

MEETING  
STATE OF CALIFORNIA  
PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
BOARD OF ADMINISTRATION  
INVESTMENT COMMITTEE  
OPEN SESSION

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
FECKNER AUDITORIUM  
LINCOLN PLAZA NORTH  
400 P STREET  
SACRAMENTO, CALIFORNIA

TUESDAY, FEBRUARY 18, 2025  
1:17 P.M.

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

APPEARANCES

COMMITTEE MEMBERS:

David Miller, Chair

Mullissa Willette, Vice Chair

Malia Cohen

Michael Detoy (Remote)

Fiona Ma, represented by Patrick Henning

Eraina Ortega

Jose Luis Pacheco

Kevin Palkki

Ramón Rubalcava

Theresa Taylor

Yvonne Walker

Dr. Gail Willis (Remote)

STAFF:

Marcie Frost, Chief Executive Officer

Michael Cohen, Chief Operating Investment Officer

Stephen Gilmore, Chief Investment Officer

Michele Nix, Chief Financial Officer

Scott Terando, Chief Actuary

Sterling Gunn, Managing Investment Director

APPEARANCES CONTINUED

ALSO PRESENT:

Jared Gaby Biegel, United Food and Commercial Workers

J.J. Jelincic, Retired Public Employees Association

Jose Martinez, United Food and Commercial Workers

Frank Ruiz

Mark Swabey

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PROCEEDINGS

1  
2 CHAIR MILLER: Okay. Good afternoon, everyone.  
3 I hope everyone enjoyed their break and happy to see you  
4 all back here with us for this open session of the  
5 Investment Committee. So I'll call it to order and we'll  
6 do the roll call.

7 BOARD CLERK ANDERSON: David Miller.

8 CHAIR MILLER: Here.

9 BOARD CLERK ANDERSON: Theresa Taylor.

10 VICE CHAIR TAYLOR: Here.

11 BOARD CLERK ANDERSON: Malia Cohen.

12 COMMITTEE MEMBER COHEN: Here.

13 BOARD CLERK ANDERSON: Michael Detoy.

14 COMMITTEE MEMBER DETOY: Here.

15 BOARD CLERK ANDERSON: Patrick Henning for Fiona  
16 Ma.

17 Eraina Ortega.

18 COMMITTEE MEMBER ORTEGA: Here.

19 BOARD CLERK ANDERSON: Jose Luis Pacheco.

20 COMMITTEE MEMBER PACHECO: Present.

21 BOARD CLERK ANDERSON: Kevin Palkki.

22 COMMITTEE MEMBER PALKKI: Good afternoon.

23 BOARD CLERK ANDERSON: Ramón Rubalcava.

24 COMMITTEE MEMBER RUBALCAVA: Here. Present.

25 BOARD CLERK ANDERSON: Yvonne Walker.

1 COMMITTEE MEMBER WALKER: Here.

2 BOARD CLERK ANDERSON: Mullissa Willette.

3 COMMITTEE MEMBER WILLETTE: Here.

4 BOARD CLERK ANDERSON: Dr. Gail Willis?

5 (Retractable barrier slipped out of  
6 Acting Committee Member Henning's hand and  
7 made noise.)

8 ACTING COMMITTEE MEMBER HENNING: That's how I  
9 announce my name. Here for Patrick Henning.

10 (Laughter).

11 CHAIR MILLER: Patrick is here.

12 Okay. Because we're not all present in the same  
13 room and Board members are participating from remote  
14 locations that are not accessible to the public,  
15 Bagley-Keene requires the remote Board members to make  
16 certain disclosures about any other persons present with  
17 them during open session. Accordingly, the Board members  
18 participating remotely must each attest either that they  
19 are alone or if there are one or more persons present with  
20 them who are at least 18 years old, the nature of the  
21 Board member's relationship to each person. At this time,  
22 I'll ask each remote Board member to verbally attest  
23 accordingly. And I know we've got at least one.

24 BOARD CLERK ANDERSON: Michael Detoy?

25 COMMITTEE MEMBER DETOY: I attest that I am

1 alone.

2 CHAIR MILLER: Okay. And did Dr. Willis join?

3 BOARD CLERK ANDERSON: (Shakes head).

4 CHAIR MILLER: Okay. We'll do the attestation if  
5 and when she arrives.

6 Okay. So the next order of business is the  
7 election of the Chair and Vice Chair of the Investment  
8 Committee. And for this, I'll hand the gavel over to  
9 President Taylor.

10 VICE CHAIR TAYLOR: Can you hit my microphone. I  
11 have a microphone. You have a microphone.

12 All right. So with that, I would like to take  
13 nominations for the Chair of the Investment Committee.  
14 And with that, I will call on Kevin Palkki.

15 COMMITTEE MEMBER PALKKI: I'd like to nominate  
16 David Miller.

17 VICE CHAIR TAYLOR: All right, I have a  
18 nomination for David Miller.

19 Is there another --

20 COMMITTEE MEMBER WILLETTE: Second.

21 VICE CHAIR TAYLOR: And a second from Mullissa  
22 Willette.

23 CHAIR MILLER: Is there another nomination?

24 VICE CHAIR TAYLOR: I can entertain another  
25 nomination.

1           Is there another nomination?

2           All right. Seeing no other nominations, I have a  
3 motion and a second for David Miller for Chair. We do --  
4 roll call vote, yeah, that's what I thought. We do need a  
5 roll call vote. So go ahead.

6           BOARD CLERK ANDERSON: Theresa Taylor?

7           VICE CHAIR TAYLOR: Aye.

8           BOARD CLERK ANDERSON: Malia Cohen?

9           COMMITTEE MEMBER COHEN: Aye.

10          BOARD CLERK ANDERSON: Michael Detoy?

11          COMMITTEE MEMBER DETOY: Aye.

12          BOARD CLERK ANDERSON: Patrick Henning?

13          ACTING COMMITTEE MEMBER HENNING: Aye.

14          BOARD CLERK ANDERSON: Eraina Ortega?

15          COMMITTEE MEMBER ORTEGA: Aye.

16          BOARD CLERK ANDERSON: Jose Luis Pacheco?

17          COMMITTEE MEMBER PACHECO: Aye.

18          BOARD CLERK ANDERSON: Kevin Palkki?

19          COMMITTEE MEMBER PALKKI: Aye.

20          BOARD CLERK ANDERSON: Ramón Rubalcava.

21          COMMITTEE MEMBER RUBALCAVA: Yes.

22          BOARD CLERK ANDERSON: Yvonne Walker?

23          COMMITTEE MEMBER WALKER: Aye.

24          BOARD CLERK ANDERSON: Mullissa Willette?

25          COMMITTEE MEMBER WILLETTE: Yes.



1 BOARD CLERK ANDERSON: Dr. Gail Willis?

2 COMMITTEE MEMBER WILLIS: Aye.

3 CHAIR MILLER: And I guess I'm an aye as well.

4 VICE CHAIR TAYLOR: All right. So

5 congratulations, David.

6 CHAIR MILLER: Thank you. Appreciate it.

7 Oh, I got the gavel again.

8 (Laughter).

9 CHAIR MILLER: I really look forward to that.

10 So, at this point, the election of the Vice Chair  
11 of the Investment Committee. And so I'll entertain  
12 nominations.

13 Oh, I didn't --

14 CHAIR MILLER: Theresa -- there we go.

15 VICE CHAIR TAYLOR: There you go. Sorry about  
16 that. I'd like to nominate Mullissa Willette for Vice  
17 Chair of Investments.

18 COMMITTEE MEMBER HENNING: Second.

19 CHAIR MILLER: We have a nomination. We have a  
20 second from Mr. Henning.

21 CHAIR MILLER: So any discussion on the matter?

22 Okay. So I'll call for the question.

23 VICE CHAIR TAYLOR: You want to do it three  
24 times?

25 CHAIR MILLER: Oh. Any other nominations?

1 Any other nominations?

2 And for a third time, any other nominations?

3 Okay. At that point, we have a motion. We have  
4 a second. We have no other nominations.

5 Further discussion?

6 So I'll call for the question, roll call vote.

7 BOARD CLERK ANDERSON: David Miller?

8 CHAIR MILLER: Aye.

9 BOARD CLERK ANDERSON: Theresa Taylor?

10 VICE CHAIR TAYLOR: Aye.

11 BOARD CLERK ANDERSON: Malia Cohen?

12 COMMITTEE MEMBER COHEN: Aye.

13 BOARD CLERK ANDERSON: Michael Detoy?

14 COMMITTEE MEMBER DETOY: Aye.

15 BOARD CLERK ANDERSON: Patrick Henning?

16 ACTING COMMITTEE MEMBER HENNING: Aye.

17 BOARD CLERK ANDERSON: Eraina Ortega?

18 COMMITTEE MEMBER ORTEGA: Aye.

19 BOARD CLERK ANDERSON: Jose Luis Pacheco?

20 COMMITTEE MEMBER PACHECO: Aye.

21 BOARD CLERK ANDERSON: Kevin Palkki?

22 COMMITTEE MEMBER PALKKI: Aye.

23 BOARD CLERK ANDERSON: Ramón Rubalcava?

24 COMMITTEE MEMBER RUBALCAVA: Aye.

25 BOARD CLERK ANDERSON: Yvonne Walker?

1 COMMITTEE MEMBER WALKER: Aye.

2 BOARD CLERK ANDERSON: Mullissa Willette?

3 COMMITTEE MEMBER WILLETTE: Yes.

4 BOARD CLERK ANDERSON: Dr. Gail Willis?

5 COMMITTEE MEMBER WILLIS: Aye.

6 CHAIR MILLER: Okay. Let me do the attestation  
7 now that Gail has joined us.

8 COMMITTEE MEMBER TAYLOR: I'm going to trade with  
9 Mullissa.

10 CHAIR MILLER: Okay. So because we're not all  
11 present in the same room and Board members are  
12 participating from remote locations that are not  
13 accessible to the public, Bagley-Keene requires the remote  
14 Board members to make certain disclosures about any other  
15 persons present with them during open session.  
16 Accordingly, the Board members participating remotely must  
17 each attest either that they are alone or if there are one  
18 or more persons present with them who are at least 18  
19 years old, the nature of the Board member's relationship  
20 to each person. At this time, I'll ask Dr. Gail Willis to  
21 verbally attest accordingly.

22 COMMITTEE MEMBER WILLIS: Yes, I attest to the  
23 fact that I am alone. Thank you.

24 CHAIR MILLER: Okay. Thank you. Okay. I think  
25 that covers that. So that moves us to action consent

1 items. And I have not had any requests to pull anything  
2 and I'm not seeing any --

3 COMMITTEE MEMBER PACHECO: I'll move.

4 CHAIR MILLER: Oh, okay. Moved approval by Mr.  
5 Pacheco.

6 ACTING COMMITTEE MEMBER HENNING: Second.

7 CHAIR MILLER: Seconded by Mr. Henning.

8 Okay. We have a motion and a second. Any  
9 discussion? Okay. Let's call for the question.

10 All in favor?

11 BOARD CLERK ANDERSON: Roll call vote.

12 CHAIR MILLER: Roll call vote. Okay.

13 BOARD CLERK ANDERSON: Mullissa Willette?

14 VICE CHAIR WILLETTE: Yes.

15 BOARD CLERK ANDERSON: Malia Cohen?

16 COMMITTEE MEMBER COHEN: Aye.

17 BOARD CLERK ANDERSON: Michael Detoy?

18 COMMITTEE MEMBER DETOY: Aye.

19 BOARD CLERK ANDERSON: Patrick Henning?

20 ACTING COMMITTEE MEMBER HENNING: Aye.

21 BOARD CLERK ANDERSON: Eraina Ortega?

22 COMMITTEE MEMBER ORTEGA: Aye.

23 BOARD CLERK ANDERSON: Jose Luis Pacheco?

24 COMMITTEE MEMBER PACHECO: Aye.

25 BOARD CLERK ANDERSON: Kevin Palkki?

1 COMMITTEE MEMBER PALKKI: Aye.

2 BOARD CLERK ANDERSON: Ramón Rubalcava?

3 COMMITTEE MEMBER RUBALCAVA: Aye.

4 BOARD CLERK ANDERSON: Yvonne Walker?

5 COMMITTEE MEMBER WALKER: Aye.

6 BOARD CLERK ANDERSON: And Theresa Taylor?

7 COMMITTEE MEMBER TAYLOR: Aye.

8 CHAIR MILLER: Okay. The ayes have it. The  
9 motion carries.

10 COMMITTEE MEMBER WILLIS: What about me, Dr. Gail  
11 Willis?

12 CHAIR MILLER: Oh.

13 BOARD CLERK ANDERSON: My apologies. Dr. Gail  
14 Willis?

15 COMMITTEE MEMBER WILLIS: Aye.

16 CHAIR MILLER: All right. Now, the motion is  
17 well and truly passed. Thank you, all.

18 So, we move onto information consent items.  
19 Again, I don't have any requests to pull any. I'll look  
20 around and make sure everybody has got a chance to take a  
21 quick to see if they want anything pulled.

22 Okay. At that point, we move to our information  
23 agenda items. What we've all been waiting for and I'll  
24 hand it on over.

25 CHIEF INVESTMENT OFFICER GILMORE: Thank you very

1 Chair,

2 (Slide presentation).

3 CHIEF INVESTMENT OFFICER GILMORE: Please let me  
4 congratulate both you and Vice Chair Willette on your  
5 elections.

6 CHAIR MILLER: Thank you.

7 CHIEF INVESTMENT OFFICER GILMORE: It's great to  
8 hear. Today, is the next installment of our asset  
9 liability management discussions. And, of course, we'll  
10 continue this process for some months to come.  
11 Ultimately, ending up, I hope, with Board decisions on  
12 risk appetite in November of this year.

13 But as I say, more sessions to come with the  
14 Board and we'll also include some sessions with  
15 stakeholders. And I think something is in the work for  
16 April there. So you'll see a lot more on this space.

17 [SLIDE CHANGE]

18 CHIEF INVESTMENT OFFICER GILMORE: As for today,  
19 I wanted to follow up on the exercise we conducted back in  
20 January where the Board provided a lot of really helpful  
21 feedback to think about some more of the risk trade-offs,  
22 the asset liability management risk-reward trade-offs and  
23 also to talk more specifically about how we would express  
24 that risk appetite.

25 [SLIDE CHANGE]

1 CHIEF INVESTMENT OFFICER GILMORE: For context,  
2 obviously back in January, we had Howard Marks and we went  
3 through an exercise to try and get feedback from the  
4 Board. We've incorporated that information in today's  
5 presentation. And there will be more of those discussions  
6 going forward. And again as I mentioned, the aim is to  
7 get the Board to a position where it feels comfortable  
8 opining on a risk appetite for the -- for the fund in  
9 November.

10 Once we have that management, we'll then  
11 construct an actual portfolio to go live in, I guess, at  
12 the first of July 2026. So it's a fairly long process.

13 [SLIDE CHANGE]

14 CHIEF INVESTMENT OFFICER GILMORE: As a reminder,  
15 last month, we went through that exercise, and there was  
16 some fairly high level conclusions, to say that there  
17 weren't really any real surprises for me. The responses  
18 we got are what I would have expected from an Investment  
19 Committee, given the objectives we have.

20 The biggest tension is probably around the desire  
21 to potentially increase risk, while at the same time not  
22 experiencing or not being exposed to large drawdowns.  
23 That's always a natural tension when doing these things.  
24 The idea with taking more risk is that prospective returns  
25 would be a bit higher, expected funded ratios would be a

1 bit higher, contribution rates would be lower, but it  
2 would expose you to a greater risk of downside, so there's  
3 that tradeoff.

4           With respect to the portfolio itself, one of the  
5 interesting preferences related to the liquidity of the  
6 portfolio, I don't want to go into that today, but we'll  
7 look at more deeply that as we go forward. Performance  
8 measurement, it was very clear that the Board, and I guess  
9 represented by the IC, focused mostly on the total return  
10 objective, more important than relative returns and peer  
11 comparisons. That kind of makes sense, given the  
12 objective we have to try and improve the funded status of  
13 the portfolio.

14           And in terms of organization, very keen on  
15 innovation. Like a preference for more internal  
16 management. And when focusing on fees, it was really  
17 about the after fee returns that were most important. And  
18 it seemed the Board was open for a difficult complexity  
19 and slightly higher costs that would come with those  
20 preferences. And it was -- it was fairly straightforward,  
21 I think. Although, we will continue discussing that  
22 during the next few months.

23                               [SLIDE CHANGE]

24           CHIEF INVESTMENT OFFICER GILMORE: Now, I've put  
25 up a table here, which is packed with information and



1 wouldn't surprise me if the direct questions related to  
2 this slide in particular. And rather than going through  
3 the whole presentation, Chair, it might be better to take  
4 questions, if there are questions, with respect to some of  
5 these numbers, because there's a lot in here. What we  
6 have done is to be guided by the feedback we had last  
7 month to think about different potential portfolios at a  
8 very high level.

9           So if you look at the first line or the top line  
10 of that table, what we have done is we've looked at a  
11 whole series of passive liquid portfolios - passive -  
12 constructed from global equities. In this case, I think  
13 it's FTSE index, and U.S. treasuries. So it's that  
14 combination. And we've used that as a reference for risk  
15 appetite, in terms of market risk. So we start with a  
16 50/50, so 50 equities, 50 bonds and we go all the way  
17 through to 90 equities, 10 bonds.

18           And you can see that as we take more equity risk,  
19 the expected return rises. Now, at the moment, it doesn't  
20 actually rise that much in these projections, because the  
21 current forward-looking returns on equities and bonds  
22 aren't that different. Ordinarily, I would expect that  
23 that return to rise more rapidly as we increase equity  
24 risk.

25           But that's the idea. So looking at the 50/50,

1 you know, 6.13; 90/10, 6.51. That's for the simple liquid  
2 portfolio. Of course, when we construct the actual  
3 portfolio, we go beyond just liquid equities and liquid  
4 bonds. We get involved in asset class selection. So we  
5 will take some credit risk. We will also take private  
6 market exposure. And when you look at the actual  
7 portfolio we've got now, and you look at the additional  
8 value that comes from that asset selection, you could  
9 expect to earn a bit more than you would earn from just  
10 choosing those liquid asset classes.

11           And when we do the modeling, the optimization, it  
12 turns out that the value-add from that asset class  
13 selection is around 40 basis points or a little bit -- a  
14 little bit more than that, which means the total returns  
15 are a little bit higher and it results in the 70/30, 80/20  
16 90/10 portfolio all giving us prospective returns or more  
17 than the discount rate. Now, of course, it's possible we  
18 could get additional returns from, you know, active  
19 management, from other sources like identifying skill and  
20 so on. But that's kind of the range we're looking at in  
21 terms of, you know, the central points for expected  
22 return.

23           The line below, return range, I think is  
24 relevant, because any of these prospective returns are  
25 uncertain. What we've done here when looking at these

1 prospective returns, is to look at the capital market  
2 assumptions from our survey. I've used the ones from Q2  
3 of last year there, because I think they're fairly  
4 representative from that time interest rates came down,  
5 then went back up again. So I would expect those CMAs to  
6 be fairly close to what we're currently observing.

7           But when people are working out these or  
8 projecting capital market assumptions, there is a wide  
9 range of estimates, and that return range that you see  
10 reflects that range from our survey. So looking at the  
11 70/30, the range, you know, 5.1 to 7.9. So quite a bit of  
12 uncertainty with respect to what those prospective returns  
13 will be.

14           The line below that, portfolio volatility, which  
15 is the number you will often see when people are talking  
16 about risk. But if you remember back to Howard Marks or  
17 our Beliefs, we think that risk is multi-dimensional and  
18 it's not just about volatility. And I'll talk a little  
19 about that -- about that later.

20           And the expected tail risk is perhaps a slightly  
21 new measure. Normally, we talk about, you know, drawdowns  
22 and the like. But this expected tail risk is the expected  
23 return -- expected return in the worst five percent of  
24 outcomes. So you look at distribution and you look at  
25 what that expected return is. The interesting bit is

1 watching how that expected tail risk increases fairly  
2 rapidly, as we increase the equity exposure. So the key  
3 is that tradeoff. How much additional return do we get  
4 from having more equities or more growth risk in the  
5 portfolio versus how much more does it expose us to  
6 downside risk?

7           And if I skip ahead a couple of slides here, it's  
8 exactly what Howard Marks was showing in his diagram. If  
9 you take more risk, you've got a wider range of potential  
10 outcomes, and we're seeing that from our table.

11           Now, the other reality of course is that this  
12 modeling is based on liquid portfolios and marking to  
13 market. Our actual portfolio will have the liquid assets  
14 and it won't be marked as frequently. So the returns will  
15 look smoother. So the observed volatility will be lower.  
16 The observed -- expected tail risk will also be lower.  
17 But that table, has, like I said, a lot of information.  
18 And gee, I don't know whether there were any specific  
19 questions that relate to this table or not, but it's  
20 probably useful to stop here, if there are, before  
21 proceeding.

22           CHAIR MILLER: Okay. And we do have some  
23 questions. And I'll just -- on the second line, the  
24 value-add from risk-equivalent asset selection, I don't  
25 know, it just -- it surprises me that that is -- does not

1 change more across those portfolios when the proportion  
2 changes pretty dramatically of the equities versus the  
3 fixed. Any thoughts on that?

4 CHIEF INVESTMENT OFFICER GILMORE: I had the same  
5 thought. And I think there are two things going on here.  
6 One is the expected return from the different asset  
7 classes doesn't actually vary that much, given current  
8 market pricing, but also it's the constraints that we've  
9 put on the modeling when we do the optimization. In fact,  
10 I could probably ask Sterling to give us more insights, if  
11 he's got anything additional to say or, Sterling, was my  
12 answer okay?

13 MANAGING INVESTMENT DIRECTOR GUNN: That's fine.

14 CHIEF INVESTMENT OFFICER GILMORE: Okay. I've  
15 had a approval for my answer.

16 (Laughter).

17 CHIEF INVESTMENT OFFICER GILMORE: Thanks,  
18 Sterling.

19 CHAIR MILLER: Yeah, because it seems that, you  
20 know, not having kind of the whole -- even just a little  
21 more active management would have the potential to really  
22 impact that a lot more. And that's kind of our -- one of  
23 our strengths, I think, going forward.

24 CHIEF INVESTMENT OFFICER GILMORE: Well, I would  
25 expect in the future, it depends on market pricing, to get

1 a bit more from taking more active risk. But we can talk  
2 about that as we continue to do the portfolio work.

3 CHAIR MILLER: Okay. Director Pacheco.

4 COMMITTEE MEMBER PACHECO: Yes. Thank you and  
5 thank you, Mr. Gilmore, for your presentation.

6 With respect to this -- as you said, this is a  
7 very busy chart. With respect to the value-added for the  
8 risk-equivalent asset selection, now I noticed that the --  
9 it's about 41 basis to about 42 basis across the spectrum  
10 When you were doing the modeling with respect to this, how  
11 did you model that process in terms of understanding --  
12 because in getting -- in getting that, it includes all the  
13 private markets, private debt, leverage, the other  
14 components other than the passive. So if you can  
15 elaborate a little bit further on that.

16 CHIEF INVESTMENT OFFICER GILMORE: This time I  
17 will call Sterling up, but we started with our actual  
18 portfolio and the composition and -- coming up, Sterling.

19 CHAIR MILLER: No.

20 (Laughter).

21 MANAGING INVESTMENT DIRECTOR GUNN: Sorry. Once  
22 again?

23 COMMITTEE MEMBER PACHECO: So with respect to the  
24 value-add for the risk-equivalent asset selection, the  
25 modeling process, because it seems to be very tight from

1 40 -- from about 41 basis points to about 42 basis points.

2 MANAGING INVESTMENT DIRECTOR GUNN: Right.

3 COMMITTEE MEMBER PACHECO: So the actual -- the  
4 modeling or the process of arriving to that.

5 MANAGING INVESTMENT DIRECTOR GUNN: Right. And  
6 the reason for that is it's mostly driven by the private  
7 equity in the portfolio.

8 COMMITTEE MEMBER PACHECO: Um-hmm.

9 MANAGING INVESTMENT DIRECTOR GUNN: So even  
10 though the overall total equity mix is changing in our  
11 actual portfolio, we always have basically the same amount  
12 of private equity. It prefers that over the public's. So  
13 that's what's driving a lot of the -- that 0.4 that you  
14 see there. So it doesn't change much from one portfolio  
15 to the next.

16 COMMITTEE MEMBER PACHECO: So is that with  
17 respect to -- so our -- it's a value -- it's based on the  
18 trust review of the 40 percent right now relative to our  
19 private markets, correct?

20 MANAGING INVESTMENT DIRECTOR GUNN: And just the  
21 private equity for the most part, so the 17 percent.

22 COMMITTEE MEMBER PACHECO: Seventeen percent. So  
23 we're not in -- we're not taking into account the private  
24 debt or other components?

25 MANAGING INVESTMENT DIRECTOR GUNN: Yes, we are,

1 but most of that difference is driven by private -- the  
2 reason it's insensitive, it's mostly driven by the private  
3 equity.

4 COMMITTEE MEMBER PACHECO: Oh, I see. I see.  
5 And is that -- is that -- over a long period of time, is  
6 that realistic? I'm just trying to understand.

7 MANAGING INVESTMENT DIRECTOR GUNN: With our  
8 current portfolio that's kind of what we see at the moment  
9 as well, like over the -- when we look at the planning  
10 horizons that we're looking at.

11 COMMITTEE MEMBER PACHECO: Okay. Very good.

12 MANAGING INVESTMENT DIRECTOR GUNN: We hope to  
13 change that and get it more diversified in the future, but  
14 that's something Steven was referring to finding more  
15 sources of alpha over and above just above the asset  
16 selection which we have there.

17 COMMITTEE MEMBER PACHECO: Oh, I see. So that --  
18 and should -- okay. I understand now. And then with  
19 respect to the expected tail risk, the five percent of the  
20 worst, can you be elaborate a little bit about that, Mr.  
21 Gilmore?

22 MANAGING INVESTMENT DIRECTOR GUNN: Certainly.  
23 You want to take the Stephen or --

24 CHIEF INVESTMENT OFFICER GILMORE: No. I was  
25 just going to say that when you were doing this modeling,



1 you worked with constraints, so you would have looked at  
2 an illiquidity constraint when doing the modeling, and  
3 that will also have implications.

4 COMMITTEE MEMBER PACHECO: That's what I figured.

5 CHIEF INVESTMENT OFFICER GILMORE: So if we had  
6 more illiquid assets, more illiquid private equity, for  
7 instance, you might see that value-add being a bit higher.  
8 So, that's why I say the constraints do play a big role  
9 here.

10 COMMITTEE MEMBER PACHECO: I see. And then the  
11 last -- the other question -- the only -- is the expected  
12 tail risk. You mentioned that it's the five percent of  
13 the worst cases. And how did you arrive at that.

14 CHIEF INVESTMENT OFFICER GILMORE: It's actually  
15 looking at the distribution, but if I go to the very end  
16 of this presentation, you will remember we -- sorry. I've  
17 got to -- if you -- if you go to this, you will remember  
18 that slide we had from last month, where there is some  
19 periods where you have very dramatic drawdowns, obviously  
20 the Depression years, the Global Financial Crisis, and so  
21 on. So when you look at that, it looks reasonable from,  
22 you know, the worst or the expected loss in the worst five  
23 percent of outcomes.

24 COMMITTEE MEMBER PACHECO: And this is how we  
25 weighted the tolerance of the losses over -- that's how we

1 modeled it basically.

2 CHIEF INVESTMENT OFFICER GILMORE: I can check  
3 with the Sterling on the look-back period, but It would  
4 have been something like that. It would have been looking  
5 at actual distributions.

6 MANAGING INVESTMENT DIRECTOR GUNN: This was  
7 historic, yes. But for these simulations we were doing,  
8 it's the usual simulation methodology, the 5,000 paths --

9 COMMITTEE MEMBER PACHECO: Yeah.

10 MANAGING INVESTMENT DIRECTOR GUNN: -- on the  
11 other slide.

12 COMMITTEE MEMBER PACHECO: Very good then. Well,  
13 that's it. Thank you so much for your -- for your help.

14 CHAIR MILLER: Okay. Director Walker.

15 COMMITTEE MEMBER WALKER: I probably should have  
16 stopped. So explain expected tail risk to me again.

17 CHIEF INVESTMENT OFFICER GILMORE: It is the --  
18 so it's talking about the worst five percent of outcomes,  
19 and it's looking at the average outcome in that worst five  
20 percent. So you're looking at a whole distribution. And  
21 so rather than looking at the very worst or the fifth  
22 worst, you're looking at that tail of the distribution and  
23 saying like what was the average loss in that. It's just  
24 one -- it's one measure. Technically, it's called a  
25 conditional value at risk. And there are many -- there

1 are many different things we could look at, but that was  
2 just one we chose.

3 COMMITTEE MEMBER WALKER: Okay.

4 CHIEF INVESTMENT OFFICER GILMORE: It might be  
5 that the Board prefers to think about tail risk in another  
6 way.

7 COMMITTEE MEMBER WALKER: I can be honest. I  
8 don't think about tail risk.

9 (Laughter).

10 COMMITTEE MEMBER WALKER: I just want to make  
11 sure I'm understanding.

12 CHAIR MILLER: Okay. I'm not seeing any further  
13 questions, so let's continue.

14 CHIEF INVESTMENT OFFICER GILMORE: Thank you,  
15 Chair. Now, Sterling mentioned the traditional  
16 simulations, the 5,000 dots that you see. I wanted to  
17 think about that sort of more intuitively. And I've been  
18 thinking about it in the context of scenarios --

19 [SLIDE CHANGE]

20 CHIEF INVESTMENT OFFICER GILMORE: -- sort of  
21 macroeconomic scenarios. And that also, I guess,  
22 highlights the point about risk not just being volatility,  
23 but let's try and make it sort of feel more real in terms  
24 of what could happen economically. What I've done here is  
25 to plot inflation against growth and to look at -- well, I

1 can't really say quadrants, because there are nine of  
2 these -- ninths, different outcomes. We have high  
3 inflation, low inflation, low growth, high growth, and so  
4 on.

5           And stylistically, an environment where you have  
6 low growth and high inflation to stagflation, which gets  
7 talked about from time to time, obviously, low growth, low  
8 inflation, recession, and you could also have, you know,  
9 high inflation, high growth, which is a boom overheating,  
10 or you could have a disinflationary boom, and you could be  
11 somewhere in the middle. I think the current market  
12 pricing is reasonably high inflation with a bit higher of  
13 potential growth in the U.S.

14           We can take all of those different macro outcomes  
15 and think about what the return outcomes might be. And  
16 we've done this stylistically here or Lauren has done it  
17 stylistically here based on some of our partners.

18                           [SLIDE CHANGE]

19           CHIEF INVESTMENT OFFICER GILMORE: We've gone  
20 through and looked at how our 70/30 portfolio would  
21 perform under these types of scenarios. Now, I wouldn't  
22 read too much into precise numbers, because we have to  
23 choose various growth and inflation outcomes, but  
24 there's -- the general sense is that a recession  
25 unsurprisingly is not good for the portfolio. You'll see

1 that, you know, equities will decline, because you've got  
2 low growth and bonds are actually doing reasonably well,  
3 because inflation has come down, so bonds will rally, but  
4 the portfolio is down.

5 A worse outcome could actually be stagflation,  
6 where global equities will also get hit because of the low  
7 growth, bonds also get hit because of inflation. And we  
8 saw something like that a couple years ago when the  
9 central banks were a bit behind the curve and had to hike  
10 rates quickly and both equities and bonds came off. But  
11 stagflation can be quite a bad outcome for our portfolio.

12 That contrast with something like a  
13 disinflationary boom, where you get good growth, low  
14 inflation, so bonds are okay. Equities do well. The  
15 portfolio does well. And a boom as well, the portfolio  
16 can do reasonably well. So having a sense of what  
17 economic outcomes can be quite helpful when thinking about  
18 how the portfolio will perform.

19 Now, that 70/30, portfolio is a -- you know, a  
20 good representation of the current risks that we have in  
21 the portfolio. So when going back to think about that,  
22 you know, that table, the 70/30, is about where we are  
23 now. Yes, our portfolio has different asset classes in  
24 it. But in terms of risk, it's about where we are. And  
25 based on the responses that the Board gave last month, I

1 got the impression that the Board's risk tolerance was  
2 probably somewhere in the range of around 70/30, 80/20,  
3 something like that. But, of course, we need to test that  
4 going forward, because it -- there were a range of  
5 responses.

6           So just thinking about that, think of that table,  
7 the 70/30, and those are the sorts of outcomes we might  
8 expect, given the various scenarios. But I want to use  
9 these scenarios sort of regularly as we go through to  
10 perhaps give a better understanding or better appreciation  
11 for what could happen in different environments.  
12 Hopefully, it's more intuitive than doing these  
13 simulations, Monte Carlo simulations, where you have 5,000  
14 observations. You don't really know what may have driven  
15 you to each of those points when you've got -- when you've  
16 got all those simulations.

17   [SLIDE CHANGE]

18           CHIEF INVESTMENT OFFICER GILMORE: And you've  
19 seen that.

20   [SLIDE CHANGE]

21           CHIEF INVESTMENT OFFICER GILMORE: I also wanted  
22 to talk about the -- what happens in terms of these  
23 distributions. One of the things the Board, the Committee  
24 looked at, you know, last month was drawdowns, declines,  
25 and didn't really want to see those declines last too

1 long.

2           What happens, of course, is that on average those  
3 drawdowns are reasonably short, say a couple of years.  
4 And if everything is very nice, it could be less than a  
5 year. But as you take more risk, and you can see from  
6 that top line, you take more risk, that drawdown can be  
7 longer, especially, you know, in the tails or in the  
8 extremes. So when you've got a lot of equity risk, the  
9 reality is that you're more exposed to those negative  
10 shocks and a longer term drawdown.

11   [SLIDE CHANGE]

12           CHIEF INVESTMENT OFFICER GILMORE: And it's the  
13 same thing you saw with the expected tail loss, as we  
14 increase the equity exposure, the extent of the drawdown  
15 in tails increases.

16   [SLIDE CHANGE]

17           CHIEF INVESTMENT OFFICER GILMORE: The other  
18 thing -- one of the other things we looked at last month  
19 was how long the return on the portfolio could deviate  
20 from let's say our discount rate. And what we've done  
21 here is to look at the 70/30 portfolio and we've looked at  
22 it over multiple horizons. So we've looked at five years,  
23 seven years, 10 years, 20 years.

24           Now, ideally, it would be great to be able to  
25 look at performance over fairly short period of time, but

1 the reality is that there will be lengthy periods where  
2 the portfolio return will deviate, potentially  
3 substantially from the discount rate. Over the five-year  
4 period, over the seven-year period, and over the 10-year  
5 period, there are instances where the rolling returns are  
6 actually negative. Forget about just achieving this.  
7 There are periods where the actual return will be  
8 negative.

9 [SLIDE CHANGE]

10 CHIEF INVESTMENT OFFICER GILMORE: So that has  
11 implications for how we think about the length of the  
12 period we should be looking at to assess, you know,  
13 performance of the portfolio, but it's just something to  
14 keep in mind.

15 [SLIDE CHANGE]

16 CHIEF INVESTMENT OFFICER GILMORE: So just to  
17 recap, in terms of -- you know, the high level takeaways,  
18 again from last month, there seem to be a tolerance for  
19 taking somewhat more risk. Although, there was, as I  
20 mentioned, a range of views on the Board. More risk  
21 leading to higher expected return, higher funded ratio,  
22 and lower contribution rates. But at the same time, some  
23 exposure to greater potential drawdowns in bad events.

24 And, of course, there was a preference to try and  
25 recover from a loss over a shorter period rather than



1 longer period, which is not surprising.

2 In terms of performance measurement just to  
3 recap, the focus being on absolute return rather than on  
4 relative returns or pair comparisons. Of course, the  
5 relative returns are also important, because with  
6 something like a reference portfolio, you want to know  
7 that the management has actually added some value over  
8 that. So you'll be looking that, of course.

9 And the Board was very open to innovation, more  
10 internal management, and looking at returns, you know, net  
11 of fees.

12 I'm having trouble with the clicker.

13 [SLIDE CHANGE]

14 CHIEF INVESTMENT OFFICER GILMORE: Ah, it's  
15 working

16 The next -- the next part of this discussion, I  
17 really wanted to focus on risk appetite. And that choice  
18 of risk appetite, of course, is one of the key decisions  
19 for the Investment Committee. The risk appetite can be  
20 expressed in many different ways. It could be simply a  
21 set of limits or a statement. Historically, the  
22 Investment Committee has done that through choosing a  
23 strategic asset allocation and also expressing policy  
24 ranges around that. But ultimately, you know, a formal  
25 risk appetite should set out portfolio risk limits,

1 including the limits that that management can act within.

2 [SLIDE CHANGE]

3 CHIEF INVESTMENT OFFICER GILMORE: So one of the  
4 current situation, as I mentioned, the strategic asset  
5 allocation sort of ties together the return, the discount  
6 rate, and the risk. And the Investment Committee goes  
7 through and formally approves a new strategic asset  
8 allocation every four years. It does an interim one every  
9 two years. And it's a little bit different under a total  
10 portfolio approach. And one of the things I've been doing  
11 and exchanging views with friends from Wilshire and others  
12 is to think about the analogies, because people keep  
13 asking what's the different between a strategic asset  
14 allocation and a total portfolio approach?

15 One of the things I think about is that the total  
16 portfolio approach seems -- is really more continuous. An  
17 SAA, you'll do the analysis and then you'll kind of sit  
18 for a while. Then you check in after a long period of  
19 time. With the total portfolio approach, it's more to say  
20 more continuous.

21 But there are other ways of thinking about it.  
22 In the past, I've talked about the strategic asset  
23 allocation as optimizing at individual asset class levels  
24 and then adding up. Whereas, the total portfolio approach  
25 aims to optimize at the whole portfolio level and that

1 should be more efficient. But one of the analogies I  
2 quite like is a cooking analogy. You can think about the  
3 objective. The objective is to feed your hungry family  
4 nutritious food on a budget. And you can do that by  
5 picking up a recipe book and following the instructions.  
6 That's very much the SAA. You've got all ingredients, but  
7 it could be that you can't find the ingredients, or  
8 they're not fresh, or they're too expensive, but you just  
9 follow that recipe.

10           A TPA is more flexible in that you've got the  
11 objective and you might want to look at what's actually  
12 fresh, you might want to sort of innovate a little bit.  
13 But the aim under either case is to provide that, you  
14 know, nutritious, cheap, tasty meal for the family.

15           So the SAA is sort of stricter in terms of the  
16 definitions with respect to each of the ingredients or  
17 asset classes in this case. Or if you think about a  
18 military analogy, the total portfolio approach is really  
19 one which is sort of look and command, where the objective  
20 is clear and then the team is tasked with achieving that  
21 objective and uses their discretion to achieve the  
22 objective.

23           So, having said that, risk appetite, the aim will  
24 be to come up with a reference portfolio comprising  
25 equities and bonds. We still have work to do in terms of

1 defining exactly which equities and which bonds. What you  
2 have seen so far, the bonds have been U.S. treasuries, but  
3 we could use some other fixed income benchmark. We could  
4 have credit exposure in there. That is for us to, you  
5 know, continue thinking about through time. And then also  
6 to have some active risk limits, which would define how  
7 much discretion management could have.

8           At the moment, the Investment Committee has given  
9 management a reasonable amount of discretion, because we  
10 can deviate in terms of our listed equity exposure, plus  
11 or minus seven percent from the SAA. For fixed income,  
12 it's plus or minus six percent, for private equity, plus  
13 or minus five. And so you've got all these different  
14 ranges, and sometimes, you know, those ranges reflect  
15 different degrees of risk, and it's quite complex.

16           The active risk limit would be an overall risk  
17 limit, rather than an asset class by asset class risk  
18 limit. So we would hopefully have this reference  
19 portfolio with active risk and then we would go ahead and  
20 choose assets classes and so on.

21                           [SLIDE CHANGE]

22           CHIEF INVESTMENT OFFICER GILMORE: Just a  
23 reminder on the reference portfolio, one of the -- one of  
24 the aims here is to have something that is simple,  
25 transparent, makes it easier to determine accountability,

1 It's scalable. It's investable. It makes it easy. So  
2 right, now we have 11 different benchmarks with our  
3 strategic asset allocation. And it's sometimes quite hard  
4 to work out whether we've done a good job or not.

5 One could say that, okay, you take all these  
6 benchmark, you look at the portfolio and have we done  
7 better? But there are lots of nuances with all those  
8 benchmarks.

9 With a reference portfolio, it's much simpler.  
10 The question is, has management done better than a simple  
11 off-the-shelf liquid portfolio? And everything gets  
12 aggregated up to that.

13 And with respect to the active risk limits,  
14 there's more work for us to do in terms of how we might  
15 define that. We would work very closely with consultants,  
16 Wilshire and Meketa, on just how that should be expressed.  
17 But the approach would really be to not seek anymore  
18 discretion than we currently have but to define it more  
19 simply and more clearly.

20 [SLIDE CHANGE]

21 CHIEF INVESTMENT OFFICER GILMORE: In terms of  
22 the risk, I've talked about, you know, the reference  
23 portfolio, also talked about asset class collection.  
24 Haven't really talked much about deal and manager  
25 selection. But in terms of the hierarchy of risks, the

1 biggest risk is reflected by the Board's overall risk  
2 appetite, which I hope will be expressed in the context of  
3 our reference portfolio.

4           The next biggest is actually the asset class  
5 collection selection. How much do we deviate within the  
6 ranges or within the limits that the Board has given us?  
7 And then it's about how we've actually chosen to make  
8 those investments through external managers, through  
9 particular deals we may do. But I think it's always  
10 helpful to be able to remind that particular hierarchy.

11           The biggest risk decision is, you know, how much  
12 overall market risk do we want. The next biggest one is  
13 how much discretion is management given? And then  
14 management will choose exactly how it implements that  
15 discretion. And that's a relatively small part of the  
16 risk picture.

17   [SLIDE CHANGE]

18           CHIEF INVESTMENT OFFICER GILMORE: And again,  
19 going back to the reference portfolio and the different  
20 asset classes, let's say we have the 70/30, global  
21 equities, government bonds. And of course, the Board may  
22 chose to have something quite different form that, but  
23 I've just used that, because that's currently  
24 approximately what we have. We have different building  
25 blocks. You can see those building blocks, cap-weighted

1 equities. We could proxy that by having a hundred percent  
2 equities, because it's just equity. For something like  
3 private equity, here, we've expressed it as between 120  
4 percent equities, 20 percent cash. So it's leveled a  
5 little bit. But it really depends on what sort of private  
6 equity it is. So venture capital will have a higher proxy  
7 than let's say buyouts, which we will be closer to just  
8 one for one.

9           You'll see something like infrastructure. Here,  
10 we've used 70 percent equities and 30 percent bonds,  
11 because some infrastructure is growth like, some will be  
12 more bond like. So we've got all these different  
13 component parts and we can aggregate them all up to get an  
14 overall 70/30 at the total portfolio level.

15           So, Chair.

16           CHAIR MILLER: And Director Ortega.

17           COMMITTEE MEMBER ORTEGA: Thank you. I just  
18 wanted to stay on this slide for a few more minutes. So  
19 can you go through what each of the boxes means a little  
20 more. I just want to make sure I understand like how  
21 private equity ends up being more than a hundred percent  
22 compared to the other items.

23           CHIEF INVESTMENT OFFICER GILMORE: Well, let's  
24 start with private equity. What we're trying to do is  
25 we're trying to risk match. And in the case of some types

1 of private equity, perhaps venture capital for instance,  
2 you're going to have much smaller company exposures.  
3 They're going to be more volatile, so they're going to be  
4 riskier than would be the case of the usual capital  
5 weighted equity indices. So it's really about say risk  
6 matching.

7           There will be some things, and I mentioned  
8 there's infrastructure, but I could mention real estate,  
9 that will be less risky, because they will have contracted  
10 cash flows. They won't be necessarily so exposed to  
11 growth. You can think about it maybe in terms of, you  
12 know, if you did a, let's say, regression, looked at the  
13 volatility of all these different asset classes with  
14 respect to equities. I'm probably not coming through very  
15 clearly.

16           COMMITTEE MEMBER ORTEGA: Well, no, I think I'm  
17 getting that point. So when you then put all of the --  
18 you assign these percentages or these risk values to each  
19 of the boxes, then that's how you add them up to get to  
20 the --

21           CHIEF INVESTMENT OFFICER GILMORE: That's right.  
22 And these are illustrative. So the actual will depend on,  
23 you know, the modeling we do and the actual strategies we  
24 have. But the point is here, these are aggregated. Some  
25 of the strategies will be -- will be quite different. If



1 we're looking at core real estate, it's going to be less  
2 risky than value-add or opportunistic. If you're looking  
3 at some forms of infrastructure where you've got long term  
4 sort of supply agreements, off-take agreements contracted,  
5 it's going to look very bond like. But there are other  
6 things that will be very exposed to growth.

7           So, we will look at these weights on an  
8 investment strategy via investment strategy and they will  
9 vary.

10           COMMITTEE MEMBER ORTEGA: Okay. Thank you.

11           CHIEF INVESTMENT OFFICER GILMORE: But the idea  
12 is to try and risk match. So if the Board says, okay,  
13 we're comfortable with a 70/30 portfolio, management will  
14 look at constructing a portfolio that has the same -- the  
15 same sort of risk and it will use weights like this to do  
16 that. I would expect that the consultants will have a big  
17 role to play in validating the weights that we use, so you  
18 can be comfortable that the aggregation gets you to the  
19 portfolio risk levels that you're comfortable with.

20   [SLIDE CHANGE]

21           CHIEF INVESTMENT OFFICER GILMORE: Okay. And  
22 here's my animation.

23           CHAIR MILLER: No questions.

24           CHIEF INVESTMENT OFFICER GILMORE: So  
25 essentially, it's basically taking all these bits and

1 adding them up. So in the case of equity risk, you know,  
2 it was one for one. Private equity, a little bit more  
3 than one for one. And the idea is just to add them up to  
4 get the 70/30 portfolio that we talked about.

5 [SLIDE CHANGE]

6 CHIEF INVESTMENT OFFICER GILMORE: With respect  
7 to performance, it can -- it can be quite -- it can be  
8 quite revealing. And what we'll do next month is actually  
9 show you what the performance would have been like if we  
10 had compared it with the reference portfolio. So you'll  
11 get the trust level review, but we'll also give you some  
12 reporting, because some of those, let's say, asset classes  
13 where you -- it looks like we have maybe underperformed,  
14 might actually look better. And some of the ones where  
15 we've, let's say, appeared to have outperformed may look  
16 worse, when we look at on risk match terms. So even  
17 though it will be the same portfolio, the conclusions may  
18 be a little bit different, but we'll discuss that next  
19 month.

20 In terms of this exercise, I wanted to look at  
21 the -- you know, the results over the last -- over a  
22 five-year period, 2017 to '21. Good performance from the  
23 PERF, 10.4, but it was less than what we received from the  
24 reference portfolio, 130 basis points different. So that  
25 time period, the PERF did less well than the simple off

1 the shelf and mix.

2 [SLIDE CHANGE]

3 CHIEF INVESTMENT OFFICER GILMORE: However, you  
4 go on -- go forward one year and you've got 2022 in there.  
5 The PERF, okay, 6.7, a bit worse, but the reference  
6 portfolio - if I can get my clicker to work - would have  
7 been worse. And partly that's because of the diversifying  
8 effects of the PERF with the actual asset classes that we  
9 have in there. So the time period is really important  
10 when thinking about, you know, the actual performance of  
11 the portfolio versus the reference portfolio.

12 [SLIDE CHANGE]

13 CHIEF INVESTMENT OFFICER GILMORE: And next  
14 steps. It's the timeline. Michele, do you want to make a  
15 couple of comments on that?

16 CHIEF FINANCIAL OFFICER NIX: Yeah. Thanks.  
17 Happy to do that. Okay. So you've seen this timeline  
18 several times, but we will continue to update it as we  
19 know more, but the goal here -- we're in February, so  
20 we're doing this ALM strategy session and risk App --  
21 activity follow-up, which Steve had just performed.

22 But past that, we will try to educate our  
23 stakeholders in many ways and we're going to talk -- keep  
24 talking about it at the March IC meeting, again in June,  
25 at the July off-site. And the first reading of our

1 outcomes for the experience study for the actuarial  
2 assumptions, discount rate, that kind of thing will happen  
3 in September, as well as hopefully the proposed reference  
4 portfolio, if we decide to go forward with a TPA approach.  
5 There will also be a strategy session, which will be  
6 closed.

7           And then all that goes as planned, the final  
8 proposal will come to you in November for approval for a  
9 whole strategy that we want to use to implement effective  
10 July 1st.

11           Also, I want to mention that, as of now, we've  
12 got webinars that we plan to also hold on top of all of  
13 this, which right now the schedule could change, but  
14 scheduled for April, July, and December for those  
15 webinars, so that we can bring our stakeholders along in a  
16 different medium besides the Board meeting, if they so  
17 choose to listen.

18           With that, I think that's the end of that, so  
19 Stephen will be happy take questions.

20           (Laughter).

21           CHAIR MILLER: Okay. Director Walker.

22           COMMITTEE MEMBER WALKER: Not a question, but a  
23 comment. I really appreciate the fact that we are being  
24 very thoughtful and deliberate about this process and  
25 taking the time to ensure that everybody is able to

1 take -- you know, take the steps as we go. And if we have  
2 just -- so if we have a July 1st effective date  
3 potentially, right? So we're going through all of this.  
4 And what if, at the end -- I'm always a worst case  
5 scenario kind of person. So what if, at the end of the  
6 day, we get to November and say, no, we've gone through  
7 all of this and we don't -- what impact does that have?

8 CHIEF INVESTMENT OFFICER GILMORE: I think it  
9 still will have been worth it, because we'll have a better  
10 appreciation for the risks and the trade-offs.

11 COMMITTEE MEMBER WALKER: Okay.

12 CHIEF INVESTMENT OFFICER GILMORE: From my  
13 perspective, the actual changes that you see may not  
14 initially be that big.

15 COMMITTEE MEMBER WALKER: Right.

16 CHIEF INVESTMENT OFFICER GILMORE: But this  
17 approach will set us up to be more dynamic in terms of the  
18 component parts of the whole portfolio. So it's really  
19 about the enabling conditions.

20 COMMITTEE MEMBER WALKER: Okay.

21 CHIEF INVESTMENT OFFICER GILMORE: And the key is  
22 that understanding of all the risk trade-offs. It's not  
23 easy, right, because you'd like to generate high returns,  
24 but there's a -- there's a downside, and there's a  
25 judgment involved. And then there's that other question

1 around, you know, how much discretion do you give  
2 management? You know, right now, in some respects,  
3 management has, you know, a reasonable amount of  
4 discretion, but doesn't feel comfortable using it.

5 With this approach, it's much harder to hide and,  
6 you know, management has to be more, I think, explicit  
7 about using that discretion that's given to it.

8 COMMITTEE MEMBER WALKER: And correct me, if I'm  
9 wrong, this will also give you the opportunity to walk  
10 through the change management that you're going to have to  
11 do in your department to get us to where we need to be.

12 CHIEF INVESTMENT OFFICER GILMORE: Absolutely.  
13 Absolutely. And one thing I think about, and I'll need to  
14 talk about Michele and Scott, is perhaps we need to give  
15 you a somewhat more detailed timeline in terms of some of  
16 those component parts as well.

17 COMMITTEE MEMBER WALKER: (Shakes head).

18 (Laughter).

19 COMMITTEE MEMBER WALKER: Sending you a secret  
20 signal.

21 CHIEF INVESTMENT OFFICER GILMORE: It's high  
22 level.

23 COMMITTEE MEMBER WALKER: Appreciate it.

24 CHAIR MILLER: Okay. Director Willette.

25 VICE CHAIR WILLETTE: Thank you. Thank you for

1 the presentation. I really find it fascinating but all of  
2 this, in my view, is in order -- is so that we can pay our  
3 benefits, right? And I also think we have to be able to  
4 pay our benefits, we need liquidity, but I haven't heard  
5 liquidity as part of how we build the blocks together. So  
6 can you just briefly talk about how liquidity factors in  
7 to putting those blocks together, so that we hit the risk  
8 we need, we get the returns we need, we take the risk we  
9 need, but we also can pay our benefits at the end of the  
10 day?

11 CHIEF INVESTMENT OFFICER GILMORE: You'll hear  
12 more on this. If I was extending the timeline, I would  
13 probably have discussions on liquidity in here beyond  
14 November. And you're right, with the reference portfolio  
15 talking about something that is very liquid and with the  
16 actual portfolio talking about something that is less  
17 liquid. Now, for liquidity, there is a -- there's a  
18 tradeoff between at one extreme if you're very liquid, you  
19 can be very opportunistic and very dynamic versus some of  
20 the asset classes that are illiquid that we think are  
21 going to give us higher returns. Whether that's private  
22 equity, or private debt, or infrastructure, real estate,  
23 we think those asset classes, you know, could give us, or  
24 should give us, higher returns than the liquid equivalent.  
25 So you need to tradeoff that ability to be opportunistic

1 versus the extra reward for locking up some liquidity.

2 But, of course, you don't want to lock up so much  
3 liquidity that it makes it difficult to pay benefits or  
4 costly to pay benefits. But I think we're a very long way  
5 from that. So there's a lot of modeling to be done in  
6 terms of the pros and cons of locking up that liquidity.  
7 One of the things we've been doing internally is to be, I  
8 guess, updating our analysis on that pricing of liquidity.  
9 So when we're looking at an investment, if it's an  
10 illiquid investment, we think, well, how much does it need  
11 to return, because we're giving up that flexibility?

12 And that work continues to advance, but in broad  
13 terms, you know, the first illiquid investments don't need  
14 to generate that much of an additional return, but as you  
15 get more and more illiquid assets, you want them to  
16 deliver higher returns, because you're using up some of  
17 that limited liquidity. So I'm not being too explicit in  
18 terms of the numbers, but there are quite a few complex  
19 inputs into pricing that liquidity.

20 So, it will be something that features when we  
21 have to construct the actual portfolio. And it may be  
22 that, you know, at some point, the Investment Committee  
23 wants to be more explicit about the liquidity constraints  
24 and limits.

25 VICE CHAIR WILLETTE: Thank you. That's my only



1 question.

2 CHAIR MILLER: Okay. Director Rubalcava.

3 COMMITTEE MEMBER RUBALCAVA: Thank you.

4 I shut it off. Sorry

5 I'm on. Thank you.

6 Am I?

7 CHAIR MILLER: There you go. You're good.

8 COMMITTEE MEMBER RUBALCAVA: Thank you for the  
9 presentation. In the -- in the -- you know, I guess it  
10 was January we had our Board education. We talked  
11 about -- we did the survey or the exercise on risk  
12 appetite. One of the balances or trade-offs was the  
13 impact -- you know, we're trying to get to a bogey on a  
14 return assumption, but also because we know -- well, we're  
15 concerned about the -- at least I'm concerned about the  
16 impact on the employer contribution rate, the impact on  
17 like PEPRA employer and employee members contribution  
18 rate.

19 In September is when we're getting presented with  
20 the experience study and actuarial assumptions. And those  
21 that exercise, that experience studies, what will impact  
22 actuarial assumptions and discount rate, and that in turn  
23 will also impact contribution rates? So how does the  
24 timing work or -- and/or how does the -- that actuarial  
25 process, how does that impact the total fund approach?

1 How -- is there -- is it different under this approach  
2 versus the strategic allocation we're used to?

3 CHIEF INVESTMENT OFFICER GILMORE: We'll pass to  
4 Scott, because the three of us are actually working very  
5 closely on this.

6 CHIEF ACTUARY TERANDO: Yeah. In terms of the  
7 interaction, in the end, it's going to -- it's going to be  
8 the same, whether we have a strategic asset allocation or  
9 TPA. You know, the Actuarial Office is working on the  
10 experience study and reviewing past experience, and  
11 developing new assumptions going forward. And, you know,  
12 that's kind of like an independent process. You know,  
13 it's removed from any of the asset allocations.

14 What we'll do -- so, you know, that process is  
15 generally the same. Where a little bit difference comes  
16 in is how we work with the Investment Office developing  
17 the discount rate. You know, we're going to be working --  
18 you know, with the strategic asset allocation, we had  
19 capital market assumptions, we had an asset allocation,  
20 and, you know, that kind of just went right to, you  
21 know -- help this, you know, go right to our discount rate  
22 in terms of each of the asset portfolios.

23 It's a little bit different process with this.  
24 It's -- you know -- as, you know, Stephen mentioned, we  
25 have a reference portfolio, but then you're going to add

1 some active -- you know, there's going to be some  
2 adjustments to that passive portfolio to become an active  
3 portfolio. And so we have to kind of start with like  
4 where are we with the passive portfolio and then we add  
5 in, you know, what kind of changes is there going to  
6 happen?

7           We get almost to the same point in terms of we're  
8 going to end up with the portfolios -- a final portfolio  
9 under various scenarios. And then we'll see how that  
10 compares with, you know, the capital market assumptions  
11 and that gives us a range for the discount rate.

12           But when we present those results in September,  
13 you know, it's going to be the full package where when you  
14 see the different portfolios, it will include the new  
15 assumptions, impact on contributions, funded status and  
16 everything. So you see everything at once, so you  
17 don't -- they're not separate and then you have to add  
18 things together.

19           COMMITTEE MEMBER RUBALCAVA: Thank you. I think  
20 I'll wait a little bit until I understand the process a  
21 bit better. Thank you.

22           CHIEF ACTUARY TERANDO: Sure.

23           COMMITTEE MEMBER RUBALCAVA: I need to see it.

24           VICE CHAIR WILLETTE: All right. Any other  
25 questions from the Boar members or Committee members?

1           Okay. Seeing none, we'll go -- we do have some  
2 public comment on these items. The first public  
3 commenter -- we have three public commenters. This first  
4 is J.J. Jelincic.

5           J.J. JELINCIC: Good afternoon. J.J. Jelincic,  
6 RPEA.

7           The total portfolio concept actually makes a lot  
8 of sense. And I will remind you that Ben Meng had tried  
9 to push you in this direction earlier. Management has a  
10 lot of discretion in the current SSA, strategic asset  
11 allocation, model and they haven't used it. I haven't  
12 seen anything that would indicate that that discretion  
13 will be used in the new model. Maybe it will, but if  
14 there's a change in motivation, then that change to use  
15 more of the discretion ought to be explained.

16           If the portfolio is going to be based on the  
17 Board's risk tolerance, which again makes a lot of sense,  
18 I think it's really important to be able to define risk  
19 and risk adjustment for lending to people and companies  
20 who are incapable of borrowing from banks or in the public  
21 market. Obviously, there's some risk there and we need to  
22 develop a analytics that helps us understand what that is.

23           Private equity again, you know, how do you risk  
24 adjust it when the higher returns that you've seen  
25 historically, and quite frankly the trend has been

1 downward, really is based on the GP's conflicted  
2 assignment of the value of the portfolio? You know, at  
3 the stakeholder's forum, I asked the question how do you  
4 risk adjust private equity portfolio? I got a lot of  
5 words but not a lot of answers, but I think that's  
6 something you really need to think about.

7           Two other observations. The current asset  
8 allocation, the last time you published it was in  
9 September. November, you published the September results,  
10 so it's getting kind of stale. And I noticed that you're  
11 doing a closed session on this item later. The  
12 Bagley-Keene Act allows the Board to meet in closed  
13 session to make investment decisions. It's been made  
14 evidently clear that you are not at the position of making  
15 an investment decision yet. But then I also recognize  
16 that the Attorney General has said he will not enforce  
17 Bagley-Keene. His job is to represent the agencies when  
18 they violate it. And I also recognize that, you know,  
19 CalPERS picks and chooses which parts of which laws they  
20 choose to comply with.

21           In all, I think this is a reasonable approach and  
22 I would encourage you to continue to develop it, but look  
23 at the questions that are in there. Thank you.

24           CHAIR MILLER: Yeah. Thank you for your  
25 comments.

1           Next, we have frank Ruiz followed my Mark Swabey,  
2 and Jose Martinez.

3           You have the floor, sir.

4           MARK SWABEY: Thank you. Yes, I will speak  
5 first.

6           Thank you for allowing me, Mark Swabey, an  
7 opportunity to address the CalPERS Investment Committee,  
8 guests, and CalPERS staff. And congratulations to, you  
9 David and Mullissa, on your elections.

10           I want to talk about private equity in terms of  
11 the ALM, the asset liability management, or vice versa.  
12 In the total portfolio approach proposal that I've -- that  
13 I've seen. It's not the full proposal, but the estimated  
14 time length for private equity contracts is five to 10,  
15 years which is -- makes it a long-term illiquid investment  
16 going forward.

17           In contrast, CalPERS current private equity  
18 portfolio out of 381 contracts, which were identified in  
19 2024, 137 or more than 33 percent, more than one-third of  
20 the contracts are more than 11 years old, some dating back  
21 to 2007, one dates back to 1998. Now, we think that this  
22 is pretty darn risky to the entire -- both to the asset  
23 class and the entire portfolio carrying these old  
24 contracts.

25           Reinvestment contracts may be given and to keep

1 these alive. But the biggest risk, according to Mr.  
2 Marks, is missed opportunities. And I haven't heard a  
3 word of that so far in the presentation or in prior  
4 comments. So, we're missing out on some decent  
5 opportunities in more liquid assets by keeping these old  
6 contracts. And one possibility to fix this is not only to  
7 just exit those old contracts, accept the fees, and take  
8 what revenue you get from those, and put them into some  
9 dividend-paying stocks. I haven't seen much of  
10 dividend-paying stocks as part of our overall stock  
11 port -- asset class or our portfolio. But some high-yield  
12 dividend stocks in asset management indus -- in the asset  
13 management industry may help us get more money for our --  
14 for these -- more returns from that particular asset class  
15 of public equity.

16 And dividends also help you get closer to  
17 doubling time as a benchmark for your asset class.

18 Thank you.

19 CHAIR MILLER: Thank you for your comments.

20 And next, Mr. Ruiz.

21 FRANK RUIZ: Thank you for allowing me, Frank  
22 Ruiz, a CalPERS retiree an opportunity to address the  
23 CalPERS Board, guests, and CalPERS staff.

24 Welcome back to the upside down substandard  
25 deviation world of private equity nightmare investing.

1 Like Humpty Dumpty, CalPERS private equity, PEP, contracts  
2 are sitting on a wall. As we know Humpty plunges down the  
3 and shatters into pieces. CalPERS as well in its PEP  
4 contracts are falling into pieces with no omelet to show  
5 for it. When these contracts renew for years, CalPERS  
6 reinvests whatever small return has been made into a new  
7 five to 10 year contract. The pattern has been repeated  
8 over, and over, and over again for a minimum of 26 years.

9           For at least the last 26 years, CalPERS has been  
10 investing in a very high risk program with minuscule  
11 returns. The lost investment opportunities have been  
12 horrendous. This is the Big Bertha element -- elephant in  
13 this room, the \$2 billion return from an investment of  
14 \$134 billion speaks for itself.

15           On January 13th, 2025, Mr. Howard Marks from  
16 Oaktree Management shared how standard deviation helps  
17 investors know if their investment decisions are producing  
18 investment returns or not. One rule Mr. Marks stated was  
19 higher risk can produce a higher rate of return. The  
20 graph he showed had the graph line going upward. This is  
21 how normal investing works. In contrast, CalPERS listens  
22 to upside-down consultants, Tweedle Dee and Tweedle Dum.  
23 But in the upside-down world of nightmare private equity  
24 investing, the substandard deviation graph line goes  
25 downward. CalPERS is investing in the highest risks



1 possible with tiny returns and then reinvesting returns in  
2 new contracts or in contract extensions. Listening to  
3 Tweedle Dee and Tweedle Dum continues a downward spiral.

4           Furthermore, money may be borrowed from more  
5 successful asset classes or member contributions further  
6 reducing CalPERS funds to invest in future investment  
7 opportunities. Also, the '23-'24 annual comprehensive  
8 financial report stated that the private debt and public  
9 equity returns 17 percent. Private equity missed the  
10 industry standard of 13 to 17 percent with its 9.3 return.  
11 Private equity possibly lost between 3.7 and 7.3 or higher  
12 returns last year. Again, private equity met its  
13 substandard deviation prediction of below its 13 to 17  
14 percent benchmark with minimal returns.

15           Also, in November, 2025, is D Day month. CalPERS  
16 has nine months to review asset classes' past performance  
17 before deciding to adopt the total portfolio risk program.  
18 Further, it allows Mr. Howard Marks standard deviation to  
19 show which program have past successful results and which  
20 don't. CalPERS needs to look outside its investment box  
21 to see how current events are shrinking pension fund  
22 dollars.

23           The Palisades and Eaton fires have been projected  
24 to cost California increases in mortgage rates, car  
25 insurance, health care costs, inflation, gas price

1 increases, and many other unforeseen costs, such as eggs  
2 at or near \$1 an egg. CalPERS needs to consider a  
3 paradigm shift away from wasteful investments in the  
4 private equity program and invest in annual paying billion  
5 dollar asset classes. Thank you for your attention.

6 CHAIR MILLER: Thank you, Mr. Ruiz.

7 Okay. Next, we have Jose Martinez. And we'll  
8 follow them with LR Roberts.

9 LR ROBERTS: I'll withdraw mine and come back  
10 tomorrow.

11 CHAIR MILLER: Okay.

12 JOSE MARTINEZ: Good morning. My name is Jose  
13 Martinez. I'm a butcher at Cardenas Markets at Store 11  
14 in Riverside, California.

15 I've come here today to tell you about an  
16 accident at work -- at my work managers did not take  
17 seriously. On the evening in November of last year, I  
18 began cutting pork neck, which I do most days.  
19 Unfortunately, as I was working, I split my middle finger  
20 in half. It's almost cut right down the middle.

21 They wrapped my finger and placed it over a trash  
22 can for 15 minutes after I told my supervisor. Then they  
23 took me to HR for about three hours while they continually  
24 tried to reach one of their nurses on the phone.  
25 Eventually, they told me to go to Concentra, their office,

1 which is the urgent care -- the company that does the  
2 urgent care at Cardenas. When we got there, it was closed  
3 and the HR person just left me there, and that someone --  
4 else would pick me up at a later time. I waited for about  
5 45 minutes before the new assistant manager came. This  
6 whole time my finger was still bleeding literally.

7           Instead of taking me to the hospital or the  
8 emergency room, he literally just took me to work and Told  
9 me to clock out. He didn't ask if I needed a ride or if I  
10 wanted to go to the hospital or anything. I walked to the  
11 hospital from about 8:30. I got there about 9 o'clock at  
12 night.

13           A week and a half later, I was sent back to work  
14 with restrictions. However, management ignored those  
15 restrictions. As a result, my finger got severely  
16 infected and the situation got worse. I spent the last  
17 few weeks and last rest of this month fighting with  
18 Cardenas and their health provider to get me the treatment  
19 I needed and the compensation I am owed. Cardenas's  
20 response on this day of my injury and after put me in a  
21 serious danger. My finger hasn't fully recovered now. I  
22 have a workers' compensation attorney to help me get what  
23 I am owed. However, I should not need a lawyer to enforce  
24 my rights to be safe at work. I am a human.

25           Thank you.

1 CHAIR MILLER: Thank you.

2 Jared.

3 JARED GABY BIEGEL: Yeah. Hi. My name is Jared  
4 Gaby Biegel with the United Food and Commercial Workers  
5 International Union. I'd like to update the Board about  
6 labor risks at Cardenas markets, a California-based  
7 grocery chain owned by Apollo Fund IX, a \$550 million  
8 investment of yours.

9 For two years, we have informed the Board of  
10 labor risks at Cardenas Markets as they have grown, and we  
11 have documented Apollo's violation of each of your private  
12 equity Labor Principles, except for the one involving  
13 child labor. Now, Apollo will seek commitments for its  
14 newest private equity fund, Apollo Fund XI. We urge you  
15 to take concrete steps to enforce your private equity  
16 Labor Principles at Apollo before you consider any future  
17 investment -- Apollo investment.

18 Since we spoke to the board in November, we have  
19 learned of two new class action lawsuits, which were filed  
20 against Cardenas in 2024 alleging violations of  
21 California's Labor Code regarding pay, overtime, meal  
22 break, and rest break violations. One was filed in Los  
23 Angeles County, one in Santa Clara County, and Cardenas is  
24 seeking to compel the Santa Clara case to arbitration.

25 We had previously informed you of a pattern of

1 settling class action lawsuits involving Cardenas's labor  
2 record without admitting wrongdoing and identified  
3 litigation complaints as labor risk to your investment.  
4 Cardenas settled class action lawsuits, alleging  
5 California Labor Code violations without admitting  
6 wrongdoing in 2023 and 2024, with the settlements costing  
7 a total of \$4 million.

8           One such case alleged pay, overtime, meal, and  
9 rest break violations. The other alleged violations of a  
10 regulation to provide seats to cashiers. Prior to  
11 Apollo's acquisition of Cardenas, the company settled an  
12 earlier class action in 2021 alleging meal, rest break,  
13 pay, and overtime violations without admitting wrongdoing  
14 at a cost of \$6.5 million. I want to reiterate that of  
15 CalPERS's five Labor Principles, we have provided examples  
16 which violate four of them.

17           One, we believe the allegations stated in the  
18 current class actions involving meal, break, and pay  
19 violations like those alleged in settled cases are  
20 examples of Cardenas not complying with CalPERS Labor  
21 Principles entitled, "The Elimination of All Forms of  
22 Forced or Compulsory Labor?"

23           Two, we believe Cardenas has violated your  
24 freedom of association Labor Principle. We told you in  
25 November that the National Labor Relations Board has filed

1 a complaint against Cardenas. In the case of Rosalba  
2 Martinez and a co-worker alleging that Cardenas has been  
3 interfering with restraining and coercing employees in the  
4 exercise of their rights guaranteed under the National  
5 Labor Relations Act to choose freely whether they want to  
6 form a union or not. The government is taking Cardenas to  
7 trial over Ms. Martinez's case.

8 Other workers have told CalPERS about managers  
9 leading anti-union meetings and workers have described  
10 experiencing retaliation for their union activity in  
11 violation of the same labor principle.

12 Three, you have heard from workers who experience  
13 violates your Labor Principle entitled, "A Safe and  
14 Healthy Work Environment." Jose just told you about that.  
15 Today.

16 Four, Cardenas workers have commented on acts of  
17 discrimination at work, examples which we believe violate  
18 your Labor Principle of elimination a discrimination. Ms.  
19 Valeria Alvarez's lawsuit alleging sexual harassment and  
20 retaliation for reporting sexual harassment is a prime  
21 example.

22 Apollo is violating your Labor Principles and its  
23 own workforce principles at Cardenas. Apollo has said  
24 that they leave labor management up to portfolio  
25 companies, abdicating responsibility to uphold your Labor

1 Principles or its own.

2 Thank you so much.

3 CHAIR MILLER: Thank you. Thank you. Appreciate  
4 your comments. I think that concludes our public  
5 comments, unless we have anyone on the phone. And I think  
6 LR Roberts indicated that they didn't need to speak at  
7 this time. So I want to make sure I got that right.

8 Okay. So that concludes public comment and I  
9 believe that concludes this meeting. And so we will now  
10 go into closed session. We'll recess into closed session,  
11 then we'll immediately reconvene in open session after the  
12 closed session.

13 Thank you.

14 (Off record: 2:31 p.m.)

15 (Thereupon the meeting recessed  
16 into closed session.)

17 (Thereupon the meeting reconvened  
18 open session.)

19 (On record: 3:36 p.m.)

20 CHAIR MILLER: Okay. We are back in open  
21 session. And hearing no objection, this adjourns this  
22 meeting. Thank you.

23 (Thereupon, the California Public Employees'  
24 Retirement System, Investment Committee  
25 meeting open session adjourned at 3:36 p.m.)

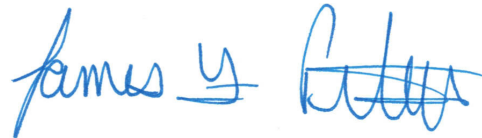
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That I am a disinterested person herein; that the foregoing California Public Employees' Retirement System, Board of Administration, Investment Committee open session meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by computer-assisted transcription;

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

IN WITNESS WHEREOF, I have hereunto set my hand this 23rd day of February, 2025.



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