

1 NEW YORK CITY TEACHERS' RETIREMENT SYSTEM

2 REGULAR BOARD MEETING

3 Held on Thursday, November 19, 2020

4 Via Zoom Videoconference

5

6 ATTENDEES:

7 DEBRA PENNY, Chairperson, Trustee, TRS

8 PATRICIA REILLY, Executive Director, TRS

9 DAVID KAZANSKY, Trustee, TRS

10 THOMAS BROWN, Trustee, TRS

11 JOHN ADLER, Trustee, Mayor's Office

12 RUSSELL BUCKLEY, Trustee

13 SUSANNAH VICKERS, Trustee, Comptroller's Office

14 VALERIE BUDZIK, TRS

15 LIZ SANCHEZ, TRS

16 SUSAN STANG, TRS

17 ROBERT BETHELMY, TRS

18 ANNETTE HANRAHAN, TRS

19 KAVITA KANWAR, TRS

20 NATARAJAN KRISHNAMOORTHY, TRS

21 MICHELLE MARSHALL, TRS

22 PAUL RAUCCI, TRS

23 ANDREW BRADFORD, TRS

24 BARBARA OWZCAVCZYK, TRS

25 RENEE PEARCE, TRS

1 Attendees (Cont'd)

2 THADDEUS MCTIGUE, Deputy Executive Director, TRS

3 KATE CHEN

4 ISAAC GLOVINSKY, TRS

5 CARMELA CRIVELLI

6 JAN TURNER

7 SHERRY CHAN, Chief Actuary

8 MARTA ROSS, Corporation Counsel

9 ROSA POLANCO

10 LIGAYA MARAGIN

11 MATT THOMPSON

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1 P R O C E E D I N G S

2 (Time noted: 3:30 p.m.)

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4 MS. REILLY: This is the Board
5 meeting of the Teachers Retirement System
6 for November 19, 2020.

7 I'll start by calling the roll.

8 John Adler?

9 MR. ADLER: Here.

10 MS. REILLY: Thomas Brown?

11 MR. BROWN: Here.

12 MS. REILLY: Natalie Green Giles?

13 (No response.)

14 MR. ADLER: She's not here. She was
15 called away at the last minute.

16 MS. REILLY: David Kazansky?

17 MR. KAZANSKY: Present.

18 MS. REILLY: Russell Buckley?

19 MR. BUCKLEY: Here.

20 MS. REILLY: Debra Penny?

21 MS. PENNY: Here.

22 MS. REILLY: Susannah Vickers?

23 MS. VICKERS: Here.

24 MS. REILLY: We have a quorum.

25 The next item on the agenda is TRS

1 operations, and Kavita Kanwar will give
2 us that update.

3 MS. KANWAR: Good afternoon,
4 everybody.

5 Members have been notified that
6 their account statements for the third
7 quarter of 2020 are now available.

8 On November 9 the quarterly account
9 statements were posted on our website for
10 approximately 125,000 members who are
11 currently in service or on leave.

12 On October 20, the TDA quarterly
13 statements were posted online for
14 approximately 59,000 members who have
15 accounts. And on October 30, the TDA
16 quarterly statements for the TDA
17 beneficiary participants were mailed to
18 the population of approximately 1200
19 members, or beneficiaries.

20 In the fall of 2020 issues -- member
21 newsletter was published in October.

22 In-service news has been mailed to
23 non-retired members, and benefit reports
24 have been mailed out to retirees.

25 During November, TRS is conducting

1 an electronic awareness campaign to
2 members about our TDA program. We are
3 e-mailing about 223,000 targeted messages
4 to brand new TRS members, existing
5 members who are not investing in TDA, and
6 members who have recently stopped making
7 their 3 percent pension contributions
8 under Chapter 126.

9 All messages have the goal of
10 promoting participation in the TDA
11 program.

12 Thank you.

13 MS. REILLY: Thanks, Kavita.

14 THE SPEAKER: Could you mail that to
15 us electronically? Appreciate it.

16 MS. KANWAR: Yes.

17 MS. REILLY: Next item on the
18 agenda is the executive director's
19 report. And the first item on the
20 executive director's report is the next
21 meeting. It has been suggested that the
22 next regular meeting of the Teachers
23 Retirement Board be held on the third
24 Thursday of the month, December 17, 2020.
25 So we should all mark our calendars.

1 Next is a resolution on the
2 modification to the administrative budget
3 for fiscal year 2021.

4 MR. KAZANSKY: Please skip to the
5 resolves.

6 MS. REILLY: "Resolved, that the
7 Board direct the executive director to
8 identify and implement a reduction to the
9 TRS agency budget for fiscal year 2021 in
10 the amount comparable to savings that
11 would have been achieved through the MBO
12 2020/2; and that such reduction shall be
13 applied to the portion of the budget
14 attributable to the employer;

15 "And be it further resolved that the
16 executive director is hereby authorized
17 and directed to take any action that may
18 be necessary to effectuate this
19 resolution."

20 MS. PENNY: Do I hear a motion to
21 approve this modification to the
22 administrative budget for fiscal year
23 2021?

24 MR. BROWN: So moved.

25 MR. KAZANSKY: Second.

1 MS. PENNY: Discussion?

2 (No response.)

3 All in favor of the motion, please
4 say "Aye."

5 (A chorus of "Ayes.")

6 Any opposed?

7 Any abstentions?

8 (No response.)

9 Motion carries. Thank you.

10 MS. REILLY: The next resolution is
11 record retention schedule, LGS-1.

12 MR. KAZANSKY: Please skip to the
13 resolves.

14 MS. REILLY: "Resolved, that TRS
15 hereby adopts the retention and
16 disposition schedule for the New York
17 local government records, LGS-1;

18 "And be it further resolved that the
19 executive director is hereby authorized
20 to take any action necessary to
21 effectuate this resolution."

22 MS. PENNY: Thank you.

23 Do I hear a motion to approve the
24 record retention schedule?

25 MS. VICKERS: So moved.

1 MS. PENNY: Is there a second?

2 MR. BROWN: Second.

3 MS. PENNY: Discussion?

4 (No response.)

5 All in favor of the motion please

6 say "Aye."

7 (A chorus of "Ayes.")

8 Any opposed?

9 Any abstentions?

10 (No response.)

11 Motion carries. Thank you.

12 MS. REILLY: The next resolution is
13 approval of the amendment to the rules
14 and regulations of the Board of Education
15 Retirement System.

16 MR. KAZANSKY: Please skip to the
17 resolves.

18 MS. REILLY: "Resolved, that the TRS
19 Board approves the amendment to Section
20 5A of the BERS rules and regulations to
21 provide for;

22 "1) an extension of the deadline to
23 file nomination petitions for the office
24 of employee members of the retirement
25 board in the event the executive director

1 of BERS is unable to certify at least two
2 nomination petitions, and;

3 "2) a revision of the formal
4 requirements of such nominating
5 petitions."

6 MS. PENNY: Thank you.

7 Is there a motion to approve the
8 amendment to the rules and regulations of
9 the Board of Ed retirement system?

10 MR. KAZANSKY: So moved.

11 MS. PENNY: Is there a second?

12 MR. BUCKLEY: Second.

13 MS. PENNY: Discussion?

14 (No response.)

15 All in favor of the motion please
16 say "Aye."

17 (A chorus of "Ayes.")

18 Any opposed?

19 Any abstentions?

20 (No response.)

21 Motion carries. Thank you.

22 MS. REILLY: Next on the agenda is
23 the calendar.

24 The first item on the calendar is
25 the matter of approval of the minutes for

1 the October 1, 2020 investment meeting,
2 and the October 15, 2020 board meeting.

3 MS. PENNY: Do I hear a motion to
4 approve the October 1 investment meeting
5 and October 15 board meeting minutes?

6 MR. ADLER: So moved.

7 MS. PENNY: Is there a second?

8 MR. BROWN: Second.

9 MS. PENNY: Discussion?

10 (No response.)

11 All favor All in favor of the motion
12 please say "Aye."

13 (A chorus of "Ayes.")

14 Any opposed?

15 Any abstentions?

16 (No response.)

17 Motion carries. They are approved.

18 MS. REILLY: The next item on the
19 calendar are the actual items. You all
20 received an electronic version of the
21 calendar.

22 MR. KAZANSKY: Please waive the
23 reading of the calendar.

24 MS. REILLY: Thank you.

25 We should have a vote on adopting

1 the calendar.

2 MS. PENNY: Is there a motion to
3 adopt the calendar?

4 MR. BROWN: So moved.

5 MS. PENNY: Is there a second?

6 MS. VICKERS: Second.

7 MS. PENNY: All in favor please say
8 "Aye."

9 (A chorus of "Ayes.")

10 All opposed?

11 Any abstentions?

12 (No response.)

13 MS. PENNY: We approved the
14 calendar. Thank you.

15 MS. REILLY: Thank you.

16 Next on the agenda is Other
17 Business, and we have a TRS presentation
18 called "The TRS Data Warehouse with
19 Tableau." Michelle Marshall is going to
20 be presenting, and Jan Turner is going to
21 be assisting her. Michelle Marshall is
22 Deputy Director in our Member Services
23 Department.

24 Michelle?

25 MS. MARSHALL: Good afternoon, all.

1 Today's presentation was originally
2 scheduled for March 19. Then the City
3 essentially shut down due to the
4 pandemic. So, we're very happy that
5 we're finally here together, albeit
6 remotely.

7 Now I'll be honest with you, my eyes
8 glazed over whenever people started
9 talking to me about data. So my goal
10 here today is to make sure that doesn't
11 happen to you.

12 Let's start with the obvious first
13 question: What is a data warehouse?
14 Simply put, it's a system for storing,
15 analyzing and reporting on data. This
16 data is drawn from multiple sources and
17 collected together into a central
18 repository for easy access by authorized
19 users across an organization.

20 So here's a look at the TRS data
21 warehouse (indicating screen). On the
22 left, you see our current in-house
23 sources, Aspen and UPS, external sources
24 such as AT&T and our call center
25 software, Jenesys; our member and partner

1 portals, et cetera.

2 Data from all these sources is
3 collected and stored in our ever-growing
4 data warehouse, so we can ultimately make
5 smart data-driven business decisions by
6 means of reporting and visualization.

7 Now, reporting emphasizes the data
8 itself, like the number of people who
9 retired this summer, or what percentage
10 did so on the last week of August.

11 But our focus today is on
12 visualization, which brings the data to
13 life graphically and interactively, so we
14 can easily see and investigate any
15 trends, outliers and patterns of the
16 data, all of which facilitate good
17 decision making.

18 (Brief discussion off the record.)

19 MR. SANCHEZ: I can share my screen.

20 MS. REILLY: Much better.

21 MS. MARSHALL: Now you can see on
22 the left side the different sources, and
23 they're all collected into the central
24 repository for the purpose of reporting,
25 visualization and decision-making.

1 Now, how does this help us at TRS?

2 We're using a powerful data
3 visualization tool called Tableau, and it
4 allows us to quickly access and analyze
5 data from one source, on multiple
6 channels as needed, see and interact with
7 the data, which helps refine our
8 questions so we can better understand the
9 story behind the trend, outliers and
10 patterns that we see.

11 And we'll show you today three
12 visualizations that helped us answer some
13 questions we had in our member services
14 department, including:

15 Where do the participants in our
16 member education program come from?

17 What trends have we seen in face to
18 face customer service in use of our
19 member website?

20 And how are we doing with TDA
21 (indicating)?

22 Here's a fun fact for you. Before
23 the pandemic, our on-site member
24 education programs drew almost five as
25 many participants from one particular zip

1 code in Brooklyn than anywhere else in
2 the City.

3 That's not something that leaps off
4 the screen at you when you look at a
5 traditional report like this
6 (indicating). But let's go to a live
7 demo of one of our interactive maps in
8 Tableau (indicating).

9 Above the map you can see the number
10 of participants by borough, from 2015 to
11 2019. And then the dots on the map
12 represent the relative number of
13 participants in each borough by zip code,
14 with the largest cluster coming from one
15 area in the southeast section of Brooklyn
16 (indicating).

17 So, on the left we zeroed in to take
18 a closer look. And I couldn't help but
19 wonder, what's going on over there in
20 11234?

21 So we looked at the map in a
22 slightly different way to find out. On
23 this view (indicating), the zip code
24 borders have been added along with the
25 number of participants. And so, mystery

1 solved. So now we can clearly see that,
2 unlike most zip codes in our densely
3 populated borders, 11234 is just much
4 bigger than one or two neighborhoods.
5 And it makes perfect sense that so many
6 members from that area have attended our
7 member education program.

8 Now, as modernization continues and
9 we're able to add service data to the
10 data warehouse, I'm looking forward to
11 revisiting these maps to see not just
12 where participants live, but where they
13 work. Because in districts where program
14 participation seems to be lagging, when
15 we can partner with schools there to
16 increase awareness of how our member
17 education program will benefit teachers.

18 And of course, in the meantime,
19 we're currently hosting our member
20 education programs on Zoom.

21 Now, as I mentioned earlier, we also
22 compare visits to our walk-in center to
23 self-service on our member website. And
24 certainly the pandemic has changed the
25 dynamic. But were we prepared for the

1 change?

2 When we look at different types of
3 visualizations that you're seeing now,
4 one that clearly transforms data from two
5 different sources, our member website and
6 also our standalone tool that captures
7 our walk-in visits, into useful
8 information.

9 And so, you will see that the
10 walk-in visits are shown on the left on
11 the yellow bar chart, and the
12 measurements are on the left-hand side
13 and --

14 And then website visits, represented
15 by the blue line, are mentioned in the
16 millions on the right-hand side
17 (indicating).

18 Now, right away you can see from the
19 bar chart that walk-in center visits are
20 roughly 7500 from 2015 to 2017, before
21 dropping off by about a thousand.

22 But notice the line graph which
23 shows a healthy uptick in website visits
24 from one million in 2016 to 1.5 in 2017,
25 1.8, in 2018, and then a dramatic

1 increase to 2.6 in 2019, 2.6 million.

2 Now, you will notice that the
3 results are also summarized nicely below.

4 So these trends show the success of
5 our ongoing modernization program in
6 increasing both the quality and quantity
7 of our self-service options online,
8 including electronic payments for loans
9 and service purchase.

10 And also kudos to our walk-in center
11 staff for bringing our visitors to our
12 kiosks and helping them to register for
13 online account access and find
14 information, file applications. Also,
15 that they could help themselves in the
16 future from the comfort of their own
17 home. And of course that's come in very
18 handy since the start of the pandemic.

19 Now, TDA is something else that's
20 been very, very handy for our members in
21 the long run. But have we seen an upward
22 trend in TDA enrollment as well?

23 Well, here let's take a look at one
24 year, 2003 (indicating). What you see is
25 that just 4 percent of those who became

1 TRS members in 2003 also enrolled in our
2 TDA program that same year.

3 But 16 years later, by the end of
4 2019, 61 percent of that 2003 cohort has
5 joined the TDA ranks. What about our
6 other cohorts?

7 We're very, very happy to report
8 that more and more members are choosing
9 TDA and doing so much sooner in their TRS
10 membership, which means greater income
11 security at retirement.

12 So, on the left you can see that TDA
13 enrollment in the first year of
14 membership increased from 4 percent in
15 2003 to 25 percent in the last five
16 years.

17 Also, this visualization shows that
18 our TDA enrollment rate has accelerated
19 rapidly. In fact, the cohorts that have
20 been -- getting little ahead of
21 ourselves, I apologize -- but I do want
22 to tell you a little more about TDA.

23 So, the cohorts that enrolled with
24 us in the past ten years have reached or
25 exceeded 60 percent TDA enrollment in

1 about half the time as that 2003 cohort,
2 and about just 8 years or less instead of
3 16 years for that cohort.

4 Now, really I could have just told
5 you that our TDA enrollment rate has
6 increased dramatically in the last
7 decade, but would that have had the same
8 impact as showing you the arc of
9 enrollment for 17 cohorts on one
10 acceleration graph (indicating)?

11 Well, just like our members benefit
12 from attending member education programs
13 and using new and improved self-service
14 options on our website and enrolling in
15 TDA sooner rather than later, we are
16 benefitting from the TRS data warehouse
17 and the use of visualization to transform
18 our data into useful information.

19 So let's exit Tableau now and take a
20 look at those benefits again.

21 (Indicating.) There we go. These
22 benefits include easy access to a growing
23 pool of data that we can express
24 visually, so we can readily see and share
25 the trends, outliers and patterns of data

1 that facilitate good decision-making.

2 Also, the ability to pull data from
3 multiple sources in an instant and layer
4 them as needed to examine the
5 correlations between processes and
6 departments, et cetera, and simplify data
7 analysis; because once you find the right
8 visualization for the type of data you're
9 using, a picture is worth more than a
10 thousand words.

11 So, I've talked to you today about
12 just a few of the ways we're using the
13 data warehouse with Tableau in the member
14 services department. But as we continue
15 to modernize the way we do business at
16 TRS, our data warehouse will grow and
17 help us assure that across our whole
18 organization we're making timely
19 decisions for the lasting benefit of our
20 members and beneficiaries.

21 I want to thank you so much for your
22 time and attention.

23 Are there any questions about the
24 data warehouse or Tableau?

25 MS. PENNY: Michelle, thank you so

1 much for the presentation. It's obvious
2 that you're using the information that
3 members are providing by going on the
4 website and everything they do. Thank
5 you so much for keeping up with them, and
6 for the member service department, you
7 work so hard. We appreciate everything
8 you do for our members. Thank you.

9 MS. MARSHALL: Thank you so much.
10 I want to thank Jan and Liz for
11 switch-hitting today.

12 MS. REILLY: Thank you, Michelle,
13 Liz and Jan.

14 Next on the agenda is a presentation
15 from Grant Thornton. I guess, Sharon
16 Campbell, you will be presenting?

17 MS. CAMPBELL: Yes.

18 Good afternoon, everyone. My name
19 is Sharon Campbell. I am a managing
20 director in Grant Thornton's employee
21 benefit plan audit practice. And I am
22 the lead on the New York City Retirement
23 Systems, with the assistance of my team,
24 some of which are on this virtual
25 meeting.

1 I really appreciate the opportunity
2 to present to you the results of the
3 audit of the Teachers Retirement System
4 of the City of New York as of and for the
5 year ended, June 30, 2020.

6 As you know, this was our first year
7 auditing TRS. And as you're also aware,
8 2020 was a very difficult year for a
9 number of reasons, including but
10 certainly not limited to adapting to a
11 remote environment.

12 Over all, the audit went well.
13 There was a relatively smooth transition.
14 We issued an unmodified clean opinion
15 dated October 28.

16 In the spirit of the holiday season
17 I want to take a moment to thank
18 management for their assistance
19 throughout the audit process. They were
20 integral in the success of this. They
21 got us up to speed. We really
22 appreciated their depth and breadth of
23 knowledge, agility, adaptability and
24 transparency that was demonstrated very
25 consistently throughout the audit.

1 I'm also extremely thankful for the
2 coordinated efforts of New York City's
3 Comptroller's Office, the Bureau of Asset
4 Management, the Office of the Actuary,
5 Pfizer OPA, and of course our team, the
6 Grant Thornton team, some of which is
7 also on this call, including our subject
8 matter experts. All of us as a
9 coordinating effort was integral to the
10 successful and timely completion of the
11 audit.

12 So, with that, I'm going to share my
13 screen (indicating) for my presentation.
14 This presentation is our annual required
15 presentation. This is our audit team
16 (indicating), some of which again are on
17 this call. And then we have our subject
18 matter specialists. Again some of them
19 are on this call as well, including our
20 investment specialists, our actuarial
21 specialists, our IT specialists.

22 So, we'll start with
23 responsibilities. We're responsible for
24 performing an audit of TRS' combining
25 financial statements that were prepared

1 by management and conducted under U.S.
2 generally accepted auditing standards,
3 forming and expressing opinions as to
4 whether or not the basic combining
5 financing statements are presented fairly
6 in all material respects and in
7 accordance with U.S. GAAP, reading other
8 information in the combining financial
9 statements, such as management discussion
10 and analysis, and the required
11 supplementary information, and assessing
12 whether it's materially consistent with
13 the basic combining financial statements,
14 and then reporting identified significant
15 deficiencies and/or material weaknesses
16 in internal control related to financial
17 reporting.

18 As a reminder, an audit provides
19 reasonable but not absolute assurance
20 that the combining financial statements
21 are free of material misstatements due to
22 error or fraud. It does not relieve
23 those charged with governance or
24 management of the respective
25 responsibilities.

1 And our responsibilities are further
2 described in the agreement with the City,
3 the citywide agreement that was executed
4 on July 9, 2020.

5 From a high level, I'm going to go
6 through the responsibilities of those
7 charged with governance, and then move on
8 to management. Those charged with
9 governance among other things are
10 responsible for overseeing the financial
11 reporting process, discussing significant
12 accounting and internal control matters
13 with management, informing of the matters
14 that are relevant to our audit such as
15 subjective strategies and related
16 business risks that may result in
17 material misstatement and matters that
18 warrant particular audit attention, and
19 significant communications that you are
20 aware of with regulators, matters that
21 are related to the effectiveness of
22 internal control as it relates to you
23 oversight responsibilities, and your
24 views regarding current communications
25 and actions regarding previous

1 communications.

2 Also responsible for informing us of
3 fraud or any suspected fraud, including
4 your view of fraud risk.

5 With that, I do want to take a
6 moment, I'd like to take the opportunity
7 to ask the question, if there's any
8 members who are aware of any fraud or
9 suspected fraud?

10 (No response.)

11 I will assume that the silence means
12 that no one is aware, so I'll move on to
13 management responsibilities.

14 So, management is responsible for
15 preparing and fairly presenting the basic
16 combining financial statements in
17 accordance with U.S. GAAP, including the
18 MDMA and the required supplementary
19 information, designing, implementing,
20 evaluating and maintaining effective
21 internal control over financial reporting
22 and over compliance with existing state
23 statutes and city laws; communicating
24 significant accounting and internal
25 control matters to those charged with

1 governance; providing us with
2 unrestricted access to all persons and
3 all information that would be relevant to
4 our audit; informing us about fraud,
5 illegal acts, significant deficiencies
6 and material weaknesses in internal
7 controls.

8 Based on the results of those
9 inquiries, management was not aware, did
10 not make us aware, of any fraud or
11 illegal act or significant deficiencies
12 and material weaknesses.

13 Management is also responsible for
14 adjusting the combining financial
15 statements, including the disclosures to
16 correct any material misstatements. None
17 were identified. And informing us of any
18 significant subsequent events as well as
19 providing us with certain
20 representations, written, in the form of
21 the management representation letter
22 which we've included for your reference
23 in Section 4 of the PDF.

24 Any questions so far?

25 (No response.)

1 This is a high level audit timeline
2 that was provided to management.
3 Actually, management's timeline was much
4 larger in scope there, a number of things
5 more granular for management. This just
6 gives you an idea as to the timeline of
7 when certain audit procedures were
8 performed (indicating).

9 Moving on to the next slide
10 (indicating). So, we approached the
11 audit by updating our understanding of
12 the environment in which TRS operates.
13 We use that knowledge and understanding
14 to perform a risk-based assessment of the
15 financial reporting process. We
16 determine a materiality threshold. We
17 identify financial statement categories
18 that are likely to be materially
19 misstated, whether due to fraud or error,
20 and we design our procedures and focus
21 our audit attention on areas of greater
22 risk.

23 So materiality. Materiality is the
24 magnitude of an omission or a
25 misstatement that would likely influence

1 a reasonable person's judgment. And this
2 materiality can be both qualitative and
3 quantitative. We base our materiality on
4 a benchmark. For TRS' plan this is based
5 off total net position, restricted for
6 benefits. Financial statement line items
7 that are greater than materiality are
8 considered in scope. However, there
9 could be areas and there are areas that
10 may be below materiality thresholds that
11 may be in scope if qualitative factors
12 are present.

13 Examples would be related party
14 transactions or any fraud risk that's
15 identified, or any other scope in items
16 that are significantly related to
17 non-material items.

18 So, as mentioned before, we approach
19 our audit using a risk-based approach,
20 first identifying significant risks. So
21 this slide communicates the significant
22 risks that were identified for this audit
23 (indicating).

24 A pervasive risk for all audits is
25 management override of internal controls

1 over financial reporting. We test that
2 predominantly through journal entry
3 testing. We did not identify any matters
4 as it relates to management overrides
5 based on our procedures performed.

6 Another area of significant risk is
7 investment fair value, specifically for
8 those investments where more judgment is
9 involved, such as in internal
10 investments. And based on our audit
11 procedures, we identified no exceptions
12 there.

13 So, the other areas of focus that we
14 spend some time on. Again we spend time
15 on investments, investment income. So we
16 confirm investment positions. We
17 evaluate the reasonableness of the fair
18 value disclosures.

19 On a sample basis we test the
20 investments held at year end as well as
21 purchase and sales throughout the year to
22 determine the reasonableness of the
23 reported fair values.

24 We test the reasonableness of
25 investment related income, including net

1 appreciation and fair value; and also
2 evaluate the reasonableness of investment
3 expenses. We did not identify any
4 exceptions.

5 For member loans we test the
6 completeness of population of member
7 loans. And then on a sample basis we
8 test on the participant level the
9 eligibility for the loan, that the loan
10 exists for the period and is
11 appropriately reported, and it's
12 consistent with the summary plan
13 description or long provisions, including
14 the amount of the loan -- (brief
15 interruption) -- the duration of the loan
16 and interest rates. No exceptions were
17 noted with member loans.

18 Another area of focus is member
19 contributions. Again, we test the
20 completeness of the population of the
21 member contributions, select a sample of
22 members who contributed. We test the
23 eligibility to contribute and whether the
24 amounts were contributed and
25 appropriately calculated in accordance

1 with the plan provisions.

2 For benefit payments we test the
3 completeness of the population of benefit
4 payments. And on a sample basis we
5 select benefit payments that were made
6 during the year to determine that the
7 member was eligible for the type of
8 benefit requested, that the benefit was
9 appropriately authorized and that it was
10 calculated appropriately based on plan
11 provisions.

12 And then for net pension liability,
13 we test the completeness and accuracy of
14 the census data. We assess the
15 reasonableness of the assumptions that
16 are used, the actuarial assumptions,
17 input methods used in the calculation of
18 the net pension liability. That includes
19 evaluating the reasonableness of expected
20 rate of return, the discount rate,
21 mortality.

22 And on a sample basis we test census
23 data information, testing the
24 completeness and accuracy of certain
25 selected demographic data that's driving

1 the net pension liability. There were no
2 exceptions noted there.

3 I'm not going to go into detail on
4 the IT general controls, also ITGCs. We
5 did not place any control reliance over
6 ITGCs this year. Basically we performed
7 certain procedures to gain an
8 understanding of the IGTCs to allow us to
9 design control procedures in the future.

10 From a high level, the areas of
11 focus for ITGCs include security
12 administration, which is related to
13 security access, access rights, access
14 monitoring procedures, and access change
15 control.

16 We looked at program maintenance,
17 testing for change management, change
18 management policies and processes for
19 in-scope applications.

20 It says CIP observations and
21 recommendations, which we included. But
22 I did want to point out that the
23 observations and recommendations
24 individually and in the aggregate did not
25 rise to a level of significant or

1 material, and we can talk about that
2 later.

3 Other areas included program
4 execution, specifically batch processing,
5 job scheduling, system access and
6 scheduling tools, as well as technology
7 operations, which we're including but not
8 limited to physical access to the data
9 center, disaster recovery backups, data
10 redundancy and help desk functions.

11 And then another area of focus under
12 ITGCs is cyber security. So we reviewed
13 the design of the information security
14 specific controls, both preventive and
15 detective in nature, in place over the
16 items listed on this slide (indicating).

17 Does anyone have any questions?

18 (No response.)

19 Moving on. We employed certain
20 specialists within our firm. So our
21 compensation benefits consulting
22 practice, which includes our actuaries,
23 did assist us in reviewing the
24 reasonableness of the actuarial
25 assumptions and methods used by the New

1 York City Office of the Actuary to
2 determine the system's -- liability.

3 We use our New York pricing group
4 for investment valuation. And then we
5 used our corporate value consulting group
6 to test certain, a small portion of
7 commingled investments and funds and debt
8 securities.

9 We also had a subcontractor, Delaros
10 Robinson, who assisted us in audit
11 procedures.

12 We talked a little about Covid and
13 working in the remote environment.
14 Management again was integral in
15 assisting us with gaining remote access,
16 which helped us complete our audit
17 procedures. Typically in benefit plan
18 audits there's a lot of work surrounding
19 demographic data. We were able to gain
20 access to the system, the applications
21 that contained that data.

22 Our responsibilities also require us
23 to communicate any misstatements. We
24 didn't identify any, so there are no
25 slides.

1 Then we'll move down to the
2 remaining required communications,
3 quality of accounting practices and
4 internal control matters.

5 So, these are our required
6 communications (indicating). We're not
7 aware of any going concern on longevity
8 matters. We're not aware of any fraud or
9 non-compliance with laws and regulations.
10 There were no significant deficiencies or
11 material weaknesses in internal controls
12 over financial reporting that were
13 identified.

14 We're not aware of the use of any
15 other auditors as it relates to the TRS
16 plan audit. We did not use internal
17 audit. The related party and related
18 part transactions are disclosed
19 appropriately in the financial
20 statements.

21 There were no significant unusual
22 transactions that merit your attention.

23 We're pleased to report that there
24 were no disagreements with management.
25 We're not aware of management's

1 consultation with other accountants as it
2 relates to the audit.

3 There were no significant issues
4 discussed with management, no significant
5 difficulties encountered during the
6 audit, and there were no other
7 significant findings or issues that would
8 be relevant to you or your oversight
9 responsibilities.

10 There were no modifications to the
11 auditor's report. Again, it was an
12 unmodified and clean opinion.

13 And the other information and
14 documents that contain the combining
15 financial statements, our responsibility
16 is to review that information to insure
17 that there's no material inconsistencies
18 between the audited financial statements
19 and the information in the other
20 information.

21 That information would include
22 management's discussion and analysis and
23 any supplemental schedules that are not
24 audited. And it will also include, which
25 will be filed in December, the CAFR.

1 So we're also required to
2 communicate the quality of accounting
3 practices, so significant accounting
4 policies are detailed in the combining
5 financial statements. The accounting
6 policies were deemed to be appropriate
7 and applied consistently.

8 We noted no transactions that were
9 entered into that were significant or
10 unusual, or any transactions for which
11 there was lack of authoritative guidance
12 or consensus.

13 The required disclosure of estimated
14 uncertainty is included in the notes to
15 the financial statements. And the most
16 significant estimates include the
17 fairness of the investments and the net
18 pension liability.

19 The financial statements, the
20 disclosures were deemed clear and
21 complete in all material respects. And
22 there were no other matters noted.

23 This is just internal control
24 matters. Just as a reminder, we're
25 responsible for obtaining reasonable

1 assurance, whether the financial
2 statements are free of material
3 misstatements.

4 So our audit included consideration
5 of internal control over financial
6 reporting as a basis for designing our
7 audit procedures, but we do not express
8 an opinion on the internal controls or
9 the effectiveness of internal controls.

10 Any control deficiencies that did
11 not rise to the level of significant
12 deficiencies or material weakness were
13 communicated to management.

14 Again, we did not identify any
15 control deficiencies that rose to a level
16 of significant deficiency or material
17 weakness.

18 This slide just communicates the
19 different types of control deficiencies
20 (indicating).

21 Does anyone have any questions?

22 (No response.)

23 So that concludes the presentation.

24 I will share with you, included in
25 here, we do have a commitment to promote

1 ethical and professional excellence. So
2 if you have any questions or concerns
3 feel free.

4 And then, one other thing I do want
5 to communicate is our internal control
6 letter; again, basically indicating our
7 responsibility as it relates to internal
8 control. And the piece here is that
9 material weaknesses, we did not identify
10 any.

11 However, given the limitations as
12 far as the fact that our audit procedures
13 are not designed to identify deficiencies
14 and internal controls that could
15 individually or in combination result in
16 a material weakness, there is a
17 possibility material weaknesses may --
18 that were identified, but we did not
19 identify any.

20 Okay. And then we included for your
21 reference observations and
22 recommendations as it relates to
23 information technology.

24 That concludes my presentation.

25 Does anyone have any questions, want

1 to go into depth or detail on anything
2 included in the presentation?

3 (No response.)

4 MS. PENNY: Okay. Thank you very
5 much for that presentation.

6 MS. CAMPBELL: Absolutely. And
7 thank you for having us. We appreciated
8 the opportunity, and I want to wish
9 everybody a happy and healthy holiday
10 season.

11 MS. PENNY: Thank you. You as well.

12 MS. CAMPBELL: Thank you.

13 (Discussion off the record.)

14 MS. REILLY: Questions and comments
15 from the public is next on the agenda.

16 (No response.)

17 Seeing none. Madam Chair?

18 MS. PENNY: Mr. Kazansky?

19 MR. KAZANSKY: Before we go, on
20 behalf of the Trustees and the members of
21 UFT, we want to thank TRS. As
22 Thanksgiving is coming around, it's only
23 appropriate to thank you all for the hard
24 work you've done in these unusually
25 difficult circumstances. And we want to

1 just wish you and your families a safe
2 and happy Thanksgiving. And stay away
3 from each other.

4 (Laughter.)

5 MS. REILLY: Thank you.

6 MS. PENNY: There's no executive
7 agenda today. And so, with that, do I
8 hear a motion to adjourn?

9 MR. ADLER: Motion.

10 MR. BROWN: Second.

11 MS. PENNY: All in favor of the
12 motion please say "Aye."

13 (A chorus of "Ayes.")

14 All opposed?

15 Any abstentions?

16 (No response.)

17 We stand adjourned.

18 Thank you.

19 Happy Thanksgiving.

20 (Whereupon, at 4:18 p.m. the meeting
21 was concluded.)

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

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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, and that this is an accurate

transcription of these proceedings.

IN WITNESS WHEREOF, I have hereunto

set my hand this 22nd day of November 2020.

JEFFREY SHAPIRO