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4	NEW YORK CITY TEACHERS RETIREMENT SYSTEM
5	INVESTMENT MEETING
6	Held on Thursday, March 3, 2011
7	at 55 Water Street
8	New York, New York
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2 ATTENDEES:

4	MELVYN AARONSON, Chairperson, Trustee
5	LARRY SCHLOSS, Comptroller's Office, Trustee
6	SANDRA MARCH, Trustee
7	MONA ROMAIN, Trustee
8	RANJI NAGASWAMI, Office of Management and Budget
9	JANICE EMERY, Office of Management and Budget
10	LISETTE NIEVES, Comptroller's Office
11	THAD McTIGUE, Comptroller's Office
12	MARTIN GANTZ, Comptroller's Office
13	JOHN DORSA, Comptroller's Office
14	SEEMA HINGORANI, Comptroller's Office
15	MARC KATZ, Teachers' Retirement System
16	YVONNE NELSON, Comptroller's Office
17	JOEL GILLER, Teachers' Retirement System
18	SUSAN STANG, Teachers' Retirement System
19	ROBERT C. NORTH, JR., Actuary
20	MICHAEL KOENIG, Hamilton Lane
21	MARIO GIANNINI, Hamilton Lane
22	DAVID MORTON, Rocaton
23	CHRIS LYON, Rocaton
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1	PROCEEDINGS
2	(9:41 a.m.)
3	MR. KATZ: Good morning and welcome to
4	the March 3, 2011 investment meeting of the
5	Teachers' Retirement Board. We will begin by
6	taking the roll.
7	Melvin Aaronson?
8	MR. AARONSON: Here.
9	MR. KATZ: Kathleen Grimm not here.
10	Sandra March?
11	MS. MARCH: At long last present.
12	MR. KATZ: Welcome back.
13	MS. MARCH: Thank you.
14	MR. KATZ: Ranji Nagaswami?
15	MS. EMERY: Janice Emery.
16	MR. KATZ: Janice Emery sitting in for,
17	okay.
18	Lisette Nieves?
19	MS. NIEVES: Here.
20	MR. KATZ: Mona Romain?
21	MS. ROMAIN: Present.
22	MR. KATZ: Larry Schloss?
23	MR. SCHLOSS: Here.
24	MR. KATZ: We have a quorum. The first
25	order of business is to nominate an acting

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chair.

2 MS. ROMAIN: I nominate Mr. Aaronson. 3 MS. EMERY: Second. 4 MR. KATZ: Second. 5 Mr. Aaronson, you are in business. MR. AARONSON: We will start with the 6 7 pension public session. 8 MR. SCHLOSS: Martin, would you like to 9 review the results? MR. GANTZ: So we have a flash report 10 11 here for the period ending January 31st. Everyone should have copies in front of them. 12 13 If you don't, we certainly have extras at the other end of the table. 14 January for the month was generally a 15 16 good month for positive returns. The overall 17 fund was up about 1.6 percent for the month of January. U.S. equities were up about 2.2. 18 19 The emerging markets were up about 2.7. Developing markets up 2.4. REITS did very 20 21 well at 2.5. The core plus 5 and TIPS were roughly flat for the month as rates rose a 22 little bit. The big increase in rates 23 happened in November and December. High yield 24 and convertible bonds did well. Investors 25

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continue to search for yield and convertible bonds are sensitive to strong equity returns.

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3 Overall, the funds' value was at 40.977 so now over 40 billion and the net of fees the 4 return is 17.85. The increase in market value 5 from the end of fiscal year is now over \$6.2 6 7 billion. You will see the fiscal year-to-date 8 returns on an absolute basis across the third column of numbers and they are well into the 9 20 percent range. Total equity is 25.06. 10

11 Fixed income are still positive for investment grade, although we had two negative 12 13 months in November and December, and we are ahead of the benchmark as well. TIPS are a 14 little under 2 percent. The high yield and 15 16 convertible bonds continue their strong run 17 and opportunistic fixed income is also doing very well. Total fixed income is at 4.63. 18 19 And so, generally, a good month. And as a sneak preview, February was a pretty good 20 month too. 21

22 MR. AARONSON: Anybody have any 23 questions about the report?

24 Continue doing this in the future.25 That's an order.

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MR. GANTZ: Thank you.

2 MR. AARONSON: Okay, is that --

3 MR. SCHLOSS: Now, we have the quarterly4 report.

5 Martin, do you want to sit in my seat. 6 MR. GANTZ: I am going to sit over here. 7 MR. SCHLOSS: Does everybody have a 8 quarterly?

9 MR. GANTZ: So this report is for the period ending December 31st. And during the 10 11 quarter the Russell 3000, the U.S. equity market as we measure it was up 11.5 percent 12 13 per quarter. Very strong quarter. Interestingly it's the same increase that we 14 saw in the quarter before, so there were two 15 16 consecutive quarters of 11.5 results. 17 Obviously that gives you very good results for 18 fiscal year to date, which you just saw on the 19 flash report. Developed markets were up over 20 6 percent for the quarter.

21 In fixed income you will recall back in 22 November the federal reserve announced their 23 long and widely anticipated quantity EASE 24 program. In advance of, that treasury yields 25 had been bid down. The prices bid up and

1 after the announcement the markets sold off 2 and the rates for ten year, for instance, went from below 2.5 percent to nearly 3.5 percent 3 4 where they are roughly today. In the more 5 risky asset classes within fixed income such as high yield and convertible bonds, the 6 7 returns were very strong. As investors search 8 for yield and convertible bonds you have 9 sensitive to equities. Generally, our rule of thumb is 70 percent of the upside and that's 10 11 pretty much what we saw. So generally good quarter, as you will see on page 9. By the 12 13 way, U.S. equity small cap did better than large cap by a nice margin, by about 16 14 percent to 11 percent and value slightly ahead 15 16 of growth.

So if you turn to page 9, you will see 17 18 the overall returns for the retirement system. 19 The blue bar is the pension funds, the retirement system's return for the quarter are 20 a very healthy 6.63 percent. The fiscal year 21 22 to date and one-year numbers also very strong at 16.11 and 13.92 respectively. The returns 23 were behind the benchmark and we will go 24 25 through that in a couple of pages. You will

also note the three-year number is now
slightly positive. It had been negative for a
while, so the strong returns are finally
taking the better market numbers that we saw
in '08 and '09 and turning them around to the
point that 15-year numbers are back up to 7
percent.

8 The next page shows where the asset mix 9 was as of December 31st. The pie chart, of 10 course, are where your assets are invested. 11 And if you look at the table on the bottom, what jumps out is the green bar that we are 12 13 underweight private real estate and the red bar where we are overweight U.S. equity. 14 То the extent that we have not invested the 15 16 policy in private real estate, we are putting 17 that money in public equities. We are also slightly underweight of developed markets EAFE 18 19 and we are slightly underweight the core plus 5. Overall, the pension fund was at 40.3 20 billion and was about 69 percent total equity, 21 22 so we are just about at the policy rate.

Now, the next few pages show some
attribution of returns and we break it down to
allocation effect and management effect. The

allocation effect were what the results were
 due to being underweight or overweight policy
 and the management effect is how the managers
 did versus their individual benchmarks.

5 Generally speaking, you are going to see in the slides that we show the managers did 6 7 very well except in two areas and that's 8 generally the private markets, private equity and real estate. Part of that explanation is 9 10 private equity because of a lag effect when you have very strong market results in the 11 public markets there is a lag effect. Part of 12 13 it is because funds underperform.

The allocation effect for the quater was 14 27 basis points negative and that's partially 15 16 due to the underweight, slight underweight, at 17 this point in equities and during a strong 18 bull market any underweight in your highest 19 returning asset class will have an effect. The managers were negative 9 basis points and 20 you will see in future points due almost 21 22 entirely to private market, not public markets. 23

For the one-year period on the next page, the net result was minus 9 basis points

but you see the allocation effect was minus 1 2 1.08. The managers did very well, 99 basis points for a net of 99. The allocation effect 3 4 was more pronounced here because we were more underweight equity during 2010. That 5 underweight is now virtually gone; we are 6 7 roughly at policy now. The numbers smooth out 8 over three years because we had the up and the down market. The allocation effect, the 9 managers effects now smoothed down a little 10 11 bit and negative 23 for allocation, positive 15 for management. The result was a negative 12 13 8 for the system.

14 And the totals are on the next page summarizing how the managers did. And if you 15 16 just scan the page, you will see mostly positive numbers; some small, some better. 17 18 EAFE managers did very well. Core plus 5 and 19 high yield did okay. REITS did okay for the year. And the negative numbers that you see 20 are in the private equity of real estate. I 21 22 would explain the quarter and 12-month numbers for private equity being the lag results. 23 Т would explain the longer-term numbers being 24 under-performance in general. 25

1 Page 15. Sorry, again these numbers are 2 very, very small on this page but if I can 3 direct you to the left side, that shows how 4 Teachers did versus other large public funds and we define that as funds greater than 10 5 billion. How they did for the quarter ending 6 7 December and the fund was in the top quartile, 8 in the 20 percentile. So that was very good. 9 You will also see as you move out to the right 10 side of the page how Teachers did in the 11 longer-annualized numbers and, generally, the results were at or below the median. 12 13 And the next page shows --MR. SCHLOSS: I would point out on page 14 15 for the one year, you are also in the top 15 16 quartile. Congratulations. 17 MS. MARCH: Congratulations to you. 18 MR. GANTZ: So the explanation as to why 19 you go from top quartile to a roughly median 20 is shown on the next page. If you look at the 21 right side of the page it shows that each year, each calendar year at this point end of 22 December, year by year going the last five 23 years and for the last year you were in the 24 top quartile. December, '09 you were doing 25

very well in the 30 percentile. In December, 1 2 '08 you are roughly median. Skipping December 3 '07 and December, '06 you are doing very well. There was the December, '07 number and 4 generally speaking that year being in at the 5 bottom of the quartile rankings affected the 6 7 longer-term numbers, but for the markets where 8 equity markets did very well. Since the fund 9 is very exposed to certain U.S. equity, when the U.S. equity markets does well the fund 10 11 does well and those are the times the fund did well. 12

13 So page 18 shows a total equity allocation. The pie chart which the big 14 piece, of course, is in red and that's the 15 16 U.S. equity portion. That was about 64 17 percent. I mentioned before the fund was 18 about 69 percent total equity and that 19 represents 27.8 billion. The total, of course, is now over 40 billion. 20

The next page breaks down the total equity and you will see the pie chart again in red. That simply indicates that most of the assets are passively managed. We do have some active management here and if you take a look under the "Index" and "Actual Return" columns
on the table, you will see that small cap had
a very good quarter in the 16 percent range.
Large cap was in the 11 percent range. If you
had mid cap, you would see that would be in
the 13 percent range. Small cap did better
than large cap in this particular report.

8 Page 20 shows how small cap returns did. 9 So the fund has a small developing manager, 10 small cap program and the results here are you are going to see very consistent charts. 11 12 Going to be repeating myself, but for the 13 quarter fiscal year to year in the equity 14 space you are going to see very strong absolute level of results. In this case in 15 16 small cap they are very high because small cap 17 outperformed most other asset classes and, in 18 addition, the managers beat the benchmark. So these are just very good numbers overall. 19 Over 35 -- actually, exactly 35 percent for 20 the fiscal year to year and over 29 percent 21 22 for the one-year period and even just the quarter was over 18 percent, and the numbers 23 are well ahead of the benchmark. 24

Large cap develop -- again, this is a

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developing program on page 21 and the period 1 2 of results again are very strong on an absolute basis, but we are behind the 3 4 benchmark for the quarter year. But the 5 results were very strong on an absolute basis. Teachers has an emerging 6 7 managers/manager program in U.S. equity and 8 that's shown on page 22. And the results here 9 are ahead of the benchmark, very strong and 10 part of that is because the results were 11 helped by small cap and mid cap. You have a couple of small cap and mid cap programs. 12 And 13 the small cap and mid cap programs in recent periods have done well and the benchmark as 14 well, and so the numbers are very strong. 15 16 The single largest program that you have 17 here is the passive Russell 3000 program on 18 page 23 and here that's 42 percent of the 19 asset for 16.8 billion. And, as expected, the results closely matched in return at risk what 20 we would expect to see and, as I mentioned 21 22 before, very strong on an absolute basis. The three-year number, however, is still slightly 23 negative, minus 1.84. But the results, except 24 25 for the quarter which was behind by three

basis points, were slightly ahead of the
 benchmark for other long-term periods and
 that's what we would expect in this program.

4 The next page shows total domestic 5 equity and obviously this page is dominated by the pages you saw before. The passive numbers 6 7 drive the numbers on this page. International 8 starts on page 25, 15 percent of the assets 9 are invested here. That's a very lonely pie 10 chart on top and that's because all the assets are actively managed. And the bottom part of 11 the chart shows the diversification between 12 13 values shown in light green, growth shown in purple. I don't know from other shades, but 14 looks like purple to me. 15

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MS. MARCH: Magenta.

17 MR. GANTZ: Magenta. And core is shown 18 in red, so the results are on page 26. The 19 results are slightly less than the results that you saw in U.S. equity market and that's 20 partially due to some of the problems that we 21 22 have seen over the past year in the euro zone. But it was a very strong quarter on an 23 absolute basis, very strong fiscal year. 7.07 24 for the quarter, 23.97 for the year. We were 25

slightly ahead by 46 basis points for the
 quarter, slightly behind the fiscal year by 21
 basis points. But when you go out from the
 12-month period, which is 11.14 out to
 inception at least, that would show 15 years
 the results are well ahead of the benchmark.

7 REITS are on page 27 and we do have a 8 separate program for REITS. Four percent of the assets are invested here. This continues 9 10 to be a strong area and also the managers continue to do very well in this area, ahead 11 of the benchmark by 22 basis points for the 12 13 quarter returning 7.89 ahead for the fiscal year and well ahead for the year by over 300 14 basis points returning 32.10. And if you go 15 16 out to the inception of the program which is 17 exactly eight years as of December 31st, the 18 program has returned 12.94, 169 basis points 19 ahead of the benchmark. This is a program that performed very well. 20

The last equity slide we have shows the activist and environmental managers. Strong results overall on an absolute basis and well ahead of the benchmark, but the longer-term numbers you will see the five-year number here was behind the benchmark and this represents 1
 percent of the fund.

3 So unless there are any questions, we 4 will start talking about fixed income which is starting on page 30. About 31 percent of the 5 fund is invested here, a little over 12 6 7 billion. The pie chart in red shows the 8 investment grade core plus 5 program that 9 dominates about 53.7 percent of the overall assets, but we are diversified in other asset 10 classes, namely high-yield TIPS and 11 convertible bonds. Now we have opportunistic 12 13 fixed income shown in pink as well.

We break down the core plus 5 by sector 14 on the next page, page 31, into three sectors. 15 16 One of the sectors is labeled "Agency." It 17 really should be government or treasury 18 agency. The core plus 5 allocation that you 19 see, we now see some negative numbers for the first time. And that's because during the 20 quarter when the quantitative easing program 21 22 was announced, the market sold off. Quite frankly, that was a little bit 23 counterintuitive what we were expecting when 24 25 the program was announced. So, we do finally

see some negative numbers. The benchmark is 1 2 down about 5 percent, 4.9. Managers were 17 basis points behind. Investment grade credit 3 4 managers were also behind by about 1.4 percent 5 and that's because they have some more sensitivity to duration or interest rate risk. 6 7 Mortgages, however, outperformed and actually 8 posted a positive number. We have looked back 9 at previous market cycles when we had sharp 10 rises in long-term rates and this is 11 consistent with what we expected and what we would expect and what has happened in the 12 13 past, and that's because primarily mortgages have a shorter duration which has less 14 interest rate sensitivity. So when interest 15 16 rates go up, there is less downside to the mortgages. On the other hand, when interest 17 18 rates go down, there is less upside. So, the 19 volatility of returns is guite muted.

The returns overall are on the next page and the program overall had a negative return at minus 1.02. That was 57 basis points ahead. Fiscal year to date is a slight positive, 1.96. The one-year number was very strong at 8.58, well ahead of the benchmark.

Longer-term numbers were all roughly about 1 2 6-1/2 percent. And if you take a look at the chart on the bottom you will see that the 3 4 volatility returns, unlike equity which are 5 even higher, are roughly in the 4 to 5 percent 6 range. I mentioned mortgages before. 7 Mortgage sector has volatility returns generally in the 2, 3 percent range. 8

9 TIPS are on page 33 and similar to the 10 core plus 5, these were effected by rising 11 rates and so showed negative returns for the quarter by minus 1.11. Fiscal year is 12 13 positive at positive 1.71 and the one-year number is at 6.47, ten basis points ahead. 14 The long-term result since inception are at 15 16 5.51, 17 basis points ahead. High yield did 17 very well, so high yield did very well even in 18 the face of long-term rising rates. I just 19 mentioned before that investment grade credit has a closer sensitivity to interest rates 20 because of the higher duration. High yield 21 22 has lower sensitivity to long-term rates, although they can be effected because of macro 23 reasons in if rates go high enough. But in 24 25 the most recent environment, in this quarter

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investors are searching for yield. The rates 1 2 going up did not impact the returns negatively because spreads continue to contract resulting 3 in positive returns of 2.89 and that was 32 4 basis points ahead of the benchmark. For the 5 fiscal year it's very strong, 9.29 and for the 6 7 year to date 13.43. You will note since 8 inception, which is ten years, the results are also ahead of the benchmark for all the 9 10 periods shown.

11 Page 35 shows convertible bonds returns and while the results are very strong on an 12 13 absolute basis, because these returns are very closely related to how the equity markets did, 14 if equity markets did very well these returns 15 16 should do very well. However, the results 17 were behind the benchmark as a program for 18 each of the periods shown.

19Strongest fixed income returns are shown20on the next page and the blue bar our21performance is clearly well ahead of the22benchmark, over 5 percent for the quarter,23over 8 percent for the fiscal year and over 2324percent for the one year. This has been sort25of a wonderful Goldilocks place to be

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because --

2 MS. MARCH: What are they doing that you 3 are not supposed to? 4 MR. GANTZ: They are doing what we expect them to do, but the market environment 5 is helping a lot as well. So sometimes being 6 7 in the right place helps. And so while the 8 managers themselves are doing a good job, it 9 is a really good environment for them. Over the period generally, rates were falling were 10 11 low and accommodated and it was a great opportunity to take up securities that were 12 13 creating a very aggressive price. Finally, on page 37 the economic 14 targeted investment returns are shown. 15 And 16 Cathy Martinos is sitting right next to me and 17 will give you more information about that 18 program. 19 MS. MARTINOS: Good morning. 20 MR. AARONSON: Good morning, Cathy. 21 MS. MARTINOS: Your ETI portfolio did well in the quarter, outperforming both its 22 23 custom and benchmark for all periods and for most periods. 24 25 If you want to turn now to page 7, I

will go through a couple of highlights. Does
 everyone have one now?

3 First page is your Public Private 4 Apartment Rehabilitation Program. Couple of 5 highlights. We made over \$7 million in new б purchases in four of the five boroughs and 7 issued another 8-1/2 in new commitments for 8 the five boroughs. 9 Page 8 shows the tracking AFL-CIO Housing Investment Trust in New York City. 10 11 Big highlight is that they invested \$90 million in a project in Manhattan during that 12 13 quarter. 14 The next page, 9, is your Workers' Housing Initiative with HIT. There is no 15 16 change there in that quarter. Page 10 shows the CBC revolver and where 17 18 that facility is invested in construction 19 loans in the five boroughs, you can see that 20 on the chart. 21 Page 11 is access. There is really not much change there. They continue to perform 22 23 well. Page 12 shows you performance by 24

25 manager. Again highlighted here, the program

1 does very well in this environment because the 2 average coupon is over 6 and we are getting 3 delivered high-interest loans because it's a 4 forward commitment program, so it's kind of 5 interesting. 6 Any questions? 7 MR. AARONSON: Seeing none. You have 8 anybody -- real estate. MS. NELSON: So in the board book, the 9 large one, let's move onto page 16 and we will 10 11 talk about the highlights of the performance of the real estate portfolio for the third 12 13 quarter 2010. The portfolio at that time had a market 14 value of \$454 million. We had about \$336 15 16 million which is committed but unfunded, ready for the managers to invest in this recovery 17 and to the --18 19 MR. AARONSON: Where is that money 20 invested now, Yvonne? MS. NELSON: I think, as Martin 21 22 mentioned, in equities right now. So not bad, not a bad parking place. So all together the 23 activity represents close to \$800 million. 24 25 In terms of performance, I feel a little

1 bit better following up Cathy because we had 2 another positive quarter, 6.3 percent for Teachers. 110 basis points ahead of the ODCE 3 4 real estate benchmark. So in terms of the performance of the real estate portfolio for 5 Teachers in the near term and overextended 6 7 periods, at this particular point in time we 8 only have one period in which we underperformed and that's kind of right in the 9 middle of where the crisis was. 10 That 11 three-year number, as you can see down at the bottom, is where we underperformed. But other 12 13 than that, we have surpassed the benchmark by at least a 100 basis points in every other 14 15 quarter.

16 In terms of the market environment in third quarter, there was still continued signs 17 of a real estate recovery underway, although 18 19 it's slow. But, there are a couple of positive points. Transaction volume for 2010 20 has kind of picked up, twice the amount over 21 the level of 2009. Lenders are lending again. 22 There has been some easing of credit, but 23 let's kind of talk about where those deals are 24 25 getting done. Both the investors and the

lenders are definitely focused on high-quality 1 2 property and what I mean by that is really the core property. The low-risk properties, the 3 4 ones that have high quality, high tenant, rent 5 rolls that are in prime markets. So if you kind of look over that transaction value that 6 7 I am talking about, most of them took place in 8 prime markets including New York City, New York, D.C., San Francisco. So that's 9 10 where most of the activity is. However, if 11 you have the special skills to be able to deal with a vacancy issue, then you are able to 12 13 achieve a pretty good yield for those people who are willing to pursue those types of 14 opportunities such as the noncore managers 15 16 that we have, and we will see that they have 17 also picked up in some investment activity.

18 So just moving on, the following page is 19 just a graph, you know, of the Teachers' performance versus the benchmark which is now 20 21 the ODCE and the net basis. As we move onto the next page, it's really just an overview of 22 how we see the portfolio being constructed in 23 terms of what our policy is. As of third 24 25 quarter, there is a 5 percent allocation to

real estate, equates to an allocation of close
 to \$2 billion.

3 The next section just talks about by 4 policy, how we see the portfolio diversified in terms of the risk we want to take. And in 5 terms of investment style, that 40 percent 6 7 could be allocated to core and the remainder 8 being allocated to noncore strategies 9 including emerging managers of which Teachers is active, has commitments to three emerging 10 11 managers at this point.

The next section just kind of talks 12 13 about where we are today. We talk about how in the first page we had dollars in the ground 14 and commitments yet to be funded, about \$800 15 16 million. If you kind of look at that in terms 17 of strategy, we are at about 36 percent core 18 and 64 percent noncore. And as we build the 19 program, you know, those dynamics are kind of going to bounce back and forth. 20

21 In terms of investment activity down at 22 the bottom, it kind of summarizes cash flows 23 between the managers and the Teachers' System. 24 You will see you contributed about \$30 million 25 to managers for the quarter. Interestingly enough, got some money back this time, \$10
 million, which is a good thing. A good,
 healthy flow between the managers and TRS.

4 The following page is just a kind of report card on the program, just kind of 5 taking the highlights of what's in the IPS. 6 7 We talk about the fact that you are performing 8 in excess of the benchmark. We talk about where we are in terms of investment style, 9 core and noncore, 36 percent and 64 percent. 10 We are funded at 1.2 percent at this 11 particular point. And, as Mel pointed out, 12 13 the uninvested part is in U.S. equity, which was his question. The only area where we are 14 quote/unquote out of the policy is in the LTV. 15 16 We have a debt value of about 58 percent. IPS 17 currently talks about 50 percent level and 18 this is not surprising given the credit crisis 19 and the kind of challenges that have been faced in all asset classes, not just real 20 estate. In terms of manager exposure, we are 21 within those guidelines. 22

Lastly, the next page shows you where
the portfolio is, where we are invested on
property type. The Teachers' portfolio is

1	represented on the left side and ODCE is
2	represented on the right side, so we are doing
3	pretty good at this point.
4	And if anybody has any questions
5	MR. AARONSON: Any?
6	No questions. Thank you very much.
7	MR. SCHLOSS: Who is doing private
8	equity?
9	Barry. This is Barry Miller. He is the
10	new head of private equity of asset
11	management.
12	Barry, do you want to do a quick
13	overview of your background?
14	MR. MILLER: Sure.
15	As Larry said, my name is Barry Miller.
16	My background briefly is prior to coming to
17	the City, had my own private equity firm
18	focusing on the private equity secondary
19	market.
20	Prior to that, I spent three years at a
21	firm called Pomona Capital which is owned by
22	ING investment and services firm. I was one
23	of several partners there focusing on the
24	sourcing and execution of private equity
25	secondary transactions as well as investing

capital on behalf of the ING insurance 1 2 companies. Just to kind of give you a little 3 bit of perspective about the firm, about 6 4 billion in assets. Three businesses was primary, so invest capital on behalf of 5 insurance companies and secondaries invested 6 7 capital on behalf of a third-party's funds and 8 co-investing, investing side by side with a 9 lot of our private equity managers.

Prior to that, I spent seven years at 10 11 AXA Private Equity. There I ran the New York office. Again, to give you perspective about 12 13 size of assets under management, about 25 billion. Similar story to Pomona, invested 14 capital on behalf of the AXA insurance 15 16 companies as well as secondary investing on 17 behalf a third-party funds. There I sat on 18 the Global Investment Committee, which is the 19 investment committee for all private equity products except our direct business. 20

21 And prior to that, I spent two years at 22 DLJ where I didn't know Larry, and there I 23 worked on their private equity funded funds. 24 MR. AARONSON: And, Barry, where did you

25 grow up?

1	MR. MILLER: Where did I grow up? I
2	grew up in New Jersey.
3	MR. AARONSON: And did you go to public
4	schools in New Jersey?
5	MR. MILLER: I did both. I was a
6	hybrid. Then I went to Tulane.
7	So that with that, I give you kind of a
8	brief overview of the private equity
9	portfolio, where we are. I will keep it
10	relatively brief because you will hear a lot
11	from me later in the day.
12	So if we look at the market today, the
13	market clearly continues to change. The
14	fundraising market today is better than it was
15	last year, but still it's not great. I think
16	if you look at private equity fundraising,
17	what you will see is high-quality or
18	top-quartile managers are raising capital
19	today. Managers that are second quartile
2.0	sither been been underwerferming en beringe

20 either have been underperforming or having a21 difficult or challenging time.

22 What we will see, again as we talk a 23 little bit about the portfolio and the 24 performance and so forth, the big issues for 25 managers in the market today and the big issues for a lot of limited partners today is
 a lot of the earlier funds are unrealized.
 It's unproven how managers are going to
 perform and as a result, it's becoming a
 little bit more difficult for investors to
 decide which managers are going to back going
 forward.

8 If we look at the exit market today, the 9 good news is it's getting better. The not as 10 good news is it's coming off of a relatively 11 low level. The past few years, as people have 12 seen in this portfolio, in the balance of the 13 private equity markets there have been limited 14 distributions.

That being said, the market is beginning 15 16 to change. The IPO market is beginning to 17 There are more opportunities for us to open. 18 cede to capital positions, secondary buyouts 19 and as a result, as I go in a little bit more detail into the portfolio for yourself, you 20 will see the distribution pace continues to 21 22 increase. The flip side of that is the contribution pace continues to increase, but 23 the good news is the money needs to work for 24 you. And as a result if we look forward over 25

the next few years, we will see more and more
 distributions coming.

3 If you look at the overall cash flow trends in the market, this is very similar to 4 what we are seeing in all portfolio. And the 5 good news is, and Larry will go into more 6 7 detail in the economy and so forth, at least 8 today on the surface the outlook is modestly positive. If we look at the overall portfolio 9 now from IRR standpoint, the portfolio has 10 increased for over a quarter 100 basis points 11 to 6.83 percent. The multiple has increased 12 13 from 1.1 to 1.2. So, clearly moving in the right direction. 14

As I touched upon before, in a macro 15 16 level the capital call and distributions for 17 the portfolio capital calls for the quarter 18 was 109 million, 88.8 million in the second 19 quarter. The pace of distributions decreased nominally from 46 million to 41-1/2 million. 20 But if we look forward to the fourth quarter, 21 distributions were almost a 100 million. So, 22 we are clearly moving in the right direction. 23

24The portfolio today is mature. It's not25a seasoned portfolio. If you look at the

overall commitments in the portfolio, roughly 60 percent of the capital has been drawn down. So as we look going forward, that number will continue to increase. But, again, it takes time. Money has to be in the ground and that's when we start seeing exits in the future.

8 Overall, if we look at it from the 9 quarter, the program appreciated by \$80 10 million or approximately 4-1/2 percent. So we saw real growth in value. If we look at from 11 a commitment standpoint, no new commitments 12 13 were made in the third quarter. We made one new commitment in the third quarter which is 14 Trident, 35 million. Again, if we look at the 15 16 overall portfolio and we think about diversification, what the portfolio looks like 17 18 again by fair market value roughly 83 percent 19 in North America, 10 percent in Europe, 7 percent in the rest of the world. So it's a 20 modestly-balanced portfolio; it's a modestly 21 diversified portfolio. We continue to think 22 about new commitments and way to augment the 23 diversification. 24

And the last piece I would touch on is

25

where does the portfolio stand, how do we 1 2 benchmark. Because that's always an important 3 thing, how you are doing versus your peers. 4 If you look at it from the benchmark that we use, which is the Russell plus 500 basis 5 points for illiquidity, we are modestly 6 7 lagging that benchmark. That benchmark as of 8 the first quarter was 7.59 percent. We are at 9 6.83 percent. If we look at it from a venture 10 economic standpoint or really a pooled-vehicle benchmark, which includes all private equity, 11 we are exceeding that benchmark. 12 That 13 benchmark is 3.75 percent. But, again, I think as we look at the 14

portfolio, again because it's not a seasoned portfolio, it's a relatively immature, we should see over time the IRR and multiple continue to move forward.

19 And that's where we are today.

20 MR. AARONSON: Barry, I have a question. 21 When we make a commitment, we keep the money 22 or the general partner gets the money that we 23 commit?

24 MR. MILLER: So the way it works, so we 25 go to a general partner. We say, We are going to give you X amount of dollars. We don't give them any money until they start making investments, so the money stays in our pocket. We do with the money whatever we see fit and then when they make investments or call fees and expenses, they send us a drawdown notice and we pay them over time.

8 Generally speaking, the model is it 9 takes five years to invest that money and then 10 it takes another five years to get our money 11 back, plus a return.

MR. AARONSON: And their fees, when do their fees start? When we commit the money or when they call it down and start to --

15 MR. MILLER: What I would say is this: 16 It's a great question and I am going to give 17 not the simplest of answers, which is the fees 18 that we pay are based on the commitments, not 19 the amount of money we pay them. So that's 20 the first part.

21 MR. AARONSON: Let me just understand. 22 That means that we are holding the money and 23 they are charging us 2 percent or whatever? 24 MR. MILLER: Whatever the appropriate

25 fee is, that's what we are being charged.

MR. AARONSON: And we are dumb enough to
 make that?

3 MR. MILLER: Well, what I would say is 4 that the good news is that the opportunity for 5 them is they are looking for deals and the good news is we want them to find the best 6 7 deals. So we are paying them a fee not 8 necessarily for money in the ground but for them to look, and look around whether it's 9 global, whether it's U.S., depending on what 10 11 type it is. 12 MS. MARCH: They are smarter than we 13 are. 14 MR. MILLER: No. 15 MS. MARCH: They are smarter than we 16 are. 17 MR. AARONSON: I just want to make sure I understand. I guess everybody does the same 18 19 thing similar or, you know, other pension 20 funds and private? 21 MR. MILLER: The private equity is commitment structure. 22 23 MR. AARONSON: So they all give these people money and these people have done 24 nothing; they have not invested a penny of it 25
and we are paying them just the same.

2 MR. MILLER: What I would say is --3 MR. AARONSON: And because they can call 4 the money any time they want, we have to keep the money in cash earning, you know, a 10th of 5 1 percent and they are charging us 2 percent 6 7 and we are getting -- and, you know, I think 8 that the people who are doing investing for 9 all of the public systems have to get together and tell these people that's no way that we 10 11 are going to do business in the future. We got to do something to protect the soundness 12 13 of our funds. And by paying them all this money for nothing, when they are not investing 14 a penny of the money, we are just giving away 15 16 money.

17And I am sure everybody has been reading18and hearing about what's going on all over the19country about the funding of retirement20systems. It looks like -- it's just something21that came to my head.22MR. SCHLOSS: Any more private equity23questions?

24 MR. AARONSON: Anybody else have any 25 questions?

1 MS. MARCH: No, you asked them all. 2 MS. ROMAIN: Maybe we could do this in 3 executive session, but the exit activity part 4 of the notes say the prospect of higher taxes 5 seem to have generated a lot of secondary PE 6 to PE sales. Can you comment on that or would 7 you --8 MR. MILLER: I can answer. MR. SCHLOSS: Let's wait. 9 MR. AARONSON: I just want to finish my 10 11 circle. 12 MS. MARCH: Wait, write it down. 13 MR. AARONSON: This is different than what we do at real estate, right? In real 14 estate we have the money invested and they get 15 16 the money when they are ready to invest; am I right? 17 18 MR. SCHLOSS: No, they are exactly the 19 same. 20 MR. MILLER: It's the same structure. 21 MR. SCHLOSS: However, you will be happy 22 to know we are going to bring you a real 23 estate investment that we only pay when the money is invested. We pay zero commitment 24 25 fee. A structure you will admire, so we are

1 working on it.

2	MR. AARONSON: But right now real estate
3	and private equity are exactly the same?
4	MR. SCHLOSS: Exactly the same.
5	MR. AARONSON: We are paying fees on
б	monies that's not invested?
7	MR. MILLER: Fees on commitment, not on
8	money.
9	MR. AARONSON: Well, that concludes that
10	session, the public session.
11	Can we go into the executive session
12	now.
13	No, I think we need the public session
14	on the variable funds first, then we will go
15	into the private session.
16	MR. LYON: Good morning. So let me just
17	also reintroduce David Morton, one of our
18	other partners from our research team. And
19	David will be speaking about one of the later
20	agenda items, but just wanted to reintroduce
21	him.
22	So I will try to go pretty quickly.
23	Luckily Martin covered a lot of market
24	commentary, so I will try not to repeat that
25	when I talk about the variable fund

performance and positioning.

2 I would like to start with the green 3 quarterly reports. Going to hit a couple of highlights, but certainly can take questions 4 5 now or as followup. If you flip behind tab 2, we have some 6 7 comments on page number 3 relating to the 8 Diversified Equity Fund or Variable A for 9 shorthand, as it's formerly known. And this is information through yearend, so through the 10 11 fourth quarter of last year the fund was up 9.9 percent. That was modestly ahead of the 12 hybrid benchmark, but it was a 13 couple -- almost 15 percent behind Russell 14 3000 Index. So in one quarter for the U.S. 15 16 equity markets to be up 11-1/2 percent in 17 periods like that given the structure of 18 variable A, we would expect on average to 19 trail a little bit. That's what we found. So the defensive composite and, in this 20 21 particular quarter, the international equity composite did trail the overall funds return. 22 23 That said, those two composites for the quarter were each ahead of their respective 24

25 benchmarks. So it's not that they weren't

executing well on their strategies, but their 1 2 characteristics and in the case in the defensive composite, the lower market exposure 3 that they have were such that they dampened 4 the returns a bit versus the U.S. equity 5 return market. So I would say this result is 6 7 in line with expectations for a particularly 8 robust period.

9 So, in any case, if you flip ahead to 10 page number 4, you can see on page 4 is the five-year risk and return characteristics. 11 And again, as has been pretty consistently the 12 13 case in the past, the total fund which is the blue square has exhibited somewhat less total 14 return volatility, somewhat less risk over 15 16 this five-year period which is consistent with its design. That said, it has underperformed 17 18 a little bit versus the benchmarks and part of 19 that versus the five-year U.S. equity market is due to in this particular five-year period, 20 international wasn't quite as strong a 21 22 performer and a large portion of this is also due to certain managers that are no longer 23 24 part of the program. So there are other 25 factors as well, but those strike us as two of

the primary factors. And, again, with the scale here, the returns aren't terribly different. So it's close, but it did underperform. But the risk profile is what is consistent with the objectives of this fund.

And then if you flip ahead to pages 6 6 7 and 7, you can see on page 6 a similar chart, 8 different scale showing the risk and return of all major composites. And on 7, something we 9 like to look at over time is how our tactical 10 11 managers within the defensive composite position themselves. You can see that they 12 13 had 80 percent and 62 percent equities at yearend respectively. And then there is some 14 additional detail which we have previously 15 16 reviewed on the yearend flash in the last 17 meeting, so I am going to keep moving to the 18 next fund unless there are questions.

Behind tab 3, page 16, we have a profile of variable B which we have discussed in other ways many times over the past year, but here you can see the asset allocation approximately \$419 million at yearend and you can see how this was split between the funds to managers. If you flip ahead to the next tab behind

page 18, we have comments on the remaining 1 2 other three variable funds, C, D and E or the International, Inflation Protection and 3 Socially Responsive Equity funds respectively. 4 5 And what you can see is for the quarter, each of the funds modestly to more meaningfully 6 7 outperformed their benchmarks. And all this 8 information of course in this book is net of And since the inception of each of 9 fees. these three funds, they are all meaningfully 10 11 ahead of their benchmarks. So just to tick it off, the 12 13 International Fund has an positive 2-1/2 percent return since inception versus negative 14 3-1/2 roughly for the benchmark, so guite a 15 16 large spread there. Inflation Protection Fund 17 has a positive 6.8 percent annualized return 18 since inception versus 3.3 for the benchmark, 19 so again a big spread. And the Socially Responsive Equity Fund, 6.4 percent since 20 inception annualized versus 1.61 with the 21 benchmark. So these are all pretty successful 22 performance results relative to benchmark 23 since the inception of these funds in 24 mid-2008. 25

1 There is some information profiling each 2 of the funds on the following pages. So, for instance, starting on page 19 there is a 3 profile of what the International Fund looks 4 like. And just as a reminder, this fund is 5 actually unified in the sense that the 6 7 international equity fund co-invests alongside 8 these managers alongside the international 9 composite of variable A, so the manager 10 allocations are substantially the same. 11 Then you can see, if you flip ahead, to page 22 what the Inflation Protection Fund 12 13 looks like in its profile. And as a reminder, this fund invests substantially all its assets 14 in a PIMCO mutual fund that, in turn, holds 15 16 and actively allocates to a series of 17 underlying other PIMCO mutual funds. And the 18 recent holdings, there is a time lag on how 19 these are released as of December 31st as shown on page 22. 20 And, lastly, the Socially Responsive 21 Equity portfolio, which is different than the 22 rest of the portfolios in that it's a much 23 more concentrated active portfolio, is all 24 25 invested substantially in a Neuberger Berman

mutual fund strategy that is profiled starting
 on page 23.

3 And then in the back we have our normal 4 information for your later reference, 5 backward-looking economic and market review and our standard disclosures. So pause there 6 7 and see if there are any questions. 8 MS. EMERY: Chris, that PIMCO fund is a mutual fund versus an institutional? 9 MR. LYON: It's an 10 11 institutionally-priced mutual fund, yes. And it, in turn, invests in other PIMCO funds and 12 13 part of that is given scale to this particular investment option. As of January 31st, had 14 just under \$18 million. And so compared to 15 16 our roughly \$10.2 billion variable A fund, for instance --17 MS. EMERY: Nobody is afraid of 18 19 inflation? 20 MS. MARCH: No, it's a new fund. And 21 until the individuals who are investing their own money learn about it, it will take time. 22 It's a new fund and it could take five, six, 23 eight years until people focus. 24 25 MS. EMERY: But it's really a great

1 addition.

2	MR. LYON: Together the three new funds
3	have attracted now well over a \$100 million.
4	MR. AARONSON: This is in a 2-1/2-year
5	period. These funds are $2-1/2$ years old.
6	MS. MARCH: It's just
7	MR. LYON: But a \$100 million is a
8	reasonable amount of movement, certainly a
9	starting point.
10	Any other questions on the quarterly
11	report? If not, I am going to go to the
12	monthly items real quick.
13	So the first thing is distributed in
14	advance, I will go through it really fast.
15	The January 31st variable A flash report and
16	the first page you can see the asset
17	allocation 10.1 billion at the end of January.
18	And something I would just like to point out
19	is that you will see we still have some of the
20	legacy labels, but in the active equity
21	composite for core, previously agreed to
22	collapse the risk controlled and eclectic. So
23	this is the last time you will see any
24	reference to those. And collapsed most of the
25	information, but we will finish collapsing it

on next month's report. And the same is true 1 2 on the international composite as well.

The following pages, 2 and 3, you can 3 see the performance information. Square in 4 the middle of page 3 is what's the line item 5 called "Teacher's Total." That's the total 6 7 variable A return for the month of January. 8 This was 2.12 percent. That was within a 9 handful of basis points of both the 10 benchmarks, right between the two benchmarks. And for the one-year period ending January 11 31st, we are up 21-1/2 percent. That lags the 12 13 benchmark for one more than the other, but for similar reasons that I described earlier. 14 But, particularly, the international and 15 16 defensive composite did not keep up with the 17 U.S. equity markets during that time frame, so 18 these are the major observations for variable 19 Α. Any questions? 20 MR. AARONSON: Yes, I have a question. 21 22 Is it possible for you to break out for me the

investment managers in the variable program 23 that are similar to our emerging managers in 24 the pension fund, and about how much of our 25

DDA funds are invested in emerging managers? I would like that information if we can have it by the end of the week because next Tuesday we would like to use that information at a meeting.

MR. LYON: Yes, we can do that by the end of this week. We will have it for you.

6

7

8 On variable C, D and E we also have the report that's distributed ahead of time. You 9 can see for the month in this case, three 10 funds each slightly lagged their respective 11 benchmarks. But their results for the 12 13 one-year period, the international fund is pretty close to its benchmark and the other 14 two funds were meaningfully ahead of their 15 16 benchmark for the one year through January 31st. 17

18 Lastly, we had the February benchmark 19 report, which includes an estimate of the hybrid benchmark for variable A. February was 20 a strong month, generally speaking, across the 21 board, particularly for equities. Not much 22 difference between U.S. and international 23 benchmark. And you can see that the hybrid 24 benchmark is estimated 3.47, 3.47 percent for 25

1	the month of February. It didn't feel like I
2	was saying earlier plus 3 percent kind of
3	month. Last week and a half or so was a
4	rougher ride, but nonetheless it did finish
5	out pretty strong results thanks to the first
6	half of the month, basically. You can see
7	also how the PIMCO All Asset Fund that's used
8	in variable D and the Neuberger fund used in
9	variable B performed well during that month.
10	Any questions?
11	So that concludes I think the public
12	session for the variable funds.
13	MR. AARONSON: Thank you very much.
14	We need a motion to go into executive
15	session. Do I hear such a motion?
16	MS. MARCH: So moved.
17	MR. SCHLOSS: Second.
18	MR. AARONSON: Anybody opposed to
19	going okay, nobody opposed.
20	
21	
22	(At this time the meeting went into executive session.)
23	
24	
25	MR. AARONSON: Okay, voted to go out of executive

session. We are now back in public session.

2 MS. NAGASWAMI: Mel, I received an e-mail yesterday, which I think several people 3 4 already have, acknowledging three of our trustees for their lifelong contribution to 5 6 this fund and the pension community at large. 7 And I simply want to acknowledge Mel, Sandy 8 and Mona for being those three trustees that 9 are being honored by NASP next week and it's 10 just an absolute delight to have a chance to work with you guys. I just think it's a 11 terrific honor for the system and a real 12 13 recognition of your work, so thank you.

(Applause.)

14

MR. AARONSON: Maybe we will have the 15 16 good luck that some of you will be attending 17 the program. The funds that are raised in 18 this program go to educate minority children 19 so that they can participate in the financial industry and they do a great job. And we are 20 glad -- Mona, Sandy and I, are glad we are 21 able to help them. They are just a great 22 23 team.

MS. MARCH: Thank you for your kind 24 25 words.

MR. AARONSON: And in public session now

2 we have to summarize what we did in the3 executive session. Susan?

MS. STANG: Okay, in the executive
session of the variable funds there was a
discussion about the change in the investment
profile of one of the passport funds.
Consensus was reached, which will be announced
at the appropriate time.

10 In the executive session of the pension fund, an economic review as well as detailed 11 performance reports on each asset class were 12 13 presented. An update on an investment manager 14 was presented. A consensus was reached, which 15 will be announced at the appropriate time. An 16 update on one investment manager was also 17 presented. There was a presentation on a 18 specific asset class. There was also a 19 presentation and discussion on the procurement process. A consensus was developed, which 20 will be announced at the appropriate time. 21 22 There was a presentation about the private 23 equity portfolio and market and a discussion followed. There was also a presentation about 24 25 asset allocation, which was received and discussed.

1	MR. AARONSON: So anybody have anything
2	to add to that?
3	Okay, do I hear a motion to adjourn.
4	MS. MARCH: So moved.
5	MS. ROMAIN: Second.
6	MR. AARONSON: Anybody opposed?
7	We are adjourned.
8	[Time noted: 3:15 p.m.]
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4	STATE OF NEW YORK)
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б	COUNTY OF QUEENS)
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8	I, YAFFA KAPLAN, a Notary Public
9	within and for the State of New York, do
10	hereby certify that the foregoing record of
11	proceedings is a full and correct
12	transcript of the stenographic notes taken
13	by me therein.
14	IN WITNESS WHEREOF, I have hereunto
15	set my hand this day of,
16	2011.
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19	YAFFA KAPLAN
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