

0001

1

2

NEW YORK CITY TEACHERS' RETIREMENT SYSTEM

3

INVESTMENT MEETING

4

Held on Thursday, October 1, 2020

5

Via

6

Zoom Videoconference

7

8

ATTENDEES:

9

DEBRA PENNY, Chairperson, Trustee, TRS

10

THOMAS BROWN, Trustee, TRS

11

DAVID KAZANSKY, Trustee, TRS

12

JOHN ADLER, Trustee, Mayor's Office

13

CYNTHIA COLLINS, Trustee, Mayor's Office

14

JOHN DORSA, Trustee, Comptroller's Office

15

SUZANNE VICKERS, Trustee, Comptroller's Office

16

NATALIE GREEN GILES, Trustee

17

PATRICIA REILLY, TRS, Executive Director

18

THADDEUS MCTIGUE, TRS, Deputy Executive Director

19

VALERIE BUDZIK, TRS

20

LIZ SANCHEZ, TRS

21

SUSAN STANG, TRS

22

RON SWINGLE, TRS

23

SANFORD RICH

24

SHERRY CHAN, Chief Actuary

25

STEVE YUAN, Mayor's Office

0002

1

ATTENDEES (Cont'd)

2

SUMANTA RAY, Mayor's Office

3

ARISTEA AFTOUSMIS, TRS

4

DAVID LEVINE, Groom Law Group

5

ISAAC GLOVINSKY, TRS

6

ROBIN PELLISH, Rocaton

7

EMMA O'BRIEN, Rocaton

8

JULIE MOORE, Rocaton

9

KATIE PIRO, Rocaton

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

0003

1

P R O C E E D I N G S

2 (Time noted: 10:04 a.m.)

3

4 MS. REILLY: Good morning. Welcome
5 to the October 1, 2020 TRS Teachers
6 meeting. I'm going to start by calling
7 the roll.

8 John Adler?

9 CHAIRPERSON ADLER: Here.

10 MS. REILLY: Thomas Brown?

11 MR. BROWN: Here.

12 MS. REILLY: Natalie Green Giles?

13 MS. GREEN GILES: Here.

14 MS. REILLY: David Kazansky?

15 MR. KAZANSKY: Present.

16 MS. REILLY: Russell Buckley?

17 MR. ADLER: Russ is not going to be
18 able to make it today.

19 MS. REILLY: Debra Penny?

20 CHAIRPERSON PENNY: Present.

21 MS. REILLY: Susannah Vickers?

22 MS. VICKERS: I'm here.

23 MS. REILLY: We have a quorum.

24 I'll turn it over to the Chair.

25 CHAIRPERSON PENNY: Thank you very

0004

1 much.

2 We'll start with the first thing,
3 the public funds August 2020 performance.

4 And Emma, I believe you're taking
5 that over for us?

6 MS. O'BRIEN: Yes. Good morning,
7 everybody. Robin will be joining around
8 10:15. So I will get started with the
9 review for the August performance report.
10 I'm also joined by my colleagues Katie
11 Piro and Julie Moore from the equity
12 team.

13 MS. REILLY: Before you start. You
14 all received the documents that were
15 mailed to you, e-mailed to you, that
16 Rocaton will be going over. So you
17 should refer to those documents. If you
18 didn't receive the documents, you can
19 just e-mail Liz right now. She put her
20 e-mail address in the Chat, and she'll
21 forward you all the documents.

22 Thank you.

23 MS. O'BRIEN: Before we get into
24 performance for the Passport funds, I
25 thought I'd spend a minute on what

0005

1 happened in the markets during the month
2 of August. We saw another strong month
3 for equity markets, particularly U.S.

4 equities. Looking at the S&P 500, this
5 was up 7 percent for the month of August,
6 which is the best August on record since
7 1986.

8 August also marked the fifth
9 straight month with positive gains within
10 the S&P 500. The index gained 35 percent
11 during the period, which is the largest
12 five month gain since 1938. So really
13 what we've seen is a pretty incredible
14 bounce since the lows in the market back
15 in March.

16 We continue to see two stories play
17 out within the equity market,
18 particularly the U.S. equity market. One
19 is the performance dispersion between
20 large cap stocks and small cap stocks.
21 So if you look at the year to date period
22 through August, U.S. large cap stocks
23 were up 10 1/2 percent. U.S. small cap
24 stocks were down 5 1/12 percent. That's
25 about a 16 percent dispersion that's

0006

1 happened year to date for the first eight
2 months of the year.

3 Even more notable is the disparity
4 between growth and value stocks. Year to
5 date growth stocks are up 30 1/2 percent.
6 Value stocks are down 9.4 percent.
7 That's a 40 percent difference between
8 growth and value, just in an eight-month
9 period.

10 This is the trend that we've seen
11 really over the last decade, that growth
12 has consistently outperformed value. But
13 it's been really more amplified so far in
14 2020. And it's really been driven by a
15 few large cap tech stocks. So, if you
16 think of Amazon, which was up 87 percent
17 year to date; Apple was up 77 percent
18 year to date; FaceBook and Microsoft, up
19 about 44 percent year to date.

20 These four stocks are really the
21 driving force behind the growth market as
22 well as the broader U.S. equity market.

23 Looking at international markets,
24 they did rally in August, returning 5.2
25 percent; still down about 4 1/2 percent

0007

1 year to date, but started to see a
2 rebound in August.

3 Emerging markets equity up 2.2
4 percent in August, and now in positive
5 territory year to date.

6 Finally, fixed income markets flat
7 to slightly negative, as we saw yields
8 move modestly off of their historically
9 low levels during the month.

10 If we think about how this
11 translates into performance for the
12 Passport funds. If you look at the
13 August flash I'm going to focus on the
14 first page of this (indicating).

15 Starting with the diversified equity
16 fund, assets were \$16.4 billion as of the
17 end of August. The fund returned 6.1
18 percent versus 6.6 percent for the hybrid
19 benchmark, and 7.2 for the Russell 3000.

20 If we look at the underlying
21 composites that make up Variable A, the
22 passive equity composite, which is about
23 60 percent currently, tracked the
24 benchmark for both August as well as
25 longer trailing periods.

0008

1 The defensive strategy composite was
2 up 4.2 percent for the month of August,
3 trailing the benchmark return of 6
4 percent. This has really been driven by
5 the low vol strategy within the
6 composite, as they have struggled to keep
7 pace over the year-to-date period. Their
8 value style has really been a headwind
9 over this period.

10 Looking at the actively managed U.S.
11 equity composite, this was up 5.3 percent
12 versus 7.2 percent for the Russell 3000.
13 Over the year-to-date period, this
14 composite is down 5 percent versus 9.4
15 for the Russell 3000.

16 Our next discussion topic is
17 actually -- review of this composite, so
18 I don't want to spend too much time on
19 the performance drivers. But there's
20 really two key points to make here.

21 One, there's a small cap bias in the
22 portfolio. And two, there's a value bias
23 in the portfolio, which has hurt
24 performance year-to-date.

25 If you look at performance for the

0009

1 individual manager level, it's actually
2 been quite strong when benchmarking to
3 their individual benchmarks.
4 Furthermore, each manager's benchmark has
5 actually underperformed the Russell 3000
6 for the year-to-date period; again,
7 because of the small cap bias and the

8 value bias within the portfolio.

9 Back to the comments I had made on
10 Apple, Amazon, FaceBook and Microsoft
11 really being the drivers of the
12 performance within the U.S. equity
13 market. These four stocks make up 14
14 percent of the Russell 3000, and it's
15 only one and a half percent of the active
16 U.S. equity composite. So that alone is
17 a pretty significant driver of
18 performance dispersion.

19 And then finally, the international
20 equity composite very modestly lagged the
21 benchmark for the month of August and is
22 still outperforming by over 2 1/2 percent
23 year-to-date.

24 Moving on to the balanced fund. As
25 of the end August, about \$511 million in
0010

1 assets, in line with the benchmark for
2 both August and longer trailing periods.

3 The international equity fund, total
4 assets of \$188 million. As I mentioned,
5 very modestly lagged for the month of
6 August and is outperforming for the
7 year-to-date period.

8 Looking at the sustainable equity
9 fund, it's had about \$341 million in
10 assets; returned 4.9 percent for the
11 month of August and trailed the benchmark
12 return of 10.3 percent.

13 There's one manager within this
14 fund, Brown large cap growth. They
15 showed very strong performance within the
16 first half of 2020 and have seen some
17 performance challenges through July and
18 August.

19 The benchmark for this strategy is
20 the Russell 1000 growth, where we've seen
21 an increased concentration in these tech
22 related mega-stocks. Apple, as an
23 example, makes up 12 percent of the
24 Russell 1000 growth. Microsoft makes up
25 10 percent. And as a result, this fund
0011

1 does have exposure to those names. Due
2 to their risk control, they're capped at
3 5 percent. So they have a pretty big
4 underweight to these mega-cap tech
5 stocks, which has really driven the
6 performance in July and August.

7 And then finally we look at the two
8 newly added index funds, the U.S. equity
9 index fund and international equity index

10 fund. The U.S. equity index fund has a
11 market value of \$20.1 million as of the
12 end of August; international has \$3.1
13 million as of the end of August.

14 Both were tracking in the month of
15 August. If you look at the year-to-date
16 period, more significant tracking, and
17 that's as a result of the cash flows that
18 occurred at the end of March. If you
19 look at the underlying mutual fund
20 performance, it's in line with the
21 benchmark.

22 I'll pause there and see if there
23 are any questions.

24 MR. KAZANSKY: Emma, my question
25 really is around value and growth. So,
0012

1 is value just dead? Is the expectation
2 that its day is gone, it's never going to
3 outpace growth as far as returns are
4 concerned? And does that generally mean
5 that we should be rethinking it, or is
6 this something that Rocaton views as a
7 temporary thing, even though temporary
8 has been ten plus years?

9 MS. O'BRIEN: So, when we think
10 about styles, they do go in and out of
11 favor. What we've seen with growth has
12 been pretty extraordinary given the time
13 period growth has been in favor. So we
14 would expect at some point that value
15 will come back in favor. It's really
16 hard to know when, particularly with what
17 the drivers of growth have been.

18 Julie from our equity team, as I
19 mentioned, has joined. I don't know if
20 you have any additional views.

21 MS. MOORE: What we've seen with
22 value managers is the importance of value
23 managers continuing to evolve. So I
24 think some of the value managers that
25 were historically fixated on just buying
0013

1 low PE stocks and thinking that was the
2 whole value story, and that if you just
3 buy low PE stocks, that will be enough.

4 And what we've seen is that the
5 value managers that have done a little
6 bit better and that will probably fare
7 better as value comes back, will be the
8 people that are a little more open-minded
9 about the value spectrum and that are
10 thinking about this evolution that we've
11 seen within the industry, and are

12 thinking about how companies are evolving
13 and thinking about what this world of
14 Amazon and delivery and working from home
15 and what this will all mean; as opposed
16 to just looking back at ten years of
17 history and saying "Let's just buy the
18 cheap stocks, they were cheap, they will
19 come back."

20 We still think there is a role for
21 value, that value is not dead, and that
22 if you were to go all into growth now and
23 ignore value, you would be leaving,
24 potentially leaving some money on the
25 table, but also potentially piling into

0014

1 growth at a very expensive time and
2 perhaps at the wrong time and miss the
3 opportunity for value.

4 The challenge is when value will
5 come back. We thought value will come
6 back for many years with the rest of the
7 industry, we thought it would be coming
8 back. And so we never would expect that
9 the IT sector would represent 40 percent
10 of the growth benchmark like it did in
11 '99. But if you think about what
12 happened after '99, then we had 2000.

13 So you do have this market that will
14 continue to evolve. If you think about
15 how the indices have evolved, health care
16 used to represent a growth sector. Now
17 health care is more of a value sector.

18 So it's making sure you have value
19 managers that can be a little more
20 flexible in how they're thinking about
21 value and thinking about different
22 factors. So we found those have been the
23 value managers that have been more
24 successful, as opposed to some of the
25 ones that have been sort of much more

0015

1 strict about, it must be just about PE.

2 MR. RICH: Can I offer a view on
3 this, please?

4 CHAIRPERSON PENNY: Mr. Adler?

5 MR. ADLER: I'd like to hear Sandy,
6 because my question is about a different
7 topic.

8 MR. RICH: So, I'm expressing a
9 view, I'm not asking a question. I
10 believe the foundational problem is that
11 our lack of performance is related to our
12 belief that we can actually predict when
13 value is better than growth, when growth

14 is better than value, when any individual
15 stock is better than the index.

16 We have systematically failed to
17 meet what is basically an unmanaged index
18 exposure, which could have been
19 implemented at far less expense. This is
20 the root of the issues that I have
21 brought to my Trustees to deliver to this
22 committee.

23 There is a foundational belief in
24 our Trustees at BERS and in our staff, in
25 our strategy department and in our

0016

1 consultants Siegel and Aksia, that there
2 is no demonstrable ability of any
3 individual to determine these things.
4 Index exposure is better, long term
5 exposure to index is far better; drive
6 down expenses and do not believe that you
7 can --

8 CHAIRPERSON PENNY: I have to stop
9 you there, Mr. Rich, because that's your
10 opinion and we certainly will make
11 decisions the way we see fit. But I
12 thank you for your opinion.

13 Mr. Adler, you had something else to
14 add?

15 MR. ADLER: I have two questions
16 about the fund report here. The first is
17 concerning the balanced fund. I note
18 that -- and this is probably for Susan
19 Stang -- that the assets in the balanced
20 fund are up to \$510 million now. And
21 when we switched to Variable B from a
22 bond fund to a balanced fund about a year
23 ago if I remember correctly, the assets
24 were down below \$400 million.

25 So I believe that the increase --

0017

1 it's just interesting to me, I don't know
2 if you have any insight into the
3 increase. I guess the balanced fund is
4 more appealing to folks than the bond
5 fund? Is that what you would say?

6 CHAIRPERSON PENNY: Susan, we can't
7 hear you. You are on mute.

8 (Talking over each other.)

9 MS. STANG: The balanced fund. I
10 think when we changed it from the bond
11 fund to the balanced fund it was probably
12 about \$400 million. So I think you can't
13 really conclude much going from 400 to
14 \$500 million, because a third, 30 percent
15 of that is growth in the international

16 markets, which there has been some;
17 right? And there probably has been some
18 inflows to the balance fund.
19 Ron probably could -- I don't have
20 the exact numbers, but it's been a couple
21 million bucks a month; right? And I
22 think we changed from the bond fund to
23 the balanced fund greater than 12 months
24 ago.

25 So I wouldn't read too much into the
0018

1 difference between 400 and 500, actually.
2 I don't think that --

3 MR. ADLER: Okay; that's fine.
4 Thank you.

5 My second question is about the
6 sustainable equity fund.

7 So, Emma, you mentioned that one of
8 the reasons for the underperformance,
9 even though it's a large cap growth
10 oriented strategy, is the limits on the
11 holdings of individual securities.

12 My question is, given where the
13 market is, are those limits we should
14 think about?

15 MS. O'BRIEN: Typically we like to
16 see managers that have risk controls in
17 place stick to their guns, even in
18 periods where we are right now, where
19 we've seen notable and amplified
20 performance from tech managers.

21 So I think of it differently, where
22 the fact that Brown has kept to their 5
23 percent max to an individual security as
24 actually a positive.

25 MS. PELLISH: I'm jumping in; sorry.
0019

1 I don't think we're necessarily
2 imposing, although these are guidelines
3 for the mandate, I don't think we're
4 imposing them on Brown in a way that
5 alters the way they would typically
6 invest their portfolio.

7 So, I think most active managers
8 want to be reasonably diversified and
9 recognize that over some period of time
10 they will not participate in these very
11 strong momentum driven markets.

12 The absolute returns of course are
13 very good, but it's been impossible
14 keeping up with the large cap growth
15 index. And I don't think we want to see
16 managers alter their investment style,
17 particularly one which has generated

18 pretty good relative returns over long
19 periods of time.
20 MR. ADLER: Got it. Thank you for
21 answering those questions.
22 CHAIRPERSON PENNY: Any more
23 questions about that?
24 (No response.)
25 So we're ready for the next topic.

0020

1 So the next topic is the diversified
2 equity fund. We're going to talk about
3 the U.S. equity composite review.
4 Robin, are you going to do that?
5 MS. PELLISH: Yes, I will take that.
6 CHAIRPERSON PENNY: Terrific.
7 MS. PELLISH: So, let me just give
8 everyone some context, remind everyone
9 what we're trying to accomplish here.
10 From time to time over the many
11 years that the Variable A fund has
12 incorporated an allocation to actively
13 managed U.S. equity mandates, the topic
14 of whether this is an appropriate
15 allocation within the diversified fund,
16 that discussion has taken place at the
17 board level. And this is a repeat of
18 that discussion; not a repeat of that
19 discussion, but this is the kind of
20 discussion we should have periodically.
21 Is the investment structure within
22 Variable A, does it continue to be
23 appropriate given how capital markets
24 evolved, potentially how other offerings
25 in the Passport funds have evolved and

0021

1 how participants evolved?
2 So this discussion is very much in
3 the mode of the kind of review of various
4 segments of Variable A that we have had
5 in the past, that we will continue to
6 have going forward.
7 And you may recall that we had
8 detailed discussions of the international
9 component of Variable A, probably over a
10 year ago, made some changes to that
11 portion of the program. And following
12 the review of this section of Variable A,
13 we'll turn to the defensive sector in
14 subsequent meetings.
15 So, we try to lay out in this deck
16 the various questions that have been
17 raised by TRS, by Rocaton and by the
18 Board about using active U.S. managers
19 within Variable A. And I encourage

20 people to ask questions and make comments
21 as we go through. This is a fairly long
22 deck, we tried to be really thorough.

23 And I think you will note we didn't
24 end the deck with a recommendation,
25 because there are a number of different

0022

1 paths we could go down in terms of this
2 composite, and there are issues and
3 advantages associated with each one of
4 the paths, and we try lay those out.

5 So with that, let me launch in on
6 Slide 2 (indicating). What you will see
7 is an introduction to this discussion.
8 We know here that this discussion is
9 particularly timely because there have
10 certainly been performance challenges of
11 this composite relative to the broad U.S.
12 equity market, as measured by the Russell
13 3000 index.

14 We note that the performance
15 challenges have been particularly notable
16 over the last five years.

17 So, with that, let's turn to Slide 4
18 if we can (indicating), and look back a
19 little bit. How did we get to where we
20 are today in terms of this composite?

21 So, the entire Passport fund
22 structure has evolved over many years in
23 which it's been offered to members. And
24 Variable A's structure has certainly
25 evolved over the years. For many years

0023

1 the composite represented about 20
2 percent of Variable A. And during that
3 period of time, the composite included
4 two components; three quarters of this
5 composite was compromised of risk control
6 or enhanced index strategies. They were
7 primarily large cap, in some cases small
8 cap. And the focus of those strategies
9 was to generate modest alpha and to have
10 very minimal tracking relative to the
11 benchmark.

12 And then a quarter of this composite
13 was compromised of what we call eclectic
14 managers. These are very style-specific
15 managers which made larger bets relative
16 to their benchmarks, had larger tracking
17 error relative to their benchmarks; and
18 in aggregate took much more active risk
19 in the hopes of generating incremental
20 active return.

21 So, in the years leading up to 2014

22 there was a lot of discussion about
23 whether this is the right structure for
24 this particular composite within Variable
25 A. And a couple of changes were made to
0024

1 this composite beginning in 2014.

2 First, it was decided that the use
3 of enhanced index and risk controlled
4 managers wasn't optimal; that we had a
5 very large index allocation and that if
6 we used active managers we really wanted
7 them to take more risk relative to the
8 benchmarks in hopes of generating higher
9 incremental returns.

10 And so, that led to the elimination
11 of the risk control mandates, and we
12 targeted a higher tracking error versus
13 the broad market.

14 It was also determined that we would
15 reduce the size of this allocation and
16 focus on the highest conviction managers
17 and not worry about whether this
18 composite itself, because it was going to
19 be a smaller component of Variable A --
20 not worry whether it was diversified by
21 style and cap size; but really focused on
22 finding the managers that we have the
23 highest conviction in, in terms of adding
24 incremental returns relative to the
25 manager's specific benchmark.

0025

1 And so, today, we have a composite
2 which has a target of up to 15 percent of
3 Variable A, but not a mandate to be at 15
4 percent. And, in fact, today this
5 composite is about 10 percent of Variable
6 A, has seven managers. And because we
7 have focussed on managers, we take
8 relatively high tracking error to the
9 benchmarks. And we haven't been focused
10 in having a diversified composite within
11 this 10 percent.

12 We have ended up having a value
13 style bias and a smaller cap bias
14 relative to the Russell 3000 index.

15 That's the composite as it stands
16 today.

17 So, we can turn to Slide 5. I
18 presume folks will interrupt if there are
19 questions. I will not pause for
20 questions, but happy to answer any that
21 are generated.

22 So, if we turn to Slide 5, we're
23 looking now at manager changes over time.

24 And Rocaton was founded in 2002, so we
25 only have in our database information
0026

1 going back to 2002. That's why we're
2 using that as a starting point.

3 If you start in 2002, there were
4 nine managers in the composite in 2002
5 calendar year end. Of the original nine
6 managers only one is left, and that is
7 Sound Shore, and they've been in place
8 since the 1980s, a very long tenure in
9 Variable A.

10 Over the past 18 years we've hired
11 17 managers for this composite and
12 terminated 19 managers. So manager
13 changes have occurred for two primary
14 reasons.

15 One, we lost faith in their ability
16 to generate the kind of incremental
17 returns the composite was targeting. And
18 two, because of the structural changes
19 that we imposed, as I just discussed.

20 We eliminated a handful of risk
21 control enhanced index managers, INTECH
22 and PIMCO stock plus and Wellington and
23 Martindale and T. Rowe Price. The bars
24 highlighted in green are managers that
25 were terminated primarily because we
0027

1 decided to focus on higher tracking error
2 managers.

3 The managers that are highlighted in
4 this yellow-ish or orange-ish color are
5 managers that were terminated because of
6 underperformance or because of
7 organizational issues that we thought
8 would lead to underperformance. And then
9 the blue bars represent managers that are
10 currently in the portfolio.

11 So, this is sort of a timeline of
12 how we got from 2002 to the current
13 manager composite.

14 So, with that, maybe we'll talk
15 about performance, start to talk about
16 performance on Slide 6 (indicating).

17 So, we've noted that we have in the
18 composite today pretty styled focused
19 managers. So they're focusing not on
20 tracking the benchmark closely, but on
21 exploiting a particular sector,
22 opportunities within a particular sector
23 of the U.S. equity market.

24 So, if we look at the list of
25 managers on the bottom half of Slide 6,

0028

1 you can see that each one of these
2 managers is either value or growth
3 managers that, the majority of managers
4 are value managers; and that we have four
5 smaller cap managers, one all cap manager
6 and two larger cap managers.

7 So, this roster gives you a visual
8 of the fact that we have, relative to the
9 Russell 3000, we have a bias towards
10 smaller cap stocks and value stocks.

11 MS. MOORE: I wanted to add one
12 thing. Before you joined the call, there
13 was a question about whether this current
14 composite was reflective of a Rocaton
15 view, that we were trying to take a style
16 bet or trying to take a cap bet.

17 And it really is not. The decision
18 was made to, as you said, the decision
19 was made to have, not to worry about
20 diversification within this portfolio and
21 really to focus on the highest conviction
22 ideas.

23 So this is not taking any kind of a
24 -- Rocaton doesn't know when value is
25 going to come back. Rocaton doesn't know

0029

1 when small cap is going to come back.
2 And we're not trying to take any kind of
3 timing bet in here.

4 This is purely a reflection of the
5 highest conviction managers relative to
6 their individual benchmarks, which may
7 not be relative to the Russell 3000 that
8 I know you're going to talk about. I
9 just wanted to make that point clear.

10 MS. PELLISH: Thanks, Julie.

11 So, we have the 831 market values
12 for each one of these mandates. And then
13 we have some performance information.
14 This is very summary, over the past five
15 years, excess return for each one of
16 these mandates relative to their specific
17 benchmark. And they each have a
18 benchmark that's targeted toward their
19 specific style.

20 And then we have their
21 since-inception excess return and we have
22 the inception date of all of these
23 mandates. And you can see, with the
24 exception of the Wasatch micro path,
25 which was added in 2019, they've all been

0030

1 in place for at least six years, and

2 Sound Shore of course goes back to 1981.
3 Over the past five years we've seen
4 underperformance from three of these
5 managers to the tune of about 100 basis
6 points, and outperformance of -- one of
7 the managers hasn't been in place for
8 five years, but the other three managers
9 have outperformed by significantly more
10 than 100 basis points.

11 And since inception, all of these
12 managers have outperformed their specific
13 benchmark.

14 And I know the Board is aware of
15 this, but every time we talk about a
16 performance number relative to a specific
17 manager, this is after their investment
18 management fees.

19 MS. GREEN GILES: Robin, that was
20 going to be my question. Do we have
21 those fees? Do you have those handy?

22 MS. PELLISH: Actually, you have
23 them. I can tell you them, but you have
24 them in your performance report which I
25 don't have right in front of me.

0031

1 Emma -- would you like us to note
2 them? We didn't put them in because this
3 is sort of the public record and we don't
4 provide those in the public record. But
5 I'm happy to talk to them, if you would
6 like.

7 MS. GREEN GILES: That would be
8 helpful, I think.

9 MS. PELLISH: Sure.

10 Emma, can you mention those?

11 MS. O'BRIEN: Sure.

12 Do you want to know the specifics or
13 the range of fees?

14 MS. PELLISH: Why don't we go
15 through the specifics, it's just seven
16 numbers.

17 MS. O'BRIEN: So, NewSouth is 45
18 basis points, 0.45 percent; Diamond Hill
19 is a performance based fee, the estimated
20 annual fee is 10 basis points; Sound
21 Shore, 20 basis points; Wasatch small cap
22 growth, 81 basis points; Cardinal small
23 cap value, 70 basis points; Shapiro small
24 cap value, 90 basis points; and the new
25 Wasatch micro cap, 100 basis points.

0032

1 MS. PELLISH: Thanks, Emma.

2 So the smaller cap managers are
3 between 70 and 100 basis points. The

4 larger cap managers are between 10 and 45
5 basis points.

6 MR. ADLER: These numbers on this
7 slide are net? Just to confirm.

8 MS. PELLISH: Yes; they are net of
9 asset management fees paid by Variable A.

10 MR. ADLER: Thank you.

11 MS. PELLISH: Sure.

12 If there are no more questions on
13 this slide, let's turn to the next slide.
14 The next slide is very colorful
15 (indicating). China presents information
16 in a user friendly way. Let me describe
17 what we're trying to illustrate with this
18 graph.

19 We're trying to talk about the
20 market environment over, particularly
21 over the last five years, but I think it
22 extends beyond five years.

23 And what we're showing on this chart
24 is the relative performance of value
25 versus growth and small cap versus large

0033

1 cap, and how the active manager composite
2 has performed in this environment.

3 So first, let me point to the green
4 line that hovers around, that has been
5 hovering around the zero line for most of
6 this period of time; and then has
7 descended into negative territory,
8 particularly over the past five years.

9 That is the rolling three year
10 excess return of this composite. So it
11 is the net return -- and again, every
12 time we show you the composite return or
13 the manager return, this is after all of
14 investment management fees.

15 So, this is the return of the
16 composite relative to the Russell 3000 on
17 a rolling three year basis.

18 We've compared that, then, to the
19 market performance of value and growth
20 stocks. That is shown in the yellow
21 line, where you can see the relative
22 performance of growth stocks in the U.S.
23 equity market versus value stocks. And
24 every time that yellow line dips below
25 the zero line, that means that value

0034

1 stocks are outperforming. Every time it
2 goes into positive territory, above the
3 zero line, that means that growth stocks
4 are outperforming.

5 And so, you can see that, exactly as

6 you would expect, there are periods of
7 time historically when growth
8 outperforms, there are periods of time
9 historically that value outperforms.
10 It's pretty cyclical and it's impossible
11 to predict with any degree of precision.
12 What you can see is something we all
13 know, and we've mentioned quite a few
14 times already this morning, that growth
15 stocks outperformed significantly, very
16 significantly for a fairly long period of
17 time. And you can see that by the
18 vertical ascent of the yellow line into
19 territory where growth stocks are
20 outperforming significantly.
21 The orange line shows the same,
22 provides the same information. But
23 instead of growth versus value, we're
24 looking at large versus small.

25 And so, again, you can see there are

0035

1 periods in which large cap stocks
2 outperformed, and that's shown in the
3 reddish orange, is above the zero line.
4 And you can see there are periods of time
5 when small cap outperformed, and that is
6 shown when this reddish line dips below
7 zero.

8 And what you can see as we get to
9 the end of the time period here, is that
10 large cap stocks have had a sustained
11 outperformance.

12 So, net takeaway here is that the
13 composites underperform and had
14 significant underperformance relative to
15 the Russell 3000 over the recent years.
16 It's coincident with the sustained
17 outperformance of large cap and growth
18 stocks.

19 If there are no questions on this
20 slide, maybe we'll turn to some other
21 performance data on Slide 8 (indicating).

22 So, this slide is focused on the
23 U.S. active composite from a number of
24 perspectives. First, let me turn your
25 attention to the bottom half of this

0036

1 slide, where we're looking at the U.S.
2 active composite return; again, after
3 investment management fees, over the past
4 three years and over the past five years.

5 You can see, these happen to be
6 periods of time ending in July, I think,
7 when we ran this data, end of July. But

8 over the past three years the U.S. active
9 equity composite has generated an average
10 annual return of about 4.1 percent; over
11 the past five years, about 5.1 percent.

12 You can see the Russell 3000 index
13 return. That compares to double digit
14 returns over the past three and five year
15 periods.

16 What we've been saying is the
17 Russell 3000 is not a particular apt
18 benchmark for this composite because of
19 the nature of the managers being used in
20 this composite over this time period.

21 So what we did was, we took the
22 individual benchmarks from each one of
23 these managers and we weighted it, we
24 re-weighted those benchmarks every
25 quarter going back over the past five

0037

1 years, based on the weighting to those
2 managers over the past five years.

3 So we created a custom benchmark
4 which is comprised of the individual
5 managers' benchmarks, whether it's the
6 Russell 1000 value, the Russell 2000
7 growth, whatever the individual manager's
8 benchmarks were, we added them together
9 weighted by that particular manager's
10 allocation within this composite. And we
11 created that custom benchmark in the U.S.
12 equity composite.

13 We've never shown this in any
14 reports. But this is what it would look
15 like if we'd shown it quarter by quarter.
16 And that benchmark looks much more like
17 the active manager performance because it
18 actually reflects the value and small cap
19 bias that is reflective in that composite
20 of seven active managers.

21 So you can see that over the past
22 three years the active managers in
23 aggregate have outperformed this
24 composite benchmark, and over the past
25 five years they've trailed by about 110

0038

1 basis points.

2 So, I think this is just another
3 illustration of how different the
4 composite is today versus the Russell
5 3000. That difference is depicted in the
6 top half of the page. In the right hand
7 side you can see how tracking error has
8 increased. And that, again, was a
9 deliberate effort. We wanted to increase

10 tracking error relative to the Russell
11 3000, and we have.

12 And on the left-hand side of this
13 page you can see, this is just another
14 way to look at the style of the
15 composite, which is the green square
16 versus the style characteristic of the
17 Russell 3000, which today is larger cap
18 and more growth oriented than the
19 composite.

20 So this information, all of this
21 information are just different ways in
22 which to illustrate the risk
23 characteristics of the composite today
24 versus the Russell 3000.

25 Any questions on this page?

0039

1 Hearing none. I feel like I'm
2 beating a dead horse a little bit on
3 Slide 9. We do this on a holdings basis,
4 we show you what the top ten holdings are
5 of the portfolio in 2017.

6 And let me -- we compare that to the
7 next slide, which is in 2020. And I
8 think, I'll point you to one number, a
9 dizzying array of numbers. But if you
10 look at this slide, Slide 9. In 2017 the
11 percentage of the aggregate holdings of
12 these managers -- we downloaded each one
13 of the manager's portfolio holdings -- if
14 you added them all together, about a
15 third, 32.5 percent, you can see this
16 number on the bottom left hand corner of
17 the slide -- about a third of this
18 portfolio had a market cap of less than
19 \$10 billion.

20 At the same time, the Russell 3000
21 had about 18 percent of its market cap,
22 less than \$10 billion.

23 If you go to the next -- so 33
24 percent versus 18. If you go to the next
25 slide, fast forward three years to 2020,

0040

1 that 33 percent of holdings with market
2 cap less than \$10 billion went up to 52
3 percent in this composite, became even
4 smaller bias, and the Russell 3000's
5 allocation to small cap stock actually
6 went down from 18 to 15 percent.

7 So we've moved, we were smaller cap
8 in 2017 in the Russell 3000 and we've
9 increased that gap over the ensuing three
10 years.

11 I'd like to move from the specifics

12 of the characteristics of performance of
13 the U.S. equity composite to widen our
14 perspective, to look at active management
15 in U.S. equities more broadly.

16 But before I do that, any questions,
17 comments?

18 (No response.)

19 Can you still hear me online?

20 MR. MCTIGUE: We can hear you.

21 (Laughter.)

22 MS. PELLISH: I have a nightmare
23 that I continue to talk for hours and no
24 one is there. (Laughter.)

25 So we turn to Slide 12. This is

0041

1 Rocaton's general philosophy about active
2 management. And we acknowledge that
3 active investing is a zero sum gain. You
4 can't all win. For every winner there's
5 a loser.

6 And actually, in aggregate, the
7 entire pool probably is a net loser
8 because there's trading costs involved
9 and asset management costs. So it's very
10 much, at best a zero sum gain. So it's a
11 hard game to play and there are both
12 winners and losers.

13 And there are lots of reasons to
14 invest actively and there are a lot of
15 reasons not to invest actively. And we
16 talk about some of the criteria that we
17 think should be considered when deciding
18 whether you want to be an active
19 investor; and that includes whether there
20 are good passive investments.

21 For example, in high yield, there
22 really isn't an investable high yield
23 index. But in public market equities
24 there are very good investable indices.

25 How efficient the market is, which

0042

1 simply put means the likelihood that you
2 can identify the misvalued securities,
3 that are misvalued by a margin large
4 enough to allow for trading costs, and
5 that allows you to generate an
6 incremental return relative to the
7 benchmark.

8 Your time horizon, you really have
9 to be a long term investor to be an
10 active investor, because the market is so
11 cyclical, and even great managers
12 underperform for sustained periods of
13 time.

14 And finally, how much time and
15 effort you want to put into this
16 exercise; because whatever market you're
17 investing in, if you invest actively it
18 requires a commitment of resources both
19 from the staff perspective of identifying
20 and reviewing these managers, as well as
21 the board level of having these kind of
22 discussions.

23 So we note here that the U.S. equity
24 market has been a challenging market for
25 active investors and is generally thought

0043

1 to be one of the more efficient asset
2 classes; again, identifying misvalued
3 stocks is particularly difficult, because
4 of the availability of information and
5 the number of well-informed investors who
6 are trying to buy most mispriced
7 securities.

8 So, now what we're going to do --
9 that's our philosophy, that this is a
10 tough game to play, a particularly tough
11 game to play in the U.S. equity market.

12 Let's look at the actual experience
13 of active managers. I will -- there's a
14 lot of words on Slide 13, so let's turn
15 to Slide 14 where I think it's much more
16 usefully presented, same information.

17 Now we're talking about the universe
18 of active managers. And we use a
19 database, the investment database, which
20 is a manager database that's used by most
21 of the large consulting firms. It's a
22 very good database, because it's not
23 promoted or managed by any one
24 consultant. It doesn't reflect the
25 biases. It's a database that virtually

0044

1 every institutional manager provides data
2 to. It's a pretty good database.

3 And what we're looking at here is
4 the performance of active managers in
5 that database, and here we're looking
6 gross of fees. So this is pre-asset
7 management fees, because that's the way
8 the data is provided, because fees, even
9 for a given manager, fees will vary based
10 on the size of the mandate and the
11 particular portfolio, et cetera. So this
12 is all gross of fees.

13 And what we're looking at here is
14 both total returns and excess returns
15 after the benchmark. So, on the top half

16 of page 14 we're looking at the median
17 manager, so the 50th percentile manager
18 total returns. We're not looking at
19 after benchmark returns, we're looking at
20 total returns. We're looking at specific
21 peer groups within this database. We're
22 looking at large cap growth, large cap
23 value, small cap growth and small cap
24 value. So there's four quadrants.

25 And we're looking at two time

0045

1 periods; the three years ending June 30
2 and the five years ending June 30.

3 On the top, let's focus on, for
4 example, on the top left hand box. So,
5 over the three years ending June 30,
6 2020, the median -- again, 50th
7 percentile manager over this time period
8 -- in the large cap growth manager peer
9 group, did by far the best; okay? Ad
10 nauseam, large cap growth has
11 outperformed everything else in the U.S.
12 equity market, and actually globally, but
13 particularly in the U.S. equity market.
14 So, no surprise, the median manager in
15 this peer group generated a return of
16 almost 18 percent on an average annual
17 basis over the past three years.

18 And even if you slide over to the
19 right, that same peer group generated an
20 average annual return of over 14 percent
21 through the last five years, very much
22 the place to be, if you could predict
23 these cycles.

24 If you look at large cap value
25 managers, they generated total return

0046

1 over the past three years, on average, of
2 3.3 percent. This is again the median
3 manager. The median manager earned 3.3
4 percent pre-fee over the past three years
5 and a little better over the last five
6 years, 5.6 percent average over the last
7 five years.

8 If you look at small cap value,
9 worse place to be, combines the onus of
10 small cap and the onus of value. And so
11 over the last three years the median
12 manager lost 3 percent a year over the
13 last three years.

14 And if you held that median manager
15 over the last five years, you did a
16 little better, positive returns of less
17 than 2 percent.

18 So, these are the total returns
19 gross of fees.
20 Now we look at how the median active
21 manager in each one of these peer groups
22 did in terms of excess return relative to
23 their specific benchmark. So, again,
24 relative to Russell 1000 growth, Russell
25 2000 value, the appropriate benchmark for
0047

1 that peer group.

2 So, we saw that over the past three
3 and five years, large cap growth managers
4 had the best performance. But that was
5 only true in total return. In fact, you
6 were better off if you held the Russell
7 1000 growth index over those two periods
8 of time; because what the bottom half of
9 the page shows on the left-hand side, is
10 that the median large cap growth manager
11 actually underperformed the Russell 1000
12 growth index by over 100 basis points
13 over the last three years, and by
14 slightly more than that over the past
15 five years.

16 The best place to be in terms of
17 relative returns over the last three and
18 five years was in small cap growth. So,
19 even if you assume you're paying your
20 small cap growth manager about 100 basis
21 points, which is true for Variable A, you
22 were rewarded for investing actively in
23 small cap growth as if it were passively.

24 In the other three quadrants that
25 really hasn't been true over the past
0048

1 three and five years, particularly over
2 the past five years. In large cap you
3 had negative returns gross of fees. In
4 large cap value the Variable A has very
5 good large cap value fees, about 20 basis
6 points. So you would have been rewarded
7 by 70 basis points. The average investor
8 would not have been.

9 And in small cap value, after fees,
10 the median manager generated negative
11 returns.

12 So you can see, not a great picture
13 for active management over the past three
14 and five years, particularly for large
15 cap growth managers, but similarly true
16 for value managers as well. The only
17 place where active management was
18 particularly strong over the past three
19 and five years was small cap growth.

20 Any questions on this page?

21 (No response.)

22 The next question that arises, I
23 think naturally from Slide 14 is: That's
24 how the median manager did, but can you
25 even identify the median manager with any

0049

1 accuracy?

2 So, the way we try to answer that
3 question is, we use the same database and
4 the same peer groups. And we have a page
5 for each peer group in this deck. But
6 now we're looking at the large cap growth
7 peer group. And we're looking at this
8 characteristic known as persistence. And
9 performance persistence simply refers to
10 the probability that a manager that has
11 done well over a time period A will
12 continue doing well over time period B.

13 Do good performing managers tend to
14 stay good performing managers, and the
15 bad performing managers tend to stay bad
16 performing managers? Or is there a lot
17 of movement within the peer group? We
18 know there's movement in terms of
19 relative and total returns across peer
20 groups. So sometimes value is strong,
21 sometimes growth is strong. But even
22 within a peer group managers move around
23 a lot.

24 So the way we look at this is to
25 take the five year period that ends June

0050

1 30, 2015. And then we look at the
2 separate five year period that ends June
3 30, 2020. So there's no overlap in the
4 two time periods. And we're looking at
5 the same peer group, large cap growth
6 managers.

7 So we look at the large cap growth
8 manager peer group for the first five
9 year period, and we look at the top
10 quartile managers, and we isolate the top
11 25 percent of managers in that peer
12 group. That's the bar on the far left of
13 the slide.

14 And then we look at where those
15 individual managers fell in that large
16 cap growth peer group for the next five
17 years. So, what this bar on the
18 left-hand of Slide 15 tells you is that,
19 of the top quartile managers for the
20 first five year period, about 30 percent
21 were once again top quartile managers in

22 the second five year period. Those are
23 good managers, they had a great ten year
24 run.

25 About a quarter of them fall into
0051

1 the second quartile. So about 56 percent
2 of top quartile managers are above median
3 for the subsequent five year period. But
4 about 43 or 44 percent of that top
5 quartile manager peer group falls below
6 median for the next five years.

7 If we look at the managers who are
8 second quartile for the first five year
9 period, we see slightly better outcomes,
10 about 36 percent were in the top
11 quartile. But again, a substantial
12 percentage, in this case 41 percent, fell
13 below median. And about, almost a
14 quarter of those second quartile managers
15 fell to the bottom quartile in the next
16 five years.

17 And as we flip through the next
18 three slides which go through large cap
19 value, small cap growth, small cap value,
20 we can see a consistent pattern. And
21 we've done these analyses almost every
22 year at Rocaton. And the fact is,
23 although the numbers change a little, the
24 theme is the same; which is that there is
25 relatively little performance persistence

0052

1 among U.S. active equity managers.

2 And what the importance of that is,
3 is that it makes historical performance
4 of a given manager a criteria that should
5 be considered certainly, and considered
6 heavily; but it's not necessarily very
7 useful as predictor of future
8 performance, because there isn't a lot of
9 performance persistence among U.S. active
10 equity managers.

11 Any questions on this data?

12 MS. GREEN GILES: I just want to say
13 that this is an extraordinary analysis,
14 hugely, hugely helpful to understand.
15 Because I guess the knee-jerk would be,
16 of course we should be investing and not
17 in active management.

18 But now I say that based on
19 everything you have told me. I say that
20 with huge conviction. And I really, I
21 think this is extraordinary. I just want
22 to go on the record saying that.

23 MS. PELLISH: Well, thank you.

24 I will say that it highlights, as
25 you've just pointed out, it highlights
0053

1 the difficulty of selecting strong
2 performers in the U.S. equity space. But
3 it does say it's not an impossible task.
4 There are some, there's a substantial
5 minority of managers who have shown
6 performance persistence. It's not an
7 impossible task, but certainly a very
8 difficult task.

9 So I'm not going to go through the
10 next three pages, because they show the
11 same level of lack of persistence for the
12 other peer groups.

13 Any other questions about this data
14 or comments before I go to the concluding
15 pages?

16 (No response.)

17 So, if we turn to Slide 20, I'm
18 trying to wrap this up. Hopefully we've
19 made clear a couple of important points.
20 The first is that there are very
21 significant style biases within the
22 current composite, and have been for a
23 number of years; which makes benchmarking
24 to the Russell 3000 problematic. So it's
25 simply not a useful benchmark. And I

0054

1 take responsibility for this. We
2 persistently included the Russell 3000
3 benchmark for this composite. I think
4 everyone would have been better served if
5 we had used a more custom benchmark which
6 reflected the actual characteristics of
7 the composite. We would have seen that
8 the composite underperformed the Russell
9 3000, but would have also had more
10 information about how the managers had
11 been doing relative to their own specific
12 benchmarks.

13 I think we've also highlighted the
14 challenges associated with selecting
15 active U.S. equity managers due to the
16 issues associated with performance
17 persistence.

18 And finally, the fact that there's
19 been significant turnover of the managers
20 within the composite; but that all of the
21 managers currently in the composite have
22 added value to their benchmarks over the
23 period since their relationship with
24 Variable A began.

25 So they've all added return relative

0055

1 to their benchmark since inception and
2 all of them are highly rated by Rocaton.

3 So this is a good group of managers.
4 I don't think we have significant issues
5 with any one of these managers. But the
6 reality is that, in aggregate, the fact
7 that they're smaller in value,
8 value-oriented, has detracted from the
9 overall returns of the fund, which is
10 benchmarked to the Russell 3000.

11 So, on the following slide we try to
12 lay out a couple of, three different
13 alternatives that the Board might
14 consider as we discuss the question of
15 whether we should consider modifications
16 of the current composite.

17 So the first alternative we lay out
18 is to maintain the composite but make it
19 more cap in style, neutral to the Russell
20 2000. So go back to the period of time
21 before 2014 when we consciously strove to
22 be very diversified within this
23 composite. And the benefits obviously
24 would be lower tracking error relative to
25 the Russell 3000.

0056

1 And since we would have to add
2 managers to this composite to make it
3 more diversified, I know that one of the
4 initiatives that Rocaton shares with the
5 Board is the interest in considering and
6 evaluating more diverse managers for the
7 Passport funds in general, the
8 opportunity to add managers certainly
9 gives the opportunity to consider diverse
10 factors.

11 There are issues associated with
12 moving to this more diversified approach.
13 We've talked about the challenges
14 associated with outperforming in the U.S.
15 equity market, adding more managers,
16 consciously going towards an objective of
17 lower tracking error I think increases
18 the challenge of adding value after fees.

19 And then, we would have to undergo a
20 significant time and effort associated
21 with identifying more mandates. And
22 Rocaton's happy to do that, that's part
23 of our responsibility. But that would
24 obviously also closely involve the TRS
25 staff, and the Board would have to spend

0057

1 time and effort on this.

2 The second approach we outline here
3 is to maintain an approach similar to
4 what we're doing today, and, in fact,
5 what we're doing in the pension fund,
6 which is primarily employ index
7 strategies. So the bulk of U.S. equities
8 in Variable A is indexed, the bulk of
9 U.S. equities in the Teachers pension
10 funds are indexed.

11 But we could selectively add
12 managers with the highest conviction
13 level. And this group of managers would
14 be benchmarked not against the Russell
15 3000, but against a custom benchmark
16 which is much more useful in evaluating
17 the ability of this group of managers to
18 add value, given their particular styles
19 and strategies.

20 So the benefits of this approach
21 include the ability to allow us to
22 continue to use high conviction managers.
23 It creates an opportunity for incremental
24 returns for the total fund. Although we
25 recognize that, since this is a

0058

1 relatively modest allocation within
2 Variable A, the net impact on the total
3 fund's results would be modest. But it's
4 a very large fund, billions of dollars,
5 so every basis point of real dollars that
6 we can provide for our members.

7 And then finally, we do have, as I
8 mentioned, the managers currently in the
9 composite have added value relative to
10 their benchmarks since inception, and
11 most of them over recent periods of time,
12 and they're high conviction managers.

13 And so, changing our approach
14 significantly would mean terminating high
15 conviction managers. If we pursued
16 Alternative 2 we would not have to
17 terminate high conviction managers.

18 Of course, there are issues with
19 every approach. The issue associated
20 with Alternative 2 highlighted here are
21 that we can't guarantee there won't be
22 performance challenges going forward.
23 And even though these are high conviction
24 managers who added value relative to the
25 benchmark, if the current phenomenon of

0059

1 large cap growth outperforming everything
2 else in sight continues, this composite
3 will likely continue to underperform the

4 broad U.S. equity benchmark.

5 And then, to the extent that we have
6 a very specific style bias within this
7 portion of Variable A, there is a
8 possibility that we would have to adjust
9 the indexing approach that we use today.
10 So, for example, in the extreme, if every
11 manager in this composite was small cap,
12 we would probably want to reduce, modify
13 the way we're indexing U.S. equities to
14 avoid an overweight to U.S. small cap in
15 aggregate throughout the portfolio.

16 Today that's not a particularly big
17 issue because we're not entirely small
18 cap. But if we had a total small cap or
19 total value bias we would have to adjust
20 the way in which we index. And that in
21 fact has been done in the pension fund.
22 They divided it up into so large cap
23 indices and small cap indices. So the
24 retention of active managers could be
25 reflected in changed weights within the

0060

1 index strategy.

2 And then, finally, we added a third
3 alternative path, which is to
4 de-emphasize the role of actively managed
5 U.S. equities and eventually eliminate
6 this composite from Variable A. So, we
7 highlighted the benefits.

8 There's a fee benefit because fees,
9 active managers certainly charge higher
10 fees than the index strategy, which is
11 very, very low. But you have negotiated
12 very -- the staff has done a particularly
13 good job of negotiating very low fees in
14 these strategies. And I think, given the
15 size of the composite, this has very
16 modest impact on the total fund. But
17 there would be a modest reduction of
18 fees.

19 We reduced the opportunity to
20 outperform, but we also reduced the risk
21 of underperformance.

22 And finally, it does eliminate some
23 of the time and effort associated with
24 this part of the program for the staff
25 and Board. But there also are issues

0061

1 associated with Alternative 3. We've
2 eliminated the risk of underperformance,
3 we eliminate the potential for
4 outperformance. We reduced the
5 opportunity to add diverse managers to

6 the total fund. We would have to
7 terminate some managers who are very good
8 managers and have actually outperformed
9 their benchmarks, some by very
10 substantial margins.

11 And then, finally, I do want to note
12 that over recent periods we added a U.S.
13 equity index option to Passport funds,
14 that's Variable F. And so, it could be
15 argued that fully indexing U.S. equities
16 within Variable A is somewhat redundant
17 because we've already offered that option
18 to participants in Variable F.

19 And so, happy to answer any
20 questions, but that concludes the
21 information and analysis I wanted to
22 bring to the Board. And I would be
23 interested in hearing feedback,
24 questions, input from the Board as well
25 as TRS.

0062

1 CHAIRPERSON PENNY: First, Robin, I
2 want to thank you for laying this out, an
3 incredible amount of work and a lot of
4 information, certainly a lot for us to
5 think about.

6 And I also want to stress, since
7 this is public session, this represents
8 10 percent of our Variable A?

9 MS. PELLISH: Yes.

10 CHAIRPERSON PENNY: I want everyone
11 to be clear on that.

12 So do we have any questions from the
13 Trustees for Robin? We'll certainly be
14 talking about this in the future.
15 Questions?

16 MR. KAZANSKY: I'd like to -- again,
17 this information is fantastic. And I
18 think, and Robin, I appreciate the fact
19 that you stole a little bit of my
20 thunder. Because my argument for
21 diversified equity was, it was really the
22 only option for our members to get access
23 to the equity market. That would one of
24 them.

25 But we have this new U.S. index

0063

1 which is really truly just a passive
2 attempt.

3 But I guess my question is regarding
4 the benchmarking. Is the strategy to
5 move forward with benchmarking to bring
6 to the Board ideas on how the
7 benchmarking could be, for lack of a

8 better word, more appropriate for this
9 particular sector? Or is that something
10 that Rocaton is going to analyze, do and
11 put in place? Or is that something that
12 comes to us for analysis, or both?
13 MS. PELLISH: I would want the Board
14 to approve. I don't know if the right
15 word is "approve." But I would certainly
16 want to present any change in
17 benchmarking. That's an important part
18 of the work we do with the TRS staff. So
19 we would come to the Board with a
20 proposal about how to change the
21 benchmarking for this composite, and how
22 that might be reflected in the total fund
23 benchmark. Because using the Russell
24 3000 in the current composite is just not
25 meaningful.

0064

1 So I would, to the extent this
2 composite is retained in any way, shape
3 or form, we'd want to re-examine
4 benchmarking and bring specific
5 recommendations back to the Board.

6 MR. KAZANSKY: Do you have a time
7 frame on that, by any chance?

8 MS. PELLISH: Depending on the
9 decision of the Board, we could come back
10 next month. It's not going to look very
11 different from what we already presented
12 to you. So we would, really what you
13 want is, you want a benchmark to answer
14 the question of: Has this group of,
15 individual manager group of managers,
16 added value relative to the indexing of
17 alternatives?

18 And the indexing alternative for
19 this composite is the composite of the
20 indices against which individual managers
21 are evaluated.

22 So we would bring to you a weighted
23 composite of those benchmarks. So it
24 would look very similar to what you've
25 already seen, but we would provide more

0065

1 substance and detail mostly about how
2 that would affect the total fund
3 benchmark.

4 MR. KAZANSKY: Great; thanks.

5 MR. ADLER: Let me echo my
6 appreciation to Rocaton for the work that
7 you did for this deck. I think it's
8 fantastic. And personally, I think it
9 makes a very compelling case against

10 using active management. Because the
11 thing about, if we just changed the
12 benchmarking is, I think the slides
13 demonstrate that the individual
14 benchmarks against which the active
15 managers are measured, even if you weight
16 them together, persistently underperform
17 the Russell 3000; because not only is
18 active management persistence hard to
19 come by, but cap and style choices are
20 hard to come by in terms of persistence,
21 in terms of outperformance.

22 So I feel like, with the active
23 management composite, we are not getting
24 compensated for the risk that we're
25 taking.

0066

1 And while you mention that -- you
2 lose the opportunity for outperformance.
3 I feel like the theory is that, much
4 more, but there's a risk of
5 underperformance both from the cap and
6 style choices as well as the active
7 managers themselves.

8 And truthfully, I'm less interested,
9 we can have a high conviction manager who
10 outperforms the managers, the individual
11 benchmark, and still -- I think that one
12 chart with the different boxes on the
13 page demonstrated that the best
14 outperforming managers still underperform
15 the overall benchmark.

16 And my view is, that's taking money
17 out of the pockets of the members.

18 And let me ask the question also of
19 the Teachers, not just of Roca-ton, which
20 is: There is a point in the deck where
21 it talked about time horizons and the
22 long term time horizon. And obviously,
23 the pension fund has a very, very long
24 term time horizon as far as our
25 liabilities -- where basically we have

0067

1 risk sharing, risk pooling, longevity
2 risk.

3 It's actually on Slide 12, I think,
4 where it says a longer investment horizon
5 is necessary. And then it says, "If
6 investors are unwilling to have a long
7 time horizon, successfully investing in
8 institutional active management becomes
9 more challenging."

10 So my question to the Teachers is,
11 these are your members. I don't think

12 that anybody -- not that everybody has a
13 long term investment horizon, because it
14 varies according to the age of the member
15 and their own plans for their money and
16 so on.

17 So personally, I'm a little
18 reluctant, but I would appreciate your
19 input, as to say, okay, we're doing this
20 for this longer time horizon where not
21 all the members are in a tax-deferred
22 annuity and individual account have a
23 longer time horizon.

24 What is your thoughts on that,
25 Teacher members?

0068

1 CHAIRPERSON PENNY: I think that's
2 what members take into consideration.
3 We're trying to remind members as soon as
4 they start, sometimes in their 20s, to
5 start investing in the TDA. A lot of
6 them think, because they're so young they
7 go with the variable, they go with
8 something a little riskier because over
9 time it's going to make money.

10 And in the past we found that people
11 when they're getting ready to retire they
12 were going more towards a fixed.

13 But it depends. Certainly what we
14 always say is, this is long term, this is
15 for the long haul.

16 I don't know. David or Tom?

17 MR. BROWN: I echo what you say,
18 Debbie. Our members know that investing
19 in TDAs is definitely for the long term,
20 and they know the advantages of long term
21 investment and accrual of interest.

22 So, I echo what you say.

23 MS. VICKERS: Aren't we giving them,
24 it's their choice, and we're giving them,
25 our job is to create a variety of choices

0069

1 and give them the best choice with the
2 most information as possible. But which
3 fund they choose to invest in is up to
4 them.

5 MR. ADLER: Let me point out one
6 thing about that, which is, not all the
7 members of TRS have the choice to invest
8 in any of the variable funds beyond
9 Variable A; that some had the choice of
10 Variable A, I believe, but don't have the
11 choice to invest in B through F, or
12 however many letters you go.

13 MS. GREEN GILES: Unless I'm

14 mistaken, all BERS members do not have a
15 choice in the Variable A; is that
16 correct?

17 MR. KAZANSKY: That's right. Only
18 TRS members have the option currently for
19 all of the options.

20 MS. GREEN GILES: So John's point is
21 very well taken.

22 MR. ADLER: I want to make one other
23 point, which is that, we adopted
24 investment beliefs as a board exactly two
25 years ago, October 2018. And one of the

0070

1 beliefs, "We favor the use of indexing to
2 implement public market investment
3 strategies, except in those cases in
4 which a compelling case can be made that
5 active management can reap incremental
6 benefits for the funds."

7 And I believe this deck does to make
8 the case that active management can reap
9 incremental benefits for the funds. And
10 I'm totally open to having more
11 discussion about that. But I'm not
12 convinced, and I think that our position
13 should be that our default is indexing,
14 and that we have to be convinced that
15 active management reaps incremental
16 benefits.

17 And I think what has happened
18 historically is that it has reaped
19 incremental losses for the fund's active
20 members.

21 MR. BROWN: I understand that all
22 members in TRS cannot invest in the other
23 Passport funds. But actually, what
24 percentage of TRS members who are
25 eligible to invest in the other Passport

0071

1 funds other than diversified actually do
2 invest in those funds?

3 Would you know that, Susan?

4 CHAIRPERSON PENNY: All members in
5 TRS can invest in all those funds. I
6 think we're getting confused and we have
7 to be very clear. This is not a BERS
8 meeting, this is a TRS meeting. And I
9 don't want anyone in the public to think
10 they cannot. All Teachers' Retirement
11 System members can invest in all of the
12 choices.

13 I'm sorry, go ahead, continue.

14 MR. BROWN: What percentage of our
15 members actually do invest in funds other

16 than Variable A? Not the fixed, but the
17 other funds, other than fixed and
18 Variable A and diversified. Do a large
19 percentage of our member invest in funds
20 other than the fixed and diversified?

21 MS. STANG: I can't give you the
22 numbers exactly; but the answer is a
23 large percentage of people have money, a
24 little bit of money in a lot of different
25 funds; what you see when you go to the

0072

1 participants.

2 MR. BROWN: Thank you for that.

3 CHAIRPERSON PENNY: Again, Robin,
4 thank you so much. The purpose of this
5 was for you to explain it, and you laid
6 it out very clearly. Certainly a lot to
7 think about and a big decision to be
8 made.

9 If we're done with that topic we'll
10 go on to the next one, which is the
11 emerging markets equity screening
12 project.

13 MR. ADLER: One more question. What
14 is our process now for making decisions
15 about the active management sleeve in the
16 Variable A?

17 CHAIRPERSON PENNY: If the Teachers
18 want to talk about it a little bit more
19 amongst ourselves, then what would we do,
20 Robin?

21 MS. PELLISH: Sorry?

22 CHAIRPERSON PENNY: If the Teachers
23 members want to talk a little more
24 amongst ourselves, what will the process
25 be?

0073

1 MS. PELLISH: I think we can
2 certainly -- this is a lot of information
3 on an important topic, and I did not
4 expect the Board to make a decision
5 today. But I'm happy first to take away
6 any additional requests or questions that
7 the Board wants clarification on. And we
8 can revisit this topic next month if the
9 Board members think that makes sense, and
10 maybe reach a decision at that time after
11 everybody had an opportunity to digest
12 this information.

13 CHAIRPERSON PENNY: So does anyone
14 need Robin to do any further digging on
15 any of these?

16 MR. KAZANSKY: It doesn't sound to
17 me -- I would say from the vibe in the

18 room, but we're not in a room -- that
19 keeping things as they are is probably
20 not where we're at, and that there seems
21 to be some desire amongst the group to
22 either explore a bit deeper into choices
23 2 and 3 on your kind of --

24 So, is there kind of a more detailed
25 explanation and information that you can
0074

1 give to us as selecting option 2, which
2 is kind of scaling back active as opposed
3 to selection 3, which is just slowly
4 getting rid of it?

5 MS. PELLISH: I can provide some
6 detail around impact on fees, and it
7 might require going into executive
8 session for that discussion of the impact
9 of fees for both approaches; and
10 additional detail on how you might
11 implement alternatives 2 and 3.

12 CHAIRPERSON PENNY: Great; okay.

13 Any other questions on this topic?

14 Robin, so that's what you will work
15 on next?

16 MS. PELLISH: Yes.

17 CHAIRPERSON PENNY: Thank you.

18 I guess we're ready for the emerging
19 markets equity screen.

20 Robin, you'll do that again?

21 MS. PELLISH: Yes. That's a very
22 brief discussion. I just wanted to add
23 this to the agenda just to make sure that
24 no one thought we had forgotten about
25 this process. You recall a number of
0075

1 months ago the Board agreed on at least a
2 preliminary process for evaluating
3 screening emerging market equities using
4 a couple of criteria, and using both the
5 MSCI and Sustainalytics databases. The
6 Bureau of Asset Management now has both
7 those databases. I've gotten some
8 preliminary screens.

9 Susannah, I don't know if you want
10 to comment on this. We had some
11 conversations about this. And the plan
12 is to come back to the Board at the
13 November meeting, present the results of
14 that screening. And I think the kinds of
15 questions we want to answer at this point
16 is: How many companies would be screened
17 using this criteria, using these
18 databases? Are these companies actually
19 held in the active manager portfolios

20 within the pension fund, the variable
21 fund?

22 And if so, what are the active
23 manager comments on the fact that we
24 raised red flags about these companies?

25 So we wanted to provide a fairly
0076

1 detailed level of information to the
2 Board about what would arise from using
3 the screening process we outlined several
4 months ago. We're now in a position to
5 do that.

6 So that concludes, unless, Susannah,
7 you have anything to add to this?

8 MS. VICKERS: Not really. Somebody
9 might ask, I'll just remind everybody,
10 that in addition to that screening
11 discussion of our own process, we will be
12 before the end of the year receiving our
13 first annual screening report from
14 Sustainalytics.

15 CHAIRPERSON PENNY: Great.

16 Any questions or any other comments?

17 (No response.)

18 I guess we are ready for a motion to
19 go into executive session.

20 Do I hear a motion?

21 MR. BROWN: So moved.

22 MS. VICKERS: Second.

23 CHAIRPERSON PENNY: All in favor
24 please say "Aye."

25 (A chorus of "Ayes.")

0077

1 All opposed?

2 (No response.)

3 We are moving into executive
4 session.

5 (Brief discussion off the record.)

6

7 (Whereupon, the Board moved into
8 executive session.)

9

10

11

12

13

14

15

16

17

18

19

20

21

22
23
24
25
0078

1 CHAIRPERSON PENNY: So we're ready to
2 go back into public session. Do I hear a
3 motion to go back to public session?

4 MR. BROWN: So moved.

5 CHAIRPERSON PENNY: Is there a
6 second?

7 MS. GREEN GILES: Second.

8 CHAIRPERSON PENNY: All those in
9 favor of going back in?

10 (A chorus of "Ayes.")

11 We are going back in.

12 (Whereupon the Board returned to
13 public session.)

14 CHAIRPERSON PENNY: Susan, you want
15 to report out?

16 MS. STANG: In executive session we
17 received one manager presentation.
18 Consensus was reached on a path forward
19 and a vote was taken, which will be
20 announced at the appropriate time.

21 We also received one manager update.

22 CHAIRPERSON PENNY: Thank you.

23 Is there anything else we have to do
24 in public session?

25 (No response.)

0079

1 Then do I hear a motion to adjourn?

2 MR. KAZANSKY: So moved.

3 MR. BROWN: Second.

4 CHAIRPERSON PENNY: All in favor of
5 adjourning, please say "Aye."

6 (A chorus of "Ayes.")

7 Any discussion?

8 (No response.)

9 We stand adjourned.

10 (Whereupon, at 11:44 a.m. the
11 meeting was concluded.)

12
13
14
15
16
17
18
19
20
21
22
23

24
25
0080

1

2

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

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

I, Jeffrey Shapiro, a Shorthand
Reporter and Notary Public, within and for the
State of New York, do hereby certify that I
reported the proceedings in the within-entitled
matter, on Thursday, October 1, 2020, and that
this is an accurate transcription of these
proceedings.

IN WITNESS WHEREOF, I have hereunto
set my hand this 4th day of October, 2020.

JEFFREY SHAPIRO