

# Webinar

## ULI Toronto: Noise in the City

Date: March 23, 2022

00:00:36 --> 00:00:40: Hello, good afternoon and welcome as people begin to trickle  
00:00:41 --> 00:00:41: in,  
00:00:41 --> 00:00:44: we're going to run the ULI Toronto membership video before  
00:00:44 --> 00:00:46: we get things going.  
00:01:09 --> 00:01:12: Having the ability to. Exchange stories,  
00:01:12 --> 00:01:16: exchange ideas and really sort of find mentors in the  
00:01:16 --> 00:01:19: industry via ULI was a huge plus for me.  
00:01:19 --> 00:01:21: So one of the things that I first started doing  
00:01:21 --> 00:01:24: with you Ali in terms of active engagement with their  
00:01:24 --> 00:01:25: urban plan program.  
00:01:25 --> 00:01:26: And for me that's they.  
00:01:26 --> 00:01:29: They basically go into schools and work with young people  
00:01:29 --> 00:01:31: in junior high and high school.  
00:01:31 --> 00:01:33: One of the great things about Uli is that it  
00:01:33 --> 00:01:37: provides a great platform for public sector and private sector  
00:01:37 --> 00:01:40: interests to meet with an opportunity to connect with a  
00:01:40 --> 00:01:41: variety of people from a variety of.  
00:01:41 --> 00:01:44: Different disciplines, so I work in real estate development,  
00:01:44 --> 00:01:47: but it's useful and important to get to know people  
00:01:47 --> 00:01:49: in other aspects of city building opportunity,  
00:01:49 --> 00:01:53: get recognition the opportunity to participate in my  
community and  
00:01:53 --> 00:01:56: give back in a way all of those things have  
00:01:56 --> 00:02:00: enhanced my career and I think enhance what I'm able  
00:02:00 --> 00:02:03: to offer the industry. And I'm really excited to be  
00:02:03 --> 00:02:04: part of Uli Toronto.  
00:02:04 --> 00:02:10: And really advancing my leadership skills and fostering my  
connections  
00:02:10 --> 00:02:12: and really just advancing.  
00:02:12 --> 00:02:15: My mission for city building was a young professional new

00:02:15 --> 00:02:17: to the province and I found you,  
 00:02:17 --> 00:02:20: Ali and other kind of similar organizations really helpful in  
 00:02:20 --> 00:02:21: terms of,  
 00:02:21 --> 00:02:23: you know, bridging connections and networking.  
 00:02:23 --> 00:02:28: It's an opportunity to connect with people who have  
 questions,  
 00:02:28 --> 00:02:31: who are who have not quite figured out how to  
 00:02:31 --> 00:02:32: do things,  
 00:02:32 --> 00:02:34: and I liked how hands on you could be as  
 00:02:34 --> 00:02:34: a member.  
 00:02:34 --> 00:02:36: You could get involved immediately.  
 00:02:36 --> 00:02:38: You could volunteer for me.  
 00:02:38 --> 00:02:41: You Ali is one of the greatest organizations in the  
 00:02:41 --> 00:02:42: world and.  
 00:02:42 --> 00:02:45: Certainly in Toronto to connect to learn and to become  
 00:02:45 --> 00:02:49: a part of an organization that really values its people  
 00:02:49 --> 00:02:50: and its members.  
 00:03:04 --> 00:03:07: Thank you our membership video is your invitation to get  
 00:03:08 --> 00:03:09: more involved with you all.  
 00:03:09 --> 00:03:14: I Toronto, the world's largest and most active ULI chapter.  
 00:03:14 --> 00:03:16: A few notes to ULI members of those who are  
 00:03:17 --> 00:03:21: not yet members of some amazing value opportunities that  
 membership.  
 00:03:21 --> 00:03:23: Things that you may not be aware of.  
 00:03:23 --> 00:03:28: First of all, you can access our ULI membership directory  
 00:03:28 --> 00:03:31: across the around the world.  
 00:03:31 --> 00:03:34: Through the global Membership directory,  
 00:03:34 --> 00:03:38: an amazingly powerful networking tool.  
 00:03:38 --> 00:03:41: You can also engage in your like committees.  
 00:03:41 --> 00:03:45: We'll be recruiting for committees by the late spring,  
 00:03:45 --> 00:03:48: so the time to get involved if you're interested in  
 00:03:48 --> 00:03:52: committees is now through the navigator function.  
 00:03:52 --> 00:03:54: As a member, you'll find that.  
 00:03:54 --> 00:03:56: Also, as we return to in person,  
 00:03:56 --> 00:03:59: events increasingly in the coming months,  
 00:03:59 --> 00:04:02: an amazing feature that members have access to is to  
 00:04:02 --> 00:04:06: find out in advance who's going to be in attendance.  
 00:04:06 --> 00:04:09: In fact, you could do that for this event too  
 00:04:09 --> 00:04:13: by checking out the event attendee list in the on  
 00:04:13 --> 00:04:14: the online portal,  
 00:04:14 --> 00:04:20: and finally you Ali has an incredible resource bank for  
 00:04:20 --> 00:04:23: you through knowledge Finder,

00:04:23 --> 00:04:28: some. I'm 75 years of case studies around the world  
00:04:28 --> 00:04:33: that you can find very easily through a very sophisticated  
00:04:33 --> 00:04:35: search engine,  
00:04:35 --> 00:04:37: so there's a few things that that you might not  
00:04:37 --> 00:04:37: know about,  
00:04:37 --> 00:04:40: but we encourage you to become a member.  
00:04:40 --> 00:04:41: Or if you are a member,  
00:04:41 --> 00:04:44: to take advantage of these good afternoon.  
00:04:44 --> 00:04:46: My name is Richard Joy,  
00:04:46 --> 00:04:48: executive director of Yulia Toronto,  
00:04:48 --> 00:04:52: and welcome today's webinar. The noise in the city,  
00:04:52 --> 00:04:54: the art of urban urban acoustics.  
00:04:54 --> 00:04:58: Before we get started, I want to take a moment  
00:04:58 --> 00:05:02: to recognize people who were here before this land was  
00:05:02 --> 00:05:05: settled as a Toronto region based organization,  
00:05:05 --> 00:05:08: you Alli acknowledges and we all acknowledge the land we  
00:05:08 --> 00:05:09: are meeting on.  
00:05:09 --> 00:05:12: Virtually is the traditional territory of many nations,  
00:05:12 --> 00:05:14: including the Mississaugas of the credit,  
00:05:14 --> 00:05:17: the Anishinabek, the Chippewa, the holding,  
00:05:17 --> 00:05:19: the Shawnee and the Wendat peoples.  
00:05:19 --> 00:05:22: And now is home to many diverse First Nation,  
00:05:22 --> 00:05:27: Inuit and native people. We acknowledge that Toronto is  
covered  
00:05:27 --> 00:05:30: by Treaty 13 with the Mississaugas of the credit.  
00:05:30 --> 00:05:31: We are all treaty people.  
00:05:31 --> 00:05:33: Many of us have come here as settlers,  
00:05:33 --> 00:05:37: immigrants and newcomers in this generation are  
generations past.  
00:05:37 --> 00:05:41: You will. I Toronto stands in solidarity with indigenous  
communities  
00:05:41 --> 00:05:44: demanding action and accountability for the ongoing legacy  
of the  
00:05:45 --> 00:05:46: residential school system.  
00:05:46 --> 00:05:49: We'd also like to acknowledge and honor those who come  
here involuntarily,  
00:05:49 --> 00:05:50: particularly descendants from those who brought here  
through enslavement to  
00:05:54 --> 00:05:57: better understand the meaning behind it's land  
acknowledgement.  
00:05:57 --> 00:06:01: We recommend some of the programs that we'll be putting  
00:06:01 --> 00:06:05: into the chat that you can see for free through  
00:06:05 --> 00:06:05: YouTube.

00:06:05 --> 00:06:09: You are Toronto is working with sister organizations in the  
00:06:09 --> 00:06:12: Toronto region to support a local effort in response to  
00:06:12 --> 00:06:15: the escalating crisis of the war in the Ukraine next  
00:06:15 --> 00:06:18: week, April 1st. We have a free webinar we just  
00:06:18 --> 00:06:21: put that up and the link will be posted on  
00:06:21 --> 00:06:25: how our industry can support the growing relief effort,  
00:06:25 --> 00:06:27: including initiatives here in the Toronto region.  
00:06:27 --> 00:06:31: As the refugee and immigration waves arrive here in Canada.  
00:06:31 --> 00:06:34: In the interim, you can immediately support one of two  
00:06:34 --> 00:06:35: fundraising campaigns,  
00:06:35 --> 00:06:39: the Canadian Ukrainian Foundation and the Red Cross of  
Canada.  
00:06:39 --> 00:06:43: The links will be provided in the chat.  
00:06:43 --> 00:06:48: Lastly, I'd like to acknowledge today's event in all ULI.  
00:06:48 --> 00:06:52: Today's event in audio like program would not be possible  
00:06:52 --> 00:06:55: without the generous support of our annual sponsors.  
00:06:55 --> 00:06:58: We'd like to thank all the sponsors for their support  
00:06:58 --> 00:06:59: now more than ever.  
00:06:59 --> 00:07:02: You Ally Toronto relies on the support of the sponsors  
00:07:02 --> 00:07:05: to put on high quality programming and to drive our  
00:07:05 --> 00:07:08: mission to shape the future of the built environment for  
00:07:08 --> 00:07:12: transformative impact in communities worldwide to all of  
them,  
00:07:12 --> 00:07:15: we say thank you. It is now my pleasure to  
00:07:15 --> 00:07:19: turn the remainder of the program over to another.  
00:07:19 --> 00:07:25: Richard Richard Witt principal at BDP Quadrangle and  
Pasteurella Toronto  
00:07:25 --> 00:07:26: board member.  
00:07:26 --> 00:07:29: His information and the information of our other speakers will  
00:07:29 --> 00:07:32: be in the chat function to speed things up.  
00:07:32 --> 00:07:34: Richard over to you and thank you for doing this.  
00:07:35 --> 00:07:38: Thank you very much. Richard J.  
00:07:38 --> 00:07:40: Today we're going to be discussing many things,  
00:07:40 --> 00:07:43: but we're going to start with an introduction from Nicholas  
00:07:43 --> 00:07:44: Silvestre Williams.  
00:07:44 --> 00:07:48: Nicholas is a principal at Acoustics Engineering Limited,  
00:07:48 --> 00:07:50: so we're going to listen to everything that has to  
00:07:50 --> 00:07:52: say and all the insights and that's going to be  
00:07:52 --> 00:07:55: followed by a panel discussion with all of our panelists.  
00:07:59 --> 00:08:00: Thank you very much, Richard,  
00:08:00 --> 00:08:03: I appreciate that. So you know,  
00:08:03 --> 00:08:06: I think you as well for the opportunity to speak  
00:08:06 --> 00:08:07: on urban acoustics.

00:08:07 --> 00:08:08: For those who don't know me,  
 00:08:08 --> 00:08:10: air Acoustics is an engineering consulting firm,  
 00:08:10 --> 00:08:12: and we specialize solely in acoustics,  
 00:08:12 --> 00:08:15: noise, and vibration. It's all we do and a lot  
 00:08:15 --> 00:08:17: of familiarity in this.  
 00:08:17 --> 00:08:19: We live in the city we live in the Toronto.  
 00:08:19 --> 00:08:21: We live in the Greater Toronto area,  
 00:08:21 --> 00:08:24: the GTA, Ontario. However, you wanna look at it.  
 00:08:24 --> 00:08:27: It is growing. It is big and noise is an  
 00:08:27 --> 00:08:28: issue.  
 00:08:28 --> 00:08:30: If it can get the next slide.  
 00:08:30 --> 00:08:33: I wanna just start with a couple of the developments  
 00:08:33 --> 00:08:35: that we have had in the city.  
 00:08:35 --> 00:08:38: You know, you see news about what's happening and people  
 00:08:38 --> 00:08:41: think that this growing and this expansion and this need  
 00:08:41 --> 00:08:44: for housing is new but young and Shepherd sent as  
 00:08:44 --> 00:08:46: an example of a project is is quite a number  
 00:08:47 --> 00:08:47: of years now.  
 00:08:47 --> 00:08:51: It's been established we can get the next slide.  
 00:08:51 --> 00:08:53: I'm gonna go through these pretty quickly.  
 00:08:53 --> 00:08:56: We have in mostly development VMC,  
 00:08:56 --> 00:08:59: again an amazing project that has.  
 00:08:59 --> 00:09:04: Consolidated office residential. So much mixed use rental  
 and of  
 00:09:04 --> 00:09:06: course we had the transit,  
 00:09:06 --> 00:09:09: the Metrolink, the subway, that all extends there,  
 00:09:09 --> 00:09:12: and you have 10s of thousands if not hundreds of  
 00:09:12 --> 00:09:16: thousands of people in this new area all living together,  
 00:09:16 --> 00:09:20: all intermingling and noise is going to become an issue.  
 00:09:20 --> 00:09:22: We can get the next slide.  
 00:09:22 --> 00:09:25: Looking to the future same thing in Brampton.  
 00:09:25 --> 00:09:29: You have the Brampton shoppers world redevelopment and  
 again completely  
 00:09:29 --> 00:09:33: redefining the area and bringing 10s of thousands of people  
 00:09:33 --> 00:09:35: into an area that you have to live together.  
 00:09:35 --> 00:09:38: We have to be harmonious and we can't be quiet  
 00:09:38 --> 00:09:41: because things need to be planned.  
 00:09:41 --> 00:09:43: Things need to be constructed and then you need to  
 00:09:43 --> 00:09:43: live there together.  
 00:09:43 --> 00:09:46: I'm going to touch upon each of these next slide.  
 00:09:48 --> 00:09:49: I'm going to just take a minute,  
 00:09:49 --> 00:09:52: let you read this joke because it's pretty relevant to

00:09:52 --> 00:09:53: me.

00:09:59 --> 00:10:01: And in radio they say never have dead air,

00:10:01 --> 00:10:04: but normally I can tell by my audience in a

00:10:04 --> 00:10:07: live audience if people laugh at this but.

00:10:07 --> 00:10:08: I hope you had a chuckle,

00:10:08 --> 00:10:11: and despite the humor of it,

00:10:11 --> 00:10:15: it is really telling because noise sound,

00:10:15 --> 00:10:17: which is the physical quantity,

00:10:17 --> 00:10:21: is very personal. People react very differently to things and

00:10:21 --> 00:10:23: what one person doesn't like.

00:10:23 --> 00:10:26: One person will have an issue with.

00:10:26 --> 00:10:28: It is dynamic and we can't.

00:10:28 --> 00:10:31: We often cannot just sort of take a broad brush

00:10:31 --> 00:10:33: and say this is good.

00:10:33 --> 00:10:36: This is bad because that's how varying it is in

00:10:36 --> 00:10:37: our responses to noise.

00:10:37 --> 00:10:38: If we go to the next slide.

00:10:41 --> 00:10:43: This is an example. I think most of us have

00:10:43 --> 00:10:44: this experience,

00:10:44 --> 00:10:48: a ticking clock dripping tap in a hotel room,

00:10:48 --> 00:10:51: or maybe in your own bedroom that keeps you awake.

00:10:51 --> 00:10:53: It's not very loud, but you hear it.

00:10:53 --> 00:10:56: You know that that cricket that's buzzing any type of

00:10:56 --> 00:10:58: noise like that could disturb you.

00:10:58 --> 00:11:01: Whereas we have people. I myself live very close to

00:11:01 --> 00:11:02: the roads.

00:11:02 --> 00:11:03: I have a fire station next to me.

00:11:03 --> 00:11:07: It's not a problem whatsoever because that become

00:11:07 --> 00:11:07: it.

00:11:07 --> 00:11:09: So you can see it's not just about how loud

00:11:09 --> 00:11:11: things are and we're going to touch upon some of

00:11:11 --> 00:11:12: that.

00:11:12 --> 00:11:14: It is very much what do you expect.

00:11:14 --> 00:11:15: What are you comfortable with?

00:11:15 --> 00:11:18: What are you used to versus what are the abnormal?

00:11:18 --> 00:11:20: And I'm not suggesting in any way we can change

00:11:21 --> 00:11:23: all the rules because that would never be managed.

00:11:23 --> 00:11:27: But do understand that the human response to noise is

00:11:27 --> 00:11:29: incredibly complicated,

00:11:29 --> 00:11:30: so I love this field.

00:11:30 --> 00:11:35: Next slide, please. This is a snapshot of the downtown

00:11:35 --> 00:11:38: and just what it looks like.

00:11:38 --> 00:11:41: Many of those buildings in new and I only took

00:11:41 --> 00:11:42: this.

00:11:42 --> 00:11:43: I think it was the middle of the day so

00:11:43 --> 00:11:45: the traffic on the gardener looks fantastic,

00:11:45 --> 00:11:47: but you can see the highway.

00:11:47 --> 00:11:49: You can see the rail lines.

00:11:49 --> 00:11:51: You can see all the roads that we have in

00:11:51 --> 00:11:53: the city and at the end of the day when

00:11:53 --> 00:11:56: you live in a city you are going to get

00:11:56 --> 00:11:59: noise. It is inevitable. I'm going to touch upon some

00:11:59 --> 00:12:02: of the issues that we deal with and where they've

00:12:02 --> 00:12:03: come from,

00:12:03 --> 00:12:06: but. For for you being here,

00:12:06 --> 00:12:08: you need to understand that noises.

00:12:08 --> 00:12:12: Normal sound is normal and in some ways we have

00:12:12 --> 00:12:14: to get very used to it.

00:12:14 --> 00:12:15: We can have the next slide please.

00:12:18 --> 00:12:20: So in real estate and land use planning,

00:12:20 --> 00:12:22: which is the audience here?

00:12:22 --> 00:12:23: What do we want to talk about?

00:12:23 --> 00:12:26: We have noise as an engineering consultant.

00:12:26 --> 00:12:29: We have noise as it comes to planning how you

00:12:29 --> 00:12:30: locate a site,

00:12:30 --> 00:12:32: we deal with noise as you construct the building or

00:12:32 --> 00:12:35: buildings and then finally the people who live there.

00:12:35 --> 00:12:38: The designers and architects have to make sure that it's

00:12:38 --> 00:12:41: comfortable for those living in the space and it's very

00:12:41 --> 00:12:41: easy to say.

00:12:41 --> 00:12:44: Well planning, put it in the quietest place possible that's

00:12:44 --> 00:12:45: never going to happen.

00:12:45 --> 00:12:47: We sort of ran out of the best spots in

00:12:47 --> 00:12:48: most of the cities.

00:12:48 --> 00:12:51: Writing number of years ago in construction,

00:12:51 --> 00:12:53: you can't build things quietly.

00:12:53 --> 00:12:54: That's not going to happen,

00:12:54 --> 00:12:57: and it's how do you manage it?

00:12:57 --> 00:12:59: And then in design, everyone wants a beautiful,

00:12:59 --> 00:13:01: quiet space, but one has to understand.

00:13:01 --> 00:13:04: With density it means someone's living above you below you

00:13:04 --> 00:13:07: underneath side of you and you certainly don't want to

00:13:07 --> 00:13:09: be the problem and you hope that someone else isn't

00:13:09 --> 00:13:12: the problem. So let's touch upon how all of these

00:13:12 --> 00:13:13: things affect us.

00:13:13 --> 00:13:17: Next slide, please. This is just an excerpt of the

00:13:17 --> 00:13:21: City of Toronto planning terms of reference for a noise

00:13:21 --> 00:13:22: study,

00:13:22 --> 00:13:24: and if we just sort of read,

00:13:24 --> 00:13:25: you know, we have to.

00:13:25 --> 00:13:28: I have to identify all the noise from airports,

00:13:28 --> 00:13:33: transportation, rail industries, everything that makes noise.

00:13:33 --> 00:13:35: That's a good thing. We certainly want to make sure

00:13:35 --> 00:13:37: we look at the noise if we think it's an

00:13:37 --> 00:13:37: issue,

00:13:37 --> 00:13:40: but I want you to understand how all encompassing a

00:13:40 --> 00:13:43: noise study is in planning and the planners will contact

00:13:43 --> 00:13:45: when the developers will contact me and say we have

00:13:45 --> 00:13:46: to do all of this.

00:13:46 --> 00:13:48: We have to get all this information.

00:13:48 --> 00:13:51: And there are a lot of legacy rules around that

00:13:51 --> 00:13:53: have existed since the early 70s,

00:13:53 --> 00:13:57: and even before. It's applicable,

00:13:57 --> 00:13:59: but I want you to know that.

00:13:59 --> 00:14:01: This is what's looked at next slide,

00:14:01 --> 00:14:06: please. Again, an idea if you can,

00:14:06 --> 00:14:07: just from City of Ottawa.

00:14:07 --> 00:14:11: But if you were doing a single building again,

00:14:11 --> 00:14:15: roads, rail transit aircraft if applicable,

00:14:15 --> 00:14:15: I need to look at that.

00:14:15 --> 00:14:17: In those I need to look at that outdoors.

00:14:17 --> 00:14:20: You can see how encompassing because next slide.

00:14:23 --> 00:14:28: This is an example. Of future planning along Eglinton East.

00:14:28 --> 00:14:30: You can see there are.

00:14:30 --> 00:14:33: 10 new developments just in this one photo alone that

00:14:33 --> 00:14:34: are coming,

00:14:34 --> 00:14:37: and each of these developers need to do noise studies

00:14:37 --> 00:14:38: need to retain staff.

00:14:38 --> 00:14:40: Get all of this information in.

00:14:40 --> 00:14:43: They have to contact all of these institutions to get

00:14:43 --> 00:14:45: the information so you can see the amount of work

00:14:45 --> 00:14:47: that goes into this and I will put forward that

00:14:47 --> 00:14:50: there are absolutely ways that this can be improved.

00:14:50 --> 00:14:53: This can be made more efficient because we know we

00:14:53 --> 00:14:54: live in a city.



00:14:54 --> 00:14:58: We know that people want to live on Eglington where  
00:14:58 --> 00:15:00: their rapid transit is coming.  
00:15:00 --> 00:15:02: But now as a noise consultant,  
00:15:02 --> 00:15:03: I'm sometimes asked to see,  
00:15:03 --> 00:15:05: well, it might be too noisy,  
00:15:05 --> 00:15:07: so that's not a good place for development.  
00:15:07 --> 00:15:10: There are these inconsistencies that happen during planning  
and,  
00:15:10 --> 00:15:12: and we need to find ways to address that next  
00:15:12 --> 00:15:13: slide,  
00:15:13 --> 00:15:17: please. I do want to touch on the gentle credit  
00:15:17 --> 00:15:19: to the provincial government.  
00:15:19 --> 00:15:22: An attempt was made to update some of the planning  
00:15:22 --> 00:15:23: documents.  
00:15:23 --> 00:15:24: It did not go very well.  
00:15:24 --> 00:15:27: I'm certainly happy to chat with anyone about that,  
00:15:27 --> 00:15:30: but some initiatives have been done and I think we  
00:15:30 --> 00:15:32: need to look at it because a lot of the  
00:15:32 --> 00:15:36: initiatives that we still have today are very industry focused  
00:15:36 --> 00:15:39: and you can't go a day without seeing the need  
00:15:39 --> 00:15:43: for new housing development in the province and we have  
00:15:43 --> 00:15:46: to somehow find a way to make compatibility work.  
00:15:46 --> 00:15:50: I'm simply saying industry and commercials incompatible with  
residential.  
00:15:50 --> 00:15:52: I don't believe it's correct that they they can be  
00:15:53 --> 00:15:53: made compatible.  
00:15:53 --> 00:15:56: They're just other things that need to change in that  
00:15:56 --> 00:15:56: system.  
00:15:56 --> 00:16:01: Next slide, please. We're gonna move to construction noise  
so  
00:16:01 --> 00:16:03: things have been planned.  
00:16:03 --> 00:16:06: Now you're building and now everyone complains.  
00:16:06 --> 00:16:07: You get the number, you get.  
00:16:07 --> 00:16:10: The people probably, rightfully oh.  
00:16:10 --> 00:16:12: I would say rightfully complaining about the trucks happening  
in  
00:16:12 --> 00:16:13: concrete.  
00:16:13 --> 00:16:18: Pouring the backup beepers, but you can't build without  
noise.  
00:16:18 --> 00:16:20: There is a certain amount or certain degree of acceptance.  
00:16:20 --> 00:16:25: We have to have as a society in that.  
00:16:25 --> 00:16:26: My sister lives at young and egg.  
00:16:26 --> 00:16:28: I speak with her often and she's reached out to

00:16:28 --> 00:16:31: me many times on what can be done for certain  
00:16:31 --> 00:16:31: issues.  
00:16:31 --> 00:16:34: My first condo was that young and Finch and again  
00:16:34 --> 00:16:35: we had to.  
00:16:35 --> 00:16:37: We were in phase two and phase three was being  
00:16:37 --> 00:16:38: built.  
00:16:38 --> 00:16:42: I didn't mind it, but my wife certainly didn't.  
00:16:42 --> 00:16:45: These things have to be accommodated and I think we  
00:16:45 --> 00:16:47: we do need a lot of education here in the  
00:16:47 --> 00:16:50: city and understanding that listen if we want progress and  
00:16:50 --> 00:16:52: you live in a city.  
00:16:52 --> 00:16:55: This is inevitable. I think it's unreasonable to say I  
00:16:55 --> 00:16:58: want silence and birds sounds on a Sunday morning,  
00:16:58 --> 00:17:01: absolutely, but on a Friday afternoon I think there's a  
00:17:01 --> 00:17:04: certain amount that has to change in public perception.  
00:17:04 --> 00:17:06: Having said that, if I can get the next slide.  
00:17:10 --> 00:17:12: This is all sorry this is next slide,  
00:17:12 --> 00:17:14: but this is an example of again of a headline  
00:17:14 --> 00:17:16: and actually even though they show a condo development,  
00:17:16 --> 00:17:20: it's particular headline was discussing some of the municipal  
projects  
00:17:20 --> 00:17:21: that we're going.  
00:17:21 --> 00:17:22: If I can get the next slide,  
00:17:22 --> 00:17:26: please. Thank you as an example of of ways  
00:17:26 --> 00:17:28: that we can accommodate.  
00:17:28 --> 00:17:31: We've we're seeing it in a lot of the provincial  
00:17:31 --> 00:17:31: projects,  
00:17:31 --> 00:17:35: construction noise. They're imposing limits on noise.  
00:17:35 --> 00:17:38: They're going above and beyond many of the requirements.  
00:17:38 --> 00:17:42: We're even seeing private developers now instituting noise  
monitoring,  
00:17:42 --> 00:17:44: so we know even if it gets too loud,  
00:17:44 --> 00:17:45: you can make noise. You need to make,  
00:17:45 --> 00:17:47: but if it gets too loud,  
00:17:47 --> 00:17:49: things happen. Work is stopped,  
00:17:49 --> 00:17:51: triggers occur, there's complete forms.  
00:17:51 --> 00:17:54: There's lots of issues, and I would certainly encourage any  
00:17:54 --> 00:17:55: developers here.  
00:17:55 --> 00:17:58: Look into these systems. There are fantastic ways of working  
00:17:58 --> 00:18:00: with the community on it.  
00:18:00 --> 00:18:02: They are steps that can be done.  
00:18:02 --> 00:18:05: So while I say construction noise must happen and must  
00:18:05 --> 00:18:05: be allowed,

00:18:05 --> 00:18:09: they're always there with the community and their technologies that

00:18:09 --> 00:18:10: will never eliminate.

00:18:10 --> 00:18:13: But they are technologies that can reduce construction noise,

00:18:13 --> 00:18:15: reduce the disturbance of people.

00:18:15 --> 00:18:18: It does require engagement and education.

00:18:18 --> 00:18:22: Next slide, please. Now I'm going to move to living

00:18:22 --> 00:18:25: in the building and again this is.

00:18:25 --> 00:18:29: This is the topic I can easily spend an entire

00:18:29 --> 00:18:30: hour talking about.

00:18:30 --> 00:18:32: You move into a a high rise.

00:18:32 --> 00:18:35: You move into a place where people are living above

00:18:35 --> 00:18:35: you.

00:18:35 --> 00:18:37: Below you left and right of you.

00:18:37 --> 00:18:39: No one wants to go in.

00:18:39 --> 00:18:41: I hope and and here they're neighbors doing things.

00:18:41 --> 00:18:44: That's certainly not the intent,

00:18:44 --> 00:18:46: but I think there needs to be a lot of

00:18:46 --> 00:18:49: education here on what people can do and what living

00:18:50 --> 00:18:50: is like.

00:18:50 --> 00:18:53: We're seeing people coming in and we're seeing a lot

00:18:53 --> 00:18:54: of complaints.

00:18:54 --> 00:18:56: And I have had just some of them.

00:18:56 --> 00:18:59: Lots of hotels, hearing your neighbor,

00:18:59 --> 00:19:01: lots of condos, people hearing.

00:19:01 --> 00:19:04: Amorous events let's leave it at that.

00:19:04 --> 00:19:09: Another notable 1A fellow fantastic musician practiced about

00:19:09 --> 00:19:10: five hours

00:19:09 --> 00:19:10: a day.

00:19:10 --> 00:19:13: Needless to say, his neighbors below him were not

00:19:13 --> 00:19:14: particularly

00:19:13 --> 00:19:14: impressed.

00:19:14 --> 00:19:16: You do need to realize where you're living in,

00:19:16 --> 00:19:19: and I think going even further than that,

00:19:19 --> 00:19:22: some of the sales need to make people understand this

00:19:22 --> 00:19:25: is what high density living is all about.

00:19:25 --> 00:19:28: Having said that, we have seen changes in designs over

00:19:29 --> 00:19:29: the years.

00:19:29 --> 00:19:34: The Ontario Building Code sound and Transmission section

00:19:34 --> 00:19:37: was changed

00:19:34 --> 00:19:37: a couple of years ago and I'm certain that it

00:19:37 --> 00:19:41: will incredibly elevate the standards that we get today.

00:19:41 --> 00:19:43: There are more changes that are going to be coming

00:19:43 --> 00:19:46: over the next few years that the engineers and scientists  
00:19:46 --> 00:19:47: are working on,  
00:19:47 --> 00:19:50: but we are seeing things move up regardless of that  
00:19:50 --> 00:19:50: fact.  
00:19:50 --> 00:19:53: We do need to understand that there are things that  
00:19:53 --> 00:19:56: need to be done by the people while the construction  
00:19:56 --> 00:19:58: also keeps up with it.  
00:19:58 --> 00:20:04: Next slide, please. This is a bit of a issue  
00:20:04 --> 00:20:06: because,  
00:20:06 --> 00:20:08: as mentioned we don't have.  
00:20:08 --> 00:20:09: We don't have land left.  
00:20:09 --> 00:20:12: People want privacy in their internal spaces.  
00:20:12 --> 00:20:14: Well, we look at again the top photo.  
00:20:14 --> 00:20:21: Your typical balcony door window looking out into the  
outside.  
00:20:21 --> 00:20:23: And then it it's real I.  
00:20:23 --> 00:20:26: I've worked on projects that are overlooking the garden.  
00:20:26 --> 00:20:27: I've actually had people tell me no.  
00:20:27 --> 00:20:29: I like living here, so I think some of the  
00:20:29 --> 00:20:31: rules going back even to the early planning stages,  
00:20:31 --> 00:20:35: are that you can absolutely have people who like that  
00:20:35 --> 00:20:35: noise.  
00:20:35 --> 00:20:38: Having said that, there are absolutely people who do not  
00:20:38 --> 00:20:41: want to hear things and the developers can look at  
00:20:41 --> 00:20:41: it and say no,  
00:20:41 --> 00:20:45: well, we do have options for better facades,  
00:20:45 --> 00:20:49: better glazing, better windows. The second point,  
00:20:49 --> 00:20:52: the STC. Again, I apologize for the technical terms,  
00:20:52 --> 00:20:55: but this was the big code change that happened and  
00:20:55 --> 00:20:56: all designers and architects,  
00:20:56 --> 00:21:00: engineers, builders everyone is getting much better.  
00:21:00 --> 00:21:03: I have actually had quite a number of developers and  
00:21:03 --> 00:21:05: pretty happy to say that you know no one wants  
00:21:05 --> 00:21:06: to work for the code minimum.  
00:21:06 --> 00:21:09: They absolutely need to meet code minimum,  
00:21:09 --> 00:21:11: but a number of developers have come in and said  
00:21:11 --> 00:21:12: well,  
00:21:12 --> 00:21:14: no, we want to make sure that we can sell  
00:21:14 --> 00:21:15: better units,  
00:21:15 --> 00:21:18: more expensive units sometimes. But then we're going to  
build  
00:21:18 --> 00:21:18: it.

00:21:18 --> 00:21:22: Even higher and higher acoustic privacy and you don't hear  
00:21:22 --> 00:21:23: the elevators.  
00:21:23 --> 00:21:25: You're not going to hear the sounds,  
00:21:25 --> 00:21:29: and this is certainly possible without significantly increasing costs.  
00:21:29 --> 00:21:32: But there is a cost aspect to it that you  
00:21:32 --> 00:21:33: can't ignore.  
00:21:33 --> 00:21:40: Next slide, please. I'm finishing on this one because owners  
00:21:40 --> 00:21:41: are important.  
00:21:41 --> 00:21:44: I I've lived in condos I I many many many  
00:21:44 --> 00:21:46: of my friends live in condos.  
00:21:46 --> 00:21:50: We've we've gone through the process of buying condos,  
00:21:50 --> 00:21:54: rental apartments and again I get about a call a  
00:21:54 --> 00:21:54: week.  
00:21:54 --> 00:21:57: I would say one call a week 50 calls a  
00:21:57 --> 00:22:01: year and people who have rented or bought or moved  
00:22:01 --> 00:22:02: in.  
00:22:02 --> 00:22:04: And it usually comes down to Nicholas.  
00:22:04 --> 00:22:07: This particular noise is a problem and.  
00:22:09 --> 00:22:11: You don't wanna hire an acoustic engineer.  
00:22:11 --> 00:22:13: Yes, I know I'm saying that you don't want to  
00:22:13 --> 00:22:15: hire an acoustic engineer to go through a ridiculous testing  
00:22:15 --> 00:22:17: when a lot of things can be dealt with with  
00:22:17 --> 00:22:21: conversation. Invariably designs meet code,  
00:22:21 --> 00:22:24: they meet code, and people are doing things that are  
00:22:24 --> 00:22:25: a bit ridiculous.  
00:22:25 --> 00:22:29: So really you do need to have conversations when buying  
00:22:29 --> 00:22:32: what understanding living in a community means.  
00:22:32 --> 00:22:33: And I don't just mean within your place,  
00:22:33 --> 00:22:36: there are again, we've seen it before where dogs are  
00:22:36 --> 00:22:38: outside and we are taking a lot of people.  
00:22:38 --> 00:22:41: Being out walking the dogs and someone else is complaining  
00:22:41 --> 00:22:42: about a barking dog.  
00:22:42 --> 00:22:44: I've seen it with garbage trucks.  
00:22:44 --> 00:22:46: I can't believe there's a garbage coming to my building  
00:22:46 --> 00:22:48: and it's beeping and making noise.  
00:22:48 --> 00:22:51: And sorry, but that's how you remove garbage from a  
00:22:51 --> 00:22:52: building.  
00:22:52 --> 00:22:54: These are the types of things that we do need  
00:22:54 --> 00:22:57: to sort of get people changing and understanding.  
00:22:57 --> 00:22:58: Thank you next slide please.  
00:23:00 --> 00:23:04: So in closing. Within 15 minutes I wanted to touch

00:23:04 --> 00:23:07: upon the issues and I hope that you have a  
00:23:07 --> 00:23:10: lot of questions for us because you can see how  
00:23:10 --> 00:23:12: the noise, the acoustics, noise,  
00:23:12 --> 00:23:15: and vibration have their impact in the early planning stages  
00:23:15 --> 00:23:18: have their impact during the construction and things that can  
00:23:18 --> 00:23:21: be done and then have the impact on living together.  
00:23:21 --> 00:23:24: It is a very complex topic that.  
00:23:24 --> 00:23:28: People get incredibly emotional about I.  
00:23:28 --> 00:23:31: I am always here to help on the science,  
00:23:31 --> 00:23:34: but I think dialogue is first and foremost the best  
00:23:34 --> 00:23:38: solution to many of these engineering problems.  
00:23:38 --> 00:23:38: Thank you.  
00:23:42 --> 00:23:47: Great thank you, Nicholas. Some excellent insights and I  
00:23:47 --> 00:23:50: think  
00:23:47 --> 00:23:50: many of us can associate with.  
00:23:50 --> 00:23:52: Sorry many of us can associate with the leaf blower  
00:23:52 --> 00:23:53: thing.  
00:23:53 --> 00:23:57: Everyone hates a leaf blower blowing.  
00:23:57 --> 00:23:59: I would like to introduce the panel.  
00:23:59 --> 00:24:01: I'm just going to read out briefly the the BIOS  
00:24:01 --> 00:24:05: for everyone are in the chat function with us today.  
00:24:05 --> 00:24:08: We have Jennifer arises. Who's vice president of  
00:24:08 --> 00:24:10: development at  
00:24:08 --> 00:24:10: First Capital Reef Alton Grant,  
00:24:10 --> 00:24:14: who's executive director of municipal Licensing and  
00:24:14 --> 00:24:15: standards of the  
00:24:14 --> 00:24:15: City of Toronto.  
00:24:15 --> 00:24:17: Do you wanna Curvin vice president,  
00:24:17 --> 00:24:21: external approvals and implementation crosslinks allows me.  
00:24:21 --> 00:24:28: Nicholas Sylvester Williams principal at acoustics  
00:24:28 --> 00:24:32: engineering Acoustics Engineering limited.  
00:24:28 --> 00:24:32: Just heard from. Very sort of interesting things that that  
00:24:32 --> 00:24:33: you raised there.  
00:24:33 --> 00:24:36: Nick. Lots of discussion. I took some notes here.  
00:24:36 --> 00:24:39: Lots of discussion about noise being normal.  
00:24:39 --> 00:24:41: Sound is normal. We have to get used to it.  
00:24:41 --> 00:24:44: Things about planning and consistencies,  
00:24:44 --> 00:24:49: compatibility, can't you know? We can't build without noise  
00:24:49 --> 00:24:50: and  
00:24:49 --> 00:24:50: I,  
00:24:50 --> 00:24:54: you know, anecdotally, my experience has been that the  
00:24:54 --> 00:24:57: development  
00:24:54 --> 00:24:57: community really wants to avoid noise in and finished product

00:24:57 --> 00:24:58: because that's the.

00:24:58 --> 00:25:01: The number one source of of complaints from residents and

00:25:01 --> 00:25:04: it's it's quite difficult and it's very expensive to go

00:25:04 --> 00:25:06: back in and fix it afterwards.

00:25:06 --> 00:25:08: So getting the design done,

00:25:08 --> 00:25:12: done right up front tends to be better.

00:25:12 --> 00:25:14: An ounce of prevention is worth a pound of cure

00:25:15 --> 00:25:15: as they say,

00:25:15 --> 00:25:18: but I think that sort of leads us straight to

00:25:18 --> 00:25:21: Alton and what what are the biggest complaints that you

00:25:21 --> 00:25:21: hear?

00:25:21 --> 00:25:25: What? What should people's expectations be around noise

00:25:25 --> 00:25:25: that they

00:25:25 --> 00:25:25: encounter?

00:25:28 --> 00:25:30: Yeah, great question. Richard and Nicholas.

00:25:30 --> 00:25:31: Thank you for that presentation you have.

00:25:31 --> 00:25:33: I have contact an issue.

00:25:33 --> 00:25:35: This is and I think that's really important for the

00:25:35 --> 00:25:36: audience.

00:25:36 --> 00:25:39: Noise is in our top five complaints in the city,

00:25:39 --> 00:25:45: the biggest complaints being around construction and being

00:25:45 --> 00:25:48: around amplified

00:25:45 --> 00:25:48: count over the last since 2018 was complaints are over

00:25:48 --> 00:25:52: 17,000 in the city which is an increase of 164%

00:25:52 --> 00:25:54: in the in the last you know,

00:25:54 --> 00:25:56: 340 years, so it's significant.

00:25:56 --> 00:25:59: It impacts people. People need to be aware of their

00:25:59 --> 00:25:59: community.

00:25:59 --> 00:26:02: They need to turn their minds to to managing as

00:26:02 --> 00:26:03: as as Nicholas says,

00:26:03 --> 00:26:07: managing the noise, mitigating it where you can,

00:26:07 --> 00:26:10: understanding your part of a community and how can you

00:26:10 --> 00:26:13: work together to to minimize the noise we we all

00:26:13 --> 00:26:13: agree.

00:26:13 --> 00:26:18: Infrastructure development and housing development is

00:26:18 --> 00:26:20: really important right now,

00:26:18 --> 00:26:20: but we need to do it in a way that's

00:26:20 --> 00:26:21: mindful of the Community.

00:26:22 --> 00:26:26: Thank you know it raises a good point and Jennifer

00:26:26 --> 00:26:30: is probably positioned quite well to to respond to,

00:26:30 --> 00:26:32: you know what's being done because I remember the,

00:26:32 --> 00:26:34: you know the good old days so you know,

00:26:34 --> 00:26:35: not that I'm not old,

00:26:35 --> 00:26:36: of course, but you know,

00:26:36 --> 00:26:38: trying to 20 years ago when the city was filled

00:26:38 --> 00:26:41: with surface parking and you could just show up and

00:26:41 --> 00:26:43: put up a nice tower and that wasn't going to

00:26:43 --> 00:26:44: be too close to anything.

00:26:44 --> 00:26:46: Now all the sites are collected.

00:26:46 --> 00:26:47: All the sites are difficult there.

00:26:47 --> 00:26:50: You know around the highway in the face of First

00:26:50 --> 00:26:50: Capital.

00:26:50 --> 00:26:52: Quite a lot of them are very close to.

00:26:52 --> 00:26:54: Rail as well, which is quite noisy.

00:26:54 --> 00:26:57: So what are some of the things that you're doing

00:26:57 --> 00:27:00: to improve noise pollution for building residents?

00:27:01 --> 00:27:04: Yeah, thanks Richard and hi everyone.

00:27:04 --> 00:27:07: So you know, given our structure as First Capital we

00:27:07 --> 00:27:08: are reached.

00:27:08 --> 00:27:10: So the way we're set up is that we tend

00:27:10 --> 00:27:13: to favor a purpose built rental projects and we also

00:27:13 --> 00:27:15: prefer to hold these assets long term and that the

00:27:15 --> 00:27:19: reason I'm saying that is because we make design decisions

00:27:19 --> 00:27:23: at the outset of a project to ensure that long

00:27:23 --> 00:27:25: term viability of the building.

00:27:25 --> 00:27:27: So as Nicholas mentioned, you know that might mean higher

00:27:28 --> 00:27:28: cost up front.

00:27:28 --> 00:27:31: So for instance in past experience.

00:27:31 --> 00:27:35: That we have been constructing adjacent to a rail corridor.

00:27:35 --> 00:27:38: We know that the building envelope presents a huge

00:27:38 --> 00:27:40: opportunity

00:27:40 --> 00:27:42: for noise attenuation,

00:27:42 --> 00:27:42: so this includes you know higher STC ratings on the

00:27:42 --> 00:27:45: glass.

00:27:45 --> 00:27:47: And how do you doors that are fronting along a

00:27:47 --> 00:27:51: noise source like a real corridor,

00:27:51 --> 00:27:55: fewer glazed openings altogether and replacing that with,

00:27:55 --> 00:27:58: you know more solid masonry material to dampen the sound.

00:27:58 --> 00:28:01: To go even further than you know,

00:28:01 --> 00:28:03: potentially code which of course is the bare minimum.

00:28:03 --> 00:28:06: We'd like to take a close look at,

00:28:06 --> 00:28:08: you know, floor to floor conflicts on our floor plans

00:28:08 --> 00:28:09: wherever possible,

00:28:09 --> 00:28:13: so that we can, you know,

00:28:13 --> 00:28:13: make sure that we're locating sources of noise away from,



00:28:13 --> 00:28:15: you know more sensitive areas.

00:28:15 --> 00:28:18: So, for instance, locating a gym in an amenity area

00:28:18 --> 00:28:20: next to a bedroom is probably not the best way

00:28:20 --> 00:28:22: to to lay out your building,

00:28:22 --> 00:28:24: so you know to that extent we try to we

00:28:24 --> 00:28:26: try to mitigate those conflicts.

00:28:26 --> 00:28:29: And we also look to where we have the space

00:28:30 --> 00:28:30: on a site.

00:28:30 --> 00:28:34: We try to locate. You know those sensitive uses away

00:28:34 --> 00:28:36: from from a source.

00:28:36 --> 00:28:39: So at our redevelopment of the the former Christie factory

00:28:40 --> 00:28:40: in the Tobico,

00:28:40 --> 00:28:43: we are constructing a new GO station and there is

00:28:43 --> 00:28:45: an existing rail corridor there.

00:28:45 --> 00:28:48: So we've actually positioned the site so that the office

00:28:48 --> 00:28:53: buildings which are you know considered less sensitive are located

00:28:53 --> 00:28:55: directly adjacent to the GO station.

00:28:55 --> 00:28:57: And then we would locate,

00:28:57 --> 00:28:59: you know. The residential kind of in behind there as

00:28:59 --> 00:29:00: a as a buffer.

00:29:02 --> 00:29:05: Regardless, you know there's one of the things about sound

00:29:05 --> 00:29:05: is it's.

00:29:05 --> 00:29:08: It's coming up in in lots of different directions.

00:29:08 --> 00:29:09: You know it's it's outside.

00:29:09 --> 00:29:13: It's the stipulations between. It's the noise during construction.

00:29:13 --> 00:29:16: Somebody else who we have with us is potentially making

00:29:16 --> 00:29:17: quite a lot of noise.

00:29:17 --> 00:29:20: There is Joanna and I'm wondering if you could tell

00:29:20 --> 00:29:23: us a bit more about the the sources and the

00:29:23 --> 00:29:24: impacts of transit noise.

00:29:24 --> 00:29:27: You know how does the the noise of the things

00:29:27 --> 00:29:29: that you're during construction and also when it when it's

00:29:29 --> 00:29:30: completed?

00:29:30 --> 00:29:32: How does that affect to Jason development?

00:29:34 --> 00:29:36: So you're right, we we do,

00:29:36 --> 00:29:41: we're we're the culprits on on a lot of fronts

00:29:41 --> 00:29:43: and and it's not just,

00:29:43 --> 00:29:48: it's not where where a design build maintainer,

00:29:48 --> 00:29:51: so we have a lot of obligations with respect to

00:29:51 --> 00:29:51: noise.

00:29:51 --> 00:29:53: So that's that's number one.

00:29:53 --> 00:29:58: And so, because we're responsible for design and for construction

00:29:58 --> 00:30:00: and for maintenance,

00:30:00 --> 00:30:04: we have to look at our design and our construction.

00:30:04 --> 00:30:07: Through that through a 30 year life cycle or like

00:30:07 --> 00:30:08: actually 35 years,

00:30:08 --> 00:30:12: if you included the construction period so.

00:30:12 --> 00:30:16: We have to look at construction is really interesting and

00:30:16 --> 00:30:20: and and of course that's going on right now we

00:30:20 --> 00:30:24: have a lot of neighbors and you know to Carlton's

00:30:24 --> 00:30:27: point, I'm I have no doubt that the city gets

00:30:27 --> 00:30:31: a lot of complaints about the long term construction that's

00:30:31 --> 00:30:34: been going on on the crosstown and interestingly.

00:30:34 --> 00:30:39: We do not have to comply with the city's restrictions

00:30:39 --> 00:30:41: on overnight work.

00:30:41 --> 00:30:47: And that would that determination was made back in 2018.

00:30:47 --> 00:30:50: I believe it was about 2018 where we it was

00:30:50 --> 00:30:54: determined that we didn't need to apply for permits.

00:30:54 --> 00:30:57: We already had permission to do tunnelling work and and

00:30:57 --> 00:31:00: work in the tunnels without restriction.

00:31:00 --> 00:31:04: But we still need to comply with the noise limits.

00:31:04 --> 00:31:08: The construction noise limits what we have done as as

00:31:08 --> 00:31:11: a contractor is we have adapted.

00:31:11 --> 00:31:15: Our protocols to make sure that that our neighbors know

00:31:16 --> 00:31:19: when we're going to be doing overnight work.

00:31:19 --> 00:31:21: We're not required to do it,

00:31:21 --> 00:31:24: but we do. We did develop a protocol in consultation

00:31:24 --> 00:31:26: with the city and our client to say we do

00:31:26 --> 00:31:29: need to let the neighbors know if we're doing an

00:31:29 --> 00:31:32: overnight concrete pour. We we really do need to let

00:31:32 --> 00:31:35: them know and that that's an attempt to try to

00:31:35 --> 00:31:38: minimize the complaints and give people a heads up that

00:31:38 --> 00:31:41: that these types of things are happening.

00:31:41 --> 00:31:44: In terms of controls during construction,

00:31:44 --> 00:31:49: we have an extensive noise and vibration control program.

00:31:49 --> 00:31:52: We have developed it as part of our project agreement

00:31:52 --> 00:31:57: with the province and that goes into excruciating detail on

00:31:57 --> 00:32:00: the the types of noise that limits on every type

00:32:00 --> 00:32:03: of a construction equipment that we bring on site.

00:32:03 --> 00:32:07: So those sources of limits come from a variety of

00:32:07 --> 00:32:08: documents,

00:32:08 --> 00:32:10: some of them are provincial summer,

00:32:10 --> 00:32:14: federal, and. Actually, some believe it or not come from  
00:32:14 --> 00:32:17: the United States from FHW A and a couple of  
00:32:17 --> 00:32:19: other sources as well.  
00:32:19 --> 00:32:23: So we have drawn from a lot of experience on  
00:32:23 --> 00:32:28: these large construction projects to be able to manage noise  
00:32:28 --> 00:32:31: and to Nicholas's point we have.  
00:32:31 --> 00:32:35: We have monitoring points at every single construction site  
so  
00:32:35 --> 00:32:40: we are constantly monitoring noise and we have an  
obligation  
00:32:40 --> 00:32:42: to in our plans to report.  
00:32:42 --> 00:32:46: Always, noise exceedances within 24 hours of those of the  
00:32:46 --> 00:32:48: noise limits being exceeded,  
00:32:48 --> 00:32:51: and then we will do an investigation and find out  
00:32:51 --> 00:32:52: why why that happened.  
00:32:52 --> 00:32:56: So we have a lot of controls at right at  
00:32:56 --> 00:33:00: the ground level of of our construction activity,  
00:33:00 --> 00:33:02: so then we come to the design of transit.  
00:33:02 --> 00:33:07: While transit is obviously has multiple sources for noise and  
00:33:07 --> 00:33:11: vibration and the the surface stuff is pretty obvious we  
00:33:11 --> 00:33:12: have.  
00:33:12 --> 00:33:15: Trains running on rail. We have some of the vibration  
00:33:15 --> 00:33:18: that might come as a result of that and just  
00:33:18 --> 00:33:21: the vehicles operating on their own.  
00:33:21 --> 00:33:25: Fortunately, they are electric vehicles so that that certainly  
does  
00:33:25 --> 00:33:26: help.  
00:33:26 --> 00:33:28: But we also have other sources of noise that people  
00:33:28 --> 00:33:29: may not think about.  
00:33:29 --> 00:33:32: We have our big yard where there is obviously a  
00:33:32 --> 00:33:34: lot of movement of vehicles,  
00:33:34 --> 00:33:37: a lot of industrial type activity that happens.  
00:33:37 --> 00:33:41: We have bus terminals. There are two bus terminals that  
00:33:41 --> 00:33:44: we are building brand new and those are at two  
00:33:45 --> 00:33:46: different locations.  
00:33:46 --> 00:33:50: Ones near a new residential development at Don Mills and  
00:33:50 --> 00:33:54: Eglinton and the other one is out at Mount Dennis  
00:33:54 --> 00:33:55: nearby the the rail.  
00:33:55 --> 00:34:01: So obviously very different environments and we have to  
design  
00:34:01 --> 00:34:06: to maximum performance limits for those particular facilities.  
00:34:06 --> 00:34:09: We also have for all the underground we have all  
00:34:09 --> 00:34:13: of the ventilation equipment and when those fans are running

00:34:13 --> 00:34:16: there they can be quite loud.  
 00:34:16 --> 00:34:17: They don't run all the time,  
 00:34:17 --> 00:34:20: but when they do they can be quite loud.  
 00:34:20 --> 00:34:22: So we have to make sure that they meet the  
 00:34:22 --> 00:34:23: performance limits,  
 00:34:23 --> 00:34:26: the maximum noise and vibration.  
 00:34:26 --> 00:34:29: That comes from those. We also have traction power  
 substations,  
 00:34:29 --> 00:34:33: their electrical equipment. It runs all the time,  
 00:34:33 --> 00:34:37: so again. We have to meet specific performance limits for  
 00:34:37 --> 00:34:41: the those traction power substations and the location of  
 them.  
 00:34:41 --> 00:34:45: You know, some of them are located in what you'd  
 00:34:45 --> 00:34:47: consider more sensitive areas,  
 00:34:47 --> 00:34:50: so there's a lot to consider when it comes to  
 00:34:50 --> 00:34:52: both the design,  
 00:34:52 --> 00:34:57: construction and and long-term operation of of these large  
 transit  
 projects.  
 00:34:57 --> 00:34:58: And you know the province has done has gone a  
 00:34:58 --> 00:35:01: long way to identifying what those controls need to be.  
 00:35:01 --> 00:35:05: Both on the construction site and on the design  
 00:35:05 --> 00:35:08: side. So it sounds it sounds like there is a  
 00:35:08 --> 00:35:11: lot of noise,  
 00:35:11 --> 00:35:12: but that you're also doing,  
 00:35:12 --> 00:35:14: you know, quite a lot going going above and beyond,  
 00:35:14 --> 00:35:16: you know, I wonder how?  
 00:35:16 --> 00:35:18: How much can the development and construction industry be  
 00:35:18 --> 00:35:22: expected  
 to improve the noise like it?  
 00:35:22 --> 00:35:24: Is there more that can be done?  
 00:35:24 --> 00:35:25: Or should should it be being done some somewhere else  
 00:35:25 --> 00:35:28: by somebody else?  
 00:35:28 --> 00:35:29: Somebody else be responsible for maintaining?  
 00:35:29 --> 00:35:31: Well, I'd say I'd say you know some of the  
 00:35:31 --> 00:35:33: provisions that are in in our contract are taking that  
 00:35:33 --> 00:35:37: next step to to ensure that there are controls and  
 00:35:37 --> 00:35:41: there are mechanisms for ensuring that you meet the  
 00:35:41 --> 00:35:45: performance  
 00:35:45 --> 00:35:50: requirements.  
 00:35:50 --> 00:35:51: I I think there's there's some documents that are quite  
 00:35:51 --> 00:35:56: old that definitely need to review some of the noise.  
 00:35:56 --> 00:36:01: The noise criteria for subway.  
 00:36:01 --> 00:36:03:

00:36:03 --> 00:36:08: As an example, for underground transit comes from the from  
00:36:08 --> 00:36:09: the 1990s,  
00:36:09 --> 00:36:16: so it's it's stated and and probably could stand a  
00:36:16 --> 00:36:17: review.  
00:36:17 --> 00:36:21: And also just the decision making some of the interesting  
00:36:21 --> 00:36:22: parts for me.  
00:36:22 --> 00:36:27: I came from a long history of transit planning,  
00:36:27 --> 00:36:29: going back to the 90s and and some of the  
00:36:29 --> 00:36:33: decisions that are being made around the location of,  
00:36:33 --> 00:36:36: say, bus terminals. The one at Don Mills and Eglinton  
00:36:36 --> 00:36:39: is a really good example because it's not.  
00:36:39 --> 00:36:41: Not the best location you know.  
00:36:41 --> 00:36:47: If you had. If you had consideration for noise during  
00:36:47 --> 00:36:52: during the assessment of of the locations,  
00:36:52 --> 00:36:54: there might have been a slightly different decision on the  
00:36:54 --> 00:36:55: location.  
00:36:55 --> 00:36:59: So there's there's some front end planning conversations that  
00:36:59 --> 00:37:01: really  
00:36:59 --> 00:37:01: need to bring the noise at the long term.  
00:37:01 --> 00:37:05: Noise and vibration and the planning together a little bit  
00:37:05 --> 00:37:10: better and then also on the performance requirements for  
00:37:10 --> 00:37:13: transit.  
00:37:10 --> 00:37:13: And the considerations that need to be brought into the  
00:37:14 --> 00:37:15: into the discussion.  
00:37:16 --> 00:37:19: Helping you the you're the recipient of of these things.  
00:37:19 --> 00:37:20: What? What do you think?  
00:37:20 --> 00:37:22: Do you think that there's there should be so much  
00:37:22 --> 00:37:23: directed?  
00:37:23 --> 00:37:25: I mean this, it feels like there's a bit of  
00:37:25 --> 00:37:27: an air of inevitability to the whole discussion of there  
00:37:27 --> 00:37:28: is noise.  
00:37:28 --> 00:37:31: It's going to happen. Should there be another position we  
00:37:31 --> 00:37:31: should take?  
00:37:37 --> 00:37:40: A question, and I think it's a shared response and  
00:37:40 --> 00:37:42: I think that's why this panel today actually is  
00:37:42 --> 00:37:45: very well rounded and has people from all the different  
00:37:45 --> 00:37:46: industries we all care about this.  
00:37:46 --> 00:37:49: We all want to live together to work together and  
00:37:49 --> 00:37:51: to be able to enjoy our community.  
00:37:51 --> 00:37:54: So I really think it's a shared experience.  
00:37:54 --> 00:37:57: It's something that we we struggle with all the time  
00:37:57 --> 00:37:58: and finding that balance.  
00:37:58 --> 00:38:02: The balance between the industry that's looking for more

flexibility

00:38:02 --> 00:38:04: and then the the residents who are looking for it

00:38:05 --> 00:38:05: to be stricter.

00:38:05 --> 00:38:08: So we have to land in the middle somewhere and

00:38:08 --> 00:38:09: it's very challenging,

00:38:09 --> 00:38:13: but it's it's really important that we as an industry

00:38:13 --> 00:38:18: and regulators work together and understand that there is an

00:38:18 --> 00:38:20: impact to noise,

00:38:20 --> 00:38:24: but it does impact everyone differently so there isn't one

00:38:24 --> 00:38:25: size fits all.

00:38:25 --> 00:38:28: Every site is different and I'm glad you know to

00:38:28 --> 00:38:28: hear.

00:38:28 --> 00:38:31: Jennifer talking about the the Christie site and how it's

00:38:31 --> 00:38:34: being set up and how they're trying to manage what

00:38:34 --> 00:38:37: they know is going to be noise and people want

00:38:37 --> 00:38:39: to be able to open their windows.

00:38:39 --> 00:38:41: People want to be able to sleep at night and

00:38:41 --> 00:38:44: then we have the the new hybrid work model where

00:38:44 --> 00:38:46: more people are working from home.

00:38:46 --> 00:38:51: We're closer to construction. We're closer to everything and,

00:38:51 --> 00:38:53: you know, we're all getting used to it,

00:38:53 --> 00:38:55: but it is. It is always going to be there,

00:38:55 --> 00:38:56: and I think it's a shared responsibility.

00:38:57 --> 00:38:59: I'm I'm hoping that everyone's going to get their house

00:38:59 --> 00:39:02: renovations over within this first couple of years because

00:39:02 --> 00:39:04: everyone

00:39:02 --> 00:39:04: showed up at home and so I'm sitting working from

00:39:04 --> 00:39:06: home. It's it's nonstop, you know,

00:39:06 --> 00:39:09: construction noise from people swinging hammers.

00:39:09 --> 00:39:11: Do you think Nick that there are?

00:39:11 --> 00:39:14: There are some things that that can be done which

00:39:14 --> 00:39:16: are quite easy or or more obvious.

00:39:16 --> 00:39:17: To kind of mitigate these noises.

00:39:18 --> 00:39:22: There's there's always something there was always

00:39:22 --> 00:39:25: something and you

00:39:22 --> 00:39:25: know very familiar with a lot of the systems that

00:39:25 --> 00:39:26: they have out there,

00:39:26 --> 00:39:30: and the ideas that people have there is.

00:39:30 --> 00:39:32: I guess some idea that you can make case on

00:39:32 --> 00:39:35: drilling if you're doing a big building you have a

00:39:35 --> 00:39:38: big drill and you're gonna put a big hole in

00:39:38 --> 00:39:41: the ground. That's never going to be quiet.

00:39:41 --> 00:39:44: It can be reduced. You can have local barriers.

00:39:44 --> 00:39:47: You can have timing, but that's just never going to

00:39:47 --> 00:39:47: be quiet.

00:39:47 --> 00:39:51: Having said that, we can see that we don't do

00:39:51 --> 00:39:53: pal driving anymore.

00:39:53 --> 00:39:57: Hurry, compact is something that's used to compact material.

00:39:57 --> 00:40:00: Again, we used to have massive pieces of equipment that

00:40:00 --> 00:40:03: you know you could hear it perfect kilometer away.

00:40:03 --> 00:40:06: Now there's other types of equipment that they have,

00:40:06 --> 00:40:07: so there are always ideas.

00:40:07 --> 00:40:10: There's always equipment that's improving.

00:40:10 --> 00:40:13: We're actually. I don't know how much it's reached the

00:40:13 --> 00:40:16: construction industry as the question for Jennifer.

00:40:16 --> 00:40:18: But electric vehicles we're seeing,

00:40:18 --> 00:40:21: certainly on a number of mining and aggregate sites.

00:40:21 --> 00:40:24: And you know that that's going to propagate its way

00:40:24 --> 00:40:25: into the city.

00:40:25 --> 00:40:28: A common complaint I'll show you here called in backup

00:40:28 --> 00:40:32: because I think all I would say a large majority

00:40:32 --> 00:40:36: of projects in Toronto they use new technology now whisper

00:40:36 --> 00:40:39: hush kits. I know they're mandated on many projects,

00:40:39 --> 00:40:42: provincial and federal, and municipal projects,

00:40:42 --> 00:40:45: so there's always something it is changing,

00:40:45 --> 00:40:49: but for the idea that you will be able to,

00:40:49 --> 00:40:51: you know. Never hear anything.

00:40:51 --> 00:40:53: Never heard the building going up next to you.

00:40:53 --> 00:40:56: I think that that's where that dialogue comes in and

00:40:56 --> 00:40:56: you know,

00:40:56 --> 00:40:58: I'm so happy to hear all the things that you

00:40:58 --> 00:40:59: wanna have said and done,

00:40:59 --> 00:41:02: because again, we're seeing that also on a lot of

00:41:02 --> 00:41:03: private developers as well.

00:41:03 --> 00:41:05: And I think more and more of it is going

00:41:05 --> 00:41:07: to become the expectation and norm.

00:41:08 --> 00:41:11: I feel like in in Toronto we're still kind of

00:41:11 --> 00:41:13: doing things the same way you know the the older

00:41:13 --> 00:41:16: some you know probably other people would say this,

00:41:16 --> 00:41:19: but you know once when I was a young architect,

00:41:19 --> 00:41:22: somebody said to me everything in the end and construction

00:41:22 --> 00:41:25: comes down to somebody on a site swinging a hammer.

00:41:25 --> 00:41:26: And that's the sort of the noisy way of getting

00:41:27 --> 00:41:27: things done.

00:41:27 --> 00:41:29: And for a long time that that was,

00:41:29 --> 00:41:31: you know, every time you Draw Something you think.

00:41:31 --> 00:41:32: How was this really happening?

00:41:32 --> 00:41:33: You know? And in my mind,

00:41:33 --> 00:41:35: it's happening in some, you know,

00:41:35 --> 00:41:38: lavish factory far away and you know with robots putting

00:41:38 --> 00:41:39: it together.

00:41:39 --> 00:41:42: And that somehow now is becoming more of a reality

00:41:42 --> 00:41:44: and a lot of noise mitigation has.

00:41:44 --> 00:41:48: It is able to happen through offsite production example,

00:41:48 --> 00:41:50: we just we can see behind me or what office

00:41:51 --> 00:41:53: building that we did and the the the amount of

00:41:53 --> 00:41:57: noise on that site compared to a more customary concrete

00:41:57 --> 00:41:59: construction is is quite remarkable.

00:41:59 --> 00:42:01: How quiet it is Jennifer,

00:42:01 --> 00:42:03: do you do you? Are you seeing more of that?

00:42:03 --> 00:42:07: So more construction techniques or new things which might help

00:42:07 --> 00:42:09: to offset some of the construction noise?

00:42:11 --> 00:42:14: Yeah, I mean, we're we're always focusing on trying to

00:42:14 --> 00:42:17: make sure we're engaging with all of our stakeholders.

00:42:17 --> 00:42:20: I think that's that's key and it's becoming even more

00:42:20 --> 00:42:20: crucial.

00:42:20 --> 00:42:23: I think residents groups are becoming better organized,

00:42:23 --> 00:42:29: better informed. They know what they are entitled to expect

00:42:29 --> 00:42:31: during construction.

00:42:31 --> 00:42:34: We're trying to be a little bit more proactive in

00:42:34 --> 00:42:36: dealing with with them,

00:42:36 --> 00:42:39: especially in the neighborhoods that we know are going to

00:42:39 --> 00:42:40: be highly sensitive,

00:42:40 --> 00:42:43: you know. We we tend to focus on what we

00:42:43 --> 00:42:44: call super urban,

00:42:44 --> 00:42:47: which is, you know, part of our strategy which we

00:42:47 --> 00:42:50: define in part as being close to transit highly dense

00:42:50 --> 00:42:51: areas.

00:42:51 --> 00:42:53: You know all of these things means you know you're

00:42:53 --> 00:42:54: close to transit,

00:42:54 --> 00:42:55: but you're also going to be close to noise,

00:42:55 --> 00:42:56: so I think that's you know.

00:42:56 --> 00:42:58: I think Carlton was alluding to that too.

00:42:58 --> 00:43:00: There's a trade off of living in in a in

00:43:00 --> 00:43:02: a busy city and and you're close to these amenities



00:43:02 --> 00:43:04: and these great conveniences.

00:43:04 --> 00:43:07: But you also will be encountering noise as we continue

00:43:07 --> 00:43:07: with this,

00:43:07 --> 00:43:11: you know, construction, boom, that we're seeing so.

00:43:11 --> 00:43:13: And I touched that engagement and I think it's it's.

00:43:13 --> 00:43:17: It's doubly important for for us and companies like us

00:43:17 --> 00:43:20: because we actually a lot of our development projects are

00:43:20 --> 00:43:23: located on sites that we own and operate a shopping

00:43:23 --> 00:43:27: center. So that's that, was kind of the the initial

00:43:27 --> 00:43:30: model for us as as retail developers,

00:43:30 --> 00:43:33: and we're now looking at those properties as development opportunities

00:43:33 --> 00:43:34: for mixed use.

00:43:34 --> 00:43:38: But in in doing so creates another challenge which is

00:43:38 --> 00:43:41: keeping our tenants happy and our retail tenants so.

00:43:41 --> 00:43:44: So we need to make sure that when we are

00:43:44 --> 00:43:46: doing these construction projects,

00:43:46 --> 00:43:49: we're not only keeping the local residents fully apprised,

00:43:49 --> 00:43:53: but also our tenants and making sure that we're taking

00:43:53 --> 00:43:56: steps to to make sure that they remain successful,

00:43:56 --> 00:43:59: because in turn that that helps us and,

00:43:59 --> 00:44:00: and making sure that we're not,

00:44:00 --> 00:44:04: you know, closing off entrances or or or,

00:44:05 --> 00:44:09: you know, preventing access to those to those shops.

00:44:09 --> 00:44:11: We also work extensively with the residents.

00:44:11 --> 00:44:15: Construction management plans. We do complete.

00:44:15 --> 00:44:16: You know the vibration monitoring,

00:44:16 --> 00:44:19: which is a requirement, but we go above and beyond

00:44:19 --> 00:44:21: in some cases which I think Joanna was mentioning which

00:44:21 --> 00:44:24: was measuring noise levels and reporting to the residents or

00:44:24 --> 00:44:28: to stakeholders on when we've exceeded and why.

00:44:28 --> 00:44:32: And you know, there's a balance between keeping and I

00:44:32 --> 00:44:33: think Richard,

00:44:33 --> 00:44:36: you were you were talking about this is is keeping

00:44:36 --> 00:44:39: on schedule and keeping you know as as contemplated during

00:44:39 --> 00:44:42: the design in terms of timing to complete these projects.

00:44:42 --> 00:44:45: And the delays that we encounter when we're trying to

00:44:45 --> 00:44:47: manage through these noise complaints so,

00:44:47 --> 00:44:51: so there's a lot to balance when we're considering being

00:44:51 --> 00:44:51: on site.

00:44:53 --> 00:44:55: Great points to add something.

00:44:56 --> 00:44:58: I just want to say Jennifer,

00:44:58 --> 00:45:01: I love that too super super urban I I had  
00:45:01 --> 00:45:04: not heard that before and I think that is such  
00:45:04 --> 00:45:05: a fantastic too.  
00:45:05 --> 00:45:11: Interestingly, some of the planning documents will change  
the 2013  
00:45:11 --> 00:45:12: for a new class.  
00:45:12 --> 00:45:13: Don't need to go into the details,  
00:45:13 --> 00:45:17: but I think that's an even better term because that  
00:45:17 --> 00:45:18: is what we see.  
00:45:18 --> 00:45:23: You have existing development going into a city of Toronto  
00:45:23 --> 00:45:24: world Class city.  
00:45:24 --> 00:45:27: We talked about these 24 hour cities and yet.  
00:45:27 --> 00:45:30: We still have these. Not quite archaic,  
00:45:30 --> 00:45:33: but you know, not fully updated documents that don't address  
00:45:33 --> 00:45:35: this super urban environment that we live in.  
00:45:35 --> 00:45:37: I just I just love that term.  
00:45:38 --> 00:45:42: I think you know, as as we become super urban  
00:45:42 --> 00:45:43: as well,  
00:45:43 --> 00:45:45: you know the cost is on is on everyone's mind.  
00:45:45 --> 00:45:48: I think we we can't not address issues with proper  
00:45:48 --> 00:45:52: expenditure and how that that passes on to people.  
00:45:52 --> 00:45:55: Is there anything advantageous about noise mitigation?  
00:45:55 --> 00:45:59: That kind of reduces costs for things.  
00:45:59 --> 00:46:02: So kind of a flyer question that everyone suddenly thinking.  
00:46:02 --> 00:46:02: Well,  
00:46:03 --> 00:46:07: well, I'll jump in there from the engineering point of  
00:46:07 --> 00:46:09: view and we we see it that one thing is  
00:46:10 --> 00:46:12: if you can do more and make less noise,  
00:46:12 --> 00:46:17: things can happen faster and speed certainly makes things  
well.  
00:46:17 --> 00:46:20: Maybe not cheaper, but certainly you have things happen  
faster,  
00:46:20 --> 00:46:24: but you're absolutely correct. We talk about monitoring  
journey.  
00:46:24 --> 00:46:27: You talk about all of these things and they are  
00:46:28 --> 00:46:29: additional costs that.  
00:46:29 --> 00:46:31: Are going to exist and and you can't ignore that  
00:46:31 --> 00:46:32: there there is one.  
00:46:33 --> 00:46:36: Are there? Are there some new construction techniques that  
we  
00:46:36 --> 00:46:37: should talk to?  
00:46:37 --> 00:46:40: I think Joanna you've got some in mind.  
00:46:40 --> 00:46:40: Well,

00:46:40 --> 00:46:42: in particular on the crosstown,  
 00:46:42 --> 00:46:45: and I think we're now that we've done.  
 00:46:45 --> 00:46:49: We've shown that these underground mining operations,  
 00:46:49 --> 00:46:53: which we've done on four stations on the Crosstown,  
 00:46:53 --> 00:46:58: can really help mitigate noise complaints at the at these  
 00:46:58 --> 00:46:59: locations.  
 00:46:59 --> 00:47:02: So we have four. One of them is at Ave  
 00:47:02 --> 00:47:02: Road,  
 00:47:02 --> 00:47:05: and you can imagine that neighborhood has a lot of  
 00:47:05 --> 00:47:06: residences,  
 00:47:06 --> 00:47:10: a lot of sensitive, more probably more sensitive.  
 00:47:10 --> 00:47:12: This is and we have we did.  
 00:47:12 --> 00:47:15: We did mining for that particular station,  
 00:47:15 --> 00:47:16: so we did not open up the road.  
 00:47:16 --> 00:47:19: We opened up two openings.  
 00:47:19 --> 00:47:22: All of the excavation work was done underground,  
 00:47:22 --> 00:47:25: so all of that really does does do a lot  
 00:47:25 --> 00:47:28: in terms of mitigation of noise.  
 00:47:28 --> 00:47:31: Now clearly you're going to have the same number of  
 00:47:31 --> 00:47:34: trucks because you still have to haul material away,  
 00:47:34 --> 00:47:39: but the actual excavation work is is really it is  
 00:47:39 --> 00:47:40: far underground.  
 00:47:40 --> 00:47:42: And so that really does help.  
 00:47:42 --> 00:47:46: And Toronto really hadn't had a lot of experience with  
 00:47:46 --> 00:47:51: that for constructing subway stations or underground  
 stations.  
 00:47:51 --> 00:47:53: And now that we've had some experience with it,  
 00:47:53 --> 00:47:55: and we've shown that it works,  
 00:47:55 --> 00:47:59: I think you're going to see more of that happening.  
 00:47:59 --> 00:48:01: And that's just how it helps everybody.  
 00:48:01 --> 00:48:02: It's not just a noise,  
 00:48:02 --> 00:48:06: noise and vibration issue, it's also traffic.  
 00:48:06 --> 00:48:10: Because you're not reducing the number of traffic lanes and  
 00:48:10 --> 00:48:14: creating congestion and adding all of that into the mix  
 00:48:14 --> 00:48:15: it does.  
 00:48:15 --> 00:48:16: It does help on a lot of fronts,  
 00:48:16 --> 00:48:19: so for us. There were.  
 00:48:19 --> 00:48:21: There were a lot of benefits from for doing it  
 00:48:21 --> 00:48:23: and it wasn't just about noise and vibration.  
 00:48:24 --> 00:48:26: You know what I mean when you talk about mining?  
 00:48:26 --> 00:48:29: Suddenly I'm thinking you're getting some diamonds and  
 gold,  
 00:48:29 --> 00:48:31: and that's how you're paying for the for the.

00:48:32 --> 00:48:38: Glacial till is what we're minding and Sand Ave station.

00:48:38 --> 00:48:41: I was there when they were doing the excavation and

00:48:41 --> 00:48:41: it was.

00:48:41 --> 00:48:44: It was like being on a really wet beach so

00:48:44 --> 00:48:46: it's pretty lucrative.

00:48:46 --> 00:48:50: Yeah, yeah. We've just got a couple of minutes,

00:48:50 --> 00:48:52: but we have to go to the Q&A.

00:48:52 --> 00:48:54: I'm wondering if any of you would like to add

00:48:54 --> 00:48:57: any any final comments after this Carlton you heard from

00:48:57 --> 00:48:57: you for awhile.

00:48:57 --> 00:49:00: If you have anything or anybody else.

00:49:02 --> 00:49:04: I think I saw some stuff for me in the

00:49:04 --> 00:49:04: Q&A,

00:49:04 --> 00:49:08: so I'll probably hold off until there there's some stuff

00:49:08 --> 00:49:11: vehicles which is very challenging and I can speak to

00:49:11 --> 00:49:12: that in the Q&A.

00:49:12 --> 00:49:15: It's not necessarily pertaining to development or construction,

00:49:15 --> 00:49:17: so I'll I'll hold off until we get to the

00:49:17 --> 00:49:17: Q&A.

00:49:19 --> 00:49:22: Nicholas, Jennifer, John, or anything else you'd like to add

00:49:22 --> 00:49:23: or would jump to the Q&A.

00:49:25 --> 00:49:27: I think go to the Q&A would be good.

00:49:28 --> 00:49:32: OK, great so I will start with that.

00:49:34 --> 00:49:39: So first question is from Nikita.

00:49:39 --> 00:49:44: As an acoustic consultant, I'm guessing that's for for Nick.

00:49:44 --> 00:49:47: Do you deal with? Do you also deal with vibration?

00:49:47 --> 00:49:50: What are the issues surrounding the management of

00:49:51 --> 00:49:53: vibration?

00:49:51 --> 00:49:53: Good question, thank you. Yes yes,

00:49:53 --> 00:49:56: vibration is considered in. When we say sound or noise,

00:49:56 --> 00:49:58: but it's acoustics, noise and vibration.

00:49:58 --> 00:50:03: Vibration is generated by tunnel boring machines by rail

00:50:03 --> 00:50:04: traveling

00:50:03 --> 00:50:04: while they're moving.

00:50:04 --> 00:50:06: It is something that is absolutely assessed there.

00:50:06 --> 00:50:09: There are a number of processes and enjoying you spoke

00:50:10 --> 00:50:10: of the FHWA.

00:50:10 --> 00:50:13: They're well laid out process for assessing,

00:50:13 --> 00:50:18: determining the vibration, assessing the vibration mitigation,

00:50:18 --> 00:50:20: myriad events, a lot of it done.

00:50:20 --> 00:50:22: Not the source. I'm sure John.

00:50:22 --> 00:50:24: You could probably spend an hour talking about,

00:50:24 --> 00:50:26: you know track isolation slab design,  
00:50:26 --> 00:50:29: but there are a number of things that are done  
00:50:29 --> 00:50:33: that many of the real authorities are doing to minimize  
00:50:33 --> 00:50:35: it from even getting into the ground.  
00:50:35 --> 00:50:37: And that is as an engineer the most effectively prevented  
00:50:37 --> 00:50:40: from getting into the ground and you really don't need  
00:50:40 --> 00:50:41: to worry about anything else.  
00:50:43 --> 00:50:47: Great, next I have a question from says Adeline.  
00:50:47 --> 00:50:51: When the mitigation becomes too expensive or result in a  
00:50:51 --> 00:50:54: built form that isn't commercially acceptable,  
00:50:54 --> 00:50:58: what should we give? I'm not sure who who that's  
00:50:58 --> 00:51:01: going to be best for.  
00:51:01 --> 00:51:01: Maybe  
00:51:01 --> 00:51:04: jump in and then feel free to tack on to  
00:51:04 --> 00:51:05: what I'm saying,  
00:51:05 --> 00:51:07: so I think there's a few things to consider.  
00:51:07 --> 00:51:08: First and foremost, I mean,  
00:51:08 --> 00:51:11: I mentioned the building envelope is being a key.  
00:51:11 --> 00:51:13: You know mitigator of noise.  
00:51:13 --> 00:51:15: It's also one of the most expensive ways to mitigate  
00:51:15 --> 00:51:16: noise,  
00:51:16 --> 00:51:21: I think, so there are smaller scale ways to mitigate  
00:51:21 --> 00:51:25: noise so you know as as as small as looking  
00:51:25 --> 00:51:25: at.  
00:51:25 --> 00:51:29: You know, we've added. And and this happens quite often.  
00:51:29 --> 00:51:31: And is, you know, in the in the little kind  
00:51:31 --> 00:51:34: of threshold between a parking garage entrance and your  
00:51:35 --> 00:51:35: the driveway,  
00:51:35 --> 00:51:37: there's that trench drain with the metal.  
00:51:37 --> 00:51:40: Kind of great. We've added some rubberized material inside  
00:51:41 --> 00:51:42: to prevent that noise,  
00:51:42 --> 00:51:45: right? So there's you know there's pavers in a in  
00:51:45 --> 00:51:49: a parking lobby entrance that create noise if they're loose  
00:51:49 --> 00:51:50: so you,  
00:51:50 --> 00:51:51: you can kind of mitigate it.  
00:51:51 --> 00:51:53: That way, you can do isolation inside your buildings along  
00:51:53 --> 00:51:54: with garbage shoots,  
00:51:54 --> 00:51:58: which is another big, big issue that we're seeing.  
00:51:58 --> 00:52:02: And and elevator cores. You know,  
00:52:02 --> 00:52:04: I think. Also, as you know,  
00:52:04 --> 00:52:07: as I think it helps in that the TGS and

00:52:07 --> 00:52:11: the ESE and green standards are also changing which.  
 00:52:11 --> 00:52:15: It doesn't kind of directly necessarily translate,  
 00:52:15 --> 00:52:17: but I think just by virtue of those changes,  
 00:52:17 --> 00:52:20: we're going to see some noise attenuation coming along with  
 00:52:20 --> 00:52:20: it,  
 00:52:20 --> 00:52:22: as maybe a fringe benefit.  
 00:52:22 --> 00:52:25: So I'm thinking about you know,  
 00:52:25 --> 00:52:28: obviously increased building performance is going to become  
 more of  
 00:52:28 --> 00:52:28: a requirement,  
 00:52:28 --> 00:52:31: but also, you know we're using geothermal technology in a  
 00:52:31 --> 00:52:32: lot of our buildings,  
 00:52:32 --> 00:52:36: which reduces the need for this traditional mechanical  
 equipment and  
 00:52:36 --> 00:52:38: mechanical penthouse,  
 00:52:38 --> 00:52:41: which is another major sound of our major source of  
 00:52:41 --> 00:52:41: noise,  
 00:52:41 --> 00:52:43: so that that. Helps us and then of course you  
 00:52:43 --> 00:52:46: know we're we're along the go go rail corridor and  
 00:52:46 --> 00:52:49: I know that there is an electrification project going to  
 00:52:49 --> 00:52:52: be happening, which I think will help with that type  
 00:52:52 --> 00:52:53: of noise as well,  
 00:52:53 --> 00:52:54: because those trains are much quieter,  
 00:52:54 --> 00:52:57: so there will be other ways to mitigate rather than  
 00:52:57 --> 00:53:00: just these big ticket items that sometimes do get beat  
 00:53:00 --> 00:53:02: out of the project at the end.  
 00:53:04 --> 00:53:07: Johnny, do you have any special balancing of costs?  
 00:53:07 --> 00:53:09: Things that you want to mention?  
 00:53:12 --> 00:53:16: I mean, most of what we're doing right now is  
 00:53:16 --> 00:53:18: already built into our contract,  
 00:53:18 --> 00:53:20: so we're doing it. It's not.  
 00:53:20 --> 00:53:24: It's not any. I don't think that it's anything really  
 00:53:24 --> 00:53:25: extraordinary.  
 00:53:25 --> 00:53:29: However, you know if if the newest contracts that  
 00:53:29 --> 00:53:34: are coming out say for Ontario line as an example,  
 00:53:34 --> 00:53:39: I'm started adding adding new requirements or updated  
 requirements and  
 00:53:39 --> 00:53:44: reduce noise levels that affects every piece of construction  
 equipment  
 00:53:44 --> 00:53:45: out there.  
 00:53:45 --> 00:53:49: I think that's the point at which the construction industry  
 00:53:49 --> 00:53:51: would say hold on a second.  
 00:53:51 --> 00:53:55: You're asking me to retrofit every piece of equipment that

00:53:55 --> 00:53:55: I've got.  
 00:53:55 --> 00:53:59: So I I'd say that's that's likely to be more  
 00:53:59 --> 00:54:02: of a limit to us than anything else is on  
 00:54:02 --> 00:54:04: the equipment side,  
 00:54:04 --> 00:54:09: because the equipments really. The equipment's really  
 intrinsic to construction  
 00:54:10 --> 00:54:14: and that's the area that we might actually there might  
 00:54:14 --> 00:54:18: be pushback on that and and commercially it's it would  
 00:54:18 --> 00:54:19: be very difficult to enforce.  
 00:54:20 --> 00:54:22: Right, thank you now I'm.  
 00:54:22 --> 00:54:25: I'm guessing this next one is for Carlton.  
 00:54:25 --> 00:54:28: I would like to know why the source of noise  
 00:54:29 --> 00:54:29: vehicles,  
 00:54:29 --> 00:54:32: acceleration and speed is not enforced more.  
 00:54:32 --> 00:54:34: This is from an anonymous attendee.  
 00:54:34 --> 00:54:38: I understand that the loud mufflers on motorcycles and cars  
 00:54:38 --> 00:54:39: are illegals are illegal.  
 00:54:39 --> 00:54:42: They are the worst offenders for creating noise at all  
 00:54:42 --> 00:54:43: times of day and night.  
 00:54:43 --> 00:54:47: I've recorded over 100 decibels during night hours,  
 00:54:47 --> 00:54:49: yet there seems to be very little enforcement.  
 00:54:49 --> 00:54:51: Why isn't there more mitigation?  
 00:54:53 --> 00:54:56: So yeah, I'll start with enforcement.  
 00:54:56 --> 00:54:58: I'm not sure, but what they mean by mitigation.  
 00:54:58 --> 00:55:01: We have a dedicated team made up of a Manager,  
 00:55:01 --> 00:55:03: 3 supervisors and 24 staff.  
 00:55:03 --> 00:55:06: We have coverage for over 20 hours of the day,  
 00:55:06 --> 00:55:09: so we have it. We are well aware of the  
 00:55:09 --> 00:55:11: issues with motorcycles.  
 00:55:11 --> 00:55:14: We have done blitzes where we have incidents of  
 aftermarket  
 00:55:15 --> 00:55:19: mufflers with both high performance cars and motorcycles  
 and we  
 00:55:19 --> 00:55:21: have done with this with the police.  
 00:55:21 --> 00:55:23: What's important to note is that we are not.  
 00:55:23 --> 00:55:28: Immediate responders, nor can we pull over a vehicle.  
 00:55:28 --> 00:55:31: So we work closely with the police we identify based  
 00:55:31 --> 00:55:32: on data and complaint data,  
 00:55:32 --> 00:55:36: and we establish safe blitzes in key parts of the  
 00:55:36 --> 00:55:40: city where this activity happens and we pull people over  
 00:55:40 --> 00:55:42: with the police we measure and then we we,  
 00:55:42 --> 00:55:46: we we fine or we want and so it's it's

00:55:46 --> 00:55:49: been a good education piece.

00:55:49 --> 00:55:51: It's a good enforcement piece,

00:55:51 --> 00:55:54: it's something we're aware of and it's something we're actively

00:55:54 --> 00:55:54: doing.

00:55:54 --> 00:55:57: It is an education piece for the people putting on

00:55:57 --> 00:55:58: these.

00:55:58 --> 00:56:02: Aftermarket mufflers these body shops these that you're not helping

00:56:02 --> 00:56:06: anyone and it's just it's just not acceptable in in

00:56:06 --> 00:56:09: the community and when we do find it we work

00:56:09 --> 00:56:13: with the police and we we do issue appropriate charges

00:56:13 --> 00:56:17: when they exceed the noise levels that are in the

00:56:17 --> 00:56:17: noise bylaw.

00:56:19 --> 00:56:22: So you don't. You don't carrying a gun as part

00:56:22 --> 00:56:23: of you go.

00:56:25 --> 00:56:28: No, we we do not care guns and again it's

00:56:28 --> 00:56:31: important to work with the police because.

00:56:31 --> 00:56:34: We don't have the authority to pull people over,

00:56:34 --> 00:56:39: you can't? We don't want our our staff chasing Chase

00:56:39 --> 00:56:41: motorcycles.

00:56:41 --> 00:56:44: You know, being on a ramp at DVP in Lawrence

00:56:44 --> 00:56:46: it it needs to be done in a safe way.

00:56:46 --> 00:56:47: But we need to get that message out.

00:56:47 --> 00:56:50: And we've done a lot of work with public education

00:56:50 --> 00:56:52: campaigns on on noise as well and something will continue

00:56:52 --> 00:56:52: to do.

00:56:54 --> 00:56:58: Thanks next, that was most from anonymous attendee,

00:56:58 --> 00:57:02: author from another. I'm assuming it's a different anonymous attendee.

00:57:02 --> 00:57:07: What are the regulatory mechanisms that ensure adequate acoustic separation

00:57:07 --> 00:57:11: between suites in rental units being built in 2022?

00:57:11 --> 00:57:14: Since Tyrion does not apply to rental units,

00:57:14 --> 00:57:16: which I think that's maybe a good one for Nick

00:57:16 --> 00:57:16: to stop.

00:57:16 --> 00:57:18: I don't know if anybody else have anything else to

00:57:18 --> 00:57:18: add.

00:57:20 --> 00:57:24: I'll give a quick second if anyone wants to so.

00:57:24 --> 00:57:26: Correct Tara and does not apply,

00:57:26 --> 00:57:30: but of course the Ontario building Code always applies for

00:57:30 --> 00:57:34: for anything that's built and and the code is quite

00:57:34 --> 00:57:37: clear that you have to meet this engineers.



00:57:37 --> 00:57:42: Lots of different engineers are hired and architects everyone goes  
00:57:42 --> 00:57:43: in and checks,  
00:57:43 --> 00:57:49: so whilst Tarion does certainly have a post construction testing,  
00:57:49 --> 00:57:51: that's great to tick a box.  
00:57:51 --> 00:57:54: I can't think of a single rental project that I've  
00:57:54 --> 00:57:55: worked on that.  
00:57:55 --> 00:57:58: We've gone through every step and and ensure that everything  
00:57:58 --> 00:58:00: was code compliant,  
00:58:00 --> 00:58:01: so it's great to have that.  
00:58:01 --> 00:58:03: But don't don't don't mistake that not having the check  
00:58:04 --> 00:58:06: at the end doesn't mean it's something's getting skipped.  
00:58:06 --> 00:58:07: It's not.  
00:58:09 --> 00:58:13: Great, thank you. So I just want to realize that  
00:58:13 --> 00:58:16: we are actually out of time,  
00:58:16 --> 00:58:19: so I want to thank everyone who who submitted a  
00:58:19 --> 00:58:20: question.  
00:58:20 --> 00:58:23: Unfortunately we don't have time to answer all the audience  
00:58:23 --> 00:58:23: questions,  
00:58:24 --> 00:58:27: but we will capture them for the future in order  
00:58:27 --> 00:58:31: to inform future programming by your large quarter.  
00:58:31 --> 00:58:33: So I want to thank all the speakers for the  
00:58:33 --> 00:58:38: overviews and discussions and for some excellent answers to questions  
00:58:38 --> 00:58:40: on behalf of Uli Toronto.  
00:58:40 --> 00:58:42: I want to thank all of our panelists for joining  
00:58:42 --> 00:58:42: us today.  
00:58:42 --> 00:58:46: Please be sure to check out your Toronto's upcoming programs.  
00:58:46 --> 00:58:48: Some very exciting events lined up.  
00:58:48 --> 00:58:51: You can register for any of them by following the  
00:58:51 --> 00:58:51: link in the chat.  
00:58:51 --> 00:58:54: We look forward to having you on a future webinar.  
00:58:54 --> 00:58:56: Enjoy the rest of your rainy day.  
00:58:59 --> 00:59:02: Thank you Richard. Thanks everyone.

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