

Billy Bishop Toronto City Airport

Noise Sub Committee Meeting 4

January 16, 2019

7pm to 9pm

Billy Bishop Airport Boardroom
(Mainland Passenger Transfer Facility, above Aroma Café)

PARTICIPANTS

Hal Beck – Co-Chair (York Quay Neighbourhood Association)

Angela Homewood – Co-Chair (PortsToronto)

Gary Colwell (PortsToronto – Noise Management Office)

Bryan Bowen (City of Toronto, City Planning - Waterfront Secretariat)

Wayne Christian (York Quay Neighbourhood Association)

Lesley Monette (Bathurst Quay Neighbourhood Association)

Max Moore (Bathurst Quay Neighbourhood Association)

Alex Lavasidis (Lura Consulting - Notetaker)

Michael David (PortsToronto- Project Manager for Noise Study)

SUMMARY OF DISCUSSION

The following provides a summary of discussion at Noise Sub Committee (NSC) Meeting 4. This is not a verbatim account of the discussion. This summary is organized by discussion topic. The agenda for NSC Meeting 4 is available in Appendix A.

1. Draft Noise Study Scope of Work

To accommodate the time constraints of Michael David, PortsToronto Project Manager for a Noise Study (a guest to the NSC), the Draft Noise Study Scope of Work agenda item was moved to the start of the meeting. A hard copy of a Draft Noise Study Scope of Work was provided to each meeting participant. Angela Homewood noted that an electronic copy of the Draft Noise Study Scope of Work would be circulated to NSC members following the meeting (available in Appendix B). Members will have 3 weeks to review the Draft Noise Study Scope of Work and provide comments.

Michael explained that once comments on the Scope of Work are received, and the Scope of Work is updated as required, the request for proposal will be issued through MERX (as an open tender). Proposals from consultants will then be assessed, and a consultant will be selected to undertake the Noise Study. The consultant will then develop a preliminary noise monitoring plan, which they will present to the NSC. The monitoring plan will be a detailed technical document with noise monitoring locations and quantity, and monitoring protocols.

From the draft noise monitoring plan, the NSC will be given a few weeks to provide comments. These will be used to update the plan as required. The following step will be to action the plan, which may include

installation of temporary noise monitors in designated locations and monitored based on best management practices and/or regulatory standards. The consultants will then present a draft report, which will include the technical details outlining how the data was gathered, the process used to analyse the data, and a summary with recommendations including noise mitigation strategies that are practical and deliverable. Recommendations will be based on the data, and will have a measurable benefit. The draft report will be provided to the NSC for review, before it is finalized.

The following provides a summary of discussion that followed Michael's presentation:

- Hal noted that he had previously suggested a community walk with noise consultants to review potential locations for noise monitors along the waterfront, including targeted runway offsets and elevations. After refreshing himself on NPC300 standards, Hal suggested a need to focus in on the worst probable case scenarios, and points of reception for those scenarios. Hal inquired if there was any preliminary shortlist of worst probable noise scenario locations.
 - Gary responded that Hal is referring to a different study, in which PortsToronto may install two to three strategic noise monitors along the waterfront as community noise monitors. There is currently one portable noise monitor in use. The location of the monitor still needs to be selected, as various buildings in the community would like noise monitored on their site. Gary is waiting for additional input from the acoustic noise engineer on the best height and location for placement of the noise monitor.
 - Angela confirmed that the noise monitoring Gary and Hal are discussing is separate from the Noise Study Michael is presenting to the NSC. The noise monitoring terminals Gary mentioned are meant to be more permanent, and ongoing, gathering data over a long period of time. Comparatively, the Noise Study is meant to gather "point-in-time" data to establish a baseline and provide suggestions for noise mitigation measures that PortsToronto can move forward with. The long-term monitoring will still go ahead, but that is a separate agenda item for a future meeting.
 - Gary noted that he will confirm the acoustic noise engineer's attendance at a future meeting.
- Max inquired which months the Noise Study aims to take noise measurements.
 - Michael responded that the intention is to collect data during the summer period, as that time is most representative of peoples' use of the waterfront.
- Lesley noted that at the King's Landing's last AGM, which took place in the winter, residents on the second and third floor were complaining about noise more than during summer months because the tree canopy that usually reduced noise in the summer, is not present in the winter. Lesley highlighted that this showcases how complex noise issues are, and why it is important to recognise this complexity when measuring noise.
 - Michael noted that this complexity is recognised by PortsToronto, which is why there are no predisposed monitoring locations. He noted that this study is being undertaken by the consultant, to ensure samples are representative.
 - Angela noted that the report from King's Landing Noise Management Committee (provided by Lesley) was also circulated to Michael.
 - Michael noted that he will share that report with the consultants, once they are selected.

- Max noted that if each Neighbourhood Association or building were to provide a similar document (to the Kings Landing report), with noise issues experienced by residents written down, that would be helpful information for this Noise Study.
 - Michael noted that this would be helpful feedback.
- Max noted that there are various factors that impact noise that will be important to consider. He highlighted that depending on various factors, some buildings further away from the airport experience more noise than buildings closer to the airport.
 - Lesley noted that building angles also impact how sound travels.
- Bryan requested clarification on use of the term, “predictive analysis” (page 2 of the Noise Study Draft Scope of Work, bullet point one).
 - Michael responded that “predictive analysis” speaks to the mitigation strategy. As many measurements as required will be taken to allow for a “predictive analysis” of potential noise mitigation solutions. This analysis will identify if potential noise mitigation solutions (e.g. operation solutions, noise barriers, etc.) will be impactful. This analysis would be completed through computer analysis, which would be informed by representative data gathered through monitoring.
- Max inquired if this study was also a study that will outline how PortsToronto should conduct noise measurements.
 - Michael noted that this is part of the Noise Study, as the experts will identify locations for monitoring and methods for monitoring. Once those are approved and circulated to the NSC, the consultants will prepare a detailed scope of work, data will be collected and analyzed, and then mitigation strategies will be developed and recommended to PortsToronto.
- Max inquired if that will also include recommendations on how to measure noise in the future.
 - Michael noted this could potentially be included.
- Lesley noted that there were previous discussions about using dBC, dBA and dBZ. She noted that there are concerns around ensuring that persistent low frequency droning is measured. Lesley noted that this requires discussion around which monitoring levels will be used, and the importance of including all levels and frequencies of sound. Lesley also noted she is researching the impact of different frequencies of noise on the human body.
 - Angela noted that in the Draft Scope of Work on page 2, item 1.4, it states that dBZ will be used as a measurement.
 - Lesley was pleased that dBZ will be used as a measurement.
 - Max noted he is also pleased the measurements will be taken in dBZ, as he is convinced dBA measurements are inaccurate.
- Lesley inquired if it is helpful to share anecdotal information with Michael for explanatory purposes, to help the consultants understand the impact of noise on community members.
 - Michael responded that this is helpful feedback.
- Bryan inquired if PortsToronto are open to the Noise Study consultant attending future NSC meetings to explain their scope of work and present their findings and recommendation in the draft report.
 - Michael responded that this is a good idea, as the experts are the best source of information for the NSC. The consultant will be asked to attend a future NSC meeting.
- Max noted that there is a phone app that measures noise in dBZ that can potentially be used to measure noise in the community.
 - Hal responded that measurement tool may be more appropriate for ongoing monitoring rather than the Noise Study.

- Max noted that this Noise Study and ongoing monitoring program are an opportunity to create a noise measurement program, including the creation of a more valid model for accurately measuring noise. Max noted that eventually, he would love to see a report on how a downtown airport controls its noise, noting that it would also make for an interesting academic study.
- Hal noted that his largest overall concern is the assessment of noise impacts relative to ambient background noise. Hal noted that it is a requirement to capture the lowest background noise level, without including the sounds from any airport activities. Hal asserted that this would allow for assessment of the sound level exclusion limits. Hal noted that even with a monitor running for 24 hours, it is possible to not record the lowest background noise level in each hour, depending on the aircraft and terminal activities occurring during that 24-hour period. Hal also noted that there are many different communities along the waterfront, and that each may have a different lowest background noise level. Also, the ambient background noise on the water side of a building is lower than the background noise on the city side of the same building, and there are noise gradients that accompany elevation changes. Hal noted he has been reading through NPC 300, and noise feasibility assessments; Hal has questions for the Ministry of Environment regarding noise feasibility assessments in an urban marine environment. Hal does not believe the standards that exist speak to an urban marine environment in a fulsome manner.
- Max responded that he has an opposing opinion, in that he understands noise measurement to be cumulative, including ambient background noise and other noises. Max noted that it is this cumulative noise level which impacts the community.
- Hal agreed with this comment and concern.
- Hal noted that his interest is in addressing various noise standards, which focus on noise impacts which require accurate background sound levels. Hal explained that it is the lowest background noise level or the exclusion limit, whichever is highest, that becomes the approved stationary source sound level. Hal noted that airport related noise sources need to be assessed separately from non-airport noises, as there are different assessments for each type of airport noise. Then, all sources must be combined and analyzed cumulatively. Without prolonged monitoring and careful analysis of the data collected, identification of the lowest background noise level will be challenging. Hal suggested that airport and ferry noises must be removed in order to identify the lowest background noise level per NPC-300 and NEF protocols.
- Max noted that he agrees with what Hal is proposing so long as it does not distract the study by focusing only on the reduction of airport noise. Max noted that it is the end result that matters, which is a reduction in noise experienced by the community, regardless of what specific noise source is being reduced.
- Lesley noted that it is important to recognise that the issue to be addressed is annoyance from noise, which is based on the accumulation of noise from various sources, over time. The variance of intensity of noise, duration of noise, and frequency of noise all accumulate to be more or less impactful on people in the community.
- Hal noted his first goal would be to confirm the airport can meet the established noise standards.
- Michael noted that both points are valid. There is a reason for the set standards, but there are also impacts outside of those standards that the community has concerns about. The study is meant to address both. PortsToronto welcomes comments on how to identify baselines.
- Hal reemphasized that some days, it is hard to capture the lowest background sound level, especially in the summer due to waterfront tourist activity. Therefore, Hal is also reserved about the choice to take noise measurements only during the summertime.

- Lesley noted that noise in the winter tends to be more of a shock, as there is less accumulated sound, as opposed to in the summer months. Lesley continued that as part of having an airport in an urban environment, it is necessary to deal with the impacts of noise from the airport on human beings, not just technical aspects of noise.
- Hal noted that Lesley's intent sounds like a health impact study, which is beyond the scope of this particular Noise Study being presented.
- Wayne noted that he would like the Noise Study to also identify and define every term that is associated with noise (e.g. pitch, frequency, etc.) to ensure everyone involved is on the same page during discussions. Wayne also noted that Billy Bishop Airport is extremely unique in that it is surrounded by about 90% water, and noise moves across water differently than various land surfaces. Wayne is looking forward to being able to speak with noise specialists who will be attending future NSC meetings regarding meteorological impacts.
- Michael noted that once a consultant is appointed to the Noise Study, they will be able to attend an NSC meeting and discuss the study with NSC members.
- Max noted that the Noise Study should include consideration of how weather and humidity will impact noise readings. He noted that the noise experienced in the community varies depending on weather. Max provided an example, explaining that when working at the Harbourfront Centre, depending on the wind direction, some days the noise from the airport carries over and overwhelms the space, while on other days, the noise from the airport is barely audible.
- Michael noted that how weather and humidity will be considered is a level of detail that will be included in the study plan, which will occur after a consultant is selected. He also noted that extreme weather scenarios should be excluded to ensure the data is representative, but noted that the experts being hired will identify what would qualify as an "extreme" weather scenario.
- Wayne noted that it will be important to use meteorological terms correctly, as they have specific definitions (e.g. "calm" winds equates to a specific threshold in terms of wind speed, in meteorological terms).
- Michael agreed and noted that this is another example of why experts are being hired to complete the Noise Study.
- Lesley noted that she watches the wind sock outside of the airport, and that there have been very few times it is not moving. She noticed prevailing winds over 80% of the time, without many calm days.
- Hal observed that the Draft Scope of Work refers to wind speed in km/h and asked Wayne to comment.
- Wayne commented that km/h is a general term used by the public, but when measuring wind speeds in aviation, the measurement is always in knots.
- Michael noted that the wording in the Draft Scope of Work is not necessarily what will be used in the study. Instead, the Draft Scope of Work is being used to hire a consultant to complete the study. He noted the comment on measurements is useful, and other similar pieces of feedback are welcome.
- Hal commented that multiple weather scenarios should be part of the scope of the study, as weather impacts how communities experience noise.
- Wayne supported Hal's comment, noting that weather and wind speed can greatly impact a community's experience of noise.
- Angela noted that the portion of the Draft Scope of Work being discussed is section 1.3, which does not apply to the overall study.
- Hal observed that section 1.5.1.2 also discusses weather, and information included in the report is in section 1.6.

- Angela noted that there are three key components to the overall noise assessment. First, there is the scope of work, then the preliminary noise monitoring plan, and then the findings and recommendations of the noise assessment study. Section 1.3 of the Draft Scope of Work outlines what should be identified when forming a baseline. If members think this section should include other points, they should relay that in their feedback on the Draft Scope of Work, to PortsToronto. Angela highlighted another weather reference in section 1.5. The final report is discussed in section 1.6., however Angela noted that the detail will come later on in the process, and the NSC will have a chance to provide comments on the detailed Scope of Work being proposed by the consultant hired to conduct the noise study.
- Bryan requested that PortsToronto keep a comment log with responses to comments provided during all phases of the noise study. Bryan also requested that the log be attached to the final report. He noted that this will allow for transparency if there are some sections of the final report the NSC is confident in, and other sections they are less confident in.
- Angela agreed, noting that this is typically the practice for an environmental assessment.
- Hal noted that baseline conditions are not discussed in noise literature which focuses on background sound levels. Hal also noted that if background sound levels are documented, it would fulfil a request he has been asking of the airport for years.
- Angela replied that any baseline studies include all existing noise. This is what occurs at ports, airports and noise studies in the province, as a standard practice. She noted that particular noises cannot be excluded as factors when measuring baselines, or else those measurements would be null and void.
- Hal countered that these statements do not align with NPC-300 requirements.
- Max restated that he is interested in the cumulative noise measurement. He suggested that the study be more inclusive of various weather conditions including wind and humidity, as excluding any really humid or windy days would exclude the noisiest days, which greatly impact the community.
- Michael noted that the management plan will need to be written in a way that reflects fair, representative measurements.
- Max suggested including days where winds are up to 30 km per hour, and fairly humid days, to ensure accurate readings of the noise levels experienced in the community on the worst days.
- Hal noted that several years of weather statistics are available.
- Gary noted that these are useful recommendations.
- Michael excused himself for needing to leave for a previous commitment, but encouraged members to provide their comments through email.

2. Finalize Terms of Reference for the Sub-Committee

Alex explained that additional edits had been suggested to the Terms of Reference following the last NSC meeting. Max had suggested removing Section 3.2's reference to the term/termination of the NSC, instead leaving this to be addressed, as is, in section 5.2 paragraph 2. Hal had also suggested a number of edits which were provided to the NSC members. NSC members approved all of Hal's recommended edits, but discussed Max's suggestions. The main point of contention was that while Max would prefer there to be no set disbandment timeframe for the NSC, other members would prefer a time limit be set to encourage the NSC goals to be achieved, and to allow members to commit for a shorter, predictable time frame.

The NSC agreed to soften the language in section 3.2 to read: "It is anticipated that it will take a period of approximately one year to fulfill the mandate of this committee, at which point the existence of the committee will be re-evaluated. If there is a desire for the committee to continue with a new mandate, a

new terms of reference would be required. The focus of this committee is to fulfill the mandate outlined in this terms of reference.”

The suggested edits will be made by Alex and circulated to the NSC through email for final approval.

3. Airfield Rehabilitation Program Letter of Support

Angela explained that Billy Bishop Airport is considering putting forward an application package to the Airports Council International – North America, for [an environmental award](#) for the airport’s Airfield Rehabilitation Project and Ground Run-up Enclosure (GRE) facility initiatives. Angela noted that the airport needed at least one letter from a community or stakeholder group to confirm that the project was a success or an accomplishment. Angela noted that in the application, the airport highlights the community and City consultation that occurred as part of both initiatives. She explained that throughout the Airfield Rehabilitation Project, a 3-year initiative, there had only been 10 construction related noise complaints. Angela presented the NSC with a drafted letter of support for the airport’s application, inquiring if the NSC members would feel comfortable supporting the airport’s application, as a committee.

Bryan inquired if the award would be specifically for construction management, or also the subsequent mitigation of noise from the construction of the GRE. Angela responded that the environmental award category allows the airport to include the new LED runway lighting, noise and light mitigation during construction and mitigation of high-power engine run-ups. She explained that she did not include that level of detail in the draft letter of support but instead, the letter explains that the project overall should be recognised.

The NSC members were concerned about how the award would be used by PortsToronto in the future, and were uncomfortable supporting an award that could be perceived to suggest that there are no ongoing concerns between the airport and the community, especially around noise mitigation. The NSC members also noted that before approval, they would need to consult their individual community groups (which each NSC member represents). NSC members would also like more details regarding the description of the award. NSC members did recognise that the Airfield Rehabilitation Project construction had been exceptional in preventing and addressing noise and lighting impacts on the community. Based on the general hesitation of the group, and the requirement for a quick decision (the application was due one week from the meeting), There was an understanding that the NSC would not be able to sign the letter of support, but Angela thanked the NSC for their time.

Bryan noted that PortsToronto had also asked the City of Toronto for support for the award. The City of Toronto may provide a letter to PortsToronto that uses neutral language to acknowledge that PortsToronto have acted on the council request for construction of the GRE. If the City does provide this letter to PortsToronto, it will be circulated to the NSC for their records.

Hal noted that the construction company should be recognised for their work in reducing impacts on the surrounding community during construction. He also cited Gene Cabral for his commitment regarding construction impacts in general.

Additional Items

4. Noise Curfew Infraction Funds

Angela shared that, as per the suggestion in the last NSC meeting, the PortsToronto Board of Directors recently approved that money raised through noise curfew infraction charges will be placed into a community fund. Additional information is available in Appendix C.

Lesley replied that she was happy to hear about this change. She inquired if there was a charge from the most recent noise curfew infraction. Gary responded that the most recent noise curfew infraction was caused by a non-commercial airline (a general aviation plane). PortsToronto is still waiting on Transport Canada to confirm if there will be a fine issued.

Max suggested that the fund be used to provide the community with noise monitors. He also suggested the local community centre receive some of the funds, as the community centre is impacted by aircraft noise.

Angela noted that PortsToronto have had meetings with the Toronto District School Board to investigate opportunities to provide funding for community initiatives.

Max inquired if the fund would be retroactive to 2010. Angela replied that the approval was not retroactive.

5. Provincial Noise Standards Presentation (Angela Homewood)

Due to time overruns on other agenda items, the NSC did not have time to review the Provincial Noise Standards presentation (by Angela) or to review or add to the list of Noise Standard questions for the Ministry. Instead, Angela noted that the presentation she will share with the NSC was originally made in 2016, relating specifically to the GRE construction. The presentation will be circulated to NSC members electronically for their review. Angela noted that Hal's email from earlier in the week includes discussion on noise standards in further detail that should be read by NSC members to allow for deeper discussion and informed questioning with the Ministry.

Bryan inquired if a delay in the presentation would delay the meeting with the Ministry. Angela responded that the Ministry was meant to attend the May NSC meeting, which would still allow for the NSC to discuss noise standards and questions for the Ministry at the March meeting. Bryan suggested the NSC reach out to the Ministry now with an invitation, and let them know general questions will be sent at a later date (to allow the Ministry to better prepare for their visit). The focus of the session with the Ministry will be to help to NSC better understand Provincial noise guidelines.

Angela noted that once a draft Scope of Work is prepared for the Noise Study, it will be circulated to the NSC, as this may influence the questions posed to the Ministry. Bryan suggested that the Scope of Work include consultant feedback on how the provincial guidelines should be interpreted, which would help inform the NSC meeting with the Ministry. Angela responded that this was a good idea and suggested the consultants also attend the meeting with the Ministry.

Lesley inquired which document would be useful to read before the meeting with the Ministry in order for the NSC members to be well informed. Hal responded that earlier in the week he had circulated redlines to

draft NSC Meeting No.1 with key excerpts from NPC-300 attached (6 pages), as well as the entire NPC-300 (56 pages). Hal suggested these excerpts were the most useful to read to have a better-informed discussion.

6. GRE Video

Gary shared a video he took of a run-up occurring within the ground run-up enclosure. This video reflected the ability of the GRE to block noise from a plane run-up.

7. Follow Up to Meeting No.3 Presentation (Gary Colwell)

Gary provided printed copies of feedback to address questions posed to him in the NSC meeting 3 summary. An electronic copy of this feedback will be circulated to NSC members following the meeting.

8. Recent Night Time Noise Concern

Concern regarding overnight noise was raised by Lesley. Gary explained that the recent, night time noise disturbance, was caused by the ferry. It had to be kept running through the night due to the weather, there was the potential for damage against the dock wall (unless the engine was running to stabilize the boat). Hal inquired why the ferry wasn't idling on the island side, while Lesley noted that it sounded like someone was dumping something. Gary responded that the noise was definitely produced by the ferry, and that he would follow up with additional detail.

9. Plans for Upcoming Meetings

- Wednesday March 27th, 7-9pm:
 - Noise standards presentation
 - Review of NPC 300
 - Focus on developing general questions for the Ministry
- Wednesday May 29th, 7-9pm:
 - Ministry attendance (planned)
 - Noise Study consultants to attend
- Wednesday July 24th, 7-9pm

Postponed to future meeting (date to-be-determined)

Acoustic Noise Engineer to teleconference into a meeting (with PowerPoint presentation). They will address the placement of noise monitors in the community and answer questions about noise measure placement.

10. Action Items

1. An electronic copy of the Draft Noise Study Scope of Work will be circulated to NSC members following the meeting (available in Appendix B).
2. NSC members will provide feedback on the Draft Noise Study Scope of Work within 3 weeks.
3. Gary will confirm the acoustic noise engineer's attendance at a future meeting to discuss the ongoing community noise monitoring program.
4. Michael will share the Kings Landing report with the Noise Study consultants, once they are selected.

5. The Noise Study consultant will attend a future NSC meeting.
6. Suggested TOR edits will be made, and the revised TOR will be circulated to the NSC through email for final approval.
7. If the City provides a signed letter to confirm PortsToronto's activities for an Airports Council International – North America environmental award, it will be circulated to NSC members for their records.
8. Angela's Noise Standards presentation will be circulated to NSC members electronically for their review.
9. An electronic copy of Gary's Meeting 3 feedback will be circulated to NSC members following the meeting.
10. Gary will provide additional details on a recent noise issue, produced by the ferry.
11. Homework for the NSC members before the March 27th meeting:
 - a. Feedback on the Noise Study Scope of Work
 - b. Brainstorm general questions for the Ministry
 - c. Review Hal's NPC 300 excerpts