Transcript of a Presentation Made to the Huron County
Health Board by Jane Wilson, Wind Concerns Ontario,
held on August 4, 2016

PRESENTER: Ms. Jane Wilson

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1 --- Upon commencing the audio recording
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- THE CHAIRPERSON: I will say I was given, as
- 3 of evening last night, some questions that might just be
- 4 related to this from a public, so I'll have an opportunity
- 5 to ask some of those. I think some of those will be
- 6 reflected on the board as well.
- 7 So Jean-Guy.
- 8 MR. ALBERT: All right. Thank you,
- 9 Mr. Chair.
- 10 At its last meeting, board members directed
- 11 staff to invite Jane Wilson to give a presentation on
- 12 possible opportunities to partner with University of
- 13 Waterloo to conduct investigation with regards to potential
- 14 health hazards associated with industrial wind turbines.
- 15 So this morning I have the pleasure of introducing Jane
- 16 Wilson, who is the president of Wind Concerns Ontario.
- 17 Along with Jane is Warren Howard. Warren is also an
- 18 executive with Wind Concerns Ontario.
- 19 Jane had indicated that some folks from
- 20 University of Waterloo may be joining us, so I'll introduce
- 21 just in case they come in: Dr. Philip Bigelow, an
- 22 associate professor with the University of Waterloo, was to
- join us as well as Dr. Ron Brown, also an associate
- 24 professor with the University of Waterloo. So if they're
- 25 not in the audience, they may join us in progress.
- So without further adieu, Jane, I'll give it
- 27 to you.
- 28 MS. WILSON: Good morning, and thank you

- 1 again for the invitation. It's a pleasure to be here in
- 2 Huron County.
- 3 Just very quickly, Wind Concerns Ontario is
- 4 a coalition of the energy groups, families, and individuals
- 5 that are concerned about the effects of industrial-scale
- 6 wind power on three areas: on the economy, on the natural
- 7 environment, and on human health. Our group spans the
- 8 province from Algoma in the north and Lake Superior area to
- 9 the far east and Nation Township and south southwest,
- 10 Chatham-Kent, and all points in between.
- We are not opposed to renewable sources of
- 12 power. We do believe, however, that a thorough analysis of
- 13 all of the impacts of industrial-scale power generation and
- 14 the need for community support are critical to sustainable
- development, and we're supported in this by the views of
- 16 two auditors general, both of whom are concerned about how
- 17 this program has been rolled out in Ontario.
- 18 We've been interested for years in doing
- 19 research in response to citizen complaints about the
- 20 effects of wind turbines as they've been sited, and we also
- 21 felt it was important to involve an institutional partner.
- 22 So we've been in discussions with University of Waterloo,
- 23 specifically the School of Public Health and Health
- 24 Systems.
- The university is known for seeking
- 26 innovation solutions to some of the major health challenges
- 27 of our time. They work in chronic disease prevention and
- 28 management, health and aging, healthcare system

- 1 integration, management and informatics, food and water
- 2 safety, security in government, but in our area, they are

- 3 working also in health and the environment.
- I should mention at this point, too, I'm a
- 5 registered nurse, so health issues are very close to my
- 6 heart and part of what I do.
- 7 The background for research studies in
- 8 Ontario, in 2010 -- actually the work was done in 2009.
- 9 The Chief Medical Officer of Health released in 2010 a
- 10 literature review, and as the conclusion of that report,
- 11 she said:
- "A key data gap in Ontario was actual noise
- 13 measurement of the environment and around more quiet rural
- 14 areas and wind turbine projects."
- The Health Canada wind turbine noise study,
- 16 which was released in 2014, actually showed that 16.5 per
- 17 cent of people who are living at 1 kilometre or less were
- 18 distressed or annoyed, and "annoyed" in this context is a
- 19 medical term that denotes distressed. That number jumped,
- 20 actually, to 25 per cent at the provincial setback of 550
- 21 metres.
- We've been in contact with Health Canada
- 23 since. We actually had a meeting with them the day after
- 24 that report was out, and I have been in correspondence with
- 25 them ever since. Just, I think, last Friday I got a
- 26 letter, again, and they agree with us that there are gaps
- 27 in that study, and so that's one of the things we're
- looking at is closing those gaps and getting the

- 1 information that we need.
- 2 The Canadian Council of Academics and
- 3 acoustics professionals around the world say that the
- 4 A-weighted measurement of noise actually fails to capture

- 5 the whole picture of noise that's produced from wind
- 6 turbines.
- 7 One of the reasons that got us going is
- 8 they're not only complaints to us, but, as of December
- 9 2014, the Ministry of Environment and Climate Change
- 10 revealed to us that they have received over 2,700 noise
- 11 complaints. That's to the end of 2014. So as a year and a
- 12 half, we're estimating that's probably more in the region
- of 3,000 noise complaints to this point.
- The need for research, again, is confirmed.
- 15 Most studies today are simply reviews of existing
- 16 literature. There's been a lot of work done, but these
- 17 studies have not caught up with that. Again, studies have
- 18 relied on the A-weighted noise measurement, which many
- 19 people are confirming is not an adequate picture of what's
- 20 going on. No studies in Canada have followed what's called
- 21 a purposive sample. What that means is you find people
- 22 having problems, and you follow up and investigate those
- 23 people and find out what's going on. That means
- 24 investigating noise complaints and actually doing noise
- 25 measurement. A major flaw in Ontario's Green Energy
- 26 Program has been the failure to take seriously these
- 27 complaints and to do proper follow-up.
- 28 Recently, there was a study done in

- 1 Australia. It's called the Cooper Study or the Cape
- 2 Bridgewater Study. That study changed the language of wind
- 3 turbine noise research around the world. Instead of
- 4 talking about noise, Steven Cooper, the acoustician,
- 5 concluded that the word we should be using is "sensation."
- 6 Now, that's our experience too. When we talk to people
- 7 exposed to this, one of the first things they do is say, "I
- 8 feel it. I can feel it." So you can see how things are
- 9 developing in research.
- 10 So the Cooper Study was critical. They
- 11 found that there is a cause and effect relationship between
- 12 wind turbine power output and people's response. And back
- in 1985, there was a study done in Toronto. A study of
- 14 infrasound showed that 12 to 23 per cent of people exposed
- to infrasound at less than 8 hertz will react with nausea,
- 16 dizziness, and other symptoms.
- In fact, the ISO 1996 says:
- 18 "Perception of sound and effects of sound
- 19 differs considerably at low frequency."
- So, again, they're looking at low frequency,
- 21 which is not something that's not been studied. And,
- 22 again, the ISO determines that perception of sound may be
- 23 described as pulsation.
- 24 Dr. Paul Schomer, who is the standards
- 25 director emeritus for the Acoustical Society of America,
- 26 just gave a presentation a few weeks ago. In that, he
- 27 said, here's the picture of wind turbine noise emissions:
- 28 "Audible sound can result in annoyance or

1 distress. Infrasound can result in reports of poor health.

- 2 Both of them result in sleep disruption, which then, as
- 3 people get tired and exhausted, you can see other health
- 4 effects. Those effects reported can be the feeling of
- 5 pulsation, pressure on or in the ear, headache, fatigue,
- 6 nausea, and dizziness."
- 7 These are the effects that are reported
- 8 around the world, not just in Ontario
- 9 Many people have relied on audible noise as
- 10 being the problem. We know now it's a bigger picture than
- 11 that. They say, if you can't hear it, it can't hurt you.
- 12 We know now that's not correct. And, similarly, you don't
- 13 see X-rays, but they can hurt you. We don't see infrared
- 14 light, but it can hurt us. We don't hear infrasound, but
- 15 it can harm us. And the Cooper Study, again, shows this to
- 16 be true.
- So Winds Concerns Ontario, again, we have
- 18 wanted to do some research for quite a while. Our goal is
- 19 now to build on that work that was begun by the Cooper
- 20 Study in Australia, and working with the University of
- 21 Waterloo, their expertise not only in health, but in health
- 22 technology and technology.
- So Phase I would be collection of the
- 24 citizen reports, analysis and identification of the
- 25 participants for follow-up. And here we're proposing to
- 26 use -- again made in Canada, Dr. Robert McMurtry of the
- 27 University of Western Ontario and Carmen Krogh developed
- 28 diagnostic criteria which would be very useful deciding

- 1 which subjects would be interesting to study.
- 2 Phase II would be actual noise measurements
- 3 on a minimum of six locations. It would be multiple areas
- 4 in the homes, outside the homes, so a thorough noise
- 5 measurement.
- And Phase III would be analysis and
- 7 reporting of those results.
- 3 Just to give you a couple of details about
- 9 the project, because it can get very technical, again, we
- 10 can use A-weighted measurements for audible noise, measures
- of audible and low frequency noise, and separate measures
- 12 of infrasound. The equipment to measure noise will be
- 13 present, as I said, in various locations inside and outside
- 14 the dwelling. Sleep disturbance data will be collected
- 15 simply by using actograph technology. I think everyone is
- 16 familiar with a Fitbit watch or whatever. This will help
- 17 people determine how their sleep is being disturbed and
- 18 when. All this data will be correlated with wind turbine
- 19 proximity, turbine activity, and weather conditions at the
- 20 time.
- So our request to the Huron County Board of
- 22 Health today is to consider being a participant in this
- 23 venture, adventure, one might say. A minimum contribution
- 24 would be just to allow our research team access to your
- 25 confidential reports of noise that are being received by
- the health unit and to allow the staff epidemiologist to be
- 27 a named investigator in the project. Other levels of
- 28 participation would be to allow the staff epidemiologist

- 1 and public health professionals to participate in the
- 2 analysis of the results and site selection for Phase II
- 3 activities. We would also ask that the staff
- 4 epidemiologist could be a part of the named research team
- 5 for reporting and publication of results.
- 6 Again, this is a new approach because we're
- 7 following a purposive group of participants. I don't know
- 8 if you know of Sir Austin Bradford Hill, who is largely
- 9 regarded as the father of epidemiology. He said:
- "When you do studies and you don't find out
- 11 what you thought you would find, if you don't see a cause
- 12 and effect, but you still have a group of people who are
- 13 not well or having some problems, you don't give up. You
- 14 keep working at it."
- That's what's guiding us.
- So, again, actual noise measurements will be
- done, not just computer predicted models, which is what has
- 18 been done in many other studies. We may use control
- 19 subjects who could actually be family members in the same
- 20 location. We aim to keep costs to a minimum, and the
- 21 funding for this project will be done through grants and
- 22 donations yet to be determined, but we'll be working hard
- 23 to get the resources to do that.
- 24 So that's my quick summary, and I can answer
- 25 any questions right now. Warren or I will be happy to
- 26 answer any questions as well.
- 27 THE CHAIRPERSON: I'll look to the board
- 28 first. Board Member Jewitt?

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BOARD MEMBER JEWITT: I have a technical question. Are there any concerns about not having a
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- 3 baseline of what the noise is required for the introduction
- 4 of the IWTs? I mean, if we're just measuring it now, we're
- 5 going to get what it is currently, but we don't have any
- 6 information of what pre-existed.
- 7 MS. WILSON: I don't know. I mean --
- 8 MR. HOWARD: I mean, what we're planning is
- 9 a 30-day test period in each home, and in that time,
- 10 turbines will not be operating. So we will have that
- 11 baseline without -- so before the turbines, and we're
- 12 structuring it, the noise collection, and one of the key
- 13 points is to make sure that the noise, particularly the
- 14 infrasound we're finding, displays the characteristics of
- 15 the blade pass frequency that goes off from the turbines so
- 16 that it is very clearly wind turbine noise that we're
- 17 studying.
- BOARD MEMBER JEWITT: Thank you.
- 19 THE CHAIRPERSON: Board Member Steffler?
- 20 BOARD MEMBER STEFFLER: Yes. Are you going
- 21 to be making the same presentation to our Lambton-Middlesex
- 22 County where there are a lot of wind turbines down there or
- 23 Durham County where there are a lot up around Grand Valley
- 24 so we can all share in the costs, not just share in zoning?
- 25 I think this is an Ontario issue.
- MS. WILSON: Mm-hmm.
- 27 BOARD MEMBER STEFFLER: This should be
- 28 brought up at the ROMA convention in Toronto so that it

- 1 could be equally funded.
- MS. WILSON: We started in Huron County with

- 3 -- actually Dr. Bigelow, Warren, and I were in a meeting.
- 4 We were discussing how we get started and where we'd get a
- 5 population that had already identified problems, and I
- 6 think Dr. Bigelow said, "Huron County's got a mechanism in
- 7 place to be collecting complaints. Let's start with them."
- 8 "Why not call them?" he said. So we really have just
- 9 started with you, but that's a good suggestion, to be
- 10 sharing, but to keep the costs down, we're looking at a
- 11 limited population right now.
- Do you have anything to add to that?
- MR. HOWARD: Well, just the costs to the
- 14 Huron County, I don't think will be that large.
- 15 MS. WILSON: Yeah. No. Costs will not be
- 16 that large. We're assuming the costs for the noise
- 17 measurement. All the technical things would be done.
- 18 Those would be phases that are under our --
- BOARD MEMBER STEFFLER: I guess the point
- 20 I'm trying to make: It's not only a Huron County issue.
- MS. WILSON: Yes.
- BOARD MEMBER STEFFLER: So I think you
- 23 should be looking outside of Huron County, our friends up
- 24 in Grey County and Lambton County, Middlesex, all across
- 25 Ontario.
- MS. WILSON: Yes. Some other municipalities
- 27 are looking at doing their own noise measurement studies,
- 28 but they're just in the development phase now as well.

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THE CHAIRPERSON: Board Member Jewitt.
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                    BOARD MEMBER JEWITT: It might not be to
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     you. It might be more to Jean-Guy. But in the original
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     proposals that we had for the information gathering, how
     restrictive was our information? Because it's asking us to
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     share -- one of the requests is to share confidential
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     information, and so is that something that we would have to
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     go back and ask the folks that have already allowed the
     information to be brought forward, that they would feel
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     comfortable having it shared beyond what we have gathered
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     it for?
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                    MR. ALBERT: Through the chair, we haven't
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     gone too much beyond it. I think there's a motion in front
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     of you, or there will be after this presentation. It's a
     little different than what we had proposed, definitely.
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     The original proposal was for us to collect the data and
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     for us to analyze the data and to see if there was enough
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     there to generate a Phase II. So if the motion passes and
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     we're directed to look into this further, that is something
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     that we would definitely have to consider, sharing the
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     information. That would have to be brought forward to
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     anybody who wants to participate.
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                    THE CHAIRPERSON: Any other comments?
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                    I will make a few comments just because
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     Dr. Bokhout, who is our Acting Medical Officer of Health
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     right now was not available to attend today, so we did sit
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     down, and he wanted me to relay some information on his
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     feelings and thoughts on this to the board.
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So, when we did sit down, we both agreed,
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     and I think the board does agree, that a partnership is a
     key part of looking at this type of -- or analyzing the
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     issue itself and that we do -- he felt with ourselves and
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     with the University of Waterloo, there is an opportunity
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     there. And his biggest feeling was the initial stage is
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     something that can be kind of done in a reasonable amount
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     of not time, I guess, but a reasonable amount of low
     financial impact, because we kind of started some of that
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     already. We'd have to kind of regenerate that, I guess,
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     finally.
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                    And then we'd want to talk with the
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     University of Waterloo, and, as in the presentation, there
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     was comments about staff time with our epidemiologist and
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    how they would be a part of the team, and that would be a
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     consideration we'd have to look at to find out where the
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     workload lands.
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                    But that was really his feelings on it is
     the initial first phase is something that could be
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     considered, and it would be a very light impact from a
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     financial perspective. And he thinks there is some
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     interest. And, at the same time, that's where he felt, if
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24 But the big key -- and he was very adamant

25 as well as I agreed with him -- is that there has to be

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26 partners at the table, because this is a -- well, as Board

27 Member Steffler mentioned, this is a bigger issue than just

we were going to move forward, that's where we would start.

28 Huron County. It's a large issue, and having an academic

1 asset that is interested in the subject is a valued asset,

- 2 and if their technology or reading -- I'm not sure if
- 3 they're providing the sensors or whatever, but we think
- 4 it's important that we have not just our own
- 5 epidemiologist, but others outside looking at the
- 6 information that will be collected itself if it gets to the
- 7 next step of Phase II. So the partnership, he felt, was
- 8 extremely important right from Day 1. That's what he
- 9 relayed to me. Any questions about that?
- I do have a few questions here. I will be
- 11 forwarding them to you, Jane, if that's okay, or I'm not
- 12 sure if someone has even given you a copy maybe already.
- MS. WILSON: Yes.
- 14 THE CHAIRPERSON: If you are recording,
- 15 you're not supposed to be recording.
- 16 FEMALE SPEAKER: Oh. I just thought with
- 17 all the other recording devices.
- 18 THE CHAIRPERSON: They asked beforehand.
- 19 FEMALE SPEAKER: Oh, sorry.
- THE CHAIRPERSON: And I appreciate that, but
- 21 there was requests made. That's why I mentioned right in
- 22 the beginning of the meeting that they requested to be
- 23 recording.
- 24 Sorry about that. I got sidetracked because
- 25 I have Karen behind me.
- There were 13 questions that were sent to me
- 27 last evening, actually -- yeah, 13 questions with some
- 28 subsection questions. Some of them, I think, would need

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1 some time for you to answer. I'm not sure if that's
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- 2 something that is best or if you'd like me to try to rifle
- 3 through them.
- 4 MS. WILSON: I think my thought when talking
- 5 to Sandy when she gave them to me was that I could see a
- 6 lot of those questions actually are later in the process
- 7 and would probably be better for us to try, if that works
- 8 for you, and then --
- 9 THE CHAIRPERSON: Yes. Okay.
- MS. WILSON: And then we'll see if we can
- 11 get --
- 12 THE CHAIRPERSON: Okay. As long as you got
- 13 a copy, I think that's the most important. And in saying
- 14 that, there are some very pointed questions, but, at the
- 15 same time, I think some of them fall back on our board, and
- 16 I just received these last night, so I think some of these
- 17 will to come to myself as well.
- Any other questions or comments with regards
- 19 to the presentation of information or of Jean-Guy? Yes.
- MALE SPEAKER: You touched on it, but I
- 21 would like to see -- I mean, based on what the
- 22 recommendation is it does ask for staff time, so I would
- 23 like to see an acknowledgement from administration that we
- 24 have the capacity for staff to bring this into their
- 25 workload without impacting the jobs that they're currently
- 26 completing. So, I mean, it's not directly in the
- 27 recommendation, but I would like to see that.
- MR. HOWARD: Sure.

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1 THE CHAIRPERSON: Any other questions or
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2 comments? We do have a recommendation, and it sounds like

- 3 there might be maybe an added to that of Board Member
- 4 Jewitt. A report would be brought back on the staff asking
- 5 to move forward. Does that sound fair?
- 6 BOARD MEMBER JEWITT: Yes.
- 7 THE CHAIRPERSON: So the recommendation that
- 8 is in front of us is that the Board of Health directs staff
- 9 to obtain additional information for Wind Concerns Ontario,
- 10 the University of Waterloo, the representative related to
- 11 the requests to the health unit to participate in that
- 12 investigation and further that the findings will be
- 13 reported to the board members at a later health board
- 14 meeting and further that a report be brought forward
- 15 identifying staff in that capacity, staffing capacity.
- 16 That's it.
- So do I have a mover for that? Board Member
- 18 Jewitt, Board Member Versteeg. Questions or comments?
- 19 BOARD MEMBER STEFFLER: I still have a
- 20 concern that Middlesex and Lambton and Grey and the other
- 21 counties should be asked to take part in this. I still
- 22 have a big concern there because this is -- as I said, this
- 23 isn't only Huron County wide. I can see it will be a great
- 24 cost here in staff time and whatnot, travel, and I would
- 25 like to see at least these other neighbouring counties be
- 26 involved because I hear it all the dime down in Lambton. I
- 27 hear it in Middlesex, Grey, and Durham, and whatnot. I
- 28 would like to see this presentation be made to them and get

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1 their health units onside as well.
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- THE CHAIRPERSON: Board Member Versteeg:
- BOARD MEMBER VERSTEEG: Thank you, Chair. I
- 4 support this motion, and I think Board Member Steffler's
- 5 concerns are genuine and real, but I think, also, you have
- 6 to start somewhere, creating somewhere, and I think the
- 7 capacity to do as large a study as perhaps Board Member
- 8 Steffler is looking for is maybe looking for a little too
- 9 much. And I think this look to be like a good starting
- 10 point, and we'll have a report back before we proceed on
- 11 what kind of costs and staffing commitment we're looking at
- 12 specifically. At this point, we don't quite know where
- 13 that's going to be for us. So I think this motion is
- 14 probably an appropriate one.
- THE CHAIRPERSON: Board Member Steffler?
- BOARD MEMBER STEFFLER: Yeah, no.
- 17 Certainly, Member Versteeg, I will certainly support the
- 18 motion, but I would like to see it expanded.
- 19 THE CHAIRPERSON: Any other board member
- 20 comments? What I will say, if there are no other comments,
- 21 is that I think Board Member Versteeg has the right idea.
- 22 You have to start somewhere, and then you can start asking
- 23 for other partners to come to the table. I think it's
- 24 extremely important, like I stressed earlier, that there
- 25 will be a relationship right off the get-go with an
- 26 academic institute, and I think that's a strength to even
- 27 looking at this matter.
- Any other questions or comments?

1	Since we don't have a question, all in
2	favour? And that is carried. Thank you very much.
3	MS. WILSON: Thank you very much.
4	THE CHAIRPERSON: I will make a quick
5	acknowledgement. I saw Sarah come in. We did acknowledge
6	that you might be arriving at some point, so we just wanted
7	to let you know that we did talk about your representation
8	at this meeting.
9	Thanks, Scott. We mentioned you earlier,
10	though. We'll go on to actually program reports, and this
11	is the finance committee.
12	Whereupon the audio recording concludes
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