NEW YORK CITY TEACHERS' RETIREMENT SYSTEM
INVESTMENT MEETING
Held on Thursday, March 5, 2015
At 55 Water Street
New York, New York
9:50 a.m.

ATTENDEES:

MELVYN AARONSON, CHAIRPERSON, Trustee, TRS

SANDRA MARCH, Trustee, TRS

THOMAS BROWN, Trustee, TRS

SCOTT EVANS, Trustee

SUSANNAH VICKERS, Trustee

CHARLOTTE BEYER, Trustee

PATRICIA REILLY, Teachers' Retirement System

THAD McTIGUE, Comptroller's Office

MARTIN GANTZ, Comptroller's Office

JOHN ADLER, Trustee, Finance

SUSAN STANG, Teachers' Retirement System

DAVID LEVINE

ATTENDEES:

VALERIE BUDZIK, Teachers' Retirement System

PAUL RAUCCI

RENEE PEARCE

JOHN MERSEBURG, Comptroller's Office

LIZ SANCHEZ

PRESENTERS:

YVONNE NELSON

CHRIS PAK

ALEX DONE

PETYA NIKOLOVA

DAVID ALTSHULER

DAN GALINKO

EVAN NAHNSEN

MARC LIPSCHULTZ

RAJ AGRAWAL

SUZANNE DONOHUE

WILLIAM FOSTER

PRESENTERS:

STEPHEN BURNS

ISHIKA BANSAL

W. JEFFREY BECKHAM

MATT BRONFMAN

ALIX RICE

JOHN GRAY

ALEX HILL

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MS. REILLY: Good morning. We'll begin the investment meeting of the Teachers' Retirement Board for March 5th, 2015. I'll start by calling the roll. Melvin Aaronson?

MR. AARONSON: Here.

MS. REILLY: Thomas Brown?

MR. BROWN: Here.

MS. REILLY: Sandra March?

MS. MARCH: Present.

MS. REILLY: Suzanne Vickers?

MS. VICKERS: Here.

MS. O'REILLY: John Adler?

MR. ADLER: Here.

MS. REILLY: So we do have a quorum and I'll turn it over to the chair.

MR. AARONSON: Thank you very much. At this meeting we'll start with a public session of the QPP. We move to the public session of the Passport Funds and then when we go into executive session. We have a report by the Passport Funds in executive session and then we will have the QPP executive

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session. So that's going to be the order of the day.

And after saying that, Scott.

MR. EVANS: Thanks very much. This is a spiral-bound book, please. We're going to talk about the results. This is the second fiscal quarter ending December 31st. If you turn to page 11, we can see the results for the quarter. The fund was up 2.11 percent, policy index return of 2.02. That is an incremental excess of 9 basis points. You can see on page 7 that 7 of those basis points were allocation effect whether we were under or overweight individual sectors and two basis points were selection.

That's as close as you get to a draw versus the benchmark for quarter. Very, very even results with the benchmark.

On page 12 you have the 12 months ending December 31st. 7.75 for the plan, 8.50 for the policy index. You

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can see the under-performance was primarily in selection effect. That's how the managers are doing relative to the benchmark and whether they are overweight or underweight of the benchmarks themselves.

The three-year returns on page 13, again you had positive allocation effect and negative selection effect ending with 18 basis points.

So since we're talking about the quarter, we'll go to page 14. We'll look where the 9 basis points came from. It is very modest, so I'll be brief here. Interesting things going on in selection effect. This is how the managers are doing relative their benchmarks where you have the developed markets. These are the EAFE portfolios doing very well relative to their benchmark and private equity actually in the plus column. Private equity had been in the negative column when the public markets were going up so much,

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there is a lag effect with private equity and now we're slightly positive.

If you turn to page 15, you can see how the fund is doing relative to its peers. Its peers being all those funds, public funds, over $10 billion. And the Teachers' portfolio is the red star. The benchmark is the blue star. You want to be at or about that top bar, which is the top quartile. The gold bar is the median. You can see we are sort of median over the ten-year period, but have done better recently relative to peers over the past quarter, both the benchmark and the system in the top quartile and over the past two quarters.

So this fiscal year we are in the middle. The distribution for the portfolio and the benchmark is doing well. One of the things you can definitely conclude here is we have a tough benchmark, when you look at the benchmark itself is tougher than the peers.

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That's all I have on the topdown analysis. We are now going to hear from the heads of each asset class. We'll give you a little more depth about what's going on and I'll start with John Merseburg.

MR. MERSEBURG: Good morning. If you would please turn to page 20 on the spiral-bound book, you will see the total equity composite. That has been close to the benchmark for most periods. The tilt from performance over the trailing 12 months, but since it's mostly passively managed it is very close to the benchmark.

Turning to page 21, we have the Total Small Cap composite. That was behind the index for the quarter and for 12 months, but is well ahead of the benchmark for longer periods. And that's because of the good performance of the one active manager in that composite.

Moving to slide 22, you see that

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the Total Mid Cap composite is ahead of the benchmark for the quarter, but behind for longer periods. That's basically because this consists of an S&P Index fund which has a smaller tilt relative to the Russell Mid Cap benchmark index.

Moving on to page 23, you see that the total Russell 1000 composite was close to the benchmark for most periods. The slight under performance in the most recent quarter was because of the active managers.

Turning to page 24, you see that the Russell 3000 passive composite is close to the benchmark for most periods as we would expect.

And then on page 25 we see that the manager of managers benchmark is behind the manager of managers composite -- excuse me, is behind the benchmark for the quarter and most trailing periods, but it has a relatively short track record.

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Turning ahead to page 27 we have the total developed markets composite that was ahead of the benchmark for the quarter. It was down 2.35 percent versus the index which was down more in a negative 3.57 percent. During the quarter the active composite beat the benchmark while the passive composite trailed a bit.

Moving on to page 28, we have the developed growth active composite that was ahead of the benchmark for the quarter and for the longer three and five-year trailing periods.

And then on page 29 we have the total developed value active composite. That was also ahead of the benchmark for the quarter and ahead for the longer term, five and ten-year trailing periods.

On slide 30 we see that the developed Small Cap active composite trailed for the quarter. Again, a shorter track record, only goes back 12

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months.

And on page 31 we are wrapping up public equity. We have emerging markets and the emerging market composite trailed the custom benchmark slightly for the quarter.

Does anybody have any questions on the public equity?

MR. AARONSON: I have a question for the index portion. I know to match the index, if you just are investing in the index it is difficult because of the costs. But it is my understanding in our program we do stock lending and it was always my belief that the added benefit we get from stock lending should keep us at least upward of the index or even ahead of the index.

And I see for at least the last three years or so, that we are slightly behind the index. Is there something going on with our stock lending program?

MR. MERSEBURG: The securities lending, the accounts don't get credited

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to the accounts that they come from. So whatever earnings we get from securities lending for the Russell 3000 account does not get credited at the managers account.

MR. EVANS: It comes at the total level.

MR. MERSEBURG: Yes.

MR. GANTZ: We have a breakdown for you if you want, but we don't credit it to the manager's account simply because it is not attributable to the manager's performance itself. But it is credited. If you look at the appendix of this book at the end, there is a line that says "Securities Lending." That is the value. There is also a chart on page 66 that you see the equity earnings by year, so it is credited and it is accounted for on a performance basis as well. Going on a consolidated basis if you want a breakdown, we can get it.

MR. EVANS: But securities lending do offset a bunch of the costs.

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MR. AARONSON: Yes, I would like to see that.

MR. MERSEBURG: Also if there is a -- typically if there is a difference because of the cash drag. So at the end of the year we had some cash movements. Depending on what the market does in the three days between trade and settlement date, that can have a little impact. But we find that evens out over a course of time. If you look at the longer term record, it evens itself out.

MR. AARONSON: Anybody else with a question?

John, thank you very much.

MR. MERSEBURG: Thank you. Thank you. I think I'll hand it over to Yvonne.

MS. NELSON: I have market value of $2 billion. There are five.

MR. AARONSON: What page?

For page 32. It is just one page, but it is good news in that we've had a phenomenal year in 2014.

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As you can see, in terms of our portfolio, it was slightly under the benchmark for three months, fiscal year to date. But the good news in all that is both numbers are in excess of 30 percent and I think that's pretty good. Also as we look at longer terms, we see that our managers have successfully outperformed this benchmark. And as we look at the trailing ten years, the Teachers' portfolio is ahead by 113 basis points.

Any questions?

MR. AARONSON: Continue to do that.

MS. NELSON: Thank you.

MR. GANTZ: Martin Gantz. Good morning, Mr. Chairman, trustees.

If you turn to page 34, it is a summary of the Fixed Income Asset Allocation for the Teachers' Retirement System as of the end of December. And you'll see the pie chart and the market values were over 20 billion for fixed income and it is roughly 35 percent of

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the whole fund. And the largest section by far is in dark blue, which is the Core Plus Five.

Breaking down the Core Plus Five is on the very next page, 35. It represents just under $10 billion and is nearly 17 percent of the fund. It has government sector, mortgage sector and credit sector. We are overweight the spread sectors, mortgages and credit and underweight the treasury sector and because this was -- the quarter rates declined as we'll talk about. We were underweight the sector that outperformed the most, so that didn't help. But we'll show performance in a moment.

If you look at the difference column, each of the sectors have underperformed. Of the 13 managers, we had 6 outperformed, 7 under-performed. And most of the under-performance came from the government sector because of the interest rate moves. And in the mortgage and credit sectors are much

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more modest. So taken together as a whole, what does it mean?

On Page 36, Core Plus Five returns for the quarter on the left were 1.77 behind the benchmark for 2.23. For one-year return, very strong considering how low rates are. It shows what declining rates do, the return is 7-1/2 percent, just under the benchmark. And for longer periods of time -- well, ahead of the benchmark for all of those periods of time. Again, I mentioned there were 13 managers when you go to the one-year number. Of the 13 managers, 11 outperformed. And the only 2 that didn't were in the government sector and that goes away on the long term.

The next slide is progress, which is our emerging manager program. And it is virtually a mirror image. Progress hires managers to mimic the Barclays aggregate, which is the most commonly investment grade benchmark.

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On page 37 you'll see on the left also underperforming virtually for the same reasons, under-performance in those manager's government pieces of the portfolio. Even though it is not sector portfolios, it is the government pieces and doing well elsewhere in the portfolio and the credit sectors. And for the one-year period, they are slightly above the benchmark.

TIPS is shown on page 38. The returns were roughly flat for the quarter. And for the physical year to date we are actually negative. And the one-year period, I'm talking about absolute basis, were slightly positive less so than the Core Plus Five. And the returns were just under the benchmark.

As you know, we just completed or approved the TIP's Manager restructuring and we'll be announcing results of that to the board probably next month. The transition is being completed I believe

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this week.

For high yield, on page 39, that's about 4-1/2 percent of the fund and it is about $2-1/2 billion. You will see the returns are spot on on the benchmark. This is very interesting because it is minus. Normally high yield you think of being correlated with equity. So equities are going up, the largest sector of issuance, of new issuance for high yield in 2014 was energy. When energy crisis started going down, it ultimately went down by 50 percent. Recently, certainly in the fourth quarter, that sector got hurt a lot. And because it is a bigger sector of high yield, you ended up with negative return. It also pulled down the 12-month number as well to 2.46. I'll tell you that recently in the last -- as crude went down to about 40, a little above 50 -- we'll talk about that in a moment -- there's been a significant rebound in those prices. So

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spreads have tightened and have come back. May be temporary, but they've come back. So now returns are back into a much more positive number. And the long-term numbers, you see the 10-year and 15-year numbers are 17 percent.

Bank loans are on page 40. That's a relatively new program since 2012. In this case, it is doing very well. The benchmark was negative, less negative than high yield as you would expect because it is higher than capital structure because it has less risk. Managers did better because they were more defensive in all the periods you see. In high yield we have a mix of defensive and aggressive managers.

Convertible bonds on page 41. I told you this day would come when managers would outperform. It would be when the markets would be muddling along and have negative returns. And that's surely what happened in the last three months, where the returns are very modest and the program outperformed the primary benchmark by 100 basis points and the fiscal year to date over -- nearly 150 points because the benchmark is negative. For the trailing periods, it is still behind. But as we get through a market cycle, that should turn around. And the managers themselves, comparing the dark blue to the gray, are beating their individual benchmarks.

Opportunistic fixed income on 42, you'll see negative fixed and the 10 percent benchmark. It is very similar, some markdowns for energy. But in the case of Opportunistic income, it is where they are involved in restructuring or buying things that are cheap and things are going into distress to recapitalize a company. So there are more. So they write down public securities right away. Ultimately, that's what we want in the portfolio for. Only other comment, longer-term opportunistic doing very well we see.

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Unless you have questions, I'll turn it over to Brian -- Chris. I apologize.

MR. PAK: Good morning.

If you turn to page 43, we have the ETI returns. And as of December 31st 2014 the Teachers' ETI portfolio outperformed its benchmark by 42 basis points. And over the last 12 months the Teachers' ETI portfolio outperformed its bench by 2.3 basis points.

If we flip to the big book, page 7 in the big book, we have the detailed collateral benefit reports for the ETI program. So on page 7 we have the PPAR program, collateral benefit report listed. And the Teachers' PPAR portfolio outperformed its benchmark by 54 basis points during the second quarter of the fiscal year and by 564 basis points over the last 12 months. There was a slight drag in the returns because we had a large prepayment for Cathedral Towers, but that resulted in a

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prepayment penalty by the borrower. In the fourth quarter, Teachers purchased 15.5 million in liens to create or preserve 956 units. Those loans originated through Bank of America, Citibank, CPC and LIIF.

And I'm happy to report that in the -- as of December 31st, Teachers received its first rate lock from a new lender, Wells Fargo, for a $1.8 million loan in the Stapleton section of Staten Island. And the Teachers' portion of that loan would be $360,000. It is going to be supporting a six-story affordable housing development with 67 units. In addition to that rate lock, Teachers made $13.7 million for rate lock commitments through Bank of America Citibank and CPC. I would like to point out, because we added a new lender with Wells Fargo, we had a slight excel error. So up on top where it says "current market value," we accidentally doubled that sum. It should be 161.9

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not 322 million.

MS. MARCH: We'll take the error.

MR. AARONSON: I have a question. In the total commitments, to my understanding, Manhattan is the richest borough in the city and the Bronx is the poorest borough in the city. Yet we seem to be making in this program more contributions and investing more in Manhattan than we are in the Bronx. So since this is supposed to be an economically-targeted investment, is there any explanation for that?

MR. PAK: Sure. So the historical figures on the bottom goes back 30 years. So we do, you know, shifting demand over time to different boroughs. But our program is a long-term takeout program and we basically help support the affordable housing stock through extending 30-year mortgages to them.

And our program is most frequently used in conjunction with additional subsidiaries from different city

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agencies, so we are -- our program basically helps -- helps affordable housing programs in those areas, but we -- it is in conjunction with other city subsidiaries. In the past we might have had more money flowing into Upper Manhattan and such is compared to the Bronx.

MR. AARONSON: Thank you.

MR. PAK: If there are no additional questions, if you flip to page 9 we have the AFL-CIO-CIO housing investment trust. Last quarter we missed the benchmark by 6 basis points. But this quarter we are -- we've outperformed its benchmark by 15 basis points and 36 basis points over the last 12 months.

If you turn to page 10 in the big book, this is the Workforce Housing Initiative for the AFL-CIO-CIO. And we had a new investment of 8.265 million for an HDC bond offering that will be used to finance 619 affordable units in

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Long Island City.

If you flip to page 11, we have the Access Capital Strategies Program. The Teachers outperformed its benchmark by 44 basis points over the last 12 months. In the fourth quarter, Access purchased 5 million of HDC multi-housing revenue bonds. And those, the proceeds were used to rehab 874 units of rental housing in ten buildings across six scattered cites in Bronx, Manhattan and Brooklyn. In addition, Teachers invested 1.2 million in 79 multi-units in the Bronx.

That concludes the ETI collateral benefit reports. Unless there are any questions, I'll turn it over to Alex.

MR. DONE: This is Alex Done. Good morning, Mr. Chairman and fellow trustees.

Today we are doing the private equity quarterly report. We will be discussing third quarter '14 numbers, September 30, 2014. I'll turn you in

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the big book to page 24 and that is where we will begin.

Page 24 provides a snapshot of the portfolio's active commitment and overall performance. You will see in the middle of the page, the table, Teachers had 5.5 billion of active commitments through the third quarter of '14 across 90 managers and 142 funds. Portfolio had a market value of $2.7 billion, which represented 4.7 percent of total Teachers' plan assets relative to the 6 percent target to the asset class. In addition, unfunded commitments totaled 2.2 billion resulting in total exposure of $4.9 billion to the asset class. If you look at the bottom of the table, you will see that the returns since inception have decreased 14 basis points quarter over quarter to 9.45 percent versus 9.59 percent in the June quarter and multiple -- net multiple is standing steady at 1.3 times.

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Now, I ask you to turn to the next page, page 25. Here we list recent commitments. Teachers close on one commitment during the third quarter to Vista Equity Partners and it was $125 million commitment.

If you quickly turn to page 26, we list subsequent commitments from the third quarter through February 24th of 2015 and Teachers close on an additional $242 million in commitment. And that was to seven partnerships, two Core partnerships and five emerging managers.

Moving next on, I'll flip you to page 28. So on page 28 we'll look at the Quarterly Value Analysis. So during the third quarter of '14, the portfolio was slightly cash flow negative. So contributions exceeded distributions to the tune of $41 million. However, the portfolio has been cash flow positive in three out of the last five quarters. You will notice here as well that quarter over quarter and year over year,

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the portfolio value has actually increased. So in the quarter or quarter over quarter, that has increased $75 million or 2 points year over year. The value of the portfolio has increased by $301 million or 12-1/2 percent.

Now I'll take you to page 29. The portfolio performance is broken out by strategy. You will see the leading strategies are special situations at about 19 percent net IRR, large buyouts at about 17 percent and secondaries at 15 percent net return.

Now I'll take you to page 31 where you can visually see the cash flow movement over the last several quarters. And I mentioned you'll notice the cash flow has been positive over the three of the last five quarters.

The last page is 32 that I'll present. Here you see the portfolio remains diversified by strategy, buyouts, our largest exposure, at 54 percent and that's versus a target of 65

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percent. We expect this exposure to increase as we continue to source and commit --

In terms of geography, pie chart to the right, you'll see North America shows the largest and Western Europe 15 percent and rest of the world is balance and Asia at 3 percent.

Bottom of the page, as requested by the board, we have updated this page to reflect the portfolio's exposure to New York State-headquartered companies. In terms of market value, you'll see in that table that 9 percent of the PE portfolio is exposed to New York State-domiciled companies and 5 percent of the portfolio is exposed to New York City-domiciled companies.

And with that, I'll take any questions.

MS. MARCH: Not about your report, didn't we ask that you analyze our private equity portfolio so that we could know -- since inception so that we

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could know, since we believe we pay very high fees in that area, if the earnings that we've had with all our private equity firms have really -- their earnings have really been a value to us, value to us considering what we have to pay to have private equity managers? I believe we asked that question.

MR. AARONSON: I recall it.

MS. MARCH: We did ask that question. Somebody take a look at our private equity portfolio, all of the private equity managers, analyze what fees we have paid these managers and analyze what in total we have earned as a result of invested in those managers' net results, what have we earned.

MR. DONE: We can certainly come back with the details on that. I can tell you as we report on the quarterly performance, the figures we provide is since inception. So it is purely a return perspective, portfolio has returned 9 percent value over time and

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that is net of fees.

MS. MARCH: It is net of fees?

MR. DONE: Yes.

MS. MARCH: With all the private equity funds that have not exactly performed as we expected, which can happen?

MR. DONE: It includes every fund you've ever invested in, whether you are an investor today in it or not. So this is since inception.

MR. ADLER: And what is the relevant benchmark?

MR. DONE: It is a public market benchmark. It is the Russell 3000 plus 300. We have in here relative benchmark performance and certainly we have under-performed the public market benchmark since inception.

I'm just looking for the actual data here, but we have under-performed by 3-1/2 percent or 355 basis points. So if you look at since inception, if you were to have invested your dollars

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in the Russell 3000 plus included a 300-basis point, that would have returned 13 percent versus the 9.45 percent that the portfolio has returned. So we lagged by 355 basis points.

MR. AARONSON: Does that mean you lagged the Russell 3000?

MR. DONE: Plus 300. Go ahead, sorry.

MR. AARONSON: The Russell 3000 by 355 points?

MR. DONE: Yes.

MS. BEYER: How much?

MR. AARONSON: 355.

MS. MARCH: If I take it one step further, and if I'm not making sense someone will correct me, we invest in asset classes that take very little of our effort, very little of our staff for much larger percentages of our assets. So you are telling me what the earnings are on about 2 to 3 percent of our assets. I believe we have 5 percent invested.

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MR. DONE: Yes.

MS. MARCH: How can we compare the effort that it takes to earn this money in comparison to what effort it made both in terms of staff that has to handle it, consultant that has to handle it, time that it takes to do it? All of that has to be evaluated when you were finished in the end of saying we earned this percentage. So I don't know if that question makes any sense, but it does in my mind. Because when it is over, everything we learned we learned in kindergarten.

MR. EVANS: Let me make sure I'm understanding. We do show on page 27 the answer to your question, net of fees, how are we doing versus if we just invested in the market. And, as Mel said, if we just invested in the market we would have 55 basis points. But we also have to look at what we are paying the managers and the effort that we are taking, the extra costs that we have to cover the private equity class, the extra accounting and the consultants' fees and everything else. And I think that's a correct way to look at it.

I think we have to look at that for all asset classes. And the benchmark that we should compare ourselves to is, you know, if we index the money, and in this case in the Russell 3000, we get X. So private equity is optional, real estate is optional, Opportunistic is optional. So if we invest in optional asset classes, are we or are we not confident that we can get extra returns?

Now, in private equity this management team press said or management team Larry Schloss, a private equity expert, have counseled the way to get value out of this asset class, the private equity asset class, is concentrate your focus on the managers that have demonstrated capabilities to earn sufficient returns over time. And "sufficient" being index returns plus an allowance for the leverage that they take and the liquidity.

So since I've been here, and as I understand several years before that, we've been endeavoring to bring you only managers that have conviction, that have a high probability of earning sufficient returns. And so I think you'll see as we move forward, because it takes a long time for private equity to work, this happened if we concentrate our efforts and high on producing the returns that are necessary to cover these costs, which you correctly identified.

MS. MARCH: And I have a question. When Larry Schloss was there, the private equity expert, we had staff. Even though we have a consultant, I believe the staff at my investment level, advisor level has to be staffed to be able to watch the consultant and the private equity managers.

Do we have a full complement of staff at BAM right now?

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MR. EVANS: No, we don't. As you know, there were a fair number of people that left with Larry. I believe Alex Done has done an excellent job. We have a fellow that started yesterday, Anash -- what is his last name -- Kadizia who is a very bright young man. And we are building a staff, we have job postings there. You are quite right, without proper staffing we can't get there.

I am currently offering salaries that are below the low quartile level in public pension space. So it is very difficult to recruit staff at the salary levels that we are able to offer. The consultant or comptroller is very aggressively working to help me address that situation, but we are in many cases dealing with situations where people are able to leave for many multiples of what they earn even to other public pension plans, public pension plans where the living costs are much, much lower than

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they are in New York City. We have people that are able to leave and get a premium elsewhere. So this is something that needs to be addressed.

We will be back to the board in terms of soliciting proper funding, but there is no higher personnel priority on my plate than getting a full complement of a private equity staff.

MS. MARCH: I respect what you want to do, but you have to respect this is our members' money and sometimes we have to work a little faster to ensure the fact that we have the right staffing handling such a complicated aspect.

MR. EVANS: We are working at it at full strength.

MR. AARONSON: I just want to say that labor trustees have nothing but the highest respect for Alex's ability, but he's working alone now or was working alone. And he is not superman and he can use --

MS. MARCH: Alex -- my remarks were

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not directed at Alex.

MR. EVANS: No, they were directed to me.

MS. MARCH: And no -- and we are very pleased to have Anash joining the staff and he will add to our capability. And we also have people from our other asset classes working out and we have very competent consulting staff, so your assets are being looked after. But we need more staff if we want to get this job done.

MR. AARONSON: Are you finished with your report?

MR. DONE: I am. Any questions?

MR. AARONSON: No.

MR. DONE: Thank you.

MS. NELSON: So, back again, this time we're going to turn our attention to private real estate in the board book, page 47, beginning of the presentation for real assets. As you know, there is a 6 percent allocation to real assets. I will be reporting on the

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highlights for the third quarter 2014 for real estate. The page numbers on the right are obscured, so after this page I'm just going to return to the pages down at the bottom.

So the first page of the report at the bottom is page 1. And I'll continue to refer to those page numbers since it's hard to see what else is going on. So just to kind of give you an overview, real estate recovery is finally taken hold with U.S. followed by Europe and Asia. This is turning out to be a great investment environment for real estate and we are seeing signs of that. I guess the biggest surprise in 2014 was that interest rates stayed so low that, together with some very healthy debt markets, has been driving up the value of real estate.

For example, in your own portfolio if I look to what your market value was third quarter of 2013, it was 1.1 billion. And as of this reporting date,

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it is 1.4 billion, an increase of 300 million or 27 percent. We also have some commitments that we have yet to fund, close to a billion, about 950 million. Altogether, our exposure to the real estate asset class $2.3 billion and that's comprised of about 45 deals. We have about 36 managers working on that and I'm going to talk about performance.

If you look at the lower right, you'll see a graph. The Teachers' portfolio is the dark bar and the lighter bar is the real estate benchmark. The real estate benchmark is a time-weighted benchmark. It is the Odyssey index plus we add a premium of 100 basis points because we have both Core and Non-Core investments in the portfolio, as you know.

For the quarter, looking over to the left of the graph, you'll see that the performance for that quarter is 2-1/2 versus the benchmark of 3-1/2. So

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we are under about 80 basis points here. We have that 100 basis points premium for a reason. You don't always see it every quarter. The performance from the noncore managers were relatively flat this quarter, but as you look over to the right, more importantly for the longer periods and for the year maybe, you can see some of the positive attributes that I talked about.

About the market in general, you'll see that the Teachers' portfolio outperformed the benchmark by 50 basis points for the year, similarly the three-year by 20 basis points, the five-year by 110 basis points, the ten-year which is the kind of bright line that we draw on the IPS in terms of is this program performing or not performing. Ten-year mark is what we look to. And there is a very strong 390 basis points outperforming there. Since inception, 140 basis points. And in terms of dollar rate return basis given

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the conversation we just had earlier, the since inception return is 8.7 percent for the program reflecting 1.3 times equity multiple.

In terms of investment activity, there wasn't any investment activity in the third quarter, but since the third quarter we submitted and closed Almanac on your behalf and also committed and closed at 65 million. We talked about in our annual plan for real assets a goal of about 785 million for the year and so real estate has contributed 150 million toward that. And we are talking about other investment proposals later in the agenda.

So if you move over to page 2, this really is just a drill-down of the portfolio by investment style. We talked about exposure of real estate at 2.3 billion and that's comprised of Core and Core Plus strategies where those managers are delivering returns that are primarily comprised of income. And then

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you have the Non-Core managers who are looking at things opportunistically, trying to fix broken capital structures. And that part of your portfolio is about 60 percent. Within that Non-Core 60 percent is also a slice where you would find the emerging. So in terms of where we are today, we are at 2.4 percent funded and we are 4.1 percent committed.

MR. AARONSON: Excuse me? Is this the same in private equity, we give the money and we lose all the income on the money while they are holding it?

MS. NELSON: I'm sorry, I didn't hear the last part.

MR. AARONSON: The committed money, so we have 2.4 billion invested, 1.7 billion committed?

MS. NELSON: Those were percentages.

MR. EVANS: Are you asking if we pay fees on committed?

MR. AARONSON: Yes.

MR. EVANS: Do you pay fees on

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committed?

MS. NELSON: Yes, it varies. It varies. We know it is very, very important to you, so I would say we've been striving not to pay committed. I think we've been successful in the separate accounts we've established, so in terms of the accounts that we did with MS related and Hudson, we don't pay on committed. We drop that. In terms of the commingled funds, they are more broadly available in the marketplace and are driven by what the market says. You know, we do pay on committed less. So over the years, you know, we try to bank them on that.

MR. EVANS: So she correctly noted and it is important to ask, when we can hire manager and pay less for that manager, we do it. If we can get people to work for just invested capital, we do it.

MR. AARONSON: So I neglected to ask the same question when Alex was

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reporting. We have a large committed amount that's not invested yet. Are we paying high fees to the managers for that money?

MR. DONE: In private equity you do pay fees on commitments.

MR. ADLER: Through the investment period?

MR. DONE: Yes. And that's standard.

MS. BEYER: And part of your question is are we giving those funds over and I don't think we are. They are committed and not until they are called, or are we putting the monies in?

MR. EVANS: Before the funds are called, they sit in the -- in the holding place in the case of private equity -- what do we call it, Martin?

MR. GANTZ: It is parking places.

MR. EVANS: It is in the Russell 3000 for the private equity. It is a combination of.

MR. AARONSON: And, therefore, for

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Russell we are paying sometimes 2 percent.

MS. BEYER: Exactly.

MR. EVANS: That's why you have the so-called J curve.

MS. BEYER: What portion would you say is the commingled versus the separate?

MS. NELSON: I would say we are predominantly commingled because of execution.

MS. BEYER: Okay.

MS. NELSON: It is -- it is more prudent and it is easier to get a lot of dollars out the door in a commingled fund. It takes deep, deep resources, as you know, to invest on a direct basis. And we've done that in real estate and on limited occasions in the separate accounts that I mentioned. And that's because we are there, we can get on the train, they call us, we look at the deal together. You have to have deeper resources in order to execute directly.

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We've been doing that in a gradual way as we've been building up BAM.

MS. MARCH: I want to follow up with something that one of the trustees said. It is true that if we've committed X number of dollars to a private equity firm that they haven't put to work yet, the money is invested somewhere and it is earning money. I realize that.

MS. NELSON: Yes.

MS. MARCH: But would you not say if we are paying the private equity manager X amount of money for the assets that they really should have already put to work, if those funds were invested in an asset class that earned X you would have to subtract the earnings that you earned in the asset class that the money was in from those assets as to what you paid the private equity manager to really know what those assets earned?

So if it is in the Russell 3000 and the Russell 3000 earned 8 percent and

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there was $100,000 that we're talking about and that $100,000 you are paying the private equity manager 20 percent for those fees, when it is all over you've got to subtract it to know what those assets really earned. You can't really clearly say that those assets are still earning their going rate because they are still committed. There is a second part to the story, although it may not be a huge amount of money.

MR. EVANS: If I'm understanding you --

I'm sorry, I'll let you finish.

MS. MARCH: No, I'm finished.

MR. EVANS: I think your concern is taken care of by the way we calculate the returns in private equity. So those costs that you have on committed funds are getting deducted against the private equity. So when they finally call the money down, you have to earn back those monies on top of it. And what we use as a benchmark is the Russell 3000. So

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from the moment they call down the assets, the question is are they earning at sufficient money to outperform both the fees and what we would have gotten for index invested.

MS. MARCH: So if I understand what you just said to me, and maybe I don't understand it, if there's X dollars in the Russell 3000 and that money earned that much and there's X dollars in a private equity managers portfolio and we are paying them but it is not earning anything when you figure out the fees, you subtract from the private equity managers' money?

MR. GANTZ: It is in the returns.

MS. MARCH: No, I understand it is in the returns. So what you are saying to me is we lose nothing at all?

MR. EVANS: No, no.

MS. VICKERS: No, we are saying it is baked into the calculation of the returns.

MR. EVANS: If you have a private

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equity fund where you've committed money but no money has been invested, your returns are going to be negative and they are negative by the factor of the fee. So you have nothing invested and you have a fee. That's one of the reasons why you have that curve where you have negative funds, negative returns upfront. It increases the burden on the private equity firm to make money on the back end to account that you are paying money on the front end when the money hasn't been invested.

MS. MARCH: When you are analyzing what we've earned in our private equity portfolio, I would like to see a separate column on the back end they made up what it cost us in the beginning end. I want to see it.

MR. EVANS: We'll break it out for you. Happy to.

MS. MARCH: And I have a few things this board -- and, I mean, the board in total, this board has long time wanted

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to do Workforce Housing. We have been unable to find a manager who's willing to do it. I would like to suggest to the comptroller's office that they work with the AFL-CIO-CIO housing trust to see if something can be developed for Workforce Housing because it is time. And I think everybody here would agree that the AFL-CIO-CIO housing trust has been a stellar investment for us, especially those of us who sat here in 2007, 2008 and 2009 and saw what happened in the real estate market. And the AFL-CIO-CIO housing trust had not one mortgage that wasn't in trouble.

MS. VICKERS: So we've done that. We've had meetings with them. I don't think Chris or Brian are here. I don't know if you were in those meetings. Wasn't there an meeting in late last year based on not just this boards' but, you know, many boards' desire to try to find ways to invest in Workforce Housing and affordable housing? And we have

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told them of our desire.

MS. MARCH: I would make a suggestion, that you contact them now because I believe they may or they may not be interested. But I understand meeting with them previously. I'm just suggesting we do it now.

MS. VICKERS: We've met with them recently and we've been very clear in our desire to work with them. And we are waiting for that opportunity to come to fruition, but they know that we are ready.

MS. MARCH: Thank you.

MS. NELSON: Can I clarify something for you, Charlotte. And you were also asking about fees and paying on committed and real estate. I just want to clarify something and I'm glad we are on page 2. So this slice, Core Plus, this 40 percent slice of your portfolio at the top, the circle on page 2 on the top, it is a pie that's cutting up the portfolio by strategy. And

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there's 40 percent that's allocated toward Core and Core Plus strategies. These commingled funds, they don't call your money until they need it. So, in essence, you are paying on invested.

MS. MARCH: Let's turn the gray to black and the black to gray. That should be our goal. We are very happy to see gray, but let's reverse the colors.

MS. NELSON: Okay.

MR. ADLER: So you are saying the commingled and the Core --

MS. NELSON: The open end funds they have when investors commit to a fund, they put you in a few outside of the fund, they don't call your money.

MR. ADLER: Until they have a deal?

MS. NELSON: Exactly.

MR. ADLER: In terms of the separate accounts, do we have separate accounts on both sides of the portfolio, on the Core side and on the opportunistic side.

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MS. NELSON: We do, yes.

MR. ADLER: Thanks.

MS. NELSON: Yes, and hopefully it is a growing part of the portfolio.

MR. ADLER: Do you know -- do you know how much is in separate accounts, what percentage?

MS. NELSON: I was just adding it up. If you look at page 8, TRS committed about 375 million to New York -- if you look, do you see the gray line that cuts the page?

MR. ADLER: Yes.

MS. NELSON: There is one deal, New York City asset investor No. 2, that's above that gray line where TRS committed 145 million. That says, "New York City separate account." And then in the bottom half, it kind of down -- what kind of order, is this, alphabetical? Anyway, New York City 1 and 3.

MR. ADLER: Yes.

MS. NELSON: So that's about 375 million.

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MR. ADLER: So those are the three separate accounts that we have?

MS. NELSON: Yes.

MR. ADLER: Got it.

MS. NELSON: We had a separate account, Tishman, that did very well, for us and it is no longer active.

MR. ADLER: I see.

MS. NELSON: Oh, actually there's also Taconic.

MR. ADLER: Taconic.

MS. NELSON: 70 million, that's also a separate account that we pay on invested.

MR. ADLER: Thank you.

MS. NELSON: Okay. So on page 3 it is a drill-down on quarterly performance, which I think is instructive. But I don't want to overemphasize quarterly performance because real estate is, you know, a long-term asset class. We do have blips and fluctuations quarter by quarter, but just to summarize, the Core Plus portion

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that we just talked about comprised of about 15 funds delivered a return of 2.7 on a net after-fee basis. And on the Non-Core side we had about 27 Non-Core investments. And for the quarter, that component of the portfolio delivered a return of 2-1/2 percent on a net basis.

Emerging for managers delivering, and a graphical depiction down at the bottom, this is -- page 4 is another interesting way to look at the performance for the quarter. It is a depiction of all of your investments and it is showing you the managers that have performed better than average, which would be those where the bars are coming out from the right side and a big arrow that says "Above average." Folks in the middle are, you know, just doing their thing. And the people at the bottom, below average are the bars coming out to your left.

Interestingly enough for this quarter, the top three performers for

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the quarter was Carlyle, Taconic and Emmis. So two of the three are the New York centric programs that we talked about so -- and also in terms of where they are investing. And I think that's important to you and us. So the Taconic assets are in Manhattan, one is in SoHo and the other one is all the way west like Tenth Avenue for an office property. MS is a little more diversified. They invest in kind of retail strips. So we have retail properties up and down Westchester Avenue in the Bronx as well as Flatbush Avenue in Brooklyn, office property in Long Island City and another one in Williamsburg. So they are spread out and they are doing exactly what we expect them to do.

The next page, 5, different slice of how we diversify risk by property type and geography. Let me speak a little bit on the lower half of the page, the geographic diversity case. On

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the Northeast we now highlight with a triangle the exposure of the portfolio to the New York City MSA, which is approaching 20 percent. It is at 18.7. So we talked a lot before New York and it is 18.7 percent and we will continue to track that. The split in terms of our global approach, because this is a global investment program, we have 16 percent U.S., about 84 percent domestic.

Page 7 is just a summary of where the program sits vis-a-vis the compliance metrics that we set forth in our IPS. In this particular quarter, Teachers' program is fully compliant.

Page 8 is just a summary of your investments.

And I'll take -- if there are any other additional questions, I'll take them. There are some additional items we'll talk later on in the agenda.

MR. AARONSON: Yes. Who is it that sets the value? And I was going to ask

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Alex that. Who is it that sets the value so that we can value our fund? And is it -- is there an impartial person who checks whatever the manager says is the value of the fund?

MS. NELSON: So for real estate, that Core, Core Plus slice, 40 percent slice we are talking about, those assets are appraised once a year by a third-party. They don't do it all at the same time, like every quarter they do 25 percent of the portfolio. So that is the process in the Core open end space.

In the opportunistic space, the managers are guided by FAS 7, which means you have to look at your asset of quarter and evaluate what you think it is worth in its current state, whether you finish your business plan or not. And you're supposed to be a fair valuation based on what someone would buy that for. The manager does that every quarter. There is an auditor that

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comes in once a year to opine on that methodology. Some GPs -- it is not standard across, but there is a GP that you will hear about later today that they also hire a third-party to help them with that, even with their quarterly internal valuation.

So I hope that's a good summary.

MR. DONE: I would add, Mr. Chairman, private equity is the same. And what I would add to what Yvonne said, in addition, we had the investment teams who sit on the boards and we are part of valuation committees. The GPs will share with us their valuation and we'll opine if it -- their methodology makes sense. And then we have an auditor come in to do it.

MR. GANTZ: We are talking about private markets. It is very important there are assets in there.

For opportunistic, one of the wonderful assets of and the pillars of what we have in -- in addition to lower fees and better terms is that the valuations we write in our documents. And counsel knows about this. We have language in there that requires the fund to hire an independent administrator and they are required to have the evaluations performed at our request or on certain schedules. So it is not the manager's evaluations, but an independent evaluator by an independent -- hired by an independent administrator.

MR. AARONSON: Is that something that could be done in real estate and private equity?

MR. GANTZ: It costs money and it is also a different, different animal. It is credit versus equity.

MS. MARCH: That's the animal we'd like to deal with.

MR. AARONSON: Because if you ask me to evaluate my real estate portfolio I would give you one figure, but would anybody else pay that for it. And

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that's the part I think that's the value, how much would somebody pay.

MS. NELSON: Exactly, what the market would pay.

MR. DONE: The way you get comfort in the valuation of our managers is in their exits. So you can see how -- what valuations are receiving at exit versus the marks that were in there portfolio in the quarter before the transaction is concluded. That is one of the analyses we do to get comfort that a manager appropriately assesses their assets.

MS. MARCH: That's why, Alex, you need staff, because you can't wait until they exit. You have to have staff that's helping you evaluate them while they are giving you their evaluations, because it is really important to watch the street.

MS. NELSON: That happens on an ongoing basis.

MR. DONE: I would reiterate you are absolutely right. We leverage our

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consultants and they have very big staff.

MS. MARCH: Alex, there are consultants sitting here. I have more faith in you. I love my consultants, but you are dedicated to be a city employee. I have more faith in the teacher in the classroom than I have with the company they've hired to watch the teacher, because they are there for their own personal reasons. She's there to protect our assets, the children. You are there to protect our assets, the money.

MR. DONE: Understood.

MR. EVANS: Any further comments?

MS. NELSON: No, I was asking for questions. I'm fine.

MS. NIKOLOVA: My comments will be very brief just because the portfolio of the infrastructure program is still in very early stages. So where we are today is that Teachers has committed 370 million to infrastructure across three

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managers. All of the managers are in the Core part of the program as defined by the IPS, which includes Core strategies and the program was funded.

MR. AARONSON: Excuse me, are there any remarks?

MS. NIKOLOVA: Sure, because there are many pages. I wasn't going to go through that. But if that is easier, sure. Absolutely.

MR. AARONSON: So what page?

MS. NIKOLOVA: 59. So StepStone is our new infrastructure consultants, so that is the performance report that they generate for us.

MR. AARONSON: Thank you.

MS. NIKOLOVA: What I was saying, and you could find these on page 60, is that Teachers has invested in three managers on the top of the table and the committed capital was 370 million. Of that you would see the contributed capital is about -- capital is about 48 million. So that emphasizes the point

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of the portfolio is still running construction, the managers are still investing, they are early in their investment periods. Our usual investment period is one to five years. So it takes a while to ramp-up. That is why you are seeing still managers going through that process.

If you look at page 61, you would see the benchmark and the performance. So the IRR is 8.2 percent which compares to a benchmark of 5.9 percent. Again, I would like to emphasize that it is early so I don't want to mislead you. It looks good, but it is early. So hopefully it gets even better. And that's the net return.

There is a section "Market Overview," some of the major transactions in the market. This leads us to page 65. It really gives you data points that there are no new commitments, that there are no subsequent investment commitments. It

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gives you information of the cash flow, increase, decrease. Again, I don't think they are very meaningful because it is just volatility and they keep doing what they are doing.

You have again investment performance on page 66.

On page 67 there is a vintage performance. You can see what it is, but it is early. So you have to be -- each years.

If you go to page 68, you would see the comment that I made that by strategy, the investments are in Core infrastructure on the table there. You would see the investment managers and how much. That's page 68, how much they represent of the portfolio. Again, we are building on this program so these numbers will not remain the same.

Page 69 represents the cash flow activity.

A lot of information on page 70. Again, net funds. You saw this in the

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table already upfront.

And page 71 gives you the geographic exposure to date which is very highly focused on North America, primarily the U.S. It is 77 percent. This will change as well as funds continue to invest.

And there is a checklist on page 73 which shows that the infrastructure program is compliant with the IPS.

This concludes my remarks.

MS. MARCH: I want to start out by thanking you. And I do clearly understand your experience and how much you know in the infrastructure area. I don't know how long we've had an asset on location for infrastructure.

MS. NIKOLOVA: Two years.

MS. MARCH: I think prior to that, this board in total had education where we brought in Canada, where we had -- at least the Teacher trustees had relationships with Australia. We would really like to see this comptroller's

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office go in the direction of infrastructure investments similar to what Canada and Australia has done.

It is very true the managers, the investment managers in this country, have not produced products that we can invest in and it does limit your ability to bring us the products if they are not doing it, but I think what I'm saying is out there there are public funds that have moved into infrastructure and their model are not private equity models. And you pay on the assets before they are in the ground.

I would like to urge that we go back to Borealis, that we do something in a joint venture with them.

If this country -- if the investment world in this country is not moving in the direction that both those entities have moved into, well, we can't do it on our own. But we do have an asset class. It is time to do it. Let's have them in. You meet with them,

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see what we can do, and let's put personalities aside. And understand we want to make investments in infrastructure that don't form the private equity model, but instead form the model that has been used in Canada and Australia. We're ready. This board has been ready even before we made the allocation to this investment class.

MS. NIKOLOVA: So we know about your desire and, as you hopefully know, we have been looking for some of the models like Borealis. We need to, they have 50, 60 maybe 100 people now so it is a different model.

And maybe now -- I know we are in executive session and we are on the record, but we have been talking actively to --

MR. EVANS: We are in the public session. You just said executive session.

MS. NIKOLOVA: Yes, I'm not going to give details -- right. Maybe I can

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talk a little bit about when we are in an executive session. It may be better suited there.

MS. VICKERS: Yes.

MR. EVANS: Let me just say, the comptroller's office would be happy to have a discussion with the Teachers' board about what it would really take to have the type of model you are referring to, Sandy, that is practiced in Canada and what changes need to take place. We will be happy --

MS. MARCH: I don't know that we have to change the model. If we can't do it because of our present structure, then let's give them the money to do it. They know how to do it. Let them present a product to us. We don't have to do it inhouse. Let's allocate some of our assets to them directly just as we would do it to any one of our other managers.

I understand the parameters that you work under. I've been here for 30

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years. Comptroller's offices in the City of New York, sometimes they have limited, you know, parameters. We understand that. But there is a place that we can go just as we give our money to an index money to manage our money because we don't manage it inhouse. And I know it cost us almost nothing to do that. Let's see if -- that's what we've been saying and nobody is hearing us. We are not asking the comptroller's office to all of a sudden wake up tomorrow and have 100 employees, 30 of them being able to handle infrastructure. We are asking the comptroller's office to seek the Canadian system or the Australian system and see if they are willing to take our money and invest it until -- maybe they can even invest it somewhere here in the United States of America. They know how to do the deals.

MR. EVANS: We'd be happy to discuss this with you.

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MR. AARONSON: I think we have a commitment of 2 percent of this asset class, which is $1.4 billion, the current value of the assets of the program. And we have less than 400 million invested over a two-year period. We know there are organizations out there that if we dealt with them, we would be willing to co-invest, allow us to co-invest with them at minimal fees like the Australian account that we already have where we are paying a fraction of what we are paying to our private equity partners in infrastructure. And I think we should look into that because it is available. And they've reached out to us and we have not responded.

MR. EVANS: We'll be happy to talk with you after -- after the meeting.

MR. ADLER: I have a question. I have a question on a different vein, if that's all right.

We heard earlier from Martin about

the impact of the precipitous drop in oil prices on our high-yield portfolio. I recognize we haven't made any commitments yet, but I wonder if you can talk about the energy part of the infrastructure market and what the drop in oil prices means both for traditional energy and for renewables, if you have some comments on that.

MS. NIKOLOVA: Sure, absolutely. So to make it clear, we don't have any exploration in our portfolios. So the immediate impact of what's going on with oil is on that part of the business. We do have managers that do deals in midstream, which means transportation, storage, et cetera.

As we all know, the shaling revolution in the U.S. has been really, you know, money factoring renaissance. A lot of job creation, huge impact on different areas. So this has led to the need in addition to exploration, we need to transport the product. And this is

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where our managers, some of them have been involved. The way they do that is they have contracts. That's why it is infrastructure, that's why this is not private equity. So when you have contracts with credit-worthy parties, which means they went through credit analysis, et cetera, they can withstand any drop. These are the counterparties. And we typically see contracts with more than one counterparty so there is diversification there.

So far to answer your question directly, we have not seen any path in the portfolio because the structures are such that are exactly doing what they are expected to do. Infrastructure contracted long-term cash flows.

MR. GANTZ: I would also like to clarify since we are in public session -- without giving name of the manager or specific securities, we'll talk about that in executive session if you wish. Just yesterday we met with

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one of our credit managers and talked about this, exactly mirroring what Petya is talking about.

While obviously they've gone down the least, but those have long-term contracts, long-term income and they are part of the LMPs that have been issued because people are looking for yields. But that is probably one of the healthiest areas in the energy sector. Because even if the prices go down, it still has to flow through the pipes.

MR. ADLER: Thank you.

MR. AARONSON: Okay. Anybody else with a question?

MS. NIKOLOVA: Thank you.

MR. EVANS: That concludes our quarterly report. And see if we have anything else.

We are going to do the January monthly review, so let us quickly turn to the flip book, the color flip book that we have every month. And I'll ask you to turn to the performance page

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which is on page 37. Just quickly for the month of January which was a down month for the equity market, the Teachers' portfolio was down 20 basis points versus a benchmark policy benchmark up 11. You can see two columns over the fiscal year to date is 0.84 versus 1.45. We are continuing to be in a period of up and down movements, but basically flat markets. As you know, February was stronger, but this continuing chatter in the markets.

And if you turn to page 30, you can see the current asset allocation adjusted for funds that have been held for private asset classes that we were discussing earlier. You can see the left of the chart, it is more or less at zero. And this is what we are attempting to do to be neutral relative to our long-term policy mix, the board's long-term policy mix. Fixed income on the right we are a little underweight, longer-term bonds Core Plus which end up

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to be intermediate on average, and we are overweight in cash in gray which is bonds that are less than four years in term.

The mayor's office had asked that we -- when we take a look at this sort of intermediate structural positioning being long cash and short Core Plus, that we talk about the combined effects. So what sort of interest rate sensitivity that we have when we put these two pieces together. We are saying it is our goal to be about neutral in interest rates sensitivity or duration to the Barclays Aggregate Index. And when you put these two together, our duration in the blue box and the gray box, the Core Plus Five and cash, it is 5.73 versus a Barclays aggregate of 5.55. So we are over in terms of the duration. We are actually getting a better yield, 262 versus 222. So we are achieving, you know, what we are attempting to do. We can even have

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a little bit more cash relative to the Core Plus and we'll watch that and we'll report to you on it, as long as we have this structure in the portfolio.

Let me turn quickly to Martin to give you the highlights of January.

MR. GANTZ: So, thank you, Scott.

January was a month similar to December. Slight negative returns, so let's go directly to it. If you take a look at the returns for the month, turn to page 29, the one with the bars. The bar on the left shows the return minus 20 basis points. Bar in the middle is the return fiscal year to date, which through seven months January 15th for the fiscal year was just under 1 percent.

If you turn back a page, there is better news.

MS. MARCH: Thanks.

MR. GANTZ: I'm saving it. If you turn back a page, page 27, you'll see the drivers and what happened in January

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which is very similar to what happened in December. The first page would show the U.S. equity number, Russell 3000 was negative 2.78. Interestingly, the next set of numbers the non-U.S. was slightly positive by less than 1 percent. On what really drove the market and this was really the story, the last section of numbers on page 27, the Core Plus Five was up nearly 2-1/2 percent because interest rates significantly went down.

And that's why the TIPS market on the next page was up over by 3 percent, similar reason. High yield was up slightly. That was partially duration because they do have exposure to interest rate risk even though the spreads did widen.

The best performer you had by far is towards the bottom on page 28, reads labelled "DJ US Select Real Estate" Fiscal Year to Date up 19 percent through January, so now we are in early March.

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So I can give you a hint. In February, here is where the good news is. So while they are not official numbers, these are -- but the Russell 3000 returned over 5-1/2 percent. The non-U.S. markets were also up. EAFE was up over 5 percent, emerging markets up nearly 3. Interest rates started creeping up a little bit and spread widens a little bit. Actually spreads tightly, so Core was down and TIPS were down by 1 percent and high yield was up 2-1/2 percent and convertible bonds were up 4 percent.

If you take all that together --

Before I go to that, I'll show you what the market value is. So if we turn to page 35 after the negative 20 basis points, the market value is about -- you'll see January, $58.8 billion.

And you'll see on page 36 it is the yearly numbers with the ten-year return being nearly 7 percent. We ran the

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numbers end of February, this is the estimate part, and the 58.8 billion in February because of those wonderful numbers that you'll see officially next month. But you are over $60 billion for the first time unofficially. We'll get you the official numbers next month. And the return is in the upper 3s, probably close to 4. So the return was less than 1 percent. Because of a really good month, we got a really good pop to get to our 7 percent in just one month. So that's the information for February.

The rest of the book shows information for the programs and the managers, unless there are questions.

MR. EVANS: Okay, that is it for the January update. I'm now going to ask you to turn all the way to the back of the book. Start from the back page, 432, which highlights the potential educational topics in consultation with your consultant Rocaton we were teaming

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up with. And we'll discuss the particulars of this in executive session, but I just wanted to quickly cover the various topics we can have in our monthly meetings. Four different topics on asset allocation, seven topics on implementation on investment structure, and then general topics are behavioral finance and we can talk about the specific sectors, if you like.

So we'll talk -- Rocaton will give you a short presentation during executive session and we can determine sort of the batting order that you prefer in terms of these. Some of these will be delivered by Rocaton, some will be delivered by outside firms. So I wanted it to be responsive, particularly to Charlotte's request, that we do this monthly. And we have tee'd up a number of topics for discussion.

If there are no questions in the session, I'll turn it back and say we conclude our remarks for the public

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session.

MR. AARONSON: Public session of the QPP is finished and now moving into the public session of the Passport Fund. Mike Fulvio and Joe, and many of you know Joe from having worked with him. He is head of our asset allocation group and he's been involved in helping with the allocations over a time.

MR. FULVIO: With that, we'll dive into the performance update. We circulated ahead of time an electronic version of the quarterly performance. And because we presented this performance for calendar year 2014 at the last meeting, we weren't planning to go through it in great depth, but we're happy to answer any questions and comments.

MR. AARONSON: Anybody?

MR. FULVIO: All right, we'll dive right into the January performance report. And I'm pleased to have handed out and presented you with a new format.

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It is definitely a facelift on the old report, but more than just format we added additional metrics to this report on risk and risk adjusted returns.

So happy to provide you with a quick overview, that of which we'll be seeing each month going forward. Want to make sure this meets your needs, so please give us feedback in this session or offline in the future.

So on page 1 what we tried to do is summarize upfront the Passport Fund. And you can see on the top of the page, diversified fund at the end of January had about $11 billion in assets. Just below that you can see the underlying composite that comprise this fund. If you recall, 50 percent allocation to passive U.S. equity strategies, 15 percent allocation to defensive strategies, 20 percent to actively and 15 percent allocation to non-U.S. entities.

And as you recall, the non-U.S.

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exposure is meant to be a diversifier for this fund and potentially an enhancer over long time periods.

So with that, the performance for the month of January it is down 2 percent modestly trailing its hybrid benchmark. And the return as a whole trailed the non-U.S. equity markets -- I am sorry, trailed the broad U.S. equity market. The Russell 3000 Index, I'm sorry, outperformed by about 79 basis points for the month of January. So where we've come in the past and for a number of years now have been talking about the performance drag that non-U.S. markets have had on this portfolio, we've seen some reversal in the month of January. And you can see the non-U.S. component were one of the few positive components for the month of January. And again it is largely over the past few years, that is largely in part to the currency effect on that exposure, so you can see below that the passive

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exposure largely in line with its benchmark, especially over the long term.

The defensive strategies composite which served its purpose this month as well, positive to the tune of 40 basis points again outperforming the defensive strategies benchmark. And the active component for the U.S. markets, you can see lagging a little bit by 12 basis points for the month.

So I'll -- we can go into a little more detail on the diversified equity fund, but I wanted to make my summarizing comments on the other funds before we dive in a little bit deeper. The bond fund you can see returned nearly 1 percent for the month and that was in line with its benchmark. The International Equity Fund again I noted positive returns, although lagging on a relative basis. M-I-S-C fee was up half a percent.

MR. AARONSON: Do you think that

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might be due to the equity, International Equity Fund has some emerging markets in them and they didn't do as well in January as the MSI?

MR. FULVIO: That's correct. Their managers are permitted to make model allocation in their markets. And one of the things that you might recall discussed late last year was the addition to dedicated emerging market managers that will be added to the program. And with that, we will be making changes to the variable International Fund benchmark to reflect those allocations. The Inflation Protection Fund, you can see there are assets of about $43 million. Positive return for the month, 85 basis points trailing its benchmark return of 1-1/4 percent. And just below that the Socially Responsive Equity Fund down about 2.3 percent, outperforming the S&P Index for the month. That fund you can see as well is garnered assets and is

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close to the International Equity Fund also at about $100 million.

If there are no questions, I'll spend a couple of moments diving into the report a little bit just to show you some of the new features, if you will, at the request of the board.

Page 2 you'll notice information, we are showing information ratios in many cases, the active managers as well as passive managers. And information ratios are measured risk-adjusted performance. We are adjusting the manager's relative returns and the volatility of those relative returns over time. And we tend to do that for longer-term time periods to avoid focus on any of the short-term time periods.

One of the other things that we do, you can see on page 3, is for the defensive strategies composite where we show additional information on the right of the page we are showing analyzed a measure of volatility. And we feel that

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is appropriate measure to include here given the objective of this composite to offset or help protect the fund in volatility or down-market environment.

You can see towards the bottom of the page the first bold arrow for the defensive -- the volatility over the five-year time period for this composite was just shy of 8 percent. And a couple of lines below that, volatility of the U.S. equity markets is over 13 percent.

So there was, as you can see, some -- it is doing its job. There is some protection here relative to the broad U.S. equity market. And if you would look to the left for a few -- a couple of columns, actually the five-year column showing the performance for this fund, you can see that obviously this fund in an upmarket for the U.S. equity markets to the tune of 16 percent. This fund did lag that, but was returning about three-quarters of the return of the U.S. equity market

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with substantially less volatility. So it is performing as we expect, so we thought it would be helpful to add these volatility measures for that fund.

MS. BEYER: I do have a question, Mr. Chairman.

Can you give in simple English a definition of in what context -- I can see the context for standard. I know information ratio is quite technical.

MR. FULVIO: Think of the information ratio as the unit of excess return that the manager is performing at for each unit of risk it is taking relative to its benchmark.

MS. BEYER: And why is it not just as easy to use the standard deviation against the benchmark, you know, have the benchmark standard deviation and then the fund standard deviation? Why are we taking information ratio? I know the academics like it better, but why do we like it better?

MR. FULVIO: You would generally

expect over time the manager's portfolio might have less volatility than the other equity markets. But I think in the case of managers, they're being compensated for providing excess return, the tracking allows you to see the volatility of those excess returns relative to the benchmark and it helps kind of focus a little.

So why we think it is a good tool is when -- over long-term time periods when you see negative information ratios, it is a sure signal that the managers, you know, might have some kind of issue that we want to bring to their attention that we are reviewing them and spending more time on.

MS. BEYER: So why do we see that in a context, a larger context? What is the range of the ratio, how good and how bad is it? The dancing diamonds is what I'm talking about? The dancing diamonds that are on the information ratio.

MR. FULVIO: Information ratios

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will vary depending on the type of strategy that you are looking at. So you might not expect that U.S. equities, for example -- which is a large but very well-followed market where it is harder to seek out excess return, if you will, you might expect it to be more difficult so you have a lower return. Where in U.S. markets, you might expect a higher risk adjusted return. So what we'll do overtime is we will use these metrics to evaluate them relative to what we are expecting. And what is not on this page is the expectations for each manager, but we will include that as part of our review of the strategies.

MS. BEYER: And some sort of context than is larger than the fund and the index I think might be helpful.

MR. FULVIO: On the metrics itself?

MS. BEYER: Yes, a range in that particular arena.

MR. FULVIO: So the fund as a whole given its nature being mostly passive,

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we would expect over time the volatility of the fund's excess returns relative to its benchmark to be very narrow. This fund does not take a lot of active risk and because of that the excess returns which can be cyclical over time, the volatility of those excess returns again being narrow, you know, you will see more pronounced moves in the information ratio of the fund.

So we would like to kind of -- we like to think of this fund as having an expected tracking error. That is the denominator in that information ratio metric. We would like to see it within 2 percent. So you'd expect over time two-thirds of the -- for this fund, that the fund would have performed plus or minus within 2 percent of its benchmark. And the information ratio is helping highlight whether or not it's performing within those expectations.

MS. BEYER: Maybe we can zero in on the middle of page 3 on BlackRock. And

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the information ratio is an eye-popper compared to the other managers and yet, as I would understand it, it is passive.

MR. FULVIO: That's right.

MS. BEYER: So how it -- it doesn't make any sense to me. That's what I meant by in context --

MR. FULVIO: You have to take each manager in the context of its strategy. So BlackRockn this is an index fund. So they are seeking to perform in line with non-U.S. markets with very little volatility in their performance around that benchmark. So the volatility of this strategy has been particularly low. But at the same time you'll also notice for the three-year period, this particular strategy it outperformed by 23 basis points. So because the volatility denominator is very low and the information ratio calculation here, that information ratio is a lot higher given that it has added value.

MS. BEYER: I'm not sure I got

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that. I don't want to take any more time.

MR. NANKOF: Joe Nankof, N-A-N-K-O-F, one F.

So an index fund tracks the benchmark very closely over time. So the risk relative to the benchmark is -- what we are dividing by is very close to zero. So it's added 23 basis points over this period, three-year period we are looking at, which is high relative to the risk it is taking. That's all it is saying and that's -- so you are getting paid; you've gotten a lot of excess return.

MS. BEYER: Which is why I was underscoring the need to look at context. Because this makes you look and say wow, that's fantastic and it really isn't all that fantastic.

MR. NANKOF: That is a fair conclusion. So we would say over a long period of time if you can get something like .25, 1 quarter the return per unit

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of risk for diversified portfolio, not for a single manager but for diversified portfolio, you're doing very well.

MS. BEYER: More importantly, having a negative information ratio over a three, five, ten-year period would be cause for some concern; is that correct?

MR. NANKOF: It is. But again taken in the context of the diversified equity fund over -- certainly over the three and five-year period, given the tremendous bull market we've seen in the U.S. and given that this fund has allocations to non-U.S. markets -- but when the U.S. market is the only place to be really for that period, you'd expect that you'll underperform. If you look over a period where there is more balance globally, then hopefully we'll expect to see positive numbers. So we try to evaluate the results numerically in the context of the market environment.

MS. BEYER: So we are taking

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information ratio of our defensive managers and putting them in that total even though we are not showing them on this report for three, five and ten years?

MR. NANKOF: It includes all.

MS. BEYER: The question is: How much of an impact are they having --

MR. AARONSON: This is a great question for one of our educational programs.

MS. BEYER: Yes. Thank you. I've taken enough time.

MR. NANKOF: We'll take that up at another meeting.

MS. BEYER: Thank you.

MR. AARONSON: What are we up to?

MR. FULVIO: That is the performance on January. I know Martin gave a quick update for February and how it impacts these strategies. The broad market was up nearly 6 percent, the MS was up about 6 percent so we'll expect pretty strong returns for the month of

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February.

You can see the defensive strategies benchmark. The defensive strategies benchmark was up close to 4 percent. So even though it lagged the U.S. equity markets, it did have a pretty reasonable return for the month. And you can see below that diversified, again, that is a rollup of the underlined. Up about 5-1/2 percent, so we'll expect to the see the fund up in that month. And you can see it for the other strategies, decent returns with the exception to the bond fund.

MR. AARONSON: I don't know who was responsible for this great month of February, but the Teachers of the City of New York thank you very much.

MR. FULVIO: We won't take all the credit.

MS. MARCH: But this is the variable. I know I'm teasing.

MR. FULVIO: If there are no questions on February we can -- that

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would conclude the comments.

MS. MARCH: Only can we repeat it in March?

MR. FULVIO: Just for what it is worth, through yesterday's close stock markets were down by about 30 basis points. But it is early.

MR. AARONSON: Does that conclude --

MR. FULVIO: That concludes our comments for the public session.

MR. AARONSON: So that concludes the public session and we're going to go --

MS. VICKERS: I'm sorry, if I may, before we break, Chris Pak is here and has an answer to what was brought up earlier regarding the AFL-CIO.

MR. PAK: And I would just like to add context. So we met with them actually last month, February. And we are in regular contact with them both on the phone and in person. We make up about 13 percent of their mutual funds,

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so every time they are in New York they try to meet with us. So we are in constant communication with them.

MR. AARONSON: Thank you.

MS. MARCH: Thank you.

MR. AARONSON: Okay. So now I think before we switch to executive session, we take a 7-1/2 minute break.

MS. MARCH: Why don't we go into executive session for discussion regarding the purchase and sale of securities and an update on specific investment managers.

MR. AARONSON: Is there a second to that motion?

MS. BEYER: Second.

MR. AARONSON: Motion has been seconded. Any discussion?

Seeing no discussion there is readiness to vote. All in favor.

MR. ADLER: Aye.

MS. VICKERS: AYE.

MR. AARONSON: Any opposed?

The motion carries and we are now

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in executive session. And after doing that, we can now take a 7-1/2 minute break.

(Recess taken.)

MS. MARCH: I move that we go out of executive session, back into public session.

MR. AARONSON: Is there a second?

MS. VICKERS: Second.

MR. AARONSON: All in favor say aye.

MR. ADLER: Aye.

MS. MARCH: Aye.

MS. VICKERS: Aye.

MR. AARONSON: We are now in public session. And the first item in public session is going to be a review of what we did in executive session.

MS. STANG: In the executive session for the pension fund, one manager update was presented.

An infrastructure investment was presented and discussed. Consensus was reached, which will be announced at the

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appropriate time.

Two real estate investments were presented and discussed. Consensus was reached on one of the investments, which will be announced at the appropriate time.

A presentation on the allocation between different cap size sectors in the domestic equity market was received. Consensus was achieved, that will be announced at the appropriate time.

A presentation on a specific passive international account was received. Consensus was achieved, which will be announced at the appropriate time.

There was a discussion of the plan for future trustee education sessions.

MR. AARONSON: Anybody else have anything you want to add, say or do?

Do I hear a motion to adjourn?

MS. MARCH: So moved.

MR. BROWN: Second.

MR. AARONSON: Any discussion? No

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discussion.

All those in favor of adjourning say aye.

MR. ADLER: Aye.

MS. MARCH: Aye.

MS. STANG: Aye.

MR. BROWN: Aye.

MS. VICKERS: Aye.

MR. AARONSON: We are adjourned.

(Time noted: 3:40 p.m.)

C E R T I F I C A T E

STATE OF NEW YORK)

: ss.

COUNTY OF RICHMOND)

I, CHARISSE ROMEO, a Notary Public within and for the State of New York, do hereby certify:

That the above proceedings are a true record.

I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 9th day of March, 2015.

____

CHARISSE ROMEO