VIDEOCONFERENCE MEETING

STATE OF CALIFORNIA

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BOARD OF ADMINISTRATION

INVESTMENT COMMITTEE

OPEN SESSION

ROBERT F. CARLSON AUDITORIUM

LINCOLN PLAZA NORTH

400 P STREET

SACRAMENTO, CALIFORNIA

MONDAY, SEPTEMBER 14, 2020

9:50 A.M.

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

A P P E A R A N C E S

COMMITTEE MEMBERS:

Ms. Theresa Taylor, Chairperson

Mr. David Miller, Vice Chairperson

Mr. Rob Feckner

Mr. Henry Jones

Ms. Lisa Middleton

Ms. Stacie Olivares

Mr. Jason Perez

Mr. Ramon Rubalcava

Ms. Betty Yee, also represented by Ms. Lynn Paquin

BOARD MEMBERS:

Mr. Margaret Brown

Ms. Fiona Ma, represented by Mr. Frank Ruffino

Ms. Eraina Ortega

Ms. Shawnda Westly

STAFF:

Ms. Marcie Frost, Chief Executive Officer

Mr. Dan Bienvenue, Interim Chief Investment Officer

Mr. Matt Jacobs, General Counsel

Mr. Eric Baggesen, Managing Investment Director

Mr. Steve Carden, Investment Director

Ms. Sarah Corr, Managing Investment Director

Ms. Kit Crocker, Investment Director

A P P E A R A N C E S C O N T I U E D

STAFF:

Mr. Kelly Fox, Chief, Stakeholder Relations

Ms. Pam Hopper, Committee Secretary

Ms. Jean Hsu, Interim Managing Investment Director

Ms. Kristin LaMantia, Assistant Division Chief, Enterprise Strategy & Performance Division

Mr. Arnie Phillips, Interim Deputy Chief Investment Officer

Ms. Lauren Rosborough Watt, Investment Director

Ms. Christine Reese, Investment Director

Mr. Greg Ruiz, Managing Investment Director

ALSO PRESENT:

Mr. Tim Behrens, California State Retirees

Mr. Al Darby, Retired Public Employees Association

Ms. Miriam Eide, Fossil Free California

Ms. Sandy Emerson, Fossil Free California

Ms. Christy Fields, Meketa Investment Group

Mr. Eddie Gadomski

Ms. Alyssa Giachino, Private Equity Stakeholder Project

Dr. Robert Girling, California State University

Dr. Robert Gould, San Francisco Bay Physicians for Social Responsibility

Mr. Dave Hannon, Connecticut Healthcare Associates, District 1199

Mr. Steve Hartt, Meketa Investment Group

A P P E A R A N C E S   C O N T I N U E D

ALSO PRESENT:

Mr. Woody Hastings, Climate Center

Ms. Nancy Ihara

Mr. J.J. Jelincic

Ms. Cynthia Kaufman, Fossil Free California

Mr. Ferris Kawar, Fossil Free California

Mr. Steve Schrig, Private Equity Stakeholder Project

Mr. Todd Snyder

Mr. David Soares

Ms. Dana Stokes, Fossil Free California

Mr. Patrice Sutton, San Francisco Bay Physicians for Social Responsibility

Ms. Sarah Theiss, Fossil Free California

Ms. Sheila Thorne, California Faculty Association, Fossil Free California

Mr. Tom Toth, Wilshire Consulting

Mr. Larry Woodson, California State Retirees

I N D E X

P R O C E E D I N G S

CHAIRPERSON TAYLOR: I call the Investment Committee to order. And our first order of business is roll call.

Ms. Hopper.

COMMITTEE SECRETARY HOPPER: Theresa Taylor?

CHAIRPERSON TAYLOR: Here.

COMMITTEE SECRETARY HOPPER: Rob Feckner?

COMMITTEE MEMBER FECKNER: Good morning.

COMMITTEE SECRETARY HOPPER: Henry Jones?

COMMITTEE MEMBER JONES: Here.

COMMITTEE SECRETARY HOPPER: Lisa Middleton?

COMMITTEE MEMBER MIDDLETON: Present.

COMMITTEE SECRETARY HOPPER: David Miller?

VICE CHAIRPERSON MILLER: Here.

COMMITTEE SECRETARY HOPPER: Stacie Olivares?

Madam Chair, I don't think she's checked in yet.

Jason Perez?

COMMITTEE MEMBER PEREZ: Here.

COMMITTEE SECRETARY HOPPER: Ramon Rubalcava?

COMMITTEE MEMBER RUBALCAVA: Present.

COMMITTEE SECRETARY HOPPER: Betty Yee?

COMMITTEE MEMBER YEE: Here.

COMMITTEE SECRETARY HOPPER: Madam Chair, the only one I do not show in attendance as of yet is Stacie

Olivares.

CHAIRPERSON TAYLOR: Okay. I'm going to assume -- can we check on her and see if she's getting on --

COMMITTEE SECRETARY HOPPER: We will.

CHAIRPERSON TAYLOR: -- and then -- Okay. Thank you. And we can move on. We still have a quorum.

Next, is the approval of the September 14th, 2020 Investment Committee timed agenda. I need a motion.

COMMITTEE MEMBER JONES: Move it.

CHAIRPERSON TAYLOR: Moved by Mr. Jones.

VICE CHAIRPERSON MILLER: Second it.

CHAIRPERSON TAYLOR: Seconded by Mr. Miller.

All those in favor, Ms. Hopper?

COMMITTEE SECRETARY HOPPER: Rob Feckner?

COMMITTEE MEMBER FECKNER: Aye.

COMMITTEE SECRETARY HOPPER: Henry Jones?

COMMITTEE MEMBER JONES: Aye.

COMMITTEE SECRETARY HOPPER: Lisa Middleton?

COMMITTEE MEMBER MIDDLETON: Aye.

COMMITTEE SECRETARY HOPPER: David Miller?

VICE CHAIRPERSON MILLER: Aye.

COMMITTEE SECRETARY HOPPER: Jason Perez?

COMMITTEE MEMBER PEREZ: Aye.

COMMITTEE SECRETARY HOPPER: Ramon Rubalcava?

COMMITTEE MEMBER RUBALCAVA: Aye.
COMMITTEE SECRETARY HOPPER: Betty Yee?
COMMITTEE MEMBER YEE: Aye.
COMMITTEE SECRETARY HOPPER: All ayes, Madam Chair. Absent right is still Stacie Olivares.
CHAIRPERSON TAYLOR: Okay. So then we will move on for now to our Executive Report with Dan Bienvenue.
Go ahead, Dan.
INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Thank you. Good morning, Madam Chair, members of the Investment Committee and Board. I'm Dan Bienvenue, your Interim Chief Investment Officer and it's a pleasure to be with you here this morning. Before we dive into today's agenda, I really just want to take a second to express my personal gratitude to the entire investment team, to Marcie and members of the executive team, and to yourselves, the Board, for the support I've received. You know, that support has certainly been over my career, but especially this last month as I've taken on the Interim CIO hat. It's certainly been a transition and it's only with this ongoing support and teamwork that we'll navigate our challenges together. So I just wanted to take a moment to express my deep gratitude to -- really to everybody.
I also want to specifically thank Arnie Phillips

for agreeing to step into the Deputy -- the Interim Deputy CIO role. I can attest that that too is a lot to take on at first, so I really appreciate his energy and effort, his commitment to the organization, as well as the commitment of his team, both in global fixed income, and everybody under Arnie's leadership, for everything that they're doing to take on more to leverage Arnie.

We have a really strong team of investment professionals working very hard and pulling together every day. And I'm proud of the team-oriented culture that we've built. I consistently see displays of this one team, one fund evolution, and all of the support that helps Arnie, and all of the support and help that Arnie and I have received really is just another demonstration of this -- of this team work.

And so as a team, we're continuing to execute on the strategy that you, the Board, have adopted, even as the pandemic endures, with priority number one, of course, being the health and safety of our team members, but immediately followed by the priority of managing the portfolio through the ongoing market volatility, all the while positioning the portfolio for current and future return generation.

So that takes me to today's agenda. We'll start with the -- the usual action and information consent items, of course, and then quickly move on to the meat of the agenda, which is Item 6. 6a is the semiannual trust level review and the annual program reviews of the various asset classes. And this is a critical item. We'll take a holistic look at the portfolio and the business model of the Investment Office.

We'll then move down into the various asset classes, covering implementation strategies, performance, accomplishments, and forward-looking initiatives, with the idea of facilitating your oversight roll over the entire functioning of the Investment Office and the entire portfolio.

From there, we'll move on to 6b, where you'll hear from your investment consultants, Wilshire and Meketa, as they provide their thoughts on the Investment Office and the portfolio.

That then transitions nicely to 6C, where our teammates in the Enterprise Strategic Planning Division will cover the results of the survey of the Board investment consultants.

Then the final item under number 6 is an information item on our plan to review the asset allocation, of the Long-Term Care Trust. Don Moulds, our Chief Health Director will join us for that item. Then he, Eric Baggesen, and Christine Reese will walk you through the plan.

From there we'll transition into closed session where we'll be able to cover any topics that we weren't able to cover in open.

And with that, Madam Chair, I'll turn it back to you

CHAIRPERSON TAYLOR: All right. Thank you, Mr. Bienvenue. So I just wanted Pam to note that Ms. Olivares is here now. And we can move on to our action consent items. And I need a motion.

VICE CHAIRPERSON MILLER: So moved.

COMMITTEE MEMBER PEREZ: I have a question on 5d.

COMMITTEE MEMBER FECKNER: Second.

CHAIRPERSON TAYLOR: Okay. So I've got a motion by Mr. Miller seconded by Mr. Feckner.

CHAIRPERSON TAYLOR: Mr. Perez, go ahead.

COMMITTEE MEMBER PEREZ: On 5d?

CHAIRPERSON TAYLOR: Yes.

COMMITTEE MEMBER PEREZ: Let me go back to my notes. Sorry.

COMMITTEE SECRETARY HOPPER: Madam Chair, this is Pam.

CHAIRPERSON TAYLOR: Yes.

COMMITTEE SECRETARY HOPPER: We do need to take a roll call vote on approval of the minutes.

CHAIRPERSON TAYLOR: Yeah, that's what -- oh, I'm sorry, he's 5d. We're still on 4. My bad. Let's go -- do a roll call vote on the action consent item that we have a motion by Mr. Miller, a second by Mr. Feckner. All those in favor? And, Ms. Hopper, go ahead.

COMMITTEE SECRETARY HOPPER: Rob Feckner?

COMMITTEE MEMBER FECKNER: Aye.

COMMITTEE SECRETARY HOPPER: Henry Jones?
Henry Jones?

COMMITTEE MEMBER JONES: Aye.

COMMITTEE SECRETARY HOPPER: Lisa Middleton?

COMMITTEE MEMBER MIDDLETON: Aye.

COMMITTEE SECRETARY HOPPER: David Miller?

VICE CHAIRPERSON MILLER: Aye.

COMMITTEE SECRETARY HOPPER: Stacie Olivares?

COMMITTEE MEMBER OLIVARES: Aye.

COMMITTEE SECRETARY HOPPER: Jason Perez?

COMMITTEE MEMBER PEREZ: Aye.

COMMITTEE SECRETARY HOPPER: Ramon Rubalcava?

COMMITTEE MEMBER RUBALCAVA: Aye.

COMMITTEE SECRETARY HOPPER: Betty Yee?

COMMITTEE MEMBER YEE: Aye.

COMMITTEE SECRETARY HOPPER: Madam Chair, we have all ayes. David Miller making the motion, Rob Feckner seconding.

CHAIRPERSON TAYLOR: Thank you. Motion passes. Action consent item passed.

We're on information consent items. As I understand it, Mr. Perez wants to pull 5d. I would like to go ahead and talk about that, otherwise everything is information consent.

So go head, Mr. Perez.

Jason?

There you are.

COMMITTEE MEMBER PEREZ: Sorry. 5d?

CHAIRPERSON TAYLOR: Yes, sir.

COMMITTEE MEMBER PEREZ: On -- so the pol -- on page seven, the policy exemptions, we don't have any -- the graph is empty. I'm using Insight too, by the way.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes. Correct, Mr. Perez, that's based on the refection that we did not have any -- any policy violations during -- or policy exceptions during that period.

COMMITTEE MEMBER PEREZ: Okay. And then on page 18, what's the difference --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And I'm sorry, Mr. Perez, page -- page 18 of which -- of which attachment?

COMMITTEE MEMBER PEREZ: 5d.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Attachment 5d.

COMMITTEE MEMBER PEREZ: Attachment 1, sorry.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Okay. 5d. Okay.

COMMITTEE MEMBER PEREZ: On the right-hand side of the table, what's the difference between the exempts and known contractor. How does that system work?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. I'm --

COMMITTEE MEMBER PEREZ: I'm sorry I didn't get you these earlier in the week.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: No, that's all right. And I'm sorry, we're talking about 5D, Attachment 1, page 18?

COMMITTEE MEMBER PEREZ: Yes, sir.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Okay. And I'm sorry. The -- which -- I'm sorry, which -- which section is the question on? Sorry, Jason, I'm trying to catch up with you.

COMMITTEE MEMBER PEREZ: No problem. No problem. On the right-hand side of the column, there's selection, reasons, and notes. What's -- what's the difference between exempt and known contractor, exempt critical time frame, all that good stuff?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: You know, I would like to see -- I want to make sure I answer this accurately, so let me see if I can ask Kit Crocker to pull forward to answer that question. She has the answer.

Jared, can you please bring Kit Crocker into the presenter queue, please?

CONFERENCE MODERATOR: Yeah. She should be able to chare her audio and video.

COMMITTEE MEMBER PEREZ: Sorry, man. I tried to get the questions to you guys earlier, but this was a long week.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: No. No problem. I believe I know the answer, but I want to make sure you get the best answer, so let's see if we can get Kit to come forward and answer your question.

COMMITTEE MEMBER PEREZ: Thanks.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Kit, I see you, but I can't hear you. Are you -- are you there?

INVESTMENT DIRECTOR CROCKER: Sorry. I was double muted. If this is page 18, are we looking at the spring-fed pool contract status?

COMMITTEE MEMBER PEREZ: We are -- yes.

INVESTMENT DIRECTOR CROCKER: Okay. And the question is?

COMMITTEE MEMBER PEREZ: I don't understand how the selections and the reasons with the notes, how does that work, exempts, and known contractor, so we don't have to go to RFP or -- or anything like that and I understand. But what's the difference between exempt and known contractor? And then --

INVESTMENT DIRECTOR CROCKER: And I think -- I think that known contractor is one of the categories of exemptions. But, you know, I hate to say, I'm not -- I'm not able to explain those in any may detail than that.

COMMITTEE MEMBER PEREZ: Okay. So it's someone we've used before and have a good relationship with?

INVESTMENT DIRECTOR CROCKER: Yes, exactly. You're looking at Funston, for example, that certainly applies. And -- yes.

COMMITTEE MEMBER PEREZ: And what about the time exempts? There's -- I don't know if that's on 18.

INVESTMENT DIRECTOR CROCKER: The critical time frames, that one?

COMMITTEE MEMBER PEREZ: Yes, ma'am. Yeah.

INVESTMENT DIRECTOR CROCKER: And I think that just means there was -- there's an exemption if there isn't time to go to a full RFP. But you know what, I would -- I'd feel more comfortable getting you an answer from people who are more expert at this than I am. So if we could get you that, you know, follow up with that information.

COMMITTEE MEMBER PEREZ: Yeah, for sure. No problem.

INVESTMENT DIRECTOR CROCKER: Yeah.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Mr. Perez, is there a specific one you have a question or just is that -- or just kind of general what the different labels mean?

COMMITTEE MEMBER PEREZ: No. No. Just general, what the difference -- you know, why -- why the -- why do we go -- have such a short time frame on that on the second one in that slide.

CHAIRPERSON TAYLOR: We had two.

COMMITTEE MEMBER PEREZ: Yeah.

CHAIRPERSON TAYLOR: Global equity. Garland(inaudible)

COMMITTEE MEMBER PEREZ: Yeah. And then on 19 the best practice -- so I see the exempt known contractor and the time exemption, but what's the -- is there a best practice exemption on slide 19?

INVESTMENT DIRECTOR CROCKER: Boy, I'm sorry. I'm going to have to get back -- get back to everybody on that, Dan.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes. Why don't we do that.

CHAIRPERSON TAYLOR: If you could -- yeah. If you guys could get back to all of that, that would be great.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Absolutely, we will. So, you know, exempt basically means that we know that we got the contract through an exempt process. And then the -- what follows it is the rationale. But as far as, you know, exactly the specifics of the various rationale and then best practice, let us come back to you with a -- with a good solid answer.

COMMITTEE MEMBER PEREZ: Okay. Yeah. That will help a lot. And then on -- lastly on page 29. The last sentence says there's no further action regarding any external investment resource or transaction required under the regulation. But what about, you know, our internal best practice and policy?

INVESTMENT DIRECTOR CROCKER: Okay. And that I can respond to. So this is -- this statement has to do with our compliance with a particular regulation, CCR 557. And we have -- it really is confined to that reg. So it isn't intended to address more broadly any of our actions or -- we have -- frankly, as you probably are aware, we have many internal procedures relating to conflicts of interest. And this page, and we can make it more clear going forward, is simply intended to comply with section 557.

COMMITTEE MEMBER PEREZ: Okay. Thank you. That's all I had

CHAIRPERSON TAYLOR: Okay. Thank you, Mr. Perez.

Ms. Brown, 5b.

BOARD MEMBER BROWN: Thank you, Madam Chair. Dan, I have a question on -- and I'm on just Attachment 1 of 5d, the items completed under delegated authority. There's a lot on here and maybe it's because it's for the quarter, but this looks like a lot of investments. And so I'm going to ask you about a couple of these. I was thinking though maybe in the future we could number these, just so I could refer to like line five or line six when I talk to you about these investments. That would be helpful.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Sure, Ms. Brown. And I'm sorry, Ms. Brown, can I just get what -- which page you're on, so I can make sure I'm following.

BOARD MEMBER BROWN: Two of 29. 5d, Attachment 1, two of 29, that list of all the items under delegated authority. We have quite a few commitments and quite a few additional commitments. And I just wanted to ask you about them.

I see global equity, it looks like a $4.2 billion commitment as an additional commitment. Is it an additional commitment? I'm just -- can you just explain to me what that is. I don't think I've ever seen something quite that large on this sheet. So I'm just wondering if I'm correct or what's going on with that? It's the fifth -- fifth one down.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes. Yeah. No, I see it.

BOARD MEMBER BROWN: Fourth. Fourth one down. Fourth one down.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes. Thank you. I believe that is the reallocation from -- you know, as part of the benchmark rebalance, we move money from fixed income to global equity. And that is -- is into the global equity, the factor-weighted space.

BOARD MEMBER BROWN: Great. So we're just rebalancing for the quarter per our policy.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

That's an internal rebalancing.

BOARD MEMBER BROWN: Excellent. I just -- we've never seen something quite that big, so -- I don't think.

All right. So two down from that, opportunistic strategies DISCO III. That's 500 million, right, half a billion? And so I looked up that investment. I read a little bit about it. And this is distressed debt, right, or stressed debt? Can you tell me just a little bit about that investment?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: You know what, this is another one, that I think Jean Hsu would be the right -- the right person to speak to. This is in that private debt space, but let me ask Jared, if you could please bring Jean Hsu forward to answer Ms. Brown's question, she'll -- she certainly knows it more intimately than me.

CONFERENCE MODERATOR: Okay. Jean, you should be able to share your audio and video.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Hi. Can you hear me okay?

CHAIRPERSON TAYLOR: Yes, we can.

SENIOR LIFE ACTUARY HU: Hi, Margaret.

The PIMCO deal, it is a dislocation location. Will I say it is a distressed? I probably not, because usually in distress, you usually refer to like more of a corporate. For example, like a company who is doing really bad and then almost not able to function, so you -- and it almost about to default, or has probably already defaulted. So you will say those are like stressed or distressed.

Usually, the bond of that type of company originally would trade maybe the 90s or 100. And then in that stressed or distressed situation will trade down to $0.30 or $0.20 on the dollar. So those are more -- in general, we say they are more distressed in the corporate lens.

PIMCO is one is a little bit different. They are looking more in the structure for that area. For example, they will buy agency mortgages, which is government guaranteed, but they will be able to source it when the market has some stress -- the market itself has some stress, not the company, or the collateral has some stress.

For example, last time around, in the -- when the COVID first started, there are a lot of REITs. They are doing agency -- mortgage agency trades, but they have liquidity issues. So PIMCO will be able to come in in this situation and then buy things at a little bit cheaper dollar price. For example, they might be able to buy the par bonds at around like $85 to $90 price.

And then they will wait for that to pull back to par. And then that is more of this dislocation say. This is no intent like the corporate stressed or distressed. You will be, you know, distressed for trading or distressed for control. It is quite different.

BOARD MEMBER BROWN: Great. I just want to be sure, because when I looked up this DISCO III, you know, Bloomberg tells about the found, it had stressed and distressed corporate. So I was a little concerned that we're doing that.

Great. So another question then.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: They will have it. The will have it, but it is a smaller portion. PIMCO's main strength is like sourcing things, which is safer, but not to like if the $0.20 that you're thinking about. It's more of in like the $80, $90 price.

BOARD MEMBER BROWN: Great then I have a couple questions on real assets. Thank you, Jean.

It looks likes we've got some --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: I'm sorry, Ms. Brown, I have a feeling that I'm going to need Sarah Corr for those questions, so why don't I ask Jared, can we please bring Sarah Corr forward, so that she can be prepared to answer Ms. Brown's questions.

CONFERENCE MODERATOR: Yes. Sarah should be able to share her audio and video.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Wonderful. Thank you.

All right. Ms. Brown, go ahead.

BOARD MEMBER BROWN: Thank you. Hi, Sarah. So the --

MANAGING INVESTMENT DIRECTOR CORR: Hello.

BOARD MEMBER BROWN: -- questions are with reaL assets, it looks like we have a new commitment to Pacific Urban Residential for a Multi-Family Investors, LLC. And then it looks like we have an additional commitment to the same fund. And so, first of all, why are we investing in multi-family? Are we thinking that's a good bet, and -- considering what's going on with the economy. And then why do we sort of have a new commitment and then an additional commitment, it looks like, to the same fund, just questions about those two.

MANAGING INVESTMENT DIRECTOR CORR: Yeah. So that's a result of the annual investment process that real assets goes through. So every year, staff meets with our strategic managers and reviews their pipeline and we come up with an acquisition and disposition plan. And those get approved once a year in the May and June time frame. There can be some investments that were assigned, but not closed from the previous year's allocation. And so those get approved to rollover. So the new commitments -- the new commitments for 2021 and the additional commitment is the rollover from the allocation that was provided last year that's -- they have not finished the projects yet or they have not acquired the assets yet.

BOARD MEMBER BROWN: Okay. But it -- it is the same investment, right, because it has the same date October 2013.

INVESTMENT DIRECTOR CORR: Yes.

BOARD MEMBER BROWN: Great. Yeah. And then one -- and then sort of point here, Dan, is when we put the name of the investment down, I want to make sure that we are very careful that these line up. So for some of us who are very nerdy and go through -- you know, I look at the name of the investment, and then I look at the partnership reports, and then I look at the CAFR, and sometimes they don't match up.

So I don't know if we pull these names from the PEARS system or what, but the name of the investment is pretty critical that it match, especially in private equity. And so I want to make sure we've got the same name going across. And I'll have a question later on about that with -- in Item 6, but I'm done.

Thank you.

CHAIRPERSON TAYLOR: All right. Thank you, Ms. Brown.

With that, I don't see anymore questions on information consent items, so we will move forward on Information Agenda items, Total Fund 6a.

And, Mr. Bienvenue.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

All right. Terrific. Thank you, Madam Chair.

Jared, I think we can move Kit Crocker back to the attendee room. And then if we can move the other presenters forward into the presenter room. Let's bring in Lauren Rosborough-Watt, Eric Baggesen, Steve Carden. I think we've already got Jean and Sarah. And then if we could also please bring Greg Ruiz forward.

CONFERENCE MODERATOR: Okay. I think I got everybody. You should be able to share your audio and video.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: I don't see Lauren. Do we have Lauren? All right. I see Steve. I see Eric.

CONFERENCE MODERATOR: Okay. I just added Lauren in. She should be good to go.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. Terrific. Thanks, Jared.

Okay. So this item is our annual -- semiannual trust level review and annual program reviews. And it's really one of the most important items we'll have in front of the Committee this year. It looks at the entire portfolio and business model for both the PERF and the affiliates. And then it digs into each of the asset classes and how they're run.

It takes what had been seven disparate items cross three meetings and then consolidates them into one cohesive total fund view. And we think this consolidation is a big improvement, because it really underscores our total fund perspective, as opposed to the siloed views presented historically.

(Thereupon an overhead presentation was presented as follows.)

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Now, the goal of this item is to provide the Committee with information about market conditions and the economic backdrop, about performance of various trusts, both the Public Employee Retirement Fund, or the PERF, but also the affiliates, an overview of asset classes to aid the Committee in your oversight role, and then some of the key business initiatives designed to support and enhance our investment program.

The item has four main ports. I'll kick us off here by reviewing some of the workaround strategy for the portfolio, as well as the business model that supports the management of the portfolio. From there, Lauren Rosborough-Watt will cover an economic and markets update. And then Lauren is followed by Eric Baggesen walking us through risk and performance for the total fund inclusive of the affiliates.

Then we'll dig into the various asset classes and programs with the Managing Investment Director representative of each asset class or program providing an overview of their asset class, performance of class, key accomplishments, and then forward-looking initiatives. The goal is to deliver the context that previously had been covered in a disparate manner undermining the total fund perspective, and instead consolidate into one report that allows the Committee to thoroughly understand the whole portfolio and the whole business model and how they come together.

After all, it's the whole portfolio that pays the benefits. We'll also have plenty of time for questions, and we'll pause after each speaker to take any questions that you may have.

So with that let's get started.

Can I get the next slide, please?

--o0o--

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. On slide 2, you can see the Investment Office's mission and vision statements. These were creating an alignment with and to support the CalPERS enterprise mission and vision, and the 2017-2022 CalPERS strategic plan. Each part of CalPERS organization has a role in CalPERS mission. And the Investment Office's role, of course, is to manage the investments.

Through that lens, the Investment Office mission and vision statements were redesigned about a year ago and are intended to remind us, first, why we exist, the mission, but also how we're going to accomplish it, which is the vision.

And our mission was written as follows: "To manage the CalPERS investment portfolio in an efficient and risk-aware manner to generate returns to sustainably pay benefits". Now, risk-aware encompasses our Investment Beliefs that risk is multi-faceted and that we'll only take risk where we believe we'll be rewarded for it.

But it also underscores the fact that generating seven percent -- the seven percent assumed rate of return requires risk. So we want to make sure we're taking the prudent risks that we want to be taking.

And the word sustainably was also purposely added when we refreshed it last year in recognition of our virtually perpetual investment horizon, because our job is to generate returns for generations to come.

So the mission is the what and the vision is the how. And here, we wrote our vision statement to be as follows: "To work as one team with a culture of trust respect, and accountability to effectively manage one total fund".

Now, one team reflects our desired culture of collaboration and team work. We all have different roles, but each role is critical in the management of the total portfolio and we work as a team to achieve the mission. Trust, respect and accountability are the trades we want reflected in our culture.

And one total fund reflects two main concepts. First, the total fund is the PERF, the Public Employee Retirement Fund, and the affiliates. And second, the things that happen in the various parts of the portfolio, while critical, are only critical because they support the total portfolio. Again, it's the total portfolio that pays the benefits.

So both the why and the how are key in supporting and driving our progress on the enterprise strategic goal of fund sustainability, specifically delivering the target risk-adjusted returns on behalf of our nearly two million members.

Next slide, please.

--o0o--

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Thank you. Okay. This next slide was put together to depict the various subteams of the Investment Office and what they're responsible for. The idea here is to show the various programs and parts of the team, and how they fit into the running of the total portfolio and business model.

All the way to the left, you can see that we have the main strategy and research teams, namely the Board Governance and Strategy Team, and then the Research and Strategy Group. These teams are designed to be strategic and forward looking on topics such as our own governance model, sustainability, and on how we expose the assets we're entrusted with to a set of investment risks in an attempt to earn the assumed rate of return over a multi-generational time horizon.

So next to the right here is implementation. And this is where the assets actually go into the market. Note that the assets classes sit here along with trust level portfolio management and opportunistic strategies. Also note that these parts bleed over into strategy and research as they are close to the markets and therefore are a critical part of the team thinking through the long-term strategy

And in addition to thinking strategically, these subteams are responsible for portfolio construction, trading, deal underwriting, manager and partner monitoring, and related activities.

Finally, is the area of monitor, review and assess, which where we evaluate and report on the efficacy our outcome. Included in this part of the business are investment controls and operational risk, or ICOR, which is all about our operational framework and the control function within the Investment Office. Next is the Investment Servicing Division, which is where operations sits, business and finance management, and then technology and management within the Investment Office. And then finally is investment risk and performance, which is where we measure investment risk independently from the asset classes and implementation functions, and is also where we decompose our performance, both holistically and granularly to understand the efficacy of our decisions.

And then finally, we have our support function, which provides critical business and administrative support across the entire Investment Office. And importantly, as I mentioned before, we view each subteam, whatever they're responsible for, as being a key part of the overall portfolio management function as our role within the enterprise is to manage the portfolio.

Next slide, please.

--o0o--

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Okay. Our Total Fund Investment Strategy and Processes reflect our Investment Beliefs and our Governance and Sustainability Principles in many ways, whether it's the systematic review of strategies, making sure that the risks we're taking are the risks we want to take, centralized liquidity management, or looking at risk through various lenses. All of our activities are, and should be, grounded in our Investment Beliefs and Principles.

And on this second bullet, where we talk about being intentional in where and how we take investment risks, it's worth spending a bit of time on that. As mentioned earlier, we know that getting to seven percent won't happen without taking risk. But we also know that there are prudent risks, those risks that we believe that we can both manage, as well as be compensated for.

And these are the risks that we want to take, whether it's illiquidity in the private markets, growth equity risk, or other risks, as long as we can manage the risks, and as long as they're compensated, these are the places where the appropriate level of risk taking is prudent.

Next slide, please.

--o0o--

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Thank you.

Okay. Fiscal year 2019-2020 brought many unique challenges and opportunities. And I'm very proud of the very hard work of our talented team, along with the support of our executive team and you the Board.

I believe that we were able to accomplish quite a lot including the comprehensive, centralized liquidity dashboard and management framework, which helps throughout the year, especially during the COVID-19 crisis.

And we navigated COVID 9 crisis together, where within a week, we pivoted from really minimal remote work to a hundred percent remote work and have maintained productivity and risk control throughout this pivot. And I'd be remiss if I didn't acknowledge the excellent work of Christian Farland and the whole team in ITSB that helped facilitate this move to remote working.

We also completed this during markets that were as volatile as we see with equities losing more than a third of their value in about a month, only to recover very smartly quickly thereafter. We were able to manage the holistic portfolio in a centralized and team-oriented manner, maintaining the risk exposures that we wanted, and ultimately beating our benchmark. And we didn't skip a beat on the private asset side either, with private equity, private debt and real assets continuing to both manage our existing investments, but also underwriting desired deals that should accretive to the portfolio, both through the dislocation and into the future.

The Investment Strategy reviews were quite a success also, reducing external manager relationships and thereby reducing complexity, reallocating approximately $28 billion of assets to internal management, where we have greater control and transparency. And this reallocation takes the holistic PERF to nearly 80 percent internally managed and approximately 95 percent internally managed in the public markets.

This reallocation resulted in cost savings of over a hundred million dollars annually in fees. And we know that every dollar in fees that we save is a dollar that we retained to have available for paying benefits.

We also advanced our five-year total fund Governance and Sustainability Strategic Plan accomplishing some major KPIs. We now have at least one female director on the board of every company in the S&P 500 and we released our first ever report and response to the Task Force on Climate-related Financial Disclosures, with that report being CalPERS investment strategy on climate change.

And we've also made some organizational changes to reflect our one-team one-fund approach, including the creation of the Research and Strategy Group and the Board Governance and Sustainability Program. And all of these changes that we've made have been directly migrating from a total siloed culture and business model to a one-team one-fund approach.

And finally, through numerous strategy sessions of the leadership team in the Investment Office, we developed our next five-year strategic plan, which resulted in the mission and the vision that we discussed earlier, and also resulted in our five-year strategic plan objectives, which are viewed through the lens of what we call our four Ps, with those four Ps being the portfolio, our processes, our people, and then the result in performance. And it was truly a team effort this year and I really can't say enough how proud I am of the work of our team.

Next slide, please.

--o0o--

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: So I mentioned the lens of strategic plan is these four Ps and the focal points for each are here on slide six. For the portfolio, it's all about total fund allocation, leverage and liquidity, and then about private assets. The keys here are to continue to migrate our focus to the total fund and away from siloed thinking. To ensure that the risk exposures in the portfolio are the desired exposures in both the current time period and also strategically over the long term, and to manage leverage and liquidity, such that we can retain those desired exposures, regardless of market conditions and can do so in a centralized total fund manner, which is what we were able to do during that COVID-19 crisis.

Finally is to build our capability and further deploy assets into the private markets, where we believe that the risk-return trade-off is a better one.

Now, the second initiative is focused around processes, and it's all about institutionalizing transparency, discipline, clarity and accountability to increase organizational effectiveness. The keys are governance and decision-making, integrated research capabilities, and then leveraging technology and data in a more efficient, effective and strategic manner.

Now, the third strategic objective focuses on the who of driving success, namely our people. The goal was intentionally aligned to our Vision Statement, working as one team with a culture of trust, respect, and accountability to effective manage one total fund.

And the fourth objective is around performance. And to some degree, we believe that if we get the first three Ps right, the performance will result.

The key here though is to achieve positive performance, both absolute and relative, delivering our long term projected rate of return in support of paying the promised benefits.

Next slide, please.

--o0o--

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Thank you.

Okay. Now, on slide seven, you see the fiscal year 2021 is the first year of our strategic plan. And we have initiatives designed to begin driving progress immediately. Note that this plan is CalPERS plan, and we've already begun executing, and have, and maintain a great deal of momentum.

For the portfolio, we have projects focused on better assets and more assets, including a project on allocation, leverage, and liquidity management, a review of the investment component of the asset liability management process, and then focused work on improving our capabilities and deployment in private equity and in private debt.

For the processes, the themes are governance and decision-making, technology and data, and cost effectiveness.

For people, this year will be all about refreshing our strategy around our people, specifically how we recruit, develop, and retain our team to position ourselves for success, both now and in the future.

And for performance, it's all about delivering the desired performance and then measuring and understanding the sources of performance.

Next slide, please.

--o0o--

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: So from here, Madam Chair, I'm prepared to turn it over to Lauren Rosborough Watt to talk -- walk us through the current market and economic environment. But before I do, I'm happy to pause for any questions.

CHAIRPERSON TAYLOR: So I'm not seeing any questions, so it looks like we can move forward.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Terrific. Thank you, Madam Chair. Okay, Lauren, over to you.

INVESTMENT DIRECTOR ROSBOROUGH WATT: Thanks, Dan.

Thank you for the opportunity to speak today.

I'm going to speak briefly to pages nine and ten, providing a bit of an update of information. The main points, however, remain unchanged. The U.S. and the world economies have troughed. What we're watching now is for the pace of the recovery and trying to identify the risks to the speed of the recovery, both upside risks and downside risks.

So just stepping back a bit, the Coronavirus or

COVID-1 pandemic infections rose slight -- steady in June and July across the world, as well as in the U.S., before stabilizing at an elevated level in August. In the U.S. case, cases increased sharply around 70,000 per day. But the pace of cases has subsequently declined to a around about half this amount.

Now what's important from a macro perspective is that there's been a more targeted approach by governments and states to limit the spillover from affected -- infection pockets, effectively to help slow the spread and also to stop shutting down economies as what happened in March.

In addition, what we have seen is that consumers have become more apt at adjusting to reduced mobility and working from home. And consequently, activity has improved to a greater degree than the mobility statistics have.

In terms of figures, the global economy has rebounded from its lows in April and May. Q2 GDP numbers have been released. It shows how severe that trough was. In the case of the U.S., you know, for the first half of the year, for example, the U.S. is now about 90 percent of its size that it was in the end of 2019. In Q2 alone, it shrunk by a revised 31.7 percent at a seasonally-adjusted annual pace. Now, that's similar to many developed economies around the world. So it's certainly not unusual, but yes, quite severe.

So if we look from where we are now ahead to the second half of the year, we've got July data, some August data. And they're being released and they're very positive. Retail sales, both in the U.S. and in many countries have rebounded to their February levels, if not beyond in nominal terms. Now, that's quite remarkable when you think about the time frame we're referring to here.

JPMorgan Global Manufacturing output PMI has improved again in August to a figure of 53.6. Now, that's a level consistent with expansion. We've seen global trade volume has bounded -- bounced from its trough, so it's risen 7.5 percent in June, that's a month-on-month figure. And in the U.S., the August employment report showed that unemployment rate fell to 8.4 percent.

So the U.S. economy is rebounding very strongly from its trough. Just on slide 10, you can see the IMF forecasts there.

--o0o--

INVESTMENT DIRECTOR ROSBOROUGH WATT: So for the U.S., they have minus eight percent for 2020 for the U.S. Now, financial sector economists are forecasting a roundabout minus four to minus six percent for a calendar year basis to December. So that's quite a notable increase from expectations were in the middle of the year.

Going forward, the expectations by most economists are for U.S. activity to continue to normalize, but that the pace of growth to slow. And that's not at all surprising. You get a very large drop, you got a very bounce back, and then the pace of growth still positive, but to slower over time.

GDP is expected to be back at around Q4 2019 levels by the end of 2021, possibly into 2022.

What we do know is if the pace of growth slows markedly, expectations are going to rise for more stimulus from the Federal Reserve, possible on the fiscal side as well.

So, for now, what we can see is financial conditions are certainly easier than where they were in March and April. Challenges still remain, and there are still risks on the outlook. We've got escalating trade tensions. We've got the U.S. elections in November that are increasing uncertainty going into November. We also have the trajectory of the virus and also a vaccine and how that will be deployed.

So the unprecedented situation means that the outlook for both the U.S. and global economies remain unusually uncertain, I guess is a way to characterize it.

But that said, the bounce back has been very, very encouraging.

I'm happy to take any questions.

CHAIRPERSON TAYLOR: Yes, Lauren, thank you very much. I just had a quick question. You spoke about the -- possibly meeting more federal help for the stock market federal intervention. Had that stopped? I thought that was continuing.

INVESTMENT DIRECTOR ROSBOROUGH WATT: So there is no conclusion for now. Congress, we are deadlocked. So the Democratic party had a 1.5 trillion dollar effective bill that went through. The house, however, the counter from the Republican party so far has about 300 billion. So there's nothing been agreed at this point. What I can say --

CHAIRPERSON TAYLOR: And I'm actually not talking about that. I'm talking about the Fed and the Treasury buying into the stock market, so...

INVESTMENT DIRECTOR ROSBOROUGH WATT: So the Federal Reserve has adjusted its -- I guess, it's monetary policy, strategy, as it were, to try and attest to some concerns that there have been around the inflation target. But no, not for now.

CHAIRPERSON TAYLOR: Okay. Thank you.

It looks like -- oh, wait, there we go.

It looks like we do have a question from the public, but we're not sure on what part of Item 6 that they want to talk about. So, yeah, Cheree is double checking. And I'm going to go ahead, Dan, and say move ahead and then she can let me know and we can stop, if we need to.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Great. Thank you, Madam Chair.

So next Eric Baggesen will take us through the review of trusts, both the PERF and the affiliates performance, risk and the like.

So, Eric, over to you.

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay. Thanks very much, Dan. And good morning to the Investment Committee and also to members of the public that have dialed in to today's session.

If we can -- oh, we've got the next slide up. Perfect. This slide is basically a summary of the performance that was generated in the most recent fiscal year. And what the fund returned for the fiscal year, a return of just over 4.7 percent. And while that 4.7 percent did not meet the-long term objective of seven percent, we're actually very pleased with that outcome, and in particular compared to the status or the return status that existed at the end of the March quarter.

I think at the end of the March quarter, the fund was down just over four percent. So that's almost a nearly nine percent turn around in the return that was generated. And with that nine percent increase, attributable to the last quarter of the fiscal year.

One of the things that's interesting in the returns that were generated over the fiscal year ending June of 2020 was that the growth asset classes, which are public and private equity, are where we normally anticipate the highest levels of return. Those categories made almost no contribution to the overall outcome of the fund.

The public equity market increased by approximately 0.6 percent, private equity, which was valued only through the March 31st date. Generated a negative five percent return.

And again, I would emphasize that private equity and the private assets, in general, typically value their assets on a quarter in arrears. So the evaluation of private equity lines up with basically the bottom of the market responding to the COVID-19 crisis.

The biggest contributions to the return of the fund in the fiscal year came from the more conservative assets, such as fixed income, particularly the spread category, which had a nearly nine percent return for the fiscal year; the treasury category, which increased by almost 20 percent; and the real asset area, which had a return of over four and a half percent.

Also, we had a small contribution from the liquidity segment of the portfolio. When we look at the returns relative to the actual benchmark, the fund generated a positive excess return of approximately 38 basis points or 0. -- close to 0.41 percent.

We're actually gratified by this outcome also. The contributors to the excess return, we were again the fixed income area, predominantly again the spread segment, but which contributed approximately 14 basis points of that 38 basis point total.

The asset allocation work in the fund, and this is partly attributable to doing some rebalancing towards the bottom of the market in mid-March, that effort also added approximately 14 basis points to the excess return outcome. And then the real asset area had a positive relative performance, that contributed about eight basis points to the overall active return of the fund.

And this is significant turn-around from recent history. And I believe part of that turnaround is due to activities, such as the Investment Strategy Review that resulted in a significant reduction in the capital list, which was allocated to strategies. They historically have not generated positive contributions to the overall fund relative return.

When we look at the affiliate programs, the affiliate outcomes were very much aligned with their overall risk profiles. And the various affiliate funds have very different asset allocations in some instances from that used for the Public Employees' Retirement Fund.

And the last note I would make on this page is that we now have our official performance being calculations, and we believe serves to increase transparency.

If we could go to the next slide, please.

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay. When we look at the risk summary for the fund, we note first and foremost that the overall level of risk in the fund really increased fairly dramatically over the course of the fiscal year. And when I say dramatically, there was about a 1.8 percent increase in the anticipated volatility which move the overall volatility levels of the portfolio to approximately 11 and a half percent.

That increase in volatility -- and again, volatility is only one measure of risk, but it is a significant one. But that increase in volatility is a attributable to the risk models assimilating the variability and the volatility in the market movements that took place in relation to the COVID-19 crisis.

The risk continues to be dominated by the public equity market. That's basically consistent with the risk profile of the fund for the last several decades. So there's nothing new particularly about that.

The active risk levels, or relative to the benchmark, are just over one percent, and that's well within the one and a half percent threshold by which should we reach that level of active risk, basically the staff are directed to return to the Board with a plan to try to mitigate that risk and return it to living within that one and a half percent threshold.

Of that active risk, the great majority of that derives from basically the benchmark misfit that exists in the private asset areas of private equity and real estate. And the non-investable components of the benchmarks that are applied to those various parts of the portfolio.

Another dimension of the risk could be perceived as liquidity. And we believe that the liquidity of the fund is very strong. That's not -- monitored and managed pretty much on a day-by-day basis in accordance with the entire liquidity management profile that we've had a lot of discussion with this Board over the last 18 months.

Right now, we believe we have adequate liquidity to cover nearly three times any of the liabilities that would be -- present themselves, even in a stressed environment. And approximately half of our liquidity is being managed in an overnight fashion, where the instruments that are held in the liquidity portfolio mature basically on a daily basis. So that removes the need to actually generate transactional activity should liquidity need to be raised.

If we could go to the next slide, please.

Okay. Can we get to page 13 on the slide chart?

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: There we go. Perfect. This is basically a table that shows performance over several time horizons for the PERF and for the various affiliate funds. I think if you look to the far right-hand side of this table, you'll see the returns that were generated on a one-year basis. And the most recent fiscal year demonstrated a pattern of returns that is atypical to the expectations that we have in a establishing the asset allocation for the various funds.

And that atypical nature is really demonstrated by the CERBT strategies. And there's three CERBT strategies. And again, those are programs that allow employers to reserve capital and save capital for post-employment benefits that will be due in the future. But the CERBT 1 Strategy is the most aggressive asset allocation. And it more or less mirrors the asset allocation use for the overall Public Employees' Retirement Fund.

And then the CERBT 3 Strategy is the most conservative strategy with the lowest anticipated volatility. If you look at the results for the CERBT 1 Strategy, that generated a return of about three percent -- three and a half percent for the fiscal year. The CERBT 3 Strategy, the more conservative strategy, generated a 6.3 percent return. So you can see that the pattern of returns that were generated the most recent fiscal year, the more conservative assets were rewarded in contrast to the expectations set that underlies the overall asset allocation activity.

Even when you look over the three- and five-year time horizons, you still see some mixture of performance between the more conservative and the more aggressive assets. It's only when you move out into the sort of ten-year time horizon that you start to see the expected pattern of returns starting to evidence itself, where the more aggressive assets of public and private equities examples start to show stronger returns.

But I would point out that that ten-year time horizon happens to coincide with pretty much the bottom of the marketplace during the financial crisis of 2008 and 2009. So it's indicative of the fact that ultimately returns are sensitive to the starting conditions. And when you have very low valuation levels, you know, there are high expected future returns. When you have higher valuation levels, that serves to diminish the expectation of future returns.

If we could move to page 14, please.

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: Thank you. Okay. This table reflects the performance of the supplemental income plans. And these again are defined contributions structures that are offered by a number of employers around the state of California to their employees to help them save for retirement expenses.

This table, just as the prior table, demonstrates again that the more conservative asset allocations had higher levels of return in the most recent fiscal year compared to the more aggressive ones.

And the more conservative asset allocations tend to be the target date 2015, 2020, 2025 time frame where it's anticipated that people will be retiring in the next five to ten years in contrast to the target dates farther out into the future, all the way out as far as 2050, for example, which are typically targeted towards younger employees that have a much longer duration to their careers and the belief that those -- that longer duration implies a capacity to take on higher levels of investment risk.

Again, you see in the five- and ten-year columns, you start to see those columns be more reflective of the anticipated results. And when I say anticipated results, it's the belief that the more aggressive assets, such as equity investing, will ultimately generate higher levels of return. But this is indicative of the fact that you can have significant periods of time when that expectation is not realized.

I think one of the things that's interesting in this -- in this table is really the last two rows of data. Can those two rows of data reflect the variance between the stock market outcomes that have happened in the domestic U.S. markets versus the outcomes that have happened in the international markets. So that first row, the Russell All Cap represents the U.S. marketplace. And what you see is that over recent time periods, and honestly even stretching back five or even ten years, although we don't have a ten year number on this page, the U.S. stock market has been significantly stronger than the international markets.

And the implication of this is that plans, and CalPERS is one of them, that have a global, highly diversified portfolio have tended to underperform investors that have been reflective of a significant whole market bias, where they have concentrated their investments in the United States. It's unclear whether that pattern will continue. We do believe and continue to believe that international investing ultimately is a rational and a reasonable outcome, basically to create more diversification in the portfolio.

But you can go through significant time periods where you end up with quite a -- quite a variation between the results generated in those different domiciles.

And if we could flip to page 15, please.

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay. This chart reflects the active return of the fund. And again, it's that excess return. The bars on the chart represent the annual increments of excess return. The lines on the chart represents a rolling five-year period. One of the things I think is most interesting on the chart is that line. And if you look at it, the origin of that line is more than two percent negative. That represents the results that were generated during the global financial crisis, where we, in essence, had very significant, negative excess returns.

Now, the two major contributors to that negative excess return from the financial crisis were, number one, the costs associated with raising liquidity in order to support the activities around a security lending program, and number two, the very poor relative performance that emanated from the real estate portfolio. And the real estate portfolio at that time had migrated to representing a very -- very much what is perceived to be an opportunistic or a higher risk set of investments.

It has been over the succeeding time period a huge amount of work done to basically bring the real estate portfolio back much closer -- to be in much closer alignment with the role that real estate is perceived to play in the portfolio. And that role is really centered on generating income and also generating a measure of diversification from some of the equity risk.

We were very happy with the relative return performance in our most recent fiscal year, the deposit of 38 basis points. And that positive 38 basis points represents quite a turnaround from the pattern of returns, where for the prior five years we had basically slightly negative or even flat relative returns.

And if we could on move to page 16, please.

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay. Page 16 represents a schematic representing the overall risk allocation of the fund. What you see basically is that the risk in the CalPERS portfolio - and again, this is overall levels off volatility - really derives from those growth-related assets of public and private equity.

So we basically have a situation where less than 60 percent of the assets generate more than 80 percent of the variability in the risk again measured by volatility of the overall PERF.

If we can move on to page 17, please.

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay. Page 17 is a very interesting chart that was put together by our Investment Risk and Performance people. And what they've done in this chart is to take our current asset allocation and they have extrapolated that asset allocation backwards in time for almost a hundred years to attempt to estimate what they believe the outcome to the PERF would have been over that time period.

I think this chart is very interesting on a couple of different dimensions. So first is if you actually look at the frequency of equity drawdowns -- and this is performance during equity drawdowns in the marketplace. So if you look at that frequency of equity drawdown, you just have to seriously ask yourself, if you know, is the label like infrequent, if that is applied to the concept of equity drawdowns, is that really appropriate? Because we've obviously sustained a number of equity drawdowns, you know, over that nearly hundred year time period.

The other dimension of this that's very interesting to me is also the duration that some of those equity drawdowns can extend. Obviously, the most extreme drawdown duration started in the late 1920s and extended on through the Depression.

And what you really see on this chart is that it almost took the conclusion of World War II to ultimately bring risk investing, you know, back to a position of actually being significantly rewarded. So the duration of some of these drawdowns can be pretty material.

And this is one of the reasons that the CalPERS staff have such a commitment to attempting to maintain the diversification of the portfolio, which, in some cases, means basically allocating capital to lower return -- or expected return assets, such as fixed income. And again, in the most recent fiscal year, we saw that return to the more conservative assets being paid off.

And if we could flip to page 18, please.

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: Thank you. Page 18 reflects on tracking error. And again, this is a volatility based measurement that represents the active risk in the fund or the difference from benchmark. What you see is that it -- the active risk in the fund, first and foremost, is a very small proportion of the overall level of risk. So if you think back on that 11 and approximately a half percent overall volatility, you see that the active risk of the fund only contributes about four percent of the total of that 11 and a half odd percent expected volatility.

So active risk is not a huge contributor to the overall variability of the CalPERS portfolio. And that -- the inference from that is that the CalPERS portfolio significantly is representative of a benchmark-oriented program.

What you see on the right-hand side of the chart is the blowup of that four percent slice to reflect the fact that the majority of even that small proportion of overall risk is basically generated in large measure by the private assets. And again, that is private asset benchmark misfit or uninvestability.

The Investment Risk and Performance team used the label non-actionable in this description. And I actually like that label very much, because that is one of the challenges in actually trying to create accountability around the active risk in the overall portfolio.

We've been attempting to make some benchmark changes over the last year or so to try to reduce the level of active risk that is not directly traceable to any particular decision made by the staff.

And an example of that kind of change is the floating of the weights of the private assets, where they float with market outcomes, and on a quarterly basis are reset to their actual proportion in the portfolio. And what that serves to do is bring the calculation of the benchmark more closely in alignment with the actual mechanics of how the portfolio is run.

And the objective of that is to again remove the calculation or the demonstration of risk that is not the result of any specific decision that anyone can control. And that serves to ultimately increase the degree of transparency on where risk is taken, and it's taken deliberately. And it also increases the ability to do attribution on the kinds of decisions that result in the active risk. And that attribution is ultimately necessary to try to create more accountability within the CalPERS staff and then within our external managers, and it's accountability as to whether or not those decisions that lead to active risk are actually resulting in an improvement in the overall level of return.

I think the last comment I'd like to make, before we move on to the next section or see if we have questions, is that that 4.7 percent return that was generated by the CalPERS portfolio in the most recent fiscal year, while again that was under our seven percent objective, that return, in my mind, it actually reflects very favorably relative to the majority of the peer universe.

I believe our returns, for the most recent fiscal year, were probably close to a hundred basis points in excess of kind of the average of the public fund universe. And there will be more information about that when Wilshire presents their review later on in the next agenda item.

But I think that, you know, we should be gratified with that outcome. And it's a reflection partly of the asset allocation work that we did several careers ago to basically deliberately incorporate diversifying assets in the fund. And that's one of the challenges that continues to remain though is how to retain those diversifying assets, even in the face of lower forward expectational returns.

And I think now we could flip to page 19.

--o0o--

MANAGING INVESTMENT DIRECTOR BAGGESEN: We can see if there are any questions.

Ms. Taylor, do we have questions?

CHAIRPERSON TAYLOR: Eric -- Eric. Thank you very much for your presentation. I just wanted to -- I do have some questions. I wanted to thank you also kind of bringing to our attention the -- the strategies for the CEPPTs 1, 2 and 3, which shows different risk levels and return levels. And I thought it was interesting -- then again on the target funds.

So it's interesting to see that if we wait for the long term and our appetite for risk is -- you know, we have an appetite for that risk, then it's going to have a return for us. And I just -- I thought that was an interesting way to show that you just have to understand that what is our risk appetite and -- you know, for going forward, because we're a long-term investor. And it shows that if it -- if we're willing to take the risk, we get the returns we need.

Our -- questions I have is from Henry. Go ahead, Mr. Jones.

COMMITTEE MEMBER JONES: Thank you, Ms. Taylor.

Yeah. Eric, I'm looking at page 11 of 88, 86 of the iPad, where it's the absolute return of 4.7 percent. That's the chart -- page I'm looking at.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Sure. Could we -- could we flip back to page 11, please?

COMMITTEE MEMBER JONES: Yes. Okay. That one. Yeah. And you did comment on it. I was looking at the minus 5.1 return of private equity. And we all know that for years, this has been our -- the asset with the highest investment returns over time, even short term and long term. And I do remember you saying that the market downturn was greatest in April or March. And -- but then when you look at the public equity, it's now a positive 0.6 versus the private equity on negative 5.1. And I recall you saying that -- that -- because it lags a quarter, I think you said, that -- the private equity valuation. So it does not pick up the return for that last quarter in private equity.

So my question, if my assumption is correct, is that if and when we get the June numbers, that 5.1 perhaps will disappear also, is that a correct assumption?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Well, that's certainly what we hope for Mr. Jones.

(Laughter.)

MANAGING INVESTMENT DIRECTOR BAGGESEN: Until we actually get the numbers --

COMMITTEE MEMBER JONES: Yeah, I know you don't have the actual yet.

MANAGING INVESTMENT DIRECTOR BAGGESEN: -- it's hard to forecast it.

(Laughter.)

COMMITTEE MEMBER JONES: Yeah.

MANAGING INVESTMENT DIRECTOR BAGGESEN: What's interesting about this to get to your question about it, the negative five percent return for the private equity -- and again, that lines up with the March 31st valuation activity in relation to private equity. At that point in time, the public equity capitalization-weighted benchmark, just as an example, was down more than 15 percent. So if we lined up the public equity outcome for that quarter, relative to the private equity, you still see private equity representing almost a ten percent improvement on top of the outcome as of that March quarter.

So we're absolutely hopeful that private equity will reflect the increases that we've seen in the public equity markets that have taken place since that time frame. And obviously, they've been very, very significant. And we're not surprised when private equity lags the public equity market that's going up pretty much straight up, you know, despite even a few of the bumps.

COMMITTEE MEMBER JONES: Okay.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Does that answer your question, sir?

COMMITTEE MEMBER JONES: Yes, it does. Yes. And, you know, we will -- when will we see the June numbers -- quarter ending in June, when will we see the private equity numbers for that period?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah. That information will start to evidence itself I believe at the close of the September quarter.

COMMITTEE MEMBER JONES: Okay.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Whether they'll actually have it reflected for the September quarter of it will take going out into October, I'm not a hundred percent sure.

COMMITTEE MEMBER JONES: Okay.

MANAGING INVESTMENT DIRECTOR BAGGESEN: We could get a more precise answer on that for you.

COMMITTEE MEMBER JONES: Okay. Thanks. And then the next question --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yeah. Mr. Jones, I just --

COMMITTEE MEMBER JONES: Yeah, go ahead.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: I'm sorry, Mr. Jones, I'll jump in quickly. Yes, it will be the September 30th performance where you'll see that. And anecdotally what you've seen is as valuations have started coming in in private equity space, we've seen those number be -- numbers being something like plus eight percent for that quarter. So as Eric mentioned, you know, you saw this drop as we came down. But then given the very strong bounce back in the public equity markets, we've seen similar things coming in.

COMMITTEE MEMBER JONES: Okay.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Now, private asset valuations tend to be a little bit smoother, but you are certainly seeing a bounce back in those -- in those valuations coming in.

COMMITTEE MEMBER JONES: Okay. So let's just hold our powder for -- in looking at this going forward.

The other question -- a comment I had was on the tracking error. It's page 18. It's, I guess, 95 of the -- yeah. And so as you were explaining this -- and tracking error, to some degree, tells us what kind of risk that's being taken. And looking at these charts is active risk. And that's the decisions that staff has made that's contributing to the tracking error in terms of risk. And the rest is -- the market itself is -- is causing the greatest portion of that risk profile in the tracking error, is that correct?

And also, when are we going to have a deeper dive in understanding this tracking error as it relates to the risks that the Board -- since we're coming up with our asset management liability process, we need to, I think, get a better understanding of this risk profile.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Well, to answer the first part of your question, sir, the answer is absolutely, yes, that the overall markets that CalPERS has exposure to generate by far the lion's share of the variability in the outcome.

So as I say, basically, I interpret this chart to -- that the CalPERS portfolio overall is very benchmark oriented. When you only have approximately four percent of your overall risk level, representing active risk or different decisions that make the portfolio different than the benchmark, that's basically indicative of a relatively low level of active risk.

And even then, when you look at the blowup on the right-hand side of the page of that, the majority of even that difference is attributable to the private assets. So there are really very limited numbers of decisions or magnitude of decisions with this being risk taken that makes the portfolio dramatically different than the benchmark.

And I'm going to have to ask Dan if he's got a time frame in mind as to when we might bring back a discussion more on active risk or tracking error.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: We do. Thanks, Eric. And thank you for the question, Mr. Jones. Yes, it's currently calendared for November. So our Investment Risk and Performance team is currently working with Wilshire and there's a couple of things there.

One, to you point will be to take a deep dive to really understand tracking error, but secondly to really make sure that the tracking error is serving as a risk limit that the -- that the Board can feel comfortable with how it's working as a -- as a risk limit. So both from an understanding standpoint, but then also making sure that it's meaningful. And that's the stuff that -- that currently staff and Wilshire are working together on as we speak with the plan of bringing that to you in November.

COMMITTEE MEMBER JONES: Okay. Thank you very much.

CHAIRPERSON TAYLOR: Is that all, Mr. Jones?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Does that conclude your questions, Mr. Jones?

COMMITTEE MEMBER JONES: Yes, it does.

CHAIRPERSON TAYLOR: All right. Thank you.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Ms. Taylor.

CHAIRPERSON TAYLOR: I have a question from Ms. Middleton. Go ahead, Ms. Middleton.

COMMITTEE MEMBER MIDDLETON: Okay. Thank you. And Eric, Dan, and all of the team, this has been a very good presentation. I really appreciate it.

Mr. Jones asked one of the questions that I wanted to ask. But Eric, could you explain a little bit more in detail why there is approximately a one-quarter lag in the results of private equity?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah. I think, you know, truthfully in our private equity people during their program review, Greg Ruiz, and -- will be talking to this. And honestly, Greg might be able to provide a more complete answer than I can.

But let me just offer that basically private assets are typically valued often in an array of models. And those models look at, for example, the business activity underlying. It looks at comparable valuations, for example, in things like real estate. It looks at a number of things that are actually divorced from the marketplace or how publicly-traded assets are valuing at any moment in time.

And it really takes time for those valuation models to be estimated and then to basically reflect that in the books and the records of these private funds. So it's just the operation of those funds just tends to basically only be able to assimilate that data just so fast. And we -- literally, it just takes time, for example, between when we see the marketplace moving around and when that becomes, you know, evidenced on a more widespread basis through the actual economy.

So there can actually also be a significant divorcing between what happens in the underlying economy, and that was the material that Lauren Rosborough was talking about, and then what happens in the financial markets. So you can have a very significant divergence. Even while the economy, for example, has been going down during the whole COVID crisis, the financial markets dropped and then have had a huge recovery --

COMMITTEE MEMBER MIDDLETON: Right.

MANAGING INVESTMENT DIRECTOR BAGGESEN: -- way in advance of when the actual economics have recovered. So the private assets just have all of this timing difference that they need to be normalized for. And I -- and I don't know if Dan has more commentary that he'd care to offer to that.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Yeah. The only thing I would add, Ms. Middleton -- thanks, Eric -- is that in the public markets, these things are traded on exchanges. So you would have pricing continually and you take a closing price, and then you calculate performance, right? So it's very ease to get a June 30th price, because it's the closing price on that day.

In the private markets, to Eric's point, what happens is you have all these models, and they're -- and we receive financial statements over time, and that time just takes time. So the methodology that we have pursued to give ourselves time to calculate this, is that we just -- it snaps on a certain date, then all the models are run, financial statements are received, all of these things are completed, and then we calculate performance. And that takes approximately a quarter. And that's the reason for the quarter lag.

COMMITTEE MEMBER MIDDLETON: That makes sense. Thank you.

Are there other asset classes that have this kind of divergence in timing?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: There are, yes.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Real estate. Dan, go ahead.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Private equity. No. Private equity and real assets certainly. And then our expectation is that private debt will be similar, because again it will be --

it's -- you know, it's going to be delayed. And Jean can speak more -- in more detail to that one.

COMMITTEE MEMBER MIDDLETON: Again, approximately a quarter delay or is it even longer?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: No, a quarter. A quarter in all cases is the expectation. Certainly, in real assets it's a quarter.

COMMITTEE MEMBER MIDDLETON: Okay. And I wanted to go back to the slide on liquidity, where Dan talked to us about having 2.9 times the Tier 1 30-day stress.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Let's see.

COMMITTEE MEMBER MIDDLETON: I think you went past it there.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah, I think that's page 12.

COMMITTEE MEMBER MIDDLETON: There we are.

MANAGING INVESTMENT DIRECTOR BAGGESEN: There we go.

COMMITTEE MEMBER MIDDLETON: Okay. Describe in more detail what you mean by tier 1 30-day stress.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah. Basically, we've taken our -- in our liquidity management framework, assets are, in essence, tiered. And the tiering refers to what is the maturity profile of those assets? So tier 1 assets are typically assets that mature in a very short time frame. I'm not a hundred percent sure if tier 1 is limited to 30 days or even in closer than 30 days. So we could get -- we could get detail on that from the people that do this calculation.

But what we're looking at are trying to understand assets that will convert into cash for a maturity process in contrast to having to actually sell the asset in the marketplace. So there's just a difference between an asset that matures and you're getting repaid the capital absent any kind of a transaction that needs to be generated.

The stress scenario is basically applying what can take place over a 30-day time period. And we've looked back historically to identify these types of scenarios and said how much can the market move? And obviously for example, in March of '20 we saw a very significant move in the equity market, which dropped almost by a third, in less than a month's time frame.

So that's indicative of that kind of a stressed environment what happens on various liabilities and the demand for liquidity.

So what we're saying in this is that in a stress scenario, we believe we've got more than three times the amount -- or about three times the amount of liquidity necessary to meet any liabilities that would come up. And those liabilities derive both from the retirement benefits and pension benefits that CalPERS pays out --

COMMITTEE MEMBER MIDDLETON: Right.

MANAGING INVESTMENT DIRECTOR BAGGESEN: -- but also due to mark to markets on things such as derivative instruments. If you holding futures contracts to represent equity exposure and they go down, you have pretty significant mark to markets that you have to pay. And that's what's inferred by that statement, Ms. Middleton.

COMMITTEE MEMBER MIDDLETON: All right. Thank you. The -- is there a best practice target that you have in this area?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Well, I don't -- I'm unaware of a specific ratio as a best practice. We think our entire liquidity management framework basically is absolutely best practice, and, you know, that would also be potentially a question that, you know, would be a valid question for you to ask one of your external consultants, for example, such as Wilshire Associates that looks at liquidity management processes across a number of different kinds of entities.

You know, as an employee of CalPERS, I'd like to believe that ours represents sort of state-of-the-art, but, you know, I think you need somebody else's opinion to basically buttress that comment.

So I think that -- I think it is, and there are different -- we're using, in general, the kinds of definitions and interpretations of these metrics and these statements basically that are generally used throughout the industry.

COMMITTEE MEMBER MIDDLETON: Okay. Thank you for --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And, Mr. Middleton, I'll sorry, I'll just

COMMITTEE MEMBER MIDDLETON: -- thinking about following up with Wilshire later on, and I will certainly do that. But liquidity is an -- was an issue for CalPERS in 2007, 2008. And so being certain that we are in a strong position today I think is one of the signs of lessons learned from the last crisis.

All right. Thank you.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Absolutely, Ms. Middleton.

MANAGING INVESTMENT DIRECTOR BAGGESEN: I agree with that statement.

COMMITTEE MEMBER MIDDLETON: Yeah.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And I'll say anecdotally that we have actually seen, in going through this COVID-19 crisis, just, you know, completely different, you know, experience, where, in the -- you know, in the -- in the Great Financial Crisis, we -- if we didn't know what the liquidity was, we were disparate in our management that's sort of legacy, we were disparate in our management. That's, you know, sort of a legacy-siloed thinking. We didn't have clear sources and uses of liquidity. We just knew that there was liquidity challenges across the portfolio.

This time, as Eric said, we have a very clear list of what the sources of liquidity are, what the uses of liquidity are. It's all centrally managed. And this time through, even when the markets were exhibiting stress and illiquidity, our portfolio, our balance sheet stayed completely liquid and we were continuing to be able to, you know, as Eric said, to rebalance the portfolio when needed, to lean into private markets opportunities. It was a -- it was -- it was night and day difference from the -- from the last time.

And I agree, that we think -- as to Eric's point, it's definitely worth asking the consultants. But we feel gratified that it -- it held up the way -- that way it expected -- the way we expected it to this time through and it was -- that's encouraging.

COMMITTEE MEMBER MIDDLETON: All right. Thank you. Last question I have for you, and you'll probably tell me I should ask Wilshire this one as well. But with the volatility index going from 9.7 to 11.5, Eric, you used the word "dramatic" to describe that change. So are we approaching volatility numbers that you think are as high as we should go or where do you see us over the next 12 months in terms of what we should be looking at in terms of our volatility of the portfolio?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah. I think -- well, first, let me be very clear that the numbers that we have represented are estimates of volatility of the CalPERS asset allocation. And those estimates are calculated using our BarraOne risk platform.

COMMITTEE MEMBER MIDDLETON: Right.

MANAGING INVESTMENT DIRECTOR BAGGESEN: So, one, those volatility estimates are not what's called the VIX index or the volatility index that's typically used within the financial community to indicate market stress.

So that VIX index is much -- the order of magnitude of change is that that particular index are much in excess of anything that we're seeing in the calculation of risk around the CalPERS portfolio.

But that -- basically, the volatility of our portfolio increased by approximately 1.8 percent. And again, this is using a relatively longer term model. So it takes a fairly dramatic short-term outcome. And that's exactly what we saw in the March time frame in particular around the whole COVID crisis to shock that model with that -- with that kind of a short-term outcome to generate that order of magnitude of change.

My own personal -- and this is just a guess, because we really don't know how this is going to evolve, because it's going to be entirely dependent on what happens in the marketplace. And obviously, we have a lot of uncertainty still out in front of us, not the least of which is the upcoming election. We're still in the virus situation. We still don't have, for example, vaccines and things of that nature that we know are going to have efficacy and basically helping to manage that problem. So there's a -- there's still a tremendous amount of uncertainty and potential sources of uncertainty.

But everything else being equal, we would tend to think now that we would basically see the longer term nature of that model start to diminish that risk back down as other observations come in and sort of temper some of the volatility that was generated in that first quarter of the year.

And that's about as precise an answer as I could offer.

COMMITTEE MEMBER MIDDLETON: That's a very good answer. Thank you, sir.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And, Ms. Middleton, maybe I'll just -- just add just really quickly. And this is the challenge of risk management, right, is that it's a mosaic, and you use -- there isn't a single number or metric that will tell you the risk. There's lots of them.

I will say that your strategic asset allocation hasn't changed and therefore the portfolio largely hasn't changed. So the actual risk of the portfolio really hasn't changed. What's changed is to Eric's point, the historical observations that the -- that the model is using have become more volatile, which makes the apparent volatility of the portfolio go up.

You know, measured model volatility is an important metric. But again, it's only one, and that's the reason why we -- why we have so many, whether it's liquidity, whether it's tracking error, or whether it's vola -- you know, total volatility, all of the above is triangulating to are the risks we're taking the risks we want to take. And I think we feel comfort that it -- that the answer is yes.

COMMITTEE MEMBER MIDDLETON: Dan, thank you. To put what I think you just said in lay language, the change in -- from 9.7 to 11.5 reflects more the changes in the market than it reflects a change in our portfolio, is that correct?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes. You said it better than I did, and yes, that is correct.

(Laughter.)

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Thanks, Ms. Middleton.

COMMITTEE MEMBER MIDDLETON: Thank you.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS: Ms. Middleton, this is Arnie Phillips. Can I step back real quick to your liquidity question?

COMMITTEE MEMBER MIDDLETON: All right. Thank you.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS: Our dashboard actually has three tiers, a tier 1, a tier 2, and a tier 3, and also it takes snapshots over three periods, a seven day, a 30 day, and a 90 day. So we gave you the 30-day a tier 1, tier 1 being what we perceive to be better liquidity than say tier 3 assets. And I think you hit the real issue, which is in the '07, '08 issue, our portfolio - and I was here during that time - would have likely been considered tier 3 assets. So we have completely, in addition to getting away from silos and having a total fund centralized management of it, the quality and the liquidity of the reinvestment book has gone from basically tier 3 assets to tier 1 assets. So we have much higher quality assets in our opinion. We also have a much better view of them.

So you saw a single snapshot on that tier 1, 30 day.

COMMITTEE MEMBER MIDDLETON: Um-hmm.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS: It's broader than that. But I think you got the moral of the story, which is our portfolio is much better positioned today than it was a decade ago.

COMMITTEE MEMBER MIDDLETON: Thank you. Thank you, all.

CHAIRPERSON TAYLOR: Okay. So we still have some questions. And I just want to say I think we all should understand -- I don't know if you all remember when Mr. Meng came in and he started talking about upping our liquidity, which has been -- was his plan when he moved forward, and working to create our total fund and our liquidity. I think that's what set us up for having such a great return. So I just wanted to remind folks of that. It's a shame that we've lost Mr. Meng.

And I have first from Mr. Jones a question and then Ms. Yee.

COMMITTEE MEMBER JONES: Yeah. Two questions. A comment and then a question. As Ms. Middleton said, that lessons learned. And Arnie mentioned it about the 2008, 2009 financial crisis with the huge drawdown on our assets, the impact on our fund. And as we know, regardless of the return, we still have to pay benefits every month. And $19 billion was -- still had to go out the door to pay benefits, and -- but we were in a position having to sell assets that were undervalued at the time, because we need to generate cash to pay those benefits.

So we created an asset class of liquidity at that time. And what is the target of that liquidity asset class that is -- is it one or two percent, Arnie or Dan?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes. Mr. Jones, it's --

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes, the current target for liquidity -- I'm sorry. Go ahead, Dan.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: No. I'm sure we were going to say the same thing. Sorry, Eric. It's a one percent target for liquidity, Mr. Jones.

COMMITTEE MEMBER JONES: Okay. Good. So I just wanted -- and I was here in 2008, 2009 also. And I know it was -- we took a bath because we didn't have cash to manage the system. So I'm very pleased to see that we have instituted this asset class and it's paying off now that we are in another downturn market.

The other question I had is the -- the -- back to that comment about evaluating -- the lagging evaluation of private equity and real estate. That's not just a CalPERS phenomenon, that's throughout the industry, is that correct?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Correct.

COMMITTEE MEMBER JONES: Okay. Okay. Thank you.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS: Mr. Jones, Arnie Phillips again. Just to elaborate on that liquidity question, we also have a much different portfolio in the sense that we have a ten percent U.S. treasury sleeve now dedicated to providing liquidity. And that's a much different position than we were in in the Financial Crisis also. So we have that dedicated one percent to liquidity, but we've also made a very concerted effort to make sure the rest of the portfolio has liquidity attributes ability to borrow against those assets, if we need to. And we had encumbered then in a sense last time, and they weren't there. We were making sure this time that those assets can be used for liquidity purposes, if needed.

COMMITTEE MEMBER JONES: Thank you.

CHAIRPERSON TAYLOR: Thank you.

Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Madam Chair.

I just wanted to just take a divergence for a moment. So we're in an election year. And I was just curious, with respect to the observation about the market and diverging from the underlying economy, at what point -- because it seems like before every Presidential election, the market does kind of reflect its sentiments about what may lie ahead.

And, at what point, will we see some of that just, you know, reflected in the market, both in terms of the election, and I think this time around a lot of concern about the leadership transition after the election.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Dan, do you want to take a shot at that one.

(Laughter.)

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Sure. I mean candidly -- happy too, Ms. Yee. Thank you. Candidly, the answer is we're seeing it, right? I mean you're certainly seeing it in some of the derivative markets on election and then volatility in the outcomes of the election. You know, markets are discounting regimes and they -- you know, they sort of assess all the different outcome -- potential outcomes and then kind of effectively, through markets, assign -- assign probability.

So, you know, you are seeing it. And I think that's one of the simultaneously most enjoyable but also challenging things about investment, is that, you know, everything is pricing in this way. And, you know, I think last time, frankly I think generally people thought that there would be one election outcome and a certain market response. And then we got the opposite election outcome, but actually that very positive market response. And so that -- you know, it takes you to this point of constant humility investing in these markets, that we don't know exactly what -- what is going to happen.

But what we do know is that if we can maintain our long horizon, we can maintain our competitive advantages and position the portfolio for long-term success. We can see across elections, and cycles, and the like.

COMMITTEE MEMBER YEE: Great. Thank you, Theresa.

MANAGING INVESTMENT DIRECTOR BAGGESEN: If I could just --

COMMITTEE MEMBER YEE: Oh, I'm sorry.

MANAGING INVESTMENT DIRECTOR BAGGESEN: I was just going to offer one incremental comment to what Dan just said, and I think this is really important. We have absolutely no idea what the future is going to bring. And anyone that operates in the financial markets that implies that they somehow or another know what the future is going to bring is just -- that's just witchcraft basically. That doesn't exist.

So our main objective is to make sure that we can respond appropriately and attempt to maintain our risk profile, despite almost whatever conditions the market happens to give us. And that's -- that's what all of our management tools are designed to help us do in all of these dimensions, such as the liquidity management framework.

So we don't know what we're going to see, but we're pretty confident that we're going to be able to maintain the target CalPERS risk profile through whatever it is.

COMMITTEE MEMBER YEE: Thank you. Thank you, both.

CHAIRPERSON TAYLOR: Thank you, Ms. Yee. Great questions.

It looks like we can move forward. I don't see anymore questions.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. Thank you, Ms. Taylor.

It looks like we went to slide 19. Terrific. And we'll ask Steve Carden to forward and talk about global equity.

INVESTMENT DIRECTOR CARDEN: Thank you, Dan.

--o0o--

INVESTMENT DIRECTOR CARDEN: And good morning, ladies and gentlemen of the Board and our public. Steve Carden representing Global Equity.

Before I dive into covering global equity, including the program highlights, performance, and accomplishments, I did want to draw some attention to something I noticed in looking at the -- the total deck overall. That is, you'll likely see a number of points covered within the asset classes that have already been covered by the total fund portion that Dan and Eric have covered. And I found this to be a very positive outcome that reflects our total fund focus and the culture that we have all adopted.

I also want to pause for a minute, as my eyes are itching and throat is scratchy to thank our firefighters. Can't even imagine what they're going through right now, so we appreciate that.

And with that, let's take a look at the global equity review.

If we could go to slide 20, please.

--o0o--

INVESTMENT DIRECTOR CARDEN: Okay. As you know, from the asset allocation work, global equity is the principal asset class providing growth exposure. Our team participates in global markets. And it uses this experience to provide perspective and also some insight to decision-making that happens at the total fund and strategic asset allocation level.

Our program is thoughtfully delivering multiple equity betas with low active risk and very efficient cost. In fact, 97 percent of the portfolio now consists of internally managed low-cost strategies.

One thing that's inherent in managing low active risk strategies is the need to rebalance just to remain similar to the benchmark. This is often results in meaningful purchases of securities whose weight in the index has increased and sell trades of securities weight has decreased. And we see that in our big rebalances.

During the COVID-19-driven equity market drawdown that we saw in March, the global equity portfolio's defensive positioning and focus on high conviction strategies did help moderate the impact to the total fund.

Now, let's take a look at that.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Steve, I'm sorry to interrupt you. We're somehow not getting video. Are you having technical challenges around the video?

Oh, there we go.

Now, we lost it again.

INVESTMENT DIRECTOR CARDEN: I'm sorry. It says sending video.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Okay. Yeah, there we go. I know you're in the office, but it keeps kind of coming on and off. Okay. Sorry. We'll -- let's continue and hopefully we're getting the video.

Continue on.

INVESTMENT DIRECTOR CARDEN: All right. Seeing -- seeing my is not the highlight, anyway.

So if we could go to the next slide, please, slide 21.

--o0o--

INVESTMENT DIRECTOR CARDEN: As Eric mentioned, global equity did return about 0.6 percent for the fiscal year. That's positive 0.6. And that represents an excess return of about 21 basis points. The index-oriented and active strategies were both positive contributors, while alternative beta and emerging manager strategies were a drag on performance.

And as Eric alluded to, and is expected, the factor-weighted segment provided drawdown protection and diversification when needed, though it did underperform the cap-weighted segment for the fiscal career.

Next slide, please.

--o0o--

INVESTMENT DIRECTOR CARDEN: Now, I'd like to highlight a few of global equity's major accomplishments for the year. As part of the systematic assessment of strategies that Dan and Eric mentioned, we did review and restructure three of our program areas, the tradition active, the emerging manager and alternative beta portfolios.

This restructuring not only led to a higher conviction portfolio, but it also helped us reduce costs of implementation from nine basis points down to four. This represented a savings of about $82 million. The team also quickly and successfully adapted to the remote environment, like the entire organization really. And we maintained a strong culture of communication and collaboration that was previously established.

Having this, allowed us to effectively manage the portfolio, including implementation of very large quarterly rebalance through extreme market volatility in March and April.

And finally, the team helped progress implementation of the Total Fund Governance and Sustainability Strategic Plan.

Next slide, please.

--o0o--

INVESTMENT DIRECTOR CARDEN: I want to wrap-up with a few comments about global equity's current year initiatives. First, our corporate governance team will continue to collaborate in the development and implementation of a new multi-year Total Fund Governance and Sustainability Strategic Plan.

Global equity will also be focused on selecting and beginning implementation of a next generation multi-asset trading platform.

Additionally, we will be evaluating strategic benchmarks for the strategic asset allocation work that more effectively capture equity market betas.

And finally, global equity will collaborate to -- and integrate risk exposure management across public and private equities. The goal being to identify the best way to measure and manage the combined equity exposure.

That concludes my prepared remarks. I'm happy to take any questions that the Board may have or otherwise turn this over to Arnie Phillips.

Thank you.

CHAIRPERSON TAYLOR: Thank you, Steven.

I wanted to thank you for your presentation. I'm very impressed with the new multi-asset trading platform.

I'd like to hear more about that. That's -- and I know we have heard some. And my next -- but again, thank you very much for your reports.

I think I have a question from -- I'm sorry. I think it's David. Mr. Miller, do you still have a question?

Okay. Oh, no, your question was that you couldn't hear -- or see steve.

VICE CHAIRPERSON MILLER: Yeah, it kind of looks like Henry is next.

CHAIRPERSON TAYLOR: Okay. So Mr. Jones.

COMMITTEE MEMBER JONES: Okay. Okay. Yes. Could you go back to slide 21, that's 98 on the iPad. Yeah, it's there. Yes. And I'm looking at the factor-weighted net return of 2. -- negative 2.57, and why we had a -- and I know you kind of alluded to, but I'd like you to expand on that a little bit, because I recall that the reason for going with the factor-weighted was to protect the fund on the downside.

And I think I kind of got a little bit of what you were saying why it's still positive, even though it's a negative. Could you expand on that a little bit?

INVESTMENT DIRECTOR CARDEN: Right. This is really where the impact of the diversification comes in. Even though the segment as a whole underperformed for the year, on an absolute basis and relative to the cap-weighted segment, what we did see was that it did not drawdown nearly as much as the cap-weighted segment during March. And so the cap-weighted segment being down over 34 percent and the factor-weighted a little over 30 percent. So it did provide some protection for us, when it was needed, even though it didn't perform as well for the full year.

COMMITTEE MEMBER JONES: Okay.

INVESTMENT DIRECTOR CARDEN: So it's really about the timing.

COMMITTEE MEMBER JONES: Okay. Thank you. That's relative, right. Okay. Thank you.

CHAIRPERSON TAYLOR: Thank you, Mr. Jones.

Mr. Perez.

COMMITTEE MEMBER PEREZ: Steven, how does index-oriented, how does that return -- excess return, right?

INVESTMENT DIRECTOR CARDEN: Right. It's index-oriented, so as you probably recognize, it has very low active risk. And in doing so, it is not going to deliver big outperformance in any given year.

What we see this year for index-oriented, the 22 basis points. I want to call your attention to the very last bullet on this slide. And I know Arnie Phillips will cover this a little bit more in the Fixed Income review.

But about half of that 22 basis points, I would say is actually not attributable to global equity. It has to do with our -- our low liquidity enhanced return portfolio. And you will see a opposite sign, 11 basis points impacting the fixed income portfolio. So really that -- you know 11 of that I would probably remove for your understanding, which leaves about 11 basis points of outperformance from the index portfolio. And that is a really solid year, but it's -- it's really about half of what you see.

COMMITTEE MEMBER PEREZ: Can you dumb that down for me, please?

INVESTMENT DIRECTOR CARDEN: You know what, I think Arnie in talking about the other side might be helpful. But the funding source for -- for a lot of what we do is this LLER, low liquidity enhanced return, portfolio. And there was a change in how we fund that from being, you know, focused more -- and I forget the percentages. I'll leave that to Arnie -- focused more on the fixed income side, and I believe treasuries.

And at some point in March we did shift that to putting more of the funding from global equity. And in that transition, it's just more of a timing impact, but there was an accrual of that performance that went to global equity, a positive 11 basis points, and a negative to the fixed income portfolio.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Mr. Perez, maybe I'll --

COMMITTEE MEMBER PEREZ: Thanks.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

-- maybe I'll jump in there really quickly. The LLER portfolio is a portfolio of fixed income instruments that are -- that are low liquidity, so they're not liquid, and they're a little bit longer in duration than sort of cash. And they're intended to earn a premium over say cash. What you can -- what we can do within the index portfolio is rather than hold physical stocks, securities, we can own those LLER securities and then own derivatives on futures over it that gets you synthetic equity exposure, but actually would earn an excesses return over time.

And that's what we saw is that about 11 basis points of that 22 came from owning this LLER, which futures overlaying to get synthetic index exposure, but it was actually enhancing the return a little bit. And then to Steve's point, there was also some timing where we shifted that funding from fixed income treasuries to equities. And it happened at the time when these LLER securities were depressed and then bounced back. So you saw accretive performance in global equity and then actually challenged performance on the fixed income side. At the total fund level though, they net out to the total performance of LLER portfolio, if that helps.

COMMITTEE MEMBER PEREZ: It does. Thanks, guys, both of you.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Okay.

Ms. Taylor, do we have anymore questions or are we ready to move on to fixed income with Arnie.

CHAIRPERSON TAYLOR: I think we're ready to move on. I see something from Betty Yee at 11:19 I may have missed.

COMMITTEE MEMBER YEE: No, you didn't, Theresa. I'm fine.

CHAIRPERSON TAYLOR: Okay. All right. All right. Thank you. So, yes, you can move on.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. Arnie, over to you.

Arnie you're on mute.

--o0o--

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

All right. Let's try that. Hi. Arnie Phillips. For this presentation, I'll have my fixed income hat on as opposed to my Interim DCIO hat. And, Mr. Perez, we will touch a little bit more on the LLER portfolio. So hopefully we can close the loop a little bit more for you there.

Next slide, please.

--o0o--

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS: So it's good to always remember and remind folks of one of the main roles of the fixed income is, is to be a diversifier to equity risk. And we saw that work this year, probably not as Eric explained in some of the ways we would have traditionally expected with our sort of shock absorber being the highest performing asset, but that negative correlation is what we're looking for, and it definitely worked this year.

Page 25 in this slide really talks about how we go about adding value in global fixed income. We've -- ever since I've been here for multi-decades, we've had a very structured process. It's changed a little bit in recent years. It's now centered around our weekly portfolio allocation committee meetings, where we focus on economic outlook, relative value among different products, market dynamics, for instance what Ms. Taylor was mentioning the Federal Reserve's impact in our markets and they are strong. So all those types of issues are talked about at our weekly meetings.

And it's also something I'm really thankful for. We have very strong collaboration with our centralized research and strategy group. The economic and quantitative teams out of that centralized research group are active participants in our weekly meetings in bringing an outside view to our process to complement what we're doing within fixed income.

Next slide, please.

--o0o--

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

So this slide is certainly much more complicated than it used to be, and that's really because we've created what -- out of what used to be a single fixed income portfolio are now the three segments. And when you're looking at this chart, it's also good to -- to focus on absolute returns, which are largely driven by our interest rate exposure, which is defined by our strategic asset allocation, and we're designed to have high interest rate exposure this year.

With the COVID pandemic, we saw a move to lower rates. And so lower rates mean higher prices in fixed income, so the income segment had a really strong year this year.

I mentioned the three segments. In July of 2018, we broke that traditional global fixed income portfolio into three segments, two sort of indexed focused segments, a U.S. treasury portfolio and a high yield portfolio, and then an actively managed spread segment. When we look at the U.S. treasury segment, it -- I look at it really in two pieces. We have the management of the fixed income assets, and then we have how the use of that portfolio, along with the global equity portfolio fits into our now total fund liquidity and leverage program.

And so when you look at the treasury returns for this year, the treasury side of it actually had positive returns. And as Steve Carden mentioned, the use of LLER, and Mr. Perez asked some questions around it, we have gotten to the right place now where we are looking at things from a total fund perspective and we get much better answers.

But one of the fallouts can be when you then drill down to an asset class level, you can sometimes get optically a misleading picture. And I think that's what's -- we're seeing this year in the treasury portfolio.

The portfolios -- the treasury portfolio was one of the primary funding sources for the low liquidity enhanced return portfolio, which is managed by Jean Hsu. That portfolio has a tremendous successful long-term performance. But through the COVID crisis, it did drop in value and has subsequently returned and realized most of that drop.

However, during the crisis, we did make the decision at the total fund level to move the financing of that from treasury futures to equity futures. And so what we saw was the treasury portfolio participated in the downside of the LLER portfolio's performance, but then the assets were moved out and the performance return showed up on the global equity side. So from a total fund perspective, we got it right, but it does cause some noise in some of the subcomponents and in risk-based the treasury portfolio.

The second kind of indexed segment is our high yield segment. It's designed to have some growth exposure similar to equities, but be less volatile. And it's really shooting for targeted index returns, but we do account for the higher trading costs than say a U.S. treasury in the expectation. So we're really shooting for index less 20 basis point. And this year, we -- we were down 22 basis points.

I am extremely proud of that team. The pandemic had a very big impact on trading of all securities, whether they were equity securities or treasury securities, but definitely high-yield securities, given they're a less liquid asset, so for us to basically beyond our expectation. I'm very proud of the team for that. And if you look at the -- we've only had the segments for two years, but the outperformance for that two-year period is actually eight basis points.

The third segment is the one that's most like the -- the 20-year historical returns you see on this chart, which are extremely strong for fixed income. That spread segment is the one where we actively manage it. We're trying to outperform the index. We were very well positioned going into the COVID dislocation. I do want to be clear we did not predict COVID in any way.

We look at the world from a relative value standpoint through an upside/downside lens to determine relative value. And going into, you know, that period, call it March-ish, we just felt the upside was somewhat limited in our view of the economic cycle, spread levels, and other parts of mosaic, which left us really well positioned to take advantage of the dislocations that came with COVID.

And the returns for the spread segment this year, especially the relative returns, are outsized and are not returns that we would any way expect in a normal year, but this certainly was not a normal year. And so the vast majority of our excess return or relative returns this year did come in that March and April period, after we saw dislocations from COVID.

And then finally last slide -- excuse me -- is liquidity portfolio, which we've talked a decent amount about today. It did have a strong performance year, but I would like to emphasize that return is not the driver of that portfolio. The focus is on capital preservation and maintaining liquidity.

Next slide, please.

--o0o--

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

So this slide goes through the accomplishments for last year. And this is probably one that I've been tasked with, and I think I'm most proud of I think a lot of people expect the good performance out of fixed income and they certainly had that this year. We have been making a very concerted effort to focus on total fund and become less siloed. And this chart and this slide really details a lot of that work we did with the other asset classes, but also the total fund focus on the seven percent solution, and the liquidity dashboard, which we -- we did talk quite a bit about earlier.

Our global fixed income credit and sovereign analyst did a lot of work this year assisting other parts of the Investment Office. We did work with Real Assets, Sustainable Investments, with the Research and Strategy

Group, wish Jean Hsu's Opportunistic Strategies Group. And I know it's working when I get emails from the likes of Paul Mouchakkaa, Anne Simpson, Beth Richtman thanking, you know, the folks who helped them with projects they have. And so it is a focus we're working on and I believe it's working and it shows the office's transition to that total fund focus, one team one fund.

And then finally, this was a tough year market-wise It was very disruptive, so I'm very proud of the strong returns we did have this year.

Next slide, please.

--o0o--

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

So going forward. The coming year will, in a lot of ways, look like the past year. We are going to continue to focus on total fund. This slide shows five of the bullet points. One of them we did talk about a little bit in the global equity presentation and Steve mentioned the multi-asset trading platform. It's something that literally the whole Investment Officer is working on. And we see a lot of upside to the total fund focus on liquid -- liquidity, and leverage, and just managing overall risk.

So we do think it's an important project that literally everybody in the office is contributing to. And so, Fixed Income will certainly be a pig participant in that this year. But the reality is that we are -- you know, the new way we're trying to be here for the fund is really to help anywhere as needed, that one-team one-fund focus. And we will continue to see it from our team.

So at that point, happy to take any questions.

CHAIRPERSON TAYLOR: Thanks, Arnie. Great presentation. I'm just -- real quick Eraina has a question, but I had one real quick. It looks like on your last slide here 28 of 88 direct involvement in INVO's LIBOR Reform Task Force. Can you go into that a little bit for me?

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

Sure. So LIBOR is scheduled. And I think there is some question of whether the markets will be ready to transit away from it. LIBOR is sort of a made-up interest rate level. It requires banks to -- to basically post rates every day. And it's not market-observed rates. So there is always some question of people's incentives to have it higher or lower. So there's a financial markets reform. Don Pontes is our main architect in the Investment Office to interact with Washington D.C. But there's a concerted effort to transition away from a LIBOR-based interest rate for floating-rate securities and go to an alternative sort of market-rate level that people can observe. And so we have been working with our centralized trading team with Don Pontes and our market reform -- financial markets reform team to have a voice in -- in getting it to where it needs to be, but also to make sure we're ready whichever direction it goes to manage the portfolio, and make sure, if it doesn't happen at a certain date, we're prepared for it. If it does, we're prepared for the alternatives.

CHAIRPERSON TAYLOR: I appreciate that CalPERS wants to have a voice, given how large we are. I think that absolutely makes sense.

Hopefully we do end up having a little bit of a voice. Does the support of OSG's global research effort on China and emerging markets, et cetera was my own -- my last question and what -- can you drill down on that a little bit for us?

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

Sure. So the -- our sovereign team has a very good understanding and analysis when it comes to emerging markets, which China is not necessarily an emerging market, but they heavily influenced the emerging markets. And so from an economic standpoint, they -- the sovereign team within global fixed income works closely with Lauren Rosborough and her folks to kind of get a view of the world.

And I mentioned the centralized research impact in our meetings -- our weekly fixed income meetings, that's where a lot of that sharing of information happens. Lauren will come in with her view of the world, and she'll ask, you know, what's going on with China or emerging markets. The commodity markets are a big impact in emerging markets, so our sovereign team has a really good view on that.

And just putting it all together I think makes the Investment Office output and understanding of, you know, very big factors to the mosaic we built when trying to put basic on, it -- just that collaboration between the two groups is really helpful.

CHAIRPERSON TAYLOR: Great. Thank you very much, Arnie. Go ahead, Eraina. You're up.

BOARD MEMBER ORTEGA: Thank you. I had a question back on slide 26 and it's just asking a little more about the spread category.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS: Yes.

BOARD MEMBER ORTEGA: Just curious about the one that's titled Credit Ex Sov and the Sovereign and kind of what the characteristics of those seem to be, even though the whole category performed well, those performed even better. So just curious what those are.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS: Sure. So that -- that's our corporate exposure. And so that is our investment grade exposure. So the higher quality companies as opposed to what you see labeled as high yield. And those were post -- we were positioned again relatively defensively going into COVID, again because we just felt we weren't getting compensated where we thought we were at an economic cycle and where bonds were trading. And so we were -- we were pretty close to home.

COVID hits and at least before the federal reserve came in and started buying or committing to buy corporate bonds, the corporate obligations really underperformed. And so our corporate team was, because we were positioned sort of neutral, we were able to redeploy. We don't generally take duration or interest rate bets within fixed income. Where the credit team really is strong is with our credit analysts. And so they have views on sectors and they have views on individual companies.

And so when we saw that dislocation -- and we constantly talk all day. I know Lou Zahorak is the portfolio manager there, was asking his credit analyst, okay, what -- what are the, you know, ten best companies you like in your industries that have been impacted by this that we think are really strong companies, that are trading more on overall market dislocation and less about fundamentals? And so we were able to reposition our portfolio at that point.

The -- then the Federal Reserve came in, basically supported the market, and we saw in essence a round trip of the spread widening back to more current levels. And you'll find us much more neutrally positioned again, because we have a round trip. But that's where, again, the collaboration with our centralized research group on our economic views, along with our views of the economy and where things are trading will dictate our positioning. And we were thankfully positioned in the right -- the right way to be able to take advantage of that dislocation that did occur post-COVID.

BOARD MEMBER ORTEGA: Thank you. Appreciate it.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And, I'm sorry, Ms. Ortega. I'll just jump in also really quickly. That is heroic performance. We're -- we shoot for, in those portions of the portfolio, something like 30 to 40 basis points. As much as I would like to say that, we can count on 160 and 102 going forward, I don't think we can. But this was really a tremendous work by this team.

And to Arnie's point, our team of credit analysts are very, very strong. And that's one of the reasons why we have such faith in our abilities to deploy in private credit also, is that the -- like sort of DNA within our investment team is just very, very strong, and it's a real credit to see performance like this.

I guess it's also worth just really quickly back to the LLER thing, I thought I would just quickly jump in and let the Board know that we are planning on pulling LLER out of the asset classes to remove these distortions. So, you know, to the questions that are -- obviously create confusion, to pull LLER performance out of asset classes, so that neither global equity nor the treasury sleeve will have that kind of distortion or will all be at the total fund level we think is the right answer, both from the standpoint of transparency and clarity, but then also sort of just kind of accuracy of performance. So that's -- that's one of our plans for this coming fiscal year.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

Yeah, and I'd just like to add on to that, Dan, the LLER portfolio is managed by Jean Hsu. It's a portfolio that we think is rock solid. And I think it fits very nicely into our long-term investment horizon. And if we can take the volatility like we saw in March and April, you saw the additional it added to global equity this year. And when Jean shows the presentation you'll see the very large numbers that that portfolio has produced over the last three and five years. And it's -- this is really where the difference to Ms. Middleton's comments back in '07, '08, '09 was we had a lot of assets that we thought were ultimately money good, but we weren't considering them low liquidity. We were considering them high liquidity.

And in this case, we acknowledged their low liquidity, but they're extremely high quality. And our ability to basically, through our liquidity positioning now, manage through dislocations, we feel strongly about this portfolio. And it will be coming, as Dan said, much clearer when we isolate it under, from a total fund perspective, the opportunistic bucket. You'll be able to see the direct impact. And it will allow the subasset classes, in this case, global equity and the treasury portfolio to reflect more optically what they actually are doing.

CHAIRPERSON TAYLOR: Great. Thank you guys very much.

Before we move on to our next section, I'm going to say we're at two hours and I'm having people telling me they need to run. So let's take a 15-minute break and come back. It looks like -- let's just do it at a quarter after 12:00, because it looks like we're two or one minute to 12:00 right now. So I'll see you guys back in 15 minutes.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Great. Thank you.

(Off record: 11:58 a.m.)

(Thereupon a recess was taken.)

(On record: 12:15 p.m.)

CHAIRPERSON TAYLOR: Great. Thank you.

Opportunistic strategies.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. Thank you, Ms. Taylor. And hopefully, we have Jean still in the presenter room, so Jean Hsu over to you.

--o0o--

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Hi. This is Jean Hsu representing Opportunistic Strategies.

Would you please the slide to the next, page 30.

--o0o--

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Yeah.

So some highlights of the opportunistic strategies in the past year. We have some success that we were able to implement across various strategies and then deployed as of June 30's one billion commitment. The others side of the success is that the LLER program that I think you all heard from Steve and from Arnie, we invested in the AAA and AA collateralized loan obligations CLOs. And then they add value to the total fund with very, very remote probability of capital losses. This is a very significant program for us to earn some extra basis points, basically to offer to each asset classes in -- in the past.

Going forward, we are thinking about pulling this up to the total fund level in terms of the performance attribution. And always in LLER programs, we -- our ability to negotiate favorable terms due to the current market dynamics. These are also the success happens in the past year.

Challenges that we face. In the private asset classes, the deployment is much, much slower than public markets. So we want to be aware of that. And then on the LLER side, the market volatility can cost some temporary mark-to-market losses. However, our liquidity position on the liquidity dashboard let us see exactly what we have, and then what are the sources of funding going forward, and then what are the sources of liquidity. This can help us hold the securities to maturity and then earn a liquidity premium.

Next slide, please.

--o0o--

INTERIM MANAGING INVESTMENT DIRECTOR HSU: So here, you can see the opportunistic strategies basically have three big components. One is the LLER program. That is north of the ten billion position. And then the opportunistic one, which has the public side, which is public market dislocation. And this pretty much relates to what Margaret was talking about earlier this morning, the PIMCO DISCO III. That is the public market dislocation.

And then we also have the one which is the private debt. And this is the area that we will focus our effort in the next fiscal year.

Okay. Currently, if you look at the one-year performance, we're -- the excess basis point is negative 27. This is because as of June 30 the market -- although the -- like the investment grade market, as well as the equity markets, has recovered quite a lot. CLO, because of its complexity, as well as its illiquidity, it does not recover us fast as other higher liquid assets.

We did see a significant recovery after June 30. So we're hoping that next time around when you see the numbers, the one year numbers, will be positive again.

For the five-year numbers, constantly very consistently exceed 123 basis points. And then this is the offer to the asset class, which hold the LLER. So and another way you can see LLER as internal mutual funds that always runs. And then, you know, the fixed income or the equity as the shareholders of it.

Okay. With respect to the opportunistic part, we recently funded two Opportunistic Strategies ni June 2020, one in the public market dislocation, the other one in the private debt.

Next page, please.

--o0o--

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Next year, what are we going to focus on is in the -- can we move forward to the -- one more page, please.

--o0o--

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Okay. Our major initiative for next year is we want to continue deploy money to the private debt to ensure a robust and well-diversified portfolio. And then we also want to enhance our governance framework portfolio analytics and reporting.

As you know, that this is a new area, so we are hoping that we can, you know, start from scratch, and then build a solid governance process, and then build a very robust portfolio analytics, as well as, you know, have a centralized place that we can do reporting, and then add -- like everybody is on the same page. We were able to query our database on that. So this is our focus going forward.

So with that, I want to pause here and then see if there's any questions on this opportunistic strategies.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Ms. Taylor, you're on mute.

CHAIRPERSON TAYLOR: I thought I grabbed. I did not.

I do have avenue a -- I do have a question. I'm not seeing -- oh, and I have one more after me. So you had said on page 32, major accomplishments, "Developed a framework for the private debt investment process and diligence". So I guess what I'm concerned about is making sure that we're not getting into toxic debt of any kind. And so what are those governance processes? Are we looking at -- what are our underwriting standards for getting into these kinds of programs?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Okay. So I think this is -- the question is very interesting, because we don't want to get into toxic debt. How do we define toxic debt? You know, for -- from an investment professional's perspective, everything has a price tag to it. Okay. A toxic debt -- you probably think, okay, this thing is going to go default. But if it can recover $0.50 in the dollar, and then you buy it at $0.20, then you earned that $0.30 recovery, right? Or if something was just really, really bad and you get like an option on it to -- you can pay it like $0.02 and by an option for upside -- whatever the upside is, you evaluate it as to a risk/reward the complexity, then it may not be that toxic in a way.

So it really depends on what is the risk/reward, what is the price, are we paying a right price for the return expectation? The probability of a success, probability of like a bear scenario, do we fully evaluate that?

CHAIRPERSON TAYLOR: So I guess when I'm looking at toxic debt, I'm looking at reputational risk. Do we want to be involved in loans to sovereign nations and the risk that that poses to our reputation? Do we want to be involved in -- I don't know. It depends -- I mean, remember Goldman Sachs at one point had loans to cities and counties, including I think Stockton was one of them.

And we -- they ended up in bankruptcy. What -- reputational risk is also what I'm looking at, besides just, yeah, what can we gain out of taking on this debt, right? It might be valued at 50 percent and we buy it at 20 and get the 30 percent. But do we have like underwriting stat -- standards that -- for collateralization of these loans? Like, what are we looking at?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Okay. I think you know so far that we do not plan to do any sovereign debt, so we are focusing on U.S. corporate, European corporate, real estate. So that part is -- we do not plan to do the so called toxic things.

And then I think, you know, CalPERS, we also -- we -- the onus is also abide by CalPERS's like restricted list. So we are not lending to, you know, tobacco companies, we are not lending Sudan. We are not -- all -- whatever CalPERS' restriction we will abide on that. So I think it is important that CalPERS has a robust system of debt. And then that is also why that we want to focus our effort next year on, you know, a very robust governance process and make sure that we don't step outside of what the delegation is.

CHAIRPERSON TAYLOR: And then you had said earlier that these LLER investments and collateralized loan obligations are -- have A or AA. Do we -- I know during the last crash, we found out that AAA and AA weren't actually AAA and AA. Do we know for sure that's what they are?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Okay. This is a very interesting question. Because the CLOs emerged from the financial crisis on AAA, AA level totally unharmed. Even on the lower level, they are only like a handful of defaults. They are very different than the CDOs off the world in the subprime of the world, very, very different.

So what happened last time is that rating agencies downgrading everything with a C and then an O indiscriminately. So if you have the conviction and have the understanding of the fundamental, as well as the structure of the product, you are the one who are able to take advantage of it.

We did not know much about the CLO back down. We started our CLO investments -- majority of our CLO investments way after the financial crisis, but I know that there are like banks, like huge big U.S. banks they are buying A, not double or triple. They're buying A at like $0.20 to $0.30 on the dollar on the CLO A tranche. And then they all get pulled back in Par. So you're earning like 70 points in the next three to five years, when they pull back in Par. This is a tremendous return. They returning like 300 -- 300 times.

So again, I want to emphasize everything has a price tag to it. Understanding the fundamental, understanding the structure, understanding your contract, then you will be able to take advantage of the market.

CHAIRPERSON TAYLOR: So I think we're back to our appetite for risk is what you're saying.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: It depends on how much return that we need to get. When our return target is much lower, we don't have to take that much risk. When our return target is higher, you know, it is a mathematical issue that you just need to do the math, and then we need that higher risk-return profile.

CHAIRPERSON TAYLOR: Right. Right. Great. Thank you very much, Jean. I really appreciate that. Our next --

INTERIM MANAGING INVESTMENT DIRECTOR HSU: You're welcome.

CHAIRPERSON TAYLOR: -- person is Mr. Perez.

COMMITTEE MEMBER PEREZ: Hi, Jean. On slide 30 you talked about middle market direct lending and specialty lending.

INTERIM MANAGING INVESTMENT DIRECTOR HSU:

Um-hmm.

COMMITTEE MEMBER PEREZ: Is it any different than private debt?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: No. These are all type -- middle market, the majority of them are private debt. So private debt, as I told you like two sessions ago, it's a mirror image of public debt, right? So you have -- whatever you have public and then you will very likely have something similar in the private debt, but they are not SEC registered regulated trading in the public market.

So the middle market direct lending you can think about -- who is in the middle market debt I can give you a name. Usually, if you see somebody's EBITDA is right around a hundred to a hundred twenty-five, they can be pretty big. They can be a pub -- a company of like the names that you know, but they can also be classified as middle market.

The specialty -- the -- I think your question is probably in like the middle market direct lending and specialty lending, are they the same or are they different?

Is that -- is that your question?

COMMITTEE MEMBER PEREZ: No. I'm just trying to be able to classify it my brain, so that's all -- it's all considered private debt.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Yeah. They are all -- you can all do specialty lending sometimes you can do it through public market too. Middle market direct lending sometimes they do it through migrating into the broadly syndicated market lens. And then you can have banks being the syndicate agent and then sell things out to the market. So the -- I will say it is very hard to have a cut on what is the middle -- is the middle market always private or is the middle market, you know, sometimes public?

But I will say the majority of the middle market lending is private and then market -- like the financial market use middle market direct lending and private debt interchangeably, so this is a little bit -- this is why the confusion is that when I say the middle mark -- the private debt is the mirror image of public debt.

While in the middle market direct lending sometimes there is a confusion. Now, don't forget that the private debt -- you -- in real estate, you have private debt too. In consumers, you can have private debt and in mortgages, you can also have private debt.

COMMITTEE MEMBER PEREZ: Thank you.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

Jason, this is Annie Phillips. Maybe too, as an outsider also looking in at this, I think a couple observations I have is, one, our timing is very good from the sense that this product is getting, you know, off the ground post-COVID and not pre-COVID. So I think our opportunity set is potentially large, but we don't come in with positions already that now have to deal with this dislocation. So I find that to be encouraging.

I think having watched, Jean, you know, for a long time in fixed income and now in opportunistic strategies, I know even if she's buying a AAA bond, which is a last loss type bond, she's -- she's analyzing it as if she were buying the first loss piece. So I personally -- and, you know, it's only my view, but I feel extremely comfortable in Jean's analysis and her process.

And ultimately, we're trying to -- for me, the direct lending is really a portion of the market that's not being serviced by the liquid kind of, you know, state-of-the-art bond markets right now that are the types of securities the Federal Reserve is backing.

The stuff Jean is going to be looking at are the things that don't have Federal Reserve backing, which has really driven up the price. And so I think we've got a good opportunity, and there's -- you know, nobody should be fooled into thinking there's not risk here, because, you know, these are, you know, higher cap -- or higher leveraged companies. But we're trying to go into a market that isn't seeing the federal reserve support. And I just really think our -- the fact that we don't have a portfolio now and we're coming in post. And as this plays out -- and it's possible, you know, the world goes back to being a great place and it's also possible, you know, we have some more hiccups. And I think, you know, we'll be positioned to do that.

COMMITTEE MEMBER PEREZ: Yeah. I mean, I wasn't questioning her discernment at all, not at all. I was just trying to -- trying to figure out where I can put that little bucket in my brain.

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS: Totally agree and I didn't think you were. It just -- it is an area that we think has less players in it and potentially where the compensation for taking his success better than taking it in markets where the federal reserve is a real dominant player.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: One thing I want to mention is that the middle market in the United States is one-third of the U.S.'s economy. Okay. So if you think about, you know, the public markets that they are so big and then we know their names, the Microsofts of the world. They are very, very, big, but they are -- you know, there's still substantial amounts of -- this is not the mom-and-pop shop, but this is your real economy, like one-third of the U.S. economy.

And if you put it into the world, they are probably like number seven among the world in terms of the size of it. So this is a significant portion of the U.S. And then they buy employment count, the middle market itself in the United States hires the most of our employees. It's the biggest employer in the United States, is the sector of middle market versus like a big one, or the mom-and-pop shops. So it is an important area that we just need somebody to lend money to them that they can continue to operate and thrive.

Does it come with risk? Yes, of course. They're a much smaller company. There's just the big -- the big names that we know about in the public markets. But it is because of this higher risk that we are able to price it a little bit higher to earn the spread. And then that's how we can try to get a little bit more return.

There are times that when everybody is chasing this, so that a spread compress to be very, very similar to the investment grade, then we know, at that time, that we should, you know, stop it, or slow our pace, or this is the underwriting standard is being changed to be so lose. We should have some discipline.

But just as Arnie said, you know, right now, we are very lucky that we are coming into the market right now that we are like after the -- kind of like after the crisis and then we can relook at it. Look at what is the current value of the company, what is the projected going forward, cash flow of the company, and then size our loan accordingly.

At the same time, because this is private, so you have the ability to control what is the document needed and then what -- if there's any collateral they post on it. The documents, the contracts later on will help us a lot in the recovery, in case that things go strong. So these are all the benefits that, you know, we were not in the current like troubled portfolios. We get like -- like a clean slate to go forward.

So I'm hoping that this can add incremental values to our return and then get us to the seven percent solution.

COMMITTEE MEMBER PEREZ: Great explanation. Thank you.

CHAIRPERSON TAYLOR: Thank you. Next question is from Ms. Brown.

BOARD MEMBER BROWN: Thank you. I want to follow up on Chair Taylor's comments about toxic debt. Although, I'm not -- I wasn't going to ask about things that had reputational risk. I'm actually just talking about actual risk. And so this is for Jean. We do all our underwriting in-house, is that correct, on this private debt?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: The majority of our private debt, we are going to do external. So it is a GP/LP format using external manager. Yeah.

BOARD MEMBER BROWN: Okay. And we pay for that service, correct?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Yeah, we pay for it. Yes.

BOARD MEMBER BROWN: Okay. So -- so that I just want to make sure. So with this new private debt, we know or we believe that some loans will default. Some loans will default. But the security is worth a lot more and we are going to make sure when we make these loans, that we have first position, or second position, right, that we actually can get the security.

Because I've done a little of this in my past. And it's -- I found it difficult to get the security. There's a fight among a number of the people, where they are in the rank. And so how would we go about -- do that? Do we have staff that will do or does -- do we also use a consultant to -- when the loans default and we want to get basically control of the security so we could decide whether or not we're going to keep that security and manage it as our own asset, or if we're going to sell that asset. I just want to know how that is going to work.

And my concern is, is that this -- this private debt market isn't the same as it was the past 20 years, because the economy is so much different and there is so much unknown.

So I'm assuming that these -- some of the loans will default and that we'll need to get a hold of that security and either sell it or manage it. And I'm just wondering how that process is going to work for CalPERS. And if that's closed session, you can tell me that's closed session, but I really want to know how that's going to work.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Okay. Margaret, I want to check with you that, are you talking about the one that we do int -- we do directly internally, which is a very, very small portion of it or are you talking about the one that we use the GPs to do it?

BOARD MEMBER BROWN: I think probably right now, because we didn't get that bill passed, it's the ones that we're using GPs to do it. So do they do all that work and they charge us all those fees to do that?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Yes. The GP is in the position, because we are just a participant of the fund, right? So the GP are the one who is doing all the negotiation checks. And then in case that this thing goes wrong, they are the one who comes into it and to solve it.

BOARD MEMBER BROWN: Right. But since we were going to do it and eventually we might do it ourselves in-house, right, how were we going to manage these, if we ultimately can do it in-house ourselves?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Okay. So I think our goal was to -- the one that we are going to do internally, it will be almost like -- you can think about it as a super senior position, if --

BOARD MEMBER BROWN: Right.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: -- it were a public debt. Okay. What I mean by super senior is, okay, if you have like a manager, who's lending to the middle market -- oh, let's do it something like simpler. Let's say I have a real estate debt manager, who is lending to real estate equity partner, right.

BOARD MEMBER BROWN: Um-hmm.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: So they will lend at let's say 70 LTV. Okay. And then they earn LIBOR plus 300 basis points. Okay. But they need financing. Okay. So CalPERS can come in just like any other banks can come in. So we will lend to this manager. So we will lend them at say -- you know, I'm making this up. Like, okay, LIBOR plus 100.

BOARD MEMBER BROWN: Okay.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Okay. So I will be on top of the capital structure. My LTV attachment point will probably be, let's say, 50 -- or 45 to 50 LTV. Okay. So you can see that in this situation, the manager is equivalent to holding a mezzanine tranche versus I am the super senior tranche.

So the problem -- so we have like two -- like three lines of defense. First of it is, okay, we are so high in the capital structure, so we are basically, you know, 0 to 50, right?

BOARD MEMBER BROWN: Okay.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: So we are -- we have 50 percent of LTV. The probability of the real estate itself falling $0.50 is probably smaller than it falling 20 percent.

BOARD MEMBER BROWN: Um-hmm.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: So that is our first line of defense. Our second line of defense is who do I lend to? I'm not lending to the equity partner. I'm lending to this debt manager, right? So the debt manager they have some assets. They have some other collateral. Maybe we can do some, you know, arrangement to see what is collateral underneath it.

But it is until the debt manager does not pay me, then I have to take over, which is my third line of defense, the actual collateral, which is the underlying assets.

BOARD MEMBER BROWN: Right.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: It can be an office building. It can be a multi-family residential, and then you'll have to take the -- to go in and take that -- take care of that.

I can -- I have two options, if it really happens. Number one is using the existing debt manager to do the handling of all of the default, and then, you know, either liquidate or taking care of the real estate property, or I can use our strategic partners in our real estate group who are all equity holders of different asset class. And then they will be able to help us to come in. And then either, you know, want to like liquidate the -- liquidate the collateral, which is the real building or they can manage it to make it better.

So as we were developing this, we are working closely with our real estate department as well as the outside partners. So for every single securities that we go through, we actually had the outside strategic partners help us look into that and then tell us that, you know, how -- you know, what is the comfort level that they are, given that I am coming in at $0.50 in the dollar, 50 percent LTV, for this specific bidding in this city, in this subsector of the city, in this asset collateral? What is the projected, you know, population growth everything.

So we did -- I think we overdid the analysis. So hopefully this type of very defensive play will help us mitigate our possible losses in the future.

BOARD MEMBER BROWN: All right. And that's --

and that's what I consider to be the bigger risk, that we end up with the asset or we end up fighting for the asset, and then do we have a plan for that? And as long as your analysis is looking at that third level, that sort of that stopgap, and we still are going to, you know, not lose -- I don't want to lose our investment. I mean, talk about not make the seven, or ten, or eight percent we think we're going to make, but that we don't lose the initial capital we invested. That's -- I mean, that's the risk I'm concerned about.

All right. So I appreciate the detail. And it's probably more than I should know as a Board member, but I'm really worried about this increased risk.

Thank you, Ms. Taylor.

CHAIRPERSON TAYLOR: Sure. Ms. Brown, I just want to also ask Jean sort of to comment on this, but I would think if we are doing the private loaning ourselves, we would have a better position than having it through another company, is that correct?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: It really depends. Okay. Doing private loans ourselves, I don't think we have staff equipped with the skill sets to do that in the more complicated situation, especially when you are talking the real, what I consider like, you know, lower quality or more -- more complexity deals. What we can do, as I just told Margaret, is that we can do at the super senior position, so that you insulate yourself further and further away from the underlying risk.

So those are the things that we can do internally. But, however, those -- those things that you earn much less, right? So -- in my example, I gave you you're like a -- I mean, like a LIBOR puss 100 versus the one that we're doing in the private debt right now. We're trying to achieve about seven percent.

So this is a very, very different caliber, very different risk taking. And then it requires different skill set. This is why that we need to use the outside management.

Another thing which is super important is for a lot of the higher return strategies, sourcing of the deal is essential. CalPERS historically does not have experience in this. So the ability to get access to a deal, that will increase your deal count, and then you can then, you know, filter it, and then pick up the one that you -- you think is real -- the risk-reward is more adequate. That is very, very important. And then that is something that CalPERS internally has less capacity to do that.

CHAIRPERSON TAYLOR: Okay. So I'm going to leave that there for right now, but it sounds like I'm going to have some questions on that later.

Our next question -- oops, sorry -- is Mr. Jones. Oh, I'm sorry, Ms. Middleton. My bad. Sorry.

COMMITTEE MEMBER MIDDLETON: That's all right. Thank you, Madam Chair.

Jean, thank you for a really authoritative report. I appreciate it.

If I understood correctly, one of the numbers you were talking about is you added $1 billion in opportunistic investments during the second quarter of this year, is that accurate?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Is it $1 billion of commitment. The deployment is 79, as you can see on the -- on the next page.

COMMITTEE MEMBER MIDDLETON: So that's new commitments that were added during this?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Yes. And in all this, like the GP/LP format, it's a fund that usually have anywhere from three year to five years term. And then their deployment period is roughly three years, according to the project. So you can see then usually for a one billion commitment, you need to have three years in order to reach the full capacity.

COMMITTEE MEMBER MIDDLETON: Okay. And is a billion dollars a quarter in new commitments a pace that you are comfortable with or is that somewhat faster or slower than you would like to see us taking on? And I know that depends in part on what opportunities present themselves, but there is -- there are capacity issues in terms of our ability to make good judgments on what are the right risks to take on.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Yeah. I think this is -- your observation is totally correct. What I think is -- because of the COVID pandemic, our pace of able to commit is actually faster. Why? Because everybody is seeing that there is opportunities, so they open their fund to do fundraising. So CalPERS is in a very different situation versus 20 years ago when I first joined. Twenty years ago that, you know, when I by, you know, things in the market, I move the market, right? That's also in the public market.

It is no longer true that we have to see. People doesn't really want our money. You have to see who has the -- who's fundraising, so that you can see, hey, if there is opportunity that we can participate in it. Some of the funds, especially those very good performance funds, they only open to their existing shareholders or the existing LPs. So you will have to, you know, use a little bit of CalPERS. Okay. We say that we will -- we are going to be a very -- you know, a good partner, strategic partner, you know, consistent partner, so that they're willing to give us a chance to deploy.

So now comes back to your comments. Yes, in the dislocation situation, the deployment is faster. I think today later on in the closed session, we will talk a little bit more about that.

COMMITTEE MEMBER MIDDLETON: All right.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: But on the middle market, as I said earlier, assuming that the United States middle market, one-third of the economy, is not going to, you know, perish, okay, assuming that we still have that, I see that area is a place where we can have steady deployment. And then again, as I told Mr. Perez, when too many people chasing it, we should slow down. When there are not many people able to do it, we should accelerate.

I see it right now, because of the pandemic. A lot of people are portfolio -- they're liquidity constrained, so it gives CalPERS the opportunity. And it really -- I really think to the whole team total fund approach, and, you know, especially, you know, when Ben was here, that his vision about we have to have the liquidity dashboard. We established liquidity dashboard with our understanding of our use and source of liquidity.

We are then able to have this opportunity to deploy into the private area. Otherwise, I think we will be -- you know, not be able to take advantage of this.

COMMITTEE MEMBER MIDDLETON: All right. Remind me again -- and thank you for that very good answer. What is the total amount that we have in Opportunistic Strategy right now and how much more do you want to place ni opportunistic?

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Okay. So the opportunistic strategies is basically, you know, if you want to see like the two big buckets. One is that the LLER we are -- we manage that is north of like a ten billion portfolio. And then on the opportunistic itself, I think the Board last time approved a five percent cap on it. So the five percent -- let's assume that our fund is 400 billion, then a five percent will give us about roughly 20 billion. So that is the cap. It doesn't mean that we have to go there. It really depends on the Board's guidance on, you know, how much do you want us to deploy on that one, and then we will then follow your direction.

COMMITTEE MEMBER MIDDLETON: All right. Thank you. And knowing -- those -- being reminded of those numbers and seeing that you're moving at approximately a billion dollars in this past quarter, that's very reassuring in terms of the pace of what our investment is, so thank you.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: Thank you.

CHAIRPERSON TAYLOR: Thank you, Ms. Middleton.

Our next question comes from Mr. Jones.

COMMITTEE MEMBER JONES: Thank you, Madam Chair.

Yeah, my question ultimately is is that if we are -- if we believe that this strategy will help us hit our return target of seven percent, if we believe that the necessary steps are being taken to -- to oversee this strategy to acquire those returns, I think that we need to move on it. Because I think too often over the years we've talked about strategies, and we continue to talk about them, and we look back two, three years later, everyone else have jumped on the board -- on board and implemented it, and we sometimes are still deciding what to do. And that goes to Jean's point about it, by that time, it's saturated, and so it doesn't make sense to get into it.

So my question to you, Jean, and maybe this is for Dan also, is do you have the resources to really execute what you believe needs to be executed? And so if not, then what would it take to provide the resources, so that we're not going in this -- into this new paradigm underfunding your resources that you need to execute. So if we're going to go -- and as you said, the Board has already adopted a policy of up to five percent. But then, you know, sometimes you have to move faster than slower in order to get the benefits from the new strategy. So what are the resources that would be needed to execute in a timely manner on a pacing that you believe would be the appropriate pacing to implement this strategy?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Mr. Jones maybe I'll -- maybe I'll jump in there. And thank you for the question. We appreciate the support around resources. This is a conversation Jean and I have had probably maybe a dozen times over the course of the past six or eight months. And we're trying to strike that exact balance. I do think that we have the resources that we need in place right now. We do want to be deliberate in building the team and in building the capability.

We -- you know, to Ms. Middleton's questions, we want to be also very deliberate in our pacing, in our committing of capital. If we get to a place where we think we have a constraint, certainly we'll come back to you. But I would say that one of the first things that we needed was just that ability to go to five percent of total fund from a policy language standpoint just so that we didn't have any sort of self-imposed constraints.

Now, as we continue to deploy, you know, we'll looking at whether we can deploy in size, whether we need resources, whether we should have this be an actual allocation in the next -- in the upcoming asset allocation process. And in this sort of exploratory phase, I do think we have what we need and we'll -- we'll continue to monitor, and certainly we'll come back to the Committee as we -- as we need more.

COMMITTEE MEMBER JONES: Okay. Thank you.

CHAIRPERSON TAYLOR: Okay. I think our next person is Ms. Olivares.

COMMITTEE MEMBER OLIVARES: Thank you, Ms. Taylor.

This question is for Ms. Hsu. I wanted to get some clarity on what you said the middle market range is.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: You mean, the range of we usually use the EBITDA size, so anywhere from 25 to 125. We're targeting any -- targeting right around seventy to a hundred.

So you have a range --

COMMITTEE MEMBER OLIVARES: Okay. That's our range. Okay. So -- Okay. Got it.

INTERIM MANAGING INVESTMENT DIRECTOR HSU: It's a big range.

COMMITTEE MEMBER OLIVARES: No, no, I know. And it can go down as low as ten. So I just wanted to be clear where we are within that range. I think it might be helpful for the Board to see a quarterly report on middle market performance and what's happening. There are many available out. It's not something the team would have to put together, but it could show the flow of these funds work. Also, a chart of the capital structure, and so what senior secured means.

This is relatively complex. And so, I mean, I'm happy to send a link with this report, but I think it's better if it comes from the team, because I think it's easier to understand when there's a visual representation of this information and when it's compared to other asset types.

CHAIRPERSON TAYLOR: Okay. Thank you, Stacie. We can look into that.

COMMITTEE MEMBER OLIVARES: Yeah, I'll send a link to the team.

CHAIRPERSON TAYLOR: I think our next person is Mr. Miller.

VICE CHAIRPERSON MILLER: Yeah. I think most of my questions have actually been answered. So I just do want to say thank you for the very -- very comprehensive presentations, Ms. Hsu and the entire team. And I'm just -- I'm very encouraged that we continue to make the pro -- the progress that we're continuing to stay the course. And whatever we can do to continue to support the team, I know it's turbulent times, but it's also times of opportunity. And we need to really, you know, keep our -- our focus. And I'm glad that the Investment Office and the entire CalPERS team is doing that.

And so, you know, as Ben used to say, stay calm and carry on. And I'm really looking forward to -- you know, the next few months should be really eventful.

Thank you.

CHAIRPERSON TAYLOR: Thank you, Jean, for your presentation. Again, it was a very good presentation. It looks like all our comments are done. And I hate to do this, unfortunately, or we're not going to have lunch if I don't. We've got two more sessions. We've got real assets and private equity. And these are taking a little longer than I thought. So I want to call for a break for lunch from 1:00 to 1:45, if that's okay with everybody, and we'll meet everybody back here at 1:45.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Sounds, great. Thank you, Ms. Taylor. We'll see you at 1:45 and we'll have Greg all queued up to go on private equity.

Thank you.

CHAIRPERSON TAYLOR: Sounds good, Dan. Thank you.

(Off record: 12:59 p.m.)

(Thereupon a lunch break was taken.)

A F T E R N O O N S E S S I O N

(On record: 1:46 p.m.)

CHAIRPERSON TAYLOR: We'll continue on our session with the next program.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Thank you, Ms. Taylor. All right. Up next, we move on to the private equity part of 6a. So Greg, I'll turn it over to you.

MANAGING INVESTMENT DIRECTOR RUIZ: Thanks, Dan. Good afternoon. Thank you for the opportunity to provide the annual program review of the private equity asset class. I'd like to start with an overview of the structure of the presentation. I will begin with a few implementation highlights before moving into a discussion of the private equity asset class performance and the drivers of that performance, before concluding by touching on a few priority accomplishments and initiatives.

On the next slide, slide 35 --

--o0o--

MANAGING INVESTMENT DIRECTOR RUIZ: -- we lay out a few implementation highlights from this past year. These include -- we have expanded our partnerships with existing former and in some cases new managers. We've also had a disciplined expansion of our capital deployment with an explicit focus on increasing our overall cost efficiency and diversification. And we commenced our strategic planning process.

On the next slide --

--o0o--

MANAGING INVESTMENT DIRECTOR RUIZ: -- slide 36, we give an overview of the private equity asset class performance. In any discussion of the Private Equity Program performance, I believe two -- there are two important principles to consider. The first is time. The goal of investing in the private equity asset class is to generate long-term capital appreciation. This leads us to focus on longer term performance. And individual year performance tends to be less meaningful than the five-, ten-, and 20-year performance.

This second important principle is that of measurement points. There are a number of complexities in assessing private equity stemming from the fact that there is not an investable benchmark, as is common with the public asset classes.

As a result, we engage multiple points of measurement, including performance relative to a policy benchmark, peer benchmarks, other asset classes, and absolute performance.

If I could point your attention to the top chart, we lay out Private Equity Program performance for the 20, 10, five, three and one year time periods. To ground you in the numbers, private equity generated a 7.5 percent return over the past 20 years, 10.4 percent over the past ten years, 6.6 percent over the past five years, 5.9 percent over the past three years, and negative 5.1 percent over the past year.

As mentioned earlier, the one-year performance is based on 3/31 valuations, a date which public equity valuations were near recent lows.

Relative to the information -- the same information we shared last year, private equity performance has deteriorated on an absolute basis across all time periods. If you look at the bottom chart on this page, we lay out performance versus the policy benchmark. Here, you will see the private equity performance exceeded the policy benchmark for all time periods. While we're working to position the private equity portfolio to durably outperform the policy benchmark over time, the outperformance seen here is unlikely to prove durable in the near term, stemming largely from the timing of the measurement period.

On the next page --

--o0o--

MANAGING INVESTMENT DIRECTOR RUIZ: -- slide 37, we have laid out CalPERS private equity performance relative to peer benchmarks, State Cambridge and State Street. I would note that these returns are presented on an internal rate-of-return basis, which is consistent with how these peer benchmarks are reported.

Here, you can see CalPERS Private Equity Program has underperformed peer benchmarks across all time periods, in many cases, by substantial margins. I believe the Private Equity Program's performance raises a few important questions.

First is has the Private Equity Program added value to the total fund over time?

I believe the answer to that question is categorically, yes. Private equity has outperformed CalPERS other asset classes over the longer term, and in doing so, has generated billions of dollars in additional returns as a result of our investments. Without private equity's contribution to the total fund over the past decades, we would have lower aggregate returns today.

I believe, however, there is a second important question that we need to ask ourselves, and that is has the CalPERS Private Equity Program performed at or near its potential? I believe the answer to that question is that it has not.

There are a number of complexities and nuances in answering -- in answering this question, but a few significant drivers of underperformance over time stand out. Those are: One, a lack of consistent capital deployment; two, a lack of strategic consistency; three, a lack of diversification; and four, a lack of cost efficiency. We understand the reasons for the Private Equity Program's underperformance and believe these drivers are reversible over time.

So how do we move the Private Equity Program closer to achieving its potential? First and foremost, we focus on our people. Active and thoughtful engagement and alignment from the Board, through CalPERS senior leadership, through the Investment Office, and the private equity team are critical to our success.

We have an incredibly talented and dedicated private equity team. And I feel very fortunate to have the opportunity to work with such a committed purpose-driven, diverse, and high integrity group of people. Continuously cultivating our talent and developing our team will remain a top priority.

The second thing we need to focus on to move the program closer to its potential is consistency. Consistency is key and this is critical in two ways. The first is consistent capital deployment. So historically, we've been highly inconsistent with our capital deployment. And the truth is that has hurt us.

Consistent capital deployment does not guarantee success, but inconsistent capital deployment creates a self-imposed obstacle that is difficult to overcome. If we continue to deploy capital inconsistently, I would expect continued underperformance.

The second point on consistency that's important is consistency in strategic direction. We have cycled through strategies with too great a frequency. We are progressing through a strategic planning process now to clarify our direction for the coming five to ten years. And we've already completed the first phase of this work.

We are focused on a back-to-the-basics approach, deep partnerships with high quality managers, ramping our co-investment program, and integrating data into all aspects of the program.

The third area we're focused on and moving the program closer to its potential is diversification. The private equity market has a evolved materially over the past decade and our portfolio has not kept pace. We will be focused on ensuring we have a diversified portfolio at the underlying investment strategy level moving forward.

The fourth area of focus is cost efficiency. Private equity is and expensive asset class. And in our case, this has been exacerbated by our historical implementation approach. We have the potential meaningfully reduce the aggregate cost to the asset class, while deepening our partnerships with our managers by scaling our co-investment program.

We have begun this process and are seeing strong early traction working with our high conviction partners on this initiative. It would be difficult to understate the importance of our co-investment effort. By scaling our co-investment program, we have the potential to generate hundreds of millions, if not billions, in cost savings over the coming decades.

So these are the factors you will see the Private Equity Program focused on in the coming years. We'll focus on our people, on consistency in both capital deployment and strategic direction, thoughtful diversification, and cost efficiency.

On the next two slides, and we can flip to slide 38 now --

--o0o--

MANAGING INVESTMENT DIRECTOR RUIZ: -- we've laid out our priority accomplishments and initiatives. And I'd like to spend a couple minutes touching on a few of these before wrapping up.

On our priority accomplishments, this year, we reinitiated our internship program. This required significant effort across the Investment Office. But even in the short period of time we had our interns join us this summer, we've seen the benefits. Our interns brought an energy, enthusiasm, and set of insights that were a wonderful addition to our program. And we look forward to continuing, and perhaps even expanding, this program in the years to come.

On the next slide --

--o0o--

MANAGING INVESTMENT DIRECTOR RUIZ: -- we touch on our priority initiatives. Here, one I'll touch on is our strategic planning process. We are soon commencing a second and final phase of that work. We view this as critical to firmly establishing our approach and we look forward to sharing our findings with you.

And lastly, we will seek to continuously deepen our focus and integration of ESG, and diversity and inclusion factors into our program.

On ESG, we have deepened our dialogue with our partners. And we have seen ESG integration into investment processes in varying encouraging ways, with many examples of it becoming a core part of our partner's underwriting processes, not only in ESG-specific funds, but across the broader underwriting.

We are also focused on diversity and inclusion factors, both internally as well as with our partners. We are fortunate to have a diverse team and I'm very grateful to Sarah Corr and the other leaders of the program before her, who helped build such a robust foundation.

We view this as a constant evolution and we look forward to continuing to improve on these dimensions in the months and years to come. Thank you for the opportunity to share this overview of the Private Equity Program with you this afternoon, and I'm happy to take any questions.

CHAIRPERSON TAYLOR: Great. Thank you very much for this informative update. And I also wanted to thank Sarah, since you've switched positions, for her hard work through all the years on private equity as well.

I just wanted to -- I really am very impressed with how you want to build this out. You want to make a statement on that. But with the increased cost efficiency, were you talking about that like maybe, since we're going to try to be more consistent, does that mean we can get better transaction fees, management fees than we were getting?

MANAGING INVESTMENT DIRECTOR RUIZ: Yeah. That's a very good question. So I think the two go hand-in-hand. So the one major lever for us having -- increasing the overall cost efficiency of our program is ramping our co-investment program. For us to be a reliable co-investing partner, we need to be consistent with how we deploy our capital, both to funds and to co-investing. You know, one dynamic at play with co-investment is more people would like co-investment than co-investment exists.

And so our partners are in a position where they -- they can choose to allocate co-investment among their LPs. So consistency and kind of having a deep partnership approach with RGPs is critical to us securing co-investment over time, which will help us lower the overall cost of the program.

CHAIRPERSON TAYLOR: Great. And then so I just wanted to say also as you move forward with private equity to achieve our seven percent return, I don't think it's a secret as a labor person, private equity isn't my favorite asset class. So when you talk about restructuring internal processes to improve underwriting and monitoring, and then you also talk about a deeper focus on integration of ESG and D&I factors. So one of the problems that we have with private equity is the process where private equity buys into something, and leverages it, and then ends up not paying their employees well or undermining their pension.

So I just want to make sure that part of the ESG factor is that we're -- we're trying to take care of our human capital management, our labor, our workers. I think we're going to talk a little bit more about some of this in closed session. But it's important that we acknowledge that these things can end up being risk factors to us, whether it's reputational or monetary. I mean, if we look at what happened with Toys"R"Us, it was monetary and reputational.

Soy I just want to make sure, as we're doing our underwriting, that we are taking this factors deeply into consideration as we buy into funds.

MANAGING INVESTMENT DIRECTOR RUIZ: Yes. And in short, we are. You know, I think the -- the folks -- and by folks, I mean the GPs who have durably created value over time, I think have been focused on these issues far before discussion of ESG became more prominent, as we've seen in recent years.

But ESG certainly captures these factors you're talking about, Madam Chair, with the governance and the social touching on human capital. And I think you'd be hard fast -- hard pressed to find a manager who doesn't think that managing human capital and their own reputation are not critical to their -- to their own success.

CHAIRPERSON TAYLOR: I appreciate that, Greg. Sometimes I question that, as we run into different situations, and then get it brought to our attention. So I'm hoping that we can come up with a better strategy of mitigating some of these problems that we get on the back end, after we've been invested for five to ten years already, so that we mitigate those in the future.

I know, as an asset class, it helps us achieve our seven percent solution. So I know we have to be here. I wish we were a hundred percent funded, and maybe we wouldn't, but -- I'm going to go on. I have two other questioners and that is Stacie Olivares first.

COMMITTEE MEMBER OLIVARES: Thank you, Madam Chair. This question is for Mr. Ruiz, I wanted to get your thoughts on the adequacy of the benchmark that we have for private equity.

MANAGING INVESTMENT DIRECTOR RUIZ: Yeah. You know, I think the in short, I'd say there's -- there's no easy answers for private equity benchmarking. There are, you know, two broad -- kind of very broad ways of doing it. One is to take some public market index and have a premium over that. And that's what -- that's what we do. And the other is to use peer benchmarking.

While all -- while our policy benchmark is a public index plus a premium, I'd share that we use all of these internally to look at our performance, and that's why we wanted to include both sets in the presentation today.

So I think what you'll see from us is, because there is not an investable benchmark, you have a number of complexities. And rather than try and overly simplify those, we just engage on multiple points of measurement to try and see how our program is progressing through each different lens that those offer.

So, you know, I don't mean to equivocate here. I just -- there's -- I don't think there's any perfect answer and I think the policy benchmark we're using is a very -- very reasonable approach.

COMMITTEE MEMBER OLIVARES: Would you say the --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And I'll --

COMMITTEE MEMBER OLIVARES: -- difference in the benchmark, that our CalPERS benchmark is significantly different from Cambridge and State Street?

MANAGING INVESTMENT DIRECTOR RUIZ: I just want to clarify your question. Is it do I think that the benchmarks are sufficiently different?

COMMITTEE MEMBER OLIVARES: No, statistically different, significant -- significantly different statistically. So if you look at the private equity indices, Cambridge and State Street --

MANAGING INVESTMENT DIRECTOR RUIZ: Um-hmm.

COMMITTEE MEMBER OLIVARES: -- there's incredible variance between their indices and ours.

MANAGING INVESTMENT DIRECTOR RUIZ: Um-hmm.

COMMITTEE MEMBER OLIVARES: And so I'm trying to reconcile that and whether or not we are using a benchmark that's appropriate.

MANAGING INVESTMENT DIRECTOR RUIZ: Yeah. So those -- your perception is absolutely correct. I mean, those benchmarks are quite different. So State Street and Cambridge are drawn from the peer universe.

COMMITTEE MEMBER OLIVARES: Um-hmm.

MANAGING INVESTMENT DIRECTOR RUIZ: So they are looking at the performance of, you know, peers -- broadly speaking, peers of CalPERS who are investing in private equity. Whereas, our policy benchmark is looking at a public index and adding a premium.

To me, what it -- what it boils down to a bit, and there are many other folks on our team that are -- have a far more nuanced understanding of benchmarking than I do. But to me what it boils down to is what's the aim? And so if the aim is to generate the highest possible returns in the asset class, you know, I think there you might kind of drift more towards using peer benchmarks. If the aim is to generate return -- attractive returns relative to your next best alternative, I think you may lean more towards using public indices plus a premium.

And my sense is our aim is more the latter. And so I do think there's some consistency in our aim and our benchmark, but there, of course, are -- you know, there are many ways to approach it.

COMMITTEE MEMBER OLIVARES: What's our --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And maybe I'll just jump in quickly here.

COMMITTEE MEMBER OLIVARES: That's fine. Sure.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: I'm sorry, Ms. Olivares. I'll just jump in. I'll say that, you know, this is part of our migration towards thinking total fund as to Greg's point there, thinking through the fact that if the money is not sitting in private equity, it's probably in public equity. That's one of the reasons why we migrated to a total fund benchmark -- to a public equity benchmark plus a premium for private -- for private equity.

And I'll say if you look at the history of our private equity benchmarking, and I think I mentioned this either the last meeting or the one before, that it's a real Frankenstein history. There's lots of things linked there. And some of those are peer benchmarks.

And to Greg's very first comment, benchmarking in private assets, and this is as a public assets person, is inherently frustrating, because there's not a good benchmark, and it's replicable the way that it is in the public markets.

But I'll say that when we measure -- when we look at how we achieve success, this is Greg's point, that we look through lots of lenses. But when we look at whether -- you know, how we want to benchmark it at total fund level and whether we know -- you know, because the alternative for us, if it's not in private equity, it's in public equity, we concluded that the best way to sort of drive that culture was to actually use a public markets plus a premium benchmark.

COMMITTEE MEMBER OLIVARES: Yeah, I understand that. Thank you. I -- what I guess I'm a little unclear on is the 150 bps too. So for Mr. Ruiz, what would you say the average total fee is for private equity investments, all in?

MANAGING INVESTMENT DIRECTOR RUIZ: Yeah. We have -- let's see, how do I -- so if we can jump to slide -- let's see 88 of 88.

No. Sorry, 81. So here, we've laid out the fees that we pay. And I'd focus you in on the external management. So for the past fiscal year that just ended, we had total fees of 224 basis points. And that is a combination of both management and performance fees.

COMMITTEE MEMBER OLIVARES: So if I'm looking at this mathematically, if we're looking at the -- if we go back all the way up to, what is it, thirty -- slide 36, I want to -- no. I'm trying to find it.

Right. Okay. So the cap-weighted benchmark plus 150 bps and our average fee exceeds 150 bps.

MANAGING INVESTMENT DIRECTOR RUIZ: Um-hmm.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Right. So but bear in mind that what you're seeing on the screen is net return, so the returns that you're seeing in the private equity performance --

COMMITTEE MEMBER OLIVARES: Um-hmm.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: -- is actually already net of that of all the performance fees and carry.

COMMITTEE MEMBER OLIVARES: It's pretty narrow though.

MANAGING INVESTMENT DIRECTOR RUIZ: Well, I think you're hitting on a real important point, which is, given the costs associated with the asset class, the asset class needs to deliver returns -- net returns that -- or gross returns, kind of in excess of what we could get such that on a net return basis we still see outperformance.

So that is -- what you're putting your finger on is a constant headwind. And I think for us to continue to deploy to the asset class, we need to believe that on the net basis, we can still see outperformance.

COMMITTEE MEMBER OLIVARES: Absolutely. And I think private equity is an important asset class. It's like would you get rid of an entire food group, especially if you're a large institutional investor? And the answer is likely no.

But I want to make sure that as we have -- as we structure our benchmark and we look at our performance and the fees, that we perhaps take another look at how -- how this appears, especially externally. I think it might create a little bit more confusion. Just food for thought.

MANAGING INVESTMENT DIRECTOR RUIZ: Okay.

CHAIRPERSON TAYLOR: All right. Any other questions, Ms. Olivares?

COMMITTEE MEMBER OLIVARES: No, thank you.

CHAIRPERSON TAYLOR: Thank you.

So my next question is from -- boy, I need new glasses -- Margaret Brown.

Ms. Brown?

Okay. How about Ms. Paquin. I'm not hearing Ms. Brown.

ACTING COMMITTEE MEMBER PAQUIN: Thank you, Madam Chair and thank you so much for the presentation. I appreciated it. I was curious about the conversation around diversity and inclusion and I was wondering what steps CalPERS has taken or could take to really work with our partners at their fund level, and also in the portfolio company level to increase diversity and inclusion.

MANAGING INVESTMENT DIRECTOR RUIZ: Um-hmm. Yes. Thank you for the question. So this has become -- you know, become a topic of much focus, but the importance has always been there. And I think what you're seeing from us now is a deeper set of dialogues with our partners and we're leading some of those and our partners are leading some of those. And we're seeing a focus on this across the private equity industry that I think is incredibly encouraging.

And one aspect of private equity that I think is conducive to this is because our managers have a substantial, if not majority, ownership position in the companies they invest in, we're actually seeing an ability for them to roll through some of these changes, even on an expedited basis, relative to what we're seeing in other parts of the market.

So I think what you can expect from us -- and I -- in my comments, I mentioned it. I mean, I think it starts with -- with us looking at ourselves internally. And I think we've done a good job there, but I think we constantly need to improve. Start looking there. It flows out to dialogues with our partners, and that flows into how companies are actually run.

ACTING COMMITTEE MEMBER PAQUIN: Thank you.

And are you working on this issue with other institutional investor as well?

MANAGING INVESTMENT DIRECTOR RUIZ: So I guess what would you mean by that?

ACTING COMMITTEE MEMBER PAQUIN: Well, you know, I think that this has become a topic that other large investors, public investors are looking at. And so I don't know if there's some kind of --

MANAGING INVESTMENT DIRECTOR RUIZ: Um-hmm.

ACTING COMMITTEE MEMBER PAQUIN: -- a movement to partner or to work together on this, the way we do with other types of engagements.

MANAGING INVESTMENT DIRECTOR RUIZ: Yeah, that's a really good question. I mean, what we do now is we're kind of active in constant dialogue with other kind of large peer institutions. We have not formalized anything specifically around this with those institutions, but I would say we're certainly seeing common efforts across all of us, and we're sharing knowledge between all of us. So I think it's a good point and something we might want to give some thought to as to kind of if and when formalizing that could be a healthy step.

ACTING COMMITTEE MEMBER PAQUIN: Thank you.

CHAIRPERSON TAYLOR: Thank you, Ms. Paquin.

Mr. Rubalcava, sorry about that.

COMMITTEE MEMBER RUBALCAVA: Thank you, Ms. Chair. Mr. Ruiz, thank you for the presentation. I really enjoyed it. And I'm very satisfied to see your fifth point on page 39, the deeper focus on integration of ESG and D&I factors. And I'm glad my colleagues are raising questions regarding that.

I had a question written down, but you'd sort of addressed it. I was going to ask how -- how do you do that deeper integration. And you mentioned working with partner managers and also the underwriting process. So can you explain what is the underwriting process to make sure that there's deeper integration and focus on ESG and diversity and inclusion factors, please.

MANAGING INVESTMENT DIRECTOR RUIZ: Yeah. I'd by happy to. And I think we're -- we're seeing this take place at two levels. So there is our underwriting process, when we underwrite managers. And there, we both solicit and receive information on their approach to these areas. And we bring that in and it's part of our assessment and our discussions.

So that's kind of the one level. You know, the other level we're seeing it take place at is at our managers themselves. So there, we're seeing the integration of these factors, the ESG factors, into their underwriting processes. And for me one of the -- one of the most encouraging developments is the way we have seen this transition into the core business underwriting of a number of our partners.

So, you know, there was a time when these may have been discussed only with ESG-specific funds. And while that market segment has seen significant growth, it's still relatively modest compared to the broader private equity market. But when we see the integration of ESG factors into the underwriting of our partners' core businesses, it actually to me is showing that there will be a much bigger impact, because that's overwhelmingly where the dollars and the industry reside.

COMMITTEE MEMBER RUBALCAVA: Thank you. And I also was very -- it was good to hear the Chair talk about human capital, and you mentioned in the affirmative that that's something you look at. I also want to take this time, since it's the first time I asked a question, to thank you, and also Ben, and all the staff for keeping all the staff, or keeping focus during these uncertain markets situation by COVID, and doing what you have to do, and protecting the liquidity.

And also, I like the word someone said, taking advantage of the dislocations of the market.

So thank you. Thank you, Ms. Chair.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Thank you, Mr. Rubalcava.

CHAIRPERSON TAYLOR: Thank you, Ramon and thanks for being patient. Sorry about that.

My next person is -- hold on a second. I lost everybody now. Was -- did margaret want to ask a question or were you just letting me know I missed Ramon.

If not, it looks like I've got -- oh, Margaret, you did have a question.

Margaret, are you there?

COMMITTEE MEMBER PEREZ: You're muted, Margaret.

No.

CHAIRPERSON TAYLOR: No, she can't get in. Margaret, you want to work with somebody to get you in or send us your question a via the chat.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Yeah, Ms. Taylor, she just us the thumbs up for that. She'll work with getting -- getting access.

CHAIRPERSON TAYLOR: Okay. Good. Good.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Thank you.

PRESIDENT TAYLOR: Okay. Good. Good. So then it looks like I don't have any additional questions. But let's make sure that whatever Margaret's question is, Dan, I'll get it to you and Greg.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Great. Thank you. And with that, if we're done with questions, I think we're -- we're ready to move on to real assets, and Sarah Corr. So, Sarah, over to you.

CHAIRPERSON TAYLOR: The dog chewed her cable, just FYI. That's hilarious. I'm sorry, Margaret.

MANAGING INVESTMENT DIRECTOR CORR: All right. Can everyone hear me?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes.

MANAGING INVESTMENT DIRECTOR CORR: Good afternoon, Investment Committee members. Sarah Corr, Real Assets MID. Before I get started, I would like to thank the entire Real Assets team for their support of me during my onboarding process. There's been a lot to learn and they have been very patient with me. As I sit here before you, I want to emphasize that the preparation of this presentation was a total team effort, not just in the Real Assets Unit, but also from many areas of the Investment Office. It's another example of the one-team approach we've been talking about today.

In last year's annual program review, my predecessor, Paul Mouchakkaa, commented that he did not know when the next downturn would come, but that it would.

He stated that being consistent and disciplined would be important if real assets were to continue to provide stable cash yield and inflation protection, roles that real assets perform for the total fund.

As I sit here before you in these uncertain times, he could not have been more correct. It is too early in this cycle to know the true impact of COVID on the real estate and infrastructure programs. However, if we make a consistent deployment pace and strong governance, remain disciplined in our underwriting and internal monitoring protocols, the real assets portfolio, which are predominantly core, should be positioned to weather the storm and continue to provide stable income to the system.

Next slide, please.

--o0o--

MANAGING INVESTMENT DIRECTOR CORR: Looking at the past year, the Real Assets team had a productive year with a continued focus on acquiring core assets. CalPERS managers made acquisitions during the period totaling $3.6 billion of equity. Over 95 percent consisted of core assets.

For the continued use of the annual investment process for its separate accounts, staff have been able to better align the focus of the managers with CalPERS desired exposures. Further, the Real Assets staff continues to benefit from skills resident in other areas of the Investment Office, whether it is market perspective from global fixed income, hedging guidance from ESS, or research insight from RSG.

This is not to say that real assets has not faced challenge. COVID-19 has had a negative impact on certain infrastructure and real estate sectors namely transportation and retail. It is too early to tell how protracted and deep the impact will be. However, staff continues to be in close contact with our managers and is closely monitoring the situation.

Next slide, please.

--o0o--

MANAGING INVESTMENT DIRECTOR CORR: While the portfolio continues to experience performance challenges, it has met an important role providing -- providing stable income to the total fund. And for the past five years, the portfolio has provided income of three and a half to four percent.

Although longer term, the portfolio has underperformed the benchmark, it has exceeded the expected return of the asset class adopted by the -- as part of the last ALM process.

Additionally, the Corps real estate portfolio, which represents over 70 percent of real assets, did exceed the benchmark in the one-, three-, five-, and ten-year periods. Conversely, the non-strategic portfolio continues to be a drag on performance.

Infrastructure continues to provide attractive returns in the portfolio. The underperformance in the one-year is due to older commingled funds and the impacts of COVID-19 on infrastructure transportation assets.

Next slide, please.

--o0o--

BOARD MEMBER BROWN: Hello?

MANAGING INVESTMENT DIRECTOR CORR: Priorities in 2019-2020 remain similar to previous years. Staff's consistent focus on core exposures has successfully moved real assets to 56 percent core in 2015 to the current exposure of 85 percent. Staff continues to guide managers to improve the quality of the portfolio and so as the non-strategic holdings.

This repositioning should serve the portfolio well during the current market environment. In order to help increase exposure to infrastructure, the team has been focused on expanding the business model. Activities included forming new and refining existing separate accounts, as well as committing to infrastructure funds with top tier managers.

The manager alignment model used in real assets has provided staff with transparency required to monitor the impact of COVID in real-time.

Next slide, please.

--o0o--

MANAGING INVESTMENT DIRECTOR CORR: The focus n the current year will be to -- will be to develop the five-year strategic plan. The emphasis on core assets will serve the total fund well, and it's unlikely to change with a new strategic plan. However, this part of the ALM process, staff will collaborate with RSG and TLPM on the role of real estate. The output of that process will be incorporated into the strategic plan as needed. Staff continues to reposition the portfolio. Efforts here include diversifying the portfolio with the goal of decreasing exposure to retail and non-strategic holdings and increase in exposure to infrastructure, including renewables.

Real assets staff has embraced, and continues to focus on, the INVO vision of one team with a culture of respect, trust, and accountability.

In closing, I would like to underscore how important maintaining a disciplined and consistent approach is to delivering long-term returns. We have seen the negative outcome that can happen when we do not. If we stay the course, continue to focus on governance, and maintaining measured deployment, real assets should be able to contribute to the Investment Office mission, which is to generate returns to sustainably pay benefits. Doing so will require the support of the one-fund team and you the Board.

With that, I'd be prepared to take questions.

CHAIRPERSON TAYLOR: Thank you, Sarah, for the presentation. And you know what, I forgot to ask Greg, but I also want to ask you if you feel like you have enough resources. Do you have enough people, do you have resources you need to get to where you need to go for our seven percent solution?

So I guess I'll ask you, and I don't know if Greg is still available, but I wanted to make sure we ask that.

MANAGING INVESTMENT DIRECTOR CORR: So within real assets, my crew believes that we do. That will be something I look at as part of the five-year strategic planning process.

CHAIRPERSON TAYLOR: Okay.

MANAGING INVESTMENT DIRECTOR CORR: But from my initial read, I would say we do have enough staff.

CHAIRPERSON TAYLOR: Okay. Great. Great. I just wanted to make sure. Because I know, as we move along with this whole new strategy I want to make sure that it's well resourced, so we can all be successful.

So I don't know is Greg there? I meant to ask that from you. That's okay. Dan, you can let me know.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: I believe we do have still have Greg. Greg, are you still -- do you -- are you still in the presenter room here?

MANAGING INVESTMENT DIRECTOR RUIZ: I am. Yeah, so, you know, what you're seeing is that we're evolving our strategy and there's some things we've done for a long time that we're going to keep doing. And there are some --

CHAIRPERSON TAYLOR: Right.

MANAGING INVESTMENT DIRECTOR RUIZ: -- some things that we haven't done, as much historically or at the same scale historically, like co-investment that we're going to be ramping. And so I'd say right now, I think our resources are appropriate for where we are right now. But when I look forward, you know, kind of five to ten years, I would not be surprised if we wanted to add resources in targeted areas as we, you know, branched into and built bigger books of business around some of these areas we've discussed.

CHAIRPERSON TAYLOR: Okay. Well, of course, and then we encourage you, as you find that, to bring that to the Board. We want to make sure that we're successful and we're doing this as a team effort. So that's what I wanted to say. So thank you, Greg.

MANAGING INVESTMENT DIRECTOR RUIZ: Well, thank you. Certainly appreciate the support.

CHAIRPERSON TAYLOR: Okay.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Yeah. Thank you, Ms. Taylor. And certainly we've had that support from the executive team as well. And we'll -- we certainly -- we certainly see that support. And it, you know, as discussed this is this -- this is a CalPERS strategy. And I feel like we've got coop -- you know, great support behind it. So thank you.

CHAIRPERSON TAYLOR: Certainly. All right. So the next question -- it looks like Mr. Rubalcava had a question that I don't know if it goes back to Greg or if it's for Sarah.

COMMITTEE MEMBER RUBALCAVA: It's for Sarah, Ms. Chair. Can we go back to page -- slide 41, please?

Thank you. Ms. Corr raised a couple times, you said that it's too early to know the impact of COVID-19. But I think one thing we've learned is the importance of having -- back to the human capital again, the importance of having safe buildings. So the recovery is not going to happen if people can't go back to work, tenants have to be safe, the workers have to be safe. As I was coming back into my building, I had a -- they had -- they took my temperature, and give me a little sticker and everything.

So I guess the point is we need to -- for real estate to come back healthy, it's going to depend on the maintenance staff. It's going to depend on the security, the building. And so I just want to make sure that that's something we integrate into our real estate as we move forward, be cognizant of responsible contractor responsibilities and what have you. And I just want to make that point. I know you're transitioning to this role and I appreciate that, but I just wanted to make that point. Thank you very much. More like a comment than a question, I guess. Thank you.

MANAGING INVESTMENT DIRECTOR CORR: I can -- I can respond to that, if you'd like?

COMMITTEE MEMBER RUBALCAVA: Please. Please.

MANAGING INVESTMENT DIRECTOR CORR: Within our -- within out office portfolio, the service workers, the security, cleaning crews that you mentioned, a very high percentage of them are actually unionized and SEIU members. And they are taking protocols, not only to ensure the safety of the service employees, but that they're cleaning the offices. Where they do have information that somebody there was exposed to COVID, they're -- they're cleaning the offices where they do have information that somebody there was exposed to COVID very thoroughly, and they do clean all of the common areas every night. So they are taking good care of the buildings and of the service employees.

COMMITTEE MEMBER RUBALCAVA: Thank you. Appreciate the update.

CHAIRPERSON TAYLOR: Thank you, Sarah, because --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And, Mr. Rubalcava, for what it's worth -- I'm sorry, Madam Chair. I was just going to mention that in November, we'll have a -- an information item on our Responsible Contractor Policy implementation, so we'll have another opportunity to hear from Anne Simpson and team about -- about the overall Responsible Contractor Policy.

COMMITTEE MEMBER RUBALCAVA: Thank you for that. Looking forward to November meeting. Thank you.

CHAIRPERSON TAYLOR: Yeah, me too, because we -- I think I need to share that we -- we have had some -- hundreds of deaths within SEIU members, not necessarily within our portfolio, but who are in janitorial and security. So it's just a concern that we make sure our -- our workers are also taken care of, so that we can open these businesses appropriately.

And I have one more question from Margaret, but I also -- Sarah, I had a question, because I'm -- I've heard this and I think I asked it last time too, but I just wanted to ask about how -- we have some family units, right, in our real estate core, but we also have business units. So not -- I'm not so much worried about the rents on the family apartments or whatever, but I am kind of -- I'm hearing -- a lot of articles I'm hearing -- I'm reading a lot of articles that are talking about businesses are now like, yeah, we're just going to telework from now on. So are we seeing that within our portfolio, people sort of pulling out of their leases, and saying, yeah, we're just sending all our workers home? Is that going to become a new normal for real estate?

MANAGING INVESTMENT DIRECTOR CORR: I think it's way to early to know what the long-term impact will be, if people will continue to work from home, if there will be some working from home part time, if the imprints need to be larger, because they need -- they're spending lots of compression in office space. So, I think it's just too early to tell right now.

There's, you know, some things that are definitely going to decrease demand and other things that could increase demand.

CHAIRPERSON TAYLOR: Okay.

MANAGING INVESTMENT DIRECTOR CORR: And also, where the growth in the economy comes from. So I think it's a little early yet.

CHAIRPERSON TAYLOR: Okay. Well, again, Sarah, thank you. Welcome to real estate. And I have one more question -- oh, no, I have two more questions now. Margaret, does your cord work?

BOARD MEMBER BROWN: Does it work?

CHAIRPERSON TAYLOR: Yes.

BOARD MEMBER BROWN: Oh. It's a puppy. Darn.

All right. The dog ate my homework. First time I've used that.

Okay. I want to go back to page 37 of 88, and this is for Greg Ruiz back on private equity. And that's the table that has the peer universe benchmarks. And, you know, I don't recall us seeing this before. And I'm just wondering if this is something new that you've come up with or have we always done this and I just didn't notice how far off we were with our peers?

MANAGING INVESTMENT DIRECTOR RUIZ: Yes. Thank you. Thank you for the question.

We did not come up with this. But this is a method of benchmarking that exists and has existed for some time. I can speak for last year. I know last year, we did not include this information, because this is not our policy benchmark. We included it this year as a way just to show kind of a broader set of measurement points for our performance.

BOARD MEMBER BROWN: Well, great. It's helpful to see. You know, I have -- as you probably recall, Greg, that I have consistently questioned the benchmark. I think it was before I got on the Board, maybe three years ago, when the benchmark for private equity was -- sort of the mix of the assets was rearranged and then you took it from -- the Board took it from 300 basis points to 150 basis points.

You know, and so now we're -- you know, we're able to basically stumble over the benchmark. And I think it's too low. And so I hope we will continue to look at this. I also appreciate my colleague Stacie Olivares's comments as well. But I think this is important to know we are not -- we are not getting there. We are not getting enough bang for those bucks. And, you know, maybe it's fees, maybe it's other things, but -- maybe it's more co-investment. I know you're working hard on that and I do appreciate seeing some of those SMAs come up. You know, very nice.

But keep up the work. And I really do appreciate if we could take another look at our private equity benchmarking. Thank you.

MANAGING INVESTMENT DIRECTOR RUIZ: Thank you, Ms. Brown.

CHAIRPERSON TAYLOR: Thank you, Ms. Brown. It looks like Henry. Mr. Jones, go ahead.

COMMITTEE MEMBER JONES: Okay. Thank you. Yeah. Just a question back I guess it's primarily related to private equity and real estate, but I know that it's the whole economy. But this whole issue of climate change where we have fires in the west and we have the hurricanes and tornadoes in the south and north south -- northeast, et cetera. Has that -- those events created any renewed focus of companies looking at climate change, as opposed -- I know we've been very active in this space for a long time and we've tried to encourage others to take it more seriously than they have. So have the events that have occurred over the recent past, has that created any new discussion on climate change, Greg and Sarah?

MANAGING INVESTMENT DIRECTOR RUIZ: Yeah, so -- this is Greg. And I'm happy to respond. I think, you know, what -- what we're seeing is some of the recent and jarring events I'd say are increasing a dialogue that was already active and are increasing a focus on a set of issues that -- that were being -- being considered in a number of our investors' underwriting cases.

So I guess I would say I think it provides a strong tailwind to the deeper integration of ESG factors into underwriting.

MANAGING INVESTMENT DIRECTOR CORR: Yes, I would answer it really, clearly there is impact to certain regions that have more exposure to climate impacts than others. We don't have any specific investment guidelines for initiatives around that. We do look at our exposures by geography, but we haven't made any changes.

CHIEF EXECUTIVE OFFICER FROST: And, Mr. Jones, one of the research projects that Anne Simpson and her team is working on is some zip code risk, that they can start informing the decision-making processes that are happening, both in real assets and private equity. I know that she'd be happy to give the Board an update on that work as well.

CHAIRPERSON TAYLOR: Is that sufficient, Henry? Oh, you're on mute.

COMMITTEE MEMBER JONES: No. My request is that I would like to have Ms. Simpson provide an update, if you can give that direction, Ms. Chair.

CHAIRPERSON TAYLOR: Yes, absolutely. We would like Ms. Simpson to give an update. Do you want it right now or do you want to -- I think --

COMMITTEE MEMBER JONES: No, it's --

CHAIRPERSON TAYLOR: -- we have it in closed session coming up.

COMMITTEE MEMBER JONES: Okay. I think --

CHAIRPERSON TAYLOR: Am I wrong, Marcie. I'm not sure.

COMMITTEE MEMBER JONES: Yeah, I think it -- I think it would be appropriate for public discussion of that as opposed to closed session.

CHIEF EXECUTIVE OFFICER FROST: Correct.

CHAIRPERSON TAYLOR: Absolutely.

COMMITTEE MEMBER JONES: It could be at the next meeting, because I'm sure things will -- you know, the fires are probably not going to be out in a month, so --

CHAIRPERSON TAYLOR: No.

COMMITTEE MEMBER JONES: -- they seem to be accelerating. So it would probably be more intuitive even then at the next meeting. Okay.

CHAIRPERSON TAYLOR: I have read so much information that I have forgotten, but I just read about Anne's zip code thing on climate change, which will also help us identify climate change issues that focus on -- or poverty areas where we know that's the case. And so I think that will be really insightful. So if we can make sure Anne brings that up in the November meeting, that would be awesome.

COMMITTEE MEMBER JONES: Okay. Thank you.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Yes, Madam Chair, I've made a note that we'll add that. And for what it's worth, I'll also mention on private equity that real assets completed its carbon footprint this past year for the -- the very first carbon footprint and private equity will be completing theirs this year. So we can get an update on all of that from Anne at the November meeting.

COMMITTEE MEMBER JONES: Okay. Thank you.

CHAIRPERSON TAYLOR: Thank you very much. It looks like that's all our questions if you want to move on to -- is that it? Are we done?

No, real assets. My bad.

Oh, we were in real assets.

Oh --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: I think we're complete. Are there any other --

CHAIRPERSON TAYLOR: Margaret, did you have another question that wasn't just for private equity? Did you have one for real assets also?

BOARD MEMBER BROWN: No. Just -- I'm waiting for attachment 3, so we're not there.

CHAIRPERSON TAYLOR: Okay. Okay. So then we're done here.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Although very quickly -- I'll just conclude us very quickly, if that's all right.

CHAIRPERSON TAYLOR: Sure.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: I really wanted to -- I really want to thank the team for all the hard work and preparation that went into providing this report today, as really -- as well as all the hard work that went throughout fiscal year 19-20. Obviously, there was a number of accomplishments here. And that work continues of course, every day. I really hope that the new format, this kind of consolidation of the trust level review and annual -- asset class annual program reviews really reflects our consistent evolution and progress towards our one-team one-fund culture and perspective.

You know, of course, it's the total fund that pays the benefits. We certainly seem to have lots of questions and engagement, which is really good, due to the critical nature of this item. So thank you to -- to you all for the time and thoughtfulness on this item.

In summary, we did not reach our seven percent return target. We're going to continue obviously to strive to do so. Our returns were positive in a very challenging market environment. We did beat our benchmark, despite the market volatility, but we know that seven percent is our north star, so to speak, and that's what we'll continue to strive for, despite navigating these challenging market conditions.

We'll also continue to execute on the strategy of our five year strategic plan, enhancing our capabilities in private assets, looking to prudently and diligently apply leverage where it makes sense, and improving processes and utilizing technology, data, and good governance, while keeping an eye on cost effectiveness.

We'll continue developing our people, as we know that this team is made up of people that will drive success, not only now, but when the current leadership moves from being a team member to being pensioners frankly.

And finally, most importantly, we'll keep a laser focus on investment performance, as that underlies our ability to pay the promised benefits to our nearly two million members.

So unless we have any further questions, I think we can move on to Item 6b.

Madam Chair, do we have any -- any last questions?

CHAIRPERSON TAYLOR: I had -- I don't know if I have lost them. I had public comment on 6a from three people. Cheree, do we still have that?

I'm not hearing from anybody.

Cheree, are you checking?

MS. SWEDENSKY: Theresa -- yeah. Theresa, we do have public comment.

CHAIRPERSON TAYLOR: Okay. So go ahead with the public comment. I think our first one in line was -- I wrote it down. Hold on.

David Soares, is that correct?

STAKEHOLDER RELATIONS CHIEF FOX: That is correct, Madam Chair.

CHAIRPERSON TAYLOR: Okay. So go ahead.

MR. SOARES: Hello. This is David Soares with the Retired Public Employees Association of California. As you may remember, I'm a retired prosecutor, 32 years, in Silicon Valley.

And I'm directing my comments specifically at a Attachment 3 in Agenda Item 6a. The elephant in the room is of course, the recent resignation of Chief Investment Officer Ben Meng. His, of course, specific reasons were health and family, but I think we all know that it was because a recent investigation of his conflicts of interest with Blackstone, a private equity partner of CalPERS.

And so because of that, I think that we would all be very focused on reviewing CalPERS investments with Blackstone. Meketa's report last June specifically referred to 24 Blackstone vehicles that CalPERS partners with, and specifically drew attention Blackstone Capital Partners VIII, which was the first Blackstone partnership that Mr. Meng entered into in March of 2019 soon after he came to CalPERS.

And as he noted in his statements to the press, he actually had disclosed that he had conflicts of interest with Blackstone in his January 2019 appointment Form 700. Well, I'm concerned, because in reviewing attachment 3, that investment, Blackstone Capital Partners VIII, is not included. And, in fact, there are only approximately 18 Blackstone vehicles, including ones that they have taken that are under other names, listed in attachment 3, which is the equity program review.

The billion dollar investment that Mr. Meng entered into, that was the ultimate cause of his resignation in March of 2020, Blackstone Core Partners II is not listed in attachment 3.

And then finally, there's another significant Blackstone partnership another $500 million that has already been committed. Okay. It's over 490 million in that, and that is also not in attachment 3.

And one might wring this up to just somebody wasn't paying attention, except that we are all paying attention to a Blackstone investment. And it's particularly troublesome, because Board President Henry

Jones said to Bloomberg, in a email that was reported in Bloomberg on August 16th, that he was aware of these problems when the CEO was aware.

CHAIRPERSON TAYLOR: Mr. Soares? Mr. Soares, I'm sorry --

MR. SOARES: Now, my big --

CHAIRPERSON TAYLOR: -- you've exceeded your time, so we need to move on. You've exceeded your time.

MR. SOARES: That was three minutes, Ms. Taylor?

CHAIRPERSON TAYLOR: Yeah. Yeah. I let you go over, too.

MR. SOARES: Well, thanks. Thanks very much. I think I've made my point, which is you folks need to look at that report and see where these Blackstone investments are and why they're not being reported, because it's rather curious.

CHAIRPERSON TAYLOR: Thank you, Mr. Soares.

MR. SOARES: I think some members of this Board at least will agree.

Thank you, Ms. Taylor.

CHAIRPERSON TAYLOR: Mr. Fox, next.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Madam Chair. Next in the queue is Robert Girling from CSU.

CHAIRPERSON TAYLOR: Mr. Girling, you have three minutes starting when you start.

DR. GIRLING: Thank you. Can you hear me? Hello?

CHAIRPERSON TAYLOR: Yeah, we can hear you.

You have some background though.

DR. GIRLING: Thank you for the excellent report that you've made by Dan and his team. I am also concerned about the point that was raised by President Jones, the issue of climate change. We in California are having -- living with the dramatic impact of climate change. And investments in the fossil fuel industry have been battered in the market. So I have really a two-part question.

Hello?

The first part is to what extent have CalPERS investments in fossil fuels exacerbated the volatility of the fund?

And the second part is that the New York retirement system recently increased employer contributions due to the growing market volatility. Do you anticipate that we'll need to require increased employer contributions for PERS? So those are the two questions I had.

Thank you for taking these.

CHAIRPERSON TAYLOR: So, Mr. Girling, I'm wondering if I can ask to have staff get back to you with answers on that?

DR. GIRLING: Yes certainly.

CHAIRPERSON TAYLOR: Okay. So, Marcie, if you can make sure someone gets -- thank you very much.

DR. GIRLING: Okay.

CHAIRPERSON TAYLOR: And then, Mr. Fox, our next person, please.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Madam Chair. The next speaker is Mr. Al Darby of RPEA.

MR. DARBY: Committee members -- Madam Chair, Committee members, Al Darby, Vice President, Retired Public Employees Association.

My issue relates to Mr. Baggesen's presentation. His slide, I believe number 14, supplemental income plan performance. In that plan, he indicates that the Russell -- All Russell, which is all of the stock market almost, outperformed -- and that is U.S. stocks that are in the Russell, outperformed global equity -- excuse me, non-U.S. stock -- very dramatically over the past five years. Three years ago, it was identified that the CalPERS equities portfolio, global equities, all equities were overweight in non-U.S. stocks.

There is a dramatic difference between the performance of those two categories within our equities. And I'd like to know how many basis points each year we lost in the PERF by not having the fund being overweight in U.S. stocks as opposed to non-U.S. stocks.

Ever since November 2016, the stock market has been going quite well and at the present time is about 50 percent higher in the Dow than it was when Mr. Trump became president, and the NASDAQ is even doubled what it was. So U.S. stocks dramatically outperformed non-U.S. stocks over the past five years. And for three years we've known that the PERF is overweight the other way in non-U.S. stocks. I'd like to know the answer to why that condition still exists.

Thank you.

CHAIRPERSON TAYLOR: Thank you, Mr. Darby. I'm wondering, Dan, if you wanted to weigh in on attachment 3 that Mr. Soares was talking about.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Sure, I'd be happy to, Madam Chair. As far as the -- and, you know, Greg or Sarah can speak more nearly about this, frankly. But as far as the Blackstone commitment not showing on attachment 3, attachment 3 reflects capital that's actually deployed, you know, net asset value type capital. In the case of Blackstone, we've committed to that deal, but we haven't yet seen any capital get drawn down yet, which is why there's no -- there currently no capital deployed.

CHAIRPERSON TAYLOR: Okay. Well, that's a simple answer as to why it's not showing.

And then as to Mr. Darby's question, I think that, Mr. Darby, you certainly can -- we'll direct Dan or some of the staff to get back to you on that question. But I think it's been talked about before.

But in the meantime, let us move on to 6b.

BOARD MEMBER BROWN: Ms. Chair, I have a question on attachment 3.

CHAIRPERSON TAYLOR: Okay. Go ahead, Ms. Brown. Did I miss you?

BOARD MEMBER BROWN: Yes.

CHAIRPERSON TAYLOR: I did miss you. There you are.

BOARD MEMBER BROWN: That's okay. That's all right. So Dan, this is for you as well, and I mentioned this when I spoke -- the first time I spoke about the names. You know, I look at this list and I try and match it up to the CAFR, because I have no life. I also try and match it up to other announcements when we publicly say what our investments have been these partnerships.

And so while I'm talking about the names and it's important about the names, you know, I look at Blackstone Management Partners IV, but that's not the name -- we don't have a -- I don't know what that is, because we don't have a fund called Blackstone Management Partners IV or V. I think -- I think we're getting confused on the names here. And I'm wondering where this list comes from. Does it come from the pars? I mean, I look at the very bottom and it says that three different companies put this together, I think I read at the bottom somewhere, that -- State Street Bank, and our staff, and somebody -- another consultant puts this together.

But I'm wondering how we -- I just think we need to be very careful on the names, because it's -- it's like your title, you know, it has to be held in the correct name. And I think maybe we're getting a little mixed up on that.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Thank you, Ms. Brown. And to you point, I made a note of that when we talked about 5d, that we'll look at the consistency with the CAFR. We are certainly always trying to be as transparent as we possibly can, and that means avoiding confusion. So we'll -- we'll take a look at that and see what we can do to have those be as consistent as possible.

BOARD MEMBER BROWN: Yeah. If different people are preparing the reports, they need to not use a shorthand version. The name is very important, as I realized, when we invested in a VI and a VII, and then a VII LLPS. You know, you have all these letters and numbers. And they're very close, but they're different funds. And I just want to make sure, so I can match it up.

Thank you.

CHAIRPERSON TAYLOR: Okay. Thank you. And, Cheree, am I understanding you that we have three more callers, is that correct?

MS. SWEDENSKY: That's correct.

CHAIRPERSON TAYLOR: Okay. Mr. Fox, go ahead.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Madam Chair. You have -- the next caller J.J. Jelincic on private equity.

CHAIRPERSON TAYLOR: Okay. Mr. Jelincic, you have three minutes.

MR. JELINCIC: First, I'd like to thank whoever gave us the picture back on the website. About 2:20, we finally were able to see the speakers again.

But I noticed that the report on private equity failed to show cash flows. And that's important, because the whole purpose is to generate cash to pay benefits. I don't know why it wasn't included. However, when it has been included in the past, it has shown that the GPs and related parties take about 40 percent of the cash flow, and it's cash flow that pays the bills. The investors have a hundred percent of the risk.

One of the state -- one of the state pension funds in Pennsylvania released a study over the life of its PE program and showed a similar amount of money to the general partners. So it's not the CalPERS has done a poor job. It's the nature of the asset and the management structure. So you really do need to start looking at the cash flow.

One of the other issues that came up is the benchmark and the difficulty meeting the benchmark. I will just point out that we have a history, if we can't meet the benchmark, we lower the benchmark and that will solve the problem. But you really do need to look at the cash flows.

And again, thank you for whoever gave us the picture of speaker back.

CHAIRPERSON TAYLOR: Thank you.

Mr. Fox.

STAKEHOLDER RELATIONS CHIEF FOX: Madam Chair, the next two speakers are with the Private Equity Stakeholder Group. First up Alyssa Giachino.

CHAIRPERSON TAYLOR: Go ahead, Alyssa.

MS. GIACHINO: Hello. Good afternoon, Board and CalPERS staff. I want to give you an update on issues regarding asset manager private equity firm Leonard Green & Partners. As you know, Leonard Green owns safety net hospital chain Prospect Medical Holdings, which owns hospitals across the United States, including six here in California. Over the course of its ownership, the Leonard Green led investor group has siphoned almost $670 million from the hospitals in fees and bet-funded dividends.

Workers, Congress members, state legislators, community groups, and investors have all been raising concerns about Prospect Medical Holdings with Leonard Green for months. And yet, Leonard Green has not taken the necessary steps to resolve the issues.

Now, problems at Prospect's hospitals are getting worse. In Rhode Island, the State's Attorney General and Department of Health have delayed their process to review Leonard Green's proposed exit from the company, until they can investigate the dividends Leonard Green -- the Leonard Green-led group has extracted.

If August, Rhode Island Treasurer Seth Magaziner wrote a letter to Leonard Green saying that its harmful management of Prospect Hospitals have already left -- have left already-vulnerable communities of fewer health care resources, and that the Rhode Island State Investment Commission would not consider any future investments with Leonard Green.

In Connecticut, Prospect convinced the City of Waterbury to get Prospect-owned Waterbury Hospital an almost 70 percent tax break in July. Just weeks later, Prospect outsourced Waterbury Hospital's entire IT department. You'll hear shortly I hope from one of the workers who lost his job.

Leonard Green has used the fact that it's investing on behalf of pension funds to justify its raiding of Prospect. As six members of Congress wrote in their July letter to Leonard Green quote, "Using the pension funds of public employees and other first responders as a cover for the harmful action Leonard Green has taken against these hospitals and healthcare workers is unacceptable and dishonest", unquote.

CalPERS is one of Leonard Green's biggest investors and should not allow itself to be used as a reason to loot critical health care resources. Please follow the lead of Rhode Island Treasurer Magaziner and stand up to Leonard Green to protect these safety net hospitals and their workers.

So we have several other speakers who are requesting to speak on this topic. It sounds like you listed one other, but I think there's a total of four of us, including myself, so three pending. But they may be somewhere else in the queue. So, hopefully, Kelly Fox and other staff can help make sure that we all get our comments in.

Thank you so much.

CHAIRPERSON TAYLOR: Thank you.

STAKEHOLDER RELATIONS CHIEF FOX: Madam -- Madam Chair, we only have one additional caller, just to let Alyssa know. The other two callers she referred to have not appeared in the call-in studio.

So our next caller Mr. Steve Schrig.

MR. SCHRIG: ...CalPERS to help a written community benefit -- Hello?

Should I start?

CHAIRPERSON TAYLOR: Yes, go ahead.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, go ahead.

MR. SCHRIG: Hello? Yeah. Good afternoon. I will speak to the impact of Leonard Green Waterbury Hospital's triple dipping.

My name is Steve Schrig and I'm with the Naugatuck Valley Project. And we need CalPERS to help get a written community benefits agreement with Waterbury Hospital and to get the ten information technology workers their jobs back. We are dealing with a triple dipper here and I'll explain why.

Dip one, Prospect Medical Waterbury Hospital properly received a 70 percent tax break from the City of Waterbury valued at $22 million. When the CEO, Lester Schindel discussed SARS related financial losses as the reason to get the tax break, he did not disclose that the CARES money -- federal CARES money gave them $26 million for Waterbury Hospital alone.

Waterbury city government claims that there has been a $6.5 million real estate improvements. However, they sold all the property for the hospital to an Alabama corporation.

The state claimed that $16 million in capital improvements, but Prospect Medical promised $55 million in capital improvements. They claimed $12 million in money given to the community. We have no signed agreement to make these resources to the community permanent. No transparency about where the money went.

Dip number 2, Prospect Medical received federal money totaling $283 million, 45 million just for Waterbury Hospital. In addition, Connecticut hospitals also asked the state for $450 million in July. Where is the money going?

Dip number 3, Prospect Medical, Leonard Green paid dividends and fees to themselves totaling $658 million. Where is the money going?

The impact. Waterbury Hospital outsourced the ten information technology jobs. An IT worker with 33 years experience was being paid $38 per hour with health care and a pension, was now offered $13.50 per hour, a 20 percent increase in health care premiums, and no employer contributions to their pension. Where is the money going?

Here's the Waterbury Hospital Prospect Medical Leonard Green report card. Satisfactory character, failure, their refusal to negotiate a community benefits agreement.

Competence. The Committee on Joint Commission Review for the hospital was found that they were not in good shape several times. Grade, failure.

Continued access to quality health care. They -- through an outsourcing, they endanger the IT department help desk, to help health care workers be able to use the computers they have is now overseas and inadequate. Grade, failure.

Continuing bonding by collecting bargaining agreement. They ignored the successorhip clause when they outsourced the IT department. Grade, failure.

Triple dipping does not taste good to Waterbury. The Naugatuck Valley once had 40,000 jobs in the brass industry. They are all gone now due to corporations just like Prospect Medical Holdings and Leonard Green.

This hospital is an anchor institution with the largest concentration of good jobs in our community. We have been struggling to get a signed community benefits agreement from for-profit hospitals for the last ten years.

For us to move forward, we need CalPERS to help rein in Prospect Medical Holdings Leonard Green to make sure that our hospital has the resources that it desperately needs for quality patient care and good jobs.

Thank you.

CHAIRPERSON TAYLOR: Thank you.

Are there any other people on the line, Mr. Fox?

STAKEHOLDER RELATIONS CHIEF FOX: Yeah, Madam Chair. We are screening one of the callers that Alyssa had referred to.

CHAIRPERSON TAYLOR: Okay.

STAKEHOLDER RELATIONS CHIEF FOX: As soon as we get them screened, I'll put them up.

CHAIRPERSON TAYLOR: Great. Thank you.

STAKEHOLDER RELATIONS CHIEF FOX: Okay. Madam Chair, we have Eddie Gadomski.

CHAIRPERSON TAYLOR: All right. Great, Mr. Gadomski, go ahead.

MR. GADOMSKI: My name, yes, is Ed Gadomski and I've been employed at Waterbury Hospital for the past 32 years as a PC tech in the IT department. On August 3rd, ten of us were called into a conference room and were blindsided and told that September 1st we would be terminated. Our positions were being outsourced to India.

Three of the ten employees were analysts, and the other seven employees were PC techs and help desk. We were told that we could reapply for our positions and would be offered comparable wages and benefits to what we currently have.

As of September 1st, anyone calling the help desk is now speaking to a person physically located in India. Of the seven PC techs terminated, three accepted offers from the company R4, because they had no choice to do so. Two techs have underlying medical conditions and the third tech just bought a house, is married, and has three little girls at home.

All three techs apparently fit the R4 budget, as they accepted pay cuts to make a low- to mid-$20 per hour wage. The remaining four PC techs were all offered the exact same pay of $13.46 an hour with no counteroffer.

In my case, that is about one third of my salary after 32 years at the hospital. The four of us are now on unemployment during a national pandemic. In addition to the low pay rate offered, we were told we must find our own insurance. 4R is offering to pay 80 percent up to $800 for a family. A family insurance plan in Connecticut is about $2,000 per month.

R4 also wanted us to go on-call for free, then counteroffered with the hundred dollar weekly premium, which is still a $650 weekly loss for our IT tech on-call.

We are also losing our pension donation as R4 will not contribute financial to any retirement plan. In my case, I'd be losing about 25,000 a year pay cut, and that is even before factoring in my $13.46 pay rate.

The first week of September, the hospital has already hired another PC tech from the outside, instead of recalling one of the four laid off PC techs. I wonder if the new tech is making $13.46 an hour. The PC techs are in the union contract that does have a successorship clause, which means the hospitals cannot legally terminate us as they did, but they simply don't care.

Arbitration could take weeks, or months to win, but we cannot afford to be unemployed that long. We are asking for your help to please investigate this wrongful termination as our families have been greatly impacted. Thank you so much for your time and attention to this matter.

CHAIRPERSON TAYLOR: Mr. Fox, is there anyone else?

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Madam Chair. We have one last caller. Mr. Dave Hannon.

CHAIRPERSON TAYLOR: All right. Thank you. Mr. Hannon, go ahead.

MR. HANNON: Hi. My name is Dave Hannon, and I'm the Secretary-Treasurer of Connecticut Heathcare Associates, District 1199, the union that represents registered nurses and technical employees at Waterbury Hospital, which was purchased by Prospect Medical Holdings in 2015. I'm going to give you two examples of the safety and staffing issues that my members deal with at Waterbury hospitals -- hospital, issues that have increased exponentially during the pandemic, and have been exacerbated by Prospect's one overriding concern, its bottom line.

During the national shortage of personal protective equipment, my union forwarded Waterbury Hospital list of vendors to purchase PPE from. After a few weeks of hearing that there continued to be shortages, I contacted the vendors myself to see what the holdup was.

What they told me was both disheartening and unsurprising. The hospital was not going to purchase PPE from these vendors. Prospect wanted donations only.

Later, we learned that Waterbury Hospital received nearly $50 million in PPP grants and forgivable loans, and another $17 million tax break from the City of Waterbury. That money seemingly did not go back into patient care. It went to prop up the hospital's profit margin.

Three weeks ago, a nurse who works in the family birthing center at Waterbury Hospital called because she needed a test for COVID-19 after being exposed to a co- -- by a co- -- by a co-worker who had tested positive. The co-worker had returned to work after a vacation out of state, because Prospect required staff to go without pay or use their own paid time off to self-quarantine, thus disincentivizing workers to stay home.

To further compound the problem, Waterbury Hospital did not tell patients or staff that this employee had tested positive, potentially exposing hundreds of people for several case.

My member tested positive herself and exposed her elderly grandmother and her partner, who both live with her. Her partner went to work and exposed two departments of the defense contractor he works for, which had to be shut down for three days to decontaminate.

In the hospital, three additional co-workers tested positive, as well as several patients and newborns. There is no excuse for a hospital not to provide accurate contact tracing of and to its employees during a pandemic. Yet, time and again, Prospect fails to do this, because it's razor-thin staffing model doesn't allow for multiple employees out at the same time, even during a crisis.

Prospect -- Prospect simply refuses to spend the money it takes to provide safe, effective health care to its patients or to provide for a safe workplace for its employees.

It is tempting to wright off some of this as hard decision-making during uncertain times. That is a charitable view. And after nearly six years dealing with Prospect, I am not inclined to view them charitably.

I feel strongly that CalPERS should work to disentangle its investments from Leonard Green and cease even indirect support of a health care provider that takes unnecessary risks with its patients and employees lives for the sake of its finances.

Thank you.

CHAIRPERSON TAYLOR: Thank you very much.

And, Mr. Fox, that was it?

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Madam Chair, that was the last caller on Item 6a.

CHAIRPERSON TAYLOR: All right. Thank you. Thanks to all of our callers that commented on Item 6a. I want to thank also the folks that brought up Leonard Green. As I stated before, these are some of the intrin -- intrinsic problems with private equity that I feel like needs to really be addressed as we move forward with investing more of our money. Leonard Green is just an example of a few of these companies that have been brought to our attention, but it is always the workers that pay the price for us making our seven percent.

So I know we have to make that seven percent, but I think it's also important that we figure out a way to make sure that our human capital management is taken care of when we invest in these companies.

I think we're done.

I'm sorry. I hit a button there. Done on 6a finally.

So let's move on to 6b, which is our trust level review consultants reports.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Thank you, Madam Chair. Jared, if we could please move Tom Toth from Wilshire and then also Christy Fields and Steve Hartt from Meketa into the -- into the presenters room that would be great. And we can also move the presenters from the previous item, from 6a, we can move Eric Baggesen, Greg Ruiz, Jean Hsu, Lauren Rosborough Watt, and Sarah Corr, and Steve Carden back into the -- the attendee room, please.

CONFERENCE MODERATOR: Okay.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And with that, as you'll recall, this is our -- you know, this is the consultant's version of the trust level review and annual asset class program reviews. So I'll -- I'll turn it over to Tom to lead us through Wilshire.

Tom, over to you.

(Thereupon an overhead presentation was presented as follows.)

MR. TOTH: Thanks, Dan. Good afternoon. Tom Toth with Wilshire Associates. Madam Chair and other members of the Board, I appreciate the opportunity to discuss the market and the portfolio with you today. I don't want to shortchange Board discussion, so my comments will focus on items to really complement the economic review that Ms. Rosborough Watt provided earlier and the portfolio results that Mr. Baggesen and the rest of the team discussed.

I'll try not to simply reiterate points that they covered already. And I'm happy to answer Board questions on any item of interest as we go through this.

After the portfolio discussion, we'll move into Wilshire's independent review of the investment programs before I turn it over to my colleagues from Meketa.

Let's start with Wilshire's asset class expectations on page two of 55 in Item 6b.

--o0o--

MR. TOTH: This is a particularly important topic as the Investment Committee thinks about asset class expectations for risk and return and how they might impact the strategic positioning of the portfolio and its ability to meet your return targets.

To start, you can really think about expected total returns as a collection of risk premiums, which sit on top of a risk-free rate of return. In this framework, the starting point of the risk-free rate has a really large impact on the expected total returns of riskier assets which the PERF invests in.

And much like the period following the 2008 Global Financial Crisis, today's investment environment begins with zero yields on cash and cash equivalence driven by the swift Central Bank action during the pandemic. Unlike the post-GSC period, today's challenges are made considerably more difficult by the very compressed yield spreads between zero cash yields and the market yields priced into longer dated high quality fixed income instruments.

And this is a challenge that's further compounded by real concerns that the bond return pattern itself, and not just its final destination after our ten year forecast horizon maybe changing in a way that alters the utility of the asset within the portfolio. And to put it simply, because of the low starting point, high quality fixed income might not provide the same level of diversification against drawdowns of riskier assets as it has over the past four years.

So turning to the specific asset assumptions that you see on this page, I'll start with our fixed income expectations, which are down meaningfully as of the end of June with a core bond return expectation of 1.25 percent compared to 2.85 percent to start the year, and north of three percent one year ago.

Our expectations for equity returns have also moderated, given the sharp rally we've seen in Q2 of this year, after going through what was the fastest bear market in history in March.

Wilshire's expectations for global stocks are A return of 6.5 percent annually over the ten-year forecast horizon. In comparison, our return expectations for private equity, while lower than historical experience on an absolute basis, do offer a premium versus public markets of 1.65 percent.

Now, we're often asked the question of whether our outlook reflects either a bearish view on the economy or a belief that stocks are significantly overvalued. Now, while we utilize multiple forecasting models, which do take valuation into account, when you look at the current Wilshire assumptions suite and the expected risk premium associated with U.S. equities over that of core bonds, it sits right now at about 4.75 percent.

Historically speaking that's a very reasonable risk premium, which suggests that based on our expectations, we expect investors to be fairly compensated over the ten-year forecast horizon for taking on equity exposure. It's really that level of short-term interest rates that impacts the absolute expectations to a greater extent.

If we flip to the next page, page three --

--o0o--

MR. TOTH: -- you can see Wilshire's expected return for the CalPERS portfolio, based on those assumptions I just walked through, sits at 5.56 percent over the ten-year horizon and about 6.8 percent over the 30-year forecast horizon.

The upcoming ALM cycle should provide substantial opportunity to evaluate the strategic structure of the portfolio, ask questions, and really stress test assumptions. It's clear that challenging ten-year horizon return expectations are going to require analysis of alternative strategies or different portfolio construction techniques in order to have any probability of meeting your objectives.

Earlier today, Ms. Middleton asked about the risk profile of PERF. And as you can see here, our estimated risk expectation sits at 11.6 percent today, which aligns well with what was discussed earlier, and again is a longer term look at portfolio risk. And this sits well within what we see with other plan sponsors across our client base. So in answer to her question, the current risk profile of the portfolio is consistent with other plans sponsors.

One last point I wanted to touch on in the risk contribution of the current portfolio, if we look at page four of the agenda item --

--o0o--

MR. TOTH: -- the risk contribution for equities accounts for more than 80 percent of the total risk. So if you look at the bottom left-hand side and you add up the blue pie -- slice of the pie with the red slice of the pie, that's where you get to the more than 80 percent number. And that's pretty typical for institutional portfolios, which are dominated by that equity risk.

Balancing risk contributions is another topic of discussion for the ALM cycle. The recent educational discussion regarding total fund leverage is one method of balancing risks across the total fund, while maintaining a specified level of total return. And, in fact, the Board has been discussing the utilization of leverage in a portfolio context going back to a prior offsite in 2017 with presentations from Wilshire and other outside experts.

We think continued discussion and analysis of that will be coming up during the ALM process. And we think that's going to be, you know, an incredibly -- incredibly important discussion, as we look to set the longer term strategic direction of the portfolio over the next couple of years.

The balance of the -- this presentation really starts to dive into portfolio performance and attribution. I think Eric and the team earlier touched on that enough. In the interests of time, I'd like to just open it up for questions on performance, or if it pleases the Committee, I'd like to just skip forward to -- to the universe comparison as it relates to performance.

CHAIRPERSON TAYLOR: Mr. Toth, it does look like I have a question from Mr. Jones.

COMMITTEE MEMBER JONES: Yeah. Thank you, Madam Chair. Yeah, Mr. Toth, on your slide page number three, the previous slide. Yes. From looking at this, there's an expected return of ten years and expected return of 30 years. And I know that, you know, we are a long-term investor and we do look out, you know, 30, 40, 50 years. But when we look at data, generally we say that the ten-year returns is 6.81. But if we look out 30 years, we've often been told that, well, we can get to seven, if we go out 30 years. And based on this particular chart, your expected return for 30 years is less than seven percent.

And so that creates -- and I know we'll be discussing this at our ALM, but it does raise some serious issues that if we can't get to seven in 30 years, then we have some very undesirable options. And so does this reflect the current profile of our investment strategy or does this reflect any proposed changes going forward?

MR. TOTH: Thank you for the question, Mr. Jones. The answer is this reflects your current portfolio and the current market environment. So to one of your earlier comments that historically, as we've looked at this number, those 30-year expectations did tend to gravitate to seven plus percent expected levels of returns. But the interest rate environment has shifted so materially just in the last nine months, that that has pushed the expectation lower, because we're starting for the first ten-year period of that 30-year horizon with very muted expectations and which gravitate to our long -- what we call our longer term equilibrium assumptions over time.

And that's what's dragging that return down from what has historically, as you correctly stated, been seven plus percent, down to what you see at that 6.8 percent.

So from a portfolio strategy standpoint, I do think it's going to require looking at things that are, I'll say, new, and being cognizant of the potential benefits that those types of strategies can deliver, as well as the risks to the portfolio.

I really liked one of the comments that Ms. Jean Hsu made earlier that we know there are additional risks with some of these alternative strategies and investors need to take risks to be compensated by return. And ultimately, that's the trade-off that we're looking to strike with the asset allocation.

COMMITTEE MEMBER JONES: Okay. Well, we'll be looking for your comments at our asset liability management process.

MR. TOTH: We're looking forward to it.

COMMITTEE MEMBER JONES: Thank you.

CHAIRPERSON TAYLOR: Thank you, Mr. Jones.

Ms. Middleton.

COMMITTEE MEMBER MIDDLETON: Thank you, Madam Chair. And, Tom, thank you. This is going to be a continuation of some conversations we've had in the past. Private equity is certainly a, as Mr. Ruiz pointed out, something that is important, but has also underperformed. Could you give us your sense of the importance of private equity and private debt to our overall portfolio. And then I will follow up with a couple more questions.

MR. TOTH: I'd be happy to do that, Ms.

Middleton. From a returns perspective, private assets are incredibly important. As we look across our asset assumptions suite, and I could turn your attention back to page two, and it -- if you can just quickly run your eyes down the June 2020 column there for return, that the only asset class on this page that returns more than seven percent is, in fact, private equity at 8.15 percent. The tradition ballast in a portfolio, as I mentioned, core bonds at 1.25 percent, which isn't -- it's helpful for liquidity purposes, for income purposes, and for that diversification, pulls you farther away from that seven percent.

So a bit of a long-winded way of saying I think private assets -- private equity and private debt are one of the levers that the Board can use to drive portfolio performance up towards that seven percent. And being cognizant of the risks at the same time is going to be incredibly important.

COMMITTEE MEMBER MIDDLETON: And earlier today, Ms. Hsu gave us some indications of the pacing of the ramp-up in acquiring new commitments in private equity. Are you comfortable with the strategy that she outlined?

MR. TOTH: In short, yes. I'm comfortable both with the strategy that -- that Ms. Hsu laid out, as well as the one that Mr. Ruiz laid out on the equity side. I think it's incredibly important to be consistent with implementation on the private asset side. And that's one -- that's one of Wilshire's key tenets for managing a private asset portfolio is consistent vintage year diversification, not trying to time the market or, you know, make oversized commitments one year and no commitments the next year. Much like for public assets, we think try -- timing the market in that fashion is unlikely to be successful. So being consistent I think is very important, and that goes to the pacing which both of them spoke to.

COMMITTEE MEMBER MIDDLETON: Great. We heard in public comment just recently from four employees of Waterbury Hospital, each one of them telling a story that is certainly very distressing. It's not the first time that we've heard stories of what appear to be very abusive labor practices on the part of private equity. Is there any direction or advice that you would have for an organization with the values that CalPERS has to ensure that as we move forward in this market, we can minimize our risk of partnering with organizations that have employment practices that are inconsistent with the values of CalPERS and inconsistent with the values of our members?

MR. TOTH: Thank you for the question. The short answer is yes, I do think it comes down to the diligence prior to implementation and a very solid understanding that with the partner, the private equity partner, that they understand those values that CalPERS brings to the table and expectations around the way they are likely to act. I'll refrain from making any specific comments about that situation, as I'm not nearly well versed enough, but I do think ultimately it comes down to implementation, as it relates to private equity to make sure that those -- the values of -- with your partners align with those of the organization.

COMMITTEE MEMBER MIDDLETON: I thank you for that and I will add the comment I think that's something that is demanding of us, but it is something that we must do. Thank you.

MR. TOTH: Of course.

CHAIRPERSON TAYLOR: Thank you, Ms. Middleton.

Ms. Olivares.

COMMITTEE MEMBER OLIVARES: Thank you, Madam Chair. This is for Tom Toth.

In looking at the report -- and it's a very robust report. Thank you -- I know asset allocation variance and tracking errors have contributed to underperformance. Can you touch on how much of CalPERS historical underperformance in private equity is attributable to our manager selection processes?

MR. TOTH: So I -- thank you for the question, Ms. Olivares. I would hesitate to try to put a number on it. My understanding is that the -- that staff has done that attribution and so not to -- not to pass the buck, but I think they'd be better positioned to try to give you those numbers specifically.

COMMITTEE MEMBER OLIVARES: Well, maybe not a specific number then, but I understand that the processes we use to select managers has changed over time and as has our historical performance. And as we go forward in building out our Private Equity Program, I want to make sure that our manager selection process is robust and equitable. So I'd like to get your opinion on our management -- our manager selection process in the past and then what we're looking at going forward.

MR. TOTH: So I can comment, in general, about private equity based on the diligence process that a plan sponsor that we are the private equity consultant go through for those. If I could, if we -- if we wanted to bring up the folks from Meketa to talk about private equity due diligence specific to CalPERS, they might -- I think they'd better able to provide some of that --

COMMITTEE MEMBER OLIVARES: Um-hmm.

MR. TOTH: -- some of that background. I think from my -- from my vantage point as the general consultant, one of the big changes has been looking to partner with those firms which provide co-investment opportunities as opposed to only fund opportunities in the past. And I don't remember the exact date on this, there's also been a push to try to consolidate the number of relationships across the private portfolio in order to drive both economies of scale and a deeper understanding of the investment process across those underlying providers.

So those are two differences that come to mind over the couple -- over the last couple of years. But perhaps Meketa or Mr. Ruiz could shed further light on that.

CHAIRPERSON TAYLOR: Okay. Stacie, do you mind if we wait until they do their report?

COMMITTEE MEMBER OLIVARES: Yes. I wanted to hear Mr. Toth's perspective and then we can hear Meketa's.

CHAIRPERSON TAYLOR: Okay. Great.

Mr. Jones.

COMMITTEE MEMBER JONES: Yeah. Thank you. Yeah, follow-up question, Tom. And I'm not talking about the specific strategies of private equity, because we could wait for Meketa for a dialogue in that regard. But just looking -- back to your slide on page three again, and, you know, I'm just looking at these numbers. And so you said this was based on our current portfolio. So does that mean that we -- these numbers reflect the underweight in private equity now, which is down maybe 6.1 or two percent? And if the target allocation of -- you know, we were at ten at one time. If we were -- if we had our assets allocated to the ten percent targeted level, would that -- these numbers then be above seven percent?

MR. TOTH: The -- the numbers that you see on page three, the actual allocation is reflective of your underweight. And your tar -- and the target allocation bar charts are fixed at your current target, which is eight percent for private equity.

To the extent you were to increase that to ten percent, those numbers would move higher. I hesitate to try to do the math in my head. I'll likely only get myself in trouble, but that would -- you know, it would -- it would move that number by, let's say, it's coming from private equity to -- from public equity to private equity, you would get a two percent times 1.65 percent additional return. That would roll up to that total fund expectation.

COMMITTEE MEMBER JONES: Okay. And then therefore, the expected return in 30 years would be above seven.

MR. TOTH: I'm going to -- if you give me one second here, I will try to -- I don't know that it would move it all the way there. I think it would -- it would certainly add somewhere between, I would say, five and ten basis points to that expectation. So it would certainly get it closer as it is a higher expected return asset class.

COMMITTEE MEMBER JONES: Okay. Okay. Thank you.

CHAIRPERSON TAYLOR: Okay. Thank you. We can move on now, Mr. Toth.

MR. TOTH: Great. If I could, I would like to skip ahead to attachment 4 --

COMMITTEE MEMBER JONES: I'm sorry.

MR. TOTH: -- which is the universe comparison.

COMMITTEE MEMBER JONES: I'm sorry, Ms. Taylor. I have one more question for --

CHAIRPERSON TAYLOR: Go ahead, Mr. Jones.

COMMITTEE MEMBER JONES: Yeah. And what about leverage, would that help move this number up?

MR. TOTH: It would. And you know, that comes to how leverage is implemented in the portfolio, which is going to be critical. But generally speaking, the utilization of leverage would be able to move that number higher. But again, it comes down to implementation. You could utilize leverage on a lower risk portfolio and move it back to the same return. You could use leverage on this portfolio to move risk -- to move both return and risk higher. So it really comes down to implementation. There's no, you know, one answer for that.

COMMITTEE MEMBER JONES: Okay. All right. Thank you very much. Thank you, Ms. Taylor.

CHAIRPERSON TAYLOR: Sure. Go ahead now.

--o0o--

MR. TOTH: Okay. I just had a couple of comments on attachment 4, which is the universe comparison. I wanted to show graphically on page 2 of 14, the comparison of CalPERS results over the last year versus the universe. The earlier comments indicated that over the last year, it does rank in the top quartile for total fund returns. And you can see that here on the one-year period it ranks at the 19th percentile. Over the three-year period, it ranks in the top third.

And apologies, I'm in attachment 4, page 2 of 14. I skipped ahead a couple of attachments just to make a quick comment.

So this shows the comparison of CalPERS returns relative to other large plan sponsors through the end of your fiscal year. And that has shown some improvement. As you can see, the ten-year number sits a bit below median at the -- at the 56th percentile.

CHAIRPERSON TAYLOR: Any questions?

MR. TOTH: And then one final -- one final --

CHAIRPERSON TAYLOR: No, I don't have any questions. Go ahead.

MR. TOTH: Sorry. One final comment here. We don't want to just focus on returns. We also want to focus on risk. On page 3 of 14 in attachment 4, you can see a risk-return scatter plot relative to the universe, and you can see that the CalPERS risk level is also just below the median level of risk for this universe of plans, sitting at -- we'll call that a little less than ten percent. So the realized risk for the portfolio over the last three years has come in below median, where as return has been a bit above median, so you, over the last three years, are plotting in that relatively attractive more return, less risk quadrant on the scatter plot there on page three. So you can see that in the upper left hand, the T would be the CalPERS PERF plot.

Any questions here either on any of the comments that I made about the universe or if there are other data points that you would like me to elaborate on?

CHAIRPERSON TAYLOR: It does not appear so, so you can move on.

MR. TOTH: Okay. So why don't we -- so that's -- we've touched on our total fund expectations, the importance of asset allocation. Staff earlier went over returns and attributions. So I'll move to our program reviews in attachment 3 for Item 6b.

Now, as a reminder, Wilshire evaluates CalPERS investment programs with a similar framework as we'd utilize when assessing other large asset managers. And so broadly, this includes a view of around the investment organization and investment teams, the investment process, portfolio construction, risk management, implementation, and attribution.

The review this year has been intentionally restructured to provide a more cohesive review of how each internal program fits into the whole total fund and combines to drive total fund returns.

The scoring that you'll see in the appendix is done on a decile basis with the first decile being the highest rating, a fifth decile indicating an average rating. And we also, for ease of use, correspond those to letter grades with first and second deciles, you can think about them as A, third and fourth decile as a B, and so on down the line.

As I said, the output of that evaluation for that scoring framework is included in the appendix. For the programs that we've done historically, we wanted to make sure that we provided that, so there's no loss of information or continuity from an oversight perspective. Although, we have combined what had previously been individual program reviews into one longer opinion letter here.

Importantly, for -- from an oversight perspective, there was -- there was no change in Wilshire's review process, which is meant to provide the Board with an independent analysis of the strengths and risks present in the investment organization. The full CalPERS service team here at Wilshire was involved in virtual onsites with senior INVO professionals across the Research and Strategy Group, TLPM, Global Equity and Fixed Income, Opportunistic Strategies, and Real Assets.

And these virtual onsites this year were also supplemented with regular conference calls throughout the year to really understand the evolution of each team, any changes in portfolio construction, and in regular dialogue on specific performance drivers. My fellow team members are connected here today, and, if necessary, can be available to answer questions.

As I mentioned an assessment of the factors contributing to the stability of an organization and the alignment of incentives between the team and the organization's long-term objectives are really important components of Wilshire's review. And as such, this year's overall organization score is materially impacted by the recent resignation of the CIO. The search for a permanent CIO does introduce uncertainty and the potential for a shift in investment strategy and implementation. And it can't help but take up bandwidth from the organization.

While we are familiar with and have a very high opinion of the interim professionals at the CIO and the Deputy CIO level, that uncertainty has pushed us to lower our firm score from a C to a D, as senior team stability is not where we need it to be to score more highly.

Now, while the departure of the CIO, as well as some pending senior level retirements, highlight instability for INVO staffing and give us pause, we also believe this is an opportunity to continue shaping INVO culturally and strategically to focus on total fund performance.

Going through this period, it's very important to maintain a focus on Investment Belief number 4 with long-term value being driven by effective management of the three forms of capital, financial, physical and, in this case, human capital. And number ten, that strong processes and teamwork and deep resources are needed to achieve CalPERS goals and objectives.

During fiscal 2020, we saw continued evidence of a commitment to breaking down asset class silos within the team and focusing the discussion on improving total fund performance.

We touched on some of those earlier. This includes centralizing the study of the strategic direction for the portfolio within the Research and Strategy Group, also known as RSG, which provides economic analysis and quantitative research, as you heard discussed earlier by staff.

And this information is utilized by the senior investment staff to assess opportunities and align individual investment programs to support that total fund objective. RSG was instrumental in the investment strategy review, which evaluate all of the active risks taken in the total fund, which resulted in concentrating on those strategies where CalPERS believes it has a sustainable edge to drive out performance relative to policy in alignment with Investment Belief number 7, taking risk where CalPERS will be rewarded, and number 8, that costs matter.

As we've noted in the past and continue to believe this total fund focus is very positive, as ultimately that's what's going to drive CalPERS' ability to meet its commitments to stakeholders.

The balance of my comments here, and there's much more in the letter, are going to highlight overall scores, and just one or two takeaways from -- from each of the program evaluations.

As I said, my colleagues are in attendance and they can comment on specific questions as necessary. But why don't I pause there to see if there are questions before I move on.

I'm not hearing any.

CHAIRPERSON TAYLOR: I don't have any questions. We will have callers afterwards though, so far. So move on.

MR. TOTH: Okay. Great.

COMMITTEE MEMBER PEREZ: Henry has a question.

COMMITTEE MEMBER JONES: Yeah. Do you want me to go ahead, Theresa?

CHAIRPERSON TAYLOR: I'm sorry. Yeah, I thought I got you already.

COMMITTEE MEMBER JONES: Okay. Yeah, this is another question. It's on this -- on this looking at the evaluation scores and the overall organization firm with a D grade. And as you said, it's primarily driven by the departure of the CIO. And so how important it is to recognize that we continue to have a team of MIDs. We have a team of -- for private equity. We have an MID for real estate, et cetera, et cetera. And those individuals can continue to execute what the Board Policy has been, because the Board has adopted policies for any CIO to follow, regardless of who that CIO may be.

So how important is it that the Board continue on that path, because we've adopted these policies. It wasn't the CIO that adopted the policies. How important is it for the -- continuing our Acting CIO and our Deputy Acting CIO, and our MIDs to continue implementing the policies that the Board has previously approved in order to make sure that the ship is still moving forward?

MR. TOTH: Mr. Jones, to answer succinctly, it's extraordinarily important. The continuity of investment strategy and the depth that you had or have with the Deputy CIO becoming the interim CIO, and Senior MIDs filling in in an interim basis, and even more -- even I think more impressive is that those other investment professionals who have then stepped up in their roles goes a long way to instilling some confidence that the implementation of the currently adopted strategic policy can continue going forward.

But we'd be remiss if we didn't, I'll say, call it as we see it from a stability perspective. The CIO role is very important from a strategic leadership standpoint, from a -- I'll say a thought leadership standpoint driving a lot of that investment discussion and decision-making. So I -- I couldn't sit here and tell the

Board that the -- in -- the CIO's resignation doesn't have much of an impact. It's certainly mitigated by the favorable view we have on those who have taken -- are sitting in those positions now. But having a -- having a strong stable senior investment team, I think, is critical for long-term success.

COMMITTEE MEMBER JONES: Okay. Thank you.

CHAIRPERSON TAYLOR: Does that answer your question, Henry?

COMMITTEE MEMBER JONES: Yeah. Yeah.

MR. TOTH: If I -- just one other point on the total firm score, this has been -- this has been a consistent discussion that we've had with the Board over the years. Some of the other broader organizational issues relative to private sector asset management firms around ownership incentives are another reason that that score ends up where it is as CalPERS doesn't have the opportunity to provide equity ownership or I'll -- my asset management friends would chide me for this, but outsized performance compensation opportunities. And that's an important thing to keep in mind as well.

What you'll notice, as you look through the underlying individual programs, is that generally speaking the team score is very robust. And that's where we reflect the strong depth of -- and quality of talent within the investment organization.

COMMITTEE MEMBER JONES: Okay. Thank you.

MR. TOTH: Um-hmm.

CHAIRPERSON TAYLOR: Okay. Mr. Toth, go ahead.

MR. TOTH: Okay. Let's -- we are going to start with TLPM starting at kind of I'll say a high -- high level. So utilizing Wilshire's standard scoring framework, our qualitative assessment places it in the fourth decile, which is the same as last year's review. The role of TLPM has changed a fair bit over the last fiscal year. The changes are detailed in the letter, but suffice to say that they've really focused on TLPM as the implementation agent for the strategic allocation set by the Board.

Other items like dynamic allocation, manager engagement and analytics are not part of TLPM's purview, but have been -- assumed by other teams. And so with that decrease in scope to focus on implementation, which includes the transition of some of the research to a separate centralized team, RSG, which I mentioned earlier, we'll work with you as the Board and with staff to really determine best practices as it pertains to a formal review going forward. It might make sense to incorporate it into that firm score, in the same way that we incorporate the impact of RSG, rather than looking at TLPM as a discrete entity.

And I think this -- that alignment would further support the move to focusing the discussion around total fund.

Turning to global equity, our qualitative assessment places it in the third decile, which is a strong B. And while this is the same score as last year, it does reflect the same organizational score reduction as the other programs, as well as a slight reduction in the information gathering resources, which coincides with the elimination of many of the actively managed strategies across the portfolio.

So our view is that because the global equity portfolio is not spending as much time trying to get an informational edge, we lowered that to be closer to average in our scoring.

The change in the overall construction of the portfolio didn't change our scoring, as the portfolio was already -- portfolio construction was already highly rated, and we noted that in last year's review.

So, in summary, our view here hasn't changed, in that the global equity portfolio is a very efficient and cost-effective implementation to deliver the equity risk premium to the PERF over time. Staff went over performance, but I'll reiterate that relative performance has been positive and we look to -- for that to continue going forward.

Overall, that score reflects a strong and appropriately sized team that's in place and there's success in managing the evolving portfolio in a very challenging environment in 2020.

For global fixed income, our score there also placed GFI in the third decile, or the high D, which is again the same as last year. But the underlying components did shift a similar reduction in organizational score.

One of the risks I wanted to point out here was the size of the internal GFQI team. It has declined. And we think that is a risk factor as we think about ensuring the continuity of the demonstrated investment success of the portfolio. It has occurred in the context of some movement of global fixed Income staff to other internal groups, like the RSG team.

And while this is -- that's a very good news -- that's very good news for cooperation at the total fund level. It does detract somewhat from the dedicated global fixed income resources. So we're not ringing the alarm bells there, but we want staff to be cognizant of that.

Now, these factors are positively offset by our continued high scores for the team, the portfolio construction and implementation. You saw the results, which really across the Board, were -- were strong, if not very, very strong, particularly in the spread segment. And we look at -- we think the Global Fixed Income Program is managed effectively and in a very risk-conscious manner does leverage the deep experience and expertise of the senior management team across all of those sectors. And importantly, the investment approach is consistent with the key strategic objectives of providing income, stability, and a diversi -- diversifier to -- from equity risk at the total fund Level.

Moving on to opportunistic strategies. The opportunistic strategies is rated as a fourth decile, or a, I'll say, a regular B rating. As we heard earlier, OS was established to invest in strategies that don't fit neatly into one specific asset class or type, but could possess characteristics that present relative value opportunities to enhance total fund performance.

It is worth noting a couple of changes to the OS team worth highlighting. The execution services and strategy business line was moved from OS to the TLPM team, which reduced the OS team headcount from 23 to 8. But that expertise remains very present for the fund as a whole.

In addition, we heard from the new MID for OS, and she has extensive experience investing both enhanced beta and opportunistic investments.

In terms of things to watch, and I think this dovetails with a lot of the discussion that we've had, with departure of the CIO, it's going to be critical to examine, understand, and monitor how the program is built out over time. We want to make sure that the OS team's efforts continue to be supported by broader INVO resources, particularly leveraging those insights from private equity and the global fixed income team.

And I think that dovetails well with some earlier questions from both Mr. Jones and Ms. Middleton. And I think you can see in the answer to those questions that staff is cognizant of that risk and planning for the future.

A couple last points on opportunistic strategies. The oversight and governance of the OS program has continued to improve, as we've codified staff authority limits, as well as broad allocation ranges to the underlying strategies. And Wilshire continues to participate in an oversight capacity to look at policy compliance, as well as benchmark alignment on a regular basis.

So in closing for OS, we think the team is led by very talented staff. They are very focused on enhancing total fund performance, by looking at asset classes which don't fit neatly in any one particular bucket.

CHAIRPERSON TAYLOR: Mr. Toth, I do have a question from Mr. Jones.

MR. TOTH: Yes, please.

COMMITTEE MEMBER JONES: Yeah. I think he answered my question. I was looking at the opportunistic strategies and looking at the area of resources, and I had raised that question earlier. And you kind of indicated that they still have access to resources, as opposed to just the staff in that unit. And so -- but as they begin to build out that particular strategy, and Mr. Bienvenue said that he would come back and let the Board know if they heeded more resources. So that's -- that was going to be my question, but you answered it.

Thank you.

MR. TOTH: Absolutely.

So lastly, we turn to real assets before I turn it over to -- to Meketa. So Wilshire acts in a general oversight role for real assets to understand the impact of the program on total fund results. We provide oversight specifically related to forestland. But as you know, that's a portion of the portfolio that has decreased in size and impact. And we don't feel it warrants a separate evaluation.

Our work in real assets involves regular discussions with the MID to try to understand the high level investment initiatives and portfolio construction, and performance attribution, and how risk is being managed in the portfolio. And this is -- this is meant to complement the oversight that's provided by the dedicated real estate and infrastructure board consultants who you'll hear from shortly.

The team, as you heard, is focused on positioning the portfolio for the current challenging environment, while being cognizant to realize value where possible, which fulfills, in our view, the strategic role of the Real Assets Program to provide stable cash flows, long-term inflation protection, and act as a diversifier for equity risk.

With that, I know I went through a lot, and hopefully you found the opinion letter informative. I'd be happy to answer any more questions, or I can turn it over to the folks from Meketa.

CHIEF EXECUTIVE OFFICER FROST: Chair Taylor, if I could ask a question to Mr. Toth?

CHAIRPERSON TAYLOR: Yeah, I just saw you there. Go ahead.

MR. TOTH: All right. Thank you. Mr. Toth, thank you for walking the Board and the rest of management through this framework. I think the way that this has been portrayed in the past when we've gotten these grades from Wilshire is that it's somehow a reflection of the investment performance of the Investment Office. So I do really very much appreciate the context and really trying to understand the frame by which you're doing the assessment.

So one of the questions I have, because I know part of that framework is compensation. You know, you did mention the lack of equity exposure of equity access to employees in the system does have an impact on grade. So what -- what is the highest grade that one of the, you know, the teams could actually get? You know, so if fixed income did extremely well, you know, beat benchmarks, private equity -- or public equity did very well, exceeded benchmarks, low transaction costs, what's the highest grade they could get, based on this framework about what's applicable to CalPERS and what is not?

MR. TOTH: Ms. Frost, that's -- that is a -- that's a great question. I would say it will be -- it would be challenging -- so the best grade possible is that first decile ranking. A very, very good grade is a second or a third decile ranking. The -- not to get too much into the weeds on the scoring framework, but it's meant to be a bell curve distribution with clustering around fourth, fifth, sixth, and make -- it gets incrementally harder and harder to move up the scale. So that's some broad context.

With the some of the broader organization's compensation challenges, seeing the total firm score I think there's room for improvement there, but I wouldn't expect that to get to that first decile ranking relative to private sector asset management firms. But certainly from a -- from a team perspective, I'm going to flip to the back to make sure I don't misstate anything.

The -- across the Board for the rating, they've got third and fourth decile ratings, which are quite good. I could see a second decile rating there, as, let's say -- I'll use as an example opportunistic strategies as the -- the dedicated resources there and the expertise that are brought in-house expand that could increase that score over time.

We'd try to -- we try to take a thoughtful approach to adjusting these scores in the sense that we don't want to move from, let's say, fifth decile to second decile and then back down if -- you know, year, by year, by year. We want to see consistency. So we try to step up things slowly to the extent that it's warranted. And if there are large changes, then we are going to have to move things down. Ideally, the stability for the team kind of mitigates that.

So a bit of a long-winded answer to your question, Ms. Frost, about what the -- what's kind of the highest rating that, let's say, one in -- one program could get to. I think if I had to ballpark it, second decile overall is probably the figure to focus on.

You can see global equity and global fixed income are third decile programs currently, so you might see some marginal improvement there to push them into that second decile ranking.

CHIEF EXECUTIVE OFFICER FROST: All right. Thank you.

CHAIRPERSON TAYLOR: Thank you, Ms. Frost.

In addition, I now have Ms. Olivares.

COMMITTEE MEMBER OLIVARES: Thank you, Ms. Taylor. Mr. Toth, I'm going through the grading scale and I'm trying to make sure I understand how the deciles correspond with the letter grades. So it looks like A corresponds with the first and second decile, correct?

MR. TOTH: Correct.

COMMITTEE MEMBER OLIVARES: And then B corresponds with the deciles 3 and 4.

MR. TOTH: Correct.

COMMITTEE MEMBER OLIVARES: And C corresponds with the fifth decile. What is -- is the sixth decile also a C grade or is that a D?

MR. TOTH: Fifth and sixth would both come in as Cs.

COMMITTEE MEMBER OLIVARES: And seventh decile is a D. Where is -- is there an F?

MR. TOTH: Seventh and eighth would be Ds, and ninth and tenth would be Fs.

COMMITTEE MEMBER OLIVARES: Got it. Okay. Thank you. That's helpful.

MR. TOTH: Um-hmm.

COMMITTEE MEMBER OLIVARES: And then I had another question. On opportunistic strategies, you mentioned some of the personnel changes we've had. And I'm grateful for the leadership we do have. We're relying on these strategies to bring us significant alpha so that we can meet the seven percent return target. Do you feel that we have the ideal expertise and track record in-house now to carry this out or do you feel like additional resources are necessary?

MR. TOTH: Ms. Olivares, I would say for the strategy as currently constructed, you have the right resources in place. But given the plan to build out that portfolio --

COMMITTEE MEMBER OLIVARES: Um-hmm.

MR. TOTH: -- that is going to require additional expertise in resources brought in-house to do it in a -- in a -- in a top notch manner.

COMMITTEE MEMBER OLIVARES: Thank you.

MR. TOTH: Um-hmm.

CHAIRPERSON TAYLOR: Okay. I think we can move on. I don't see any additional questions.

I do have a caller on this. So, Mr. Fox, if you want to bring Mr. Woodson in.

Mr. Fox?

STAKEHOLDER RELATIONS CHIEF FOX: Okay. Madam Chair, we're going to bring in Larry Woodson from California State Retirees.

CHAIRPERSON TAYLOR: Thank you. Mr. Woodson, go ahead.

MR. WOODSON: Okay. Thank you. Larry Woodson, California State Retirees. I hadn't intended to comment. And I actually tried to get in the queue when you were actually discussing it, so I'm going back to Mr. Toth's prior discussion on private equity. And I wanted to thank you Chairman Taylor and Board Member Middleton's comments regarding the -- being cautious about partnering with PE firms who have these kind of practices that we heard affected these four folks from Waterbury Hospital, which was a very poignant testimony.

I wanted to give you -- we've been a aware of this problem for a while now. And I think I mentioned it in stakeholders, but I wanted to give you a little -- a bit of the larger picture. PE firms are now controlling hospitals, ERs, nursing homes, doctors' practices, particularly rural hospitals. And over the past decade -- and these are some of the names and you're all familiar with them, Blackstone, Apollo Global, Carlyle, KK&R, Warburg Pincus, they've deployed more than $40 -- $340 billion to buy health care related operations around the world. And in 2019, they reached a record $79 billion of acquisitions.

And so they -- and just one other stat, is TeamHealth is a subsidiary of Blackstone, and Envision Healthcare owned by KK&R, the two of them provide staffing for about a third of the country's emergency rooms. And by the way, they -- they are one of the major causes of surprise medical bills around the country.

And so I just -- I just ask that the Board, of course, be aware of this, but perhaps direct staff to take a broader look at this issue, and the Investment staff coordinate with Dr. Moulds' health team and really take a look at where we may be inadvertently impacting, not only employees of these health care providers, but own members and not getting the kind of health care they should be, or being overcharged.

So I thank you for your consideration.

CHAIRPERSON TAYLOR: Thank you, Mr. Woodson. Yes, it's something that I'm concerned about as well.

It looks like that's it. So let's move on to, I guess, Meketa at this point, correct?

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Correct, Madam Chair. We have Steve Hartt and Christy Fields who will take us through private equity and real assets.

CHAIRPERSON TAYLOR: All right. Thank you. I don't know who wants to go first.

MR. HARTT: I'm happy to. Steve Hartt from Meketa. Can you hear me and see me?

Very good.

So I didn't want to take too long to go through, you know, the report or have formal comments. I'll have a few here, but I wanted to be sure that we had enough time here, getting late in the day, to go through questions from the Board. I think that, as highlighted by Mr. Ruiz earlier today, a couple of aspects about the Private Equity Program that I wanted to touch on.

So, number one, the key issue that I've observed in terms of the Private Equity Program, and we observed it when we first came on board a few years ago, is that CalPERS remained under-allocated to the private equity class. And just getting that exposure has been something that's been a development over time and is in process, but does take a number of years to build up that program and that exposure.

Second aspect, there's been a few questions on this today and we can go for further questions kind of going forward. But the performance of the portfolio and how it has executed in terms of, I guess, benchmarks and overall performance has been a number of issues. And some of that is related to the way the exposure in this current program and portfolio has been developed over time.

For instance, a lot of commitments in the early and mid 2000s when it turns out that the returns that were middling to poor and relatively little exposure to the vintage years that were later on starting, so 2009 and going forward to just very recently.

And so building that program over time that has quote/unquote too much exposure or over-allocated to the, you know, poorer performing vintage years and really less allocation to those that are turned out to be better performing, the issue is not so much whether or not one can know what their future performance is, but the fact that the exposure has been inconsistent has been -- had a direct impact on the how performance is.

The other comment I'd want to make is that if

Board would note that we have included peer benchmark information in our reports historically. So again, that is in there as well for the Board's consideration. So we do think it's important to consider both what we call the proxy benchmark, the alternative to -- to investing in private equity is public equity, as well as the peer benchmark to try to assess the program's performance against peers.

A third aspect that is certainly underway in strong efforts by the staff relatively recently is really focused on the fees and costs, and using the -- the list of opportunities that are available through co-investments to try to mitigate those costs and expenses. That had been a missing part of the program in -- until just recently. It had stops and starts over the years. You know, CalPERS had done that in the past, had made co-investments, but the strategy had not been executed consistently. It had been on and off. But that deployment of capital and execution in co-investments could have a pretty meaningful impact on the overall fees and costs.

Next point is in terms of the exposure and diversification, I had spoke briefly about one aspect of that, and that is the time exposure, vintage year exposures. As we've noted in private -- in prior reports, the portfolio is heavily tilted towards large and mega buyouts into those -- those structures. Some of that is coming just from the size of the program and the requirement of the large amount of capital to be deployed every year and the need to find those managers and strategies that can actually absorb that amount of capital.

That being said, being able to think creatively and work creatively to find additional exposures to help diversify the portfolio has been important. And some of that has happened recently with the addition of these credit trigger funds to invest in stressed and distressed investments, as well as some secondary managers, in other words, managers that look to buy portfolios of typically private equity funds that another investor, a limited partner, no longer wishes to hold. And sometimes that can be very opportunistic in getting some good -- some good values. And heretofore, CalPERS had really not explored or executed much in that strategy in a consistent way.

The next point I would make is -- and we can talk a little further on the ESG side of things that -- as Mr. Ruiz noted, it is an increasingly important factor within the industry. And CalPERS has made that part of their diligence in monitoring for many years now and remains an important focus. And I think, as Mr. Ruiz noted, I would agree with, it's been moving from a specialized area to being something that is thought about across the private equity asset class, the ESG and diversity initiatives.

One thing I wanted to mention, while the opportunistic strategies is a way to think about the one fund and try to execute on opportunities that don't fit neatly within the -- the asset classes within CalPERS, the credit trigger fund is also an example of a one-fund approach. And we're being able to use the expertise and relationships that the CalPERS staff has in the private equity area to source and review opportunities that those, you know, private equity-oriented managers are executing in a somewhat different asset class area than straight private equity.

That's been a very thoughtful and well-timed approach as it turns out. But an application of this one-fund idea and where I'm looking to try to use -- to try to use the talents within the organization to execute what's best for the overall organization.

And then the last point I'd make is in terms of the staffing. The formal numbers within the Private Equity Group has been relatively stable. Mr. Ruiz has been in place for a year now. We do note that subsequent to the end of the fiscal year, Ms. Corr had moved over to the Real Assets. The staffing, I think, is adequate for what they are doing now. But as there is increased execution, in particular on the co-investment side of things, it's going to take additional members, perhaps with some different skills, to be able to build that and work effectively.

As Mr. Ruiz mentioned, he's working through a strategic plan and this will be, you know, an aspect of that is thinking through how elements of the strategic plan impact different parts and one of that is going to be on the staffing side.

So I wanted to just do a quick overview here of these topics. A number of things are discussed a little bit more in our program review and performance letter that's attached for your assessment. But wanted to open up for questions to the Board and otherwise.

CHAIRPERSON TAYLOR: Thank you. Seeing -- I -- Mr. Hartt, it looks like I don't have any questions. But I sort of wanted to go through a couple of things that you talked about, which was the diverse -- needed to be diversified to be a player in the market and that it's continuing our relationships. And you and I had talked about this the other day, and I kind of want you to opine on being consistent. I think Greg talked about it a little bit. But we had -- we -- like you said, we were invested the 2000s. We no longer -- we didn't have the cohort in the 2010s, where it would have given us a little more money. So we haven't been a consistent investor in returns. And if you could opine on why that's important and how -- that we're consistent and what that means for our returns and such, a little bit.

MR. HARTT: Sure. I'd say there's a couple of aspects to it. You know, one can look at industry data and see that the performance in different vintage years is obviously different, but that the performance in some vintage years is better than others, and that trying to time the market, especially in private equity, is nearly impossible, and knowing what the future performance is going to be, especially for these multi-year drawdown investment funds is -- is really impossible to do.

So we strongly encourage our clients to develop a plan and try to, certainly without forcing capital out if there's no good opportunities, but to really work very consistently within the marketplace to try to get that exposure in top quality managers.

I think that what the team has been doing relatively recently is being able to work with -- by being a consistent player in the marketplace, they can get, A, more co-investment opportunities. They have this relationship and trust with the GP partners. But they can also work with those managers to create separate managed accounts, that there's opportunity for fee savings. There can be opportunities to direct what asset classes and types of investments that can be part of CalPERS special managed -- separate managed account, be able to control some of those exposures.

So by being a consistent player in the marketplace, it helps make sure that you have that consistent exposure to the asset class and not without really knowing what the future is going to hold, but if you have that, you've got it.

And then all the reputational benefits that you get by being seen as a consistent and trusted partner in the marketplace to be able to get those co-investments, separately managed accounts, and things like that, that could bring a lot of benefits to CalPERS.

CHAIRPERSON TAYLOR: Thank you. So if we were to -- there's been some talk about putting in a pause on this strategy, even though the Board has pretty much adopted this strategy already, until certain things are finished. So basically what you're tell -- saying is that's probably not a good idea.

MR. HARTT: No. I would strongly encourage CalPERS to be a consistent participant in the marketplace. You can see with -- with hindsight of course, but you can see that the performance of the portfolio has suffered from not participating in the marketplace in the 2010s through 2015 time period. And that's going to take a long time to roll through the -- the portfolio. Because of that not participation, you're going to see that shortcoming -- the shortcoming of performance against peers is going to be reflected in their. And that's going to take a long time to rollout. So we really encourage clients to continue to be consistent participants in the asset class.

CHAIRPERSON TAYLOR: Okay. Great. So then also I had --

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Madam Chair, I'm sorry.

CHAIRPERSON TAYLOR: Go ahead.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Madam Chair, do you mind if I chime in on that really quickly.

CHAIRPERSON TAYLOR: Oh, no, of course.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And I agree with everything Mr. Hartt just said.

I just wanted to comment on the on the potential for taking a pause. When I look at sort of the history and the lack of consistency within the plan, I see kind of three large effects. And this as a -- you know, again as a -- as a public equity person and then thinking through the lens of the total fund. First of all, those pauses have caused us to be under-allocated to this asset class. So not only has it hurt our relative returns within the asset class, but, you know, Mr. Jones spokes about this, the fact that we're, you know, low -- our allocation to the vintage years. So we are over-allocated to underperforming vintage years and under-allocated to overperforming vintage years. And that too has just been an effective inconsistency. And this is a reason to Mr. Hartt's point to continue that consistency.

And then the third effect that I would say that you see is that we've been inconsistent in our commitment to co-invest. And that has caused us to not have been successful enough to average down our fee structures within -- within the private equity asset class.

All three of those have been detrimental. And all three of those are -- as a result of really just being inconsistent in our approach to this asset class, which again underscores what Mr. Hartt was saying.

And then I guess the last comment that I would make, and Arnie has made this point several times, if we're not invested in private equity, we have to be -- we have to put it someplace. And the answer is we'll put it in public equity. And our return expectation for public equity, as demonstrated in our CMAs in the previous discussion, even our benchmarks, is 150 basis points lower in public equity relative to private equity.

So every dollar that we don't invest in private equity is in public. And that implies a 150 basis point haircut over a long horizon. So I'm really glad you asked the question and I did want to comment to that.

So, I'm sorry, Madam Chair. Back to you.

CHAIRPERSON TAYLOR: No, absolutely. I appreciate that.

And, of course, if we get 150 basis point haircut, we pass that on to employers, so that's the last thing we need.

And in response, Mr. Hartt, you and I talked about this also, but in response to my concern, who's the labor person, with what we're hearing from Leonard Green and others private equity firms, and how our labor folks have been treated, you and I talked about this and something -- could you opine on that? You talked about maybe we could do a best practices guideline, that it would be -- if we've got relationships, if that's a possibility.

MR. HARTT: Sure. So I know that as I mentioned, ESG has been both an important area of analysis and thought within the CalPERS due diligence activities, as well as it being a increasingly adopted set of practices within the private equity industry itself. That going beyond the fact that the -- the industry overall has moved very strongly to one of value creation, rather than asset stripping and over-leverage.

There was more done in the eighties than what we're seeing today. So there's a lot of con -- a lot of threads that are coming together to make that more and more effective.

That being said, we'd be would happy to work with staff and to think -- within private equity, you know, I know that Ms. Fields and Ms. Bacon could mention about -- on the real assets side, about the responsible contractor policy and things that have been done within CalPERS on some of these areas to maybe think about ways there could be some best practices to be thought within the CalPERS organization, and how to potentially work with some other large participants in the industry.

Mr. Ruiz touched on that briefly in his comments as well. And to think about what would be a -- an approach to some best practices and some evolution that could take place over time in this area.

CHAIRPERSON TAYLOR: Great. I would love that, Dan, if we could figure out a way to get together with our -- with Meketa and put something together for that, so that we can -- even if we're not -- if it's not co-investments, and then it's -- and we're just an LP, is there a way we can do that? I don't know, but -- and we can talk about that offline.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Noted. Thank you, Madam Chair.

CHAIRPERSON TAYLOR: Okay. I do have questions. See what happens when I ask too many questions. I'm sorry eye.

Lisa Middleton, go ahead.

COMMITTEE MEMBER MIDDLETON: All right. Thank you, Madam Chair. Mr. Hartt, thank you.

If there's one word I've heard over, and over, and over today, it's the word consistency. And clearly, any honest review of our practices when it comes to private equity and private debt over the last two decades, consistent is not the description that would be given to our activities.

So what specifically do you recommend we do and not do on a going-forward basis to achieve the kind of consistency that we need in order to reach the benchmarks ultimately that are being achieved by other peer organizations?

MR. HARTT: Thank you for the question, Ms. Middleton. So I would say there's a coupe of elements to that to achieving the consistency. One is that until relatively recently, the way that the private equity or -- group was given its allocation for how much new commitments you could make each year appeared, you know, relatively untransparent and was not really, in my mind, one that I really full understood as to how the target was set for the amount of capital to be targeted to be deployed in any particular year.

Some best practices in that area would be to have a pacing plan and to be able to think through with some assumptions of where the portfolio is today, some assumptions of where you would like to try to achieve in the longer time period, and some estimates about how the overall portfolio will perform. And so using that is a pretty basic tool to set the framework around how much the staff should be considering to think about as an annual budget in order to ultimately reach a percentage allocation goal.

I think a second one in terms of the consistency has to do with the strategy and that was -- that's approached. CalPERS has had a number of strategies over the years that -- with the overall aim of trying to achieve a strong result for the program, but at the end of the day, seem to be less effective. So when there was a -- an approach to try to really restrict the number of managers that the Private Equity Program would be able to allocate to with the idea of trying to achieve some fee savings, I know that the intention was good, but at the end of the day, end up exacerbating some of the diversification within the -- the portfolio. It end up being that if one of those managers was not in the market to raise capital, it made it very difficult for staff to find a different manager. Things of that nature.

So I'd say to be thoughtful about the strategy that's being used in order to be able to identify and become strong partners with the best managers that you -- that you have there.

I'd say additionally one that is taking place now, and that is to be thoughtful about looking to allocate the right amount of capital to the strongest managers. So heretofore, there had seemed to be, you know, relatively tight ranges that the staff would use to think about as their quote/unquote checks size for deployment to particular managers.

And I think now there is increased emphasis on trying to identify those managers that are the highest conviction and to try to deploy more capital with them, and to think about doing more separate managed accounts for additional fee savings, and focus on them for co-investments. So I think that an additional focus on those managers that you can have the highest conviction with is also helpful.

So I think all of these are going to be developed and thought about within the strategic planning process that it's undergoing now, but I can see some aspects of these are being deployed today.

COMMITTEE MEMBER MIDDLETON: Thank you. That was very helpful. You spoke of the need to focus on those managers that are having the highest returns. How do we do that, while also preserving the diversification of our portfolio, which seems to be a critical part of success for an entity the size of CalPERS?

MR. HARTT: Yeah, absolutely true. And it's a key tension within the portfolio construction that staff puts together. So being able to access the allocation with these strong managers takes time, and attention, and effort to make that happen.

So I think that the additional efforts on developing the partnerships and knowing that to the manager that CalPERS would be a consistent partner for them is important to get that access.

Right now, a lot of the analysis that's done to try to assess whether it's a high conviction manager has to do with looking at the prior track record and seeing how that has performed, as well as the skills and capabilities of the team, but those tend to evolve over time as different strategies develop. But also these private equity firms are organic beasts, and that certain partners that are strong some years as they develop, they may move to more senior and operating level positions as opposed to deal people and so that needs to be managed.

I'd say that at the end of the day one really needs to think through, from a bottom-up perspective, what is the quality of the managers from the performance, and the team, and the strategy perspective, and then apply some of those top-down views to see are we getting enough exposure in Europe? Are we getting enough exposure in growth equities? Are we getting enough exposure -- can we get anything in early stage venture capital?

To try to build those sets of exposures within the portfolio, some of them are a little bit easier to do at scale that CalPERS has, because for some of these things, having scale is really helpful. And for other strategies, other exposures, having scale is really, really difficult, because -- in order to get a meaningful exposure, it's hard to actually deploy the capital in that way, but -- and get that into the portfolio.

That being said, all these are being thought through and considered as the staff is putting together the portfolio. But at the end of the day, if you don't have the access to the top managers through the development of relationships, you're not going to be able to have that choice about, you know, how that portfolio gets constructed.

COMMITTEE MEMBER MIDDLETON: Thank you, sir.

CHAIRPERSON TAYLOR: Thank you, Ms. Middleton.

Mr. Jones.

COMMITTEE MEMBER JONES: Mr. Hartt answered my question in response to Ms. Middleton and I don't know how to delete my question on the chat box.

(Laughter.)

CHAIRPERSON TAYLOR: Oh, that's okay. That's okay. I'm going to move on to Mr. Miller.

VICE CHAIRPERSON MILLER: I was going to say just about the same thing. My questions have been answered. Ms. Middleton's questions were certainly more succinct than I would have been able to manage, but I have no further questions.

CHAIRPERSON TAYLOR: Okay. Great. It looks like we -- excuse me. For Item 8. Oh, we're not there yet. Never mind.

So let's move on to the real assets then.

MS. FIELDS: Great. This is Christy Fields, Madam Chair, members of the Investment Committee and the Board.

I will make some brief comments about real assets. It's always a little bit hard to be the rear guard here on long days like this. But I will try and provide just a few kind of high level comments on the real assets program.

I would like to start with a comment that applies to the total fund as much as it does to the real assets program, and that is about the turnover in fairly senior positions. And while the organization is lucky to have some very deeply experienced and long-tenured professionals who have stepped in to some of these other positions, I think it's work recognizing that these are very different jobs in some ways, very big jobs, and that some patience and support is -- you know, is merited here.

Sarah Corr is in the transition to the MID job for real assets. She's getting up to speed very quickly. That said, it's a very large portfolio and it will certainly take some additional time for her to develop a truly granular understanding of all the holdings.

Her transition though has been facilitated thankfully by a very stable and experienced staff beneath her. And so that's been great in easing the transition, as has the strength of the processes that have been put in place over the last five to six years under Paul Mouchakkaa.

David, Lisa and I are consistently impressed with the data collection, the data analysis, and then the investment insights that are developed by the team on a regular basis and shared through kind of the real asset Investment Committee meetings.

COVID certainly has had an impact on the real estate portfolio. And there are certain points of pain for sure in the retail segment, in the transportation segment, to some degree. But in general, everything is -- the portfolio is generally in control. The staff has a good handle on the exposures and the concentrations, very good con -- communication between staff and your long-term strategic partners.

And indeed, the business model that was put in place in 2011 and then ratified again in 2016 is really proving its mettle. Just to refresh everyone, these are kind of a relatively small handful of large separate accounts with generally relatively low leverage and a high alignment of interests. They're fee efficient, they're scalable, and they really allowed staff to have a very close control of this portfolio.

So that's important, not only in times like this, where there is some stress, but also going forward when there may be significant opportunity to place additional capital.

On the performance front, I would just

highlight -- and this was highlighted earlier, but I think the performance of the core portfolio and then even within that, the performance of the income return continues to be very strong in the real assets portfolio. And that is delivering on the primary objectives for the portfolio, which are the delivery of long-term income, and -- with which you can pay your benefits, diversification from listed securities, and then a hedge against inflation.

If we look at the income return over the last ten years, all time periods really, exceeded four percent annually. And if you look at the ten-year T-note now, it's 66 basis points. You can see the value proposition that this portfolio brings.

The last point I'll make is that valuations are still quite murky in all real assets, just given the low levels of transaction activity. We expect some changes to value. We don't have a lot of visibility a round that. Some of it will depend on behavior changes and how we interact with the built environment longer term, based on our experience with the pandemics. Some of it will depend on how -- how much future growth rates of rent will be impacted by the pandemic, and the return to using space in somewhat more normal fashions.

On the other side of that, we have very low interest rates. And that goes a long way, along with the weight of capital in the market to supporting -- to supporting more robust valuations.

So those are all things that we're continuing to monitor, both for your portfolio and for the larger market.

So with that, we believe that your real estate holdings are in good shape, and that they will continue to provide relative value for you over the long term.

With that, I will pause and take questions, if there are any.

CHAIRPERSON TAYLOR: Thanks, Christy. Thanks, Christy -- wow. I have a bit of an echo here.

Henry.

COMMITTEE MEMBER JONES: Calling on me?

Okay. I'm hearing feedback or something.

Am I coming through okay?

MS. FIELDS: Yeah.

COMMITTEE MEMBER JONES: Oh. Okay. I don't know what it is. It's something. Anyway, my question goes to -- as far as the -- and you talk about some weaknesses, some opportunities, and some threats to the real estate portfolio. And on the threats, you have, you know, COVID-19 and some of the others, but you don't make reference to climate change. Why?

MS. FIELDS: It's a good point. We are trying --

certainly, it's -- climate will impact the real estate portfolio. And as was mentioned earlier, real assets, this was the first year that they were able to do their carbon footprint. And there are ongoing efforts to try and create some baseline metrics that we can use over time to make more -- to get more insights about how impacted your portfolio might be, and what that might mean for portfolio construction decisions and ongoing portfolio management.

You all are early movers with a lot of the tools that are available currently. That said, a lot of these tools are evolving and I think will continue to bring more value from a decision-making perspective over time. But you're right, that was probably an oversight for us not to mention it at all.

Thank you.

COMMITTEE MEMBER JONES: Okay.

CHAIRPERSON TAYLOR: Okay. That seems to be it, if we want to move on to -- what was it -- what's our next -- infrastructure.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Madam Chair, I think -- I think Ms. Fields was speaking to all of Meketa's thoughts on real assets overall.

CHAIRPERSON TAYLOR: Okay.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: She can correct if I'm mistaken.

MS. FIELDS: That's correct. Thank you. Sorry, I wasn't clear about that.

CHAIRPERSON TAYLOR: Sorry about that.

It looks likes then we are done with 6b. So we should move on to 6c, the review of survey results of Board investment consultants.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Thank you, Madam Chair.

Jared, if we could please move Kristin LaMantia forward from the attendee room to the panelist room. And then once that's done, we can move Christy Fields and Steve Hartt back to the attendee room.

(Thereupon an overhead presentation was presented as follows.)

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: And I'll leave it to Ms. LaMantia to walk us through.

CONFERENCE MODERATOR: Okay. Kristin should be on and able to share her audio and video. And I'll move everybody else out.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Perfect. There she is. Thanks Jared. Kristin, over to you.

ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT

DIVISION CHIEF LaMANTIA: Okay. Thank you. Good afternoon, Madam Chair and Committee members. Kristin LaMantia, CalPERS team member.

I'm here today to go over the annual evaluation survey results of your Board investment consultants.

As shown in the agenda, The Enterprise Strategy and Performance Division, or ESPD, acts as a neutral third-party administrator of the Board investment consultant surveys. This year, the surveys were for the following consultant groups and asset classes: Wilshire Associates, for general pension; Meketa Investment Group for real estate; and Meketa Investment Group, private equity.

The questions asked this year are the same as in previous years. And this year, six out of the nine committee members responded to the survey questions.

In your materials, the survey results for both 2019 and 2020 are displayed for comparison, for both Wilshire associates, general pension investment, and Meketa Investment Group, private equity. And since this is the first year that Meketa is being graded for real estate, we only displayed results for 2020.

I would like to take a moment to highlight a survey calculation example. May I ask you to turn to slide 6 of the PowerPoint deck --

--o0o--

ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT DIVISION CHIEF LaMANTIA: -- which is Wilshire Associates question number one. As a reminder, this year, six out of nine Committee members responded to this survey. And in 2019, we had nine out of 13 Committee members respond.

I'd like to provide the Committee member equivalent to the percentages you see listed here. So for questions number one, "accurately analyzes issues and provides timely and objective information". The blue bar chart represents 2019. We had 56 percent, or five Committee members, rate very satisfied, 33 percent or three Committee members rated satisfied, and 11 percent, or one Committee member, rated neutral.

The gray bar chart represents 2020. We had 33 percent, or two Committee members, rate very satisfied; 67 percent, or four Committee members, rate satisfied; and zero Committee members rating neutral.

When considering this specific question this year, 90 percent of Committee members who took the survey rated very satisfied or satisfied. Last year, the percentage was 89.

CHAIRPERSON TAYLOR: Can we overview this rather than go through each question?

ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT

DIVISION CHIEF LaMANTIA: Oh, yeah. That was the only one I was going over.

CHAIRPERSON TAYLOR: Okay. Great.

ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT DIVISION CHIEF LaMANTIA: Yeah.

The comprehensive results for all consultant group surveys are included in your materials, in the form of charts representing the various answers selected by participating Committee members.

And with that, I will pause and ask if there's any questions?

CHAIRPERSON TAYLOR: I do have a question from David Miller.

VICE CHAIRPERSON MILLER: There we go.

Yeah, I think it's probably time that we take a look at this survey a little more carefully from a design perspective and see if we think all these questions really, you know, serve our needs.

The other thing that strikes me is, at least for the surveying the Board, it might make more sense to just, in terms of deployment of the survey, rather than send it out and have less than half of us bother to reply, which leaves me wondering, did they just love everyone so much that they couldn't bring themselves to finish the survey and were, you know -- or what, but to maybe do it in person with each of us, and just, you know, walk through it, and have us even do it in a conversational. Go through each of the questions, annotate our, you know, results, and even provide an opportunity for more open-ended feedback versus this 6 out of 13, which leaves me unable to interpret what the Board really thinks at all.

And that's it.

ENTERPRISE STRATEGY & PERFORMANCE ASSISTANT DIVISION CHIEF LaMANTIA: Thank you.

CHAIRPERSON TAYLOR: Thank you, David. And I will agree, I think these questions sort of don't apply to our relationship with the Board. And I know it's the same questions we've been asking for some years. So I'm wondering if maybe we should put together, and that's a Henry question, some sort of working group to take a look at the questions and then take a look at how we can make sure we get fuller responses, you know, more than just six or more than just however many -- whatever that percentage is of the Board Investment Committee members.

So -- and I did kind of opine on this I think a little bit before with -- with our consultants as well, because I think -- so for example, let me give you an example.

Where did it go?

I'm losing it here.

Recommends ways to control or reduce fees and costs. I'm not sure that that -- that they'd do that with us. Helps define appropriate risk parameters and identify mitigation strategies. I'm just not sure that these are report -- I mean, with their fuller reports, we can ask these questions, of course, but I think it's important that we have better questions on what their actual scope of work is, that maybe -- and I believe that's in their contract. So maybe we can align those questions better with that.

So I agree with David that maybe we should look at that. And, Henry, that's up to you, if you want to put together a working group on that.

CHIEF EXECUTIVE OFFICER FROST: Chair Taylor, these questions have been patterned after the scope of work of the contract that -- you know, that sets expectations for all these independent consultants to go to the Board.

So it doesn't mean that we can't modify the questions, if, you know, these are not the questions that really demand the expectations or highlight the expectations that you have for your investment consultants. But we'd be happy to hear more about that.

The other thing we could look at is are we giving you enough lead time to complete this? This should be a fairly easy survey to go in and complete. You -- perhaps, you need a little more lead time to do that, but happy to talk about a number of avenues to make this more in line with what you expect.

COMMITTEE MEMBER JONES: Yeah. Ms. Taylor, yes, I will take this under advisement and see -- you know, working with staff and see what we could do. However, I was wondering about the six respondents out of nine, because this was intended to go to all 13 Board members, so I was not aware that it only went to the Investment Committee members, because these are consultants to the whole Board, as David indicated. So that's another piece we need to resolve that.

CHAIRPERSON TAYLOR: I agree, Henry.

COMMITTEE MEMBER JONES: Even though, they're not on the Committee, it's still a consultant to the Board, because they talk -- you know, they serve us all, and so --

CHAIRPERSON TAYLOR: That's true.

COMMITTEE MEMBER JONES: Yeah.

CHAIRPERSON TAYLOR: I agree. I agree.

COMMITTEE MEMBER JONES: Yeah.

CHAIRPERSON TAYLOR: Did you have an additional question, Henry?

COMMITTEE MEMBER JONES: No. No, I just wanted -- that was going to be my comment about the 6 versus 9 members of the Investment Committee. And also I heard, you know, the comment, so we could take a look at what modifications may be appropriate.

CHAIRPERSON TAYLOR: Okay. Thank you very much.

And then Ms. Paquin.

ACTING COMMITTEE MEMBER PAQUIN: Thank you, Madam Chair.

So we also support taking a look at the survey, just to see if there's still the best type of feedback that we can get. And I also like the idea of having open-ended questions. And then I think it would be helpful to ask the consultants to do a short overview of their work from the prior year to be sent out to the Board along with --

CHAIRPERSON TAYLOR: That's a good idea.

ACTING COMMITTEE MEMBER PAQUIN: And just kind of -- because sometimes they do work closely with staff and that doesn't always come through in the Investment Committee meetings.

Thank you.

CHAIRPERSON TAYLOR: Right, but these are -- I agree, Lynn, that -- and I even thought about that. I was thinking, well, are these questions that they answer to the staff, but then why are we taking the survey, right?

ACTING COMMITTEE MEMBER PAQUIN: I think it's just good for all of us all to have an understanding of what their interactions with staff and then we can kind of base what we -- the kind of feedback we get from them during the Board meetings on what they've been doing in the background, so...

CHAIRPERSON TAYLOR: Right. Right. Good idea. Okay.

I think that was it on the Board survey, if we want to move to 6d, and that's the long-term care.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. Thank you, Madam Char. Yes, Jared, if we could please bring Don Moulds, Eric Baggesen, and Christine Reese forward to the -- to the panelist group, and then Kristin we can move back -- Ms. LaMantia back to the attendee group would be great.

CONFERENCE MODERATOR: Okay. We have our three presenters ready to come on.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE:

Perfect. Thank you, Jared. And as you say, Ms. Taylor, this item is an update on the plan around the -- reviewing the asset allocation for the Long-Term Care Program. So with that, I'll turn it over to Don Moulds to introduce the item and we'll take it from there.

Don, over to you.

CHIEF HEALTH DIRECTOR MOULDS: Great. Good afternoon. Don Moulds, Chief Health Director and CalPERS team member. I should I guess let everybody know first that I haven't inadvertently logged on to the wrong Committee meeting.

As all of you know, several CalPERS team members have been working on a solution for our Long-Term Care Program. That extends -- that work extends across jurisdictions of three different Board committees, the Investment Committee, the Finance and Administration Committee, and the Pension and Health Benefits Committee.

Staff in all three of those branches -- sorry, staff in all three of those branches have been meeting weekly to coordinate their work. And because we're all having discussions in three different committees, today and tomorrow, we thought it would be helpful to do a little bit of front-end framing to clarify how those discussions fit together.

I should note that all of the agenda items this month are informational, save for an item on the action consent agenda at FAC, where we're seeking authority to move forward with a request for proposal. Most of the items were discussing at this Board meeting will come back to you in November, where we'll be recommending action.

Back in the spring, the team alerted you that CalPERS is facing the potential need to adjust actuarial assumptions in the model it uses to project future costs and to reduce the discount rate for the Long-Term Care Fund in light of recent returns of the fixed income investments, which are the Long-Term Care Fund's primarily holding.

As I discussed in April and June, without additional actions, such changes would, unfortunately, require significant premium increases.

I'll remind you of what I reminded you of then, which is that the Long-Term Care Fund and its discount rate are totally separate from the CalPERS pension fund. The Long-Term Care Program is a closed fund, which means that additional revenue needed to meet any new liabilities must be generated from within the Long-Term Care Program.

So let me go ahead and jump in and give you a snapshot of the discussions you're going to be hearing and how they fit together. In FAC, you're going to be getting a detailed account from the actuarial team of proposed updates to the model they use to determine future liabilities of the Long-Term Care Fund.

These include: changes to our assumptions about morbidity, which is the rate of disability among our long-term care population; mortality, which is the death rate among our population; lapse, which is the rate at which policyholders drop coverage and exit the program; and the discount rate, which is the rate at which we discount future liabilities, based on investment returns.

The projected updates to our assumptions about morbidity, mortality and lapse are not insignificant, but it's the discount rate that's the primary driver of the potential need to raise rates. When FAC meets on Tuesday afternoon, Scott and his team are going to tell you that based on the work conducted by his team and validated by outside actuaries, they believe we need to adjust the discount rate from its current five and a quarter percent down to about four percent. That's a significant drop, which, if not addressed, would create a shortfall in the Long-Term Care Program.

To repeat what I said earlier, you're not going to be asked to adopt the proposed changes to the discount rate this month. Much of the work we've been doing internally is focused on solutions that would allow the Board to adopt a more modest adjustment to the discount rate.

There are essentially three ways of addressing shortfalls in the Long-Term Care Program. The first is by raising premiums, the second is through changes to benefit design, and the third is by taking steps to improve our investment returns. To be clear, reducing the amount we need to raise premiums is what we're trying to avoid doing here.

I'll also add that we can't change the benefit design unilaterally. We're contractually obligated to provide the benefits our policyholders signed up for, unless they voluntarily switch to a different benefit structure.

Nonetheless, we can offer them alternative benefit packages with lower actuarial value as a way of giving them the option of avoiding otherwise needed premium increases.

The Health Branch team has been working with both our own actuaries and with outside consultants to explore possible new benefit design options and to model them. I'm going to being with you about our current thinking with respect to alternative benefit structures at PHBC on Tuesday.

As I said, the third way of addressing the shortfall in the Long-Term Care Program is by taking steps to improve our investment returns. This has been a major focus of the work the cross-branch team has engaged in over the summer. I'll say that we were initially pessimistic about the prospect of improving returns. The average age of an LTC Beneficiary is 75, which means that a number of -- the number of folks in the program are approaching the age at which they will start needing services.

For the program, the start of services also marks a time when eligible program enrollees stop paying premiums and start drawing down on their policies. Our initial concern was that the near-term generation of new liabilities would really limit our ability to consider longer term investment strategies.

There are a couple of considerations that have generated some optimism however. The first is that the modeling that takes into consideration the updated assumptions about morbidity, mortality, and lapse show us that even though there are significant near-term liabilities facing the Long-Term Care Fund, those liabilities don't hit their peak until 2039, close to 20 years from now. That timeline opens up the possibility of a some longer term investment options.

Second, the team spent much of the summer doing extensive research, working with two outside consultants and engaging national experts with experience in long-term care and other closed fund portfolio investing. The takeaway from that work is that we think that CalPERS can potentially improve their investment returns on their existing portfolio, with its existing liability schedule without assuming inappropriate risk. You're going to hear more about that from the Investment team in just a minute.

All of this brings us to where we are today, which is to the three discussions you're going to be hearing in three committees, INVO, PHBC and FAC. I'll apologize to you now, that the order in which you're going to be hearing these discussions isn't liner, but the committee schedule sort of dictated that.

Today, the Investment Committee -- in the Investment Committee you're going to be hearing from the INVO team about their plans to move forward with an RFP for specialized investment management help with the LTC fund. They're also going to be updating you on some of the key takeaways from the research we conducted over the summer and to update you on proposed changes to the management of the LTC fund going forward.

Tomorrow morning at PHBC, I'm going to walk you through some of the options we've looked at on the benefit design side and outline an approach to offerings for members who want to buy down any potential benefit increase by taking up alternative benefit designs.

Tomorrow afternoon, ACTO is going to walk the FAC Committee through all of the modeling work they've done to identify current Long-Term Care Program liabilities.

Two more things, before I turn it over to the

INVO team. First, a reminder that these three discussions I just went over will all be informational, in particular it's important to be clear that we aren't asking you to adopt a discount rate or to memorialize program liabilities. What you're getting today is a snapshot of where we are if we take no action. Our hope is that come November, we will be recommending actions, which will change the current discount rate and liability snapshot, and which will be a better scenario.

And second, I want to again recognize that this is an exceedingly difficult time to be having this discussion. We live in difficult an uncertain times and we deeply regret the extent to which this discussion adds to the anxieties facing our Long-Term Care Program beneficiaries. As I've said in the past, we are responding to multiple systemic issues facing the entire long-term care insurance sector. Our goal here is to mitigate the negative effects those challenges have on our policyholders.

And with that, I'm going to turn it over to the investment team.

INVESTMENT DIRECTOR REESE: All right. Thank you, Don. Can everyone hear me?

Perfect.

All right. Good afternoon, Madam Chair and members the Committee. Christine Reese, CalPERS team member.

As Don mentioned, I'm going to provide a brief review of some of the key research findings and plans to release a request for proposal, or RFP, for an investment manager to provide specialized services for the Long-Term Care Fund. The recommendation, as Don also mentioned, is part of the Finance and Administration Committee agenda.

So during the last few years, as we've heard, the long-term return expectations for fixed income securities has dropped to historically low levels, along with interest rates. The Long-Term Care Fund has a majority allocation to fixed income securities to keep volatility low. And this results in a long-term expected portfolio return of four percent down from more than five and a quarter in 2018, when we last did our asset allocation study.

The Health, Actuarial, and Investment offices have been conducting research with the outside consultants. These consultants have expertise in the long-term care industry.

And through this process, we've identified investment managers that have significant experience with insurance companies, specific expertise with asset liability management for insurance type funds, and quantitative investment models and strategies that are specifically geared for insurance type funds.

So, a letter bit of detail without getting into much. The models that these managers utilize focus on asset liability management and can incorporate such factors as the expected liabilities, potential premium increases, expected investment returns, and cash flow matching to produce portfolio outcomes for evaluation.

The assets classes that may be proposed by managers could include current asset classes, such as equities and fixed income, as well as less liquid asset classes, such as private equity and real estate, and possibly the use of leverage, some of themes you've heard previously with regard to the PERF.

In way of strategies, some of the strategies could include a buy-and-hold strategy for certain asset classes, dynamic asset allocations, and a risk-reducing glide path in future years to provide just a few examples.

As the sole sources of funding for the Long-Term Care Fund are policyholder premiums and investment returns, it is very important that we review all options and ideas that could be of benefit to the fund. Based on these research results, we're optimistic that releasing the RFP for the Investment Manager will result in custom designed portfolio solutions and strategies that may increase returns for the fund while maintaining an appropriate level of risk.

We anticipate that the results of the RFP and the recommendations for the strategic asset allocation and investment manager to be presented in November at the Investment Committee for review and approval, as well as at the Finance and Administration Committee for approval of the external manager fees.

So I'm keeping my remarks brief. This concludes my remarks and I'm happy to take any questions.

Thank you.

CHAIRPERSON TAYLOR: It doesn't appear I have any questions. Anybody, just before I go?

Ms. Brown, I don't see you, but okay.

BOARD MEMBER BROWN: Sorry. Yeah. Thank you. So, you know, up until this time, we've been -- our staff -- internal staff has been managing and doing the asset allocation for the Long-Term Care Fund, is that correct?

INVESTMENT DIRECTOR REESE: Yes, that is correct.

BOARD MEMBER BROWN: Okay. So it feels like we're kind of doing the opposite. It's like, you know, we're trying to get rid of managers and reduce the cost, so we can make more money, right, and not give it away to managers. And now, we're kind of doing the opposite with the Long-Term Care Fund. And it just -- it doesn't seem to make sense. I heard your explanation. Can you -- can you share with us what they think they're going to get?

I mean, because the problem is, you know, unless we get an agreement, like when we heard the gentleman who ran the Japan fund, and basically unless the manager produced beta, all they got was the regular fee. They didn't get a bonus or they didn't get their higher fee.

And so that's my concern, we're going to end up spending more money, because we're going to be sold a bill of goods and we're going to believe what they say, because we want to believe it and we want to make -- get higher returns for the long-term care. And we're going to end up paying more and getting no bang for our buck and that's my concern.

INVESTMENT DIRECTOR REESE: Yeah. A couple of things that I'd like to mention. The Long-Term Care Fund is currently externally managed. However, we do retain the asset allocation work in-house.

This particular fund is highly specialized. And, you know, we are -- we are in a position to where we really think that we would benefit from learning from the incremental expertise that these managers have, specifically in the investment -- in the -- I'm sorry in the insurance fund arena.

So there are a lot of unique characteristics about this particular fund that are different from a pension fund, which is the large majority of what we, you know, typically manage.

As well, this fund is a $5 billion fund. So if we were to look into say private equity or real estate, it would be difficult for us to manage those types of investments in-house. So it would be a more straightforward implementation. There will obviously be fees associated with that. But if we look at the -- you know, we're going to look at what all of the managers have to offer and really select what we believe is the best combination of return-risk as well as cost. So we're not looking to simply find the manager that provides the highest return regardless of cost.

BOARD MEMBER BROWN: Well, it's -- and again, it's not the highest return. It's the highest return they say they can get. That's not the same thing.

INVESTMENT DIRECTOR REESE: Agreed.

BOARD MEMBER BROWN: All right. Maybe Ms. Olivares has a comment.

CHAIRPERSON TAYLOR: So, Mr. Rubalcava.

COMMITTEE MEMBER RUBALCAVA: Thank you, Ms. Chair. I appreciate the comment -- the presentation, thank you. And I think the -- I'm glad you answered -- I was going to -- my question was related a little bit, but the answer is sort of the same. You mentioned in your presentation about the -- I guess, the specialized consultant -- investment consultant you want. You had mentioned as one of the possible strategies -- glide path. That automatically tells you that it's very different from a defined benefit program, which is open-ended, ong term. Glide path is when there is an endpoint.

And for example, you -- you know, like they do -- I think it was in one of these reports. You have these target date funds where the date you're going to retire or that you're going to expire or you your benefit.

Say I think -- so I think your answer -- actually, it was the question I was going to ask is what are the outside skills that we don't have inside, and one of them is the outlook you have, whether a long-term versus like a date target fund, where there's an end date. So I appreciate that.

And also, if we can -- I had a vote on lowering the discount rate. If we can vote on increasing the discount rate, expected return, that's a good thing, because it puts less pressure you are on premiums. So I think we -- we -- I have to commend staff for looking at a possible solutions, and this -- I'm looking forward to seeing what the RFP look like and looking forward to what the results are. And we all will have time to deliberate those results of the RFP and the scope of work. So I look forward to this.

I know it's only -- what do you call it -- information agenda, but looking forward to when it is an action item.

Thank you.

INVESTMENT DIRECTOR REESE: Thank you.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: Thank you, Mr. Rubalcava. That was my comment that I was going to make is you certainly are going to have -- we will go through the RFP process and we will come up with a recommendation, but certainly this will be an action item before this Committee in the future before we take any action.

CHAIRPERSON TAYLOR: Great. Thanks, Dan.

It looks like that's it for questions. Let me sake sure.

No. Hey, Stacie.

COMMITTEE MEMBER OLIVARES: Hi. I have a question. So I know that with long-term care, assisted living and in-home supportive services, they're seeing significant annual increases in cost. I'm wondering if we also look at that from the investment side. So are we looking at those investment opportunities, and if so, what influence do we potentially have there?

INVESTMENT DIRECTOR REESE: I'm not -- I'm not certain I follow your question. Can you restate it?

COMMITTEE MEMBER OLIVARES: So, yeah, so there are two sides. And this happen with insurance companies, right? So let's talk about from the insurance angle. There will be the Investment Office, right? And they make investments and many of them will invest in companies that provide in-home supportive services or invest in a Real Estate Investment Trust that provide assisted living, because those are a very profitable market.

I'm wondering if we coordinate with our Investment Office to take a look at those investment opportunities to better understand what those costs are going to be going forward, and what investments we can make, and then thirdly, how we can kind of influence those costs.

CHIEF HEALTH DIRECTOR MOULDS: So I'll -- I can start and just by saying that we periodically have conversations on the health side with our Investment Office over exactly these kinds of things. We have not had that conversation yet with respect to long-term care services, but would be -- I think it's a great idea. We'd be happy do it.

COMMITTEE MEMBER OLIVARES: Thank you.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: The only thing I would add to that, Ms. Olivares, your question around the investments. That's one of the reasons to go out with an RFP is to survey the marketplace and people with insurance expertise to see if there's -- if there are ways to align the liabilities with the assets more directly.

COMMITTEE MEMBER OLIVARES: Great. Thanks.

CHAIRPERSON TAYLOR: All right. Great. That's the end of our questions.

We do have two callers for the end of -- at public comment, but right now, Summary of Committee Direction.

INTERIM CHIEF INVESTMENT OFFICER BIENVENUE: All right. Thank you, Madam Chair. I had four items for Committee collection, and I'll ask if there are others. But the four that I have was number one a description of the rationale for the exemptions. And for what it's worth, I guess there's actually a link on the CalPERS intranet site, but we'll make sure that we get that link out, so that everybody can understand what those -- what those terms mean when we're -- when we reference exemptions from competitive bid.

The second one is for Ms. Anne Simpson to come back with a climate change update in November, so we'll make sure that we get that agendized for the -- for the November agenda.

The third was we had public comment from Mr. Girling and Mr. Darby. And we will reach out to them to try to get their questions answered.

And then the fourth thing that we had was to try to get consistency between the CAFR and the Investment Office reporting around -- around kind of the naming conventions for some of the managers and strategies.

And those are the -- those are the four directions that I had. I'll ask Arnie or Ms. Taylor if you had any -- anything that I was missing.

CHAIRPERSON TAYLOR: I don't think so. Arnie, did you have anything?

INTERIM DEPUTY CHIEF INVESTMENT OFFICER PHILLIPS:

No, not on this side either.

CHAIRPERSON TAYLOR: Okay. No, that all looks good.

So we still have closed session. I'm going to move into public comments.

Mr. Fox.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Madam Chair. Back on Item 6d, you have two callers specifically for that subject.

The first caller J.J. Jelincic.

MR. JELINCIC: Hello. The trust documents say that the Board is in charge of the administration of the system and the investment of trust funds. A key to investing is to define the level of risk to be undertaken. No fiduciary responsibility is more fundamental than determining the risk appetite of the fund.

You have just been told that your agents are going to contract out the job of defining your risk appetite. Your agents have just told you that they're going to contract out the identification of the asset allocation that reflects your risk appetite.

Your agents have just told you that they will contract out the investment management of the fund. They have also told you that they are far enough along with defining your risk appetite, the asset allocation reflecting that appetite, the manager to make those decisions, and to manage the fund will be reported to you by next month. You're rapidly earning the nickname board of standbyers.

Thank you.

CHAIRPERSON TAYLOR: Mr. Fox, the next one.

STAKEHOLDER RELATIONS CHIEF FOX: Yeah. Just a moment, Madam Chair. Tim Behrens is trying to get into the queue here. So I have Tim Behrens and then Larry Woodson.

MR. BEHRENS: Thank you, Madam Chair, members of the Committee. Tim Behrens, California State Retirees.

CSR is very concerned about the sustainability of the Long-Term Care Program. We do agree that efforts to increase investment returns are needed and that review of current asset allocation strategies and investment management is in order.

However, we do have concerns regarding hiring an outside manager at a cost of over $1 million annually to perform what hopefully CalPERS investment professionals could do themselves. If given the direction of reviewing and altering asset management strategies and making new investments, it seems staff could perform this at a savings of over $1 million annually.

In the benefit and risk analysis staff present, only the risk from not conducting an RFP search are listed. It seems there should also be a listing of risks associated with hiring an outside firm.

Thank you.

CHAIRPERSON TAYLOR: Thank you, Mr. Behrens.

Mr. Fox, the next person.

STAKEHOLDER RELATIONS CHIEF FOX: Yes. This is Larry Woodson

MR. WOODSON: Yes. This is Larry Woodson, California State Retirees. And thank you for the opportunity to comment. I will comment later on the discount rate reduction proposal, which will be discussed tomorrow. As Chair of the Health Benefits Committee, I, and our -- my committee members, have heard concerns from our members for a number of years now about -- that have the LTC program about the increased premiums and less benefits. And so I -- I do applaud Dr. Moulds and his team's efforts to address the -- the issues, and the -- ensure sustainability of the program.

And I also agree with Mr. Behrens that risks -- the risks identified in the write-up are only for not letting the RFP and there are risks associated with hiring the external managers, so -- and maybe I could mention a couple of those. I mean, the -- there is a -- it kind of runs counter to CalPERS with the PERF funds trying to reduce outside managers. I think they've reduced them by over a hundred.

And the other thing is I've just heard that, you know, and to their credit, CalPERS has already done a lot of consultation and has made some conclusions, drawn some conclusions about the opportunity for longer term investments. Of course, I think we're concerned about the short term too. Particularly, there was no mention of a lawsuit, and that could throw the whole thing into a tether.

But also accrue -- assuming a new asset allocation would decrease investment in low risk fixed income assets, which have 60 -- I mean, the fund has 67 percent in fixed income, you -- I'm assuming a lot of that would be changed into other instruments, which would be higher risk. And there's just a -- you know, the economy is on such shaky ground now, that it could result in major loss in the short term rather than gain.

And my last comment is an observation, which is puzzling to me. The long-term care invests 67 percent of its fixed income -- in fixed income investments the Long-Term Care Fund, and the latest total returns were four percent. And yet, for the PERF, fixed investments -- the fixed income was the highest return at 12 and a half percent and even last year, it was nine and a half percent, so I'm not sure why the disparity.

So, I guess in conclusion, we don't completely oppose, you know, letting out an RFP, but have a lot of concerns with it and hope the Board will scrutinize it and consider the risks associated with it and maybe save us over a million dollars a year by letting our own --

CHAIRPERSON TAYLOR: Thank you, Mr. Woodson.

MR. WOODSON: -- professional staff --

CHAIRPERSON TAYLOR Thank you, Mr. Woodson.

MR. WOODSON: Thank you.

CHAIRPERSON TAYLOR: Thank you.

Mr. Fox, can you go ahead and get the next person.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Madam Chair. That concludes the conversations regarding Item 6d.

The next ten callers will all be on public comment related to fossil fuels.

I'll be -- I'll start and ask each one of the callers to please introduce themselves.

CHAIRPERSON TAYLOR: In the -- in the effort of making sure that we are conserving our time, because we still have a whole closed session to go through, I would ask that our public commenters, if you're repeating somebody else's words, don't do that. Just make your -- if you can make separate comments, that's great, but if you think you can combine the comments together, that would also be great.

Appreciate it. Thank you.

STAKEHOLDER RELATIONS CHIEF FOX: Go ahead, Mr. Filling.

DR. FILLING: Good afternoon. My name is Steven Filling. I've been blessed to teach accounting as CSU Stanislaus for the last quarter of a century. In the pellucid phrases of Governor Newsom, we're in a climate dam emergency, an emergency driven by climate change, driven in turn by burning coal.

A report issued today by the Fossil Free California group calls into question CalPERS compliance with SB 185 rule sets. I'm requesting that the Board seek a review of 185 compliance efforts. Further more, I suggest that perhaps in line with the spirit of SB 185, you consider examining performance on this through the lens of the global coal exit lists rather than waiting for the Legislature to issue further direction.

On financial matters, it's far from clear that thermal coal company investments will retain value, let alone generate return. We know that returns on fossil fuel investments are lower than other sectors. And given the global push to reduce fossil fuel use, I don't see any reason for optimism.

A little while ago, Ms. Field referred to CalPERS as having a reputation as early movers. I encourage us to live up to that reputation and move early and quickly out of the coal industry.

Thank you for listening.

STAKEHOLDER RELATIONS CHIEF FOX: Next caller.

Go ahead, Ms. Kaufman.

MR. KAUFMAN: Oh. Hi. Thank you. I didn't know I was next.

So thank you so much for taking the time to listen to me. And I just wanted to say that according to the recent report called, "CalPERS Continues Investing in Coal", CalPERS owns five billion in the companies which are on global coal exit list, and 1.46 billion in the top 100 coal companies. CalPERS has not been an early adopter and an early leader in this. You're really lagging behind. Being in these companies is incredibly risky, because market forces and public policy will bring these companies down and we'll lose money for the fund, as their assets become stranded. We would like for you to completely divest from fossil fuels.

And we know that selling shares in itself is not significant, as other buyers will buy those shares, but doing so will send a dramatic message, which has been proven to lead to political tipping points. Please inform yourselves and read the article from January of this year in the proceedings of the National Academy of Sciences called "Social Tipping Dynamics", which explains how divesting from fossil fuels, from -- with a -- from an institution such as yours, which is quite large, will have dramatic impacts on shifting the way coal companies are allowed to operate and will have a huge impact.

You guys are in an incredibly powerful position to make a tremendous difference in stopping the problem of climate change, which is causing such a disaster for all us right now.

Thank you so much.

CHAIRPERSON TAYLOR: Next, please.

STAKEHOLDER RELATIONS CHIEF FOX: Next, we have Ms. Thorne.

MS. THORNE: My name is Sheila Thorne. I'm a CalPERS beneficiary and a retired member of CFA. And I'm very concerned by the dis -- decisions to add billion in coal and coal-related holdings in recent years, holdings that are on the Global Coal Exit List as revealed in the CalPERS report, "Continues to Invest in Coal Report".

I think these investments are both ethically and fiduciarily irresponsible. For example, Duke Energy, the largest of these holdings was convicted in 2015 of nine federal environmental crimes for allowing coal ash dump sites in North Carolina to leak toxic waist into water supplies.

Last year, Duke Energy admitted that it has continued to pollute drinking water with mercury, barium, lithium, radium 226 and radium 228. Higher rates of cancer, especially thyroid cancer, have occurred in the small North Carolina communities near Duke Energy plants.

In 2017, Duke Energy was the nations worst emitter at 104.6 million tons of CO2 emissions. In

Southwestern Indiana, where its Gibson Plant was declared a super polluter, 1,674 people went to emergency rooms with asthma attacks in one year. Coal kills.

Many communities around power plants are low income and of color. The cost of Duke Energy's forced toxic coal ash clean up is estimated to climb to ten billion in the coming years, and that does not include all the litigation costs.

Carbon Tracker found that 89 percent of Duke's coal fleet has a negative profitability rate and 96 percent could have negative profitability by 2030. There will be no long-term returns on coal.

Duke Energy makes empty promises to become net zero by to 2050, but a Sierra Club report reveals that they still plan to keep coal plants on line until as late as 2048 and operate roughly nine gigawatts of coal into 2030.

Meanwhile, apocalyptic firestorms, the result of warming, are raging around us. Frankly, I'm terrified. How can you continue investment just -- how can you justify continued investment in the coal chain?

Thank you.

CHAIRPERSON TAYLOR: Thank you.

Next, Mr. Fox.

STAKEHOLDER RELATIONS CHIEF FOX: We have next

Sarah Theiss.

MS. THEISS: Hi. My name is Sarah Theiss. I'm a member of Fossil Free California and a CalPERS retiree.

Ms. Frost's letter to me yesterday is apparently CalPERS response to our coal report, as well as to three letters to you about CalPERS coal holdings that we've sent over the past three months.

The letter describes CalPERS theory of change as to the climate catastrophe, which involved shareholder engagement, advocacy and integration. Obviously, Fossil Free California has a different theory of change. But Ms. Frost's letter does not at all address the content of the coal report we released today, which is focused on coal as an investment and the problems with CalPERS coal policies.

My comment focuses on the fact that CalPERS stayed invested in three companies under SB 185 that still make over 50 percent of their revenue from thermal coal. One of them, Exxaro, plans to expand its operations six-fold. Yet, CalPERS more than doubled its investments in Exxaro. Did the Board decide to make these additional investments in Exxaro in a closed session? If not, did staff make this decision without Board approval?

And given the failure to even begin to meaningfully transfer to cleaner energy over the past five years, shouldn't CalPERS just divest from these three companies following the language and tent of SB 185. Ms. Frost's letter states that the Board will review its SB 185 coal divestments next year. We believe that beneficiaries, the Legislature, and the public deserve answers before that.

This is especially so, given that many investors are fleeing coal and the value of this sector is declining precipitously compared to the rest of the S&P 500.

F -- Fossil Free California, their request, that consistent with SB 185, the Board instruct staff to stell -- to sell its thermal coal assets consistent with 185 -- SB 185. We also strongly urge the Board to do a full review of its -- all its coal industry investments using a process consistent with its fiduciary duty. We believe such a review will demonstrate the long- and short-term risks to the fund from thermal -- from the coal industry.

When there's a sell-off in shares, as is occurring now in much of the coal market, they tend to decline in value. Risky investments should become someone else's problem. Why force our retirees to continue to shoulder this burden. The time to begin a process of divesting from the total coal value change is now.

Thank you.

CHAIRPERSON TAYLOR: Thank you. Next.

STAKEHOLDER RELATIONS CHIEF FOX: We have Dr. Gould.

DR. GOULD: Hi. Can you hear me?

Hello? Can you hear me?

CHAIRPERSON TAYLOR: Yes.

STAKEHOLDER RELATIONS CHIEF FOX: Yes.

DR. GOULD: Okay. Hi. I'm Dr. Robert Gould. I'm a retired Kaiser pathologist and UCSF professor, and President of the San Francisco Bay Area Physicians for Social Responsibility.

Representing thousands of California health professionals, PSR calls on CalPERS to swiftly and completely divest from fossil fuels and instead invest in staff's financial holdings in renewable and sustainable non-nuclear energy portfolios that would better provide a future for CalPERS retirees by averting the catastrophic public and environmental health consequences of global warming that threaten all human civilization.

The Fourth National Climate Assessment warned us about the rapidly unfolding impacts of global warming that gravely threaten our health, including sea level rise and flooding, and contamination of water systems, extreme weather events and wildfires.

Today, these climate-fueled catastrophes are determining the health and future of every Californian.

Over 25 million people that live near the sea and coastal communities are already experiencing major flood events. Heat waves like those which just scorched our state are the number one killer among climate-related exposures due to heat stroke, dehydration, and complications of chronic illness. These included kidney, cardiovascular disease, and diabetes.

The wildfire air pollution we are currently enduring is indelibly undermining the health of millions of Californians in real-time. Recognizing such climate-caused health harms, the American Medical Association, American Nurses Association and American Public Health Association have issued strong policy statements urging climate action joined by resolutions from numerous health specialty societies, including the American Congress of Obstetrics and Gynecology, the American Academy of Pediatrics, the American College of Physicians, and many other members of the Medical Society Consortium on Climate and Health representing 600,000 U.S. clinical practitioners.

We health professionals recognize that divestment in fossil fuels is cost effective, health protective preventative medicine. Since 2018, it has been the AMA's official policy quote, "To protect human health from the effects of climate change by ending its investments in fossil fuel companies", unquote.

PSR urges CalPERS to speedily and completely divest from fossil fuels for the health and wealth of the people you serve.

Thank you.

STAKEHOLDER RELATIONS CHIEF FOX: Madam Chair, next we have Ms. Sutton.

MS. SUTTON: My name is -- hello. My name is Patrice Sutton. I'm a Californian, a public health professional, a collaborating research scientist at UC San Francisco, and a retiree. I'm also Chair of the Environmental Health Committee of S.F. Bay Physicians for Social Responsibility. And on behalf of PSR, I'm asking CalPERS to stop investing in coal.

Your continues investment in fossil fuel is physically irresponsible and threatens the health of California's workers, their families, their communities, and future generations.

One need only -- sorry. One need look only -- one need not look any further than out the window to see how the climate emergency is destroying our life-support system. In California, heat waves are the new normal and climate-fueled wildfires have poisoned our air.

The science shows what's at stake for just these two climate-related exposures. Heat and air pollution are critical contributors to adverse pregnancy outcomes, including preterm birth, low birth weight, stillbirth, infertility, and miscarriage.

Rising temperatures are also a direct threat to California's essential agricultural and other outdoor workers. The science demonstrates unequivocally that burning fossil fuels and its related climate impacts, harms the health of the people you serve. Moreover, CalPERS investments in coal is antithetical to a vision for a healthy and just California, as its health harms are disproportionately felt by our state's most vulnerable populations. As such, your relentless investment in coal exacerbates instead of alleviates racial, environmental, and economic justice.

Divestment is fiscally responsible. Had CalPERS divested from fossil fuels ten years ago, it would have generated almost 12 billion more in value for its retirees. Your investments in fossil fuel has increased the vulnerability of your members to help in economic harm rather than secure their retirement, and it's diminished rather than enhanced the fund.

As health professionals, we strongly urge you to end financial support for all coal projects, so retirees can reap the financial and health burdens of your actions -- benefits, sorry, of your actions.

Thank you.

STAKEHOLDER RELATIONS CHIEF FOX: Madam Chair, next we have Ms. Eide.

MS. EIDE: Hello. I'm a young Californian resident who spends every day fighting for my future because I'm terrified.

CalPERS Investment Board, the state is burning. It is climate change, but I know you know that. You admit as much. But nonetheless, you don't act as if your house is on fire. Your engagement with high carbon-emitting companies is risking our lives now. Your engagement plan ironically seeks to decarbonize companies that produce fossil fuel.

Does that really work? Would you really want to live in a collapsing building in an evacuation zone? That's what you're doing. Coal is a collapsing industry, while fossil fuels are, as a whole, a dangerous endeavor with increasing volatility and little future.

CalPERS Investment Board, I hope you, like me, has read an understood the IPCC 1.5 degrees Celsius report. It states that by 2030, we must be 80 percent done with coal completely, meaning not just investments but usage. By 2040, that number has to be a hundred percent, no coal usage, no coal investment, nothing.

We would need to remove our money from coal. But instead, you've increased your investment by $1.5 billion. Your money speaks for you. You see a future in coal, even when climate and finance experts predict that it's in terminal decline.

In addition, you insist that your engagement is sufficient. It's not. As Greta Thunberg accurately stated our house is on fire. That doesn't mean long-term panning. That means immediate action. It means putting your money where your mouth is now, not in 30 years.

CalPERS, I know you care more about your reputation than the climate. You panic when you hear about the report defending your reputation -- the report on coal. You defend your reputation at a moment, but you don't engage in a discussion.

Anne Simpson, you attend numerous sustainability panels and profess your leadership in climate finance, but the fundamental argument you make is wrong. We don't have 20 or 30 years to reach a new sustainable model of operation. We have 12 years at the most.

As a result, long discussions are not the solution. Investing in the technology in companies that offer solutions, not problems. That's the future. Invest in uses like me, the future, not the companies that pollute the water and air causing my generation to fear for our lungs, health, and lives.

Consider this, you're investing for our future or are you investing for the present? Are you panicking about Fossil Free California's "CalPERS Continues to Invest in Coal" report because you care about your asses or because you worry that we're right, and you've made an investment error.

For anyone listening, please check out an analysis of CalPERS stupid coal investment decisions at bit.ly/calperscoal.

Thank you.

CHAIRPERSON TAYLOR: Next.

STAKEHOLDER RELATIONS CHIEF FOX: Madam Chair, the next speaker Ms. Ihara.

MS. IHARA: Is it working?

STAKEHOLDER RELATIONS CHIEF FOX: Yes.

MS. IHARA: Fires are devastating large parts of California. The higher summer temperatures as a result of climate change are a major contributing factor to the severity and frequency of these fires. Scientists argue that the fossil fuel use is responsible to a large degree for climate change.

CalPERS must totally disinvest in the fossil fuel industry. It's shocking to hear that CalPERS has recently actually increased its investment in the coal industry. Board members, please act responsibly and insist to staff fossil fuel investments be eliminated within a very short period of time.

This is Nancy Ihara, CalPERS pension plan recipient.

CHAIRPERSON TAYLOR: Next.

STAKEHOLDER RELATIONS CHIEF FOX: Madam Chair, Mr. Kawar.

MR. KAWAR: Hi. My name is Ferris Kawar. I've been a PERS member for nearly ten years. And I'd like to know how CalPERS plans to make money on our investments in coal, when the IPCC scientists tell us that up to 78 percent of coal must be completely phased out in just the next nine or ten years.

The demand for coal is shrinking every day for the following reasons: Hundreds of financial institutions representing trillions in capital have already begun to limit their exposure to the coal sector; government policies restricting investments in fossil fuels are announced monthly, if not weekly; cleaner fuel sources are competing head-to-head with no need for subsidies; and finally, pressure from climate campaigners are not going away. The voices are getting loud and stronger as we get closer to the 2030 deadline.

I'm confused because this industry is in terminal decline, but you are investing as if you know something that the world's top scientists don't. Engagement is a great strategy --

CHAIRPERSON TAYLOR: I think we lost him.

CHIEF EXECUTIVE OFFICER FROST: Mr. Fox, can you check on the queue to make sure that the other speakers are still in and see what happened with this individual.

CONFERENCE MODERATOR: Marcie, I think the call-in studio call came off of the WebEx call. I don't see it listed here any more, so I'll wait to hear from Kelly.

CHIEF EXECUTIVE OFFICER FROST: Okay.

VICE CHAIRPERSON MILLER: They may have had a time limit on their WebEx that they're in or something. Who knows.

CHAIRPERSON TAYLOR: Do we have anybody else up to speak? Can we move on? There's a whole list.

CHIEF EXECUTIVE OFFICER FROST: I think -- I think we should wait for just a few moments. I'm checking with Kelly. He doesn't appear to be --

(Off record: 5:48 p.m.)

(Thereupon a recess was taken.)

(On record: 5:49 p.m.)

CHAIRPERSON TAYLOR: We'll take a 15 minute break and hopefully everything will be back up.

CHIEF EXECUTIVE OFFICER FROST: All right.

Sounds good.

CHAIRPERSON TAYLOR: All right. Let's see, it is -- I can't read my clock. It's 6:50. Five after 6:00 let's be back.

Thanks, everybody.

(Off record: 5:50 p.m.)

(Thereupon a recess was taken.)

(On record: 6:05 p.m.)

CHAIRPERSON TAYLOR: Go ahead with our -- the rest of our commenters.

STAKEHOLDER RELATIONS CHIEF FOX: Yes, Madam Chair. We'll have four callers. We'll start with Sandy Emerson then Ferris Kawar, Woody Hastings, and Dana Stokes in that order.

CHAIRPERSON TAYLOR: Okay. Thank you.

MR. EMERSON: Hi. I'm Sandy Emerson. And I'm the Board President of Fossil Free California. I'm commenting on our report CalPERS continues to invest in coal.

As you know, SB 185, the intent was to remove investments -- hello?

STAKEHOLDER RELATIONS CHIEF FOX: You're on.

MS. EMERSON: -- in -- thank you. Because of coals outsized contribution to climate change, SB 185 was crafted in 2015 to require CalPERS and CalSTRS to divest from companies making 50 percent or more of their revenue from the mining of thermal coal. This is a very narrow definition. A 50 percent share is a very high bar.

Many investors including BlackRock and the State of New York set a much lower threshold of 25 percent or even ten percent thermal coal to qualify as a coal company. To really measure CalPERS investment in coal though, you have to go beyond the definition of SB 185. Using the broader criteria of the global coal exit list, an internationally recognized resource, CalPERS holds billions in coal, coal mining companies, coal-fired utilities, coal distribution and services, and large diversified companies with substantial coal operations.

The volume of coal reserves represented by CalPERS investments is confirmed by comparing CalPERS holdings to the top coal companies listed by the Carbon Underground 200. Overall, CalPERS increased its investments in coal and coal-related companies by 1.5 billion dollars between 2018 and 2019 for a total of 6.5 billion throughout the whole coal value chain.

By failing to set a strong coal exclusion policy, CalPERS has already lost billions in absolute value on its coal investments and the sector continues to decline.

Recently, the New York State Common Retirement Fund divested from 22 thermal coal mining companies that the Controller says are not prepared to thrive or even survive in the low-carbon economy.

Why is CalPERS continuing to invest in this unprofitable and toxic industry? The IPCC says coal must be phased out entirely by 2050. And it's commonly held that at least 80 percent of coal reserves cannot be burned if we are to keep global warming below two degrees Celsius.

For the sake of our pensions and our future, CalPERS must divest from coal. By staying invested and staying engaged, CalPERS continues to enable the coal industry to continue as a financial health and environmental risk.

Thank you.

STAKEHOLDER RELATIONS CHIEF FOX: Mr. Kawar.

MR. KAWAR: ThanK you. I'm the gentleman whose comments were cutoff, so thank you for allowing me to finish here.

I was saying engagement is a great strategy, however not for industries that are one-trick ponies, whose main product is a carbon-based fuel that needs to be burden to have value. These companies are making hollow commitments with no real plans or evidence that they're going to follow through.

They will continue to string us along as long as we let them. Now, I understand that selling these assets will just mean some other unsavory investor will scoop them up. I say let them. When the markets hit an inversion point, anyone holding these investments will lose their shirts. I mean, just think how quickly things can change within an election just two months away and the entire west cost of America choking on smoke from historic fires caused by a warming world.

I hope your strategy is not just to wait until there's a critical mass of investors that are jumping ship, so my retirement income, as well as the beach I had hoped to retire on, just won't be there. Please reach deep, buck the conventional investment wisdom that has gotten us into this mess and do what you know to be right.

There are billions to be made reinvesting these fossil fuel dollars in clean energy and other sectors of the economy that are not damaging our health or our only home.

Thank you very much.

STAKEHOLDER RELATIONS CHIEF FOX: Madam Chair, Mr. Woody Hastings.

MR. HASTINGS: Good evening. Woody Hastings. Can you hear me?

STAKEHOLDER RELATIONS CHIEF FOX: Yes, sir.

MR. HASTINGS: Can you hear me?

Hello?

STAKEHOLDER RELATIONS CHIEF FOX: Yes, sir. Go ahead.

MR. HASTINGS: Okay. Thank you. Good afternoon. My name is Woody Hastings, Energy Program Manager with the Climate Center, a statewide 501(c)(3) non-profiting working for rapid greenhouse gas reductions at scale starting in California. Thank you for the opportunity to comment.

In 2020, with the consequences of the global climate crisis already bearing down on us, with unprecedented wildfires and other anomalous climate-related problems, it's unconscionable that CalPERS is doing this disservice to its beneficiaries by continuing to invest in coal.

Coal is responsible for 44 percent of global carbon dioxide emissions making coal the primary contributor to the climate crisis.

CalPERS has 6.5 billion invested in coal and has been increasing its investments, while the investment is losing money. Given the state and global, economic and policy trends, this sector is a very bad bet for a long-term investor such as CalPERS.

Had CalPERS divested from fossil fuels ten years go, it would have generated an estimated additional 11.9

billion in value for its retirees. The returns on fossil fuel investments are lower than other sectors. And given the global push to decarbonize our energy and transportation sectors, there is no reason to believe they will be more profitable.

An argument cannot even be made that these investments help the workers in the California coal industry because there is no California coal industry. California has a policy goal of a fully decarbonized economy by 2045. The Climate Center finds that this goal, though laudable, is not aligned with the imperatives of the latest signs -- science. We need to accelerate the timeline for phasing out fossil fuels, and CalPERS can and must be a part of this transition.

We urge you to divest from your investments in coal. Thank you.

STAKEHOLDER RELATIONS CHIEF FOX: Madam Chair, we have Dana Stokes.

CHAIRPERSON TAYLOR: Go ahead.

MS. STOKES: I am a CalPERS pension -- I am a CalPERS pension recipient and a Fossil Free California volunteer activist.

In September 2019, Governor Gavin Newsom signed a landmark Executive Order to leverage the state's 700 billion pension investment portfolio and assets to advance

California's climate leadership.

While the first Climate Risk Assessment Report brought in Investment Committee and its consultants is important information to have, I would like to see CalPERS develop and produce for public viewing a companion assessment of its investments that are actively supporting Newsom's Executive Order, that are advancing California's climate leadership in real ways -- real active ways, such as re -- such as investments in renewable energy technologies, retro -- residential and commercial retrofits, smart metering, and smart monitoring, et cetera.

It's just as important for us, the pension holders, to be seeing what you are doing to counteract what you're not doing in terms of divesting from fossil fuels. So I very much encourage you to produce that information, and to go even further than that, to really support Newsom's Executive Order to begin an actual transition actively of fossil fuel investments to their counter elements, which would be greenhouse gas emission-reducing investments.

Thank you very much.

CHAIRPERSON TAYLOR: I'm sorry.

STAKEHOLDER RELATIONS CHIEF FOX: Madam Chair, Mr. Todd Snyder.

CHAIRPERSON TAYLOR: Okay. Thank you.

MR. SNYDER: Good evening. My name is Todd Snyder and I'm a concerned individual who lives in San Francisco. And I'm calling tonight to urge CalPERS to divest fully from what I call merchants of death.

So five years ago, Senate Bill 185 passed the State Legislature. It required you to divest completely from coal. It's now five years later, why have you continuously failed to comply with State law? And as your fiduciary responsibility to the stakeholders in our pension system, why would you continuously invest in funds that are among the worst performers and among the most toxic externalities in our economy.

Who is paying for the sick child with asthma in the emergency room, who is paying for COVID morbidity that increases with every emission of greenhouse gas in our world? Who pays for your investment in coal stocks, which, by the way, are money losers and some of the worst performing stocks, I might add?

So encourage you to comply with State law, eliminate any and all holdings in the Public Employees' Retirement System in any form of coal, and think of your responsibility to the people who are going to have to live out the consequences of your decisions. Climate change is here. It's happening now and you're sinking money into death.

You have a responsibility as people whom we entrust with our money to ensure that it is invested in a socially responsible way. Do your job, divest from coal now.

STAKEHOLDER RELATIONS CHIEF FOX: Okay. Madam Chair, that completes all the callers. We do have one request for a previous caller to speak on someone else's behalf. I'll let you rule on that.

CHAIRPERSON TAYLOR: No.

I think we get what the -- the whole thing is and I appreciate this previous caller speaking on someone's behalf, but I -- I get what everyone is saying. And I will say I think we all feel the import of this. We all are living in this state. We know it's an important topic.

Ms. Simpson will be giving us an update in November, which will give us all a little more context, and allow us to ask more questions, and dig a little deeper into the Prop 185 and whether, you know, we're complying and the compliance of Prop 185.

So with that, I'm going to end the open session and we will move over into closed session. Give us about five minutes, I guess, because everybody has to disconnect and reconnect. I will meet you on the other side.

Thank you.

Open session is closed. Thank you.

(Thereupon California Public Employees' Retirement System, Investment Committee meeting open session adjourned at 6:19 p.m.)

C E R T I F I C A T E OF R E P O R T E R

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

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 19th day of September, 2020.

JAMES F. PETERS, CSR
Certified Shorthand Reporter
License No. 10063