Connelly, Robyn

Good evening everyone. My name is Robyn Connelly and I am the director of Sustainability and Social Impact for the Greater Toronto Airports Authority and the Co-chair of this meeting, the Pearson Public meeting. I would also like to acknowledge my Co-Chair Michael Belanger, Director, Aviation Safety, Regulations and Performance, who is also on the call here this evening. Thank you all for joining us.

I would like to start by acknowledging that the land on which the airport sits is part of the Treaty lands and territory, the Mississaugas of the Credit First Nation. We understand and appreciate their connection as original caretakers of this land. We are thankful to be welcomed on these lands and friendship and offer this acknowledgement respectfully and in appreciation for all indigenous peoples who cared for and continue to care for the land.

And with the second annual national Truth and Reconciliation Day this coming Friday. You know, I want to take this moment to acknowledge that we all share in responsibility for the stewardship. Not only have these lands, but each as an individual taking steps towards learning and working towards reconciliation.

And I just want to ask folks to make sure that they're phone their mic is on mute and that they're off camera as well. As I mentioned from the onset, we do have a number of files with some big data on the behind it and it's easier when folks are account.

So you have all joined us this evening for the Pearson public meeting, which are part of our noise management forums. These meetings provide residents with the chance to learn more about airport operations and how your area is impacted, to hear updates from the GTAA and NAV Canada about noise management efforts, and to ask questions or raise concerns related to airport operations.

Each meeting has a drop in style where residents can ask questions about operations and their area, which I think just precedes this meeting, and some of you had a chance to have a 1 on 1 session then, and then a public meeting session, which is this part which includes presentations and a public question period. Before I share an overview of the agenda for this evening, I would like to let you know that this meeting is supported by representatives both from the Greater Toronto Airports Authority and NAV CANADA. My colleagues will introduce themselves as they present during this evening's meeting.

A couple more housekeeping items before we move on to the agenda. I would like to remind everyone that this evening's meeting is being recorded and will be made available along with the presentations on our website. Again, I would like to ask attendees if they keep their mikes on mute and their cameras off. Except of course when they're asking questions, we will pause at the end of each Section for questions. So feel free to use the raise your hand function or to type in your question in the chat when it comes to you so you don't forget it when we open it up to the questions. And when you ask a question, we ask that residents please introduce themselves, just your name and the closest intersection. This will help us understand the operations overhead to help answer your questions. We also asked that residents keep their commentary to two minutes and

when possible, be specific about an issue and or specifically ask a question. We will give the virtual mic first to those residents who are new to the forum or who have not yet asked a question or made the comment in this evening's meeting.

Alright, so that's the housekeeping items. Let's move on to the agenda.

Uh, we will open this evening's meeting with operations and community impacts. So this is just a very general overview about airport operations and where they are flying overhead. This is just used as an opportunity to orient you the residents about what operations may be impacting you. Then we will move on to the more specific GTAA updates and this meeting's update will specifically speak to our runway rehabilitation project that has been underway since April. Then we'll hand it over to our friends at NAV Canada for their updates and then we will open the floor to the general questions from residents.

So with no further ado, I'd like to hand it over to my colleague Cynthia Woods, who will give that general operations and community impacts update. Again, this is just sort of a very general update to help orient everyone here tonight to what might be flying overhead. Thanks very much and over to you.

Woods, Cynthia

Great. Thank you, Robyn, and good evening everyone.

Just start here to talk a bit about Pearson. About Toronto Pearson. So prior to COVID-19, Pearson was the 6th most connected airport in the world, facilitating almost 50 million passengers and 478,000 aircraft movements a year, directly employing 49,000 people and enabling \$42 billion of Ontario's GDP. And while we're not back to 2019 traffic levels yet, we have seen considerable traffic increases since the easing of travel restrictions began earlier this year.

The airport is open 24 hours a day. It's divided into normal operating hours, which is 6:30 AM to midnight, and in the overnight period we have a preferential runway system between midnight and 6:30 AM, where we prioritize the use of runways that fly over the fewest people. And then there's the restricted hours that are 12:30 AM to 6:30 AM, and all flights operating in these hours must have pre approval from the airport. There's an annual budget set and audited by Transport Canada. And the budget increases with passenger growth.

Next slide please.

We have five runways with ten runway ends. We have two north-south runways, which are 15L/33R and runway 15R/33L. We also have three East West runways, one is on the north side of the airport, which is runways 05/23. And then we have two parallel runways on the south side, which is 06L/24R and 06R/24L. The runways are aligned with magnetic headings. So for example, runway 23 is aligned on a 237 degree heading wheareas Runway 05 is aligned with a 057 degree heading. So that holds true for the other runways as well.

Next slide please.

So air traffic controllers have to consider a number of variables when they're selecting a runway configuration.

As a general rule, aircraft take off and land into the wind. However, under favorable surface conditions, some crosswind can be acceptable. So that means that runway configurations can be used that best support the traffic demand.

Some other considerations are the availability of the runways and taxiways, the distance that the aircraft will need to taxi to or from the runway, the time of days such as what we just discussed with the preferential runway system, which is in effect in the overnight period, and also runway length. Some of the large long haul aircraft need a longer runway due to their weight which affects lift and temperature also affects lifts. So requests for the longer runway are more prevalent in the summer months.

On an annual basis, 95% of operations are on the East or West runways and 5% are on the North or South runways. And this is because of two reasons. One, the predominant winds in the region are westerly and easterly. And two, we can accommodate the most traffic on the three east-west runways compared to the north-south. And that's assuming that those runways are available.

Next slide please.

So now we're just looking at how aircraft arrive and depart into and out of Toronto Pearson. For arriving aircraft, they enter into the local airspace and are lined up for the runway.

For arrivals, some aircraft come straight in if they're coming from a direction that's aligned with the runways, others will be lined up using the downwind leg before turning onto the base leg towards final approach, and then to the runway.

For departures, aircraft takeoff from the runway and then follow one of the standard instrument departure routes, or SID, which one they use depends on where the flight is headed.

Next slide please.

So now looking a little closer at the downwind itself, here's an example of three different base turns for the purpose of spacing aircraft out on the final approach. so they could give the air traffic controller could give different for vectors to aircraft that are arriving at a similar time so that they based on where they turn and when they will be nicely spaced on that final approach. And the higher the traffic level t a time, the greater the extension of base turns.

Under very low conditions, such as during the peak of the travel restrictions, the downwind there were there was very little extension and spaces, the downwind wasn't needed at all. Aircraft were just vectored directly to the base leg and to final approach.

Next slide please

These next slides provide an overview of community impacts of flight operations by area. Later in the presentation, we'll be talking about impacts related specifically to the runway rehabilitation. So this is is what we would see in some typical operations.

I will start in the northeast with arrivals on 23 on runway 23 and departures off of runway 05, so this affects areas of Rexdale, Maple, other areas of Vaughan, Richmond Hill and Thornhill.

Next slide. So these are sample tracks for arrivals onto runway 23 when we're in a westerly configuration. So you can see that downwind base leg and also some straight in arrivals that were aligned with that runway. So we've got different ways they're getting to final approach.

Next slide please.

And these are departures to the east from runway 05 when we're in an easterly configuration. So these flights depart from the runway and then turn in the direction they are heading and where they can turn is determined by altitude. The turns you see that are close to the runways are known as early turns, which are used by small jets and propeller aircraft, and these are permitted to turn at 1100 feet above sea level, whereas all the other jets must wait till they reach at least 3600 feet above sea level. So since aircraft climb at different rates, there is some variation in where those turns are made. So you, you see quite a splay of those departure terms.

Next slide. So now we're gonna look at the southeast area. So this is areas of Midtown Toronto, North York, Weston and Markham.

Next slide, here is a sample of the arrival flight tracks, when we're in a westerly operation. Here they're arriving on either 24R or on 24L.

And this slide here for departures, departures to the east when we're in an easterly configuration. So you can see a similar pattern to what we already saw. It's pretty much a mirror image on each side of the airport.

And then the next slide, we'll be looking at arrivals on runway 05 and departures on runway 23. So this is the northwest area which is affected by the arrivals onto those runways and departures on 23. The areas affected are Brampton, Georgetown, Milton, Meadowvale and Streetsville.

So looking at the arrival slide, so these are the arrivals onto runway 05 when we're in an easterly configuration.

And the next slide is departures to the west from runway 23, when we're in a westerly configuration. And then moving to the next set of slides for arrivals on Runway 06L or 06R and departures on runway 24L, 24R. And this area it's affecting Meadowvale, Alderwood, Erin Mills, Streetsville, Clarkson, Port Credit and Oakville.

This slide here shows the arrivals onto 06L or 06R, depending on which one they're using. If both runways are available when we're in an easterly configuration.

And then this next slide is departures to the West. On 24L, 24R, whichever one they're using. And you can see those turns again how they vary.

And then we come to the South, no sorry we come to the areas to the north of the airport. So arrivals on 15L or 15R and departures 33L or 33R. And the areas impacted are Brampton and Malton. So this slide shows arrivals from the north on runway 15L or 15R.

And then the next slide shows departures to the north on runway 33L or 33R. And you can see Runway 33L actually follows the same flight path as 33R. So they wouldn't be used at the same time for departures, but they do 33L departures end up following the same the same route, it's just over an industrial corridor.

And then the next set of slides are to the South.

Umm for arrivals on Runway 33 left and right and departures on runway 15 left and 15 right and this affects areas of Etobicoke-Lakeshore, Etobicoke Centre and Alderwood, Rockwood, Markland Wood and areas in that area there.

So this slide here shows arrivals from the south on a right or runway 33L or 33R. And then the next slide.

Shows departures to the South on 15L or 15R.

So I'm now going to turn it over to Andrew Payter. He's our manager of aviation programs and coordination and he's going to share an update on the runway rehabilitation project with us.

Payter, Andrew

Thank you, Cynthia. Good evening, everyone. Justin, let's jump into the next slide. Please.

OK. So high level and it's no different. Runways need maintenance just like our roads that we drive around every day.

Pretty extensive program this year. The anchor project was 06L/24R.

And as you can see in the bullet point there, it's a full rehabilitation and eight-month in duration. Second busiest runway in Canada, needless to say it's fairly important to Toronto Pearson, and eight months is really pushing that. There was a lot of work being undertaken this year. So this runways first built in the 1960s, little testament to how long we've been able to maintain this runway.

So the three kilometer long surface needed full rehabilitation, not just on the top course, the asphalt that you see, but also on the underlying substructure, drainage, electrical improvements, everything else.

Just normal wear and tear from weather, heavier aircraft, a little bit more traffic, it just breaks down over time.

Next slide, please, Justin.

Without getting into each one of these slides, so this just gives you a sense of, high level of, some of the work that's been undertaken this summer. What you're seeing on the screen is a methodology, the enabling works for the start of the works is removing inset lights, removing the asphalt, you know removing concrete, replacing the aggregate, the sub-base, repaving for inset lights, coming in and doing some line painting, reinstalling the lights. And then other activities that you don't see on the slide, which will be commencing in the next few weeks and month is commissioning and activation. So it was quite a bit of work. Again, three kilometers long and we had a lot of activity on the runway this summer.

Next slide please.

So the approach this year was we're going to go from the west, which is on the 06L end to the right or to the east, which is on the 24R end.

Uh, there were some rhyme and reason for this. Ideally, what we're trying to do is we're trying to take advantage of the predominant winds and the traffic.

The areas that you see right now in the green on the far left, that area is open. That was a big win for us. That was a big push at the beginning of the spring. The red box in the center, even though it's currently closed as part of the construction process or progress, we are essentially 80% complete in there.

The yellow box at the far right is the area that we have closed right now. That's where the bulk of the civil construction work is taking place currently. That work there is at least 70% complete, if not a little bit further along. Overall, the progress is going extremely well. We've done quite well this year thanks to the hard work of the teams out there. In addition to the favorable weather throughout the course of the summer. The good news is, is that we are on track for completion by the end of November, November 18th to be exact.

Next slide please.

Again, don't need to speak to all these, these are just progress photos throughout the course of the year. I do wanna note that you'll see in one or two of the pictures there work was not just nine to five every day. We took advantage of doing night closures, trying to minimize traffic impacts on the field and doing multiple shifts. The work was extensive, so we had to be very agile this summer and again overall it was quite successful so far.

Next slide please. There we go. Cynthia. Very high level. I don't know if I missed on any points there for you.

Woods, Cynthia Thank you, Andrew.

We can just look to what the operational and community impacts are for the work that's been going on and is going to continue until November.

So I just wanted to go through this, how the runways are configured because it has been impacted by the reduced availability of runways of the East West runways. Runways are configured as a system, and that's to maximize efficiency based on the traffic levels and what we have are different types of configurations. So a single operation would be where one runway is used for both arrivals and departures. And it is typically used under very low traffic levels. So, we saw this type of operation during the pandemic quite a bit. And then there's land 1 depart 1 and this is where one runway is used for arrivals and another is used for departures. The main arrival runway can also be used for surplus departures when arrival traffic is low and the main departure runway can be used for surplus arrival traffic when departure traffic is low. That surplus traffic is known as offloads.

So this is operation is used under low traffic levels not as much as with the single runway operation. So it can handle more traffic than single operations, but it's still is used generally when traffic is not too high. And we have two more options with the East, West runways. So there's the dual configuration which is two parallel runways when they're used simultaneously with each runway handling a mix of arrivals and departures.

And then there's the triple configuration, and that's when all three of east/west runways are in use, with runway one runway being used to alternate between arrivals and departures, and the remaining two being used exclusively for arrivals or departures. And these are used under very high traffic levels, such as what we saw in 2019.

Next slide please. So because of the work on runway 06L/24R and the fact that traffic is higher they're still having to use the land 1 depart 1 mode. So, this is why some of the traffic is a little more concentrated on the runways that are being used as the main arrival and main departure runway. So it may feel like traffic that's very similar to 2019 even though our traffic levels aren't quite that high as yet. And if there's an additional east/west runway that goes down, then at that point the best runway operation to handle the traffic is in north or south configuration. So when we've been seeing some of that traffic, that type of operation, I know we've had some a fair bit the recent weeks and we'll continue to have some through the rest of the project. It's because of that combination of the traffic levels and an additional east/west runway being closed for maintenance in addition to 06L/24R.

Next slide please. So we're going to go through the sections again. So looking at the northeast area and we'll just jump to the arrivals. So for this week, you can expect that the arrival traffic is going to

be typical to what you've had be since June and early July. So it not what you saw in the first part of the work in April/May, which was very high, but more like what you've seen since June and July and that will carry on through the rest of the project and that's going to be true for most of these impacts that they're really what you've already been seeing, without much change. So again, departures to the east on runway 05, it'll be similar to what we've had the last couple months.

And then southeast areas, we go to the arrivals. Again, it'll be arrivals on 24L, not on 24R of course, because of the closure.

And then we go to the departures.

Again, it'll be similar on 06R and in this case that those 06R departure path when both these south east/west runways are available, the departures would typically be off 06L which is just a little bit farther away from the communities. So 06R does bring it a little closer, so it's more of an impact than it would typically be. So that will continue through to November that it's similar to what you've had over the course of the summer.

And then northwest. Again, that will be similar to what we've had since July to September and the same for the departures. So the runways will be used pretty typically to what they have been. And again on the south side 06R – 06L won't be used – 06R is and again when the departures are on 24L that is closer to the community than 24R which is what you would typically see for departures on from these runways.

And then if we look at the north. Anybody that's affected by these operations may have noticed that there has been more use in the last few weeks.

And this will continue until the end of November because of the reasons that I mentioned earlier that we've had some additional work that's affected other runways in addition to 06L/24R. And so that cuts down on capacity to the extent that they've had to use north-south operations. And of course, they'd use it for wind and weather as well. And same with departures.

And then moving to the south side. Arrivals on 33L and 33R again. We've seen some more of that and we'll continue to. And departures on 15L, 15R.

And looking at an overview of community impacts, essentially what you if you look at the columns again, July to September is the same compared to November with just a little bit more use of those north-south operations.

Next slide please.

So these are different ways that you can reach us or engage in some of the materials that we have. I strongly suggest trying out InsightFull which is an online web portal that we have where you can put in your address and you'll get information specific to your area. So it would be similar to what you're seeing here with flight tracks, but also with some data to support it. What kind of traffic you've seen and why those operations are the way they are, it's a really useful tool. You can learn a lot on your own. But of course, you can always contact us as well, and we have the Community e-newsletter if

you're not already signed up for that, checking in. We issue that once a month and it gives you information about airport activities that affecting communities as well as notices like this meeting.

We have the runway rehabilitation webpage and then this is an e-mail address that you can use to reach us <u>community.engagement@gtaa.com</u>. And if you do have a noise complaint, you can either phone us or you can submit it online.

So I will now turn it over to Chris Csatlos at Nav Canada.

Connelly, Robyn

I'm sorry, Cynthia. Maybe we should just pause for a few minutes in case there are any questions specifically to construction. Sorry, Chris.

Paul. And again, if you don't mind, you know, coming off mic, just telling us your name and the intersection where you live. And then what your question, is that would be great. So Paul, Gary and then Irene. Thank you.

Paul Devitt (Guest)Can you hear me?

Connelly, Robyn

Yeah, you sound good, Paul.

Paul Devitt (Guest)

Yes, I live in the Kennedy and Bouvard/Hwy 7 area. Basically halfway between it and Hwy 10. Basically, the Etobicoke Creek Conservation. I guess the your last slide that you put up and I happened to capture it was the summary of community impacts. I noticed that you've got the various dates for each of the areas, but I don't see what the expected traffic patterns or heavy use low use is after November. Maybe you could go back and recognize that you've only covered it up to the latest time period with September, November and I'll go back on mute.

Woods, Cynthia

That's because we're just giving an update on the project and that's when the project expected to be finished. So that's why those dates stop at the end of November.

Paul Devitt (Guest)

Can you, could you comment on what the expected impacts will be after November? Please.

Woods, Cynthia

After November, there'll be. It'll be very similar to what you experienced in 2019 because traffic is higher. So it'll it'll be quite a difference from what you've had throughout the pandemic cause of course, we had little traffic, but similar to what you had in 2019. I don't know what else, if anyone has any comments on that.

Paul Devitt (Guest)

So you would, you would suggest that it was what was showing for me in the northwest in the April to June time frame?

Woods, Cynthia

No April to June, that was it was different from typical operations. So it would be similar to what you're getting now, although there will be greater distribution of traffic than there is right now. It's quite concentrated on those because they're using that land 1 depart 1, it's it is quite concentrated on the runways that they're using the most so it'll lighten up to some degree from what it's been over the course of the last couple of months. I don't know if Michael or NAV Canada have any comments on that.

Belanger, Michael

Hey Cynthia, I think to the residence question there, I think what to expect post November is all of our runways will be returned into full active service. And we would see traditional runway configurations as you alluded to, Cynthia, that were in effect called pre COVID, back in 2019, which I'm trying to think of it aligned best to the July to September period the runways were mostly available. All that to say, I believe it was Mr. Devitt, is, you know, post November 18 our runway usage would return to its traditional configurations, you know.

There, there's a lot of information to digest for your specific situation that may be best served with, you know, a session with the noise office just to get a better idea of how you're actually impacted.

Connelly, Robyn

Thank you, Paul. We're just going to move on to Gary.

Paul Devitt (Guest)

The other other point, if I could and then I'll stop.

Connelly, Robyn

Sorry, just one point and then I'm going to open up. We do have a few people would like to ask the question, so I am going to move it on to Gary now if you don't mind. Thank you, Gary.

Paul Devitt (Guest)

OK, I must say I don't like the avoidance. I think you had every opportunity to put everything what you expect November going forward it's again disappointing that you refuse to communicate future expectations. I'll leave it at that.

Gary Milakovic

Hi, I'm Gary and I'm from Vaughan.

The question is, you said that you organized flight plus paths, so they fly over the fewest people, particularly during restricted hours. Does that path vary? Is it rotated, or is it consistently the same based on the direction of the plane is traveling, so it will consistently fly over the same small communities over and over again.

Connelly, Robyn

I think, Chris or Michael.

Belanger, Michael

Sorry I didn't catch the individual's name. However, for our night time runway usage, our preferential runway system as you as you say, is designed to fly over the least amount of people. There are a number of different configurations that are - we have a primary configuration, we have a secondary configuration - and if all of the ingredients are there to configure that. It's primarily dependent on the wind over on the overnight period and or the available runway infrastructure, because we do a lot of maintenance on the overnight period. But if all of those conditions hold true though, the first choice will be configured and if that's not possible, it'll go to the second choice and then if that's not possible, it will go to the most in the wind runway. All of the information is available on our website, but there is some variation in the use but there is a set number of configurations that are called the primary and secondary that are used.

Csatlos, Christopher

And short. Sorry to interrupt, Gary. My name's Chris Csatlos. I'm from NAV Canada. So I just wanted to add to some Michael's points there that you know, assuming though, let's say that on a looking at a particular configuration of runways to sort of your point of do they go over the same areas with departures, it is a little bit more random because as after aircraft depart, after a certain altitude, they can turn and go towards their destinations.

So they're not all following a very precise route on their departure. They're told by air traffic controllers to, let's say, turn to a particular heading or turn and go to a particular point somewhere. And because those aircraft will, you know, turn, maybe one will turn faster, one will turn slower, heavier aircraft, slower one, the winds are different. So naturally, there is kind of a randomness to it. That means that those aircraft won't typically all fly over the same location.

Gary Milakovic

Uh, but obviously for arrivals then it would be different. They would typically fly over the same configuration too, etcetera, etcetera.

Csatlos, Christopher

Yes, so to some extent, yes, like uh, especially once you get in to areas closer to the airport, you said you were from Vaughan, so maybe it's a little bit less the case, but as you get closer and closer in, the aircraft will obviously be lined up with the runway center line, you know, let's say 5 or 10 miles out. And at that point there will all be on the same path that they have to fly to land with the runway.

Gary Milakovic

Ohh OK great. And I've one very short question. On page 37 you said you were getting higher than typical complaints. Complaints about what?

Connelly, Robyn

Cynthia, um page 37. Gary. I'm not really sure what that's in reference to.

Gary Milakovic

Uh in the bottom right hand corner of the slide deck, there are numbers. Whatever, I don't know how the slide deck was organized, but 37 was in the bottom right and there was a bullet, a bolded section that said you're receiving higher than typical complaints. And I'm just wondering what those complaint right there, what those complaints were about?

Woods, Cynthia

So this is OK.

It's a higher concentration of traffic. Yeah. So that that when we're hearing from people who are east or west of the airport who are affected by the runways that are in use, it's really about that traffic level. So that's mostly what we've been hearing from people and especially following the pandemic with such little effect to come back to high traffic levels that are. And because these runways are being used as land 1 depart 1, they're not able to spread out the traffic a little more as when they were able to dual or triple.

Connelly, Robyn

Thank you. And we'll move it on to Irene now. Thank you, Gary very much. And Irene, over to you. Thank you. And then we'll move to Beverly. I also know that there's a couple questions in the chat and we'll get to those after. But when's Beverly's question, we'll move on to the NAV Canada section of the presentation. And please keep in mind that once the presentations are done, we do open the floor back up to folks to ask their questions.

Irene, we're having a hard time hearing you. I feel like there is static but not a voice.

All right, Irene, maybe we'll work out your technical difficulties. Beverly, over to you.

Beverley Golden (Guest)

Hi there I did put this in the question and answer so I also live in Thornhill and the south end just north of Bathurst and Steeles. I've actually been hearing more traffic in the summer and now and I do hear planes very, very late at night after midnight and I got the sense that there is minimal traffic then, but there seems to be one plane that comes over every night about 1:23 or 1:25. I've even heard planes coming over my house at 2:53.

And don't ask me why I'm still awake, but they're very obvious. I mean, I look up in the sky too now in the day, and they're so low and they're so loud. And so the fact that you're saying there's less traffic during the summer in our area is a bit surprising to me.

That's just a comment and is that something I should expect to have planes flying overhead between midnight and what I think you said 6:30 AM, I think was the timing when there's minimal traffic.

Hi there is anyone there.

Woods, Cynthia

Yeah, we're just trying to decide who's best to answer the question I think this, if you're talking about the overnight...

Beverley Golden (Guest)

OK, OK.

Connelly, Robyn

I'm not clear what the...I'm not clear what the question is. Cynthia, are you able to summarize that or Beverly can you summarize?

Beverley Golden (Guest)

Yeah, sure. So I most affected as you have on the picture, runway 23 in your slides, it shows that we've had decreased traffic during the summer and now, and my observation is there is more traffic and it's lower and louder. And also I'm hearing it quite late at night, meaning after midnight. So should that be the pattern that I'm experiencing here in Thornhill with arrivals for runway 23? Or why am I? That's the question really.

Woods, Cynthia

So I know that that runway 23 has been used in the overnight period it, although it's not one of the first choice runways, it is the wind dictated runway for when the winds aree...when they need an into the wind operation on the overnight. So if it's strong from the westerly and as I mentioned earlier that is one of the prevailing wind directions, so it does actually get used a fair bit overnight even though it's not one of the first or second choice configurations. So that would be why you know you're still hearing them in the overnight period. And again, in addition to the daytime flights increasing, we've also had you know a return in traffic in the overnight period.

So that would be why you're hearing them during those night time hours. And definitely there's still traffic over though I do helious these were were more traffic between April and May, but there's still

So that would be why you're hearing them during those night time hours. And definitely there's still traffic even though I do believe there were was more traffic between April and May, but there's still heavy use of runway 23 for arrivals especially compared to this time last year.

Beverley Golden (Guest)

Yeah. I mean, it's almost unbearable to be out in my backyard because they're coming over fast and furious and they're incredibly loud and incredibly low, which seems not to necessarily correspond to what I should be expecting. So it's just a comment. I don't know if there's other people on, in from this area in Thornhill, but it was a heated discussion on next door and there's a lot of people who are experiencing this and I believe who have called in with complaints because it seems to be louder, lower flights coming and more frequently.

Connelly, Robyn

Beverly if I may, before we move on. I think it might be really helpful if you're up for it, to book a one-on-one session with our noise office because I think it's important to understand what we'll have been. You met your community will have been experiencing during this runway rehabilitation project and why that is the case. And then what you may have been what you would experience under normal operations, which will be the case in November when this runway rehab project is complete. But I think that you might find that you know for half an hour, 45 minutes of your time, we can really go through a bespoke presentation about what it is that you can that your area experiences. That and of course this invitation is open to all folks on this call tonight, if that would be, I think that might be a really a more useful way to sort of explain what's going on.

Beverley Golden (Guest)

I will do it again. I have done it so I will do it again if you suggest. Thank you. OK.

Connelly, Robyn

Thank you. I appreciate that. Alright. I know I Irene, I'm going to go. Actually, I think we'll come back to your question, if you don't mind, after the NAV Canada presentation, because I think it's actually more of a general question and not related to the airport construction.

So don't worry, folks. Anyone who's got a question in the chat, we will come back to them when we open up the floor after NAV Canada's presentation. Thanks.

Csatlos, Christopher

Thanks, Robyn. Hi everyone. So just here to provide an update from the NAV Canada side of things, mostly about the conclusion of our public consultation. That happened last fall with the report on that consultation being published this summer. So just a very quick summary of what the project was about, what the consultation was about. It was about a new type of approach or aircraft approach called required navigation performance, authorization required or RNP-AR. And implementing it in Toronto comes as a recommendation that was made in the independent Toronto Airspace Noise Review, so specifically recommendations 3A and 3B that NAV Canada should design these kinds of approaches and maximize their use in order to provide some benefits to communities near the airport. The intention of using those approaches is to provide us an opportunity to reduce the need for - I guess what I can call the typical kind of operation in Toronto during busier periods - which is often referred to as the high low split. So having your craft on the north and south sides of the airport and the downwinds at different altitudes.

RNP-AR also allows us to start or improve I should say our use of continuous descent operations, so the nature of these RNP AR procedures means that that continuous descent aspect that we've talked about in the past is sort of baked in to the approaches themselves and allows those aircraft to descend while they're on the approach rather than flying at level altitudes, which is inherently noisier. Just a reminder that the introduction of these RNP AR procedures does not in any way change any of the departure procedures, so nothing to do with aircraft departing the airport has changed and it does not affect any of the existing approaches to the airport. So these RNP AR procedures are in addition to the toolkit, If I could say that of approaches that are available today.

Next slide please.

So the bit of a quick refresher on the public consultation itself, the consultation was designed and conducted in accordance with the airspace change, communications and consultation protocol. The goal of which was to ensure that residents in the communities near the airport have an opportunity to not only learn about the proposal but provide their input directly to NAV Canada. That public consultation took place last fall and winter. So from November 2021 into early January of 2022. Next slide, please.

So as part of that consultation, we held eight public information sessions that were shipped quite a few registrations and attended by about 270 unique people throughout the course of the

consultation. This was in addition to all the feedback that we received directly through other channels such as e-mail and things like that. Also held a few one-on-one information sessions with people to provide them an opportunity to ask questions that perhaps weren't answered during the larger public information sessions.

Next slide.

In addition to the information and the briefings that we provided to anybody that the care to join them through that or through those venues, sorry also had a reach out to quite a few elected officials at all three levels of government. So federal, provincial and municipal councillors from several municipalities that are near the airport.

Next slide.

So getting into the report itself and the findings, feedback for during the consultation, I should say, was gathered through both a survey that we asked participants to fill out and as well information that we gathered during the meetings. Feedback on the survey was not limited to people that actually attended the information session. So anybody that chose to provide feedback through the online survey, we made the link available on the NAV Canada website for people to provide us feedback.

Bit of a summary of the feedback that we got. A lot of the information and comments that we received were in related to aircraft overflights that residents already experience today or in the current state of the way the operation works versus the actual proposed changes, and this was echoed in the survey results themselves. So not just in the meetings and we've received quite a few comments in relation to historical changes that had happened in the past with other airspace changes. In general, the feedback probably the biggest piece of feedback we got about the proposal was a preference shown for flightpaths that avoid overflying populated areas where possible and aircraft altitudes keeping those higher for as long as possible.

Again, this is speaking strictly of aircraft arriving at the airport.

Next slide please. So as far as, uh, the, you know, looking at what we heard back during the consultation and those key pieces of information, there was two alterations or adjustments that were made to the original proposal based on feedback that we received from the communities. So one is an adjustment to aircraft altitudes on these new RNP AR procedures and that was an increase in the altitudes. So and that comes in the form of a steeper or, you know quicker descent. Essentially what that means practically is that aircraft will stay at a higher period or sorry at a higher altitude before they start descending. So this would be most noticeable in the community of Brampton where aircraft would stay a bit higher for longer before they start descending on that approach. The second change that was made was as a result of consultation and feedback received from the City of Vaughan with respect to the location of the approach with respect to the Vaughan Metropolitan Center, which is an area of planned medium and high-density development near Hwy 400 and 401. So during briefings and discussions with the city, they had asked us to consider moving the that arc segment or the part of the approach where aircraft turned from the downwind onto the final

approach and moving it slightly further east if possible to take it further away from that Vaughan Metropolitan Center area where there are some planned developments in the future and a bit closer to other areas of commercial and industrial. So we had a look at this change and we were able to move that arc segment about, uh, 400, sorry, 600 meters east and I see someone in the chat corrected me and thank you. I misspoke.

I said uh, Hwy 400 and 401 and it's very correct, I did mean to say 400 and 407 in Vaughan. So thank you for that, Irene. And this change in the location places the places that arc bit further away from the VMC area, and a bit closer to the CN rail yards in Vaughan.

Next slide please. And this shows just a quick look at this. This image is available in the actual consultation report if you wish to have a closer look at it, but it shows the location that was originally proposed for that arc, which is the dashed white line, and then in relation to the Vaughan Metropolitan Center, and then the solid white line a bit further east is the relocated position.

Next slide. So as a result of those, uh, those two adjustments, we do expect an additional positive change and not so much on the 05 side of things because that was just the change in the steeper descent. But for the approach to runway 23, we do expect that that relocation of that that curved or arched segment will further reduce the estimated number of people and homes overflown at noise levels above 60 decibels by about 4600 people and 1300 homes respectively.

Next slide please. So as I mentioned, the consultation report was published over the summer and is available on the NAV Canada website at that URL shown there navcanada.ca/yzrnp. So you can go to there and just below the top of the page as a copy of the report you can download.

And next slide.

Uh, so as far as next steps, the actual RPR approach procedures will be published in the aeronautical publications in November of 2022. The start of actual usage of those procedures will be a bit more tactical based on the completion of the 06L/24R runway construction project that we heard about earlier. So this was a conscious decision by GTAA and NAV CANADA together to sort of not have those two projects overlap to ensure to make that transition a bit more straightforward. After we start using the RNP procedures and 180 days have passed, we'll prepare a report that looks at the implementation of those routes and obviously bring that report and those conclusions back to this forum as well. And just to clarify that, that report will look at the first 180 days of implementation. It won't be available, you know immediately after that, because after that 180 days will pass then we'll need a bit of time to look at everything and prepare the report. But shortly after that we'll have some information to bring back again. And next slide believe that was the last one. It is.

Happy to take any questions right now about RNP AR and the consultation specifically. And then if the questions aren't specifically related to RNP AR, then I'll hand it back to Robyn and we can go into the general Q&A. But any specific RNP or consultation questions, happy to field those.

Uh, we have one hand up.

Connelly, Robyn Yeah, I think, yeah.

Csatlos, Christopher From sorry, go ahead Robyn.

Connelly, Robyn

I think.

I'm sorry Chris, we're both trying to moderate here. I do think that we did see one specific to RMP in the chat. I'm just trying to go back to it. I think it's from Daniel.

And Daniel, do you want me to read these or do you wanna read them yourself?

Daniel Majonis

You can read them.

Connelly, Robyn

Cheers. And so Daniel is asking will the RNP AR be implemented as standard go forward? And then he, ohh, and then the second question is to us about the pref runway system. So this one over to you, Chris, will the RNP AR be implemented as a standard going forward.

Csatlos, Christopher

So, as a standard, if you mean to all runways, the answer is not likely the biggest benefits of RNP AR come from being able to define a very precise, you know, lateral or path over the ground of aircraft as well as a vertical profile. The biggest benefits from our RNP AR come from the ability to, or I should say they come when there are areas where aircraft can be directed that are either less built up or not populated. So taking those aircraft from more built up areas and moving them to less built up areas. So with an airport like Toronto, not every runway and not every direction of flight allows us that, I guess that possibility, Runway 05/23 the north runway was the best option to do those kinds of procedures so.

Daniel Majonis

Sorry, can I interrupt you? Uh, yeah, I understand that actually live in Vaughan. So would be 23. I'm just curious. I think it's a great change and it's understand from the report that it won't apply to all aircraft depending on their age. But for runway is 5 and 23, will it be used continually going forward? I think it's a great change.

Csatlos, Christopher

Ohh I see, sorry, I misunderstood. Yes, it will be used continually. It is a permanent approach that we're introducing, but as you said, not every aircraft is capable of flying it. But for aircraft that are capable of flying it, it will be used going forward, yes.

Daniel Majonis

Great. Thank you.

Connelly, Robyn

And Daniel, I think Cynthia addressed your pref runway question in the chat.

Daniel Majonis

But I wasn't quite clear though I mean. Based on the website like is it. Are we still gonna be using the old version where the 05/23 are the number one choice? Or the new version where it isn't, but it I know it depends on weather.

Belanger, Michael

We actually received an extension on the trial. So we're continuing to operate under the trial parameters. The application will be submitted next week to Transport Canada. There is a defined process, Transport Canada has to approve these type of procedures. So once we submit it, it becomes over to our friends at Transport Canada for final approval.

Daniel Majonis

Great. Thank you.

Belanger, Michael

Cheers.

Connelly, Robyn

Thank you. So I think that that was the last in terms of RNP questions. So now we will.

Orsini, Angela

No, no, I'm sorry. It's not. I have a question

Connelly, Robyn

Oh. Oh, sorry, Angela. OK. Ohh sorry. I was in the chat and I missed all the hands up, so I'm actually we'll just sort of open up. You can ask what RNP you can ask about when we rehab, you can ask about general operations and we will do our best to moderate between the hands up and the chat. And so Angela over to you.

Orsini, Angela

Thank you. Chris. I just wanna understand something the change in the arc centre for the VMC. My name is Angela. I live in Vaughan. OK. When you say it'll be moved further east or to the CN rail, like it, is gonna go in the front of the CN rail or the back like Hwy 7 or Rutherford? Do you know what I mean?

Csatlos, Christopher

Uh, so I think, I think I do and I'll try my best. Could we...

Orsini, Angela

You know what I mean? I'm sorry if I'm not clear.

Csatlos, Christopher

Justin, could we move back? I think maybe three or four slides to that map that I had. Yeah, no, and and understandable that that map was showing the location more with respect in that area.

Orsini, Angela

See, I don't see. I see it on Rutherford, is it?

Csatlos, Christopher

No. So the because it's an arc, like it's a essentially a big semi circle. So the location passes over roughly the I guess if I can pick some landmarks - roughly the East End of Vaughan Mills, the mall and then it passes over some of that commercial and industrial over the western edge of the CN rail yards. And so as it's passing by the CN rail yards, that's when the aircraft is pretty much going south or southeastish. And then they continue that turn and then that's where we get on to where we can see it on the map here. So it crosses Hwy 7 just at the west end of the rail yards where if I memory serves that kind of big bridges as you're going over the rail yard, and then it passes over the 407 and curves back south.

Hutchison, Norma

What's the northwest street there? Sorry. Like, I don't know. The railroads, the railway. So what is the? I see Jane St. You know, in the middle of that, that marked area, but that, that arc, what is the northwest street? I can't read it.

Csatlos, Christopher

It's not exactly aligned with a particular street, but I think it's Cedar. Cedar Stone is the furthest east street before you get to the rail yard.

Hutchison, Norma

What's the closest major road north-south?

Csatlos, Christopher

Essentially it's between Jane and sorry, I'm trying to remember what's on the east end of the rail yards there, but it's escaping me. No, sorry. I was thinking of on the other side of the rail yard. So Keel cause the rail yard is located roughly between Jane and Keel. And then that path of the flight path would be over the rail yard.

Hutchison, Norma

OK, alright, that helps me. Thanks so much. Sorry to interrupt.

Orsini, Angela

I sorry, but the RNP doesn't that...isn't the presence of that that the planes will be flying lower.

Csatlos, Christopher

No.

Orsini, Angela

Altitude.

Csatlos, Christopher

Lower than?

Orsini, Angela

I'm just reading your report.

Csatlos, Christopher

Sorry, are you asking are they going to be flying lower than what?

Orsini, Angela

Uh. The altitude will be roughly lower than like three thousand feet in altitude? Or am I getting in too much deep? I'm just trying to see the noise level cause I live on the other side of Rutherford and I want to know what rail section that's gonna be used at and I'm having problems...

Csatlos, Christopher

So I think, uh, I think what I could do then is refer you in the in the report, there's the map that has the like a colored diagram with the noise levels in particular areas around the area of the approach.

Orsini, Angela

Yeah, but you have to put the noise level of the CN on top of that and it's loud, OK.

Csatlos, Christopher

Well, we weren't consulting on the noise levels from the CN railyard, only the approach itself.

Orsini, Angela

Can I have a one-on-one with you later on? Sorry?

Csatlos, Christopher

I said we are considering the...

Orsini, Angela

The rail, when it's on every day it's over 70.

Csatlos, Christopher

That was just saying we were considering the.

Orsini, Angela

Anyways, can I? I'll take this offline.

Csatlos, Christopher

Right. But we're not changing the rail yard.

Orsini, Angela

I know that you can't. I'm just hoping that it's in the front.

Connelly, Robyn

Alright, thank you. Thank you, Angela. We're going to move on to Naveen. Or apologies if I said that incorrectly.

Naveen

Yes. No worries. Thank you, Chris. Thanks for all the details here on the new proposal. I just had a quick question. I think you guys touched on it, but I'm a little still...some clarity would be helpful. The 05 arrivals approach the new RNP to be followed. Will they be replacing the current flight paths or I'm a little confused as to only some planes will be, who are equipped to do that on the new proposed changes? Or how is that going to work?

Csatlos, Christopher

Yes. So the...your second point was correct, only some aircraft will fly the RNP AR procedure because not every type of aircraft is equipped with the right kind of equipment to use that approach. So for all of the other aircraft that are using that runway, they would continue to do what they're doing, you know conventionally or today.

Naveen

Thank you.

Connelly, Robyn

Thank you very much. Irene. Over to you. And again I'm ohh. Uh. Hopefully we got your mic up and working.

Irene

I think so. Is that better?

Connelly, Robyn

Yeah, you sound great. So great. Just I remind us where you live and then your question. Thank you.

Irene

So I live in Vaughan. And I'm around the, I guess 400 and 407. And I'm actually a little bit confused. So my questions might not make sense, but I just want to clarify. Is the arrivals of the RNP uh currently happening now? So right now the arrivals come in like if you're standing in the Promenade parking lot, they're coming steady. If you stand up Weston and Hwy. 7 in the parking lot, they're coming steady. If you are in the York University parking lot around Canlan, they're coming steady. So is that the same that we would expect from this as well?

Csatlos, Christopher

So to answer your very first question is are the RNP AR procedures being used right now, no. So we have not yet published them. They are not being used. Now having said that, that area in general obviously has a lot of traffic and a lot of aircraft going in different directions. So I guess what you're seeing now is the what aircraft are typically doing or the routes that they're taking. Depending on the traffic situation, you might see them sort of going in different directions or at slightly different altitudes. Thanks for pulling that up, Justin. As we can see, like with that all the red lines, they're sort of a bit random depending on what's happening at that particular moment. But to answer your question, we're not using those RNP approaches yet.

Irene

So how would the noise or frequency differ with what's happening now versus what we're talking about here?

Csatlos, Christopher

So the main difference is going to be the fact that, uh, those aircraft that are on that that curved route that I was showing you are not going to be at a level altitude anymore. So whereas typically aircraft would be descended to a particular altitude, they fly for a while they descend, you know another 1000 feet they'd fly for a while and then when they're doing that turn from going northeast, you know in the downwind and do that 90 degree turn and then do that other 90 degree turn and come back and line up with the runway. Typically, today they would be doing that at a constant altitude, whereas when they're flying on the RNP procedure, they would be continuing to descend, which means they won't be using as much power on their engines, which means they'll be inherently a bit quieter.

Irene

OK. So and then just my other question, cause I'm also now really confused on the when you're talking about 23 and 5 for the preferred hours or night time hours or restricted hours, I would think that because that goes over residential neighborhoods and maybe again this is on the departure, so I'm confused. Like are you using that at night time now or like what was? What was that question in relation to?

Csatlos, Christopher

So the night time period is something different, so I mean. I think part of that question maybe is better answered by GTAA. But I mean I can say that these procedures are not meant for any particular time of day. So they're not for only day or only night or anything like that. As an aside, there are specific approaches that are more designed for the night time period which have a different route and sort of take a longer route to avoid certain more built up areas during the night time period when there's lower traffic and we're working all the time to use that as much as we can, but that's sort of...those are approaches that are already in place today and not related to RNP, but there's no particular time of day that the RNP procedures are limited to.

Irene

So my last sort of have other questions and you can sort of go to other people on the RNP and come back to me. But my last comment on the RNP is the amount of development that the Vaughan, the VMC has planned like at Weston and Hwy 7 is significant and you know multiple high-rise 60 stories. And if you stand in the parking lot at Weston and Hwy. 7 on the south side, the planes come in steady. And they come in fast and they come in furious and so maybe not furious, but they're pretty constant. And I don't know, like, I don't know what, like, if you're planning on doing this and all that development comes, people are gonna start complaining. And what that means to the other communities around there as well.

Csatlos, Christopher

Yeah, and. This is, I guess one of the…one of the challenges with the with anything is you know, as the VMC for example, uh amongst other areas like it have developed over the last 10, 15, 20 years. You know obviously those aircraft have already been flying in those areas for that time, and then the development has happened underneath it. And so we are conscious of that development which is for example one of the reasons we reach out to the municipalities during these consultations to get that kind of feedback and you know, for example in this case, try and do something to minimize that.

Irene

Right. I I understand. Thank you. I understand that. I appreciate that. But you know I have family that's been in the area for 35 years and you know the flights have never been like this. I understand Pearson has expanded and gotten bigger, but I very much feel that development has forced air traffic into other parts of Vaughan that are having on a lot...much more stronger impacts. And I think that would probably be evident by the number of people that are on this call from Vaughan tonight. So thank you.

Csatlos, Christopher

So yeah, maybe the last thing I'll say before we move on is, you know we haven't made any changes to those traffic patterns in the last few years, especially not during the pandemic. So those you know, those aircraft that are that are being seen and those areas are, you know, the same patterns and the same routes that they were for the last few years.

Umm, I think the next person's Norma. Not sure if your questions for me or a general one.

Hutchison, Norma

Yeah, yeah, no, it's regarding this. Uh, what's it called? The RNP AR. Yeah, they are. So you talked about that being implemented on the more northerly east/west route, the 23 runway.

Csatlos, Christopher

Correct.

Hutchison, Norma

Will that also, just to clarify, is that going to be applied on the 24 left and right on arrivals? With a higher altitude.

Csatlos, Christopher

No, no. So short answer is no, there's no changes to any of the actual approaches to the southern runway 06 left 06 right, 24 left 24 right. However as a...I don't wanna call it a side effect because it is, you know, very much a planned...but a an effect of the way that the RNP approaches to the north runway are designed, it does allow us the capability of keeping aircraft on the south side of the airport. So the downwind that sits over, let's say, Burlington, Oakville, Toronto, Scarborough, areas, aircraft in that downwind can be a little bit higher than they would be today. We don't have to take them down to as low an altitude because the aircraft on the north side that are using that RNP approach are turning in at that same place. So short answer, we're not introducing any new approaches to the south side, but there will be some ancillary benefits on the south side.

Hutchison, Norma

OK, so at my location of...So if I say Hwy 7 and Yonge. Would there be any positive impact of this program at that point or am I already too far on the straight approach to the runway at. Or if I give you my postal code L3T?

Csatlos, Christopher

Apologies, I'm just. Furiously searching for we're Hwy 7 and Yonge is in relation. Um Hwy 7 and Yonge I don't believe would see a significant change other than perhaps some fewer aircraft because when the aircraft are flying the RNP procedure they will be flying along that arc. So whereas today

some of them would have continued further in the downwind and then turned around over your area. So there might be a few fewer aircraft, but I don't believe there would be a significant change in your area.

Hutchison, Norma

OK, alright, thank you.

Connelly, Robyn

Thank you, Norma. Paul, back over to you and then Elisa.

Devitt. Paul

I noticed in a previous session that there were certain noise collection stations, throughout the GTA. I have mentioned it before and wondered if there's been any progress in placing a noise collection center in Brampton northwest.

Connelly, Robyn

That's, I think a question to us at the GTAA with regards to our noise monitoring terminals and they'll hand that over to Cynthia to talk about our NMT's and where they are and why.

Devitt, Paul

OK. And this is a this will be a NAV CANADA question.

Connelly, Robyn

It's just helpful to have one question at a time. So we'll just let Cynthia answer that and then and then we can come back to you for a second follow up question and then we'll go to Elisa. Cynthia.

Woods, Cynthia

Sure. OK. So we did install some additional NMTs back in 2017 after doing a review, but there's been and that was really prompted due to some airspace changes that had happened in 2012. We haven't had a change, so we haven't installed any additional ones. Now I was gonna pull up web tracks so we could at least see where ones might be closest to your area. So if you just give me a minute to do that, maybe we'll take another question in the meantime.

Csatlos, Christopher

Maybe in the meantime, while Cynthia is doing that, Paul, you said you had a question for NAV Canada.

Devitt. Paul

I did. Umm, there seems to be a flight paths that come up, I'm not exactly sure whether it's 15/33, or possibly another departure, that swings across. Hwy 7. Across the beginnings of Heartlake, the north end of Brampton. Have always wondered why - given you're all about safety - why the swing would not be moved up to the area south of Caledon, commonly referred to now as a Hwy. 413. Not that it's built, but again, you would think that would be much more safe than all the new development that's been placed in Brampton northwest, headed towards Georgetown.

Csatlos, Christopher

Uh, so and apologies, I'm not familiar as well with Brampton geography. I think I know roughly the area you're talking about.

Devitt, Paul

Just think of just north of the and the starting of the 410.

Csatlos, Christopher

Ohh, OK so yeah, I think that would. Oh, thank you, Justin. I think that would probably be a departures off of 33R. And maybe less often 33L. So in general, I mean the...as you can imagine, there's not any direction you can go when you depart off of the airport without going over residential areas, so it is quite limiting as far as you know the directions they can go. Also it can be quite difficult for these aircraft to take, you know, sharp turns or multiple sort of sharp turns 1 after another when they're departing, so it can be a bit difficult for sort of snake them through certain areas, if I can put it like that. You know all of the approaches that that we have and all of the departure procedures that we have, you know, are designed in accordance with all the criteria and procedures and protocols that are provided by Transport Canada, who's our regulator as well as GTAAs. So I guess what I'm trying to say is that these procedures are designed in accordance with those standards that are set by the regulator to be safe. You know, recognizing at the same time that that there's nowhere around the airport that that doesn't have development around it.

Connelly, Robyn

Thank you. Um so...Paul...I'm just gonna move this.

Devitt, Paul

Right. Can I just say one thing to you?

On the map, none of those go over our area. And we continually see planes flying over the house. To the point that watching TV inside, we hear the planes go over. So again, just very odd, are the airplane pilots taking shortcuts because I don't think that they should...actually, according to this, before flying over our house.

Csatlos, Christopher

So this is just one of the many configurations of the airport. So what we're looking at right now is aircraft that are departing the airport off of runway 33L/R, if they were arriving on one of the other runways, that might explain some of what you're seeing. Again, there's quite a, you know, we went through about, I believe it was about a dozen different slides showing those different patterns. So I mean, perhaps I can suggest reaching out to the GTAA's noise office to sort of get a more personalized look at exactly what sort of operations happen over your area.

Paul Devitt

Will do. Thank you very much. I appreciate your answers.

Connelly, Robyn1:

Thank you, Paul. Elisa and Elisa.

Thank you for your patience every.

Testa, Elisa Hi. Hi. Can you hear me?

Csatlos, Christopher Yes.

Testa, Elisa

Yes. OK. Well, thank you very much for taking my question. Actually, it's a comment at first and then I have a question that I want some sort of answer to please. First of all, I've been following. Good evening everyone. I've been following these information sessions for quite a while and I'm trying to understand everything and believe it or not, it's quite challenging for me to understand everything. But I do, I got a better idea this evening about the increase in the flight patterns over our homes. I live in Woodbridge. My the main intersection is Islington and Hwy 7. There has been a relative increase in flight patterns over my home throughout the summer and I understand that is because of the rehabilitation of the runway. So you've had to sort of channel the flights more so over the lesser amount of the of the runways. So that's clearly understandable. And you said earlier on that as of the end of November of 2022 this coming November that we should go back to pretty much the pre COVID time of air traffic. Am I correct in what you said about that?

Woods, Cynthia

Yes, that's what we were. We were saying, yeah.

Testa, Elisa

OK, now I am, you know, with all due respect to everyone and my community members, I think on a previous forum a previous information session, someone made something, uh made a really interesting comment and that was that there's a fine balance between, you know, managing air traffic, minimizing the impact on communities and then at the same time, a higher increase in in air travel, I mean we live in a metropolis that is completely exploding and the...we live very close to an International Airport that manages an umpteen amount of air travel throughout the 24 hours and to manage everything and facilitate the demands of the growing city. I don't know how you know, sometimes you can expect a completely, you know, area where there is very, very little movement in in the air and still live in a in a metropolis such as we live in that's growing at a rapid rate. So kudos goes to the organization who tries really hard to manage all this to minimize the impact on communities and at the same time, meet up to the demands of the of the population. I mean, air travel is on such an increase, even though post COVID which - I mean we're not still at the same level as you said earlier from pre COVID times - but we're getting there because I've noticed a huge increase in air traffic. And my question to that after that comment is like I don't really understand why aircrafts need to fly at a lower level. Is it because of air patterns?

Wind patterns? Or is it to...does it help to minimize the use of fuel? Because now we're in a crisis and we are trying to lower emissions by 2030 emissions of pollutants into the atmosphere because of climate change. Why is...Why are aircrafts needing to fly at a lower level than they used to be?

Csatlos, Christopher 1:35:06

So perhaps so that I can answer your question on the first try, Elisa, like when you say, why do they have to fly at lower levels as compared to what like are you thinking as compared to historically or?

Esta, Elisa

Well. Yeah, historically. Absolutely. Because, Umm, I was looking at some statistics on...umm other on the information that's been put online. Traditionally they were flying at was it 3500 feet to now, 2900 feet? Am I incorrect in saying that, or is it? I'm not asking sure about that.

Csatlos, Christopher

So the.

Yeah, the I guess maybe the easiest way to answer it is that, the aircraft altitudes will vary depending on where they are and what they're doing, but you know over the last I'm gonna say it as long as I've been at NAV Canada and I believe you've been a long time before that, the general pattern of traffic, if I can call it that has been pretty much is, you know, relatively unchanged. Obviously there have been some changes, but the general pattern has been very, very similar over the years and the altitudes that are being used are again very similar, so. The easiest way again to describe it is that we we work backwards from the airport itself. You know obviously for the aircraft to land on the pavement at the airport, you know that's at a fixed elevation and they have to, you know, put their wheels on that piece of pavement every time. But they can only descend at a certain rate. They can't descend too quickly because it's generally unsafe to sort of descend, you know, too quickly, especially as you can imagine, when they're low to the ground.

Testa, Elisa OK. OK.

Csatlos, Christopher

So as we sort of keep working backwards, all the airports at a fixed point, they can only descend so quickly or sort of limited as to, you know, how high they could be. Obviously, the further we get away from the airport, they can be higher, but we are generally limited and the magic number there is three degrees. So when they're descending on that, when they're lined up with the runway, they're descending, they're doing that on a very precise three degree slope. So if we work backwards from the airport.

Testa, Elisa

The higher you can be.

Csatlos, Christopher

The further back, the further away I should say they get, the higher they can be flying. During the pandemic, for example, one of the things that happened was because there were so, so fewer aircraft, we didn't have to fly them as far to kind of get them in line behind each other, which meant that they were descending to, let's say, 3000 feet, which would be the lowest they would generally do before they were pointed at the runway and turning in quite close to the runway at 3000 feet, whereas before the pandemic, when it was quite busy.

They would have to fly further away at perhaps four or even 5000 feet, and then turn back around line up with the runway, and then descend on that slope. So.

Csatlos, Christopher

So I hope that helps sort of answer your question.

Testa, Elisa Testa

Yeah. And I'm sorry to. Yes. Yes, it does help me a lot. So because I just keep hearing about people saying that it's just they're flying lower and lower. But I understand. I understand what you're saying. But fundamentally, honestly, we live very close to the airport. So you would gather that that's why if you're saying, you know, to land safely, you have to gradually lower the aircraft has to get lower and lower.

And, but constantly I hear fellow community members complaining that it the aircrafts are flying at a lower level and yeah, so you've answered my question quite nicely. Thank you very much and I really, really appreciate that this ongoing communication between the organization, NAV CAN, the Pearson airport and the Community, so that we're made aware of what's happening, but what...

Csatlos, Christopher 1:39:10

You're welcome.

Testa, Elisa

And going back to what I said, it's a real fine balance to maintain this demand with the growing population, the demand for air travel, the being close to an International Airport really close and I'm trying to minimize the impact on community members after the runway is rehabilitated. A please try I on my request is that it's evenly spaced among communities so that not one community or two communities or three communities bear the brunt of the noise, but it should be spread out throughout the GTA. This is what I would gather that you can do for us, yes.

Csatlos, Christopher

Well, we appreciate the feedback especially on you know on what we're trying to do. So it's thanks for that.

Testa, Elisa

Thank you.

Connelly, Robyn

I'm Irene. Before you just given the chance, given that you've had the chance to ask a couple of questions, I'm actually going to hop to Perminder and then we'll go back to you. Irene, thanks for your understanding. Perminder.

Singh, Perminder

Yeah. So I live in Brampton, the area of Surrey, Lawson and Hurontario.

My question is left so you have a number of the noise management, the noise measuring stations, right? So is there any this kind of statistics being done that shows that the noise level has been increased or reduced kind of stuff like because you have all this data right?

So like you know, so, so I'm trying to understand like you know, how do you use the data, do you use the data to like you know to measure that as the noise like is it really coming down or is it going up? So is there some sort of statistics that shows that or do you measure that kind of like you know information?

Connelly, Robyn

Umm, absolutely and you know and given that there has been a few different questions on our noise monitoring terminals, I'm going to propose that actually at the next meeting and we would very happily give a presentation on our NMTs where they are located and why they're located there. And then what they do for them. But what we can do for you Perminder in the meantime is if you don't mind emailing, the community engagement e-mail that's in the chat and I'll just ask Cynthia or Salza to put it back in the chat again, so it's present and not way up in the chat, but what we can do for you is run a report for you for the noise monitoring terminal that's closest to where you live and what we understand from that is we monitor the number of noise events that happen at a particular terminal, the number of noise events that are attributed to aircraft noise versus ambient noise, and just try to understand what this soundscape generally looks like. So we are happy to do that for you. And we have the e-mail address there now. So send us your e-mail and we'll follow up with some questions and then give you that report.

But I think overall, since there it's been a while, probably a couple of years, frankly, that we have done a good presentation on our NMTs and I think it is really valuable and useful for residents to learn about that. So we'll do that in an upcoming meeting.

Singh, Perminder

Yeah, because I'm really interested because you have all this, like, noise mitigation efforts, right? How do you measure the noise mitigation efforts? Actually, is it really effective.

Is is what I'm trying to understand.

Connelly, Robyn

Yeah, it's, you know, it's....

Singh, Perminder

Because like since the past five years, right, like, you know, I think it's like, you know, it's as bad as before, actually, like, you know, I really haven't seen anything like, you know, that that's really affected, like, you know, the kind of noise that is being that we are subjected to because especially since I live near the like x and Hurontario and especially affected by the take offs that happen from I think it's either 5 or 23. And every 30 seconds like you know, there is like, no, the noise that comes up to 70 DB and more than that and like you know even wakes me up sometimes actually so.

Connelly, Robyn

Yeah.

Singh, Perminder

So I really would like to understand like you know, like what, how effective are your noise mitigation efforts actually and how do you measure that?

Connelly, Robyn Umm yeah.

Singh, Perminder

And I thought like, you know, you have the noise monitoring stations. So I thought like in that is something that we should be doing. So I'd like to get more information regarding that.

Connelly, Robyn

Yeah, absolutely. And we you know that's a very good question I think.

Umm, in terms of noise mitigation we, you know, there's often sort of no, you know, no silver bullet until planes are silent, you know it is very challenging and so it sort of is more of like an evolution than a revolution. Someone said at a recent meeting that its sort of incremental changes whether it's flight path changes so for example the RNP changes will lead to some incremental benefits and noise reduction.

Whether it's undertaking initiatives to make sure that the quietest fleets are flying at Pearson so that the aircraft that are flying are less loud and you know, the more that we can implement that the better that it is, whether it's programs like some previous ones we've introduced. But there is sort of nothing that makes it silent is sort of just this incremental building on top of each other to try to reduce the noise, the tool that we have that then sort of measures whether that's effective is a noise contour.

Umm. And there's a few different inputs that go into that and you know, I think I think the challenge is that certainly when you are a resident who is living close to the airport with flights overhead, then you know the thought that the noise contour is reducing sort of doesn't necessarily feel true to the experience that you're having. So it is, it is a very difficult. Again, it's sort of as Elisa was sort of saying it's a, it's a fine balance, but I think it would be really great if we could have the chance to meet with you because you are curious about this and go through the NMTs and also go through the noise contour and how that's measured and how that sort of is a tool to sort of understand or impacts, we'd be really happy to do that and meet with you to do that.

Singh, Perminder

I'd show. Yeah, I'll. I'll be sending an e-mail. So I really like to kind of understand, like, you know, whether like, no, the past five years, like, you know, because they there has to be some effectiveness after this one right.

Connelly, Robyn Yeah. No, sure. And I mean again, just because the noise might be managed doesn't mean that they're still aren't planes overhead, right?

Singh, Perminder

Yeah. Yeah. So that that's the thing. So another question, right is the noise is not being managed, right? Like you know, there are other things that can be done like, you know, giving priority to the noise insulation program and stuff like that.

Still like you know, I mean no, but I don't see from that any sort of like you know think prior to giving to that kind of....Because that is like one of the most like, you know, one of the most action that can have a kind of a great impact on the on, on the amount of noise. So the results residents are subjected to.

Connelly, Robyn

Thank you. Thank you for your comments and we look forward to connecting and following back up with you. Irene, back over to you and I'm gonna use this opportunity while you're asking your question to also go peak in the chat and see what's happening over there.

Zeppieri, Irene

Thank you. I actually would like to say that I've been really impressed at the amount of data that you guys have and the ability to be able to kind of see your plans and everything and actually has been...So it's critical as I am I do want to say thank you for that.

But I wanna just go back to departures from Runway 05. So it was noted in this arrival route that going over the CN rail was less impactful to communities and goes over less residents. So I am quite adversely impacted from the departures on Runway 5 because they all seem to hit the altitude and go north right just before the 400 and I don't understand why there? I know it's altitude is when they decide to turn, but I just don't understand why they would not turn over an area where there's gonna be less impact and less residential neighborhood resident like less residents.

And further to that, as I said before, I am heavily concerned about the heights of the buildings that are being proposed at the VMC and how that might impact flights and surrounding communities. And I hope that you will comment and work with York Region and the city of Vaughan as well.

Csatlos, Christopher

So maybe I'll answer it backwards. I'll answer their second comment or question first and then move to the first one, as far as development in in not only the VMC area, but in the city of Vaughan in general, the city of Vaughan and under other municipalities around the GTA do circulate development proposals to NAV Canada for comment. So we do look at them from the, you know from their height point of view.

Umm, obviously the decisions on what sort of development should or shouldn't be permitted in a particular area, you know, lies very much in the in the domain of the municipal municipalities sorry and they're planning departments. So while there is, you know guidance and you know, criteria out there, for example in the form of the noise exposure NEF contours, you know the area of

development and urban planning is very much in the in the domain of the municipalities. But we do provide feedback on those. And Michael, I'm not sure if you turned your camera on because you had something to add to that or before I move on.

Belanger, Michael

Yeah. Thanks, Chris. I was just gonna build on that for Irene. We do have a number of surfaces that are invisible on this map, but they do surround the airport that are...their sole purpose is designed to protect for building developments. And there were...they're registered on any title of any property that is within that zone. And I'm not quite sure if Vaughan would be in that zone, Chris. I don't know how far out that is, but.

Zeppieri, Irene

That's right. Can I just clarify my concern really is and I don't know at what point this is, but it's the heights of the buildings that they're proposing and at what point is that going to affect flight paths and, you know, there's no consultation to that effect with the public, but it certainly must because Vaughan gave comments back on the arrival path. So I, you know, and I can't get an answer to that question. I've asked several different people.

Csatlos, Christopher

So. So the again, the short answer is the city of Vaughan and other municipalities circulate development proposals to there is a NAV candidate department, the Land Use office that deals with a new obstacle. So whether that's a building or a wind turbine or communication tower, NAV Canada looks at a proposal.

Zeppieri, Irene

I understand. Sorry. I'll just cut to the chase, but if something is being proposed that is impacting your operations and you are not supportive of it and the municipality chooses to approve it anyways, the public would never know. Because we are not consulted or we are not informed of that and I just want to make that very clear and I want to, I and I hope that you will also express that concern back to municipalities and to our politicians. Thank you.

Csatlos, Christopher

And thanks for your comment. I mean the comments that we provide back to the city are you know available, like when they when the city that is approves a development permit or comments on a development permit. I mean that's done in the in the public sphere. So you know the cities evaluation and approval or disapproval of a development permit again is sort of in their domain of responsibility. We NAV Canada provide our comments to the city on those development proposals, but in the end, the, you know, the city is the land use authority, not the GTAA, and not NAV Canada.

Hutchison, Norma

If I can just maybe chime in on, I think what Irene might be saying, Irene, I hope I'm not misinterpreting.

I think you what I would be concerned about is you guys gave input on a concern about a development area and so you choose, so you change a route to try and avoid that development area in that, in Vaughan, right.

Csatlos, Christopher

So in this case the, because the RNP AR you know project was not related to a specific building or you know a specific proposal in in a municipality. You know we approached all municipalities and just the same way we approached you know the community through the public meetings to solicit feedback on what we were proposing with RNP AR during the course of that discussion, this case the City of Vaughan provided us feedback on you know what they thought was a concern with our proposal and the impact on future development. So we were able to take that into consideration.

Hutchison, Norma

OK, my, what I think might be hearing from Irene is so the city of Vaughan approached you and like I commend you on you know listening to them and then trying to accommodate them. But what I would be concerned as a resident say is if the city proposes something to you and then you guys listen to the city, you may not be listening to how that how that changes affecting other people, so the city and the people that are being affected are not all in the same loop. The city is approached you, you've changed a route, but that changed route, we weren't involved in that decision. The residents, so I'm just.

Csatlos, Christopher

Hmm. I mean in the end we, you know, we do rely on.

Hutchison, Norma

How do we how do we get that? How do we get maybe at a change so that if there's a proposal between a city between the city and the airport that the affected residents are also in that same loop to understand what the impact of a change could be?

Csatlos, Christopher

Yeah. And I understand your point, I mean to some extent we do rely on you know the municipalities to represent, represent their citizens. I mean as you can imagine it's not possible or practical to directly consult every person. For example in a municipality. So to some extent we do have to rely on your representatives, your elected representatives and the administrative officials, for example, in the planning departments at those cities to represent the residents of those cities and the best interest of the municipality and its residents.

Belanger, Michael

I think to just to final comment on this and then we can move on is anything that would prompt an airspace change does...is required to go through a defined airspace change protocol process that involves a public consultation, not dissimilar to what was undertaken for RNP. And so I think that that that's that will be the final word that we have on that.

For this evening, so I don't know if there's any more questions that we have leftover so it just open, I guess, Robyn, we can hand it back to you.

Connelly, Robyn

Sure before...we have a departure question from Irene. So someone can go dig that up for me please.

Belanger, Michael

Oh, my apologies.

Csatlos, Christopher

Sorry, yes, my apologies. That was Irene. First question when she asked and I skipped to the second one first. So perhaps I shouldn't have done that. No, that was that was my fault. As I flipped the order around and then forgot. So apologies, Irene. So your question about the departures and why they can't wait longer?

The short answer is that the way that the way that the departures work is, as you said, they climb on on the runway heading until a particular altitude, and then they turn. So even if we were to, let's say, change that that altitude for example, the point at which they reach that altitude is still going to be different every time, so you're still going to end up with aircraft that are still flying over the same areas because if they climb quicker, they're still going to end up turning sooner. So it's not, you know, it may be a change that we can do, but then it's not going to result in a you know a great impact when we look at it over a long period of time.

Connelly, Robyn

Thanks Chris.

And we just have a few minutes left and I think I just wanted to maybe ask Larry, I know, Larry, you've put a number of comments in the chat, but perhaps if you don't mind, maybe perhaps summarizing that into one specific question you'd like us to comment on, or like a comment you'd like to make verbally on the record. If I'm not mistaken, you are an old friend of ours.

Are you able to come off mute.

No, um alright.

Umm, alright, so then I think if we have no further hands raised or questions I think we can call tonight's meeting to an end. Our next one is December 8th, and this might touch on one of the comments that you made, Larry...and when come December 8th, our runway rehabilitation project will be complete and it'll be a chance for us to sort of go back to the more general updates around noise management and noise management program and how we work with the communities.

I just wanted to particularly though, take a moment to say thank you very much to my colleagues, but particularly to the residents, all who have joined us this evening.

And this is you've given us two hours of your time. You show tremendous respect and interest in the topic. I really appreciate your understanding of the nuances and the trade-offs of working to run a busy International Airport, one that is an important economic engine and employer for the region, but one that must also figure out how to live and coexist and be a good neighbor for the folks who live around it as well. And I know also we have a lot of information out there and sometimes that can get very overwhelming.

One resident made a comment I can't remember if it was Eileen or Elisa a sort of like I get so you know I can't keep up with it all. You know, it's hard for us too.

Umm. And so we really, really do appreciate the curiosity, the respect that you approach this with and we are very grateful for that and so.

I don't know if you can hear it, but cats fighting in the background. Apologies for that. That's noisy. But again, thank you all very much for your time tonight. We look forward to seeing you on December 8th.

And we have a couple of specific follow up items and we will send around an e-mail when the materials are available on the website to everybody. So you know...and we can include some of our follow up items on that. Folks who want a one-on-one, we look forward to connecting you with on that and of course Parminder will connect with you on noise contours. Thanks everyone stay well, stay safe and we'll see you in December. Thank you.

Singh, Perminder Thank you. Bye.

Hutchison, Norma

Thank you. Thank you, Michael. Thank you everyone for all of your information and to listening us to us.

Belanger, Michael Thank you everyone.

Csatlos, Christopher

Thanks.

Connelly, Robyn

Thank you. Take good care.

Belanger, Michael

Thank you, Norma. Take care. Goodnight, everyone. Goodnight.