actually going to skip ahead to page 20, because the next two sections just break apart fixed income into U.S. and non-U.S. Page 20 is the real estate returns.

It's pretty striking the difference. You know, one through five years the relative ranking is great.

It's really top decile all the way. And then we hit that seven-year number where 2008 is included and we hit the 10-year number, and the returns come back to earth.

So I think the repositioning of the real estate portfolio, the change in strategy is really kind of shining through in these results. And you all should be quite pleased.

 $\,$ And I'm going to stop there and see if there are any other questions for me.

CHAIRPERSON JONES: No further questions.

Thank you very much.

MR. JUNKIN: Great.

CHAIRPERSON JONES: Okay. Okay. We're going to go on to the next item on the agenda, Corporate Engagement: Enhanced Focus List Strategy.

(Thereupon an overhead presentation was

presented as follows.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: Great. Mr. Jones, while Dan Bienvenue and Anne Simpson make their way up, let me introduce this item.

The Focus List Program, as the committee is well aware began in 1987. And since 1987 to date, the Focus List Program has focused exclusively on the U.S. stock market, which, of course, is our largest geographic exposure in our portfolio. We collectively, the Investment Committee and staff, adopted a new focus list approach last year to employ the program at a greater scale, you know, with the potential of greater impact to the overall portfolio, and also allow the focus list methodology to be used in international markets rather than just the U.S.

And as Dan and Anne will present, Japan was selected for concentrated market engagement. And that certainly makes a lot of sense from a size and scale standpoint, since Japan is our second largest geographic exposure in public equities, so it makes sense from that scale perspective.

But in addition to that, it's also very timely, because it supports a very important new direction within Japan from both Prime Minister Abe, as well as the institutional investor base within Japan for improvements

in corporate governance. And we're -- we think this is timely and important for us to support those efforts that the Japanese markets and Japan as a country are undertaking.

So with that, I will turn it over to Dan and Anne.

MANAGING INVESTMENT DIRECTOR BIENVENUE: Thanks,
Ted. Good morning. Dan Bienvenue, Managing Investment
Director for Global Equity.

And I'm joined, of course, by Anne Simpson,

Investment Director of Global Governance, and Craig Rhines
an Investment Officer within Anne's Governance team.

So if you'll recall in November of 2014, the Committee took a decision to enhance our focus list strategy. And one of the things that staff committed to was to be back here within a year to provide an update, and that, of course, is the purpose of this item.

So the focus list dates back to 1987 with the objective being to increase company returns through improvements in governance using the tactic, of course, of engagement. As Ted mentioned, we're very well aligned on engagement.

The program has evolved greatly over the past several years with numerous evolutions, the most recent one of which, as Ted says, being to -- to take it to being

global, first of all, broadening out the universe, broadening out -- or improving the selection methodology, and improving the way that we monetize and measure the program.

So as Ted also mentioned, one of the goals was to increase the scale, so making it more meaningful and impactful on the holistic global equity portfolio. And part of taking it global was creating that ability to increase the scale.

We also refined the selection criteria, leveraging our external manager and strategic partners both in the selection, but then also in the engagements themselves.

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MANAGING INVESTMENT DIRECTOR BIENVENUE: So as you can see from slide 3 here, the Focus List Program ties very well to several of CalPERS' strategic goals, both the business plan -- the CalPERS business plan and the Investment Office roadmap, and it also aligns very well with our Investment Beliefs.

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MANAGING INVESTMENT DIRECTOR BIENVENUE: Slide 4 reflects a timeline really just kind of showing some of those evolutions. And really it's important that we've really tried to evolve this program, taking it again from

being U.S. focused to now global in nature, and really trying to increase the scale and the impact.

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MANAGING INVESTMENT DIRECTOR BIENVENUE: And that increase in scale is really shown very clearly on this slide here. You can see that the companies that we've chosen this year represent actually a multiple in terms of the scale of those chosen in recent past cohorts. And also very importantly, they also reflect overweights in the existing global equity portfolio, the holistic portfolio, meaning that the -- any positive impact from those engagements will have not only just pure economic returns, which are certainly important, but will also have relatively return implications, which is also very helpful, again increasing the scale and increasing the impact improving the results of the holistic global equity portfolio.

So my role here was really just to provide a bit of background. And that's the back I have. I'm happy to answer any questions. And otherwise I'll turn it over to Anne to take us through the specifics.

CHAIRPERSON JONES: We can move forward.

Ms. Simpson.

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INVESTMENT DIRECTOR SIMPSON: Thank you. The

Focus List Program is very important for CalPERS. And one reason I'm aware of whenever we go to talk to companies is it's our own experience showing that engagement adds value. And I think being able to broaden the scale and the impact of that approach is a really wonderful opportunity.

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INVESTMENT DIRECTOR SIMPSON: So what I'd like to do is just give you a little bit more depth on Ted's comments about why we've chosen to work in Japan. I know when we first started looking at a global approach, there was caution from the Board that we would proceed carefully. I think there was an understanding that we have tremendous experience and depth of knowledge about how the U.S. market works and what the opportunities are.

So we've really taken our time in considering this carefully. In the U.S. market, CalPERS is very active, but so are many other investors. So by going beyond the borders of the United States, I think we're accepting that, first of all, we have a global presence, because we have a global portfolio, but also that the debate on good governance on sustainable investment is now international. It's not something just confined to say the U.S. and the UK.

So as was mentioned by Ted and Dan, we are

looking at Japan from the point of view of scale as a market. It's our second biggest. The next important consideration for us always is what's the opportunity? We can see that in Japan there's a great debate at the moment about how to improve economic performance. And as Ted mentioned, the Prime Minister Shinzo Abe has actually highlighted governance reform as one of three core areas of work for Japan in order to really encourage economic performance back to where it should be.

And I think this gives us an opportunity to work in partnership with other investors and companies in that market. And I think without that local interest and opportunity, we wouldn't -- we wouldn't be considering taking the focus list there.

The other issue that we have considered as important is the question of I suppose impact, but also efficiency. If we're going to take on an overseas market, we really want to make sure we've done our homework, that we've been very thoughtful about the approach. We're not just swinging in with something that worked in the U.S. for so many years, but we're very attentive to the local legal, economic, and cultural dimension.

So if we had, I think, decided to scatter ourselves between different jurisdictions, it would be very difficult to take that thoughtful approach. We did

when we looked at the top 100 plus overweight positions have markets as different as France and Germany and Brazil. But really to stretch ourselves into those different settings would mean we'd really be, you know, a mile wide and an inch deep.

And I think the success of the Focus List

Program, as the name suggests, is really that we put

effort and thought and care over a relatively long period

of time.

The other consideration for us is what is CalPERS reputation in Japan? And I think it's important to just recap that we were -- have been active members of the Asian Corporate Governance Association for many years, and contributed to the development of a white paper, which was very well received in Japan a few years ago, and also that we've been able to send staff on visits and delegations to Japan to meet with regulators, fellow investors, and companies over a number of years.

And also, we have made sure that we've raised our voice to support local reform initiatives like the corporate governance code, which has just been issued.

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INVESTMENT DIRECTOR SIMPSON: The next slides are really to give you a sense of what we see as the opportunity. And I think it explains why Prime Minister

Shinzo Abe has really seen corporate governance as one way to bring economic revitalization to Japan. These are just a couple of slides that Craig Rhines and Doug Chen have put together to show where Japan is on our, for CalPERS top 10 countries return on equity.

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INVESTMENT DIRECTOR SIMPSON: Likewise, we can see a similar -- a similar opportunity for Japan.

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INVESTMENT DIRECTOR SIMPSON: I think another consideration for us is that Japan has been welcoming foreign investors very actively in recent years. And now, I think the Japanese market is not only viewed as a global player by size, but also it's a global player by the investor money that's actually invested in the Tokyo Stock Exchange.

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INVESTMENT DIRECTOR SIMPSON: So we have here just a summary of some key initiatives that we think really give us this opportunity to work in partnership with the Japanese agenda for reform. I want to highlight in the middle that Japan in 2014 developed an investor stewardship code, which was really calling on investors to pick up their responsibilities as owners. I think this is very consistent with Calpers own approach to investment as

set out in the Investment Beliefs. And you'll see at the back of this slide deck that we actually translated CalPERS Investment Beliefs into Japanese, and were able to share those in meetings with both companies that we got together with, but also other local market players too.

And the feedback that we've received so far has been very positive. There's been a very high degree of interest in the way that CalPERS is thinking about long-term ownership and responsibility. And I think that's the first step in building this partnership for improvement. It's going to benefit all sides. It will benefit the companies, and it will benefit us as an investor.

So this is just a snapshot of how Craig and his team have developed the engagement. The goal was really, first of all, to meet and introduce CalPERS to those companies who may not be aware of who we are and how we approach investment, to share our Investment Beliefs, and also to explain that we were there in support of the Japanese initiatives, both the investor stewardship code, and also the corporate governance code, which was aimed at companies.

It was also an opportunity to talk in more detail about our governance principles. Although, we are -- they're under review at the moment. And it gave an

opportunity to meet with regulators and other investors who were interested in these issues.

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INVESTMENT DIRECTOR SIMPSON: I won't go through the nitty gritty of how the diary worked out, but Craig is here, and if any of you have questions about the meetings and the welcome that we were -- the warm -- the warm welcome that we were given, we'd be delighted to talk about that.

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INVESTMENT DIRECTOR SIMPSON: So finally, the question is how have we actually approached the reforms that we've asked. They've been structured around CalPERS core issues, which, of course, are investor rights, board quality and diversity, compensation, reporting, and in a separate track regulatory effectiveness, but that's not for our engagement work.

And we've -- we're very glad to find that the Japanese corporate governance code captures many of these issues.

So we haven't wanted to just parachute in with an impossible list of requests and suggestions, so we have really focused on the quality of the Board and diversity being an important part of that. And we were delighted to see that diversity is actually included in the Japanese

corporate governance code, which marks it out for many other markets. So I think there's a recognition in Japan that improving board diversity really is going to be one important part of improving corporate performance.

Another element, apart from the board independence, board quality, that we've focused on has been disclosure of cross-shareholdings. We've also had -- that could be, I suppose, viewed as a transparency agenda. But, of course, if we're not aware of how the cross-shareholdings line up, we don't really understand the control in the company. So it is actually an important part of the reform agenda.

So the next step, we are waiting for a response from the companies, which --

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INVESTMENT DIRECTOR SIMPSON: -- we've written to. We've had our letters translated into Japanese as well. We think this is an important mark of respect. We're looking forward to the responses coming back. It's been encouraging to see a very positive reaction from the companies that we've been talking to. And I think we can see that there really is an appetite for talking with investors about their expectations and finding practical ways to make the reforms that are going to really be aligned with the companies' better performance.

So we'll look forward to reporting back to the Board when we've completed that cycle of review in the next stage of engagement. And we also think given the nuanced nature of the discussion, we would like to report back to you in a case study format. We think that understanding our role as an investor, the complex process of change and the outcomes would be really well captured in a case study approach.

I'd be glad to answer any questions.

Thank you.

CHAIRPERSON JONES: Thank you, Ms. Simpson for the report. And I think that's an excellent idea the case study approach. Case studies tend to provide so much valuable information and all, you know, options looking at information. So that would be great.

INVESTMENT DIRECTOR SIMPSON: Thank you.

CHAIRPERSON JONES: Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: On slides 8 and 9, and you don't need to go back to them, but that was the return on capital and the PE, how much were those influenced by share buy-backs and is that really a U.S. or is it a worldwide phenomenon?

INVESTMENT DIRECTOR SIMPSON: Thank you. That's a good question. I would say that share buy-backs are more popular in the U.S. than in other markets, and

dividends have been the preferred method of returning capital to shareholders.

That is an issue for CalPERS to think more about, because we currently don't have a view. We're agnostic as to how capital is returned, but it's something that we'd like to look at more carefully. That -- share buy-backs have not been the dominant -- there have been some, but it's not been the dominant trend in Japan or to be fair in other markets.

COMMITTEE MEMBER JELINCIC: And you mentioned that you spend time talking to the regulators in Japan. How is that received and what do you think was the -- can you give us sort of a high level on what that conversation was like and about?

INVESTMENT DIRECTOR SIMPSON: I think at a high level, the role of the regulator in Japan, the FSA, is the same as the SEC. It's to protect investors and to promote capital formation, to promote the integrity of the Japanese markets. And I think there's been a great openness and willingness to have dialogue with investors, both locally and internationally.

So we've welcomed our opportunities to meet and better understand the agenda for reform in Japan. And, you know, and to share our approach, because obviously, CalPERS has invested in some 47 markets. So we deal with

regulators in many different settings. So I think that that's an aspect of talking to CalPERS that regulators find useful.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Mrs. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

I -- this is really exciting work. I just wanted to applaud you and the team for the extent of the engagement. My question has to do with -- and I appreciate the case study approach in which this will be all memorialized, because I do think it's important to capture the tenor of the engagement, and certainly the types of issues that we are engaging about.

But my question really has to do with how do we capture these really positive changes that we're going to see to where it could have impact on other type -- on engagements with other companies? And, I mean, obviously not trying to put together any kind of a seal of approval type marker on a company, but just to be able to at least highlight what's possible, and how companies can really, you know, transform and evolve to good governance and improved corporate governance.

INVESTMENT DIRECTOR SIMPSON: Thank you. I think that's a very important point, which is that we are -- have a shared interest with the companies in better

performance. It's good for the company, it's good for the employees, it's good for the economy, and we benefit as investors. So it might be something that we should think about in relation to CalPERS perhaps signing the stewardship code, for example, as an overseas investor to show. I think that's something we should explore.

And also, I think that as companies sign up for the corporate governance code, which is the companion piece, you'll see one of the initiatives in Japan is the Nikkei Index. And that's where companies are given credit for their commitment to the code and their plans to improve.

Is that something, Craig, you'd like to comment on?

INVESTMENT OFFICER RHINES: Sure. Back in -- am on I?

There we go. Craig Rhines, Investment Officer.

As we had highlighted on the timeline, one of the efforts was for the Tokyo Stock Exchange to implement an index that includes corporate governance and financial metrics for inclusion. And that had a tremendous impact in the market.

And going back last year in some visits and engagements through the ACGA, companies were very aware and wanted to discuss that -- that they want to be

included in that index. So that was very important and that had a big impact on the market for companies to both improve corporate governance, and improve their investment returns as well.

MANAGING INVESTMENT DIRECTOR BIENVENUE: You know too, the only thing that I would add is that I think that's a great real point is that a lot of times there are ancillary benefits to others in the industry or in the market. And I would say that that would very likely be part of the case study.

So to the extent that we saw not only a benefit at that company's level but elsewhere, you know, in its peers, we would definitely look to include that in the case study.

CHAIRPERSON JONES: Thank you.

Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you, Mr. Chair. Excuse my voice. Thank you for your presentation.

Well, I think this is very exciting. And Japan is absolutely the right place to sort of branch out into I think. You've articulated very well why that is. And I think -- and I think the initial requested reforms that you've identified really do go to sort of the heart of what is different about the Japanese market vis-à-vis the U.S. The cross-shareholdings is certainly a real key

challenge in Japan, as well as the way that -- the Board composition, which I think is -- so I'm very pleased with the way your first tack into that arena.

Just a question. You know, we've been sort of engaged around the sustainable stock exchange efforts. I don't believe that any of the Japanese stock exchanges have signed on yet. Tokyo and Osaka, I don't think either of them are on. Have you -- what do you think are the prospects for that, and then incorporating some of that into our work further down the road?

INVESTMENT DIRECTOR SIMPSON: The Sustainable Stock Exchanges Initiative is being supported by the PRI, and it's to encourage listing standards to include relevant material information on the environmental, social, and governance factors.

My sense is this is closely aligned to the spirit of the corporate governance code. Japan is a very inclusive -- has a very inclusive corporate culture. I've highlighted the reference to diversity in one part of the code, and I think that what the code is trying to do is highlight the role of shareholders when, in fact, traditionally, and, in fact, by law, Japanese companies are there to serve society and to look after employees.

So I'd be interested in Craig's thought, but mine is that there would be an interest in this. However, I

think it might be a question of timing, because Japan has just launched a stewardship code, a corporate -- for investors, corporate governance code for companies, and it's also, to its great credit, signing up for the international financial reporting standards. So it's got a whole overhaul on accounting and audit, which we don't flag, but it is another big piece of work.

But Craig, would you like to comment on that?

INVESTMENT OFFICER RHINES: Yeah. The only thing
I would -- I would just reiterate, I think the timing in
all the activity, all the initiatives that are currently
underway could be the only obstacle. But my sense is that
there would be perhaps an interest there.

INVESTMENT DIRECTOR SIMPSON: We'd be glad to follow up.

COMMITTEE MEMBER MATHUR: Thank you.

CHAIRPERSON JONES: Okay. Thank you. That concludes the questions, so thank you for the presentation.

INVESTMENT DIRECTOR SIMPSON: Thank you.

CHAIRPERSON JONES: Okay. The next item Consultant Review of Global Equity.

How much time do you think that's going to take?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well,

actually, the first -- 7b, the first one up is the staff

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    review and then 7c is the consultant review.
             CHAIRPERSON JONES:
                                 Okay. Why don't we take a
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    break then right now, a 10-minute break.
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             (Off record: 11:08 AM)
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             (Thereupon a recess was taken.)
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             (On record:
                          11:19 AM)
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             CHAIRPERSON JONES: Reconvening the Investment
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    Committee meeting, please.
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             Okay.
                    Thank you. Now we'll go to our item of
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    Global Equity Annual Program Review.
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             (Thereupon an overhead presentation was
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             presented as follows.)
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             CHAIRPERSON JONES: Whose starting?
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             MANAGING INVESTMENT DIRECTOR BIENVENUE:
                                                       I'm just
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    waiting for the slides to be up here.
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             Well, while we're getting those going, I'll go
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    ahead and introduce ourselves. Good morning. Dan
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    Bienvenue, Managing Investment Director for Global Equity.
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    I'm joined once again this year by John Cole, Investment
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    Director in Global Equity. But then we're also joined by
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    Steve Carden and Don Pontes, who are two new Investment
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   Directors. Not -- certainly not new to global equity,
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   both have been here over 10 years, but new Investment
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   Directors within Global Equity.
             You recall that one of our large initiatives for
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fiscal year 14/15 was to get our leadership team for global equity in place. And Steve and Don's attendance here today really kind of reflects the accomplishment of that initiative.

We've also got Wilshire and Steve who -- I'm sorry Julia Bonafede and Steve Foresti from Wilshire who are available. And I was referring to you as Wilshire, Julia. That's a compliment.

(Laughter.)

MANAGING INVESTMENT DIRECTOR BIENVENUE: But they're available to answer questions, and certainly they'll go through the consultant review.

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MANAGING INVESTMENT DIRECTOR BIENVENUE: Okay.

So by way of executive summary, candidly, global equity had a challenging year in return space, both absolute returns and relative returns, returning 1 percent versus a benchmark return of 1.3 percent, reflecting underperformance of 30 basis points.

That said, the portfolio has continued to evolve over that time period while maintaining relatively low levels of active risk. One of those evolutions is greater use of alternative betas, both the levers that we have available to us to pool and to allocate to, but then also how much we allocate to those -- to those alternative

betas.

We've also had ongoing rationalization of our strategies, especially in the activist manager space. And we've also continued to position the portfolio really where we think we're going to be compensated for the exposures that we're talking. That's something that we're very focused on is making sure that any risks we're taking and in line with our Investment Beliefs are risks that we believe we'll be compensated.

We've also continued to evolve our business model creating a governance structure that facilitates broader and deeper inputs into our capital allocation process, also greater collaboration and team work across our functional structure. This is really important for us that we're one team, and we're all striving together to achieve one set of goals.

We've made some real strides in technology with two very large deployments that happened in fiscal year 14/15. And finally, we've continued to focus on our people getting the right people in the right roles and really developing our team.

So last year, as you may recall, we talked about what we're here to do every day is manage the portfolio and manage the business model that supports the management of the portfolio. You'll see that not only this summary,

but the program review is laid out that way. And that's really important that we're trying to manage the portfolio first and foremost, but we've got to get the business model right in order to facilitate the management of the portfolio.

So two quick housekeeping items. First, all the data in the program review is as of June 30th, 2015. The end of the fiscal year, unless it's otherwise specified, which there is one place where that's the case. And also we've set up a handful of places that we've set aside to answer questions. So if we could please ask the members of the Committee just to hold questions until we get to those -- those places. We will take a couple of periodic breaks to ask for questions, but that way we can kind of keep moving through the slides.

So that's all I have prepared. And with that, I'll turn it over to John to talk about the integration of the Investment Beliefs.

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INVESTMENT DIRECTOR COLE: Thanks, Dan. Excuse me. I'm John Cole. And as Dan noted, my job today is to provide context as to how the global equity portfolio and underlying activities relate to our Investment Beliefs.

I'll focus on page 3 of 32, and especially on those Beliefs that are colored yellow. The key for the

Investment Beliefs for your reference is on page four, which lays out in a little longer detail what each one is addressing.

Our color coding is the same as last year. Green corresponds to areas that are clearly defined, addressed, and aligned with global equity existing objectives. Yolo corresponds to Beliefs that involve trade-offs and have inherent tensions. It's on the yellow coded ones that I'll make some specific comments.

Although the colors are the same as they were a year ago in our report to you, we have gained more clarity and made some progress in addressing them.

Let's start with Belief number 1, liabilities must influence the asset structure.

Here, as you know, is where the work done by the Actuarial Office on risk mitigation and our ongoing efforts around portfolio priorities come together.

Presently, what we do in global equities does not address those broader perspectives, instead solely focusing on capturing the equity beta and accepting the volatility and other characteristics which are endemic to our global cap-weighted benchmark.

The focus is currently on tracking error, that is staying tight to the benchmark. At the same time, we're well along in developing the capabilities needed to do

more. This can occur as you become more comfortable and committed to the total fund portfolio priorities and their implications.

Additionally, we are working together with the asset allocation team and the Actuarial Office in the development of common factors to express exposures across both assets and liabilities.

Next is Investment Belief number 2, a long-term investment horizon is a responsibility and an advantage. Our conflict here is that operating within a tight tracking error prevents results that are different from whatever the market gives us. Our efforts underway are to provide the structural alternatives that change our objective and extend our effective time horizon while addressing the portfolio priorities that you will set out. Our work together on this continues over the next 18 months.

Third, is the Belief that CalPERS investment decisions may reflect wider stakeholder views. Here our focus is to consider and express the important fiduciary trade-offs impacting our investments. We are champions of the critical role of engagement in most aspects of what we do, in order to get desired results by influencing target company or industry behavior directly.

The tension here is that not all agree on what is

the right outcome, nor the appropriate manner in which to achieve it. This also encompasses the acknowledgement of the impact of our decisions on others, for example, the employers who contribute to CalPERS on behalf of their members.

The fourth Belief states long-term value creation requires the effective management of three forms of capital, financial, physical, and human. This aligns with our work related to ESG and the enhanced focus list to proactively influence behaviors of companies and investment managers that we work with. The healthy debate is to what issues matter and how we engage and it's an ongoing and necessary tension.

And finally, Belief number 9 says that the risk of CalPERS is multi-faceted, and not fully captured through measures such as volatility or tracking error. As earlier noted, we measure many risks, but their expression and management in our portfolio is largely dominated by that narrow tracking error. Together, we'll continue to explore how our portfolio priorities could change that in the future.

By not calling out the other five Beliefs, we are not diminishing the importance or our focus, but rather believe they're already adequately expressed within global equity and will be touched upon through the rest of this

program review.

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With that, and I'll pause before I turn it over to Steve and see if there are any comments or questions.

CHAIRPERSON JONES: Okay. Thank you.

Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you -- excuse me -- for your comments. Excuse me.

You spoke a bit about the efforts that are underway to move global equity towards a longer term horizon. I think that's really important. One thing I noted in my briefing before the meeting is that the policy review that is up at the next agenda item it still retains that sort of volatility focus, which is a very sort of short-term risk measure.

And so I would just challenge us to sort of think about how we can better incorporate that long-term view into the policy as well. I just wanted to mention one other thing. It's been a year since we exited hedge funds. And so that, I think, is also a positive step towards a long-term horizon. So if this could be orange, maybe that would be a better color, because I think that was a significant move on our part.

Thank you.

INVESTMENT DIRECTOR COLE: Thank you.

MANAGING INVESTMENT DIRECTOR BIENVENUE: Yes.

We've Explicitly chosen just three -- just three colors candidly, but we're -- I would definitely agree that most of them have shades for sure.

And as far as, you know, the policy item, we'll get to the policy item in the next one. But it is definitely the case that the work that we're doing around portfolio priorities, the work that we're doing around the benchmarks and the appropriate benchmarks to use certainly speaks to that. And right now, the role of global equity is, you know, cap-weighted global equity markets, all cap. But without a doubt, we're looking to evolve our capability, so that to the extent that the mandate changes, that we're very well leveraged and prepared to, you know, to get right up to that.

CHAIRPERSON JONES: Okay. Ms. Taylor.

COMMITTEE MEMBER TAYLOR: I appreciate your comments, John. I just had a question. As I was trying to write down kind of what you were talking about, could you unpack number 2 for me, the tensions that you were listing on number 2. I just got a little confused.

INVESTMENT DIRECTOR COLE: Number 2 is the long-term investment horizon is a responsibility and an advantage. What the point that I -- the key point that I'm trying to make there is that we all believe that, and it's a mom and apple pie type statement. But the reality

of being pegged and closely tracking the markets daily weekly, monthly, annually makes it kind of a hollow statement directly as it relates to global equity and our role today in the portfolio.

COMMITTEE MEMBER TAYLOR: Okay. Okay.

INVESTMENT DIRECTOR COLE: And we believe there are -- and those are the things we've talked about, there are alternatives and those are the things we're working on together, but we want to acknowledge forthrightly the way the portfolio exists and is managed today is to -- is to deliver the returns that we get today.

COMMITTEE MEMBER TAYLOR: Okay. Great. Thank you.

MANAGING INVESTMENT DIRECTOR BIENVENUE: Yeah.

The only thing I would add to that -- those are all very much -- the only thing I would add to that is just that remember that when we use the color yellow, we're not saying there's no alignment there. We're saying there's just some tension there. And this being an annual program review is a perfect example of it, right, that we are trying to focus on the long term. We're taking these alternative betas. But to be perfectly candid, it's uncomfortable to sit up here and say we underperformed the benchmark or underperformed whatever it is that you're expecting of us.

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1 COMMITTEE MEMBER TAYLOR: Right. MANAGING INVESTMENT DIRECTOR BIENVENUE: But, you 2 3 know, we're comfortable with that discomfort, I guess, if 4 we can say that. But it is the case that we have to 5 focus -- that it's -- there is always some tension on 6 taking us towards the short-term, when we should be 7 focusing on the long term, and that's what that tension 8 refers to. 9 COMMITTEE MEMBER TAYLOR: Okay. And that's what 10 I was trying to clarify. 11 Thank you. CHAIRPERSON JONES: Mr. Jelincic. 12 13 COMMITTEE MEMBER JELINCIC: How is 3 different 14 from a year ago? 15 INVESTMENT DIRECTOR COLE: Number 3, stakeholders 16 and --17 COMMITTEE MEMBER JELINCIC: No, I'm sorry, page 18 three. INVESTMENT DIRECTOR COLE: Page three. 19 20 COMMITTEE MEMBER JELINCIC: Your little chart of 21 the yellows and greens. 22 INVESTMENT DIRECTOR COLE: Oh, it's exactly the 23 same.

COMMITTEE MEMBER JELINCIC: I notice no red.

INVESTMENT DIRECTOR COLE: The colors are exactly

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the same as they were a year ago.

COMMITTEE MEMBER JELINCIC: In all categories?

INVESTMENT DIRECTOR COLE: In all categories.

COMMITTEE MEMBER JELINCIC: Okay. And the other observation I will make, and then I won't have to make it later, is as we look at the ES&G, and our values, and that makes it more and more of an argument against the cap-weighted index, but I will let it go at that.

Thank you.

INVESTMENT DIRECTOR COLE: Thank you.

MANAGING INVESTMENT DIRECTOR BIENVENUE: The one thing I would say to that is that we are doing more in alternative beta space. And I'm actually really glad you call out, Mr. Jelincic, that the colors are the same as last year, because it's important to note that there are some of these that we think -- if we ever come to you and say that we've got green for multi-faceted risk, we -- if have come to you and say that, I think that that should raise some red flags on your part, because that means that we think we've got the risks figured out. And the fact is that this market evolves and we -- we'll never have the risks perfectly figured out.

So there's challenges in this space. We're focused on the Beliefs and we're focused on expressing them in the program review and in the portfolio. But some

of these are -- will always have some tension.

CHAIRPERSON JONES: Ms. Hollinger.

COMMITTEE MEMBER HOLLINGER: Yeah. Thank you.

Thank you very much for the presentation. I just -- I
have a question. You know, now we see with what's going
on in China or in different parts of the world impacts
domestic markets. There's kind of this contagion of
volatility where something is going on in one part of the
world, it impacts us even domestically.

So I'm just wondering is there -- do you see a paradigm shift that it's no longer segregated to global equity, but just volatility in general, you know, rather than something specific abroad?

INVESTMENT DIRECTOR COLE: Well, I think you hit the nail on the head by saying it's global, and the fact that the interdependencies have only grown more during this past decade. We have referred, and still refer, to emerging markets. Well, that's really an outdated characterization, just because of the heterogeneity of the countries included in that category. And I think broadly your observation about volatility and contagion -- potential contagion is very much associated with that.

So we no longer -- I think what we did several years ago by going to a global benchmark, although timing in hindsight didn't turn out to be great, was exactly the

way to think about the future.

So -- and increasingly as we parse the risks that are in the portfolio, and think about the structure of the portfolio, we think about them kind of across boundaries that didn't exist before.

COMMITTEE MEMBER HOLLINGER: Right. Thank you.

CHAIRPERSON JONES: Okay. Thank you.

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INVESTMENT DIRECTOR CARDEN: Thank you, John. Steve Carden, Investment Director, Global Equities.

And before I get into a review of the fiscal 14/15 time period, let me first highlight a few points that we want to make about the role and the philosophy of global equity.

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INVESTMENT DIRECTOR CARDEN: First of all regarding the role. It's to capture the equity risk premium via ownership in public companies and exposure to global earnings growth. The risk premium is delivered in two forms, both price appreciation and cash yield. And in doing this, we do consider risk, as John mentioned, multi-faceted. The first one to think about is exposure comes with economic risk from the global economy.

We also take into consider liquidity -- into consideration liquidity, and we try to incorporate this

into the portfolio construction process. Regarding the philosophy of global equity, we start by acknowledging that the markets are unpredictable. And we therefore focus our efforts in a number of areas. This includes risk managed efficient delivery of index oriented strategies, alternative beta and traditional active strategies.

The sources of alpha do vary from year to year, and can generally be categorized in one of two areas, either stock selection, which traditionally comes from our active strategies, and also factor exposures, which we get from our alternative beta strategies.

As of June 30th, about 65 percent of our exposure comes from the index oriented, 13 percent from alternative beta, and about 22 percent from traditional active.

As you'll see in a moment, and consistent with the Investment Belief that costs matter, we tried to focus on fees in each of these areas. And as will be discussed in the global equity policy item that follows, the portfolio is managed within an active risk budget of between 0 and 50 basis points.

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INVESTMENT DIRECTOR CARDEN: Slide 8 is simply a snapshot of the Global Equity Policy benchmark. And as you can see, even after the exclusions, we are, as

mentioned previously, in about 47 countries covering 37 currencies. And this represents a scope of the portfolio's reach that is truly global.

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INVESTMENT DIRECTOR CARDEN: Now, let's take a look at some program characteristics. As of June 30th, the global equity portfolio was roughly \$162 billion, or about half of the total plan. Fifty-two percent of this comes from domestic exposure, about 40 percent developed international, and 8 percent emerging markets.

Now, there's a lot of data in this table, so I just want to highlight a few things. First, if we take a look at the activist column. You'll see this is an area of reflecting a high level of active risk and also fees.

As such, we've continued to work on our rationalization of all portfolios and align these aside of all other strategies when competing for capital.

Moving over one column to the emerging managers, the important thing to mention here is that we have completed the restructuring of this program. Now, there are no significant items that jump out. The AUM is about the same, the fees, and the level of risk. But it's worth mentioning that the restructuring has been significant, in that we continue to have five advisors that are now working on the plans we have to allocate meaningful

amounts of capital to well aligned emerging managers.

Now, Don will cover program expenses in more detail in a little bit, but it's worth mentioning that the \$9 million that's listed under the index-oriented column captures staff salaries and all allocated expenses, which represents less than one basis point of cost to the program area.

Now, let's take a closer look at the prior year. --000--

INVESTMENT DIRECTOR CARDEN: As Dan mentioned earlier, it's been a challenging year both on total return and relative return, with global equity delivering a total return of one percent and active return of minus 31 basis points. Viewing performance over a longer period perspective, we do see that the three and the five-year numbers are respectable, while the 10-year history, which includes the financial crisis, reflects underperformance.

We also note here the reductions in the active risk taken over the various periods as volatility in the markets has declined.

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INVESTMENT DIRECTOR CARDEN: Slide 12 shows the 10-year annual numbers along with the three-year rolling excess return history. And this highlights the impact of the fiscal '09 period on an otherwise stable pattern.

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INVESTMENT DIRECTOR CARDEN: Slide 13 shows the total annual performance of the program along with its benchmark and highlights the impact on the plan's funded ratio.

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INVESTMENT DIRECTOR CARDEN: Now, let's take a look at slide 14, which provides a look into the -- some of the significant drivers of performance for the year, and they're not all negative. On the positive side, our developed markets managers delivered 10 basis points of outperformance. Our structured products portfolio, with its efficient use of derivatives, such as CLOs and swaps, provided eight basis points of excess performance.

Securities lending activity, which is predominantly coming from the index-oriented strategies, delivered 6 basis points. And the index-oriented strategies themselves, which are managed at a lower risk level, but still try to outperform, delivered 3 basis points of excess performance.

Now, these positives were unfortunately offset by a few significant negative contributors. The activist strategies, which we noted as running a higher level of active risk detracted 28 basis points for the year.

The second largest negative impact came from the

fundamental strategies, which were down 18 basis points. Now, these are model-driven alternative beta strategies that reflect a general philosophy that markets are mean reverting. And they primarily capture this by investing in value stocks. And the value factor did very poorly during the year.

Significant negative contribution also came from our emerging markets portfolios, which underperformed by 16 basis points.

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INVESTMENT DIRECTOR CARDEN: Looking at slide 15 and the past year relative to the asset liability management assumptions shows that for 2015, we see, as the large circle on the chart, delivered along with the low returns also a low level of risk. The 10-year number represented by the yellow triangle has come in close to the ALM assumptions, though was dragged down by the significantly high risk and large negative return experienced during the fiscal 2009 period, which we see at the bottom extreme right of the chart.

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INVESTMENT DIRECTOR CARDEN: Now, taking a closer look at the risk itself, we see total risk for the global equity portfolio currently forecast at 12.8 percent, with active risk at about 20 basis points, well within

guidelines.

INVESTMENT DIRECTOR CARDEN: On slide 17, we see realized active risk dropping substantially after the financial crisis, and then drifting down even further as the market risk has fallen over the last few years.

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INVESTMENT DIRECTOR CARDEN: Slide 18, the important thing to note here is that as most of the discussion has been around risk as volatility and tracking error, we do see risk as multi-faceted, and we view it through many lenses. For example, our active risk hub here provides views into risk contributions along many aspects. In particular, we note region, sector, and factor exposures.

Now, let's again pause and I'll take questions before turning this over to Don for the portfolio positioning and business review.

CHAIRPERSON JONES: Okay. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: On slide 9, which was the cost, you identified what the 9 was, you know, so it's all staff costs plus allocated expenses. The next column over is the -- for the internal traditional active. And I assume that 10 means the same thing, it's all the allocated costs. The, you know, fees, that we pay for

data and that sort of thing. I just want to make sure that's correct.

MANAGING INVESTMENT DIRECTOR BIENVENUE: That's correct. It's actually primarily license fees. So some of our internal -- several of our internally managed portfolios are internally managed but to an externally provided model, so it's the fees associated with those models.

COMMITTEE MEMBER JELINCIC: And then on 14, the fundamentalist strategies, is that -- are all of the alternative betas listed -- grouped in that category?

MANAGING INVESTMENT DIRECTOR BIENVENUE: No.

COMMITTEE MEMBER JELINCIC: Okay. The -- what -- no alternative beta is always going to outperform, but which -- which have been the best performers, which have been the worst performers? And I'm going to ask the same thing about the fundamentalist strategies.

INVESTMENT DIRECTOR CARDEN: For 14/15, the fundamental strategies are the research affiliates fundamental indices, value based alternative beta, and easily the biggest underperformers. On the outperforming side, we do have exposure to flavor of low volatility, as well as momentum. And those two were the better performers.

COMMITTEE MEMBER JELINCIC: Okay. Thank you.

And on 16 -- 18, I guess it is, your little hub, looking at the green I see first quadrant. So I assume that's referring to that particular manager. And as I look at the different titles they refer to the specific managers or programs.

MANAGING INVESTMENT DIRECTOR BIENVENUE: Specific strategies, yes.

COMMITTEE MEMBER JELINCIC: Okay. Thank you. Just trying to understand what I'm looking at.

CHAIRPERSON JONES: Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you, Mr. Chair.

If we could take a look at page nine, you highlighted the activist managers, which are not active -- they're not in the same category as our active managers. The activists, those are the more concentrated portfolios that are focusing on corporate governance, is that right?

MANAGING INVESTMENT DIRECTOR BIENVENUE: Yeah, they're what we -- legacy had in our quote Corporate Governance Program. And to Steve's point previously, we really want to migrate to a place where they all compete for capital in the same way.

COMMITTEE MEMBER MATHUR: Right.

MANAGING INVESTMENT DIRECTOR BIENVENUE: And that's one of the reasons behind the rationalization.

COMMITTEE MEMBER MATHUR: And really, in a way, with our enhanced focus list, we're sort of internalizing some of those strategies, because we have -- we're taking -- or we're engaging companies where we have active positions.

INVESTMENT DIRECTOR COLE: Correct. But it's an important distinction that we're not trying to serve the same role as an external activist manager, meaning proactively go out, identify a target, and then engage them in a specific way. Instead, as you've heard, and we developed the enhanced focus list takes advantage of our existing overweighted positions and brings our capability to engage directly. So it's important to --

COMMITTEE MEMBER MATHUR: So it's not -- we're not taking -- we're not taking active positions in order to accomplish a corporate governance agenda, but rather we're we have over --

INVESTMENT DIRECTOR COLE: Overweights.

COMMITTEE MEMBER MATHUR: -- overweights - thank you - we are taking a -- so it's a slightly different strategy, but it is --

INVESTMENT DIRECTOR COLE: It's accomplishing -COMMITTEE MEMBER MATHUR: It is accomplishing

24 | somewhat the same thing.

INVESTMENT DIRECTOR COLE: Exactly.

COMMITTEE MEMBER MATHUR: Okay. Thank you. That's helpful.

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Several people today have mentioned our -- the elimination of our home country bias, and how that has disadvantaged us in terms of performance. And I'm wondering if you all are reconsidering that -- reconsidering that stance or that -- you know, that was a significant decision we took, I don't know, 10 years ago or so, I think. And there were good -- there was a good rationale for it, but I'm just wondering, given sort of the forecast of the next 10 years, whether that's something you want to reconsider or we want to?

MANAGING INVESTMENT DIRECTOR BIENVENUE: So I'm actually very -- I'm glad you asked that question. I mean, candidly, the answer is no. I mean, we -- we think we should always be looking at our benchmarks, and that's the work that, you know, we're working on in the portfolio priorities, and whether there are alternatives and ways to -- you know, to adjust the benchmark.

However, going back from cap-weighted is something more home country biased. We just think that narrows our diversification set and, you know, with the -- you never pick the timing on these things right.

COMMITTEE MEMBER MATHUR: Yeah.

MANAGING INVESTMENT DIRECTOR BIENVENUE: And, you

know, depending on what time period you look like -- you know, you take, you can look either really good or more challenged, but we still think that that's the -- we're committed to the most broadly diversified portfolio, and benchmark is the correct one.

COMMITTEE MEMBER MATHUR: Okay. So taking the long-term view, you still think that that was the right decision?

MANAGING INVESTMENT DIRECTOR BIENVENUE: Yes. Yes, ma'am.

COMMITTEE MEMBER MATHUR: Okay. Excellent.

I had one other -- or actually two other questions. One is page 16, I believe we're still using the word "risk", where we should be using "volatility" or "tracking error". Is that --

MANAGING INVESTMENT DIRECTOR BIENVENUE: Noted.

It's funny you say that, but as we were going through, I saw both our use of the word and also in the slides using the word risk, and we should really be clear about what we mean by that.

COMMITTEE MEMBER MATHUR: What kind of risk we're taking about. Thank you.

MANAGING INVESTMENT DIRECTOR BIENVENUE: So I'd like to say that you won't see that next year.

COMMITTEE MEMBER MATHUR: Okay. Excellent.

And then finally, just with respect to securities lending, can you remind me who -- who borrows -- or who do we lend to, and how does that impact our proxy voting, if at all?

MANAGING INVESTMENT DIRECTOR BIENVENUE: So the majority of who we lend to is prime brokers out there that are looking to take our stock, and then allow facilitation of shorts. Oh, this is excellent. I'll defer to -- I think I could have answered the question on proxy, but I think Anne will do a much better job, so I'll defer to her.

INVESTMENT DIRECTOR SIMPSON: Anne Simpson. It is team work.

(Laughter.)

INVESTMENT DIRECTOR SIMPSON: So we have a securities lending policy, which allows the Governance Program to call back shares at a point where we can consider the vote important. And we always do that when we file a proposal or as we are running a proxy solicitation at Bank of America at the moment, it's an example where -- because we -- our votes should not be for stale on the governance issue.

COMMITTEE MEMBER MATHUR: Yes.

INVESTMENT DIRECTOR SIMPSON: So we've got it structured that the governance agenda takes priority over

the cash that we can earn, so another example of being long term, I think.

COMMITTEE MEMBER MATHUR: Great. Are we -that's really helpful. Thank you. Are we concerned at
all that our engagement in this area is supporting some of
the shorter term strategies that are contributing to froth
in the market and volatility in the markets?

MANAGING INVESTMENT DIRECTOR BIENVENUE: It's certainly something that we're monitoring. I mean, we think that the value that we get of the securities lending is material. I mean, six basis points on \$160 billion is a lot. But it's certainly something that we're -- you know, kind of two-sided on. On the one hand we do believe that shorting and things like that allow for efficiency in the markets.

However, you know, I do think that you've seen some of the -- some of the volatility that you've seen and some of the apparent liquidity that's not real liquidity is a concern of ours and is certainly something that we're spending quite a bit of time on. Don specifically spends a lot of that. And he's actually going to be participating in an industry organization that looks at that topic as one of many.

COMMITTEE MEMBER MATHUR: Thank you. And I said that that was my last question, but I actually have one

more, and that's about high frequency trading and sort of how that impacts us and our -- you know, our ability to deliver returns over the long-term. And if you've been thinking at all about that as systemic risk and how we're looking to address it, if it is.

INVESTMENT DIRECTOR PONTES: Yeah, I'll take that. Don Pontes, Investment Director, Global Equity.

Yeah, so high frequency trading, and really any deemed potential predatory participant in the marketplace is something that we keep close attention to and have for quite some time.

I think the real important thing to note there is that's where relationships with our agency counterparties on the street become extremely important. And so we -- we certainly keep a close watch on what we think would be potential risks in the marketplace, but really we're asking the folks who represent us on an agency basis to keep us posted to put in safeguards with regard to our execution -- the execution of our activity, and it's really just solid two-way communication that puts us in the best position to protect against those risks.

COMMITTEE MEMBER MATHUR: And are we looking at IEX the new investor exchange and what -- and their efforts to sort of mitigate high frequency trading risk for investments?

INVESTMENT DIRECTOR PONTES: We are. We had IEX actually on site last year.

COMMITTEE MEMBER MATHUR: Great.

INVESTMENT DIRECTOR PONTES: And we -- while I don't say anything as far as where we directly execute, but we have had conversations and communication with them, and will continue to.

COMMITTEE MEMBER MATHUR: Thank you.

CHAIRPERSON JONES: Okay. Proceed.

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INVESTMENT DIRECTOR PONTES: There we go.

Well, good morning, everyone. As I just said, Don Pontes, Investment Director, Global Equity.

And as Steve mentioned, we'll now shift to take a look at global equity's portfolio positioning in the context of both the current global environment as well as historical performance of public equities.

Starting with the table on the left, you can see we're showing some basic price change returns for a number of select indices. And we're reminded really of the decoupling story that really dictated performance for the last year. It saw both U.S. Economic growth and U.S. market performance really distinguish itself from the rest of the globe.

And so this is evident here by the negative

returns really across the Board, but really the negative returns seen for the all-world index. While at the same time, the U.S. component, which makes up roughly half of that global benchmark, was nearly five percent positive.

Also of importance when attributing last fiscal year's global equity returns would be the impact realized by sizeable currency moves. So you can see in the bottom left, in the case of China, which for the FTSE benchmark is made up entirely of Hong Kong traded shares, where the currency is directly pegged to the U.S. dollar, we had mirror returns for both local and U.S. performance, while on the other hand for both Germany and Russia, both realized measurable impact when those local index returns were converted into U.S. dollar space.

But as Wilshire mentioned earlier, these sort of currency impacts, at least of this magnitude, over a longer measurement period will typically be offset. One final highlight here is the graph at the bottom right, which shows global equity market correlations have really trended towards post crisis lows, which certainly argues to that decoupling story that I highlighted, but it really does show that there is potential opportunity with regard to global allocation and global equity space.

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INVESTMENT DIRECTOR PONTES: So here we have a

longer-term chart of the S&P 500, which I think is always useful as we've touched on a couple of times today to put short-term market performance in the proper long-term perspective. And it's also an approach that's supported by our Investment Beliefs. This long-term upward trend with numerous short-term periods of market volatility really does demonstrate the importance of maintaining a long-term perspective with regards to evaluating equity returns.

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INVESTMENT DIRECTOR PONTES: So here we have the 20-year performance of U.S. equity markets, really highlighted by the recent run-up off of the post-financial crisis lows. And I think it's important to note, as indicated in each of these inflection points, you can see the price-to-earning multiple, indicating the valuation at that point in time. And although this recent run-up has seen certainly an increase in these valuation levels, we are really nowhere near the loftiest levels seen during this 20-year measurement period.

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INVESTMENT DIRECTOR PONTES: And then here you see a developed international chart showing a similar story to the U.S. in terms of the general trend and the general valuation with regard to the same time period.

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INVESTMENT DIRECTOR PONTES: And then finally on page 23, we have the emerging markets, which certainly post-crisis staged a very solid rebound off of those crisis lows, but over the last several years have really trended sideways, and I think would be safe to say is clearly the other side of that decoupling story that we talked about.

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INVESTMENT DIRECTOR PONTES: All right. So next we'll walk through a brief overview of global equity's business structure really to provide a better understanding of some of the key changes that have been implemented across the team in the last year.

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INVESTMENT DIRECTOR PONTES: So global equity's overarching business philosophy has really been formed by the continued integration of all the functional teams within the global equity group, as well as the consistent emphasis that all members of global equity are responsible for managing the holistic portfolio.

So two areas of focus that have been of primary for the team have been really the continued development of our capital allocation process, as well as the continued expansion of our risk analysis and reporting functions.

There's also an increased emphasis on the further development of the skills and resources that are necessary to better enable staff to capitalize on our inherent strengths, as well as our unique long-term positioning and structural advantages.

So finally, in order to really successfully implement this philosophy, we've emphasized the need to promote an environment that encourages collaboration and creativity and really empowers the GE team to accomplish these.

So this is done by developing and promoting the appropriate culture, but it's also done by prioritizing the build-out of the necessary technology and structure that will eliminate manual processes, it will enhance risk controls, and that then allows staff to be better positioned to enhance that global equity portfolio.

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INVESTMENT DIRECTOR PONTES: Page 26. This gives a good visual really of how highly integrated the functional subteams are that make up the greater global equity team. And as an example, you can see each of the six primary functions within the team, which includes unique responsibilities such as capital allocation, and portfolio implementation, they all have specific areas of focus, but they're also very highly integrated.

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INVESTMENT DIRECTOR PONTES: And here is just one more demonstration of the integration story, but in an organizational context. It just again highlights how management of the holistic global equity portfolio is the team's overarching responsibility.

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INVESTMENT DIRECTOR PONTES: And regarding that team, and staffing, and any existing vacancies, as Dan mentioned at the outset, we have filled several key positions in the last year. The focus in filling these positions though was not solely on necessary skills and work experience, but really also on enhancing the team's structure and continuing the emphasis of collaboration and integration.

Going forward, we do have a few key recruitments remaining, and we will continue to emphasize both individual skills as well as team culture.

CHAIRPERSON JONES: Excuse me. Before you go forward on this particular chart, the 10 appointments, the Investment Officers, Managers, and Directors, how many of those 10 were women or minorities?

MANAGING INVESTMENT DIRECTOR BIENVENUE: So of the 10, four --

CHAIRPERSON JONES: Four?

MANAGING INVESTMENT DIRECTOR BIENVENUE: Yeah -- reflect women and minorities.

CHAIRPERSON JONES: Okay. Thank you. Oh, just a minute. Priya -- Ms. Mathur.

COMMITTEE MEMBER MATHUR: I'm sorry. Yeah, that was pretty much my question. Thank you.

CHAIRPERSON JONES: Okay. Proceed.

INVESTMENT DIRECTOR PONTES: Great. Thank you.

All right. So on to slide 29. So here is another look at expenses, which Steve did cover earlier, but I do think it's important to note a couple of things. One being the total Global Equity Program expense remaining at a 11 basis points, which is exceedingly low and certainly less than you would see at probably every other global equity provider.

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INVESTMENT DIRECTOR PONTES: A few strategy types did experience changes though in fees paid over this prior year, namely the internal and external active managers, as well as the active manager strategies. The internal and external active did see increases in fees paid, the activists saw decreases. But all of these changes really due to shifts in assets under management across the various strategies, as well as changes in the performance fees which, of course, are based on the previous year

performance.

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INVESTMENT DIRECTOR PONTES: So here discussing general trends in our implementation across GE, we see kind of demonstration of a key driver of this consistently low free structure. And it's really been the ability, as we all know over time, to increase the amount of assets in global equity that are managed internally, which is now up to roughly just short of 85 percent of the total portfolio, but it is equally important to note the number of active strategies that have been transitioned internally over this measurement period.

But one thing we are seeing though, as you can see in the table on the right, is the leveling off of that transition towards internal management of these active strategies. And that's really because the state of the team and the structure is at a point where the decision to implement a given strategy, either internally or externally, is really just one factor of many in the strategy development process.

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INVESTMENT DIRECTOR PONTES: Okay. Well, finally, before I hand it back over to Dan to wrap-up our review, I would like to highlight some of our key initiatives and goals for the year ahead. So in the area

of portfolio performance, our focus will be on further department of our ability to capitalize on our inherent structural advantages, continue to improve on our ability to position the global equity portfolio. And then in the area of business process, as detailed earlier, the build-out of key technology initiatives, our capital allocation structure will both continue to be the focus going forward.

And then finally, with regard to plan level objectives, global equity is taking the lead on several key Vision 2020 initiatives, including the integration of ESG, as well as the centralization of the effort to develop and implement strategies that can exploit our many inherent structural advantages.

So unless there are any questions, I will hand it back over to Dan to conclude the review.

CHAIRPERSON JONES: Okay. No further questions. Thank you.

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MANAGING INVESTMENT DIRECTOR BIENVENUE: Okay. So in conclusion, candidly, performances was challenged in fiscal year 14/15. That said, and in line with our Investment Beliefs, we're encouraged by some of the longer term numbers, and -- but this will continue to be a focus. I mean, that's what the team is here to deliver every day,

and so we're going to make sure every day, but also every 10-year period that we're also going to -- we're going to make sure that we continue to focus on the performance.

We did have some key business successes in fiscal year 14/15, the evolution of the team and the business model, you know, with having new personnel put in place, greater collaboration, and really driving that one team culture. We've had some enhancements in our ability to take active positions. So whether that's the alternative beta space or others, we have more levers both in terms of what we can do and then how much we do with it.

We have delivered further cost savings, especially in the activist manager space. And as Don said, we had some major technology advancements, specifically PM2 and Artemis projects being delivered and delivered successfully.

In the current fiscal year, our focus will continue to be on the portfolio obviously. That's our first and foremost responsibility, and so we're -- that -- I expect that every year you'll see that bullet, at least while I'm here. The -- we've continued also to move the business model forward focusing on our culture, focusing on our technology, and again importantly focusing on our people.

Finally, and also very importantly, is I think

you're seeing a higher -- a higher level of collaboration at higher levels of the organization. So global equity is definitely going to be a part of that focusing on the Vision 2020 initiatives, and all of the Investment Office and even the enterprise initiative is very important that we're a part of one holistic organization and really trying to support that high level mission. So that kind of concludes our prepared remarks and we're happy to take any last questions.

CHAIRPERSON JONES: Okay. Thank you for your presentation.

Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman. Thank you very much for the overview. I know you don't have a full crystal ball looking forward, but I didn't hear any address about just what you preliminarily may think about any ongoing effects of the slow down in China and certainly the financial situation in Greece, and what we're all kind of focused on in recent weeks -- or recent days about the impact in the Middle East refugee crisis. But any -- any preliminary thoughts about impacts?

MANAGING INVESTMENT DIRECTOR BIENVENUE: China I would say is very much a focus. We're probably less concerned with Greece than with China just because of Greece's side within the global -- size within the global

market, whereas, China is very large. We do think that the U.S. will remain robust in that space. We do still call for U.S. growth and, you know, I believe the presentation of John Rothfield kind of bears that out. But, you know, a slow down in China is definitely a concern and something we're keeping our eyes on, both from a standpoint of economically, but also very importantly from a standpoint of earnings and how those earnings across the globe are driven.

The refugee crisis in -- you know, going on in Europe also very important. You know, obviously, from a humanitarian standpoint something that certainly we're concerned. But from an investment standpoint is figuring out what impacts that has on the economy, and then also again on earnings, that's a very important context for us and something that we're -- that we're certainly watching.

COMMITTEE MEMBER YEE: And then my last question has to do with our Emerging Managers Program related to global equity. Have we graduated any emerging managers? Is it too soon?

MANAGING INVESTMENT DIRECTOR BIENVENUE: So, yes. We have some of our most successful -- or one of our actually most successful managers originally came out of one of the legacy programs through the emerging manager program, the Manager Development Program.

1 COMMITTEE MEMBER YEE: Great.

MANAGING INVESTMENT DIRECTOR BIENVENUE: We also have a handful of managers now that are in that kind of transition bucket, so that, you know, Ted has laid out. And then, you know, when Steve referred to the transitioning of that program, we're optimistic that we have -- you know, that the advisors, the, you know, staff and the managers themselves were all collectively together trying to find opportunities that some of these managers can move into that transition and then ultimately graduate into the final portfolio.

COMMITTEE MEMBER YEE: Terrific. Great. Thank you.

CHAIRPERSON JONES: Thank you.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: If I can go back to slide 29, program expenses. The fees paid, there's a superscript 2, and what's it in reference to?

MANAGING INVESTMENT DIRECTOR BIENVENUE: That's a typo. That was left from last year.

COMMITTEE MEMBER JELINCIC: Okay. And then on the external managers, I notices this, you know, 14/15 versus 13/14, the assets under management are the same, yet the fees are, you know, significantly different. My recollection is that 13/14 we actually had some pretty

good results. And so there were some performance fees there. My recollection is 14/15 was not as good, and yet it's a much bigger number, and --

MANAGING INVESTMENT DIRECTOR BIENVENUE: Yeah. So that's a really good question. And one of the things we wrestle with is that fees are actually paid annually and paid in arrears. So the fees that were paid in 14/15 were based on 13/14's performance. And that's the reason that they -- you know, that -- as I say, we wrestle with it, because you see the fees paid the year after the performance was so good.

COMMITTEE MEMBER JELINCIC: That might be a good place to use the superscript.

MANAGING INVESTMENT DIRECTOR BIENVENUE: Right.

15 (Laughter.)

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Ms. Mathur.

COMMITTEE MEMBER MATHUR: Thank you, Mr. Chair. Well, I think this was a really good review, so thank you so much for all the work that you put into this, and all the work that goes into actually delivering the performance for the fund.

I'm interested in sort of the active management component and sort of what strategies is it comprised of and how we choose which strategies are internally managed

versus externally managed, in which cases might we have strategies that are both internally and externally managed. There may be situations, I don't know.

And I don't know that we need to -- I don't think you need to answer all those questions today, but I think it might be useful to do a deeper dive at some point, so that the Committee has a greater appreciation for what kinds of strategies we're thinking about in which markets, what makes sense?

So I would just put that on your -- as you to think about that and whether that makes sense within the agenda of this Committee sometime.

MANAGING INVESTMENT DIRECTOR BIENVENUE:

Certainly. You know, obviously, we're very passionate about global equity and we live and breathe it, so we're -- the more opportunities that we have to go through it and dig deeper into it, we're happy to.

I will say just briefly with internal and external, there are just some kinds of strategies that really lend themselves to be done internally. So, for example, alternative beta strategies, obviously the index oriented strategies, kind of broad based high scale strategies are certainly the things that really lend themselves to that. Some of the others where either the portfolio construction and the trading itself is so

tightly intertwined where -- and yet there's some stock picking capability. And that, you know, tends to lend itself more to the externally managed.

So to Don's point, what we really try to do is look at the strategy, look at where it fits in the portfolio, make sure that it makes sense, all of those things, and then come down to the very end and say all right, now what's the best way to implement? Is it implementing it internally or is it implementing it externally?

COMMITTEE MEMBER MATHUR: That makes sense. Thank you.

CHAIRPERSON JONES: Dan, you mentioned that those are some areas that you do agree with looking at. So what are we talking about bringing that kind of information back to the Committee?

CHIEF INVESTMENT OFFICER ELIOPOULOS: We need to think that through and find a spot within -- I mean, ideally we could cover it as part of this review. And I know we've gone long in the presentation. So maybe we'll give some thought about whether or not to find a way to present that more efficiently in this program review next year or maybe we find a spot early during the first half of next year when the overall agenda is much lighter, and pick a spot to dive in and address it then.

CHAIRPERSON JONES: Okay. Thank you.

Okay. No further questions. Next.

(Thereupon an overhead presentation was

4 presented as follows.)

MS. BONAFEDE: Good afternoon. Julia Bonafede from Wilshire for the consultant review of the Global Equity Program and to my right is Steve Foresti, who's our Chief Investment Officer and Head of Research at Wilshire.

We'd just like to start out by thanking staff for all of the time and the transparency spending time with us, as we went through this review. They were very accessible and made our job a little bit easier.

As Dan and his team so ably presented, you have a very strong global equity team that works under a one mission culture. It's very much team oriented. The primary philosophy is both efficiency and synergy. So they have spent a great deal of team over the past few years really rationalizing the program. As you know from their mandate, it is 15 basis points of excess returns over their custom FTSE global benchmark with a very tight tracking error constraint of 0 to 50 basis points, which we'll be talking a little bit more in the global equity policy review discussion later.

The fund did underperform its benchmark. And you've been told the reasons why. But importantly, over

the past several years, that tracking error constraint, that risk management has been very tight versus the benchmark. So they are executing the strategy appropriately.

You've also seen that they've brought more of the assets internally, and that breakdown of approximately 85 percent. And I think one of the main things that we want to communicate to you about this review is the term index oriented kind of implies replication low risk, which is indeed the case, but more and more active strategies are being implemented across the program, which brings more operational risk. And so there's a lot of -- this is a fully functioning asset management company at this point.

Some of the strategies that they're bringing in, you just asked questions about what is active and what is more passive? And some of those structural advantage programs that they're looking at actually have cross-program functionality. So, for example, the securities lending program previously has been in fixed income, and now is moving more into the center of the organization from the equity side through an execution services platform, that maybe Wylie might want to talk a little bit more about, that will streamline some of the trading activities between the programs.

Additionally, the structural advantages through

securities lending are very beneficial to the program.

There are also the CLO program is another opportunity to share between the two programs to add excess return to the program. But again, this brings more operational considerations.

The investment into technology into the program has been expanding. However, we'll expand further. One thing to note is the affiliated funds successfully implemented their Artemis software program into the program, which brought immense trading efficiency, and they delivered it on budget and on time, which is a rarity in any business. So that's to be commended.

And then finally, we just want to note from the sustainability side from the Vision 2020 one thing to keep in mind is that the demands on senior staff continue. You ask more of them from an operational perspective. And they're also working across programs on these initiatives for the total fund as these silos continue to be dispersed more within the organization. And that's all very positive, but also demands more of their time.

From a scoring perspective, we looked at the different categories this year. And you can find that on page 9 of the letter. In the organization, we thought that there was improvement this year in terms of a turnover perspective. As I said, the one team, one

mission culture. Very prevalent throughout the organization.

We did take them up on the buy/sell discipline. You'll recall from last year, the metrics used for supporting those decisions weren't fully fleshed out. They're father along this year in terms of the risk reporting that they're doing, and the rationalization of these strategies.

We did take them down just slightly on quality control and information systems. As again this program expands more actively, additional resources need to be deployed from a system standpoint to give more leverage to the system on a trading perspective, so that they can do more with the resources that they have in support the operations that they have, and to expand it further.

So with that, I will stop and we can answer any questions that you might have.

CHAIRPERSON JONES: Okay. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: I think I have three questions.

MS. BONAFEDE: Okay.

COMMITTEE MEMBER JELINCIC: The activist strategies, you point out that it's introduced more volatility in that active risk. Obviously, last year was not a good choice, but we don't run this for a one year.

In general, do you think that's a policy -- that's a program we should scale up, scale down, is it worth running?

MS. BONAFEDE: Well, I think you need to -there's a number of facets in the program, right? You
have the active managers that you've selected to run those
strategies, and then you have the corporate governance
team.

COMMITTEE MEMBER JELINCIC: Well, yeah. I think you're referring -- well, you said the activist managers, right --

MS. BONAFEDE: Yes.

COMMITTEE MEMBER JELINCIC: -- so I would have said that's corporate governance.

MS. BONAFEDE: Right, but you also have an internal corporate governance team. And you just went through the differences of how those two programs are deployed. The engagement process is more, I hate to use the word passive, but more index oriented, because it's just your overweights that you're selecting.

The activist managers are actually actively picking stocks in their portfolio, engaging in those companies which introduces active risk into the portfolio. And so they're naturally going to be biased away from the benchmark, which is active risk.

COMMITTEE MEMBER JELINCIC: So my question is, are we getting enough out of that program to accept those kind of risks, in general and over a long period of time from your viewpoint?

MS. BONAFEDE: Not this year, clearly.

COMMITTEE MEMBER JELINCIC: Yeah, this year clearly not, but --

MS. BONAFEDE: But I think as staff goes through this rationalization program where they're looking at the type of manager, what role they fulfill, some of them are very focused in terms of the markets that they enter. And so those might be rationalized out of the program, whereas, some may contribute.

And again, as I pointed out in the letter, they bring a specific expertise and outside focus. You never want your program to be too internal. You want to make sure that you're taking in all of the factors of information that are available in the market.

MR. FORESTI: I think, you know, one thing to add and this, I think, speaks to the discipline within the program is rather than look at that category as a whole and say is it worthwhile in the program, is it not, is to look at each individual manager within that strategy and rationalize their inclusion in the program.

And I think to staff's credit, they've -- and

this is where some of the buy/sell discipline increased in score this year from last year has come into play.

They've done a very good job at focusing on that sort discipline.

COMMITTEE MEMBER JELINCIC: Okay. I'm going to let it go, but I'm trying to get our consultant's view on whether this makes sense as opposed to how well staff is doing on it.

You had another issue that says the greater use of factor tilts within the program's active risk budget has the potential of carrying increased correlation to the general market. It seems to me that these tilts move away from the cap weighted and hence should have less correlation not more correlation. What am I missing?

MS. BONAFEDE: This is actually the correlation of the excess return. So, in a sense, what is -- which should be idiosyncratic actually has beta characteristics or higher correlation to the market over time, and you can see from that graph.

So to follow that logic, what you would see is some of the time, and that's a 60 percent correlation, you would see that when the fund is up, the excess return will be up. And when the fund is down, sometimes the excess return will be down. But it's directional, so it will be more correlated to that market movement.

COMMITTEE MEMBER JELINCIC: Okay. And then you talked about, you know, more cross-program investments and you talked about is we're asking more of the staff and senior management that we need more resources. From your viewpoint, do you think staff is asking for enough resources and are they getting it?

MS. BONAFEDE: I don't think it's a question of being denied resources. It's a question of the program has been brought to this point. And you can see the efficiency and the restructuring that has occurred over the years. However, if you want to take it farther or if you want a -- as you go through the portfolio priorities work, and you may look at different ways, long-term ways of approaching the marketplace, there will -- you will be -- you will need further investment in order to implement further changes.

So it's not a question of not being able to handle what they have, but further changes are going to put more pressure on the system.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Yeah. Julia, on the earlier report, the universe comparison report, we were provided information where we were able to look at our -- us against our peers in our universe of investment returns, but this review includes other variables such as

philosophy, process, organization, et cetera. And you came up with a final score of 87 percent. So how does that 87 compare to the peer groups or is that data available?

MS. BONAFEDE: You can compare. You have to cherry pick your universe, because not all funds have internal management programs that are structure the way that you are. But you can take a handful of them and compare the internal programs between the organizations. And you also have to look at what they're investing in. And most of the larger ones that I'm aware of aren't as index oriented as you are, so they're employing more hedge funds, they're employing more external managers.

And so from that standpoint, you're more risk controlled than they are, I think from a performance standpoint. You know, again, that's not really an apples-to-apples comparison.

CHAIRPERSON JONES: Okay. Thank you.

Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you. Can you talk a little bit more about your approach to assessing organizations like this, particularly the short-term focus versus long-term focus, and to what degree that factors into your assessment? And also you have a section on philosophy, but it doesn't really go to sort of the kind

of belief, structure, and coherence with type of structure that we have here, and if you could talk a little bit about that.

MS. BONAFEDE: Sure. So from -- when we're looking at this from just a purely asset management perspective, the philosophy is how does the organization manage itself according to its own Beliefs?

So we're not trying to pick apart what your philosophy is, but we're trying to determine how you're able to follow that philosophy. And we believe from staff's perspective that they very much take ownership of the Investment Beliefs and the general policies of the organization. Then we --

COMMITTEE MEMBER MATHUR: So where does that come through, I'm sorry, in the categories that you have here?

I don't really see where that comes through.

MS. BONAFEDE: So that comes in from an organization perspective. Now, you know, one place where there's always been a little bit of tension in terms of implementing the philosophy and the program has always been in terms of the hiring process. And so what happens is -- and we've seen this -- we're doing the fixed income review right now -- is that you have open positions that stay open for a while as talent is drawn to a very specific location with a very specific compensation

structure so it's more difficult to fill the seats.

And then on the other side, there are organizations that experience more natural turnover that isn't present here. So when you have positions that are open and they don't open up on the other side, you don't get that natural turnover process.

And so from a philosophy standpoint kind of all of those elements that we have listed here in organization, in how we want to manage the assets, which is in the market anomalies, efficiencies, the information that you're able to gather from the process that you've developed. So in this particular case, it's not as well defined as we are a low volatility manager. And so we're going to manage our assets according to this process, and this is the culture that we're going to build to deliver that, and this is how resourced that process all of the elements that go into the management program.

So it's a little bit different, by we try to, in this scoring process, look at asset management organizations and how we see them operate and then try to fit this criteria onto it.

MR. FORESTI: And then in terms of bridging short term and long term, I think if you look at the focus on some of the alternative betas, those are -- those are views that staff has on factors that would be expected

over the long term to compensate for the risk level that's being taken. It's not necessarily -- although they have and they intend to shift some of those exposures over time. Those are not intended to pay off quarter in quarter out, but rather be a long-term sustained exposure that staff expects to be rewarded for.

So that's kind of bridging some of the short-term statistics that you would look at in terms of tracking error and those sorts of things, but extending that out and expecting to get compensated over the long run for taking those sorts of positions.

MS. BONAFEDE: And the sustainability area that you've discussed today, there's a very strong commitment throughout the organization, not only -- and within the team, so there are -- there's a committee in place that oversees the -- how to research the process, how to look at the ratings, how -- what principles to adopt in the investment process. Those are all longer term functions.

And then to marry those with the short-term pricing of the marketplace, that is all built into the culture and the process and the philosophy as well. And so those are more longer term.

COMMITTEE MEMBER MATHUR: And that is, I just want to be clear, where in your -- in your analysis where that comes in? You know, you have all these different

categories, and I guess I'm not quite connecting the dots.

MS. BONAFEDE: So you would find it in organization -- in the particular process, you'd find it into commitment to improvement, understanding the mission, and then in philosophy, in process. So how -- what is the structure of our organization, how do we resource it, how do we manage it, and what is our investment philosophy, and do we adhere to it and do we have a feedback loop that shows that it's actually performing the way we intend?

COMMITTEE MEMBER MATHUR: Okay. Thank you.

CHAIRPERSON JONES: Okay. Thank you. No further questions. Thank you very much for the report.

We now will move to the next item on the agenda, which is Proposed Revision of Global Equity Policies - Initial Review.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you, Mr. Chairman, Wylie Tollette, CalPERS staff.

This is a continuation of the investment policy project we've been working on for the last 10 months or so. We've -- we're now applying that same approach to all of the individual asset class policies, the same approach we applied to the total fund policy. And global equity is lucky enough to be first on the list.

This is a first reading, so we're looking forward

to comments from the Committee. And we'll come back in October with a request for approval on action item.

You may recall the policy project involves synchronizing the language in our investment policies, which are the Board's investment policies with the conduct, set, approve, and oversee action verbs that are included in the Board's governance policy, as well as removing procedural and aspirational language, and focusing on our ability to test the statements in the policy. You can see this reflected in the new draft policy, which is included in your materials as attachment 1.

In addition to the elements and changes that I mentioned, there is one significant policy change that's worth highlighting, and I'll ask Dan to comment on this more fully. But we've proposed changing the forecast tracking error in the policy for the Global Equity Program from a range of 25 to 50 basis points to a new range of 0 to 50 basis points.

The underlying idea was to remove a policy element that could potentially force staff to take active risk in a market environment or in a business environment where our research or conviction would not support taking active risk. Again, I'll ask Dan to comment on that in just a moment.

You may have heard a question as well regarding the inclusion of longer term strategic initiatives or objectives in the global equity policy. And that -- if you'd like to see where those live, they live in the strategic objectives on page one of six in the attachment. An example of such considerations could be like environmental, social, or corporate governance priorities, income generation priorities, down-side protection priorities.

As you can tell from the language I'm using, we've attempted to consider those during the portfolio priorities discussion that you heard John reference and that we talked about at the July off-site. So those are definitely considerations, but they really are considerations that need to be addressed really at a total plan level. Our recommendation is to consider them at the total plan level.

Because the Global Equity Program is more than half of the plan, changes to the objectives of the strategy have a very material impact on the overall plan's performance. And we think that this priorities discussion is leading into a benchmark consideration is probably the best way to engage in that type of conversation.

I would also add that the environmental, social, and corporate governance initiatives and objectives of

CalPERS are also total plan considerations, and as a result we have chosen to include those in the Global Governance Policy, which covers the total plan. The global equity policy focuses on global equity specific risk and return considerations. That's the way the policies are currently structured.

The other element that is related directly to the Global Equity Program that involves those considerations is the manager's expectations work. And you might recall that we came forward earlier in the year with proposed manager expectations. Those manager expectations are not just applied externally, they're actually applied internally to our own managers, and involve incorporating ESG considerations into our decision making.

Those are the reasons why some of those longer term strategic objectives that are not tracking error or absolute index focused objectives, that's why they don't live in the Global Equity Program. They live in other parts of our program. They're certainly considerations we -- you think about. They're just not in this document.

So with that, I'll pause and I'll ask Dan to comment on the tracking error boundary as well as take questions from the Committee.

CHAIRPERSON JONES: Okay. We have a couple questions. Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you. Do you want Dan to make his comments first or --

CHAIRPERSON JONES: Yes, if you could hold.

COMMITTEE MEMBER MATHUR: That's fine.

MANAGING INVESTMENT DIRECTOR BIENVENUE: So actually Wylie and I are very much aligned in more ways than just our hair line, because --

(Laughter.)

MANAGING INVESTMENT DIRECTOR BIENVENUE: -- the tail of his comments were exactly the introductory comments that I was going to make as far as the tracking error. Yeah, it's really just -- you know, we use the term target, so it's not, you know, a budget or constraint, but it really is definitely what we're -- where we're trying to manage the portfolio. And we just thought it made sense to remove the 25 to 50 and make 0 to 50 just so that there's no -- you know, by removing the lower bound, we don't have an incentive to take risk when we're in a market environment where we -- where we don't think that risk will be compensated. And that's really the only substantive change in terms of the expectations of the policy.

COMMITTEE MEMBER MATHUR: Thank you. Well, I think that is a really positive development. I certainly don't see why we should take on risk in any given asset

class, unless we think we're going to be compensated for it, so -- and that is certainly one of our top Beliefs.

So I did want to address the strategic objective question, because I think there's -- if it's not directly in the equity -- global equity policy, then how can the global equity team be held accountable for considering the long-term horizon of the fund?

So there needs to be some kind of connection between the long -- our long-term view and the strategic objective. And I under -- and I appreciate that it might differ by asset class to some degree, just given the role of the asset glasses in the portfolio, but perhaps it needs to be incorporated in some -- I don't know. I feel like it needs to be incorporated in some way, this long-term view.

And so I just want -- I guess I want -- I'm challenging you all to think about it a little bit more, because so many things that we can do in our Global Equity Program could either undermine our long-term performance our support our long-term performance. And to have that piece missing to me is a disconnect.

So I guess I will stop there. I've made my point. I've made it several times today, I think, so -- but I guess I would challenge you to continue to think about it. And maybe it's incorporating the other total

fund objectives by reference. Maybe it's thinking about the role of the portfolio within the long-term objective. Some additional language I think is necessary.

CHAIRPERSON JONES: Okay.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

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CHAIRPERSON JONES: She asked that you think about it, so I think that you will follow up on that.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: We absolutely will.

CHAIRPERSON JONES: Okay. And return to us and what information -- okay.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you.

CHAIRPERSON JONES: Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah. The -- one of the things I noticed is that we haven't defined tracking error. And I just think that maybe we should. This always sees absolute returns generated by the public market, and I think one of the things that we need to build in -- he turned -- he cut me off again.

(Laughter.)

COMMITTEE MEMBER JELINCIC: Accidentally this time.

One of the things that we need to really focus

on, and I think it needs to be in the policy, is risk-adjusted return. It's not just matching the index. It's matching it on a risk-adjusted basis. So I think we need that in there too.

And the appendix, the reporting to the Investment Committee, one of the things that is currently done that I don't see here, and I hope will continue but maybe ought to be in the policy, is notifying the Committee -- and it's currently done in closed session -- but when we've changed managers or added money to them or taken money away. That probably belongs in here.

The Investment staff responsibilities, I'm not arguing that we change it, but I think it should be pointed out, because one of the things we're giving to staff is the ability to select and contract with managers. We have delegated that to staff. We have delegated it to staff without any constraints that I'm aware of.

And if we're going to do that, then I think it's important that this Board owns that, so that it -- you know, how come you picked them? Well, you know, you gave it to us. So I think it's important that we acknowledge that.

And those were the points I wanted to raise.

CHAIRPERSON JONES: Okay. Mr. Slaton.

VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.

I want to just build on the comment that Ms.

Mathur made. If -- on the first page of this policy, the third paragraph down where it says, "It is intended that this policy be read in conjunction with...". I think I would just like to see better clarity around the words that are used there, because is it subject to it, is it to be read with?

So I think looking at that language that's used there, because there's a 48-page policy that I think this is subservient to that overall policy. So you might want to do some thinking about the wording there just to give clarity that all those things, Investment Beliefs, all those things are in that total investment policy. And this doesn't conflict with that, it just gets down to a particular portfolio.

Thank you.

CHAIRPERSON JONES: Okay. Thank you.

Okay. Seeing no further questions, that completes that item.

So now we will move to the next item on the agenda, Investment Strategy -- Strategic Measure -- Measures.

(Thereupon an overhead presentation was presented as follows.)

DEPUTY EXECUTIVE OFFICER HOFFNER: Good

afternoon, members of the Committee. Doug Hoffner, CalPERS staff.

COMMITTEE MEMBER MATHUR: Mic.

CHAIRPERSON JONES: Mic.

DEPUTY EXECUTIVE OFFICER HOFFNER: Oh. I'm not used to presenting on a Tuesday, I guess.

(Laughter.)

DEPUTY EXECUTIVE OFFICER HOFFNER: Good afternoon. Doug Hoffner, Calpers staff.

Today, we're going to present a few of the strategic measures related to the Investment Office. As you recall, this is the first time we've brought these to the Committee. We've had discussions at off-sites and other venues, but this is the first opportunity for this discussion on these policy items before the Committee. As you recall in May, we brought four health related items to the Health Committee -- or Health Benefits Committee, and we'll be bringing eight items to various committees in December.

With that, I'll provide a brief overview, and then Mr. Tollette will walk through Strategic Measures 1 through 3.

I want to provide an update on Measure 4. This relates to the funded status. As we've discussed previously in the last eight to 10 months, there's been a

lot of work on asset liability management, which requires a lot of collaboration and an approach in the organization.

And base on the work between Ted, Cheryl, and Alan and their staff, we thought it was collectively better to bring that item in December after which time we'll have a draft policy on the ALM before you. And then Alan and the Actuarial Office will present an annual risk report in November to provide further context.

I also wanted to highlight -- I know this has been an item of question. We have not forgotten feedback that the Board provided to us at the July 2014 off-site, particularly related to risk metrics. And we're looking to address that at the funded status measure also presented in December.

Going forward, we're revising and looking for a 2016 reporting schedule to the Board. I understand that that might be somewhat different than the reporting schedule we had in 2015, but we want to help align that to the work that you're doing from a strategic perspective based upon the time when we have the most newest and best information on those measures.

So again, we had May, September, and December in 2015 that will probably be somewhat different next year, but we want to align it to the work that you're doing and

make it most useful at that point.

We're also continuing to focus on how to bring this information to the Board in a more -- in a say less technical way, but using technology to provide a feedback mechanism for you to see this wherever you're at and have this information at your fingertips, in a more dynamic fashion than the PowerPoint.

As you can see, there's plenty of work yet to be done. And we look forward to working with you on that. At this point, I will turn this over to Mr. Tollette to make the presentation on Measures 1 through 3, unless there's any questions.

CHAIRPERSON JONES: Okay.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you, Doug. Wylie Tollette, CalPERS staff.

And, yes, I'm excited to present Strategic

Measures 1 through 3. And we'll begin with Measure 1.

And Shannon Hoogenbosch is sitting to our left and is
actually driving the piece of new technology that Doug
highlighted. This is the presentation tool that our ITSB
division helped develop that is interactive. So what
you're viewing on the screen is actually not a PowerPoint
slide as usual, this is actually drawn directly from this
new app.

So we'll begin with Strategic Measure 1, which

seeks to measure the organization's ability to achieve the actuarial rate of return assumption, currently 7.5 percent over a full business cycle.

As you know, the Investment Committee actually receives this information in your Committee materials every month. So this isn't terribly new information, but the presentation of it is, in fact, new.

So the Board determines the actuarial rate of return based on the information and analysis provided through the ALM workshops. And these workshops provide metrics attached to the market opportunities set that CalPERS can invest in, while considering the actuarial assumptions and resulting impact to the contribution levels for the employees and employers.

In terms of looking at the performance using the -- if you look at the slide -- or the application, I really like this graph. This is what you can -- really -- what it really shows in pretty dramatic context is the one-year returns are quite volatile. And so while we have to keep track of those and look at them, it's really the longer term returns that are more important when you're looking at the actuarial rate of return.

So you can see in the one year, we're underperforming that actuarial rate by 510 basis points.

And again, that's related to our large equity allocation,

which you just heard about during the program review.

The three- and five-year returns are doing better, and actually outperformed the rate -- actuarial rate of return by over 300 basis points. And you can see those in the peach and the lavender line on this chart.

And we did attempt to create different formats for the lines. You'll notice some are solid, some are dashed, and some are dotted for those of you that are color blind.

COMMITTEE MEMBER JELINCIC: Thank you.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: The 10-year return is very close to meeting the actuarial rate of return. It still contains some impacts from the financial crisis. And Shannon just expanded that so you can see that more closely, but we're really, really close still trying to make up the difference from the underperformance during the financial crisis.

So current challenges associated with meeting or exceeding that really lay in the actual market opportunity set that we're faced with. So extraordinarily low interest rates around the globe have resulted in reduced expected rate of return for many asset classes, and fixed income in particular.

In terms of how to mitigate that -- and you can see this, although the text is very small in the -- on the

big screen. When you have these applications available to you, you can actually eventually be able to pull those up on your own iPad and read them.

But in terms of mitigating the current challenges, the first thing I would highlight is our upcoming policy discussion in October on risk mitigation, following the workshops over the course of the last year, which would reduce the risk and volatility of the plan over the long term.

This could allow CalPERS to move to a lower discount rate in a slow planned manner to help reduce investment risk and volatility in the portfolio over the short-term. In addition within the Investment Office, we intend the development of risk factors that incorporate both assets and liabilities and use those to construct our asset mix. That may provide some incremental benefits in terms of how we measure risk when risk is defined as our funded ratio or the funding gap that we have. So that's Strategic Measure number 1, I'll pause to see if there's any questions on that one.

CHAIRPERSON JONES: There are no questions, but I just want to say that I like this tool.

(Laughter.)

CHAIRPERSON JONES: You can get -- create a best practice and use it more often.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Well, thank you. I think there's many folks in technology and business teams that worked on it that will be very pleased to hear your comments around that.

Strategic Measure number 2 is the next thing I'm going to cover. And Shannon just clicked on that, so you can see that reflected here. And that measures the -- our ability to achieve superior investment returns when compared against the policy benchmark. The actual performance generated by the portfolio is affected by both our active under or overweights to individual asset classes within their allowable policy ranges, as well as the performance of the individual asset classes versus their specified policy benchmarks.

So the policy benchmark, you might recall, is a composite established by the Investment Committee, again during the ALM process every four years. And it's composed of 14 underlying benchmarks, and it rolls up to the policy benchmark. The benchmark weights are fixed and do not vary, except by Investment Committee action.

And we currently also report this statistic every month. So this isn't terribly new, but again the presentation of it using this tool is new.

You can see -- in terms of performance, you can see the chart. And we're using the same color, so there's

blue, peach, lavender, and maroon there. And again, looking at the one-year, you can see just how dramatic the financial crisis was on -- impacting the one-year returns.

For the most recent one year, we underperformed by 9 basis points, as you heard about in August. And again, that's largely driven by our very large allocation to the equity asset class. The three- and the five-year happily are outperforming the policy benchmark slightly. And the five-year performance, I'm happy to report, this is the first time in seven years that that number has clicked above the policy benchmark. The 10-year is still slightly underperforming the policy benchmark. And that again reflects the continuing impact of the financial crisis on the 10-year returns.

Current challenges related to beating the policy benchmark. As you've heard about in various committees and discussions, both in the Investment Committee, in finance, and at the full Board, they -- we have an increasing focus on liquidity and income, given the current cash flow status of the plan. So we have to make sure that we can always pay the benefit checks.

So that's something that we're really building into our investment program, and into the structure of the Investment Office the way we think about and deploy risk and capital.

We have currently as you heard about from Wilshire in August with their updated capital market expectations, we actually have some reduced return expectations around many asset classes due to -- largely due to extraordinary monetary policies across many economies. So that has somewhat dropped the return expectations for several asset classes versus what they were at the last ALM.

And as was highlighted earlier in this meeting, we actually do see increased risk and interrelated complexity across global financial markets. So that's something we continue to focus on, particularly in regards to our management of counterparty risk.

In terms of how to mitigate those challenges, as you heard about in May, within the Investment Office, we have embarked on an effort, a five-year effort, that we call the 2020 Vision, really helping to define the long-term direction and focus for the Investment Office. It's really directed and focused on reducing management fees, reducing complexity, and enhancing our internal governance and decision-making models.

This involves 36 roadmap initiatives that you'll be hearing more about in November that really involve technology, business process, and human resource management within the office.

I'll pause and see if there's any questions on Strategic Measure number 2.

CHAIRPERSON JONES: Yeah. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah. One of the things this needs to do is be risk adjusted. If we had -- if staff had said we are going to do all of our equity U.S., we would have beat the benchmark big time, but we would have made a real bet and taken a real risk that's a deviation, and that doesn't get captured here.

On the first level, you know, whether we beat the actuarial return, I mean ultimately that's our goal. We either make progress or lose ground. So in some ways, that's a relative or --

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: Absolute.

COMMITTEE MEMBER JELINCIC: -- an absolute measure, but this has really got -- we have to figure out someway to make -- to really capture the risk adjustment and know the bets we are making, and be able to reward -- you know, if you can get the returns with less risk, that's a good thing. If you are betting the farm and get the returns, then you may or may not have gotten enough returns for the bet you made. And so somewhere we need to figure out how to capture that.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I

would agree that we -- we continue to need to further the discussion around how we measure, report, discuss, collaborate around risk. Risk has been a consistent theme just during today's meeting. And we do have total plan -- we attempt to have a total plan level sort of risk target of 150 basis points at the total fund level. It' fair to say that risk budgeting and targeting of that fashion loses some of its effectiveness when it's applied to the private asset classes, because it's -- tracking error based measurements are largely dependent on statistical data, and statistical data is not as readily available around private asset classes, but you do attempt to manage and beat this policy benchmark within that framework.

So there is a risk constraint or cap that is applied at the total fund. But I agree that we definitely need a more thorough and complete way of viewing risk as it truly is multi-faceted. And I can't say that we've found the silver bullet to that, at this point, but it's definitely part of our continuing conversations.

And as I mentioned earlier, it's part of several -- it's the fundamental question being asked within several of these roadmap initiatives within the office that we have underway today. So more -- much more to come on that topic.

COMMITTEE MEMBER JELINCIC: And we need not to

lose site of the fact that risk is more than just volatility.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That's right.

COMMITTEE MEMBER JELINCIC: Or just tracking error. Thank you.

Doug mentioned, we -- there is a risk measure that is going to be included in the strategic measures following the completion of several additional conversations. And I think they're planning to come back with some proposals on that in December. So that will be one of the measures. It's actually a plan level risk measure that incorporates both assets and liabilities, because that's, I think, the important way for Calpers to view its risk is not just from an asset or just liabilities but together. And that, I think, is going to probably be Strategic Measure number 4.

CHAIRPERSON JONES: Okay. Thank you. It's not a question, just a comment. We talked to our 2020 Vision, which is a five-year plan, but I don't want to lose site of a 20-year plan.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: The 20-year plan.

CHAIRPERSON JONES: Okay. Because -- and I

understand that that's an organization-wide vision, as opposed to just an Investment Office vision. So I'm going to start asking questions about where are we on that pretty soon, so just be -- okay. Thank you.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

With that, I'll cover the third and final measure. There it is. Again, this is a measure that the Investment Committee is -- should be reasonably familiar with. We reported this back in April, so we don't report it monthly, but we do report it annually. And this is the -- the CEM value-add measure. And what this measure attempts to do is it measures our ability within the Investment Office to outperform similar peers after adjusting all of our peer returns and our returns, as well as our costs for the asset allocation mix.

So you can't just compare plans sort of straight up, you have to adjust the costs and the returns for the mix, because obviously different asset classes have different costs. So the CEM organization, the CEM benchmarking organization does that using a very rigorous methodology.

And so if you look -- again, if I can direct your attention to the application, what you can see here is for the five-year cycle, we're still being impacted largely by the 2010 -- in this number, the 2009 returns. Part of the

challenge reporting this is that the CEM is on a year lag. So the results you're looking at there are actually as of fiscal year 2013.

And because it takes them quite awhile to compile the peer information from all of our peers and do the math, and then report this back out. So we actually are due to receive the CEM peer data for 2014 within the next several weeks. So we're anxiously awaiting that. And we're hopeful that we'll see the five-year -- our five-year performance as represented by that little blue pyramid on the chart. We're hopeful to see that move upward.

If I can direct Shannon to look at the three and the one year, you can see that on the shorter term for this same measurement, we actually have made significant improvements. So the three year is right on the zero line, which represents basically the peer median in terms of performance, and the peer median in terms of costs is the vertical line.

You can see on the one year, happily we're in, what we call, the golden quadrant, which is lower cost and better returns. So that's where we really want to be.

That's our -- overall. That's our goal. Our target is to keep that little pyramid in that upper left-hand quadrant.

The challenges around this, really again

continuing to earn active return and beat our marks is primary, in addition costs. And so as you've heard during our cost effectiveness presentation, private versus public assets is a cost decision. Private is generally significantly higher than our public asset classes.

The number of external managers we employ -external management is generally more expensive than
internal management. More complex strategies tend to be
more expensive. And size also tends to correlate with
complexity, which is something of a cost driver.

The way we help mitigate that, as you've heard from us in previous meetings, to continue to reduce the reliance on external consultants and advisors to the extent that that's warranted, especially for key control and portfolio monitoring functions. We've internalized most of those. It's less expensive to do it that way; to continue to transition assets from external managers to internal, when it's possible to build those internal capabilities within the Investment Office, and importantly to reduce external management fees paid.

So those are some of the ways. We can't completely control costs, but we can certainly directly influence them, more than we can directly influence the performance of markets. And so, both of those elements roll up into this CEM's value-add calculation. And so we

focused our efforts on the areas we can most directly control.

So with that, I'll pause to see if there's any questions on this measure.

CHAIRPERSON JONES: Thank you.

Mr. Slaton.

VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.

As you know, this is an area that I -- this is a measurement I like the best, because it's independent, and it's cost adjusted for portfolio. And as I've said in other meetings, the first two strategic objectives are pretty self evident about that's our -- you know, the goal is pretty clear and it's out there.

I've always been advocate for this Board adopting these -- you know, formally adopting them, so that we own them. And this third one, the question - and I've talked to you about this before - is what should our goal be? And if the goal is upper left quadrant, which I think it should be, then we, as a group, should consider adopting that as our goal. And then these reports will show you're either there, and if you're not there, the work you're doing to get there. So I think it just adds clarity to the mission. So I hope we can look at that in the future.

CHAIRPERSON JONES: Okay. Yeah, and I think we've talked about that before, about adopting some kind

of goals strategy, so as you develop your forward-thinking to include those kind of processes and your thoughts too, so we could have a discussion about them.

CHAIRPERSON JONES: Okay. Thank you.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: This clearly helps us focus on costs and that's a good thing, but we shouldn't lose site of the fact that we are a different organization. And even if we are the least inefficient of our peers, that shouldn't be our goal. But I also recognize the reality that we're -- it's natural. We're going to compare ourselves to others. We do that with our performance versus that little fund across the street. Even though our portfolios are very different, we in the press, still say, well, they did 12 basis points better.

So it needs -- it just needs some context.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you.

 $\label{eq:chair-person-jones: Okay. Thank you very much} % for the report. % The properties of the context of$

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you.

CHAIRPERSON JONES: And that concludes our -- oh, no, public comments? I've received no requests to speak.

So this will conclude our open session Investment

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Committee meeting, and we will reconvene at 2:00\ \text{o'clock}
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    for closed session.
 3
              (Thereupon California Public Employees'
 4
              Retirement System, Investment Committee
              meeting open session adjourned
 5
 6
              at 1:03 p.m.)
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