

1 TEACHERS' RETIREMENT SYSTEM OF THE CITY OF NEW YORK

2

3 BOARD MEETING

4

5

6 November 21, 2024

7 3:29 p.m.

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9 Teachers' Retirement System of New York City

10 55 Water Street, 16th Floor

11 New York, New York 10041

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23 William Montague

 Digital Reporter

24 Notary Commission No. 01MO0009174

1 APPEARANCES:

2 PATRICIA REILLY, EXECUTIVE DIRECTOR

3 THOMAS BROWN, CHAIR, TRUSTEE

4 BRYAN BERGE, MAYOR'S OFFICE, TRUSTEE

5 JOHN DORSA, OFFICE OF THE COMPTROLLER, TRUSTEE

6 VICTORIA LEE, TRUSTEE

7 ANTHONY GIORDANO, PANEL FOR EDUCATIONAL POLICIES,
TRUSTEE

8 CHRISTINA MCGRATH, TRUSTEE
9

10 Also Present:

11 THAD MCTIGUE, DEPUTY EXECUTIVE DIRECTOR, TRS

12 VALERIE BUDZIK, DIRECTOR, TRS

13 PRISCILLA BAILEY, DIRECTOR, TRS

14 KAVITA KANWAR, DIRECTOR, TRS

15 LIZ SANCHEZ, ADMINISTRATIVE MANAGER, TRS

16 ANDREW BRADFORD, CHIEF RISK OFFICER, TRS

17 AMEET CHAUDHURY, TRS

18 RENEE PEARCE, TRS

19 MATT LASKOWSKI, TRS

20 ERIC DIAZ, TRS

21 DINA SIMON, TRS

22 MAREK TYSZKIEWICZ, CHIEF ACTUARY

23 DOLORES CAPONE, ACTUARY

24 KATE CHEN, CHIEF AUDIT EXECUTIVE

25 ISAAC GLOVINSKY, LAW DEPARTMENT

1 MARTA ROSS, LAW DEPARTMENT

2 JOE EBISA

3 KI TSE

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1 (The proceedings commenced at 3:29 p.m.)

2 MS. REILLY: Good afternoon. Welcome to the
3 Teachers' Retirement System Board Meeting for November
4 21st, 2024. I'll start by calling the roll.

5 Bryan Berge?

6 MR. BERGE: Bryan Berge representing Mayor
7 Adams. Present.

8 MS. REILLY: Thomas Brown?

9 CHAIRMAN BROWN: Good afternoon, Patricia.

10 MR. BERGE: Should we start over?

11 CHAIRMAN BROWN: Present.

12 MS. REILLY: I'll at least start by calling
13 the roll.

14 Bryan Berge?

15 MR. BERGE: Bryan Berge, still present.

16 MS. REILLY: Thomas Brown?

17 CHAIRMAN BROWN: Good afternoon, Patricia
18 Present. Thank you.

19 MS. REILLY: Good afternoon.

20 Gregory Faulkner?

21 Alison Hirsh or John Dorsa?

22 MR. DORSA: John Dorsa, present for
23 Comptroller Brad Lander.

24 MS. REILLY: Victoria Lee?

25 MS. LEE: Present.

1 MS. REILLY: Christina McGrath?

2 MS. MCGRATH: Good afternoon, Patricia.

3 Present.

4 MS. REILLY: Good afternoon.

5 We have a quorum.

6 And next on the agenda is an update on TRS
7 operations given to us by Kavita Kanwar.

8 MS. KANWAR: Thank you, Patricia.

9 Good afternoon everyone.

10 CHAIRMAN BROWN: Good afternoon, Kavita.

11 MS. KANWAR: Regarding system upgrades, this
12 week, TRS successfully completed a system upgrade for
13 our member portal. To provide increased security for
14 our members, we have introduced a new login and
15 registration process that uses two factor
16 authentication.

17 For the TDA, TRS has updated the individual
18 limits for member contributions to the TDA program in
19 2025. The IRS recently announced that the general limit
20 will be \$23,500 next year. Most members age 50 and up
21 can contribute a catch up amount of \$7,500, but based on
22 new IRS rules, the catch up limit is \$11,250 for members
23 between age 60 and 63.

24 The new limits are posted on our website and
25 we will email TDA participants soon about the recent

1 changes.

2 Regarding our account statements, earlier this
3 month, TRS posted member account statements for the
4 third quarter of 2024, and we emailed the members when
5 they were available for online viewing.

6 Member newsletters, TRS has also published our
7 fall 2024 member newsletters on our website, and copies
8 have been mailed to members.

9 And finally, for the summer retirements, as a
10 final report on our summer retirements, there were
11 nearly 1,400 members who retired in July or August, and
12 92 percent of them are receiving finalized benefits as
13 of the November payroll. Thank you.

14 MS. REILLY: Thank you, Kavita.

15 CHAIRMAN BROWN: Thank you, Kavita. Can you
16 send that to us electronically.

17 MS. KANWAR: Absolutely.

18 CHAIRMAN BROWN: And thank you, TRS, for
19 finalizing 92 percent of our members over the summer.
20 Thank you very much.

21 MS. REILLY: Thank you.

22 Next on the agenda is an update from the
23 Actuary.

24 MR. TYSZKIEWICZ: Good afternoon. So I'd like
25 to start by introducing an actuary from my office

1 joining us from Zoom, Delores Capone. She is one of my
2 deputies and she leads your evaluation team for TRS and
3 BERS. So she's going to be presenting or she's going to
4 be sharing the executive summary of what's on the agenda
5 for discussion.

6 Thank you, Delores.

7 Okay. So in your Board material is a memo, it
8 is Executive Summary with Analysis of Legislation Posed
9 by the Mayor's Office. I'll go through the Executive
10 Summary and answer any questions you may have.

11 Go ahead, next slide.

12 So in the appendix, in Appendix A of my memo,
13 it contains legislation proposed by the Mayor, Mayor's
14 Office, that would impact the funding of the plan. That
15 impact can be broken down into four categories, and
16 those four categories are up on the screen.

17 The first category is re-amortization of your
18 current UAL payments. That's the biggest item in this
19 legislation. We'll talk most about that.

20 The legislation also impacts the funding of
21 the plan in three other categories by extending the
22 amortization period for new bases, changing the asset
23 smoothing method, and an auto fresh start under certain
24 scenarios. So I'll touch on those as well in this
25 summary.

1 Next page?

2 So this picture kind of tells, you know, the
3 story. You know, this is an illustration of your UAL
4 payments and your current statute. What we're talking
5 about under this legislation is refinancing those
6 payments, kind of like refinancing a mortgage, except
7 we're using the same interest rate and, you know, the
8 mortgage or the liability we're talking about
9 refinancing is over on the right there. It's a \$9.1
10 billion UAL, unfunded accrued liability. So the blue
11 line is your currently scheduled payments to pay off
12 that \$9.1 billion UAL.

13 What this legislation does is it refinances
14 that \$9.1 billion with payments that are represented by
15 that red dotted line. You see in the blue line, in
16 fiscal year 2032, there's a big drop off in the
17 payments. We're calling that the contribution cliff.
18 That kind of sounds negative, but it's a positive
19 because you're paying off a liability. But that drop is
20 \$2.5 billion.

21 What the red dotted line does is it refinances
22 that to get rid of that cliff. So instead of having a
23 big drop of \$2.5 billion, each year, you have a \$70
24 million drop in the required payment.

25 So the next slide shows the budget impact of

1 this. So the first column there, what's labeled the
2 "Current," that's the blue line from the previous slide.
3 Those are the current UAL payments.

4 The second column there, the fresh start, that
5 is the payments under this legislation, the red dotted
6 line.

7 Both of those at the bottom have that present
8 value of \$9.1 billion if we're using 7 percent interest.
9 The difference between the two is the budget impact, and
10 you can see the numbers are negative for the first like
11 eight years, and then they become positive.

12 If you took that column, the budget impact,
13 put it in Excel, calculated the present value at 7
14 percent, that present value would be zero. What that
15 means is every dollar you're delaying in the early years
16 is paid back by the employer, by the City, with 7
17 percent interest at the later years. So the net impact,
18 the net change is zero, but there's a change in the
19 timing of contributions.

20 So this change in contribution, there's not a
21 long-term savings to changing the timing. This timing
22 has an impact on contribution volatility.

23 So on the next slide, we have got a little
24 analysis that shows how contribution volatility is
25 reduced. So what this is, this is 5,000 10-year

1 simulations where investment return was randomly
2 generated from a normal distribution with 7 percent
3 interest. I showed this kind of stochastic projection
4 to Trustees before and they said this is like a
5 multiverse, and that's a good way of looking at it.
6 This is 5,000 multiverses of possible things that could
7 happen.

8 The yellow is the multiverse where we always
9 get 7 percent, right, and what's shown with the dotted
10 lines above and below is the 25th and 75th percentile,
11 what could happen with the random investment between
12 fluctuations?

13 Now, the top is what you currently -- we're
14 projecting under the current methodology, current
15 statutory requirements, and that's not just the UAL
16 payment, that's the total payment, UAL plus normal cost
17 of administrative expenses.

18 No matter what happens with these stochastic
19 generations, there's always a cliff because everyone,
20 you know -- because there's a cliff already hard coded
21 into the projections, there's always going to be this
22 cliff no matter what kind of scenario we're looking at
23 in the future.

24 And the bottom one is what happens in our
25 projections if we fresh start and do this 20-year ramp.

1 You notice it's a flat line, or more of a flat line.
2 It's not even decreasing that much like I showed you on
3 the previous slide. That's because, while the UAL
4 payments are going down, the normal cost is going up,
5 and the two are kind of canceling, creating this kind of
6 horizontal level of contribution that doesn't have as
7 much volatility as the current scenario or situation.

8 On the next slide, we look at how
9 intergenerational equity is impacted. So
10 intergenerational equity is kind of the concept that
11 taxpayers pay the cost of service over the period it is
12 provided. So we are trying not to take the can down the
13 road.

14 So to do this intergenerational equity
15 analysis, I did what's called a solvency test. I took
16 all the money that's in the plan and I allocated to the
17 people who are going to use it first or need it first.
18 So the retirees, they're going to need it first.

19 And so everything in green there are members
20 that are 100 percent covered by current assets. So all
21 the retirees are currently 100 percent covered by
22 current assets. All the actives or all the inactives
23 are covered by assets, and then we start going through
24 the actives, and a big chunk of the actives are also
25 covered.

1 We keep working down from the oldest active to
2 the youngest active to figure out, when do we start
3 running out of money, and when we run out, when we get
4 to that \$9.1 billion UAL, in the circle below shows the
5 cohort of unfunded actives that make up that unfunded
6 liability under the solvency test. So it's a group of
7 like 68,000 actives, average age of 36 years, average
8 service of around eight years.

9 The big important number is the one
10 highlighted below average future working lifetime. It's
11 20.8, so 21 years. So if you're looking at this from a
12 taxpayer's point of view, saying I want to fund this
13 unfunded liability over the working career of the people
14 who are unfunded, it'd be like a period of 21 years, and
15 for TRS the ramp is 20 years, so that kind of fits. You
16 know, the 20-year financing is close to the 21-year
17 average future working lifetime.

18 So once again, we show the graph there that I
19 showed previously. So just simply two different ways of
20 funding the \$9.1 billion. The red dotted line actually
21 funds it over the future working lifetime. The blue
22 line funds it before you get, you know, it's fully
23 funded in about eight years, and then money starts
24 coming back to the employer as credits against the
25 normal cost.

1 Next slide?

2 So that, so we covered kind of the big ticket
3 items, the refinancing of the current UAL payments. The
4 rest of these slides are just other things, the
5 legislation changes, not as important. These are kind
6 of like nice to haves.

7 The first one is extending the amortization
8 period for new bases. So the first column there is
9 what's in statute right now. So when there's, every
10 year, there's an actuarial gain or loss, we amortize
11 that over 14 years. If there's an investment gain or
12 loss, the smoothening method, it gets amortized over 18
13 payments. There's an assumption or method change and do
14 those over 19 payments. Benefit payments are over the
15 expected future working lifetime minus one year.

16 Under this legislation, everything changes to
17 20 years, or 20 payments, other than the benefit changes
18 are still consistent to what was done before the minus
19 one kind of disappeared. So it's just amortized over
20 future working lifetime.

21 The last column is a range published by the
22 Conference of Consulting Actuaries. They just released
23 a white paper called "Actuarial Funding Policies for
24 Public Plans," and they listed what are reasonable
25 ranges for these amortization periods. And you can see

1 the numbers fall, under this legislation fall into the
2 reasonable range.

3 What they did say in that paper is, as plans
4 mature, you should consider pushing it to the large --
5 to the right, to the bigger numbers on the right. And
6 the reason for that is, as plans mature, the
7 contributions become much more volatile. So when a plan
8 is young, there aren't a lot of retirees in relationship
9 to actives. There's not a lot of money in the plan, but
10 over time, you know, assets grow at 7 percent, the
11 payroll grows at 3 percent. There's more retirees are
12 added, and so, as plans mature, you get these big
13 retiree liabilities, you get this big pool of money in
14 relationship to payroll. So any tiny change in assets,
15 you know, a 1 percent change in your investment return
16 for a year, can have this dramatic as a percent of pay.

17 So the logic there is, as plans mature, you
18 should lengthen the amortization period, just so this
19 impact isn't quite so volatile, and that's what this
20 legislation does. It impacts kind of a uniform
21 20-payment amortization.

22 Next slide?

23 It also changes the asset smoothing method.
24 So I showed two kind of fairly equivalent asset
25 smoothing methods. Number one is what we currently use

1 for New York City. It's a common method in the
2 industry. Basically, it's a five-year smoothing. And I
3 gave an example with a \$1 million investment gain or
4 loss. So say you had \$1 million loss, under the current
5 method, we wouldn't recognize it immediately. We'd
6 divide it by five. We'd recognize the first one-fifth,
7 \$200,000, we put it into our gain/loss, which would be
8 14 payments, and we take the rest and we put it on a
9 piece of paper.

10 The next year we take another fifth, the next
11 \$200,000. We put it in -- we add another 14 payments
12 for that, and we do that every year for five years. And
13 then you get that schedule of payments slowly coming
14 into the valuation.

15 Because we're not recognizing it immediately,
16 we're keeping, you know, a separate set of assets on the
17 side, it causes us to have two sets of books, two asset
18 smoothing methods, a market value of assets and an
19 actuarial value of assets, which kind of tends to
20 confuse people, confuses the layperson. When you we
21 have two different funded percents, market value funded
22 percent and actuarial funded percent, people ask what is
23 the right funded percent?

24 Well, the second method kind of does the same
25 smoothing as the first method, but it doesn't require

1 having a second set of assets or second set of books.
2 And this is a method used for by the California Public
3 Employees' Retirement System, CalPERS.

4 CHAIRMAN BROWN: This is for gains too?

5 MR. TYSZKIEWICZ: Yeah. So the second one is
6 the same \$1 million gain, but now we're saying we're
7 going to recognize it immediately. So immediately, we
8 recognize it, but we're going to smooth in the payments.
9 We're going to have a ramp for five years going up,
10 we're going to have level payments for that, was it 12
11 years, and a five-year ramp going down.

12 If you graph that, that would look like a
13 trapezoid, so it's called a trapezoidal amortization.
14 It does the same thing. It's not 100 percent equivalent
15 because interest credits are treated a little different.
16 But as far as the impact on the contribution rate for
17 smoothing, it's a five-year ramp in, five-year ramp out,
18 just like Paramount does.

19 MR. DORSA: So I recognize the California
20 plans do it. Do like a majority of, taking us out of
21 the equation, right, the top 50 plans, like how many --
22 what's -- how many use which, which model?

23 MR. TYSZKIEWICZ: I'd say the vast majority
24 use the top one.

25 MR. DORSA: Okay.

1 MR. TYSZKIEWICZ: Because the top is what --
2 the first method I learned in 1989.

3 MR. DORSA: So it's advanced.

4 (Laughter.)

5 MR. TYSZKIEWICZ: Yeah, no, it's a simple
6 method of smoothing, and back in the days before you had
7 computers, right?

8 MR. DORSA: Yeah, that's why I was kind of
9 just asking how it evolved.

10 MR. TYSZKIEWICZ: Yeah, it was before you had
11 computers. It's not perfect because you notice there's
12 no interest charged for the delayed recognition. And
13 the concept there is, well, it's not actuarially correct
14 because I'm not charging interest when I kick the
15 four-fifths down the road. On the other hand, I'm
16 thinking there's going to be gains and losses every
17 year, so that error will cancel.

18 On the one on the bottom, that's pure finance
19 math. I'm just going to -- that exactly has the present
20 value of \$1 million, and so it's really just like a
21 cleaner approach. And then once again, it's more
22 transparent. You don't have two sets of books, two
23 funded percents. When you do the projections,
24 everything's recognized and it's there right away.

25 MR. DORSA: And then at the CIA, the

1 Conference of Certified whatever -- the Actuarial --

2 MR. TYSZKIEWICZ: They didn't comment on this.

3 MR. DORSA: No, they didn't, I was just
4 curious.

5 MR. TYSZKIEWICZ: No, they -- well, they say
6 you should have a smoothing method, typically five
7 years.

8 MR. DORSA: So it's consistent with --

9 MR. TYSZKIEWICZ: Oh yeah, it's -- nothing
10 here is inconsistent with actuarial standards or with
11 what actuaries recommend.

12 Next slide?

13 Auto fresh start under certain scenarios, so
14 that's in here, and I call this handling the weird
15 stuff. Whenever you hard code actuarial methods and
16 just statute, weird stuff can bubble up.

17 And so an example of a weird thing would be
18 you have an unfunded liability, but because of the way
19 the amortization basis is lined up and which one's
20 dropped off first, you could have a credit. So you
21 could go to the City and say, hey, you owe money, but
22 we're going to give you money back from your
23 contribution, and that would be a weird thing. So this
24 would allow the actuary to say, if I see an anomaly
25 where things don't make sense, I can wipe out all the

1 existing amortization bases and start fresh.

2 A second example actually happened to BERS,
3 and this is a case study of what happened to BERS. So
4 back in June 30th, 2021, BERS was 109 percent funded
5 based on the market value of assets. But because of the
6 way -- so they had a surplus of \$854 million, but even
7 though they had a surplus of \$854 million on the market
8 value, because these payments were hard coded based on
9 statute, we had to keep charging the employers that
10 amount.

11 So you see, you know, they got a surplus of
12 854, but we're going to charge the employer another \$440
13 million through fiscal year, was it 2032, and then we're
14 going to give the employer back a whole bunch of money,
15 you know, to use as a credit for the normal costs.

16 So if this legislation --

17 CHAIRMAN BROWN: Over how many years for that?

18 MR. TYSZKIEWICZ: Hmm?yeah, it had
19 effectively.

20 MR. BERGE: Yeah, because it would have
21 effectively been overpayments as if there were UAL, when
22 there is no unfunded.

23 MR. TYSZKIEWICZ: Yeah.

24 CHAIRMAN BROWN: But you give money back over
25 a period of --

1 MR. TYSZKIEWICZ: Yes, you give it back over a
2 period of time.

3 Under this fresh start, we also give money
4 back over a period of time, but we do it right away. We
5 say, all right, you're overfunded, so we're going to
6 re-amortize this. We're going to wipe out all those
7 rows that created this blue line, we're going to start
8 with a new row, and it's going to produce that red
9 dotted line. It's going to be an \$83 million credit
10 that's applied to the normal cost.

11 Now, say next year, they drop below 100
12 percent, there's a huge investment loss, like capital,
13 and they drop below. All of a sudden, we go back to the
14 previous slide where we take that loss, we use the
15 trapezoidal amortization on it, and we'd start phasing
16 that back in. So, it just -- and then, every time, it
17 would pop up over 100 percent, it would fresh start.

18 TRS I think came close in that same year. I
19 think you might have been 99 percent on the market
20 value. So eventually, this is going to hit TRS too, as
21 you get more funded. There are times, years where
22 you'll have good investment returns and you'll pop up
23 over 100 percent. When that happens, though, an auto
24 fresh start, and you'd have a new amortization schedule
25 with a credit that's applied to the normal cost.

1 The concept is you don't want -- you're
2 targeting 100 percent. You're not trying to target 120
3 percent or 150 percent. So it is a way to kind of go
4 back to 100 percent every time it goes over.

5 MR. DORSA: So all of your stuff is always
6 based on the historic or factually based on the data
7 that we have.

8 I guess my question is, as the workforce
9 changes and less people do 30 years, like your
10 calculation says 21 years is what the current worker is
11 going to work.

12 While I totally agree that that's what it is,
13 as the workforce changes and they go to doing 15 years
14 instead of 20 years, or they alternatively go to 25
15 years instead of -- how does that impact? How does that
16 impact this, or is that 20-year ramp, that won't impact
17 this 24 ramp?

18 MR. TYSZKIEWICZ: So if this legislation
19 passes, whatever's unfunded as of June 30th, '23 gets
20 that 20-year ramp, and it's hard coded, just like the
21 current schedule is hard coded statute.

22 New people come on, they're going to be
23 charging the normal costs. They won't have any unfunded
24 liability. You know, so it really doesn't change the
25 unfunded liability other than gains or losses. So we're

1 kind of focusing on paying off the unfunded liability
2 for the current snapshot --

3 MR. DORSA: Just curious.

4 MR. TYSZKIEWICZ: The last page, conclusions.
5 So this legislation manages the volatility. I already
6 amortized any contribution for over 20 years. It
7 lengthens the amortization period of 20, and auto fresh
8 starts under certain scenarios.

9 It does this at a cost of slowing down. It
10 manages the contribution volatility at the cost of
11 slowing down the current funding of the plan. So that
12 becomes a question, the decision for the Trustees to
13 make in supporting this legislation, is slowing down the
14 funding worth the reduction in volatility?

15 For me, as an actuary, I look at this, I don't
16 think there's a bad decision here, a bad choice. You
17 could do nothing and your plan is going to be funded
18 quicker and you've just got to realize there's going to
19 be a big contribution cliff, a big surplus that occurs
20 in fiscal year 2033.

21 Or you could smooth it out a little bit, fund
22 the plan slower, it has the benefit of less contribution
23 volatility, which is also recognized as a good thing.
24 So there's good things on both sides. Good thing on the
25 current method is funds it faster. Good thing on the

1 alternate method is there's less contribution
2 volatility.

3 So I'm happy to answer any questions.

4 CHAIRMAN BROWN: Any questions for Marek?

5 Thank you.

6 MR. TYSZKIEWICZ: Thank you.

7 CHAIRMAN BROWN: Well done.

8 MR. TYSZKIEWICZ: Thanks, Dolores.

9 CHAIRMAN BROWN: Thank you.

10 MS. CAPONE: Thank you. You're welcome.

11 CHAIRMAN BROWN: Thanks, Delores.

12 MS. CAPONE: You're welcome.

13 CHAIRMAN BROWN: Thank you. Thank you, Marek.

14 MS. CAPONE: I'll See everyone hopefully soon.

15 MS. REILLY: Okay.

16 CHAIRMAN BROWN: Thank you, Marek, well done.

17 MS. REILLY: Next on the agenda is the
18 Executive Director's report, and the first item is the
19 matter of the next meeting, which has been set for
20 Thursday, December 19th, 2024. Please mark your
21 calendars.

22 CHAIRMAN BROWN: Thank you.

23 MS. REILLY: Next is a resolution for the
24 support -- to support for the legislation concerning
25 unfunded accrued liability payment schedule.

1 MR. BERGE: Patricia, if I may?

2 MS. REILLY: Yes.

3 MR. BERGE: I don't think there's even a need
4 to read the resolution into the record because I think
5 there's an understanding that that matter is going to be
6 tabled today. But if there is an interest in discussing
7 aspects of this initiative that pertain to legislative
8 strategy, or if there's even just an interest in further
9 discussing the topics that Marek discussed just moments
10 ago, which are clearly intimately related to this, we
11 can do that now. We can do that offline.

12 I'm available at your convenience because,
13 although I totally agree that this matter should be
14 tabled today, it would be wonderful if we could come to
15 a conclusion, I don't want to say one way or another,
16 but hopefully in a way that everyone likes by December,
17 just because the legislative mechanics in Albany,
18 particularly for items you want to get into the budget,
19 are complicated to pursue.

20 CHAIRMAN BROWN: So by December.

21 MR. DORSA: So I hope that -- I would -- my
22 understanding is we're going to table this today because
23 it's the first time we're seeing it.

24 MR. BERGE: Absolutely, yes.

25 MR. DORSA: I would just ask that any

1 questions that get posed, if it's of interest to other
2 parties, if we could all be looped in, just so that we
3 are not having several different conversations with the
4 actuary if we're all trying to get to the same goal of
5 understanding what this means and what the impact is.

6 So I just want to put that out there that,
7 just for the sanity of the actuary, it would be a shame
8 if we ask him the same question seven times from seven
9 different places. So maybe we'll try to --

10 MS. REILLY: Or --

11 MR. DORSA: Or at least coordinate the
12 responses.

13 MR. BERGE: I'm totally comfortable being
14 asked seven different questions. Seven same questions.
15 I love being asked questions, any time you want, any
16 forum, any time.

17 CHAIRMAN BROWN: Thank you. So let the record
18 show that this is being tabled and laid over.

19 MR. BERGE: Thank you very much, everyone.

20 MS. REILLY: Thank you.

21 CHAIRMAN BROWN: Thank you. Thank you, Marek,
22 again.

23 MS. REILLY: Next on the agenda is the
24 calendar, and the first item is the approval of the
25 minutes for October 10th, 2024 Investment Meeting

1 minutes and October 20 -- excuse me, October 17th, 2024
2 Board Meeting minutes.

3 CHAIRMAN BROWN: Thank you.

4 MR. DORSA: No, I'll also move the minutes.

5 CHAIRMAN BROWN: Thank you. Is there -- is
6 there a motion to accept the Investment Meeting minutes
7 for October 10th, 2024 and the Board Meeting minutes for
8 October 17th, 2024?

9 MR. DORSA: So moved.

10 CHAIRMAN BROWN: Great. Is there a second?

11 MS. MCGRATH: Second.

12 CHAIRMAN BROWN: All those in favor of
13 accepting the minutes, please say aye?

14 (Ayes were heard.)

15 CHAIRMAN BROWN: Those opposed, say nay? And
16 abstentions?

17 And the Board Meeting minutes and Investment
18 meeting minutes have been approved. Thank you.

19 MS. REILLY: Next are the calendar items, and
20 you all should have received your electronic version of
21 the calendar, had an opportunity to review it.

22 MS. MCGRATH: Please waive the reading.

23 CHAIRMAN BROWN: Thank you. Is there a motion
24 to accept the calendar items?

25 MS. LEE: So moved.

1 CHAIRMAN BROWN: Great. Is there a second?

2 MS. MCGRATH: Second.

3 CHAIRMAN BROWN: Any discussion? All those in
4 favor of accepting the calendar items, please say aye?

5 (Ayes were heard.)

6 CHAIRMAN BROWN: Those opposed, say nay? Any
7 abstentions?

8 And the calendar items have been approved.
9 Thank you.

10 MS. REILLY: So under Other business, we have
11 a TRS AI presentation by Ericc Diaz, our IT Service
12 Operations and AI Officer.

13 Ericc?

14 CHAIRMAN BROWN: Thank you, Ericc.

15 MR. DIAZ: Good afternoon, Members of the
16 Board. My name is Ericc Diaz, and I serve as the AI
17 Officer in the AI Center of Innovation. With nearly 30
18 years of experience in information technology, I have
19 had the opportunity to witness firsthand how innovation
20 drives progress.

21 Today, I'm excited to share our strategic
22 vision for artificial intelligence and how it can
23 transform our operations and member services.

24 Over the next few minutes, I'll walk you
25 through what AI means for us, why it's a critical

1 opportunity, and how we are ensuring its responsible and
2 impactful adoption.

3 First, let's discuss what artificial
4 intelligence is. AI is broadly defined as the ability
5 of machines to imitate human intelligence. In practical
6 terms, this means our systems can analyze complex data,
7 solve challenging problems, and automate tasks with a
8 level of precision that enhances our decision-making.
9 It's about transforming technology into a strategic
10 advantage, making our operations more efficient,
11 accurate, and smarter.

12 First, let's discuss (cough) excuse me.

13 Now, let's look at the image on the slide. It
14 was created using AI. The process involves giving the
15 AI a prompt, which is a simple text description that
16 guides it to generate a specific visual. For this
17 image, the prompt was "Create a business focused image
18 representing the Teachers' Retirement System of the City
19 of New York supported by artificial intelligence."

20 This image is an example of how AI can
21 transform written words into something tangible and
22 creative, showcasing just one of the many ways AI can be
23 applied in the real world.

24 So why should we embrace AI now? Our strategy
25 is grounded in what I call the VITAL framework, value,

1 innovation, transformation, augmentation, and
2 leadership.

3 Value: AI has the potential to deliver
4 measurable benefits from optimizing our operations to
5 enhancing member experiences. It's about achieving
6 outcomes that truly make a difference.

7 Innovation: AI is already embedded in many
8 aspects of our daily lives, like Waze, Google
9 Assistants, or Alexa. By adopting AI, we tap into the
10 same innovative potential to modernize our organization.

11 Transformation: We're looking at ways to
12 fundamentally improve how we operate. AI can streamline
13 our processes, reduce inefficiencies, and make our
14 organization more agile.

15 Augmentation: This technology works hand in
16 hand with our staff, giving them tools to be more
17 effective. It empowers them to focus on tasks that
18 require human expertise, while AI handles the repetitive
19 work.

20 Leadership: Lead with purpose by aligning AI
21 efforts with our organizational mission and values.

22 The VITAL framework isn't just a strategic
23 choice. It's about seizing an opportunity to future
24 proof our organization, deliver better services, and
25 stay ahead in an ever evolving landscape.

1 Let's talk about the how. A crucial part of
2 our AI journey is governance. We understand the
3 responsibility that comes with using this technology,
4 which is why our governance framework is built on five
5 guiding principles.

6 Integrity: This means building systems that
7 are transparent and fair. We want our AI processes to
8 be clear and trustworthy, ensuring our staff has
9 confidence in the results.

10 Safeguarding: Keeping sensitive member data
11 secure is essential. We're committed to using robust
12 security practices to protect information and maintain
13 privacy.

14 Explainability: We believe it important for
15 our staff to understand how AI makes decisions. Our
16 focus is on making these systems easy to explain and
17 ensuring that the reasoning behind AI outputs is
18 accessible and clear.

19 Human-centric: AI is here to support our
20 team, not replace them. Our goal is to create tools
21 that enhance productivity and make work more manageable,
22 always prioritizing the human element in everything we
23 do.

24 Sustainability: We're thinking about the
25 future. Our AI efforts are designed to be efficient and

1 scalable, ensuring they continue to provide value over
2 the long term without overextending our resources.

3 Now that we have covered the principles
4 guiding our AI governance, let's look at our leadership
5 structure. The Executive Strategy Committee plays a
6 pivotal role in ensuring our AI initiatives are
7 implemented responsibly and effectively.

8 Chaired by the Executive Director, the
9 committee includes our Deputy Executive Director,
10 Director of Operations, Chief Risk Officer, and Director
11 of Enterprise Applications. Together, they provide
12 strategic vision and oversight, ensuring all AI projects
13 align with TRS's goals and ethical standards.

14 The governance structure ensures our AI
15 activities are guided by clear strategy, accountability,
16 and commitment to responsible innovation.

17 As your AI Officer reporting directly to the
18 Executive Director, my role focuses on turning our AI
19 strategy into reality. I oversee the day-to-day
20 management of AI initiatives and work closely with
21 department directors to ensure projects align with
22 agency needs.

23 Through quarterly meetings with the Executive
24 Strategy Committee, we maintain strong governance and
25 oversight of all AI projects. This ensures our AI

1 initiatives drive innovation, while adhering the TRS's
2 values and standards.

3 Currently, we are focusing on identifying
4 common pain points across the organization where AI can
5 be used in a way that is practical and low risk. We
6 understand that, to make AI successful, we need to start
7 small, but think big. By collaborating with various
8 departments, we will ensure that our solution is
9 transparent, effective, and aligned with our long-term
10 vision.

11 Let me introduce Chat TRS, one of our first AI
12 proof of concepts, aimed at transforming knowledge
13 management across the agency. A key challenge for any
14 organization is maintaining institutional knowledge as
15 experienced employees retire or transition to new roles.
16 Chat TRS addresses this by making information more
17 accessible and actionable for our staff, while capturing
18 and preserving our organization's valuable knowledge.

19 By streamlining how we share and use
20 information, we not only preserve critical institutional
21 knowledge, but also enable our teams to access reliable,
22 verified information when they need it.

23 Now, instead of just describing it, let me
24 show you Chat TRS in action with a live demonstration.

25 On this screen, you can see our interface,

1 which is designed to be straightforward and
2 user-friendly. I have selected three questions that
3 show how Chat TRS supports different needs across our
4 organization.

5 First, we have a basic policy question about
6 employee dress code, something any staff member might
7 need to quickly reference.

8 Next, we have a question about Tier 4, Chapter
9 504 rules, the type of inquiry our member services
10 representatives regularly handled when assisting our
11 members.

12 Finally, we see how staff members can better
13 understand board resolution and their impact on TRS,
14 showcasing how Chat TRS helps keep our teams informed
15 about key organizational decisions.

16 What makes chat TRS particularly valuable is
17 that it provides consistent, reliable information across
18 all departments. Through our verify and trust approach,
19 every answer includes citations to specific internal
20 documents, allowing users to verify the source materials
21 correctly. This transparency helps maintain accuracy
22 and builds confidence in the system.

23 Let me show you how this works with our first
24 question. We're just waiting for this populating, and
25 I'll just read off some -- a couple of excerpts of this.

1 The employee dress code guidelines are as
2 follows: Appropriate attire, slacks, short skirts with
3 description shirts, jackets, dresses. Inappropriate
4 attire, different types of slacks, shorts, and skirts,
5 et cetera.

6 Let's go to the Tier 4 question now.

7 MS. REILLY: Could you read the question?

8 MR. DIAZ: Yes, I can, sorry. What are the
9 different rules associated with Chapter 4, Tier 504?

10 The different rules associated with Tier 4,
11 Chapter 504 include investing period, required number of
12 years to vest for TRS Tier 4 members represented by the
13 UFT was extended from five years to 10 years.

14 Contribution requirements, Tier 4 members need
15 to contribute 3 percent of their salary for the first 27
16 years of credited service. They also need to make
17 additional member contributions of 1.85 percent for all
18 required service until retirement.

19 And we can scroll down and get the rest of the
20 information there.

21 MR. DORSA: Do you have a question?

22 MR. BERGE: Does it ever give more than one
23 citation?

24 MR. DIAZ: Yes and I'm going to show you that
25 right now.

1 MR. DORSA: And I guess to follow up on that,
2 the fact check that that's the like -- that that's the
3 most modern, that nothing has changed in the last like
4 30 days or something?

5 MR. DIAZ: So we have a data integrity process
6 that it goes through before we ingest anything into the
7 bot. We started off with policies and procedures that
8 have gone through a vesting process, and then we ingest
9 those.

10 MR. DORSA: So it's sourced internally rather
11 than external?

12 MR. DIAZ: Correct.

13 MR. DORSA: Oh, okay.

14 MR. DIAZ: So we're leveraging a technology
15 called RAG, Retrieval-Augmented-Generation. So it
16 focuses solely on our internal documentation, and we
17 coded in the back-end to not hallucinate and to only
18 answer things factually.

19 So in this case, I'll read the first entry.
20 Here are some recent Board resolutions and their impacts
21 on the Teachers' Retirement System. Employer
22 contribution for fiscal year 2024, the Board approved
23 the final employer contribution for fiscal year 2024 in
24 the amount of \$3,161,752,125, which is a decrease of
25 \$12,661,055 from preliminary employer contribution.

1 This adjustment reflects a reduced financial obligation
2 for the employer, potentially affecting budget
3 allocation and financial planning for the fiscal year.

4 Now, if we scroll down, and if you notice
5 here, there are little references to the actual
6 documentation that it's pointing to. So this is the
7 citation to the documents and the actual sections of the
8 documents it's pulling the information from. So we'll
9 select the first one here.

10 We can go to the document itself, and you can
11 see where it pulled that information from. So now the
12 staff member who is utilizing the tool can verify the
13 information that they're getting as well as review the
14 responses that are there.

15 Thank you very much for your time. Do you
16 have any further questions?

17 CHAIRMAN BROWN: Excellent. Thank you. Thank
18 you, Ericc.

19 Any questions for Ericc?

20 MS. REILLY: Do you have a question? Go
21 ahead.

22 MR. BERGE: Well, I just quibbled with the
23 summary of the impact of the final employer
24 contribution.

25 MS. REILLY: So where did we get the impact

1 from, Ericc?

2 MR. BERGE: That was a questionable summary.

3 Yeah, how is the impact created, but when it says what
4 it makes the impact of the solution.

5 MR. DIAZ: It's making assumptions based on
6 what it's -- well, I'm making assumptions. It's
7 reviewing what season of documentation.

8 What happens when we ingest the data is it
9 breaks it down into various chunks, takes the keywords,
10 and then it matches it to actually put the information
11 together.

12 MS. BUDZIK: Do you ever review -- do you
13 review and potentially modify?

14 MR. DIAZ: So we have a testing team that's
15 going through answering questions, asking many, many
16 questions based on those specific documents or
17 resolutions were recently ingested, those that will go
18 through an additional writing process for questions such
19 as this.

20 MS. REILLY: So I guess what I'm hearing is
21 that they don't agree with the impact that --

22 MR. BERGE: Well, just like the finalization
23 of the employer contribution has no effect on TRS budget
24 allocations, like none, you know.

25 MS. REILLY: Right.

1 MR. BERGE: It just doesn't.

2 MS. REILLY: Yeah, so --

3 MR. DORSA: But on the City budget --

4 MR. BERGE: Not really, honestly, it's just
5 finalization. It's like an accounting true up.

6 MR. DIAZ: The whole purpose of the trust and
7 verify is so that we're not just taking it for face
8 value. So in the perspective of the impact, we want
9 someone to review the documentation and see if that's
10 actually factual.

11 AI, across the board, you have to still keep
12 confident in your review of the documentation. That's
13 why the focus with our governance is to maintain the
14 human in the loop, right? We don't want this solution
15 to just be, all right, I'm going to take that impact
16 statement for face value. That's why we reference the
17 documents.

18 CHAIRMAN BROWN: Thank you.

19 MR. DIAZ: Any further questions?

20 CHAIRMAN BROWN: Any questions for Ericc?

21 Thank you, Ericc, well done. Thank you so
22 much.

23 MR. BERGE: Thanks very much.

24 CHAIRMAN BROWN: Patricia?

25 MS. REILLY: Okay. I'm sorry. Thank you,

1 Ericc.

2 Next, we have questions or comments from the
3 Public.

4 MR. CROONQUIST: Shall I just -- I taught
5 ninth grade, so I think you can hear me. My name is
6 Robert Croonquist.

7 CHAIRMAN BROWN: Maybe you can go to the mic
8 for the people on Zoom.

9 MR. BERGE: Oh yes, that's right, because we
10 can hear you, but there are others.

11 CHAIRMAN BROWN: Thank you. And just state
12 your full name for the recorder.

13 MR. CROONQUIST: Yes. My name's Robert
14 Croonquist. I taught Jamaica High School in Queens, and
15 I just -- I'm a retiree. I retired in 2006.

16 And first off, I just really want to thank you
17 for the wonderful job that you have done in protecting
18 my vision.

19 At Jamaica High School, I created an
20 organization called Youth Arts New York, and out of
21 that, we brought atomic bomb survivors from Hiroshima
22 and Nagasaki into, over a hundred of them, into
23 classrooms in New York City, to 40,000 plus high school
24 students.

25 As a result of that, we won the Nobel Peace

1 Prize, we were part of the international campaign to
2 abolish nuclear weapons that won the Nobel Peace Prize
3 in 2017. And we are very adjacent to this year's Nobel
4 Peace laureate, Nihon Hidankyo, the atomic bomb -- the A
5 and H bomb survivors organization in Japan because we
6 brought many of them to the United States and allowed
7 them to speak at the United Nations and to have a
8 presence in New York.

9 As a result, the United Nations passed a
10 treaty on the prohibition of nuclear weapons. And you
11 have a packet here. I gave you a packet with a copy of
12 the treaty.

13 So in 2018, we began working with council
14 member Danny Drum, who was a retired New York City
15 public school teacher and the head of the Finance
16 Committee of the City Council. And in 2021, the City
17 Council passed a resolution instructing the New York
18 City pension funds to divest from nuclear weapons
19 producers.

20 We have been working with John Dorsa and John
21 Adler at the Comptroller's Office since I think about
22 2018, I think from way back at the beginning when Scott
23 Stringer was the Comptroller. And finally, we have
24 gotten to this point where we feel that we're working
25 with a -- in our group is a man named Michael Lent, who

1 oversaw the Ford Foundation's divestment from fossil
2 fuel production.

3 What we're looking for is a divestment from
4 nuclear weapons producers, which is much, much simpler
5 than divestment from fossil fuels. It's targeting 25
6 producers, and we feel that we can thread the needle to
7 divest from -- we're working with a group called The
8 Don't Bank on the Bomb based in the Netherlands, and
9 looking at exactly how we could thread the needle for
10 you to fulfill your fiduciary responsibility, so that I
11 can continue to live well, and future retirees, and
12 divest from these weapons of mass destruction.

13 So what I would really -- I am here today is
14 just to open up communication, and I wonder who would be
15 here on the Board to continue this discussion. And so
16 thank you for your time, and I don't know if you have
17 any questions.

18 CHAIRMAN BROWN: Any questions for Robert?

19 Thank you, Robert, for coming up and sharing.

20 MR. CROONQUIST: Okay. Who would I -- who
21 would I be in touch with to continue a conversation?

22 CHAIRMAN BROWN: You can email us. You can
23 email us.

24 MR. CROONQUIST: And how do I do that? Is
25 it --

1 CHAIRMAN BROWN: TRS?

2 MS. REILLY: TRS.

3 CHAIRMAN BROWN: TRS's email.

4 MS. REILLY: Me?

5 CHAIRMAN BROWN: Or --

6 MS. REILLY: Well, I'm not the board members,
7 so.

8 CHAIRMAN BROWN: Yeah.

9 MS. REILLY: I mean, you could send it to me
10 and I could send it out to the Board.

11 CHAIRMAN BROWN: That would be okay.

12 MS. REILLY: All right.

13 CHAIRMAN BROWN: Yeah.

14 MS. REILLY: Okay. So I'll give you my --

15 MR. CROONQUIST: Okay, great.

16 MS. REILLY: I'll give you my card.

17 MR. CROONQUIST: And I do want to thank you
18 for doing such a wonderful job of -- with our pensions.
19 It's made my life be able to live a good life in my
20 retirement, so thank you.

21 CHAIRMAN BROWN: Thank you, Robert. Thank you
22 for coming up. Appreciate it. Thank you.

23 Okay. Before we ask for a motion to adjourn,
24 I just wanted to mention that, at the UFT on October
25 26th, we sponsored a UFT Pension Expo, and over 400 of

1 our members came to the UFT, and we provided them
2 information about their retirement benefits.

3 And TRS representatives came, and I just
4 wanted to thank TRS for coming to our first Pension
5 Expo. And the associates from TRS I'd like to mention,
6 Jimmy Ramsoonder (phonetic), Sahar --

7 MS. REILLY: Gergis.

8 CHAIRMAN BROWN: Gergis (phonetic), Suzanne
9 Corbin, Anna Abreu (phonetic), Russine Coles (phonetic),
10 and Roland Lussante (phonetic) all came, spoke with our
11 members, gave pension information out. Well received,
12 and we just want to thank them very, very much for
13 spending practically an entire day with us on Saturday,
14 October 26th. It was much appreciated. And so please
15 pass along our thank you to those members.

16 MS. REILLY: Thank you, Tom.

17 CHAIRMAN BROWN: Thank you.

18 MS. REILLY: I just want to let you know that
19 I spoke with a few of the employees that attended and
20 they really enjoyed it and they really felt really good
21 after they were able to meet with the members and talk
22 with them.

23 CHAIRMAN BROWN: Yeah, it was great. It was
24 great.

25 MS. REILLY: It was great.

1 CHAIRMAN BROWN: We had our pension
2 consultants there, but I heard people whispering, TRS is
3 here, TRS is here. Go to that room over there, TRS, and
4 it really -- well, we have always had a great
5 relationship with Teachers' Retirement System, and our
6 members love TRS. They provide --

7 MS. REILLY: Except when they don't.

8 (Laughter.)

9 CHAIRMAN BROWN: You provide us with a defined
10 benefit pension along with the opportunity to
11 voluntarily join a 403 BTDA program.

12 And if you ever get a chance to come to one of
13 our expos, you see happy, happy, happy people, as Robert
14 is, is a happy retiree. So thank you, Robert, for
15 coming.

16 MR. CROONQUIST: Thank you.

17 CHAIRMAN BROWN: Thank you, again, appreciate
18 it.

19 So any questions? Anything else anyone would
20 like to add to the agenda? So I think this is an
21 appropriate -- oh, and I want to thank, before I forget,
22 Adrian, our TRS tech, and of course, Will, our recorder.
23 So, much appreciated, thank you, guys, and thank you,
24 Ericc, for your presentation.

25 So is there a motion to adjourn?

1 MS. LEE: So moved.

2 CHAIRMAN BROWN: And is there a second?

3 MS. MCGRATH: Second.

4 MR. DORSA: Second. You beat me to it. You
5 beat me to it, I'm sorry.

6 CHAIRMAN BROWN: Any discussion? So all those
7 in favor of adjourning, please say aye?

8 (Ayes were heard.)

9 CHAIRMAN BROWN: Those opposed, say nay? Any
10 abstentions? We are adjourned.

11 (The proceedings concluded at 4:20 p.m.)

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1 CERTIFICATE OF DIGITAL REPORTER

2

3 I, WILLIAM MONTAGUE, a Digital Reporter and
4 Notary Public within and for the State of New York, do
5 hereby certify:

6 That the foregoing proceeding is accurately
7 captured with annotations by me during the proceeding in
8 the above-titled matter, all to the best of my skills
9 and ability.

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

14 IN WITNESS THEREOF, I have hereunto set my
15 hand this 6th day of December 2024.

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William Montague, Digital Reporter
Commission No.: 01MO0009174
Expiration Date: June 7, 2027

1 CERTIFICATE OF TRANSCRIPTIONIST

2

3 I, NANCY KRAKOWER, Legal Transcriptionist, do
4 hereby certify:

5 That the foregoing is a complete and true
6 transcription of the original digital audio recording of
7 the testimony and proceedings captured in the
8 above-entitled matter. As the transcriptionist, I have
9 reviewed and transcribed the entirety of the original
10 digital audio recording of the proceeding to ensure a
11 verbatim record to the best of my ability.

12 I further certify that I am neither attorney
13 for nor a relative or employee of any of the parties to
14 the action; further, that I am not a relative or
15 employee of any attorney employed by the parties hereto,
16 nor financially or otherwise interested in the outcome
17 of this matter.

18 IN WITNESS THEREOF, I have hereunto set my
19 hand this 6th day of December 2024.

20

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Nancy Krakower, Transcriptionist

