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BEFORE
THE RETIREMENT BOARD
FIREMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

IN THE MATTER OF)
INVESTMENT COMMITTEE)

STENOGRAPHIC REPORT OF PROCEEDINGS had at
the audio/video meeting of the above-entitled
matter, held at 20 South Clark Street, Suite 300,
in the City of Chicago, County of Cook, State of
Illinois, on June 16, 2021, commencing at the hour
of 9:30 a.m.

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APPEARANCES

COMMITTEE MEMBERS:

DANIEL FORTUNA, President and
Annuitant Trustee

WILLIAM MURPHY, Secretary and Active Trustee

TIMOTHY McPHILLIPS, Investment Committee
Chairman and Active Trustee

MELISSA CONYEARS-ERVIN, City Treasurer

ANNETTE NANCE-HOLT, Active Trustee

ATTORNEYS FOR THE BOARD:

BURKE, BURNS AND PINELLI, LTD.
BY: MS. SARAH A. BOECKMAN

ALSO PRESENT:

LORNA SCOTT, Chief Investment Officer
MARC TORRES, IT Analyst
MARK MYSLINSKI, City Treasurer's Office
KELLY WELLER, Executive Director as of 7-1-21

1 MEMBER MCPHILLIPS: Good morning,
2 everybody. This is Committee Chairman Tim
3 McPhillips of the Investment Committee.

4 I hereby convene this Investment
5 Committee meeting for June 30, 2021.

6 Lorna, could you please take a roll call?

7 MS. SCOTT: Trustee McPhillips.

8 MEMBER MCPHILLIPS: Here.

9 MS. SCOTT: Trustee Murphy.

10 MEMBER MURPHY: Here.

11 MS. SCOTT: Trustee Fortuna.

12 MEMBER FORTUNA: Here.

13 MEMBER MCPHILLIPS: We have a quorum. I
14 will make some quick comments for the record and
15 then I will turn it over to Lorna.

16 Public Act 101-0640 allows this meeting
17 to be conducted by audio and video conference. The
18 Act requires a roll call vote on each matter acted
19 upon.

20 We are proceeding by audio and video
21 conference because we continue to believe that due
22 to the pandemic it is prudent to not be physically
23 present in the same space.

24 We have posted notice of this meeting in

1 accordance with the Open Meetings Act and the
2 meeting is being recorded. A transcript of the
3 proceedings will be prepared and ultimately, after
4 approval, will be made available on the Fund's
5 website.

6 I will also note that this meeting is
7 solely focused on educational investment matters
8 and we will not be taking any actionable votes.

9 As Trustees know, we are required to
10 fulfill the annual training requirements under
11 Section 1-113.18 of the Illinois Pension Code.

12 I'd like to thank Lorna for organizing
13 this educational session and I will now turn things
14 over to her to proceed with our Committee agenda.

15 MS. SCOTT: The first item on the agenda
16 is an infrastructure investment overview. I am
17 going to turn the presentation over to Callan, to
18 Brady, to take us away.

19 MR. O'CONNELL: Thank you, Lorna. Just a
20 quick minute and a half introduction and then,
21 Marc, maybe you can pull up our first set of slide
22 docs, the infrastructure education.

23 What we wanted to do here in the next
24 couple of months and quarters is spend some time

1 with the Board and the Committee on issues we want
2 to explore in more detail as part of the Asset
3 Liability Study that we will be doing later this
4 year.

5 When we did that five years ago, we added
6 a number of new asset classes that are in what we
7 call the Real Assets Category. So Real is a term
8 that we use in finance to apply to things that have
9 inflation sensitivity. So we added core real
10 estate. We will be hearing from those two managers
11 later today. We added global REITS, Real Estate
12 Investment Trusts, so those have inflation
13 sensitivity as well. And then we added U.S. TIPS
14 or Treasury Inflation-Protected Securities.

15 The other component of the real asset
16 portfolio is commodities and over the past 16
17 months really we have had a discussion about how
18 this performed in the pandemic and whether or not
19 we want to continue to have those.

20 So when we get into the Asset Liability
21 Study, we will look at the allocations that we have
22 made in those assets classes and determine whether
23 we want to make any changes. But importantly we
24 also want to evaluate asset classes that we haven't

1 invested in historically and infrastructure
2 represents one of those.

3 So this is an asset class that we
4 consider real so there were components of the
5 return that are sensitive to inflation and
6 therefore should perform well if inflation picks
7 up.

8 And in order to explore it in more detail
9 as a part of an Asset Liability Study and make it
10 part of our long-term asset allocation, we really
11 want the Board to understand some of the nuances
12 that come with investing in infrastructure because
13 this is a fairly new asset class.

14 So we have prepared the slides that we
15 will walkthrough here. I am shortly going to turn
16 it over to my colleague, Jan Mende, who is a
17 specialist in Real Assets. She is part of Callan's
18 Real Assets Consulting Team so she focuses on all
19 of these asset classes, such as real estate,
20 infrastructure, and helps clients build-out their
21 portfolio in that regard and helps all of Callan's
22 clients think about infrastructure and its
23 characteristics and can help facilitate a
24 discussion of whether or not that makes sense for

1 the FABF.

2 So I will turn it over to Jan to talk
3 about infrastructure, both private infrastructure
4 as well as listed or publicly traded infrastructure
5 securities.

6 We welcome any questions that you have
7 throughout the presentation. As we heard from
8 Trustee McPhillips earlier, we are not asking you
9 to make a decision but really to provide background
10 on just what infrastructure is so that when we do
11 the Asset Liability Study we are in a better
12 position to determine whether or not we want to
13 initiate an allocation to this new asset class.

14 Jan, I will turn it over to you. As we
15 mentioned, Marc will be advancing the slides so if
16 you just let him know when you are ready to move
17 forward and what slide you'd like to speak to, he
18 will take care of that on your behalf.

19 MS. MENDE: Great, thanks, everybody, for
20 making time for the educational session here today.
21 And, Marc, for your help on the tech side here.

22 My name is Jan. I have been with Callan
23 just about four years but I have been covering the
24 infrastructure space for investors for about ten

1 years so I have seen it develop during that time
2 period.

3 As we are talking to our clients about
4 infrastructure and what it is, essentially, it is
5 long-lived assets, which are hard to replicate with
6 defensive income streams and monopoly market
7 positions that are difficult to enter either
8 because of high barriers to entry or regulations
9 there.

10 The typical sectors where infrastructure
11 managers invest are energy, renewables, water
12 waste, transport, communication, and social.

13 What I would say is communication was on
14 this list five years ago. It's been a growing part
15 of the sector with the increase in data consumption
16 and all the Netflix movies and all the Amazon
17 shopping we are doing.

18 One thing that is different with private
19 infrastructure and private real estate most of our
20 clients access private real estate through the
21 open-end funds which are largely U.S. focused.

22 Infrastructure has a much more global
23 focus. That being said, a lot of infrastructure
24 managers will talk about the OECD markets, which

1 are the major markets. U.S., U.K., Western
2 European countries.

3 As we talk to our clients about looking
4 at infrastructure, some people like the fact that
5 they get exposure to non-U.S. currency. Other
6 people see that more of a risk.

7 So I would say moving on to the risk
8 side, as things change in the world the competitive
9 landscape changes. That infrastructure asset that
10 you thought was a very safe asset may be less
11 useful to you in your portfolio.

12 For example, people used to invest in
13 coal fired power plants. Nobody really wants to
14 invest in coal so people who owned those assets are
15 dealing with that difficulty right now.

16 Other risks to consider are interest rate
17 movements could have a big impact on these assets.
18 In general, infrastructure assets have more
19 leverage than real estate so as interest rates rise
20 it's just magnified in the infrastructure space.

21 Inflation. This is good as long as you
22 can pass on -- as an infrastructure owner, as you
23 can pass on those higher costs to your clients but
24 it depends on the type of contract structure you

1 have. We have a little more information about that
2 later.

3 Another risk here currency movements. We
4 have some clients who invested in infrastructure
5 where the portfolio is in the U.K. or in Europe.
6 And over the past few years the currency volatility
7 there has impacted their quarterly return
8 performance. So that is definitely a consideration
9 as we get further on in this process it would be
10 something we would discuss with you.

11 Lastly, this last line here, Black Swan
12 Events. Things you couldn't predict. Everybody
13 thought airports were a growth business and then
14 2020 happened so things you just can't predict in
15 terms of demand.

16 Those are just some high level thoughts
17 that we like to start off as we're looking at this
18 space.

19 Marc, if you could move on to the next
20 slide, please.

21 So when we talk about infrastructure, the
22 core real estate funds that you invested in are
23 what we would call private infrastructure. They
24 are not traded on the public markets.

1 In infrastructure, you can invest in
2 those unlisted funds on the right. But you could
3 also access infrastructure through the public
4 markets, which we refer to as listed here.

5 If you invest in the public markets
6 infrastructure, it is pretty easy. These are
7 operating companies you can acquire. They are very
8 liquid and you can trade in and out of them.

9 I would say one thing that our clients
10 have found is that they share the volatility of the
11 public markets and that doesn't always do what our
12 clients want this to do for their portfolio.

13 Another thing I would say, for both
14 listed and private infrastructure, benchmarking is
15 difficult. Although the sector has been around for
16 ten years, there isn't enough data to really
17 provide a benchmark the same way we have for real
18 estate. It is coming, it's just not here yet.

19 We have another slide about listed
20 infrastructure later in the deck that we can talk
21 to.

22 On the right side of the page, you have
23 the unlisted infrastructure funds, which is where I
24 generally focus with our clients.

1 Similar to the open-end real estate
2 funds, you can invest in these assets to get
3 long-term income and appreciation, depending on
4 exactly which strategy you choose.

5 One other point here is the valuation
6 method. For private infrastructure, it is not
7 subject to the public market volatility so last
8 year our clients who had this in their portfolio
9 didn't see as much volatility as they did in their
10 public markets investments.

11 If you could go on to the next slide,
12 please.

13 Infrastructure, just to give a little
14 more color on what it is. You see the big tall
15 picture there, that is the cellphone tower relaying
16 all the communications that we all are doing on a
17 daily basis. That asset is going to be around for
18 a while and it is pretty essential for our social
19 and economic part of the economy here.

20 The top right picture is a water
21 deceleration plant in Southern California. It took
22 them about 25 years to build this plant from
23 permitting it, to designing it, to building it,
24 et cetera, so it is a pretty defensive asset.

1 There is not going to be a lot of near term
2 competition on that.

3 When they developed that plant, they
4 signed a 30-year agreement with the San Diego Water
5 System to provide water and that was a very safe
6 stream of revenue because they know that area needs
7 water and they are going to get that payment from
8 the government.

9 When people talk about infrastructure,
10 those are the sort of low demand elasticity things
11 that we like to see.

12 On the bottom right, in the U.K., there
13 are some municipalities that have taken street
14 lighting off of their budget and asked a private
15 manager to manage their streets for them for 20
16 years and in exchange it simplifies the budget for
17 the local economy. The private manager gets a
18 reliable stream of income and they can leverage it
19 up so that is why infrastructure can be more highly
20 leveraged because you have more high term
21 contracts.

22 If you could go to the next slide here.
23 I updated this one, Slide 7 of the PDF I think. It
24 is "What is the Driver for Global Infrastructure

1 Investment Today".

2 And renewable energy targets are a big
3 one we heard a lot about. Data storage, as I
4 mentioned, Netflix, Amazon shopping, requires that
5 and just aging infrastructure.

6 So if you wanted to have a little bit
7 more data on what exactly you mean by a
8 communication investment. Cellphone towers, data
9 centers, are something that you hear managers talk
10 about.

11 Power. The wind, solar, hydro biomass,
12 geothermal power are things that people talk about.
13 Honestly, most of it these days is the wind and
14 solar power. The other kinds of assets are a
15 little bit less frequent.

16 And then moving down, you see waste water
17 is another thing that people talk about as an
18 infrastructure investment. They are very hard to
19 get.

20 The last one here sustainability. What
21 is that? That is a new category I would say that
22 has really come on in the last five years and it
23 has to do with efficiency being installing systems
24 to monitor energy use or water use to make sure

1 that we are being efficient with those scarce
2 resources.

3 Do you all see Slide 7 here? I just want
4 to make sure. Okay, great, thank you.

5 Those are the other sectors that I
6 mentioned before. Transport, energy and social
7 infrastructure.

8 In the U.S., I would say social
9 infrastructure has been less of an opportunity
10 because it generally relies on public private
11 partnerships, which in the U.S. with 50 states and
12 all of our local and City governments it is
13 difficult to get framework to do these efficiently
14 and private infrastructure managers generally find
15 better opportunities in the private businesses in
16 the country.

17 If you could move on to the next page.
18 So when we talk about real estate with your
19 clients, we always talk about the region where it
20 is located and property type.

21 For infrastructure, I like to say there
22 is kind of a third dimension to think about. It is
23 revenue types and risk.

24 People are attracted to infrastructure as

1 an asset class because it has long-term and stable
2 revenues and that is true but not every asset has
3 the same revenue structure. That is something as I
4 am talking to infrastructure managers I want to
5 understand. Do I really have certainty that I will
6 have income despite economic disruptions like
7 Covid.

8 Toll roads are something you hear about
9 as an infrastructure investment. Just because you
10 have a toll road, it doesn't mean it will perform
11 the same way in an economic downturn. If you have
12 a toll road that has availability, base revenue on
13 the left side of this page, you may have a contract
14 with a government that the government will pay you
15 as long as people can drive on that road. Doesn't
16 matter how many people drive or things like that.
17 As long as that road is usable, then you get paid.

18 Your payment rate as an owner might be
19 little bit less because it is a very safe revenue
20 but you could also own a toll road and have what I
21 would say is GDP linked revenue. Where if there is
22 an economic downturn and people aren't driving, you
23 don't collect any revenue or much less and you are
24 much more exposed to economic risk.

1 As we talk to infrastructure managers it
2 is always important to understand how they look at
3 revenue risk and what type of revenue risk they
4 would take. Not all toll roads are the same is
5 what I would say.

6 If we could go on to the next page,
7 please. These are just some bar charts here to
8 show you where deals are taking place. And on the
9 top you see Europe has always been a significant
10 part of the private infrastructure opportunity.

11 North America, that kind of dusty blue on
12 the top, is increasing in its share.

13 I would say as telecom has become a
14 bigger opportunity there has been more investment
15 in the U.S.

16 And then by sector, this one always takes
17 people by surprise, that sort of bright blue in the
18 middle there, that represents renewable investments
19 and renewables comprises a sizable number of the
20 deals done in the infrastructure space as people
21 are looking to get cleaner sources of energy.

22 If we could go on to the next slide
23 here, I have some information about renewables.
24 What is driving all of this activity? And the

1 diagrams on the bottom right there show back in the
2 day you had your power plant and they would
3 transmit the energy to your home. Now there is
4 many different ways to source power. Locally
5 through solar or wind and store it with batteries
6 or other types of things so that is what is driving
7 some of the renewable investments that people have
8 heard about.

9 I would say renewables as a sector
10 generally has performed well. There have been
11 issues but the performance of that sector has been
12 good and returns have come down significantly in
13 the past ten years.

14 Renewable assets these days may be a
15 5 percent return and maybe ten years ago they were
16 closer to 10. As the sector has been proven,
17 people have piled in a bit.

18 We could go on to the next slide. Key
19 Risks in Infrastructure Investing. We kind of
20 touched on these a bit here.

21 Regulatory risk is one I always like to
22 just highlight. One example, people who invested
23 in the U.K. water systems thought I am investing in
24 a water asset. Everybody needs water and I am in

1 the U.K. It is a very stable country. I don't
2 have any regulatory risk there but kind of
3 post-Brexit there was a more populist government
4 that came in and they started limiting the amount
5 of profit people could earn from owning these
6 assets and that caused some issues in that space
7 which people didn't expect.

8 They are working through that and for
9 people who hold those assets over the long-term the
10 hope is that they will recover value but in the
11 short-term it's been difficult.

12 Revenue. We talked about that. How safe
13 is that revenue? Is it going to fluctuate if there
14 are issues with the economy?

15 Leverage. Infrastructure is more highly
16 leveraged than real state so as we wonder what will
17 interest rates do here in the near-term that is
18 consideration for investing in this space.

19 Currency. You know, it is the benefit of
20 investing globally. You get global exposure but
21 you also have to be comfortable with the currency
22 risk that the fund or the program is taking.

23 Then liquidity and exits. I like to talk
24 to infrastructure managers to hear once you own an

1 asset, why do you sell it? What are the things
2 that you think about just to see how they are
3 evaluating risk?

4 These are the some keys things that we
5 like to have people think about as they are looking
6 at the sector.

7 If you could go onto the next slide here,
8 please. This is the Callan capital markets
9 assumptions here. A lot of numbers on this page.

10 The return for core infrastructure, based
11 on discussions with our capital markets team and
12 the real assets team, is a long-term return of 6
13 percent compared to 5.75 percent for core real
14 assets.

15 But at the same time you look over at the
16 risk for core infrastructure is higher. And I
17 would say that the risk is higher in part because
18 just the interest rate sensitivity for these assets
19 and inflation, how much of that can you pass
20 through to your clients, is something that is a
21 little more of a consideration for infrastructure
22 with the long-term structure there.

23 Feel free to jump in, if you have any
24 questions, but I will just keep moving.

1 One last slide here, 13. I got a lot of
2 questions in the past year about how did
3 infrastructure do during Covid and the table kind
4 of lays out sectors at the top which were least
5 impacted with Covid and then most impacted down
6 there at the bottom.

7 Telecom and digital, in general, with
8 this work from home shift, more demand for again
9 Netflix, Amazon, that created a lot of demand for
10 data centers and ways to transmit that data and
11 store the data so it did well. There has been a
12 lot of people looking at the space and it is
13 getting competitive there.

14 Same thing, renewables did well during
15 the pandemic. People still wanted clean power.
16 The sunshine and the wind blew so the renewables
17 were able to deliver on their contracts with their
18 off-takers.

19 Utilities did well as well because we
20 were all using electric and water. Maybe in
21 different places than we would have in prior years.

22 We won't go through everything on this
23 slide.

24 Transportation. People watched that

1 sector a lot. In early 2020 airports were shut.
2 Ports kind of had some issues and roads had lower
3 traffic. I would say roads have really come back
4 especially as everybody has been home ordering on
5 Amazon. All the trucks on the road. Industrial
6 traffic has held up pretty well.

7 Same things for ports. People have
8 continued to buy and consume so ports had pretty
9 steady traffic.

10 Airports. People are sort of predicting
11 it might not be until 2023 until growth and travel
12 patterns get back to what they were in 2019. We
13 will see how that all settles down.

14 MS. SCOTT: Just a quick question. Is
15 there an overlap with real estate because you
16 mentioned data centers and I am pretty sure some of
17 our core real estate funds are in data centers.

18 MS. MENDE: That is a great question, I
19 get that as well from my team. I would say there
20 are some data centers that operate more like
21 hotels. They provide everything and people can use
22 the data center for a shorter period of time.
23 Maybe a couple of years. But then there are some
24 other data centers where the infrastructure

1 operator may provide the building and make sure
2 there is the necessary power that is needed. These
3 data centers use a ton of power. The
4 infrastructure manager arranges the power and their
5 customer may build-out the space for a 10-year
6 contract.

7 So it goes I think to the difference in
8 contract lengths, whether it belongs in a real
9 estate bucket or in the infrastructure bucket.
10 That is definitely a crossover sector. It is a
11 good question, thank you.

12 So now if we go one more slide. You
13 might have seen this slide before, the relative
14 risk and return.

15 Within infrastructure, you can invest
16 across the risk spectrum. You can do
17 infrastructure debt which is a much lower return.
18 I'd say generally it is almost a little bit lower
19 return than real estate debt because it is
20 perceived as so safe.

21 Moving up on the risk spectrum, you have
22 core and core plus. I would say that is the way we
23 describe the risk for open-end infrastructure
24 funds. The return is going to be 5 to 7, 8 to 10

1 percent net over the long term on an annual basis
2 for these funds. They are acquiring assets. Ports
3 that are existing. Airports that are existing.
4 Renewable power that are existing. And they are
5 clipping the coupon from the cash flows of those
6 assets and distributing it to investors, not doing
7 a lot of development risk.

8 On the upper right side, the value add
9 and opportunistic strategies, there are what we see
10 in closed-end funds that have a 10-year life.
11 Where they acquire an asset and they have a plan to
12 double capacity or increase the footprint or take a
13 little bit more risk and have less income in the
14 short-term.

15 As we are looking at the space with our
16 clients, we work across all of these sectors so if
17 you got to that point we could definitely have
18 further conversations there.

19 Next slide, please. The institutional
20 infrastructure markets here. As I kind of said
21 earlier, the asset class is global. There are a
22 wider range of options to select from, if you are
23 willing to consider a global portfolio. If folks
24 are only interested in a North American portfolio,

1 the open-end fund universe as you see here is very
2 small. There are three funds that focus on North
3 America compared to 20 something in the real estate
4 sector that focus on North America.

5 On the right you see there are five to
6 seven funds that are open-end and look at the
7 global markets there.

8 On the closed-end fund universe similar.
9 You can see that wider opportunity in the global
10 markets.

11 Say if you are investing in the U.S., you
12 would have gotten a lot of energy investment. Now
13 you will be seeing more telecom investment coming
14 in and renewables so it is the emerging sector. I
15 think as an infrastructure investor it is probably
16 a good idea to look at the global portfolio so you
17 have access to the widest range of sector types to
18 build a diversified portfolio.

19 Then on the next slide here, Slide 17,
20 just to show the infrastructure asset class. You
21 see it really started fund raising in 2006 and 2007
22 and then the financial crisis hit.

23 I will be honest with you, some of the
24 early infrastructure managers put too much leverage

1 on their assets because they thought these are
2 safe. I can lever them up. There was some
3 missteps in those days.

4 People agree, though, that those lessons
5 learned have been taken to heart by the industry
6 and so far it seems that infrastructure assets were
7 a little less leveraged going into the pandemic
8 than they were prior to the global financial
9 crisis.

10 That was fundraising took off in
11 2007/2008. Financial crisis hit. Performance
12 wasn't great and over time you can see that
13 fundraising has really increased as people are
14 looking at the sector for this long-term cash flow
15 and the overall appreciation potential.

16 So maybe just take it here to this last
17 slide on private infrastructure, Slide 18. The
18 benefits are potential for low correlation with the
19 economic cycle. If you have these long term
20 contracts that come rain or shine you will still
21 get paid. With that you get income that is
22 distributable to the investors.

23 People look at, as Brady said, real
24 assets as an inflation hedge. The diversification

1 for a global portfolio is something you can get
2 pretty easily with infrastructure and the demand
3 for renewables and decarbonization is driving the
4 sector a bit but there is a lot of other things to
5 do out there.

6 Considerations. Illiquidity, I would say
7 that those core open-end infrastructure funds
8 generally have a four-year period where once you
9 sign up you can't get out. They want people to
10 stay in as they buildup these portfolios so core
11 real estate I would say is more liquid than that.
12 They don't have that same sort of lockup.

13 Another consideration, these are very
14 complex businesses and it is a little more
15 difficult to operate than a real estate portfolio
16 in just terms of the contract structure. The
17 operating of a water plant or things like that. So
18 it is really important to pick a strong manager for
19 this.

20 Other things we have talked about on the
21 right there. The global nature of this asset.
22 Interest rate risk. Obsolescence risk as I
23 mentioned before with coal fired power plants.

24 There are benefits and consideration

1 certainly to this asset class here.

2 We had a few minutes prepared on listed
3 infrastructure. Brady, should I go ahead and hit
4 that as well? It will be pretty quick.

5 MR. O'CONNELL: Lorna, how do you feel
6 about that? We have got maybe a couple minutes
7 left to wrap up infrastructure. The listed part I
8 think we could probably skip at this point.

9 For the committee's perspective, the
10 issue is very similar to real estate where we have
11 that global REIT portfolio that is liquid and it is
12 more like stocks.

13 Same issue here in infrastructure where
14 you can buy stocks in infrastructure companies but
15 you get the volatility that comes with things that
16 are traded on the stockmarket. Those got marked
17 down a little more than the private infrastructure
18 did in 2020 during the pandemic.

19 Maybe we can just wrap it up, if there
20 aren't any questions. Jan, I am not sure if you
21 had any concluding remarks. I did have a few
22 points when you are done to reinforce for the
23 committee.

24 MS. MENDE: No, I think that slide that

1 Marc has up right now, it lays out there are some
2 real potential benefits and reasons people are
3 attracted to this asset class.

4 And we have seen clients go into open-end
5 funds and just get exposure to the portfolio of
6 assets. Airports, toll roads, renewables. And
7 they have had some good experience with that but
8 there's been volatility.

9 I will turn it over to Brady. Thanks
10 everybody, I appreciate your time.

11 MR. O'CONNELL: Thanks, Jan.

12 Four quick points just to summarize some
13 key take-aways. One, this is an alternative asset
14 class. This is new. This is growing. We just saw
15 the slide from Jan with the capitals moving in. It
16 is kind of a trendy thing. It is not stocks. It
17 is not bonds. So we would categorize this is as an
18 alternative.

19 As such, it is not really easy to
20 benchmark. We had some discussion about other
21 alternative investments in the portfolio and how to
22 benchmark them. As we think about creating an
23 allocation and getting an allocation within your
24 investment policy statement, the benchmarking and

1 the tracking of these investments is going to be
2 more like it is for private equity and real estate
3 than it is for stocks and bonds. Just benchmarking
4 is going to be difficult.

5 This is a global asset class. So when we
6 invest in a fund we will get exposure throughout
7 the world. Jan showed there are a few that are
8 North America focused but again those invest in
9 infrastructure in Canada in addition to the United
10 States.

11 Lastly, Jan had mentioned liquidity and
12 exits. So when we did our Asset Liability Study in
13 2017, there were a lot of caveats about investing
14 in less liquid assets classes like real estate,
15 private equity. And infrastructure is more like
16 those than it is the liquid part of your portfolio.

17 But the good news is the change that we
18 have seen in 2017 is contributions coming in at the
19 level that we anticipated and if that continues we
20 should have the possibility to take on incremental
21 illiquidity risk.

22 During the Asset Liability Study, we will
23 test to see how much more we can allocate to core
24 real estate or to private equity. So that will be

1 a big factor in addition to the characteristics of
2 infrastructure that we heard about just how much
3 more assets FABF can allocate to things we can't
4 sell in a day. So that is a big factor when we
5 think about the private part of the infrastructure
6 market. How much of those illiquid assets can we
7 take on given the cash flow and benefit payment
8 projections that we have.

9 MEMBER MCPHILLIPS: I have a quick
10 question regarding your comment on the difficulty
11 with benchmarking assets like this.

12 Would that be somewhat negated in your
13 mind by the fact that these assets kind of overlay
14 very well with our liabilities? They are kind of
15 known and stable and consistent. So even though we
16 may not be able to benchmark and say that, hey, we
17 are doing well, it overlays with our liabilities
18 that we have at the Pension Fund?

19 MR. O'CONNELL: Yes. So I think that is
20 a good point. Just because we can't benchmark it
21 as well as we can stocks and bond doesn't mean we
22 don't want to invest in it.

23 There is a slide, if we go to PDF 27, if
24 we go to the private route a lot of the times the

1 benchmark we think about is the CPI or inflation
2 plus a premium.

3 We have got there listed a hypothetical
4 infrastructure of a client. The listed benchmark,
5 which is publicly traded infrastructure equities,
6 so we can see that dropped. And then what is more
7 of a long-term theoretical benchmark, we would
8 expect infrastructure to give us 5 percent over
9 inflation so that is that CPI plus five.

10 It doesn't mean we can't benchmark it.
11 It is just a little harder to benchmark than it is
12 stocks and bonds.

13 MEMBER MCPHILLIPS: Okay. Jan, if you
14 don't mind, I have a quick question for you.

15 On one of your slides you had the various
16 type of assets segregated between North America and
17 I guess the rest of the universe.

18 Under North America, if I am not
19 mistaken, it seemed to indicate that waste water
20 and water assets were kind of becoming more popular
21 in North America. Did I read that slide correctly?

22 MS. MENDE: Yes. Was it maybe Slide 7,
23 "What is the Driver For Global Investment Today"?

24 I would say that people have always been

1 looking at water and waste water investments. They
2 are just so small and scattered it is really hard
3 to find them in the scale that investment managers
4 want to invest in. So it hasn't worked out to-date
5 but there may be more opportunities in the future.
6 If municipalities say I need to get this off my
7 balance sheet and I want to make sure somebody else
8 can handle the operation. We have seen some of
9 that happening.

10 MEMBER MCPHILLIPS: Thank you, very much.
11 I thought it was a great presentation.

12 MS. MENDE: Thanks everybody. I
13 appreciate it.

14 MR. O'CONNELL: Thanks, Tim.

15 MEMBER MCPHILLIPS: Any questions from
16 any other board members for Brady or Jan?

17 Otherwise, I think we will move on to our
18 next presentation.

19 MEMBER MURPHY: None from me.

20 MEMBER NANCE-HOLT: None from me.

21 MEMBER MCPHILLIPS: Thank you, very much.

22 Before we begin the presentation from our
23 managers relating to our core real estate
24 allocation, I would like to make a motion to go

1 into Executive Session pursuant to Section 2(c)1 to
2 discuss specific investment contracts. Do I have a
3 second?

4 MEMBER NANCE-HOLT: Second.

5 MEMBER MCPHILLIPS: Lorna, can you please
6 call the roll call?

7 MS. SCOTT: Trustee McPhillips.

8 MEMBER MCPHILLIPS: Yes.

9 MS. SCOTT: Trustee Nance-Holt.

10 MEMBER NANCE-HOLT: Yes.

11 MS. SCOTT: Trustee Murphy.

12 MEMBER MURPHY: Yes

13 MS. SCOTT: Trustee Fortuna.

14 (No response.)

15 MEMBER MCPHILLIPS: Motion passes. We
16 will now proceed to closed session.

17 (Whereupon, the Board went into
18 Executive Session off the record.
19 No action was taken in Executive
20 Session.)

21 MEMBER CONYEARS-ERVIN: I will just say
22 good morning, trustees, I am here.

23 MEMBER MCPHILLIPS: I'd like to thank
24 everyone for their presentations.

1 We will now turn to the public comment
2 portion of the agenda.

3 I will quickly state that consistent with
4 Public Act 91-0715 and reasonable constraints
5 determined by the Board of Trustees, at each
6 regular meeting of the Board or it is committees
7 that is open to the public, members of the public
8 may request a brief time to address the board or
9 committee on relevant matters within its
10 jurisdiction.

11 Are there any requests for public comment
12 today?

13 None.

14 Is there a motion to adjourn today's
15 meeting.

16 MEMBER MURPHY: I make the motion.

17 MEMBER MCPHILLIPS: Second.

18 The Investment Committee is now
19 adjourned.

20
21 (WHICH WERE ALL THE PROCEEDINGS
22 IN THE ABOVE-ENTITLED MEETING
23 AT THIS DATE AND TIME.)
24

1 STATE OF ILLINOIS)
) SS.
2 COUNTY OF DU PAGE)

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DEBORAH TYRRELL, being a Certified Shorthand Reporter, on oath says that she is a court reporter doing business in the County of DuPage and State of Illinois, that she reported in shorthand the proceedings given at the taking of said cause and that the foregoing is a true and correct transcript of her shorthand notes so taken as aforesaid; and contains all the proceedings given at said cause.

Debbie Tyrrell

DEBBIE TYRRELL, CSR
License No. 084-001078

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