MEETING

STATE OF CALIFORNIA

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BOARD OF ADMINISTRATION

INVESTMENT COMMITTEE

OPEN SESSION

ROBERT F. CARLSON AUDITORIUM

LINCOLN PLAZA NORTH

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SACRAMENTO, CALIFORNIA

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9:17 A.M.

JAMES F. PETERS, CSR
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A P P E A R A N C E S

COMMITTEE MEMBERS:

Mr. Henry Jones, Chairperson

Mr. Richard Costigan, Vice Chairperson

Ms. Margaret Brown

Mr. John Chiang, represented by Mr. Frank Moore

Mr. Rob Feckner

Ms. Dana Hollinger

Ms. Adria Jenkins-Jones

Ms. Priya Mathur

Mr. David Miller

Mr. Ramon Rubalcava

Mr. Bill Slaton

Mr. Theresa Taylor

Ms. Betty Yee

STAFF:

Ms. Marcie Frost, Chief Executive Officer

Mr. Ted Eliopoulos, Chief Investment Officer

Mr. Matt Jacobs, General Counsel

Ms. Natalie Bickford, Committee Secretary

Ms. Elisabeth Bourqui, Chief Operating Investment Officer

Ms. Kit Crocker, Investment Director

Mr. Jane Delfendahl, Investment Director

Mr. Carrie Douglas-Fong, Associate Investment Manager

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

STAFF:

Mr. Mike Inglett, Investment Director

Mr. Paul Kramer, Investment Manager

Mr. Paul Mouchakkaa, Managing Investment Director

Mr. Simiso Nzima, Investment Director

Mr. Arnie Phillips, Interim Managing Investment Director

Ms. Beth Richtman, Managing Investment Director

Mr. Ed Yrure, Investment Director

Mr. Lou Zahorak, Investment Director

ALSO PRESENT:

Ms. Lisa Bacon, Meketa Investment Group

Ms. Christy Bouma, California Professional Firefighters

Mr. Terry Brennand, Service Employees International Union California

Dr. George Diehr

Ms. Christy Fields, Pension Consulting Alliance

Mr. Steve Hartt, Meketa Investment Group

Mr. Andrew Junkin, Wilshire Associates

Mr. Ali Kazemi, Wilshire Associates

Mr. Steve McCourt, Meketa Investment Group

Mr. Michael Ring, Service Employees International Union

Mr. David Soares

Mr. Tom Toth, Wilshire Associates

I N D E X

I N D E X   C O N T I N U E D

P R O C E E D I N G S

CHAIRPERSON JONES: I'd like to call the Investment Committee meeting to order. The first order of business is roll call, please.

COMMITTEE SECRETARY BICKFORD: Henry Jones?

CHAIRPERSON JONES: Here.

COMMITTEE SECRETARY BICKFORD: Richard Costigan?

VICE CHAIRPERSON COSTIGAN: Here.

COMMITTEE SECRETARY BICKFORD: Margaret Brown?

COMMITTEE MEMBER BROWN: Good morning.

COMMITTEE SECRETARY BICKFORD: Good morning.

John Chiang represented by Frank Moore?

ACTING COMMITTEE MEMBER MOORE: Here.

COMMITTEE SECRETARY BICKFORD: Dana -- excuse me Rob Feckner?

Dana Hollinger?

COMMITTEE MEMBER HOLLINGER: Here.

COMMITTEE SECRETARY BICKFORD: Adria Jenkins-Jones?

COMMITTEE MEMBER JENKINS-JONES: Here.

COMMITTEE SECRETARY BICKFORD: Priya Mathur?

COMMITTEE MEMBER MATHUR: Good morning.

COMMITTEE SECRETARY BICKFORD: Good morning.

David Miller?

COMMITTEE MEMBER MILLER: Here.

COMMITTEE SECRETARY BICKFORD: Ramon Rubalcava?

COMMITTEE MEMBER RUBALCAVA: Here.

COMMITTEE SECRETARY BICKFORD: Bill Slaton?

COMMITTEE MEMBER SLATON: Here.

COMMITTEE SECRETARY BICKFORD: Theresa Taylor?

COMMITTEE MEMBER TAYLOR: Here.

COMMITTEE SECRETARY BICKFORD: Betty Yee?

COMMITTEE MEMBER YEE: Here.

CHAIRPERSON JONES: Okay. Thank you very much.

And the next item is approval of the Investment Committee timed agenda.

COMMITTEE MEMBER TAYLOR: So moved.

CHAIRPERSON JONES: Moved by Ms. Taylor.

COMMITTEE MEMBER MATHUR: Second.

CHAIRPERSON JONES: Second by Mrs. Mathur. Thank you.

Before I call on the Chief Executive -- Chief --

COMMITTEE MEMBER MATHUR: We need to make a -- we need to take a vote.

CHAIRPERSON JONES: Take a vote.

All those in favor, aye?

(Ayes.)

CHAIRPERSON JONES: Opposed?

Hearing none. The item passes. Thank you.

Before I call on the CIO, I would just like to make a couple comments. As some of you may have seen, we officially announced our new Chief Investment Officer today, Ben Meng. Ben is familiar -- is a familiar face to CalPERS. He worked for us for seven years before leaving to become the Deputy CIO at the State Administration of Foreign Exchange, or SAFE, in China.

We are excited to have him back. Ben has a strong investment background and a deep understanding of our system and our investment operations. We look forward to introducing him personally to our members, employers, stakeholders in the future when we returns to the United States. So with that, I'll call on the current CIO, Mr. Eliopoulos.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Perfect. Good morning, Mr. Chair and members of the Investment Committee. I'm just -- I'll just say I'm just delighted for CalPERS. What an incredible selection, what an incredible leadership team with Ben Meng and Elisabeth Bourqui and the rest of the senior investment staff. It's quite remarkable the level of talent that resides here already, and is being added. And I just -- I'm just thrilled.

That wasn't my prepared remarks --

(Laughter.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- but having heard that announcement this morning, I'm really happy for CalPERS.

We have a full agenda today before you. September kicks off the time for a deep dive into the individual program areas for review of their annual performance for the year and looking for highlights into the next -- the next -- the coming fiscal year.

Today, we have our annual review of our Global Fixed Income Program, and our Real Assets Program. These are our two principal diversifying assets to our global equity exposure. They're also the asset classes that provide, you know, the highest component of return to us through income and cash yield. Very important parts of the overall program and important for the Committee to understand their role, and how they go about structuring their portfolio and their organization.

In addition to that, we have an action item with respect to the annual California Public Divest from Iran and Sudan Act, which you'll be hearing from as well as some important information items, including a update from our Global Equity Corporate Governance unit on the component of their work on proxy voting, shareowner campaigns, and corporate engagement. And more to come from me and the team on that when we get to that agenda item.

The other point I wanted to emphasize today, thinking about the fall and getting back to school, as you might recall last year, we had our Sacramento Mayor Darrell Steinberg here to talk about the Sacramento 1000 Strong Program that the Mayor launched last year with the goal of bringing together school districts, community based organizations, state and local funding partners, students and businesses to provide year-round paid internships for local youth, while fostering a highly trained and diversified workforce for Sacramento businesses.

This program, in addition to coordinating intern placement, a 1000 Strong also provides students with 40 hours of workplace training in preparation for their internship tenure. This program has personally been an important one for me and for the entire Investment Office. It's been a very positive experience for the Investment Office to be part of this program this past year.

Our investment managers took the time to expose the interns to investments and to learn about investments as a potential career.

We looked at this as an opportunity to mentor students and give back to the Sacramento community with an eye on our selfish desires to attract these students back to the Investment Office at some point in their future career.

When the students arrived last year, most were quiet, some, and actually almost all, had never been in an office before, which was a particularly poignant and important point for me, because I remember my own career, being their age, and have never been in an office building before either. And the opportunity to expose these young adults with so much potential and so much talent to this opportunity is -- is incredibly important for their lives, but more importantly it infuses our Investment Office with talent, and optimism, and an infusion of energy for the future.

When the -- over time, these students have learned to do seasonal clerk work, they've learned the expectations of being in an office environment, they've watched how work gets done sometimes with amazement, sometimes with -- you know, with the learning that comes with actually being part of an organization.

In addition to that, each of the -- each of our interns got through the difficulties of the first year of college, and balancing, you know, that important first year in school with having a job. After this first year, we thought they would graduate from the program and move on. Instead, we are very fortunate to have two of the students stay with us in the program this year. And the other two students were hired as seasonal clerks to work part-time in the office as they pursue their degrees.

All four of these 1000 Strong interns and graduates are in class today, as we'd want them to be in school. So they're not able to, you know, be here in the auditorium to be recognized, but they are very much part of our team and continue to contribute to the Investment Office, and will continue to contribute to the Investment Office.

I am, you know, very proud to reintroduce and name them to the Board for your recollection. So coming this -- coming this year we have Kendo Turner will be back with us. He is currently enrolled at American River College. We have Yeng Xiong, who is currently enrolled at Sacramento City College will be back with us as an intern.

In addition, we have Anna Razo and Abrina Lemar, both will be seasonal clerks. And both are enrolled at California State University, Sacramento.

In addition to that, I'd now like to welcome our two newest interns who we are just absolutely -- our new thousand strong interns and we're absolutely thrilled to have them with us today. I'd ask if you -- the two, if you could just stand up for a minute. They're super nervous, but I told them they don't need to be nervous at all.

(Laughter.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: We have Andria Torres, who graduated from Sacramento Charter High School, and is currently taking on-line classes part time at Liberty University in pursuit of a behavioral science Bachelor Degree. Andria is bilingual and fluent in both English and Spanish. Thank you for being here.

In addition, we have Alyssa Hampton. Alyssa graduated from Sacramento Learning Tree Academy in June 2014, and is pursuing her associate degree in childhood education. So thank you for being here. We're thrilled to have you.

(Applause.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: And with that, Mr. Chair and members of the Committee, I'm thrilled to start the day on a very uplifting and hopeful note.

CHAIRPERSON JONES: Okay. Thank you for your report.

We now move to action consent item, approval of the August 13, 2018 Investment Committee meeting minutes.

COMMITTEE MEMBER HOLLINGER: Move approval.

COMMITTEE MEMBER MATHUR: Second.

CHAIRPERSON JONES: Moved by Ms. Hollinger, second by Ms. Mathur.

All those in favor?

(Ayes.)

CHAIRPERSON JONES: Opposed?

Seeing none. The item passes. Thank you.

We have information consent items next on the agenda, but I have received no requests to remove anything from that item.

So we will go to the next item, which is Item 6, California Public Divest from Iran Act and Sudan Act.

INVESTMENT DIRECTOR CROCKER: Thank you and good morning.

CHAIRPERSON JONES: Good morning.

INVESTMENT DIRECTOR CROCKER: Agenda Item 6a is part of the annual review process mandated by the California Public Divest from Iran and the Sudan Act.

As this Committee is aware, these acts prohibit the Boards of both CalPERS and CalSTRS from investing in companies with specified business activities in Iran and Sudan, subject to the fiduciary duties of the Board. The acts require identification of and engagement with companies identified as potentially subject to the acts, and submission of an annual report to the California legislature.

The CalPERS annual report to the legislature is scheduled to come before this Committee later this year in December. For our report to the legislature, CalPERS groups companies related to the Act into three categories: Divested restricted, under review, and monitoring.

Divested restricted companies have been determined to meet the threshold criteria for divestment under the Act. And this Committee has concluded that divestment is consistent with its fiduciary duties.

The under review list is comprised of those companies that are undergoing the engagement and communication cycle as specified in the Acts.

And the monitoring category is comprised of companies that do not yet meet the threshold for divestment -- the threshold criteria specified in the Act, but that we nonetheless want to continue to monitor for possible changes in status that are relevant to the Act.

From time to time, companies are recommended for removal from the review category where staff's engagement, or possibly just research activities, have led to the conclusion that the companies are no longer subject to the Act, and today's item is of that nature.

Specifically, staff is recommending that the Committee take action to remove the 12 specified companies from further consideration under the Acts. Additional information as to key findings for each company is provided in the item.

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

CHAIRPERSON JONES: I see no questions, but I do have one comment. Our divestment policy is to bring a report every five years. And I know, Mr. Costigan and I have spoken with Mr. Eliopoulos about whether or not we can combine these reports into one. And I understand you're looking into that, because it may require a lot of additional work to bring them all at one time.

CHIEF INVESTMENT OFFICER ELIOPOULOS: That's correct, Mr. Chair. The Committee directed us and allowed us to bring the five-year review for Iran/Sudan two years from now. And we're looking to see whether we can bring all the five year reviews at that same time in a way that is efficient for the Investment Committee and not overwhelming.

CHAIRPERSON JONES: Okay. Thank you very much. Okay. This is an action item.

Oh, Mr. Moore.

ACTING COMMITTEE MEMBER MOORE: Thank you. Sorry about that.

Most of these organizations are cut and dried, and not subject to the divestment acts. But there are two companies Dubai Islamic and ENGIE that look like it's subjective, whether or not they're subject. Can you describe why you think they're not?

INVESTMENT DIRECTOR CROCKER: They gave us a very good response to our inquiries that was persuasive to staff.

ACTING COMMITTEE MEMBER MOORE: Well, for instance, ENGIE looks like they have some investments in Sudan that are related to the requirements in the Act. Do you not disagree with that?

INVESTMENT DIRECTOR CROCKER: You know, I'd be happy to go back and explore that further. That was not the conclusion we reached, but we will definitely go take a closer look.

ACTING COMMITTEE MEMBER MOORE: Okay. Thank you.

INVESTMENT DIRECTOR CROCKER: Thank you.

CHAIRPERSON JONES: Thank you.

Okay. Thank you. Seeing no further questions. As I said, that the -- this is an action item.

VICE CHAIRPERSON COSTIGAN: I'll move it.

CHAIRPERSON JONES: Moved by Mr. Costigan?

COMMITTEE MEMBER HOLLINGER: Second.

CHAIRPERSON JONES: Second by Ms. Hollinger.

All those in favor?

(Ayes.)

CHAIRPERSON JONES: Opposed?

Hearing none. The item passes.

The next agenda Item, 7, informational agenda items.

The first one is Global Fixed Income, Annual Program Review.

Mr. Phillips.

(Thereupon an overhead presentation was presented as follows.)

CHAIRPERSON JONES: And these reviews on an annual basis, Mr. Eliopoulos, the -- we alternate who will do a deep dive on these type of reviews, like one year staff, the next year it's the Board consultants, is that correct?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Not quite. So we do alternate when we do the total fund report. We alternate who goes first --

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- whether the staff or the consultant goes first.

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: For the annual program reviews of each asset class, we have not alternated. We have the staff go first and then the consultant. Each has done a deep dive.

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: So for this presentation, first, you'll hear from our staff. And you have the ability to, you know, talk with our staff. And then secondly, Wilshire who's the Board's investment consultant has done a -- has done a deep dive --

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- and will give you -- give their -- give those conclusions.

CHAIRPERSON JONES: Okay. Thank you.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Yep.

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

Good morning. I thought I'd be formal, since some of you might be wondering where Curtis is at.

(Laughter.)

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

My name is Arnie Phillips. I'm the Interim Managing Investment Director for Global Fixed Income. To my left I have Lou Zahorak, who's an Investment Director and heads up our Global Corporate Credit Team. And I do want to give a thanks to Lou. I think when Curtis was up here, I think there's always the perception that they're the be-all and do-all. And the reality is, is in my role my name I'm just the name plate for a great staff. And Lou has been extremely helpful in this transition. And I appreciate it. And we're fortunate to have somebody of his character and knowledge here, in addition to myself.

So the protocol today, I'll get it started. I'll talk about the performance. I'll talk about the role of fixed income. I'll hand it over to Lou to talk about the accomplishments for the past, what we're working on in the current year, we'll pause at that point for any questions you may have. And then following that, Wilshire will jump in.

This is a -- I joked about Curtis, but this is the first time in a long, long time that somebody has been, other than Curtis up here, giving this presentation. And the reality is is a lot of what we will talk about today is actually during Curtis's time, and should be reflected of the great work he did.

The -- I have worked for Curtis for 25 years. And I think I have a pretty good read of his strengths and weaknesses, but more importantly his accomplishments. I think two of his greatest legacies are something that Ted mentioned at Curtis's has last Board meeting when he talked about Curtis just being laser focused on returns. And I do think that was Curtis's focus, and I think when we get to the performance you'll see why Curtis cared and why it was very productive.

But I think more importantly going forward, what I view as one of Curtis's greatest legacies is what he left behind, which is a great staff of fixed income professionals that will continue what he built at this point.

Speaking of staff, last -- last Board meeting, John Rothfield from the Fixed Income staff was up here doing his semiannual economic update. At the end, I saw and heard the admiration that many of you had for John's work. And I think it's important to recognize that we have a whole staff of John Rothfields doing similar work. They may not have the Australian accent that John has, but --

(Laughter.)

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

-- but they're all doing similar high quality work in the mortgage market and the credit market, international investments, and global governments.

And I do think that speaks highly to Curtis's legacy and the team that he built. And it's important. We manage 93 percent of the fixed income assets internally. So having a good staff is paramount.

Turning to page two, which I guess I --

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INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

There we go. Reviewing the performance side here. The -- last month, when we were looking at total fund performance, we briefly touched on fixed income performance. And I think it's important to view it in two different ways. There's the absolute returns, just the pure return we get, and then there's the excess return we get or the amount we earned over what the index returned.

And starting -- so the top box up there, the top little matrix, the bottom line that says excess return, you can see that over any of the period you pick there, including back to inception, which is 1988, we've generated positive return.

If you look at just the five-year number to put that into context, Eric Baggesen last month at his presentation talked about a basis point on total fund equaling about $35 million. Well, we don't have all the assets, but we have a good chunk of them. And if you look at our five-year return, take the average balances during those five years, take the alpha or excess return that was generated in those years, it comes out to about $1.9 billion of incremental value over, if we just indexed.

And given our employees are somewhere in the 40 to 50 in fixed income, it's somewhere around 40 to 45 million per employee for that five-year period. So I think again focusing on Curtis on returns matter, I think when you put it in dollars, it sort of jumps out how much we are able too add and how important it is.

The -- but that's the excess return side. When you look at the absolute return numbers, it's more evident that our job is challenging going forward, and actually has been challenging over the prior years. If you look starting at the right of the chart since inception and move to the left, the numbers just keep getting smaller and smaller.

And in simple terms, we get our returns from two places. We get a coupon on our portfolio, and we get a price change on that portfolio.

And following the global financial crisis, global central banks around the world went to a more easy monetary policy, which equaled for us lower interest rates. Those lower interests rates are the coupon portion that we get. But now, those same central banks are starting to unwind slowly, but starting to unwind that easy monetary policy, and interest rates are rising.

In the fixed income world, higher interest rates mean lower prices. And what you have seen in the last year, but actually is the last two years, while we've eked out a slight positive return, for all intents and purposes, it's been close to nothing. And that is, I think, largely the effect of the global financial crisis, taking rates low, and now starting to unwind those to where price performance is offsetting the coupon we're receiving annually.

The other interesting thing is when you look at the capital market assumptions that go into our asset liability process, we made the assumption at the last asset liability process that income would generate 3.5 percent. If you look at our three-year number, we're more like 3.2 percent, index more like 2.7 percent.

The declining interest rate environment we've been in, which really started in the early 1980s, has flattened out, and a lot of people would argue, is -- is in the process of maybe going the other direction. So I think the expectation for fixed income in coming years is it's going to be a challenging environment for us from an absolute return basis.

Mark Anson, a former Chief Investment Officer was sort of famous for his top 10 lists. And at Curtis's going away party, he sent in a top 10 list. And one of the 10 reasons he quoted Curtis as leaving were for the first time in Curtis's career interest rates were actually going up.

And I think it was funny. It was a joke, but it had a hint of truth to it, to the extent that I think that is the environment that we are going to challenged with in coming years.

But that I think focuses on what's the role of fixed income. And Ted had mentioned earlier it's to provide a source of income and be a shock absorber for equities. Part of our shock absorber mechanism is we have 40 percent of our portfolio in longer maturity U.S. treasury securities. The longer maturity means they also have higher interest rate risk. And they're really a form of insurance for the total fund.

And I like to think of it using a personal finance example. Oftentimes when people buy insurance, whether it's home insurance or auto insurance, it always seems expensive, and something you'd rather not pay for until you actually need it.

And your son or daughter takes your new Lexus out, wrecks it. The first thing you make sure they're okay. Then you call your insurance agent and you're really happy you have insurance at that point. As it relates to CalPERS, I would say global equity is the Lexus, global fixed income is the insurance policy.

And it is important, because having that profile in a rising rate environment is going to make absolute returns in fixed income a challenge.

Switching to the inflation portfolio, which is the second box up there. Again, we've had solid five-year returns, and -- but what's really I think challenging for the Investment Office and something that we are talking a lot about, and have a road work -- or have roadmap initiative looking at is when you look at the mandate for fixed income, it's -- or for the inflation portfolio, it is to provide protection against inflation.

And yet, if you use something like the Consumer Price Index, or CPI, you look back at the last three-year, the five-year, the last 10-year period, CPI has been averaging somewhere in the neighborhood of 1.4 to 1.7 percent.

But if you look at our inflation index, which is the middle column there where it says policy index, we're not getting anywhere near 1.4 to 1.7 percent out of our inflation index. Now, our staff is outperforming it, but we're outperforming in an index that doesn't seem to be accomplishing what we need to get out of it.

And so the capital market assumption there was we were going to get three percent. If you look at the three-year return, it's 0.8 percent. If you look at the index, it's even lower at 0.5 percent.

So we have, as I mentioned, a roadmap initiative to look at possibly doing something better in the inflation program that better matches what we need going forward for inflation protection.

And then finally moving to the liquidity portion, the liquidity -- we care about the returns there, but they're really secondary to, as the name says, provide liquidity for the fund, if we need it elsewhere, but it's really about capital preservation. And just making sure the money is there when we need it at some future point.

And so while we've had decent returns there, it's just sort of icing on the cake. That's hot the main purpose for those assets.

I think at this point, I'll hand it over to Lou to talk about some of the accomplishments, one of them specifically to the liquidity bucket there. And then Lou will talk about what we're working on in the current year. And then, at that point, I think we'll stop and answer any questions you may have.

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INVESTMENT DIRECTOR ZAHORAK: Lou Zahorak Investment Director, Global Fixed Income. I'd like to highlight on page four of 43 a key total fund accomplishment that global fixed income implemented this last fiscal year was the roll-out of the internally managed CalPERS short-term investment fund, or as what we internally call it the CalPERS STIF fund.

At least year's fixed income review, Todd Smith discussed this project and the development of this fund. The genesis of this project was identified before and after the global financial crisis. At that time, senior staff at CalPERS determined that we needed to have a more efficient and more conscious way to have risk in our most liquid portfolios.

By bringing the management of this fund internally, we are better positioned to control that risk, and the characteristics of that liquidity pool, and ultimately to be able to access that pool -- that liquidity pool in the most extreme financial stress periods. That was -- that's one of the most important factors why we decided to bring it in-house.

As I said, Todd Smith in fixed income led that development. But I would have to say we could not have accomplished this implementation without the help of Matt Flynn and his team in the Investment Servicing Group, and without the collaboration and flexibility of State Street Bank to help modify our custody and cash management processes so we could sweep funds from our external managers into our internal STIF fund.

And honestly, I'd like to acknowledge our Internal Credit Trading staff and the Execution Services Strategies Group that work on the day-to-day trading and portfolio construction of this portfolio. The portfolio has grown in size from about $8 billion prior to the strategy being developed to this past year, we've managed anywhere from 25 to 35 billion dollars internally now.

Through these efforts, we are -- we've calculated we're saving anywhere between three and a half million to seven million dollars. So it's a big one for us internally.

For the current fiscal year, global fixed income is continuing to help the Investment Office develop skills and capabilities as it relates to total fund returns. In the prior years, global fixed income has made extensive contributions in developing ESG efforts, and incorporating those in our investment process internally and with our external managers.

This year, we have committed two employees to spend 10 to 20 percent of their time working with Beth Richtman's Sustainable Investments Team specifically on research.

In addition, we have four credit research staff members working on specific research groups focused on water issues and disruptive technologies. Finally, Arnie and our entire team are focused on working with the Trust Level Portfolio Management and the Opportunistic Strategies Group to develop the total fund liquidity and leverage capabilities in the future.

We'll stop there and see if there's any questions.

CHAIRPERSON JONES: Yes, we have one.

Mr. Moore.

ACTING COMMITTEE MEMBER MOORE: Can you go back to page two of 43 again where you have your returns by subasset class. The inflation asset class did great for the last one year period, but inflation was only up 2.7 percent for the last year. What accounts for the premium -- the difference on that yield?

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS: It's completely driven by the commodities side, and specifically the oil side of it. Oils had a very nice run this year.

ACTING COMMITTEE MEMBER MOORE: Thank you. Appreciate that.

CHAIRPERSON JONES: Ms. Mathur.

COMMITTEE MEMBER MATHUR: Yeah. Thank you.

I think it's quite something that we have -- that we manage so much of our fixed income portfolio internally. I mean, 93 percent is the number that you shared. And it's extraordinary that we've been able to develop such a high caliber truly talented team internally. And I really appreciated your opening comments, Arnie, about Curtis's leadership. And I think that has been important.

But really the fact that the team has all -- works together and across -- and increasingly across the entire portfolio, the entire Investment Office to really drive value, I think is so important. I mean the credit side -- understanding credits is essential, not just to fixed income, but, of course, to global equity and to other asset classes -- asset classes as well. So I really appreciate that increased commitment to sort of that enterprise-wide focus.

I noted -- I think you were very clear about sharing your concerns sort of moving forward around absolute return, and what -- how is this -- how is this asset class going to perform moving forward. And, of course, it is an important component of the portfolio even in times when it's not performing well, because as you say, it's a shock absorber. But how -- and I don't want to -- obviously, we can't get -- I don't want to get too much into detailed strategy, but how are we positioning the portfolio, how are we looking at it differently moving forward, given that we are in a rising interest rate environment, and that's expected for some time to come. Are we doing -- are we doing anything differently?

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

Well, everything we do daily is dynamic. It's what I like about the job. What I knew yesterday helps me today, but isn't going to do my job today. I have to keep learning.

The interest rate exposure is, in a lot of ways, a given. We have never, at least in the 25 years that

I've been here, been big proponents that we have the skill or necessarily anybody has the skill to necessarily predict interest rates. So I don't think you'll see us deviate a whole lot from that index as it relates to interest rate risk.

I know -- I don't know what the exact, five, seven years ago, there was talk about shortening our interest rate exposure by changing our index based on what seemed reasonable at the time that rates were going to go up.

And yet, here we are, however many years later and nothing has changed, and would have cost us a lot of money had we done that. So I don't think you'll see us that -- we don't view that as even it's a tool in our tool box, not one that we feel we're necessarily very good at, nor really anybody is.

But within the portfolio, we certainly can position for different interest rate environments and how they impact the economy. And I think we view it as sort of late cycle right now.

Certainly, the tax policy in the last year has given us a little bit more runway. But I would say given where things are trading, we're a lot closer to home at the moment, keeping powder dry for potential opportunities down the road.

Within asset classes, I know Lou has a sort of a defensive tilt in his -- you know, higher quality tilt in his corporate portfolio within mortgage portfolio we can position for higher interest rates and what that might mean for specific parts of that product.

So we'll continue to manage within our asset classes. I think you'll find tilts across asset classes, we're probably leaning towards doing, when it's more obvious in the past. And a lot of that - not that it didn't necessarily work in the past - is we have a lot of total fund responsibilities now, and we want to make sure that -- I think it's Investment Belief 7 -- that we're being compensated for the risk.

And I think you'll see when we have broad consensus among our senior staff that something is attractive, we will continue to make those bets like we always have. But probably not when it's -- it kind of seems cheap, you'll probably find we try to make money within our specific subsectors and not cross over nearly as much.

But certainly, higher interest rates have implications throughout the economy. And we will try to get those into our portfolio to still take advantage of it.

COMMITTEE MEMBER MATHUR: Thank you. And I know in fixed income, we have less exposure to international credits than we do in our global equity portfolio, can you just share a little bit about how thinking is evolving in that regard and what our current exposure is.

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS: So our index has approximately 10 percent to the international area split between developed markets and emerging markets. And what we have found is that the vast majority of the return comes from the foreign exchange exposure, and much less from the actual bond aspects of it.

And the dollar has been extremely strong. And so we've been underweight international and that has worked. But again, we think the dollar rises sort of late stage also. We don't necessarily think it's going to turn tomorrow, but maybe closer to the end than not.

So we are starting to close some of that underweight. But it's a relatively low yielding part of the world. And in a lot of areas, the international markets have had negative returns -- or negative interest rates in recent years. And so optically, and when we run scenarios, they often don't kind of pencil out as extremely attractive, because they're so low yielding. So we've had a natural kind of underweight, but given the dollar positioning, we're getting more neutral, but I would be surprised if we got to an overweight any time soon.

COMMITTEE MEMBER MATHUR: Okay. Thank you so much.

CHAIRPERSON JONES: Yeah. Thank you, Ernie. Ernie, you made -- Arnie, you made a comment that triggered a memory about five, six years ago at the Investment Committee, where we had this, I don't know, maybe two or three different meetings about duration with the interest rate risk. And what triggered my memory is you said we would have lost a lot of money, if we had adopted that change.

And so I think it's probably intuitive that periodically when we have these lengthy debates on policy, and then we go out four or five years and come back and say, well, what would have happened. So it helped us be informed on our decision making as we go forward. So thanks for holding the ground on that decision.

Okay. Mrs. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you.

Arnie, I wanted to thank you for your presentation. Getting in front of the Board is never fun or easy, I don't think. But also the fact that you gave credit to Curtis, but your team -- and that this is such a team effort. As my colleague Ms. Mathur side, I really appreciate that you acknowledged all of that. And I think you guys are doing a great job.

I did have a couple of questions. And I think -- I think you kind of answered the one question I had, which was you had mentioned that you were looking at -- let me make sure I can find my notes here -- possibly doing something else to change the returns, because they were becoming lower, or because of the rising interest rates. And you sort of talked about that. Could you expand?

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS: Sure. So on the income portion, we will only be changing within our portfolio trying to position, but won't be taking interest rate tilt in our portfolio per se.

COMMITTEE MEMBER TAYLOR: Okay.

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS: Where we will be hopefully relooking at and potentially doing something different is in the inflation component, simply because the index we're targeting is not returning anything near what actual inflation is running. And so if our goal is to protect ourself to inflation, it doesn't appear our index is necessarily going to do that.

COMMITTEE MEMBER TAYLOR: Okay.

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS: And so that is something we have a INVO-wide process working on to reevaluate that and decide if something should change, and if so, what should it look like.

COMMITTEE MEMBER TAYLOR: Okay. Great. Thank you. I'm glad I asked, because I didn't quite understand that.

And then I also wanted to thank you for making sure that you're integrating our ESG policy. The 10 -- was it two to three people, is that what it was?

INVESTMENT DIRECTOR ZAHORAK: There's two individuals specifically. One is contributing 10 percent, the other one is contributing 20 percent. So it's in that range.

COMMITTEE MEMBER TAYLOR: Oh, wow. Okay.

INVESTMENT DIRECTOR ZAHORAK: Yeah.

COMMITTEE MEMBER TAYLOR: And I really appreciate you guys looking into that and working on that with Beth's office. So thank you very much.

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

One other thought, it was interesting when the water topic came up. We literally had like half the staff wanting to work with it, because it's a -- just a --

COMMITTEE MEMBER TAYLOR: It's huge issue, especially in California.

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

Yeah, exactly. And so we ended up with a couple people, but I know Beth even outside of fixed income had a lot of people willing to help out -- help out on what's a very interesting topic.

COMMITTEE MEMBER TAYLOR: Great. Thank you very much.

CHAIRPERSON JONES: Ms. Yee.

COMMITTEE MEMBER YEE: I was just going to ask you about the water topic.

(Laughter.)

COMMITTEE MEMBER YEE: Just generally, and I know it's obviously here in California top of mind for everyone. But what opportunities at this early stage have you identified with regard to water or other disruptive technologies that look promising?

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

Well, I'll take the first shot at it. Lou might have some thoughts too. My day job, when I'm not filling in for Curtis's retirement, is the mortgage portfolio. And we've been thinking quite a bit about availability of water and what it means for housing. And you can pick your warm climate desert condition U.S. places and kind of wonder long term, you know, will they have a water issue going forward if we see climate change.

And so we've been thinking about it from that standpoint. I think the most fascinating presentation that I've seen in my time here at CalPERS was about climate change, and just immigration patterns that come out of -- you can identify the obvious areas that -- or somewhat obvious area that will feel the initial brunt of climate. But what's really interesting is when you see the migrations from those areas and what it might mean for others areas.

And so it's sort of like demographics in a way that it's interesting. It's not always easy to put the tilt into your portfolio because it's sort of slow and glacier in its pace, but it is definitely something that we do think about for specific investments, if not just the whole portfolio.

COMMITTEE MEMBER YEE: Okay.

INTERIM MANAGING INVESTMENT DIRECTOR PHILLIPS:

Paul, do you want to comment?

Paul Kramer from our Investment staff is one of the folks that works most close with Beth Richtman's Sustainable Investments Team, and has done a lot of work in this area.

INVESTMENT MANAGER KRAMER: Good afternoon, ladies and gentlemen. Yes, I work on that research project with Sustainable Investments. I guess I would say initially -- I don't want to make too many definitive comments about that, because we're really kind of early in the research process. I would say that right now we're very focused on trying to define water risk from an investment perspective. We're looking at ways to screen the portfolio for water risk across the fund, which kind of has, you know, different implications, depending on the asset class. So that's sort of a nuance we're exploring.

And I think the last piece, which is maybe what you were getting to, was what investment opportunities might come out of that, so -- but that's kind of the steps we're following right now. And I think I would probably wait to talk about, you know, observations or conclusions, you know, to a later time.

COMMITTEE MEMBER YEE: Yeah. That's great. And I really appreciate you looking beyond just this asset class with respect to your review.

Thank you.

CHAIRPERSON JONES: Okay. Thank you.

Does that conclude staff's part of this presentation?

CHIEF INVESTMENT OFFICER ELIOPOULOS: I just -- I -- yes, I would just add one thing for the Committee's attention is page 40 of the attachment. I don't know whether we can -- we can shift to it quickly. I don't have the clicker in front of me, but there we go.

Because we often get asked, you know, this topic of ESG integration is it all politics, is it fluff, is it -- you know, is it pressure on the Investment staff? And it's hard sometimes to give some specific examples. And I think you can appreciate with our Global Fixed Income Team, the men and women of our Fixed Income Team are active traders and investment professionals in the markets all the time.

And really, their stock and trade is security analysis and risk management. And so when we've -- when we've talked about ESG integration over time with all of our asset classes, but particularly our Fixed Income Group, you know, they look at it from the perspective of what does it mean to be a great investor, and how do we analyze, you know, our positions for potential risk, because as Arnie said, you know, we -- absent, you know, price changing during the course, if you hold the security to its maturity, all you get is the income that was promised.

So risk awareness, risk mitigation is, you know, the principal duty of this great Fixed Income Team that we have. And they really see this ESG integration as part of what they've already been doing for decades, but really focusing on some of these emerging risk factors. You know, water risk being one of them the Controller underscored.

But as you look -- as you look at, just four examples out of many, what we're trying to do is start to provide the Committee with some more specific and tangible areas where anyone in the public that's looked at these four topics would say, yes, that's what you want investors to do, and that is what our Investment Team sees as their core of their investment activity.

In reviewing, you know, holding a security with a -- with a potential gas company, you'd want them to explore their risk mitigation with respect to pipeline leaks, and really weigh what are -- you know, in the pricing of it what is the reward from the security versus the risk.

Now, sometimes, they'll be satisfied and say we like the reward of that gas pipeline company, and we're going to take that risk. And other times we're going to say no. The point is, the Investment Committee, and we as Investment staff, you want us to be considering these risk factors very specifically, as we combine them with other risk factors in the portfolio, principally price and risk.

The other example they gave is this energy bond. You know, our team views it as part of their principal duty to explore what are -- what are -- what is this company doing in terms of carbon reduction and deleveraging?

And then lastly on the sovereign side, underweighting Turkey sovereign bonds and overweighting Mexican sovereign bonds, you know, looking at what the future will hold in terms of the governance situation in a given country is really the core of an investment professional's duties and risks, so that we really see this as, you know, the fabric of how we approach investing, and what we're trying to do in these examples.

And we've -- you know, we have 43 slides, and we're trying to just highlight four or five. That's our -- that's our agreement with the Investment Committee.

But this one in particular I think is worth, you know, reading through and pointing out publicly, because it starts to answer some of the questions in terms of, well, what does this ESG integration mean? Why would you care about it?

And I think anyone that knows our Fixed Income Team, and knows the investment professionals, and the fiber of earning a risk-adjusted return will look at these examples and not their head and say yes. Okay, this is what we want investment professionals to be doing.

So I just wanted to underscore that before we had to turn it over to the consultant.

CHAIRPERSON JONES: Yeah, a very good

observation. We did have a couple of questions.

Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, and thank you, Ted, for that response. You know, I think when any number of us are engaged more globally on these issues, the leadership of CalPERS is not lost. And I think these are just, you know, some examples. And I think we could probably come up with a pretty lengthy list of this type of work in each of our asset classes.

I wanted to ask you about the slide prior to that, slide 39. This has to do with the carbon footprint -- carbon footprint comparison of the internal credit portfolio relative to the benchmark. And I was curious about this one, because the use and reliance on the MSCI carbon data to complete our work, I guess, two questions.

One, when do you hope to have the process completed, and I guess more importantly, and I'm excited about the possibility of eventually tying this into some of the leadership role that CalPERS is playing with respect to the Climate Action 100 initiative. Yeah.

INVESTMENT DIRECTOR ZAHORAK: Lou Zahorak, Investment Director. If you remember a year ago at our last fixed income review we did present to you the carbon footprint analysis for our portfolio I believe as part of the reporting process. I don't think we're due to present that again for another year.

COMMITTEE MEMBER YEE: Okay.

INVESTMENT DIRECTOR ZAHORAK: You know, we're just highlighting that we -- and we are -- in the past, we've used MSCI's carbon data. Paul actually was the Investment Manager that worked specifically on that project. So that's where that's really at stage.

COMMITTEE MEMBER YEE: Okay. All right.

There will be a lot of interest in this. So I just want to be sure that when we are at that point of, you know, having some findings that I think that could be helpful for others as well.

CHAIRPERSON JONES: Mr. Rubalcava.

COMMITTEE MEMBER RUBALCAVA: Thank you.

Ted, I just want to thank you for bringing up the ESG. I'm glad you pointed out to those screens. And I was going to bring it up, because I was looking at my old -- and old issue this summer from a plan sponsor and they had a brief article on ESG how everybody is finally catching up, and the U.S. is an outlier behind.

But I'm glad that CalPERS on -- with your team has taken a big role. And it gives me confidence for sustainability in the future, because that is one of the principles we keep seeing in a little literature horizon -- you know, this long-term horizon, and that's going to be -- I think it will be -- we will be rewarded for our members, for our -- our beneficiaries, so I thank you for that, and for this.

CHAIRPERSON JONES: Thank you.

So now we move to 7b, Consultant's Review of Global Fixed Income.

MR. TOTH: Good morning. Tom Toth with Wilshire Associates. I'm going to start my comments with, I think, the key takeaway. And I think this is important that Wilshire's evaluation and our discussion with staff and our understanding of the portfolio and the process used to build that portfolio has led us to conclude that it continues to be managed in a very effective and risk-conscious way. It leverages the deep expertise of the team.

Now, that being side, there is some uncertainty with changes in the MID, which are reflected in our score. And I think that's appropriate, and we'll talk a little bit more about that as we move through the item.

As we've talked a bit about so far today, their investment approach is very consistent with the strategic role that fixed income is meant to play in the total portfolio, as staff mentioned, providing income, some stability and equity diversification is critical as you manage the portfolio through a variety of market cycles.

We've talked a lot about the performance, and the numbers speak for themselves. The portfolio has done an outstanding job adding value over and above its benchmarks. I thought it was also important to point out -- I won't ask you to move to the chart, which is in the appendix of the memo, but you'll also see that the realized risk of the portfolio over the last couple of years has actually come in below or at the risk of the benchmark.

So the portfolio has outperformed over time at the same or less risk than the index. So from a risk-adjusted return perspective, excellent results there as well.

If I could have you flip forward to our scoring matrix, which is page 116 of the packet. I never thought I'd have the opportunity to use this term, but -- and I'll use this opportunity to correct some fake news, which we've seen a bit recently in the press. The overall score for our review of the Fixed Income Program is a score of B, which is an outstanding score overall.

There are some subcomponents that you might naturally question why have we derived these scores? And so I wanted to touch on those very specifically. And it starts right there at the top with the organizational score. The organizational score is a component of two things. It's the overall firm, and then it's the team. And where you'll see a more challenged score is in the firm score of D. And that's the -- that's the mark that made news some headlines earlier.

And I think that's -- when you think about the way we generate these scores, and what we're comparing the money management component of CalPERS too, it's other large asset managers in the space, the PIMCO's, Vanguard's, Fidelity's, Wellington's, what have you.

And as we've talked about for many years, there are challenges that CalPERS, as a public entity, faces that other private for-profit entities don't face, things like equity ownership. And specifically to the stability of the investment team, we're going through the process of a change in CIO. And if you were to -- if there were a change in CIO at Fidelity, or at Wellington, or what have you, our level of uncertainty goes up. And I think naturally the score should reflect that and it does in this case.

Our expectation is that going forward, that score is likely to improve. As we get the team in place, and we see that stability return, and therefore that score should increase as we move forward.

Now on the team side, it's a similar story, although the team score is a bit higher. It's rated as a B. To put that in context, that's essentially one notch down from where it was this time last year. And that's just a direct reflection of the change in MID, and the fact that a stated successor has not been made.

And so that's again just uncertainty, which we would expect to dissipate over time as that team gels, and we get a better sense that the process, which is generated the excellent results that we've seen over the last number of years, remains in place.

And that's something we're in constant contact with the team to understand what they're doing in the portfolio. I think they provided an outstanding overview on that point here so far.

Now, when you look at some of the other scores, I think the broad takeaways that they're outstanding quite frankly. When you look at the information gathering and forecasting, both of them are rated as A's, which is right there at the top, given the strength of the team, and the depth of resources that they're able to bring to bear.

All of that is reflected here. And when you think about the process that they go through for constructing a portfolio, all of those rank very highly. And so at the end of the day, we have a weight for each those scores, and that's what rolls up to that overall score for a B.

So I certainly wanted to use my opportunity here to correct some of the misinformation that was out there from earlier this week.

I'm going to stop there, because we think the staff has done an excellent job walking through the portfolio, but I'd be happy to answer any questions on the methodology or any specific scores that you may have.

CHAIRPERSON JONES: Yeah, seeing no questions, but I just want to thank you, Tom, for expanding on that D letter, because you're so correct in that the -- sometimes the general viewpoint is that they take one little piece of information and they want to expand that over the entire organization. And that was the fake news, as you made reference to, that I saw this morning also.

So I'm glad you were able to expand on that and identify what a narrow implication of that D is, as opposed to that story that is the entire organization.

MR. TOTH: Right.

CHAIRPERSON JONES: So appreciate that.

Okay. Before we move to 7c, the -- were you complete. You finished?

MR. TOTH: (Nods head.)

CHAIRPERSON JONES: Okay. Before we need Item 7c, I forgot to welcome Ms. Jenkins-Jones to her first

Investment Committee meeting, the representative from CalHR. So, welcome, Ms. Jenkins-Jones. I forgot to do that.

Okay. Now, we'll move to Item 7c, Real Assets Annual Program Review.

(Thereupon an overhead presentation was presented as follows.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: While we're waiting for the Real Assets team to come up, I just want to underscore, you know, the -- one, the incredible talent that we have within the Investment Office, I think, in the Fixed Income team, and now as we see the Real Assets team combining. And we need -- you know, we need to value that, especially, you know, any time that we see a headline like that. You know, it goes to, in the fixed income team's perspective, professionals that have worked here 20, 30, 40 years of their careers to build this incredible success.

I do think it's fair, as Wilshire mentioned in their comments, for them to grade those components the way they have pursuant to methodology. Of course, you want to signal to the Committee and elsewhere when there's transitions going on, pay attention. And I just want to assure you we're all paying attention on the transition. And we fully expect to have these positions filled. You have the announcement on the CIO. I would expect we'd be able to fill these MID positions by the end of the year, so that, you know, at the beginning of the year, you'll have a full team on the playing field in a sequence that makes sense for us.

The one area that we won't be able to address in the Wilshire scoring is on compensation and ownership. You know, that's -- we've always received a -- you know, basically a C grade on that, because as Wilshire notes, we're not able to offer ownership or equity compensation for our team that you would see at a PIMCO, or a asset management firm. So we're always going to hit a ceiling in terms of the equity ownership and the overall level of compensation that we offer to these great teams. We're always going to have this ceiling of a, you know, rather middling grade.

So with that, I see the team is here now, but I wanted to just emphasize those points while we were waiting for Paul and his team to get here.

CHAIRPERSON JONES: Okay. Thank you.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: Good morning, Investment Committee. It's a pleasure to present the annual program review for real assets. I'm Paul Mouchakkaa, CalPERS staff. And I'm joined by three members of the team, Jane Delfendahl, Mike Inglett, and Ed

Yrure.

I wish to emphasize, however, that the prepared report was a total team effort. Last year, we discussed the strategic position of the Real Assets Program. Staff continues to strengthen the position of the portfolio, but it is a portfolio still in transition.

There has been more than $24 billion of investment activity in the program over the last three years stemming from the acquisition of long-term strategic assets, and the disposition of non-strategic assets. What has guided staff has been the Investment Beliefs, the role of real assets prescribed from the ALM, the strategic plan for real assets, and ESG integration.

But the main ingredients borne from those four cornerstones are not as tangible. They are the intangibles and the behaviors of consistency, and methodical adaptation. So what does that actually mean?

One example of consistency heard by the Board regularly has been to grow our core exposures in a measured and disciplined way. This has resulted in 12.5 percent returns for real estate, and over 17 percent returns for infrastructure over the last five years in the core category.

Another area of consistency has been to expand execution through our separate accounts, and direct ownership, which now stands at 90 percent of the program. This has resulted in significant cost savings, Investment Belief number 8.

But we also need to adapt to changing market conditions. Examples where we have adapted is through the introduction of the Emerging Manager Program. We have invested over $900 million and achieved 15 percent returns for the last five years.

Another area of adaptation has been to invest in energy optimization in our buildings. This is done to improve returns, lower our operating costs, and lower our energy usage. Balancing between staying the course and being steady and adapting is key to our success. Real assets has maintained discipline around vintage year management. We all know timing is a very important part of investing.

As a long-term investor, Investment Belief number 2, it's our responsibility to do so, as it will benefit the fund in the long run.

The team will now take you through where we have been and where we are going. Jane Delfendahl will discuss our performance, and our report card to our role, which we have presented for the last two years.

Mike Inglett will discuss our portfolio position, and then Ed Yrure will discuss our current initiatives and our accomplishments.

Thank you.

Jane.

INVESTMENT DIRECTOR DELFENDAHL: Thank you, Paul. Good morning Investment Committee members.

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CHAIRPERSON JONES: Good morning,

INVESTMENT DIRECTOR DELFENDAHL: I'm Jane Delfendahl, Investment Director. I will talk about the performance of real assets, which can be found on page two of your program review.

For fiscal year 2017-18, the real assets total performance exceeded the benchmark. Given the illiquid nature of private real assets, however, more emphasis is placed on longer term performance. For the five-year period ended, real assets underperformed the benchmark by 20 basis points. The five-year real assets underperformance resulted primarily from forestland assets, and secondarily from non-core real estate assets.

What really powered our performance is our core holdings in real estate and infrastructure. Core real estate exceeded the benchmark by approximately 200 basis points, and core infrastructure exceeded the benchmark by nearly 1200 basis points. It can be noted that since the Real Assets Strategic Plan of 2011, the real assets role shifted to a greater emphasis on core and income-producing holdings.

Further, the real assets performance for the one, three, and five years exceeded the 2013 ALM expected return of seven percent as referenced in the box on page two.

Moving to page three of the report, this is our report card with respect to our role. It shows how the real assets portfolio is increasingly meeting our role of real assets, which entails three pillars. These are stable cash yield, partial inflation protection, and diversification of equity risk.

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INVESTMENT DIRECTOR DELFENDAHL: The improvement of alignment with our role is evidenced by our production of more stable positive income in a falling yield environment. Note our income has stabilized and greatly improved, and sits at 3.5 percent.

This shift has been through acquisition and growth of our core portfolio, and through the methodical disposition of our non-core portfolio which was largely acquired in the latter part of the last business cycle.

The hard work that has been put into place since the end of the global financial crisis has had a cumulative effect bringing us to the position of strength we're in today, allowing us to be adaptable to changing market conditions.

Now, I'll pass it off to Mike Inglett who will discuss the portfolio positioning of the real assets portfolio.

Mike.

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INVESTMENT DIRECTOR INGLETT: Thanks, Jane. And good morning, members of the Board. Mike name is Mike Inglett. I'm an Investment Director in the real assets unit.

I will discuss with you the real assets portfolio positions on page four of the annual program review. Over the past several years, we have made significant progress in repositioning the portfolio. All the efforts made by the team were guided by the Investment Beliefs, the real assets role, and the strategic plan. These moves resulted in a higher quality and lower complexity portfolio.

Starting with higher quality. Over the past three years, the real assets core portfolio percentage has increased from 46 to 78 percent. During that same period, portfolio value growth in real assets core exposure has increased by approximately $15.5 billion.

At the same time, the non-core exposure was reduced by approximately $8.5 billion. In the context of a private illiquid asset class, this is significant, as there was a total shift of approximately $24 billion of equity.

Further validating the shift over the past three-year period core investments have outperformed non-core investments by approximately three times with returns of nine percent and three percent respectively.

Shifting gears to lower complexity in the portfolio over the last three years, first real assets has continued to maintain discipline in using leverage. The LTV has remained around 33 percent, which is well under the policy limit.

Second, the percentage of assets under management in separate accounts has increased from 80 percent to 90 percent. Third, one of the goals of Vision 2020 is to reduce complexity by lowering the number of external investment managers.

Real assets has significantly reduced the number of managers from 50 to 30 -- 58 to 30 in that period. This is allowed for improved oversight from staff and strengthened strategic relationships with our partners. The lower complexity mentioned have lead to stronger governance, better control, and reduced fees.

In summary, the result is that through these efforts, we have contributed to strengthening the portfolio position and increasing alignment with the role of real assets. I'm going to pass it over to Ed Yrure to cover accomplishments and initiatives.

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INVESTMENT DIRECTOR YRURE: Thank you, Mike. Good morning, members of the Board. Ed Yrure, Investment Director.

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INVESTMENT DIRECTOR YRURE: My discussion points center around pages five and six, fiscal year '17-'18 accomplishments, and current year initiatives, highlighting where staff demonstrates consistency and adaptability.

As Paul touched upon earlier, our program's achievements have been and continue to be driven by these two key ingredients. We have been deliberate in our approach as we implement our strategic plan, and build a stronger portfolio in a disciplined manner.

I will now highlight a few key examples covered on pages five and six where staff has exhibited consistency and adaptability.

On page five, we identify accomplishments across varied categories. A few noted examples that point to staying the course at implementing our strategic plan are as follows:

Number one, completion of three segment plans providing guideposts for portfolio construction. Number two, continued focus on increasing our core exposure in both real estate and infrastructure. For example, the infrastructure portfolio has doubled in size over the past three years. And number three, achieving significant fee savings through contract renegotiations utilizing our preferred alignment model.

In terms of adaptive accomplishments, examples include: Staff's inclusion of energy optimization into our annual investment planning process; the roll-out of an ESG consideration matrix for underwriting new investment opportunities. Another is adapting our emerging manager program through expanded guidelines and additional capital commitments; and further, establishing a defined focus for the launch of the transition manager program based on portfolio needs.

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INVESTMENT DIRECTOR YRURE: Moving to page six, several initiatives that further highlight consistency include: Staff completing its segment planning process; also, expanding our preferred business model in infrastructure to facilitate an active pipeline.

Additionally, the team is piloting its energy optimization plan utilizing a systematic approach across real estate in identifying economically attractive opportunities.

Continuing with page six, examples of adaptive initiatives include: One, strengthening our investment process to be responsive to changing conditions, such as climate risk; two, restructuring the forestland portfolio, improving governance as well as alignment; three, evaluating our retail portfolio and its underlying strategies; four, launching a search for the Transition Manager Program.

In summary, the adaptive components of our program become an ingredient to our consistent and deliberate approach. These are the common threads as we strive to be disciplined and incremental in building a stronger portfolio.

At this time, I would like to pass it back to Paul. Thank you very much.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: Thank you, Ed.

We hope that this presentation has illuminated the strategic position of the real assets portfolio. We are nine years into a positive market cycle. We cannot predict the exact timing of the next downturn. But staff firmly believes that you cannot take the cycles out of investing in private real asset markets. Equity markets have risen and core returns have significantly been lowered.

It's in these times that there's s tendency to do four things: Increase deployment to catch up to the allocation; go up the risk curve to try to attain higher returns; shorten due diligence periods to close more deals; and fourth, reduce your focus on governance.

Engaging in these behaviors will impair the alignment of real assets with its role and the Investment Beliefs. Instead, it is even more critical for CalPERS, within the real assets group, to focus on pace deployment, strong governance, and sound internal controls and systems to underwrite, manage, and monitor a portfolio.

These activities honestly are not eye catching, and they don't -- and results do not show up instantly, but this approach will allow us to maintain consistency and adapt to changing market conditions into and through the next cycle.

With that, we are happy to have a discussion with the Investment Committee and answer questions.

CHAIRPERSON JONES: Okay. Thank you.

Ms. Mathur.

COMMITTEE MEMBER MATHUR: Thank you, Mr. Chair.

Well, thank you so much for this review. You know, you said it right there in your closing, Paul, that just how important maintaining a methodical, thoughtful, consistent, diligent approach to investing is essentially to driving long-term returns. We've seen what happens when shortcuts are taken, and that might not bear out immediately, but certainly will come home to roost in the future. So essential that the team is continuing to focus on that.

We have talked before about infrastructure, and how do we improve the pipeline. I'm glad to see that there's some efforts underway to sort of push out our preferred model. We'd love to hear a little bit more about that, and also just share with you that I've recently had a conversation with Kevin Uebelein CEO of AIMCo, the Alberta Investment Management Company. And they've been doing some engagement work with developing countries around what does it -- what does it take to be investable, to have an infrastructure project that could be investable by an entity like -- an institutional investor like AIMCo.

And just curious whether we've participated in any of those conversations or if we would, and what we -- whether we think that would be fruitful?

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: On the first part, Ms. Mathur, on your comment regarding the pipeline, we'd be happy to get -- to discuss that in closed session. We have a fairly active pipeline today that staff is working on.

On the second point, I see Elisabeth reaching for the microphone, so I'll -- I'll let her go.

CHIEF OPERATING INVESTMENT OFFICER BOURQUI:

Sure. Absolutely. Thank you. Thank you very much for your point about infrastructure and how to bring sustainable infrastructure forward as well in our portfolio. We are participating and very proud and happy to participate a very exciting initiative, which is the G7 initiative together with some Canadian plans and some European plans. And this initiative has different parts, some of them on climate change, and diversity as well as job description of the future, and also one particular initiative on sustainable infrastructure.

So it's really about bringing, first of all, the -- on the emerging market side a certain kind of -- I mean, guidelines and rules in order to be able to efficiently work on those markets in terms of infrastructure.

It's also about sharing experience, both on the deals, and also on the due diligence and the risk taking about those infrastructure projects. So we are very happy to participate to those very, I would say, very exciting and very innovative approach that was taken as part of this G7 initiative. So more to follow on that, because we have just started, and we'll be able to update you together with our team on infrastructure.

Thank you.

COMMITTEE MEMBER MATHUR: Thank you.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: I will just add one more thing in addition to that. We have responded to surveys that have been put on by various emerging market. One in particular was about Africa, where we worked with a group - NASP I believe is the name - to provide our feedback, both from an experience perspective and from a strategic investment perspective on what would be an investable project, and what tenets we would look for in terms of governance and returns, et cetera.

COMMITTEE MEMBER MATHUR: Thank you very much.

CHAIRPERSON JONES: Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you. Thank you, Paul. That was a really good presentation. And I appreciate your closing statement, because throughout the review, I was reading that we were -- you know, equity markets had risen, and our returns are going to go down, and I was a little concerned that maybe we were looking at doing what put us in trouble in 2008 and getting, you know, a little bit -- well, maybe we need better returns, so we're going to do those mortgage-backed securities again.

So I'm glad to hear that you guys are staying the course and working on our core returns, regardless of whether they are declining, and just staying in that position.

And then I had a question on the improving the pipeline for the infrastructure. I just wanted you to -- and I know Ms. Mathur talked about it a little bit, but I wanted you to kind of elaborate on that a little bit for us, and how this came about, and how you're working it.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: So in terms of specifics, we'll go through. We're happy to discuss that what -- you know, what the active items are today. I want to add just a few comments.

First, we have built the largest infrastructure portfolio of any U.S. public plan, at close to four and a quarter billion dollars. There's a high degree of scarcity of infrastructure investments that match our role today. And they tend to be highly competed. And the transactions are, for lack of a technical term, just lumpy. They're big. They're airports, or a port, or a toll road. So they come at you in a very episodic big chunky way.

We have really been working hard to establish a repeatable business model where we can, you know, operate in a more consistent way knowing full well that the transaction markets we have little or no control over, and they will remain lumpy at least for the foreseeable future.

I will add a few more points, which is we have three investment managers in a new investments teams, and they spend almost -- and their sports staff underneath them, spend the majority if not all of their time working on these various projects in the pipeline, which again we'll discuss.

But the strong returns that we've achieved are high -- there's a high degree of dispersion in those returns, which Meketa points out very well in their letter. And that dispersion from our perspective means that being selective in the portfolio construction is very critical. So we have to balance being -- creating that repeatability, but also remaining selective.

CHAIRPERSON JONES: Okay.

COMMITTEE MEMBER TAYLOR: Thank you very much.

CHAIRPERSON JONES: Ms. Yee.

COMMITTEE MEMBER YEE: Excuse me.

Thank you, Mr. Chairman. I just want to thank you and your team, Paul. This is a very, very impressive degree of work. And the performance is obviously showing.

And I wanted to just ask you a question with respect to something on slide 6. And it had to do with the savings realized from the alignment model, and whether you anticipate any additional savings from --

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: Page five?

COMMITTEE MEMBER YEE: I'm sorry, five.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: Five.

So it's -- we showed up through this fiscal year, because we are aware of the actual returns that have happened.

COMMITTEE MEMBER YEE: Right.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: It's hard to anticipate the future without knowing what returns come from our portfolio, because the component where we have really reduced our fees are both on the asset management fee, but also in the quote profit-sharing payments that we've restructured. So it's hard to forecast exactly the amount going forward. I will say that a lot of the low-hanging fruit, like in most situations, has been squeezed out. We don't anticipate that the fee savings will mirror what has happened in the last three years.

But we do anticipate, depending on returns, that we can find other opportunities to expand our model as I mentioned before.

COMMITTEE MEMBER YEE: Right, right.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: But it does stand at 90 percent of the program today. Around the global financial crisis, that number was significantly lower than where it stands today. So that's where a lot of those fee savings were borne from.

COMMITTEE MEMBER YEE: Gotcha. Okay. Great. Thank you.

And then I wonder if you could just make a brief mention about -- I know the retail study is in progress. Any initial insights at this point?

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: It is early on on that, so there's more work to do. You know, retail is a very fickle animal. It's always evolving. And we focus. And I -- it's something that PCA has highlighted consistently for a number of years with the Board. We focus on having a dominant retail strategy, keeping that evolution in mind, and that fickleness, if you will, in mind.

We also have our annual investment plan. So with our annual investment plan, our partners, whether they're retail, office, multi-family, they come in and see us at least once a year, and go over the portfolio. We discuss the needs in our existing portfolio and the opportunities going forward.

With our partners active in the market day-to-day, they give us real-time information in terms of where to tilt the portfolio and where not to. And they're incentivized to provide that information through their profit-sharing payments and whatnot.

As we look ahead, we are in the midst of doing a fairly robust review. And our focus is to always improve the quality of our retail portfolio. And if there's any opportunities for us to do that, that's what we -- that's really the underlying current, and focus in our retail view today.

COMMITTEE MEMBER YEE: Thank you.

CHAIRPERSON JONES: Okay. Ms. Brown.

COMMITTEE MEMBER BROWN: Thank you.

Early in the presentation, you talked about disposition of non-core assets. So can you just explain that to me in layman's term? Is that like selling things? And what is non-core versus core?

Thank you.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA:

Non-strategic assets, some non-core assets we own are strategic, but an example of some of the sales that we've executed. First, we had a very large commingled fund -- opportunistic commingled fund program. It was north of $3 billion. We have disposed of that very large complex portfolio, very high fees, and was a drag on our performance for a number of years.

We also recently disposed of a timberland holding that was tied up with very onerous leverage and difficult supply agreements that made -- that had some unique circumstances in our structure, that -- so these are a couple of examples.

And the underlying -- again, the underlying current, as I mentioned to Ms. Yee on retail, is focusing on properties and infrastructure projects that align with the role. And that role being stable cash flow, diversification of equity risk, and inflation protection.

So in terms of how we call our portfolio, it really has that in mind.

COMMITTEE MEMBER BROWN: Great. And I know we talked at great detail about the timberland sale. So would I find the other dispositions in some of the charts and details we get maybe in closed session, is that where I would find them, or are they listed anywhere?

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: Some are. Some are done just through natural attrition from our port -- from our core partners.

COMMITTEE MEMBER BROWN: Okay.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: The more significant ones, such as the timberland one and the commingled funds that I highlighted, these would be found in the reports that go to the Board.

COMMITTEE MEMBER BROWN: Great.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: But in our annual investment plan, one of the other features that comes up as I mentioned earlier, when our partners come and they don't just say this year we see an opportunity pipeline of X million dollars for us to pursue. They also give us information about our portfolio, and may say there are four properties that we believe are the right time to exit from, and-cash out.

They would no longer will be -- they're no longer positioned to be aligned with the role and what you're looking to achieve

COMMITTEE MEMBER BROWN: Great. And so that -- those dispositions totaled about 8.5 billion, is that what I heard?

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: The dispositions are probably not the full 8.5 billion, because what we've included in that is the change in value of the portfolio.

COMMITTEE MEMBER BROWN: Okay.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: But it is the lion's share.

COMMITTEE MEMBER BROWN: Great. Thank you.

MANAGING INVESTMENT DIRECTOR MOUCHAKKAA: You're welcome.

CHAIRPERSON JONES: Okay. Thank you. So I see no further questions from staff. And before we go to Item 7d, we have a request to speak on 7c. Mr. Michael Ring, if you can come up. You will have three minutes, and take your seat here at my left, end of the dais, and the clock is right below me here, and you know the drill.

MR. RING: I know the drill.

Good morning, Chairman Jones, Committee members. Michael Ring, Service Employees International Union. Just a brief comment that I think your staff is not taking as much credit as they should for one component of your real -- with your estate portfolio, which is that CalPERS has a long-standing responsible contractor policy, and is someone who represents members on both sides of your equation, members in the system, and members in the real estate markets who provide janitorial and security contracting services.

I think CalPERS is at great advantage compared to many other institutional investors we work with, because the responsible contractor policy is baked into your process from the beginning. I don't have to share with this Committee how many issues you mitigate and risks you mitigate from worker, community, or tenant concerns that your partners and your own staff have much greater control over and an ability to ensure a positive outcome by having it on the front, and everyone IS considering this from the very beginning.

It's very difficult for investors when they find out on the back end that the quality and value at the building is being threatened because someone is being sexually harassed, someone is being -- not being paid, someone is not providing the services that they were contracted for. So I just wanted to emphasize how important this Committee's work has been in having this policy, and how great its been to work with your staff in implementing the policy across the years.

Thank you.

CHAIRPERSON JONES: Okay. Thank you very much. And we appreciate you coming here to share your comments with us today, Mr. Ring.

Now, we will go to 7D, the Consultants' Review. We have Wilshire Associates, Pension Consulting Alliance, and Meketa.

Who's going first? Wilshire?

MR. JUNKIN: Which order would you like for it to go?

CHAIRPERSON JONES: Wilshire you go first.

MR. JUNKIN: Happy to. All right. That's good, because I think mine may be the shortest.

So we've provided an opinion letter, and no additional slides, but we make comments both as the general consultant on the overall Real Assets Program and then as the forestland consultant, so I'll phrase my comments in those two directions.

Overall, we believe that the Real Assets Program is being run in exactly the way that you want from a strategic standpoint. It's focused on cash flows. It's focused on inflation sensitivity, whether that's real estate or infrastructure --

CHAIRPERSON JONES: Pull the mic towards you.

MR. JUNKIN: -- whether that's real estate or infrastructure, or at this point forestland with the changes in the portfolio there.

So from a very high level standpoint, we're pleased with how the Real Assets Program is going. If you look on page two of six, 224 of mine, you can see the top chart is rolling correlation with the growth assets of CalPERS or the income portfolio of CalPERS.

This is supposed to be a diversifier. You can see more recently it has been. There's that spike at the beginning, which it's fair to say is a crisis. And during a crisis, all assets tend to correlate towards one. So that's not to say that if there was another crisis now, we wouldn't see the same kind of spike. I think it would be lessened by the changes that you've made predominantly in the real estate portfolio over the last decade.

Moving onto the forestland portfolio, there are a few graphs in here about timber prices. We've covered this I think pretty extensively over the last couple of meetings, so I'm not going to spend a lot of time here. You had a portfolio up until the sale of Crown Pine that was really focused primarily on south eastern timber. If you look at the prices and you sort of step back a little bit and try to discern a pattern, you can see southeastern timber was probably flat at best.

Northeastern was probably trending up a little bit, and then northwestern was up pretty significantly. And so that was the headwind that the portfolio faced. The sale of Crown Pine has really changed the structure of the forestland portfolio.

First off, it's not nearly as big.

Second, the debt issues that plagued Crown Pine have been removed from the portfolio. There's essentially zero debt at this point on the portfolio. And so staff now has plenty of time to make decisions about whether or not the remaining assets should be retained, should be sold at some point in the future, given the changes in the overall benchmark for real assets, which it now has a real estate only benchmark, meaning infrastructure and forestland essentially have to compete with real estate, it could be the case that staff decides these remaining timber assets are competitive and should remain or they may decide it's not an important strategic part of the ongoing part of the Real Assets Program.

So I'll stop there. That's a pretty high level review of our written comments. Happy to take any questions.

CHAIRPERSON JONES: Okay. Seeing no questions on that item, we'll go now to PCA.

MS. FIELDS: Good morning. Christy Fields, PCA real estate

(Thereupon an overhead presentation was presented as follows.)

MS. FIELDS: I was actually happy to hear Paul's closing comments describe real estate as not eye-catching. I'm really happy to be not eye-catching at this point.

I think staff has done a great job of describing the program over the last year, and over the last 10 years really. And I was just here with my colleague David last month, speaking about the performance. So I won't spend a whole lot of time on that.

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MS. FIELDS: I would like to just reiterate the point about the focus of the program being on core portfolio -- core properties, and those being really high quality income-producing assets in durable locations.

And you can see the results of those. If you look particularly at the five-year in the top table, these are returns for the different risk subsectors in the portfolio, and you can see the very strong performance of the core program.

The bottom table peels back on the onion just a little bit more in that it focuses on the income returns. And you can see that overall, the program generated an income return in line with the benchmark, but that the core portfolio has produced an even stronger income return. And as Ted mentioned in his earlier opening comments, that is one of the main objectives of the program, so delivering strongly on those objectives.

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MS. FIELDS: I wanted to touch as most people do on the Investment Beliefs, but just to acknowledge what a strong tool this has been for the system in whole, but for the Real Assets Program. Specifically, it's been very deeply and well integrated into the investment decision-making process, and is a strong -- it's one of the strengths that I mentioned later in the SWOT analysis as a really kind of guiding light for the whole program, along with a very specific role of the program.

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MS. FIELDS: I don't have my buddy Sarah Bernstein who's our ESG expert, but I did want to highlight all the many ways, some more nascent than others, that the program is really beginning to integrate -- integrate all these ESG objectives into decision making and portfolio management efforts.

CalPERS continues to be a leader in U.S. institutional ESG efforts. And it's -- as we've mentioned before, real estate is one of the asset classes with the strongest reasons for and the most benefits to gain from these ESG integration efforts.

You're particularly advantaged by your business model, which -- through which you invest in -- in a smaller number of separate account structures over which you have control in comparison to other investors who are not able to use separate accounts to the extent that you do, and are -- have to gain most of Their real estate exposure through closed and commingled funds over which they do not have as much control. And this has allowed you really to continue your leadership efforts in the ESG area.

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MS. FIELDS: I'm going to skip a little ahead, so I don't take up too much time, to the SWOT analysis on page nine of our deck.

You'll notice, if you read through these, that some of the attributes are both -- can be scene both in a positive and in a less positive way. Scale is kind of an obvious one, and we've talked about that before. But it really gives you the ability to pursue the business model that you do, and it also gives you -- the size of your portfolio gives you tremendous market insight just given the number, and the breadth, the geographic distribution of your portfolio.

Scale on the other hand is -- can be a challenge when you're trying to be innovative. And I think Paul's discussion of doing -- of pursuing innovation in small and targeted and disciplined ways is the right response.

Also among strengths, I think in addition to the strong purpose and Board direction, really again is an incredibly talented and diverse team, under a very steady hand with the MID very disciplined, and the culture of the team is very positive and collaborative. And I think really inures to the Benefit of the system.

I think on weaknesses here, the other one I'd like to highlight is -- and some of these are not necessarily specific to CalPERS, but rather to market conditions currently. But when I was here in August, we talked a bit about your -- the opportunities present in your existing portfolio to deploy capital to either add additional space or to improve the quality of the assets, and to increase your revenues generated by those assets.

The cost of maintaining and improving those assets are increasing. So some of the returns on that -- the deployment of that capital may not be as large as they might have been in the past. But that's not just impacting CalPERS, that's impacting all real estate investors.

On the opportunity side, again, your business model and your strategic partners offer a tremendous opportunity, in that they have very deep footings in their individual sectors, and can do a lot of working of the individual assets at the operational level to improve the net operating income and the profitability. And in this market where acquisition, where acquiring assets is so competitive and so fully priced, being able to do that is -- is a specific benefit to CalPERS.

Amongst the threat -- the threats, we put organizational change on there. I think just to recognize that there's been, over the past 12 to 18 months, a fair amount of change at senior leadership positions. It looks like the system is addressing that well. Very excited to hear about Ben, by the way.

And then one of the other threats, and I think the Fixed Income Program review touched on it also, is just the pace of change, technology, and some of the disruptive forces that are -- that are impacting real estate, as well as many of the other industries.

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MS. FIELDS: And on the next page, you know, these are just a few of these. And I think staff is spending an appropriate amount of time continuing to study these, and research these, and review their portfolio holdings in light of the way that these dynamics are influencing the way people interact with real estate and making sure that you have a very high quality portfolio today and in the future.

I think I'll stop there.

CHAIRPERSON JONES: Okay. We have a couple questions. Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you. Thank you for a really comprehensive review, and I -- I'm am -- thank you very much also -- and Sarah who's not here -- for the ESG assessment. And it was very comprehensive. So thank you very much, but also I had a couple of questions.

One, under threats, you have -- I can speak

English, proliferation of new bank lenders less -- new non-bank lenders and less regulation, so -- and then higher leverage and more speculative supply are historic harbingers of real estate downturn. So for the first one, I don't understand the new non-bank lenders, and then the second one, if you could explain for us.

MS. FIELDS: Certainly. So non-bank lenders include life insurance companies, the commercial mortgage backed security market, and a lot of the debt funds that have proliferated recently. And we put this in here back in 2007 in advance of the global financial crisis really, real estate lending was all about the banks.

And today, non-bank lenders have made big inroads into commercial real estate debt markets. And so roughly, the real estate lending market is now roughly equally divided amongst banks, Life Cos, the CMBS market and then the debt funds. And so there is now a significant portion of that market that's not regulated as the banks are.

And so generally, leverage is still quite moderate compared to the last cycle. That said, we're seeing kind of anecdotal evidence of some loosening of covenants, and some easier lending in the non-bank space. And so that's just something that we're continuing to monitor, since it was a significant part of the dislocation in the last cycle.

COMMITTEE MEMBER TAYLOR: So we're moni -- or you're monitoring to make sure that we don't end up in the same place in losing money not necessarily because they have direct impact to CalPERS employees.

MS. FIELDS: That's absolutely right. And of course you are in a much less levered position than you were then, and just your investment strategy.

COMMITTEE MEMBER TAYLOR: Right.

MS. FIELDS: It does not emphasize leverage the way some other investors do. So, yeah, there will be less of an impact.

COMMITTEE MEMBER TAYLOR: Well, yeah, it would be nice to make sure we do monitor that to make sure --

MS. FIELDS: Yep.

COMMITTEE MEMBER TAYLOR: -- we kind of have a heads up if something like that were to occur again.

And then the higher -- is that what you were talking about, the higher leveraged more speculative supply as well?

MS. FIELDS: Yes, those are -- you know, supply and real estate gets really dislocated when there's excessive supply added, and then when there's additional leverage. And so we've seen certain markets with certain property types, where there has been quite a bit of new supply delivered, multi-family markets and some office markets.

And again, it's -- it's nothing like we saw in the last cycle, but we're very late. We're long in the tooth in this one, and we're just, you know, starting to see some of these dynamics a little bit, and just keeping an eye on it. So if these were -- this is not really a red flag right now, but, you know, they're classic real estate -- real estate disruptors, and so things that we again monitoring.

COMMITTEE MEMBER TAYLOR: Thank you.

MS. FIELDS: Um-hmm.

COMMITTEE MEMBER TAYLOR: I do appreciate that. And then I also just wanted to kind of reiterate what Mr. Ring had side earlier, our Responsible Contractor Program has been very successful. I hear a lot about it when I go out to events. And I -- so the fact that you guys are helping us with that, I do appreciate. I'm also very impressed over the rest of your sustainable investment in the real estate market, and -- I mean, it's just -- it's just important we think about what properties we own, and where we own them, and how much impact that may have in the future for flooding problems, or, you know -- I mean, from what I understand Miami is constantly under water at this point.

So, you know, I think it's very important that you guys covered this under this portfolio. So I do appreciate that.

And then I had one more question. As you -- technology changes space use disruption and innovation are influencing commercial real estate. So what's biophilic design?

(Laughter.)

MS. FIELDS: It is a design that emphasizes the human need for connection with nature, and for those connections and how they feed and feed us, and support our productivity. And so it includes -- its's a -- it's a very all-encompassing type of thought around design, but it includes the use of natural materials, of natural light, of shapes that are found more universally in nature, spheres, and other types of shapes.

And it's really becoming an interesting, and I think it's going to be an important movement in the way new -- new real estate assets are designed and integrated into our cities.

COMMITTEE MEMBER TAYLOR: Okay. Thank you.

MS. FIELDS: Yep.

CHAIRPERSON JONES: And while you're on that page, what's gig money?

MS. FIELDS: The gig economy basically refers to a labor market that is more characterized by short-term or contract type employment, rather than permanent employment.

CHAIRPERSON JONES: Like Ubers.

MS. FIELDS: Like Uber, yeah, exactly.

CHAIRPERSON JONES: Okay. Thank you.

Okay. Ms. Mathur.

COMMITTEE MEMBER MATHUR: Thank you.

In your overview of the SWOT analysis, which is on page nine, you -- the way I heard you talk about innovation was as a strength that we were implementing small, demonstrable, innovative techniques. But the way you've listed it is as a weakness, and I'm just curious what you meant by innovation as a weakness.

MS. FIELDS: Yeah. I mean, I think you are doing some interesting things in the Emerging Manager Program, in the ESG integration, but it's difficult to do a lot of it. And it's difficult I think also -- and innovation also applies to, I think, investment strategy. And so it's difficult for you to move into sectors that are simply -- you can't put two or five billion dollars in some of these nicher sectors that have been very popular in the last four or five years and have been throwing off strong returns. It's more difficult for you to access those types of properties.

So I agree that where Paul and his team have picked and choosed to apply their energies and to try and do some things new for the system, it's tougher. It's just tougher.

COMMITTEE MEMBER MATHUR: So is that more -- so that's -- that's related then really to scale --

MS. FIELDS: Yeah.

COMMITTEE MEMBER MATHUR: -- which is the first --

MS. FIELDS: That's correct.

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

CHAIRPERSON JONES: Mr. Slaton.

COMMITTEE MEMBER SLATON: Thank you, Mr. Chair.

Coming back to page 10, the chart -- the biophilic design. So, you know, that's an opportunity for future projects. But what is it's impact on the current projects that did not take that into account? And what do you see as the impact on our existing portfolio.

MS. FIELDS: And I think that's exactly why I put it on here, because it's new, and I think staff is really -- given how large your portfolio is, their energies are spent on deploying new capital, but also a lot of their energy is spent on exist -- management of the existing portfolio.

And really what they do and what they have developed a good discipline around is doing their best to see around the corner and what's coming, and adjusting their portfolio, either through new acquisitions, or through dispositions, or renovation to be aware of these things that are coming. Because the younger generations, the millennials, we talk about them all the time, really interact with the built environment in a different way than we did.

And so I think this is just one of those things out there that I think is going to become a much more prominent piece of new design, and so important to have it on everybody's radar.

COMMITTEE MEMBER SLATON: Okay. And then two of the other pieces of the chart are artificial intelligence and machine learning. Could you help me understand the difference between those two things?

MS. FIELDS: Yeah. I'm going to cheat with my notes, because I had to see. So artificial intelligence is actually kind of the pithier end development of computer science that allows machines to do things that have traditionally required human intelligence. And so kind of easy ones are speech recognition and those type of things.

And you're seeing that a lot, kind of the easiest applications to real estate are smart business -- are smart building management systems with all the sensors and the monitoring.

The machine learning is interesting and it's really just becoming important to real estate, primarily because real estate has always been a very fragmented industry, but also because as real estate practitioners, we're all a little bit -- there's a certain amount of inertia to the adoption of data, right? I mean, real estate used to be who could have the secret -- the best secret the longest, right, to get your building developed before somebody else's did, or get your lease signed.

And everything -- that's all changing. And so art -- machine learning now is where they are using real estate data to improve investment decision making, so they're actually creating machines that they feed giant data sets to that then learn from the data without being explicitly programmed. And the way that's getting applied to real estate is kind of predictive forecasting.

You know, what will returns in the multi-family space in Sacramento look like in a year, or three years, or five years? And so it's really fundamentally changing the way people are investing in real estate, but it's fairly -- fairly new.

COMMITTEE MEMBER SLATON: Interesting. Okay. Thank you.

CHAIRPERSON JONES: Okay. Yeah. Mr. Eliopoulos.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Just use this as a opportunity for a commercial sort of plug and announcement for our Pillar 3 in our private equity plan. You know, one of the driving forces and factors there is to access these technology companies that will be extreme disruptors across different sectors, including real estate.

Because I think what the essence of Mr. Slaton's question is, yes, our current portfolio is vulnerable to that level of disruption to the extent that we're not innovating and changing along the way.

So, one, having a portfolio with access to that sort of knowledge and data around the technology disruption that is coming is important for the return stream that it will bring to us potentially, but it's also important to us for the information that we'll receive and data that we'll receive from the Pillar 3 portion of our portfolio to use it to infuse into our real estate portfolio in this case, so that we can assess the level of change, and the pace change, and protect ourselves on one side of the portfolio and take advantage on the other -- on the other side.

CHAIRPERSON JONES: Thank you.

Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

Ted, your question -- or your comment just triggered something in my mind. Maybe it's a question for Meketa. And it has to do with the fees, and whether you believe there's greater transparency between the infrastructure GPs and LPs relative to fees than there is typically in private equity funds.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I can just start, and then turn it -- maybe segue over to Meketa for sure. We definitely have better transparency -- well, I don't want to say better trans -- the fee --

COMMITTEE MEMBER YEE: Different, yeah.

CHIEF INVESTMENT OFFICER ELIOPOULOS: The fee approach in our separate accounts is very simple, and very straightforward, and something that we can monitor quite explicitly. And with fewer partnerships, there are things that we can do in real-time.

COMMITTEE MEMBER YEE: Um-hmm.

CHIEF INVESTMENT OFFICER ELIOPOULOS: The private equity fee structure in these commingled funds, as we've discussed, have all these different fees associated with it, so it's more complex. And to the extent that we have hundreds and hundreds of partners, it's, you know, more cumbersome and time-consuming to -- you know, to evaluate the fees on a real-time basis. So for our -- for CalPERS experience, that's the main difference in terms of what differences there are in the infrastructure market, or private equity market, or real estate market. That's -- you're right, that's a better question for Meketa.

COMMITTEE MEMBER YEE: Okay.

MR. McCOURT: Steve McCourt, Meketa Investment Group.

CHAIRPERSON JONES: Excuse me. Maybe, Ms. Yee, we'll have him make his presentation, because he's going to talk --

COMMITTEE MEMBER YEE: Oh, I'm sorry. Yes.

CHAIRPERSON JONES: Yeah, he hasn't presented yet.

COMMITTEE MEMBER YEE: Yes. Okay. I'm sorry.

CHAIRPERSON JONES: So but before we do that, why don't we take a 10-minute break and reconvene at 11:25. Okay.

(Off record: 11:14 a.m.)

(Thereupon a recess was taken.)

(On record: 11:26 a.m.)

CHAIRPERSON JONES: I'd like to reconvene the Investment Committee, please.

Okay. We'll reconvene by calling on Meketa and then after Meketa we'll call on Ms. Yee.

MR. McCOURT: Thank you. Steve McCourt with

Meketa Investment Group. To my left Lisa Bacon. I will provide a few -- very few summary remarks on our annual program review, and Lisa will go through more of the details.

We were just presenting last month to you the semiannual performance reviews of the performance of this portfolio as, you know, has been very, very strong for the one-year period, the return was 20.6 percent, and for the trailing 10 years, 14.4 percent. So well beyond any benchmarks that have been set. We've communicated to Paul that that's barely good enough for us. So nice work, Paul.

The net asset value and the size of the program continues to grow at a nice clip. During the last year, the net asset value increased from 4.3 billion -- from $3.8 billion to $4.3 billion, an increase of 14 percent.

The program is in compliance with all key parameters. Related to various policies that govern the infrastructure program. The program is -- is well staffed.

The most significant policy change in the program over the last year relates to the target allocation to infrastructure, which through the end of the prior fiscal year was one percent. Going forward, infrastructure does not have a Board-assigned target allocation. It now is a discretionary component of the real assets program. As Paul mentioned, staff is happy to provide detail on their thoughts of growing the program and evolving the program in the absence of that specific target under closed session.

So with that, let me hand it Over to Lisa for more of the details.

MS. BACON: Thank you, Steve. Lisa Bacon, Meketa Investment Group.

So as Steve mentioned, since we were just here in August, essentially the performance numbers that we covered then are the same as we have covered in our letter today for our remarks here in the open session, I thought I would focus on some of the charts that we prepared for you to take a look at the historical evolution of the program, so that we can get a better understanding of where the program is today and how it got there.

And so I'll direct your attention, first, to page three, exhibit 1. And so the bar chart here on the left side of the chart shows the NAV, and then on the right side of the chart with the line going up, that shows you the percent of the total fund.

And so it just -- in looking at the picture, you can see from the period '07 to '13 that the program kind of got a bit of a slow start, increasing a little bit, but really there's sort of a demarcation when you start looking at 2014.

Moving on. In 2014, the program crossed a billion dollars for the first time. In 2015, it crossed $2 billion. In 2017, it crossed three. And this year it crossed $4 billion. And so as Paul mentioned in his remarks, the program has made a lot of progress just in the last couple years. And so from 2014 to 2018 that is a doubling of the portfolio. And the thing that is also notable during that period of time is the total fund was growing also. And so to double your infrastructure portfolio, you had to more than double the actual exposure.

Turning your attention to the next page, on Exhibit 2, gives some background on where those exposures came from and how they came about. The bars here show the amount of commitments, and so not deployment, but just commitments either to funds or to accounts in terms of what a manager would have the authority to deploy.

And each separate chunk of those bars is a different manager or a different account. And the height of the bar shows how much was committed. Similar to the last chart, there's two different axes going on. And so line here shows you the cumulative commitments over that period of time. And so similar to the chart that we just looked at, where there's a demarcation where there was a much steeper increase in the NAV, you can see around 2013 that the line of cumulative commitments starts to steepen appreciably. And currently, you're sitting right now at about five billion in committed -- in commitments.

One of the things we see when we look at this is that the commitments are not as consistent as far as vintage years that you ordinarily would like to see. And the amounts -- and the amounts of the commitments are not -- not what are necessary to maintain a target exposure.

I think over the current year, and the year past, as staff has talked about and may talk about more, they have a number of initiatives that are going to position them better to take -- to have other vehicles and more commitments in place that will improve the vintage year profile.

In terms of investment activity this year, which we did not remark on in August, we noted the Rocky Caney Wind investment, which is one of the largest investments. There were some smaller investments by existing managers that we noted occurred, but didn't really profile them. And so this is -- in total a 349 megawatt asset with operations in Kansas and Oklahoma. And it makes a meaningful addition to the renewable infrastructure portfolio, moving that from 16 to 21 percent.

In terms of managers, drawing your attention now to page five and the chart, this is again similar. We wanted to take a historical perspective of the different aspects of the programs. And so this chart shows the percentage of the total NAV over the period of years that are deployed through funds, separate accounts, or direct investment.

And as the bars go across the period, you can see that the percent managed to -- managed in funds decreases over that period of time, and the amount managed through direct investment and accounts increases over that period of time. And so today, you're sitting at a total of eight general partners. You've got three in direct, two in accounts, and eight in the commingled funds. And that is consistent with the policy preferences in the strategic plan.

And then finally just to make a few comments on future portfolio evolution, as Steve mentioned and as you all are well aware, the previous -- the previous target for infrastructure which was one percent under -- underneath real estate but specified is now embedded within real estate's 13 percent plus or minus five.

Staff has been working on some strategic planning and pacing planning. And as I mentioned, and Paul had mentioned, working on a number of initiatives that will give them more capacity and a couple different kinds of vehicles. But in order to maintain the existing exposure, if that's desired, and even increase it, there are a number of things that are probably necessary to engage in at least as much as the staff has already been doing, and perhaps a little bit more.

We've mentioned a few of these here. These are, you know, obvious things that people have already talk -- been talking about in terms of more separate accounts, keeping with the direct targeting, possibly looking at some club investments where three or four like-minded, like-size investors get together essentially in a separate account of three or four, which provides some advantages for scale and also diversification.

Also, looking very selectively at commingled funds. There may be some geographies or strategies where going with a commingled fund manager is really the best risk-adjusted return, and provides the best access to deal markets. For example, if there were a desire to go into Africa more, that might be a geography where finding a manager that had been operating and investing there for, you know, 15, 20 years would be -- would be the way that you all would want to start out at least.

Also, looking at some more co-investment opportunities, those can come by themselves, but they also can come along with those commingled funds, and that's a nice way to get access to those.

And then finally looking perhaps a little bit more at value-add and opportunistic. In the first chart that I showed you, the bars are colored to show the core, and the value-add, and opportunistic. And as Paul mentioned, you can really see both the percent and the absolute amount that has been increased in the core space. By the same token, there are a lot of interesting strategies in the value-add and opportunistic space that might be attractive with respect to access, and also with respect to risk-return profile.

As Steve mentioned, with respect to the investment policy, as we mentioned in August, everything is compliant there.

And I think that's probably the extent of our remarks for right now. Happy to take any questions.

CHAIRPERSON JONES: Okay. Thank you.

Ms. Yee, would you push your button.

Okay. Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman. And this is really more of a -- kind of a question for future thought, but -- and I appreciate the response, Ted, earlier. But the question has to do with just fee transparency, which I think we want to see more of across the board. And my original question was whether there was greater fee transparency between infrastructure GPs and LPs than we typically see in our private equity funds, and understanding that there's a distinction between looking at, you know, tracking fees, whether we have separate accounts or commingling of funds.

But I'm also just struck by the tools that we might have available to us to do a better job of that. And perhaps this is more appropriate when we talk about the PE model again. But particularly with Pillar 3 as we talk about getting into the technology space about is there an opportunity to have some machine-learning application that could actually enhance that particular task of tracking fees?

So maybe that's more appropriate. But I think as a -- did you -- I don't know if Meketa has any other thoughts to add to what Ted had identified as, you know, kind of a distinction here.

MR. McCOURT: Thanks. I largely agree with Ted. The significant difference in transparency in fees doesn't really relate as much to private equity versus infrastructure. It relates to fund vehicle types, so funds versus separate accounts. Separate accounts generally provide you a lot more opportunity for both better transparency of fees, negotiation of fees, and reporting of those fees.

One could argue that infrastructure assets in general are a little less complex than private equity assets. And so generally more simple assets lead for less opportunity for complex fee schedules. But the -- but the big transparency difference is going to be in the vehicle type.

COMMITTEE MEMBER YEE: Okay. Thank you.

CHAIRPERSON JONES: Okay. Thank you.

Seeing no further questions. That completes that item.

We will go to Item 8a, Review of Investment Policy Update, and information item.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Mr. Chair --

CHAIRPERSON JONES: First reading.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Yes, it's the first reading. Kit Crocker will be presenting this from the Investment staff.

CHAIRPERSON JONES: Okay. Thank you.

Kit.

INVESTMENT DIRECTOR CROCKER: Thank you. Kit Crocker, CalPERS staff. Item 8a is a first reading of staff's proposed updates to the Total Fund Investment

Policy and the Real assets program Investment Policy.

Staff brings policy revisions before this Committee at various points throughout the year. I just want to point that out for general context. While these are typically not ad hoc revisions. In fact, they are -- follow a fairly set annual review cycle.

For example, the more general updates to the Total Fund Policy, which governs, as you know, over a dozen investment programs and functions, would typically arise during our annual, if you will, well-baby checkup for the total fund, during which a broad range of staff from across the entire Investment Office review and identify any needed updates to the total fund umbrella Investment Policy.

This annual checkup normally starts in the winter months internally, and if changes are needed, culminates in a presentation to this Committee in the spring. I mention this mainly because that's not what we're bringing to you today, which I'll explain in a minute.

The program policies are also reviewed annually in conjunction with their associated annual program reviews. And these program reviews typically start in August of each year and conclude in November or December. And we're in the midst of wrapping those up now.

For this year's review cycle, staff from the

Trust Level Portfolio Management, or TLPM, and Real Assets teams required -- identified the required changes. And just so you know, the teams from Opportunistic Strategies, Global Equity and Global Fixed Income also went through the exercise of reviewing and were involved, but have confirmed that no changes are indicated for their program areas at this time.

So now turning to today's specific item, this is a first reading of the proposed changes arising out of the two recently concluded annual program reviews, namely TLPM, which was concluded this past August, and the Real Assets Program review, which is on the agenda as you just heard for this month.

Now, while these changes are, in staff's view, relatively minor, we consider it important that the policies be as accurate and up-to-date as possible to reflect this Committee's direction to staff.

For the Total Fund Policy changes today, they come in essentially three flavors: Changes related to recent organizational changes within the Investment Office, namely the transition of key analytical, monitoring, and reporting functions from the TLPM team to the IRP team; and updates to legacy content to reflect the latest and greatest. This includes items like changing the review window used to evaluate our realized tracking error, which, as you've noted, we're proposing that the policy reflect five-year review -- or rolling evaluation rather than three years to reflect current practice.

And finally -- thirdly and finally, for several investment and operating responsibilities, we're proposing language updates just intended to better reflect our focus on holistic portfolio management versus individual asset classes and isolation.

So then finally, we're also taking advantage of this opportunity as we always do to continue with our efforts to increase clarity and consistency within the policies. So, for example, changes in that category include the collapsing of duplicative statements into single concise items and minor phrasing changes to improve ease of reading.

Regarding the Real Assets Program Policy, you'll see we've explicitly called out the real assets strategic plan as a key consideration for staff's investment decision making. For the net asset value thresholds, the Committee previously approved for the infrastructure and forestland portfolios, we've clarified that as is the case for the geography and risk classification, leverage limits will apply only when the portfolios reach a certain size to offset the comparatively lumpy nature of the infrastructure and forestland portfolios.

So again, this is a first reading. We're seeking your feedback. And with that, I'll pause for any questions, and also invite PCA, Meketa, and Wilshire to comment.

CHAIRPERSON JONES: Okay. Ms. Mathur.

COMMITTEE MEMBER MATHUR: Yeah. I just have one question. And if -- I'm looking at attachment four page seven of eight under the leverage component. You've changed the language from "limitations" to "parameters". So instead of reading, "Leverage limits are imposed at both the program and portfolio level", you've eliminated that and change it from -- to -- and now it says, "Leverage parameters shall be measured on a loan-to-value ratio". But then in the next sentence you added, "The permitted leverage limits are as follows:" So I'm just con -- I'm just a little confused about what's a limit, what's a parameter, why are we using that -- you know, two different terminologies? Do they have different meanings and intentions?

INVESTMENT DIRECTOR CROCKER: And I think the choice of the word "parameter" was intended to reflect that we have both maximums -- you know, the loan-to-value ratio was a maximum, whereas the debt service coverage ratio is a minimum.

You raise a good point though then, that final lead-in language we go back to limits. I'd be happy to change that to parameters.

COMMITTEE MEMBER MATHUR: Okay. So what you really means is parameters and -- okay.

INVESTMENT DIRECTOR CROCKER: Yes. Yeah.

COMMITTEE MEMBER MATHUR: Then that's fine. Yeah, if you'd change that to parameters then that would solve the problem.

Thank you.

CHAIRPERSON JONES: Okay. Seeing no further questions from the Committee members, either Meketa -- this is an information item. There's no need to -- yeah. Meketa, Wilshire, any -- have any comments?

MR. KAZEMI: Ali Kazemi from Wilshire Associates.

CHAIRPERSON JONES: Okay.

MR. KAZEMI: Just wanted to comment that we did review the changes that staff had proposed and are supportive of those changes as can be seen in our letter to the Board.

The one comment I'll make is in our initial review of the changes, some of the language that was changed was in regards to what the appropriate levels of risk and leverage levels would be, and how they would be determined going forward. Our comments back to staff was that having that level of ambiguity could be problematic in the future, and so we felt that there would be -- it would be appropriate to maintain some level of specificity to regards to what those levels should be.

Staff took those comments, made further revisions, and we're fully supportive of the draft that you have in front of you now.

CHAIRPERSON JONES: Okay. PCA.

MS. FIELDS: Christy Fields, PCA. The proposed changes to the real estate portions of the policy were all very small and clean-up in nature, so we have no issues with it and are supportive.

CHAIRPERSON JONES: Meketa

MS. BACON: Lisa Bacon, Meketa Investment Group.

As with the others, we had an opportunity to review a draft. We did have a few comments on that. Everything we felt strongly about was reflected in the draft that you have in front of you, and we don't have any comments besides what are in our letter. We are supportive of the changes.

CHAIRPERSON JONES: Okay. Thank you. We have a question. Mr. Moore.

ACTING COMMITTEE MEMBER MOORE: Hi. My question has to do with the affiliate fund benchmarks. It looks like a couple of them have changed from a FTSE-based benchmark to an MSCI benchmark. What's the reason for that?

INVESTMENT DIRECTOR CROCKER: That was to align with State Street's benchmark.

ACTING COMMITTEE MEMBER MOORE: Thank you.

CHAIRPERSON JONES: Okay. No further questions. Thank you very much. We now will move to item 9, information agenda item. CalPERS Consultant Public Fund Universe Comparison Reports. Wilshire Associates.

(Thereupon an overhead presentation was presented as follows.)

MR. JUNKIN: Good morning again. Andrew Junkin with Wilshire. I just need to find the right page. Bear with me just one moment.

Oh, I could just go from this. Perfect. Problem solved.

I want to start by saying this is an annual report that we provide that compares CalPERS to other large pension funds north of $10 billion. And I want to start by saying it is a very interesting data point, but its usefulness I think is limited, because included in this universe are some funds that are just not at all like CalPERS, right?

There are some funds that are, I know, 30 percent funded and they have a very different investment strategy, and they should. There are some that are 98 percent funded, and they also have a very different investment strategy. So it is -- it is in some ways sort of a report card of what the pension world is doing and how CalPERS slots into that. But I would not take this as a measure of success or failure. It's just another data point that you should have, but it's probably not actionable.

And we've talked about it, and I'll bring it up again. I think the most obvious way that CalPERS at 360, 70 billion, depending on the day, is different than a $10 billion fund would be the ability to scale into alternatives.

But a $10 billion fund you can pretty much do anything you want to when it comes to alternatives. You could be 20 percent private equity. That could be your target. You might not get there. There's no way CalPERS could ever do that, right? So it's just going to be different.

So having said all that, I'm going to bounce around. I am going to apologize in advance. The graphics on some of these pages are abysmal, and in some cases it's impossible to even see the little letter that represents CalPERS. That is -- this was not intended to be an eyesight test. I've zoomed in as far as I can on my iPad, I can't -- I still can't make it out.

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MR. JUNKIN: So starting on page two here -- and now I'm going to have to pull up my report, because I -- the notes that I made to myself require me to be able to zoom in, but I'm there.

If you look at the five-year return, the way this page works, the top is the grass, the blue -- light blue band is the 5th to 95th percentile. So there are some observations that are outside of the universe technically, otherwise the bars stretch to be so big as to potentially be meaningless.

The blue square in this case is the Wilshire 5000. The green triangle is the Barclays government credit, so high quality fixed income. And then the red T would be CalPERS.

If you look at the five-year, the seven-year, the 10-year ranking down at the bottom in the table, the number in parentheses is the ranking. So the five-year ranking for CalPERS is in the 60th percentile. The seven-year ranking is in the 55th percentile. The 10-year ranking is in the 90th percentile.

Now, we now what's in that 10-year ranking that next year won't be there. A pretty significant hit in the real estate portfolio. So that's kind of the biggest difference between the three and the five-year -- sorry, the five year and the seven-year numbers.

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MR. JUNKIN: Moving on to page four, this is five-year risk versus return. Again, this is one of the pages where you really can't see the letter. I think it's right under the line, just a little bit to the right. So a little bit low, and a little bit right, but pretty close to median in terms of risk -- in terms of an absolute risk number, and pretty close to median in terms of return. As we just saw on the prior page, it's really the 60th percentile.

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MR. JUNKIN: I think page five, which happens to be the clearest page in terms of our graphics is also probably the most important page. And so this is actually a look. This is not returns. This is the actual asset allocation of CalPERS compared to that peer universe. And a couple of things sort of stand out right off the bat. One is alternatives where you can see CalPERS is significantly below the peer median. Sort of in the bottom quartile, again, in terms of allocation not returns. So bottom quartile just means you have a lower allocation.

Now, alternatives includes private equity, but for the rest of the universe it also includes things like hedge funds and risk parody. Two things that you just done have significant exposure to. That's one of the reasons why I think you're sort of as low as you are there.

The other two things that I think jump out would be the CalPERS weight to U.S. Equity, where you're in the 84th percentile, so you have less in U.S. equity than many of your peers. And the international equity weight, where you're in the 14th percentile, you have more international equity than many of your peers.

This goes to the decision that was made probably 10, 11 years go to eliminate the home county bias in the public equity portfolio, and to allow the weights of U.S. and non-U.S. to be fully reflective of the global stock market.

And the thinking behind that was what we really want out of this portfolio is global equity beta, an exposure to global GDP growth. Thus, why would we tilt towards the U.S. or away from the U.S. when what we really want is full global exposure.

Many of your peers have not done that. Many of your U.S.-based peers continue to have a biased portfolio. They lean heavily -- more heavily on the U.S. market. The U.S. market has outperformed. I'm going to walk through a few of those pages in just a minute.

So those are -- those I think are the two critical pages. Now, I'm going to -- I'm going to skip a few pages here and go to page eight.

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MR. JUNKIN: And again, I apologize for the size of the font. But if you zoom in and look at -- like the five-year number here, CalPERS ranks in the 42nd percentile, so just above median in terms of a U.S. equity return. Pretty good.

If you go to page 10 --

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MR. JUNKIN: -- and look at that five-year number again, it's the 35th percentile. So pretty much the top third. Again, a pretty good ranking. Now, I'm going to go backwards. We're going to go to page six, which is total public equity. And if you look at the five-year number here, it's just below median. So how do you have an above-median ranking and an above-median ranking in the two components, but below median in the total. And again, it's that weight in the U.S. and non-U.S. equity. So I just want to make clear to everybody sort of the impact that that single decision has, which again we, Wilshire, have taken the same stance with all of our clients. We believe that exposure to the global GDP growth -- to global GDP growth is best expressed through a global equity portfolio.

Just a couple more pages, or just a few more pages. So now I'll jump to page 12, and we'll cover a little bit of good news here.

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MR. JUNKIN: This is private equity. And I'm just going to look at the 10-year ranking, because anything less than 10-year gets a little bit subjective. Fortieth percentile above median, not quite to top quartile. But in my opinion, that's a pretty solid private equity peer group ranking for an investor that suffers from scale at CalPERS. And there are plenty of things that your staff is working on to address that.

Page 14, the income -- this is the full income asset class ranking. And the 10-year number here is not a typo that -- you are the number one fund in the peer group there.

So it's been really -- to dovetail into the comments that were made earlier during the global fixed income review, both by staff and by Wilshire, performance has been good. I think this -- this proves that out.

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MR. JUNKIN: And then last, to bring it home is real estate on page 20. And really this one is -- again, I've made these comments. Kind of if you look at five years, seven years, 10 years, the numbers are kind of all over the map. The five-year ranking, yeah, in the 41st percentile, the seven-year ranking in the fifth percentile. So great returns for seven years. And that 10-year number has got, you know, one year that we won't ignore in there.

So this will be a very different report when you see it again in another year. Hopefully, that 10-year return on real estate will have -- the ranking will have moved up. So that's the end of that report. I'm happy to take any questions that you may have.

CHAIRPERSON JONES: Yeah. Okay. Thank you, Andrew. Yeah. I have a question regarding your comment about the usefulness of this report because of our size. And as we continue to grow, it appears that our size is going to be even bigger than our comparison portfolios. So either do we continue to use this report if it becomes more and more less useful, or do you make changes in the report, so that it does become more useful?

So I don't think we're in a position where we just stay the course, so we've got to do something, if you're saying this report is limited in its use.

MR. JUNKIN: Well, I'm going to break that into two -- that -- my response into two parts. My belief that there's some limit in the usefulness of universe charts is true, regardless of your size. You could be a $10 billion plan, and I would have given you probably the same speech.

Generally, it's interesting. And I think there's data that, as fiduciaries, you would want to be aware of, but rarely does it lead you to take action on something that you haven't already seen somewhere else, performance versus a benchmark, or in an annual program review the identification of a trouble spot, something like that.

So that's not to say you -- so that clearly that's not to say you should not use this data. I think it's important that you see it and digest it. But just me hand it to you and then walking away without sort of laying the groundwork I think is even less useful.

If we -- the second part of my answer would be we can definitely customize the universe. As we start moving the cutoff up, as an example, if we were to go from 10 billion, to 25 billion or 50 billion, the -- at some point, the peer universe drops to such a low number that it's no longer really even meaningful, right? It's you versus six funds or something like that, and we can probably list them off on our fingers.

So we've tried to sort of balance what's the cutoff. But we have been at 10 billion probably for 10 years, and I think funds have grown, certainly CalPERS has over the past 10 years. So it's probably time for us to take a look at that number, and decide whether that's an appropriate number or not.

CHAIRPERSON JONES: Okay. Okay. Thank you.

Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you. I just had a quick question for you, Andrew. The exposure to global GDP growth and having a non-bias, right, are -- that we decided on has put us behind more than a few other like funds, specifically CalPERS -- or STRS, in terms our returns, because they're weighted to the U.S. equity market, is that something that we should consider changing to in the future?

MR. JUNKIN: I think that having just gone through the asset allocation process, that's the most logical time to address it. It's certainly up to the Investment Committee if there are other times to address it. You're right, that is a decision that has had a negative impact on returns. Could have easily gone the other way.

COMMITTEE MEMBER TAYLOR: The other way.

MR. JUNKIN: And so --

COMMITTEE MEMBER TAYLOR: But it's been going this way for quite some time now.

MR. JUNKIN: It has been. And just in thinking in terms of sort of board governance, and who was on the Board 10 or 11 years ago when this decision was made, I probably just need one hand and -- to count the number of board members. So there may be some value for you to just have a refresher on that.

And I Elisabeth has turned on her mic --

COMMITTEE MEMBER TAYLOR: I see that.

MR. JUNKIN: -- which is generally my cue to stop talking, so --

(Laughter.)

CHIEF OPERATING INVESTMENT OFFICER BOURQUI: I didn't mean to be.

MR. JUNKIN: No, not at all.

CHIEF OPERATING INVESTMENT OFFICER BOURQUI: No, it was just to add on your excellent question. I think it's -- it's a good point at time to rethink about our basic assumptions, and especially such one which is so crucial as whether or not we should have home bias. I would like to emphasize that this is really part the strategic asset allocation and not of --

COMMITTEE MEMBER TAYLOR: Right.

CHIEF OPERATING INVESTMENT OFFICER BOURQUI: -- active risk per se that we take on top of that. It's really the base of the strategic asset allocation. I just wanted to bring it back in the context of that process that we have, and that we are going to do. So certainly, we know that the next -- I mean, we are within this process, and the next mid-year review for 2020 as part of the ALM process will address that on an extensive manner. And we are already starting to think about that, you know --

COMMITTEE MEMBER TAYLOR: Yeah, I didn't want to go --

CHIEF OPERATING INVESTMENT OFFICER BOURQUI: -- and our assumptions for that process.

COMMITTEE MEMBER TAYLOR: I didn't want to go outside the process, but I thought it should be mentioned.

CHIEF OPERATING INVESTMENT OFFICER BOURQUI: Yes.

COMMITTEE MEMBER TAYLOR: So thank you very much.

CHIEF OPERATING INVESTMENT OFFICER BOURQUI: Thank you for your point.

CHAIRPERSON JONES: Ms. Hollinger.

COMMITTEE MEMBER HOLLINGER: Thank you. Appreciate this.

I had a quick question. I know on the CalPERS direct model, the motivation behind that is to get us up to -- to be able to increase our scale. But I was wondering if you compare ourselves on the private equity slide here, if we just compared ourselves to the Canadians who do direct investing, or do they basically occupy those addition -- you know, the top quadrant on private equity, because it's similar in size?

MR. JUNKIN: In terms of performance or the size of the allocation?

COMMITTEE MEMBER HOLLINGER: In terms of performance.

MR. JUNKIN: That is actually not --

COMMITTEE MEMBER HOLLINGER: Or you may not know.

MR. JUNKIN: -- an answer that I know off the top of my head.

COMMITTEE MEMBER HOLLINGER: Okay.

MR. JUNKIN: So the universe is that these are Wilshire Universes. And they're compiled sort of with the agreement that we, Wilshire, won't cherry pick individual funds. We can report to you and show you the rest of the universe, but there's some anonymity included. Just like we wouldn't go to a Canadian fund and say, well, here's where CalPERS is. That's just the --

COMMITTEE MEMBER HOLLINGER: Okay.

MR. JUNKIN: -- the nature of the agreement that we have on those universes. So the answer is I don't know, but I don't know for a reason.

COMMITTEE MEMBER HOLLINGER: Okay. I appreciate that.

CHAIRPERSON JONES: Okay. So seeing no further questions thank you for that.

We will move now to Item 9b, Corporate Governance

Update: Voting Proxy, Shareowner Campaigns, and corporate engagement.

I see the team is coming down.

(Thereupon an overhead presentation was presented as follows.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: Here we go.

Great. I'm going to get -- I'm going to get us started here, Mr. Chair. I'm just flipping to a page, while we let Simiso and Beth join us.

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: As I mentioned in the -- in my opening remarks, and as you just alluded to, this item is a corporate governance update on proxy voting, shareowner campaigns, and corporate engagement, which is a subset -- a subset of our overall ESG strategic plan. So that's why I thought I'd start with the overall plan, first, just to ground everybody in what this subset is.

So if you look at our overall five-year plan and you go to the very bottom right-hand corner, you'll see proxy voting, shareowner campaigns, and focus list. So we'll be covering that today. In the middle of the -- middle of the chart, you'll see diversity and inclusion, and two dashes on engagement, and voting. So we'll be addressing that today.

And then if you turn to the left on engage 100 plus on the PRI Montreal Pledge companies, what we now call our Climate Action 100+, we'll have an update on that today.

So that's just to give a little bit of a -- of a setting. We have a lot of activities on ESG overall, the strategic plan. The Sustainable Investments team is responsible for our overar -- overarching overall strategy across all of our asset classes, number one. And then, number two, in March, we come back to the Committee for a full discussion on our overall plan, and all of the constituent parts, as well as a review of our actual proxy voting principles or Global Governance Principles at that time.

Today's discussion is meant to focus on the proxy season specifically. We now have, Simiso was telling me yesterday, about 9,200 votes have been cast out of what we anticipate to be about 11,000 for the full season. We can -- so to review how the season went, kind of give a report card on the activities, how, in general, the 9,000 votes went. That's a very big task to try and summarize how 9,000 votes went, number one.

Number two, to focus in on the priorities that we've identified for the global equity proxy voting season. We had a session in March and April together to identify what would be our, you know, priority subject matter areas. So in March and April, we identified corporate board diversity, climate action, and executive compensation as areas of priority with a continuing emphasis across the board on proxy access and majority vote.

So that is the setting for the presentation today. This is the overall report, and this is the overall five-year strategy, which we'll come back to in March. Today is a review within our Global Equity Program how the proxy season, shareowner campaigns, and engagements went with our public companies, as we anticipated in March and April when we were going into the proxy season.

And with that, I will turn it over to Simiso to go through the report card, and then both together Simiso and Beth to give a glimpse of, you know, looking forward for the coming -- for the coming year, and an opportunity for the Committee to give us feedback on how the year did, and things to think about as we bring back our strategy and our areas of emphasis and priorities for next March.

In short, we think it was a successful season. I think when you review the -- review the numbers across the board, lots of achievements, lots of improvements across the Board, particularly on the priorities that we have. I think metrics are showing movement overall in the areas that we care about.

But there's room for enhancement for sure and further success next year. And that's what we wanted to spend some time talking about that as well.

So with, Simiso, I'll turn it over to you and Beth.

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INVESTMENT DIRECTOR NZIMA: Thank you, Ted. Members of the Investment Committee, good afternoon. My name is Simiso Nzima, Investment Director, Global Equity.

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INVESTMENT DIRECTOR NZIMA: Before I get into the actual presentation, I just want to take this opportunity to recognize the Corporate Governance team, and the work that they put in, you know, over the years, and especially this season. The Board gets to see me three, or four, or five times per year, but they -- you know, you don't really get to see members of the team. But I just wanted to recognize them for the hard work and the success that this program is achieving.

I have Todd Mattley and Craig Rhines behind me. But I also have Stuart Hall and Tamara Sells back in the office, you know, manning the shop so as to say.

But really getting back into the presentation, we have 30 slides prepared. I'm not going to go through all the slides. I want to focus really on the two slides which locate the 2018 proxy season outcomes, as well as looking ahead, so the 2019 proxy season outlook.

The summary of contents really shows the statistics related to these two slides that I'll focus on. And then in the appendix, we have the entire board of work that the corporate governance team was involved with in 2018. And, you know, at the end of the presentation, I'll be open to dialogue with the Board and take any questions related to the entire presentation, not only focusing on the two slides.

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INVESTMENT DIRECTOR NZIMA: So looking back, the 2018 proxy season outcomes, what is it that we achieved and what were the things that we focused on.

I'll start with corporate board diversity, which is the first two bullet points. And really, you know, with corporate board diversity we were energetic and we were making progress. Thirty percent of the companies that we engaged, starting in July last year, have added a diverse director to their board. That is 151 companies out of the 504 companies that we engaged last year.

So that's really something which we are seeing movement in that area. But I want to emphasize that really the work we're doing here is like trying to boil the ocean.

(Laughter.)

INVESTMENT DIRECTOR NZIMA: You know, it doesn't happen overnight. It will take time, but we are determined that with the ownership rights that we have, we will move, you know, the market and get these to move along.

Speaking of ownership rights, we actively used our ownership rights in terms holding directors accountable for improving corporate board diversity. As a result, we voted against 438 directors, 841 companies where these engagements did not have constructive outcomes.

And just as a point of emphasis, really here we're voting against board chairs, members of the nominating and governance committee, as well as long tenured directors, again because we think this matters. It matter for the bottom line. It matters for the returns that we get. This is what really pays our pension in terms of the returns that we get, and companies being managed effectively.

Shifting gears and looking at executive compensation. In March, we came to the Board and talked about the enhancement that we did to the voting practice on executive compensation. And as a result, we -- this year, we voted against 43 percent of say-on-pay plans, which is the executive compensation proposals. And this compares to about 16 percent of a five-year average. So this is a significant change in terms of voting on executive compensation.

And we're hearing from other investors and, you know, talking about these, and what we're actually doing in this space. So we're going to continue to hold companies accountable for performance. We think that executive compensation should be cost effective, and also show a direct and non-complex link to shareowner value creation.

Last, but not least, on these really the shareowner campaigns that we're engaged in, these companies were identified either internally or in partnership with some of our strategy partners. And we targeted 121 companies, which resulted in 88 settlements. We still have about 16 ongoing engagements. And we ran solicitations at 17 companies. The results of those solicitations are at the -- in the appendix on slide 29, so I won't go into that here.

But really this is what I wanted to highlight in terms of the outcome of the 2018 proxy season.

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INVESTMENT DIRECTOR NZIMA: Looking ahead, looking at the 2019 proxy season, this is really an area where there's significant collaboration between, you know, ourselves, Corporate Governance, Global Equity team and Sustainable Investments. And our goal here is to make sure that we think the corporate governance work that we do with the ESG strategy plan to make sure that really we are touching on those priorities that are identified and which we come and report to the Board in March.

So we'll continue to work collaboratively with the Sustainable Investments team in terms of looking at strategies that we could implement and enhance, and then also in the review of the global governance and sustainable investments principles.

So here what I have really I listed some of the -- a subset of some of the issues -- activities that we'll be looking at. But I'm not going to go through these. I'll have Beth sort of talk through some of the high level thoughts that we have especially on corporate board diversity, as well as on climate action 100.

Over to Beth.

MANAGING INVESTMENT DIRECTOR RICHTMAN: Thank you Simiso. Good afternoon. Beth Richtman, CalPERS staff.

So after the great discussion we had at the Board off-site, the SI team and the Corporate Governance team thought about what we're doing on diversity and inclusion relate to our public companies. And we concluded that really we don't want to just be looking at diversity at the Board level.

Conveniently, in the United States, there's a reporting standard which requires all companies with 100 or more employees to file a report by law on an annual basis that reports on the company's gender, race, and ethnic data on key positions and overall workforce.

It's actually a report called the EEO-1 that's grounded in the Civil Rights Act of 1964. And it's a report our U.S. companies are already doing. We just want them to make it public. In fact, right now -- well, as of 2017, the data we have, only 3.2 percent of Fortune 500 companies are actually reporting this data. But some of the issues that create the sort of scarcity of diverse boards that we've been talking about come in part because of maybe the overall workforce. And so we'd like to understand this better.

I should note that the data won't tell us about every element that CalPERS cares about related to diversity, but it will tell us a lot. And it will allow us to compare companies within industries and across the United States. And importantly, it will allow us to assess how reflective a board's diversity is of its workforce.

As Ted mention, we'll be coming back in March to discuss potential updates to the ESG strategic plan. One thing I'll note related to this and related to diversity and inclusion is that we do intend to take a broader approach to D&I. Currently, in the ESG strategic plan, it's really focused on our public companies, but we are working on a total fund approach. And we look forward to coming back on that.

And additionally, after the Board off-site and some updates to the Governance and Sustainability Principles that you adopted in March -- sorry, in June, there are a couple things that we'll probably be adding to this strategy that I wanted to mention. And one is harassment, and particularly sexual harassment and two is related to looking at compensation, particularly inappropriate pay gaps related to gender and minorities. So that will be part new elements that we'll be thinking about as we're working on our strategy.

So I look forward to your further thoughts and questions on these issues and appreciate your past comments.

The next thing I wanted to cover briefly is Climate Action 100+. You know, it's funny, the numbers in this presentation just prepared I guess a few weeks ago are already stale, in that now, the initiative has 296 investors and over 31 trillion of assets behind it.

Climate Action 100+ has been recognized by the global media as the world's largest and most ambitious investor engagement project. The Investment Office is quite proud of the key role that CalPERS has played in building this initiative into the force that it now is.

And I want to recognize all the great work of Anne Simpson who's the chair of the initiatives steering committee, but also the other five members from Corporate Governance, and also the Sustainable Investments team who have been working really hard on getting this off the ground.

You know, that's a significant amount of resources going into this initiative from our team. But I will mention that our holdings in the companies in the Climate Action 100 list aggregate to over 20 billion. So this is a very significant initiative for us for a reason. And also, the systemic risk to our portfolio of climate change grows as we now every year.

There will be an annual benchmarking of the progress with the companies as part of the Climate Action 100 initiative, which will help inform our shareowner engage -- shareowner engagement, and how, you know, our proxy voting team will be exercising votes at future company meetings.

The first report in the benchmarking analysis will be published in early 2019, and we look forward to sharing those results.

Now, back to Simiso.

INVESTMENT DIRECTOR NZIMA: So at this point really, we'll take questions from the Board and any dialogue and direction that you may have for us.

CHAIRPERSON JONES: Thank you.

Ms. Brown.

COMMITTEE MEMBER BROWN: Thank you.

I wanted to go back to the 2018 proxy season outcomes. The first bullet you talked about, that the 30 percent of the companies you engaged with added a diverse director, 151. So do those companies have none before and now they have more than one, one or more than one or did they -- I'm just curious.

INVESTMENT DIRECTOR NZIMA: They've added an element of diversity that they did not have. So they may have had some elements, but not -- as we look at our definition of diversity it's really broad based. So it's an element of diversity that they previously did not have.

COMMITTEE MEMBER BROWN: So they may have had a woman on the board, but maybe not an African-American male or something like that, is that correct?

INVESTMENT DIRECTOR NZIMA: Yes.

COMMITTEE MEMBER BROWN: Okay. So these aren't brand new to diversity. These are just increasing the amount of diversity potentially.

INVESTMENT DIRECTOR NZIMA: Some of them may not actually have had any diverse directors.

COMMITTEE MEMBER BROWN: So I'd like to know what that -- what that is, if -- which ones that didn't have any, and the ones that now have increased. Because I think it's great if we go from none to some, as opposed to some to more.

My next question where you talked about you voted against 438 directors. So how many of those were actually ousted, did not make it back? I know we said we voted against 438. Did any of them not get put back on the Board?

INVESTMENT DIRECTOR NZIMA: We'll have to go back and look at that. But in terms of our holding in these companies, we don't hold enough shares in terms of actually getting director being -- you know, having to leave the board.

Some of those companies actually have majority voting. So if -- for example, if the directors had received, you know, less than majority support, then they would have had to resign from those boards.

However, I just want to emphasize that the fact that we may not have, you know, significant holdings. It's not sort of -- it's not a handicap. The number of companies which we had written before -- we'd written the first letter and the second letter on this issue, and which they never responded to us. But when we voted against the directors and wrote to them and explained why we're voting against the board chair and the nominating and governance committee, they actually reached back to us at that point after that -- you know, having that against vote coming from us, even though we actually hold a small percentage of the overall vote of the company.

COMMITTEE MEMBER BROWN: So because you voted no, you got them to engage because they don't --

INVESTMENT DIRECTOR NZIMA: They -- they -- yes --

COMMITTEE MEMBER BROWN: They don't like being told no.

INVESTMENT DIRECTOR NZIMA: -- the engagement -- exactly.

COMMITTEE MEMBER BROWN: Okay. It would be helpful to know which of those did re-engage after we voted no on them, and those that just sort of side we don't care and turned their back. That would be nice to know as well.

And then the last one was with pay. And I don't know how successfully were any of those, where we said, we voted against 43 percent of executive compensation proposals. And my guess is, you know, all the CEOs got their money, but let's -- let's let you tell me what the answer was.

INVESTMENT DIRECTOR NZIMA: Yeah. So the executive compensation proposal, those are advisor reports.

COMMITTEE MEMBER BROWN: Right.

INVESTMENT DIRECTOR NZIMA: And, you know, at the end of the day, if the company, they'll -- you know, they'll pay the CEOs. But I think what this reflects and what this encourages, it leads to more engagement with the companies. We're already hearing from some of the companies that we voted against, where they're reaching out and saying, you know, what is it that we need to do, why did you vote against?

So it leads to the start of engagement in terms of -- you know, in terms of executive compensation, and we'll engage these companies and see what the problem is, whether the problem is with the design of their comp plans in terms of the failure to link, you know, the pay to performance of the company.

COMMITTEE MEMBER BROWN: Great. Thank you.

CHAIRPERSON JONES: Mr. Costigan.

VICE CHAIRPERSON COSTIGAN: Great. Thank you, Mr. Jones.

Great report. Just a few questions, and I know that I asked last year. And I think Ms. Simpson, as part of this report, it talked about majority voting in all. And I don't need an answer now, but I'd like something back.

So last year, I raised the issue of Apple and BlackRock. And so when we talk about voting against people and voting for board diversity, one of the things I pointed out was the lack of diversity on Apple's board of directs and that the -- one of the female board of directors at Apple was the head of the Nomination and Governance Committee at BlackRock.

And when you cross-reference those two, there is clearly a lack of diversity on both boards, and when that same individual sits on two large boards of which we have majority shareholder voting -- so all the parameters that we want were in place.

So I'd like to know, again a question I had raised last year, where are we voting where we have that authority against directors that serve on multiple Boards? I think as we've raised before, and I think Ms. Brown raised this as well, is we've talked about geographic diversity, educational diversity, gender diversity, LBGTQ, race, name all of it -- so again, this was a question I raised. You can go back and look at the transcripts. Last year, I raised this at Apple and I also raised it as it related to one of the large banks, because there was an individual that sat on multiple boards.

And if we talk about board diversity, as we've talked before, there are 25,000 boards slots. Board diversity means adding more people, not the same person to those slots.

So I don't know what we did with Apple or BlackRock.

INVESTMENT DIRECTOR NZIMA: I can't answer the specific companies. But in terms of the people sitting on multiple boards, the Governance and Sustainability Principles, we actually have that taken care of and is part of our voting practice. So if you're a company executive and sit on one other board besides where you're a company executive, then we actually vote -- we vote against you.

VICE CHAIRPERSON COSTIGAN: So then on that one individual who's on Apple and BlackRock's board, I'd like to know how we voted her.

INVESTMENT DIRECTOR NZIMA: We can check that and come back to you.

VICE CHAIRPERSON COSTIGAN: So just again, these are great reports. Look I -- and then just in some specific areas -- you guys do amazing work, so I really appreciate it, so I'm just asking some probing questions just -- and I'm not picking on any company here. I'm just looking at on slide 29, 502 of 503 of the iPad, I just picked one at random MGE Energy. I just want to make sure that I understand how this operates.

They had a climate risk proposal -- do you want to go to slide 29. Okay -- had a 10 percent, which means it failed, but only 10 percent -- we only garnered 10 percent in support. So the question I have, and you can get back to us, is 10 percent of what? So how many -- how many eligible votes were there? And I think you actually touched on this, which oftentimes we're operating against a board of directors, and a chair, and others. So if there 100 percent of the voters in the universe, okay, how many actually cast a vote? So it was it 70, 80, 60, 40 30? Okay. So it's 10 percent of what?

Because it's a little bit -- it failed. But if it's 10 percent of 30 percent, right, we can start putting votes together.

The other question is I know we go out and solicit, as you -- you made an excellent point. We may not own a lot, but we have a big voice, so we go out and gather others. I'd just be interested in a case study on one of these that failed, did they go out in fact solicit the other way?

So again, I'd like to know -- and I'm not -- pick anyone you want. I just picked them, because it was a climate change, noticed it was 10 percent kind of a round number. But again, what's the universe? How many cast a vote? Because if you have 30 or 40 percent of shareholders that are disinterested, why is that?

And then just on -- just a generic question. So we voted against Elon Musk. And again, this is something we can talk about all day, but I do have concerns when the CEO of a company goes on a public broadcast and engages in an activity that really should be a terminable offense.

I saw that we voted against his compensation. I don't if you want to expand on that, but we didn't raise any other issues, or -- I'm trying to get the timing -- or did that incident occur after the proxy voting? Because I'm curious as to how we dealt with what he did on the radio show.

INVESTMENT DIRECTOR NZIMA: So since our engagement with companies are private and confidential, we can take this to the closed session and expand more.

VICE CHAIRPERSON COSTIGAN: Okay. That's fine, then we can talk it then.

Thank you. Thank you, Mr. Chair.

CHAIRPERSON JONES: Thank you. Okay. Ms. Mathur.

COMMITTEE MEMBER MATHUR: Thank you very much. Well, I am -- I have to say I'm very encouraged by the progress we've made, both in terms of the diversity component, which we know is demonstrated to deliver additional value. You know, we know that diversity on corporate boards means that that company is likely to be more successful and to deliver better performance. And so the fact that we're making significant progress there to me is incredibly encouraging.

And Climate Action 100+, where again, we know that climate change is a real material risk to companies and to CalPERS portfolio performance. The fact that we're not alone, that hundreds of large institutional investors agree, and have brought almost -- you know, over $30 trillion of assets behind this initiative, because they see it as a -- as not just an existential threat to us as a society, but really as a truly material investor risk is quite stunning, and I think far surpasses where we thought we would be just a year ago.

So I'm really proud of the work that CalPERS and all of our partners in both of these undertakings have made over the past year.

I do have a couple of questions, or first a comm -- another comment. With respect to the diversity initiative, as I remember -- as I recall, the 504 companies that we sent a letter to had no women on their boards. We used that as a proxy for other diversity. So it would not be true that they might have a woman on the Board and we're adding another element of diversity. It's really that we know that there are no -- there's no gender diversity. There may be other types of diversity reflected on the boards it's hard to capture given current data. Is that an accurate statement?

INVESTMENT DIRECTOR NZIMA: The -- that is an accurate statement. The criteria that we used for those 504 was gender diversity in terms of -- because that's the -- what was publicly available.

COMMITTEE MEMBER MATHUR: Right.

INVESTMENT DIRECTOR NZIMA: But as we then engage with these companies, we then talk about some of the elements of diversity besides women.

COMMITTEE MEMBER MATHUR: Right.

INVESTMENT DIRECTOR NZIMA: So technically, yes, that's true in terms of that they wouldn't have had a woman on the Board.

COMMITTEE MEMBER MATHUR: Right. So it's possible there's some other element of diversity that's not currently captured by the data that's reported. But nonetheless, they are now adding a diverse director -- 151 of those companies are adding a diverse director. I think that's quite a lot of progress over one year. I know that there's -- this is only the first step in a series of, you know, work that we're going to do, but I think it's an important move forward.

I also wanted to ask -- I'm also very encouraged by how we've been voting on the executive comp proposals. You know, one of the things that I think we have seen in the -- in the public markets is the life of a company has shrunk quite considerably. I think it's -- a coupe decades ago, it was something like 60 some odd years that a company survived, and today it's more like 17.

And that is quite astonishing. And also, CEO tenures have reduced, you know, for -- now I think your average CEO doesn't lead a company longer than five years.

So ensuring that there is alignment between the CEOs and the long-term performance of a company, which obviously impacts the performance -- our per -- you know, the performance of that company and our own performance of our portfolio is essential.

So while focusing on, you know, obviously, the executive compensation proposals are quite complex. They involve lots of different elements. But I want to -- I guess I'm -- my question really is, how are we thinking about longevity of these companies and sort of the lifecycle of these companies? Since we're going to own these companies through their lifecycle, we are largely passively invested in the public markets.

Pause there for an answer.

INVESTMENT DIRECTOR NZIMA: Yeah. That is an excellent question, and really gets to the core in terms of our engagement with these companies. When we look at executive compensation, we tend to be CEO agnostic. Really what we're evaluating is that the structure in -- of the compensation is really set up that this company is being managed for long-term sustainable value creation, because we're going to be owning these companies forever. We really own -- it's not owning a stock. We own a business essentially.

So the CEO may change, but even with CEO changing, we want to ensure that the design of the plan is focused on long-term strategy, and that strategy thinks about the sustainability of value creation. So really it's an excellent point.

We realize the tenure of the CEO is getting shorter and shorter. That's why really our focus is regardless of who's sitting, you know, on that chair, we want to make sure that the compensation committee -- and that is why we're voting -- you know, we're looking at voting against the compensation committee members again in terms of looking at this area, because they're responsible for the design of the comp plan. And that design should be aligned with the company's long-term business strategy.

COMMITTEE MEMBER MATHUR: Yes. And, of course, we don't want to see CEOs extracting significant, you know, shareowner value out of -- you know, for their own benefit in a relatively short period of time when that's really needed to advance the future performance of that company.

So I appreciate that that's the focus. That is absolutely -- I mean, that's consistent with our Investment Beliefs. I think that's invest -- consistent with our own sort of long-term horizon. So thanks for the good work.

INVESTMENT DIRECTOR NZIMA: Thank you.

CHAIRPERSON JONES: Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Yes. Thank you, Mr. Chair.

I just want to thank you, Beth and Simiso, for the report. Very comprehensive. And I saw some new stuff that I hadn't seen before. So I like the fact that we are using the EEO-1 data. We didn't really have a measurement before, so I congratulate you on requesting companies to include that.

How are we doing with that? Are companies actually including their EEO-1 data as we requested?

MANAGING INVESTMENT DIRECTOR RICHTMAN: Thank you for the question, Ms. Taylor.

So that is part of what we're going to be focused on going forward. This is a new element.

COMMITTEE MEMBER TAYLOR: It's a new element. Okay.

MANAGING INVESTMENT DIRECTOR RICHTMAN: Yes. So right now, it's about 3.2 percent of Fortune 500 companies report. So there's a -- there's a big gap there, and --

COMMITTEE MEMBER TAYLOR: Oh, yeah.

MANAGING INVESTMENT DIRECTOR RICHTMAN: -- that is something that when we come back in March we'll actually have so goals around what our targets are and the approach. But that is a new enhancement to our -- to -- really for our D&I strategy for public companies to get beyond just looking at board diversity.

COMMITTEE MEMBER TAYLOR: Great. So and I -- is there a plan -- just as a thought, is there a plan to partner with some other like organizations to help push that through for more than three percent?

MANAGING INVESTMENT DIRECTOR RICHTMAN: Yeah, absolutely. And there have been organizations that have been putting forward proposals over time. And some of them are getting very close to passing.

COMMITTEE MEMBER TAYLOR: Oh, good.

MANAGING INVESTMENT DIRECTOR RICHTMAN: They're getting in the 40 percents. And so we've already started talking to some. But we -- yeah, I mean, with many things that we're trying to achieve, we can't do it alone.

COMMITTEE MEMBER TAYLOR: Right.

MANAGING INVESTMENT DIRECTOR RICHTMAN: And so strong partnerships make a lot of sense for us on trying to achieve our objectives such as this.

COMMITTEE MEMBER TAYLOR: Right. And it's so apparent when it works so well for us in the Climate 100. So I just want to make sure that we're hoping to get there through other means rather than just by ourselves. So I appreciate all your hard work.

Thank you.

MANAGING INVESTMENT DIRECTOR RICHTMAN: Thank you.

CHAIRPERSON JONES: Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman. And again, thank you for the report. I wanted to just ask a question that was highlighted on slide 7. And it showed that there had been a -- there's a market decline in support for a global management proposals, and increasing support for global shareholder proposals, and just wanted to get your thoughts on why you think that is, and whether that's a trend to be -- that we'll be continuing?

INVESTMENT DIRECTOR NZIMA: Yeah. In terms of -- again, thank you for your question. In terms of the -- the decrease in support for management proposals. Again, it's about us holding companies accountable for long-term value creation.

Part of that really if you look at the significant drop there, which happened in 2017 was with the Japanese, you know, companies where we're pushing for, you know, board independence in Japan. And a lot of companies in Japan really do not have majority independent boards.

In fact, the Japanese Corporate Governance Code and the Company Act only calls for two directors in terms of being independent. So we -- since 2017, really we have been working on this and trying to push companies in Japan to move their board diversity to at least initially one-third, and then eventually to move to majority -- majority board independence.

So a significant, you know, reason for that is that -- and we'll see this actually, you know, moving forward increasing in terms of -- not increasing -- in becoming lower and lower again as we vote against comp plans, as we vote against compensation committee members and so forth.

In terms of the support for shareowner proposals, I think our view really is that, you know, everything we do is grounded in the Governance and Sustainability Principles. And if shareowner proposals are aligned with our view of the world, we will support them. And we're seeing sort of an increase in the sophistication, and especially in international -- in international markets where shareowner proposals are getting written in a much, much better way, than they were, you know, a couple years ago. So that's why we're seeing sort of an increase in support for those.

COMMITTEE MEMBER YEE: I see. That makes sense. Thank you.

And I had a couple of questions regarding compensation. So I like the 43 percent in terms of the executive comp proposals that we opposed. Were we joined by a majority of other shareholders in opposing more of the say-on-pay questions this year?

INVESTMENT DIRECTOR NZIMA: We -- we don't have sort of the data for everyone right now. So what we have, we looked at data, I think it was the end of August. And looking at global investors that voted on at least a thousand say-on-pay proposals that it already filed their

NPX filings. So that became, you know, public record. Only 48 global investors, you know, shared -- voted on more than a thousand say-on-pay proposals. Of those, 43 percent against vote actually is the fifth highest of the -- you know, the 48 global investors that you had.

And if you look at those, the top eight -- if there are only eight investors that voted against at least 20 -- you know, 20 percent of these proposals, and the average for those is about, you know, 46 percent. So we're close to the average in terms of the top investor that voted against say on pay.

We will see -- we'll come back in March with the full set of data to see where others are. But I think the fact that we are doing these and CalPERS is known for leadership in terms of, you know, governance. And we have received a lot of publicity in terms of our votes against executive compensation, we think that will actually help when other investors look at this again.

COMMITTEE MEMBER YEE: Okay. And then can you give us a flavor of how much the executive pay ratio factored into our analysis of executive comp?

INVESTMENT DIRECTOR NZIMA: Yeah. So this is the first year that the CEO pay ratio is being -- is being reported. And so at the beginning of the year, we took a decision that since this is the first year really, we didn't have sort of enough data. So, for example, the first company that reports is the only company that would have reported. So we'd only have sort of a benchmark in terms of looking at it versus its industry and versus everyone else.

So it really didn't make sense for us to start incorporating that right away. We were looking at it, when we're looking at executive compensation in terms of if, you know, the plan seemed like it was aligned and the CEO pay ratio seemed liked really out of whack, you know, really, really high, then we'd take that into account. But it wasn't really from the benchmarking perspective, because we didn't have a full set of companies that have -- that have actually reported these. And you know once this proxy season is over, we'll have a full set and we'll take a look into -- into that. And our understanding again is that even the -- the proxy advisory firms are -- did not take that into account this proxy season.

COMMITTEE MEMBER YEE: Okay. So more to come on that.

INVESTMENT DIRECTOR NZIMA: Definitely.

COMMITTEE MEMBER YEE: Okay. Good. And then lastly, can you provide an update -- I'm not sure that I heard anything recently about the SEC's review of proxy access advisors and kind of that whole -- whether we -- we're weighing in on that whole discussion or not.

INVESTMENT DIRECTOR NZIMA: Okay. In terms of where we are right now, I think we actually weigh in in terms of the comments, so there's a comment period and everything. And I think we -- we did through the Governance and Sustainability Subcommittee, we have a correspondence working group where we do comment letters and sort forth. And we understand this is still something that is -- that is still ongoing. I think there's going to be a meeting sometime, I think, within the next two months or so looking at that.

And our view again is that proxy advisors, they provide some recommendations and analysis, but they're not -- they don't determine how we cast our vote. They help us in terms of sort of looking at some of the issues that are out there. And really, they help us focus on things faster, but they're not really the determinant of how we cast our votes.

And that's something which we will sort of -- we'll communicate. I think we still have Anne Simpson on the Investor Advisory Council of the SEC. So we'll communicate that through that process.

COMMITTEE MEMBER YEE: Okay. I guess, could we -- could I just ask that we maybe get some updates on that as their continues to be kind of things emerging around that. I mean, it really is kind of an issue with respect to, you know, just the third-party proxy voting services and the issue of independence. And so to the extent that there's activity there, we can get an update on that.

CHAIRPERSON JONES: Yes, we'll include that. Okay. Thank you.

COMMITTEE MEMBER YEE: Thank you.

CHAIRPERSON JONES: Yeah. I have a couple questions. On the EEO-1 issue, while the government set forth some standards for reporting, the first question is are there any consequences of not reporting by these companies?

MANAGING INVESTMENT DIRECTOR RICHTMAN: It's my understanding it's the law. So I could find out if there are fines or consequences.

CHAIRPERSON JONES Okay.

MANAGING INVESTMENT DIRECTOR RICHTMAN: But it's my understanding that it's sort a requirement for companies that have more than 100 people.

CHAIRPERSON JONES: Okay. And so the compliance issue -- and there -- whether or not there are any aspirational goals in this provision in this law, in terms of what they're looking to, what kind of goals they're seeking to obtain?

MANAGING INVESTMENT DIRECTOR RICHTMAN: Well, for the law --

CHAIRPERSON JONES: Yeah.

MANAGING INVESTMENT DIRECTOR RICHTMAN: -- or for our project?

CHAIRPERSON JONES: Yeah, within the law.

MANAGING INVESTMENT DIRECTOR RICHTMAN: Within the law. That's a good question. I know that it's a reporting requirement, but I'll have to look to to see if there's --

CHAIRPERSON JONES: Okay. Okay. Okay. Thanks.

And then the next question is our 3D, you know, you mentioned that the additional members are on corporate boards. Do you have any information to determine how many of those came from our 3D database?

INVESTMENT DIRECTOR NZIMA: I don't have the information right now, but we can actually go back and look at that.

CHAIRPERSON JONES: Yeah. Yeah.

INVESTMENT DIRECTOR NZIMA: I think at the Board off-site in July, I think Belen from Equilar did mention that we've -- I think this year we've had about 90 members coming out of 3D going on public boards. But in terms of the ones that I'm talking about here I don't have the information to get.

CHAIRPERSON JONES: Yeah, it would helpful to know, because, I mean, we spent a lot of time and effort to create that database along with CalSTRS. And we were responding to corporations that indicated they can't find qualified candidates. And all of sudden, we gave them 400 people that are qualified, and then they said they don't have any openings, so I would like to know --

(Laughter.)

CHAIRPERSON JONES: -- how that's being achieved.

The next question I had is the -- several years ago we created our diversity forum for CalPERS. And I think we've been -- the date for having another one has been slipping. And I hope we got a date now, so that we can start publishing when we're going to have our CalPERS Diversity Forum.

I see...

MANAGING INVESTMENT DIRECTOR RICHTMAN: Carrie, who's --

CHAIRPERSON JONES: Carrie.

MANAGING INVESTMENT DIRECTOR RICHTMAN: Carrie Douglas-Fong who's been working on this is coming up. And -- but she's -- it's been really challenging to find to find a venue. But I think through some heroic efforts of staff members, we do have June is -- I guess June 2019 is the date, and we do have a venue in Sacramento.

CHAIRPERSON JONES: Okay.

MANAGING INVESTMENT DIRECTOR RICHTMAN: And I don't know if Carrie wants to add anything.

ASSOCIATE INVESTMENT MANAGER DOUGLAS-FONG: Good afternoon, Carrie Douglas-Fong, Associate Investment Manager. The Sacramento Convention Center will be closed for about 18 or more months, including this next year. We've managed to find an alternative location in Sacramento at the Sheraton. And it will be hosted June 10th and 11th. So that is the date. And I think that's as of last week.

CHAIRPERSON JONES: Thank you very much. Appreciate that, because when I'm out and among our partners, they always ask that question, when is the next CalPERS diversity -- because it was a highly popular event, and people really did enjoy participating in that event.

Okay. That's my questions. Seeing no further questions. Any other comments, Beth or Simiso?

Okay. On that, we have a public -- request to speak on this item from the public, Michael ring.

MR. RING: Chair Jones, members of the Committee, long time no see. Michael Ring with Service Employees International Union. On behalf of our members, thousands of whom are CalPERS participants, just a couple of quick points.

One, I think we just want to thank you for your commitment -- this Committee's commitment, your staff's commitment, this organization's commitment to corporate governance and leadership. You all may recall that about 10 years ago at this time, we were all pretty nervous because we were entering into the middle -- the beginning of the Great Recession. And I think we all know, if we look back, that one of the triggers of the great recession was a tremendous failure among corporate leadership, both at individual companies, at the regulatory level, and at the systematic level.

So this work is actually, in many -- in many people's view, the most critical work of this Committee because it protects us from what triggered a massive loss in funding for CalPERS. And what is the biggest risk to paying benefits would be another systemic loss.

So I just -- a couple of things there. Just want to thank you for your commitment to this work, to your staff's innovation and leadership in this work. And then specifically as you all know, SEIU is very committed to the work on diversity and inclusion in this area, sees it as a major place of risk for people who are not taking it seriously, and not taking leadership, and a major place of opportunity as the McKinsey study and others have shown for people who are taking leadership.

So I want to thank you for your leadership in that area.

Thank you so much.

CHAIRPERSON JONES: Okay. Thank you, Mr. Ring.

Okay. So that brings us to Summary of Committee direction.

Mr. Eliopoulos.

CHIEF INVESTMENT OFFICER ELIOPOULOS: All right. You're really challenging me this time on this one, so --

(Laughter.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- give me assistance and help if I missed any --

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- or, you know, mischaracterized it in any way -- you know, in any way.

Let's see. First off, it was a direction that was already given, but it was reemphasized on looking to combine all the divestment items into, you know, one item, in particular the five-year reviews.

CHAIRPERSON JONES: Yes.

CHIEF INVESTMENT OFFICER ELIOPOULOS: And we will do that.

Number two, during the Iran/Sudan, there was direction to review the vote -- review the decision by staff with respect to ENGIE, and the rationale for concluding that, and come back to the Committee with that response.

Okay. During our policy reviews, the review, there was a suggestion, and I think it was directed to make a one-word change on the policy -- on the policy, and we were going to move forward with that in the leverage table.

CHAIRPERSON JONES: Yeah. That's good.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Next, during the Wilshire review item on the universe of other funds, Mr. Jones requested Wilshire to look at the $10 billion fund size as their methodology. And so direction to Wilshire to follow up on that.

Now, getting to the proxy voting item that just concluded, there are a number of requests for follow up. I'll go through them. I didn't hear a specific Board direction, but I saw some nodding heads.

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: So let me just go through --

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- what was requested, and you can confirm for us.

First -- first, with respect to the looking -- you know, looking back at the 2018 proxies season outcomes, there was a request to follow-up on specifically, you know, how many companies added a diverse directors. Well, actually let me -- let me pause. I think there was -- there were three requests. So let me just -- so on that one, the first one was a request to -- on the 30 percent of companies that added a diverse director to their boards splitting that -- bringing back information, splitting that out in terms of those that went from none to at least one, and then which ones went from, you know, at least one or some to more. And so that is one request.

Next, a request of the 438 directors at 141 companies, which we did not receive a constructive outcome. You know, as a result of the vote, were any of those directors actually ousted or not -- not elected to the board. And then in addition to that, which companies reengaged with us after the no vote, and the flip side of that coin, which companies did not even reengage with us after that. So that was one -- one series of requests for feedback on that.

In addition, a request for feedback on how we actually voted at Apple and BlackRock, with respect to their boards of directors.

Number two, and I think actually Simiso answered this was just a question of how we voted on, you know, members that sit on multiple boards. So I don't think there is a follow-up item --

CHAIRPERSON JONES: Yeah, right.

CHIEF INVESTMENT OFFICER ELIOPOULOS: -- on that one. You know, we voted according to our principles.

But there was a request. As an example, the MGE Energy vote of -- where we were only able to garner 10 percent of the vote, there's a question out of how many votes of the universe cast, and we can bring that back as an example.

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Next, there was a request for an update on the -- from the -- on the -- on our engagement or our work on third-party proxy access -- proxy services, and particularly the SEC's review of that topic of their independence and conflicts.

Last, with respect to the EEO-1 reporting, a request for the federal -- in the federal law, if there's objectives that are stated in addition to the reporting requirement.

CHAIRPERSON JONES: Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: And the last from that is -- the last request is a report back on our 3D database and how many successful candidates from the 3D database were added. And we have the answer. The answer is 19.

CHAIRPERSON JONES: Out of 400?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Yes.

CHAIRPERSON JONES: So still -- yeah, still --

CHIEF INVESTMENT OFFICER ELIOPOULOS: Nineteen are from the 3D database that were added to the Board.

CHAIRPERSON JONES: Right. Okay. And is 400 the current number of that database, total numbers?

CHIEF INVESTMENT OFFICER ELIOPOULOS: I thought it was higher than that.

CHAIRPERSON JONES: You could -- you could follow up later.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think it was higher than that.

CHAIRPERSON JONES: That's okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: We'll follow up with -- why don't we just follow up with this item.

CHAIRPERSON JONES: Okay. Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: How many were voted and how many do we have in our database today?

CHAIRPERSON JONES: Yeah. Okay. Thank you.

Thank you. Okay.

CHIEF OPERATING INVESTMENT OFFICER BOURQUI: I have an additional one.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Okay.

CHIEF OPERATING INVESTMENT OFFICER BOURQUI: Just an additional one on the -- on thinking about how long-term strategies in companies, and how it links together with the CEO tenor, and to have some statistics and to kind of think about that for our different programs.

CHAIRPERSON JONES: Okay. Great job.

(Laughter.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: Thank you.

CHAIRPERSON JONES: You had some I didn't have.

CHIEF INVESTMENT OFFICER ELIOPOULOS: And we'll try and make it very specific for the minutes that you'll see on Wednesday.

CHAIRPERSON JONES: Okay. Right. Okay. Okay. Well, thank you very much.

Okay. So that then brings us to the last item on the agenda, public comment. And I have a request to speak from the public. The first person is Dr. George Diehr. And each of you will -- and the next two people, Terry Brennand and Christy Bouma, if you'll come forward and occupy these seats here. You'll have three minutes to speak. And the timer is here to gauge your comments, and...

DR. DIEHR: Thank you, Mr. Chair and members of the Board. My name is George Diehr, Emeritus Professor at California State University, San Marcos. I'm a retired member of CalPERS and I was former Board Member from 2003 to 2014.

My comments here concern the hiring of the now CEO, Ms. Frost. The key issue I believe in that -- in her hiring was her misrepresentation of her education, a myth seemed to be perpetuated over some time. That she was pursuing a program Evergreen State College that would lead to both a Bachelor's and Master's degree. Such a program apparently doesn't exist.

So it may have been her goal, I think, as she stated. But it's difficult to call it a pursuit, since she started two writing courses, but completed neither one, and as she was never enrolled in a degree program.

Ms. Frost originated this myth many years ago and repeated the claim on her application to CalPERS. The claim was posted online by CalPERS, and I believe some members of the Board repeated that myth to their constituents.

Even after she was hired, nothing was done until very recently to correct documents that were posted, the press release that continued to state she was pursuing the degree. So it seems reasonable, at least as an outsider, that with not having a degree that the pursuit of such a -- of a degree and Bachelor's and Master's combined, was prob -- could very well have been important in the decision to make her hire -- to hire her. And if it had not been completely up front about what that was, a different decision might have been made.

Criticism has been labeled at the original source of information about her -- about the misrepresentations the Naked Capitalism blog, which is characterized as fake news. And I certainly agree that a lot of things there are, if not fake, they're certainly exaggerated. But a lot of the key issues were substantiated by Bloomberg and others. And on Sunday Michael Hiltzik, Pulitzer Prize winning L.A. Times journalist posted an article, Pension Fund CEO's Murky Hiring. One of my colleagues put it, ignore Hiltzik at your risk.

I believe that this address -- this issue needs to be addressed. It can't be just ignored. And I believe that a -- it's essential that a thorough investigation be conducted, and I believe best conducted by an independent external organization, and not by the Board, which is so heavily invested in this.

That investigation do a couple of other things.

It should determine why a Bachelor's degree was not required, which is very common for most CEO searches for pension funds. And also, given the problem with the further -- the earlier search for the CFO, there needs to be a study of how to improve the process, so the --

CHAIRPERSON JONES: Thank you for your comments.

Mr. Brennand.

MR. BRENNAND: Good afternoon now, I guess. Mr. Chairman, members Terry Brennand on behalf of SEIU California.

We have a different, if not opposite, take on the hiring of Ms. Frost. And I'm a little disturbed that a former union member would come up here and suggest that a blog is sufficient to initiate an investigation outside the proper rights of any employee to due process. We feel like this is rightfully something that should be handled by the Performance and Compensation Committee, which is formed to look at these sorts of personnel matters.

The fact that it's been dredged out into the public, not corroborated but repeated by other news sources, we find very disturbing. And I mean, no offense to my, you know, dreadlock wearing friends at Evergreen College, but I can't imagine anything that would prepare you to be the CEO of CalPERS more than the experience of the CEO you've hired and the work record she's had since she's been here.

Thank you very much for your time.

CHAIRPERSON JONES: Ms. Bouma.

MS. BOUMA: Mr. Chair, members of the Committee, Christy Bouma here on behalf of the California Professional Firefighters. I actually would just like to embrace the sentiments of my colleague, Mr. Brennand, who just spoke on the merits and just suggest that again experience does matter. And I have watched this Board, and this body, and this system tack at a degree we've not seen out of such an organization in recent years.

And it takes some strong leadership and experience to do that sort of thing. So I would encourage you to engage under your normal process, and the appropriate committee to handle an HR problem as you would and as my members would expect their managers to do so at a fire department anywhere in California.

So I express strong support for this leader and this Board in making an appropriate decision on how to handle this issue.

Thank you.

CHAIRPERSON JONES: Okay. Thank you.

That completes the list that I have.

MR. SOARES: Chairman Jones, may I just briefly respond to some points and comments?

CHAIRPERSON JONES: Would you come up to the mic and state your name, the organization that you represent, and the -- and you'll have three minutes.

MR. SOARES: Thank you very much, Mr. Chairman. My name is David Soares. I'm a retiree. I was a prosecutor in Santa Clara County for 32 years. I'm active in RPEA. I'm actually on the Legislative Committee, but I'm speaking as an individual today.

And I'm just very concerned about some of the comments that I've heard. Because Mr. Hiltzik's article in the Los Angeles Times about CEO Frost is based on documents that were obtained pursuant to the Public Records Act. And I know members of this Board thought that Ms. Frost had completed substantial course work toward a degree. I don't think we're talking about credentials. What we're talking about is doing any work at all.

And I'm concerned when we talk about experience of the CEO. Washington State, where I actually own property, my kids live, is divided into three. It's not like CalPERS. Ms. Frost was $139,000 a year head of the clerical division that basically processes the checks, that asks -- answers member phone calls. There's an investment division, the Washington State Investment Bureau that's actually headed by a very highly qualified woman who's been there since 2003. And I think we're really disrespecting her if we put Ms. Frost's experience, in a mainly clerical job -- and she has said, she was a clerk typist when she was hired. She has -- doesn't have the educational background. She doesn't have the investment experience.

And I should also add that Washington has a separate State actuary who's employed by the State legislature in Washington who does all the actuarial work. And the most important role, and why I came here to the Investment Committee, is of course investments.

As much as I'm concerned about contribution rates, I'm also concerned about the sustainability of my pension. As a recent retiree, I have a fairly long life expectancy. And I want that money to be here. And if this Board is so careless as to look the other way when there are falsehoods that have been made about someone's background to get on the Board. And I think this Board was misled. I don't think this Board was out to hire someone unqualified.

I think that you do, as fiduciaries, have to conduct as prudent persons an independent investigation of this state of affairs, and make a formal decision about how you're going to proceed, and not just try and brush this off. Because this isn't just some blogger. I've seen the documents that were obtained pursuant to the Public Records Act. And they're very disturbing. And I think that's why the Los Angeles times and Bloomberg are picking up this story. And it's my understanding that others very substantial media outlets are going to be reporting this.

Thank you very much for the opportunity to address the Board.

CHAIRPERSON JONES: Okay. This meeting is adjourned. And we will convene in closed session at 2:00 o'clock.

(Thereupon California Public Employees' Retirement System, Investment Committee meeting open session adjourned at 1:07 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 28th day of September, 2018.

JAMES F. PETERS, CSR
Certified Shorthand Reporter
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