

Detailed Responses to City of Burien Questions

1. Question: *"Why have there been no studies evaluating increases in aircraft noise on ALL runways since the 2002-2007 Part 150 Study? (The 2013-2018 Part 150 Study evaluated only the third runway.) FAA guidance calls for new noise analyses whenever there is an increase of noise of at least 1.5 dB DNL. The communities believe that there have been increases of at least 1.5 dB DNL given the rapid growth in aircraft operations since 2002. Can you show us any evidence that this is not the case?"*

The 2014 Part 150 update assessed noise impacts from all three runways and showed a smaller impacted Area; the SAMP Environmental Review will also evaluate noise from all three runways.

- The 2013-2018 Part 150 Update, completed in 2014, did in fact include traffic on all three runways and all flight traffic. We believe that the misperception that the study only included the third runway stems from the fact that we scheduled the Part 150 update in order to ensure that all operations were included so as to maximize the accuracy of the study – including but not limited to third runway use.
 - The Federal Aviation Administration (FAA) requires airports to model noise exposure using the Day Night Level (DNL) metric; the FAA finds a level higher than 65 DNL incompatible with unmitigated residential uses.
 - With the inclusion of Third Runway operations, the 2014 Part 150 update showed a ***smaller*** existing geographic area that was experiencing airport noise above the level appropriate for residential uses without mitigation as compared to the previous update. As was discussed in the June 2019 StART meeting, the main driver of this change was improvements in aircraft noise-reduction technologies.
 - Finally, the Sustainable Airport Master Plan (SAMP) Near-Term Projects (NTP) environmental review will also evaluate noise impacts. If the SAMP NTP environmental review noise contours indicate that there is a substantial change, the Port plans to work with the FAA to update the official Part 150 Noise Exposure Maps (see the answer to Question 4 for additional details).
2. Question: *"The Expert Arbitration Panel's Review of Noise (Final Report) recommendations in 1996 included many noise abatement procedures (e.g., minimizing nighttime flights, reverse thrust). Why have many of the noise abatement procedures not been implemented? Why has the Port ignored 23 years of pleas from the surrounding communities for noise abatement flight procedures and yet is willing to "discuss" such noise abatement procedures with the StART Committee?"*

We believe it is incorrect to characterize the Port as having ignored community concerns over the past several decades. The Port has been recognized nationally for its innovative leadership on both noise abatement and noise mitigation.

- Sea-Tac Airport's noise abatement flight procedures have been in place since 1990 when the Federal Aviation Administration (FAA) implemented the "Four Post Plan," which sets geographic boundaries for aircraft departure and arrival profiles. The Port monitors these procedures and meets regularly with the FAA to discuss adherence rates. Approximately 99% of aircraft fly within the defined noise abatement corridors.
- Federal law does not allow the Port to mandate the complete elimination of reverse thrust. Therefore, to address this concern, the Port has included language within the pilot approach charts for Sea-Tac Airport to limit the use of reverse thrust to what is necessary for safety during the nighttime hours.

- The work of StART to move forward on analyzing additional noise abatement procedures is further evidence of our continuing commitment to continue to push for even greater responsiveness to community concerns, to the best of our abilities, legal constraints, and available technology.
- Finally, as announced on September 12, 2019, Sea-Tac has secured a revised Runway Use Agreement with the FAA and has begun a new voluntary Late-Night Noise Limitation Program with the airlines serving Sea-Tac.

3. Question: *“When was the last time that the performance of Sea-Tac Airport’s noise program was audited by the State of Washington or the FAA? Given the Port’s lax oversight (documented by its own internal review) and exceedingly slow implementation of noise mitigation programs, might such an audit be justified? A recent Port audit of the program indicated only 40 homes were sound insulated in three years, while just five miles away at King County Airport at Boeing Field, 100 homes/year were insulated during operation of its program between 2009-2015.”*

The FAA audits all grants when they are closed out to ensure that all grant obligations have been fulfilled. The Port has used airport revenues for residential noise mitigation programs in the last decade and until very recently there have been no new grants to audit. The state audits the Port annually to check for compliance with state law and determines which programs to review.

- The Port’s own internal audit function operates independently to ensure transparency and accountability of all Port programs. Of the two findings from the recent internal audit report on the noise program, one was mostly addressed through updates in 2015 and the other was a recommendation to enhance our oversight going forward to avoid any potential future issues.
- Again, the Port’s noise program is nationally recognized for its leadership and innovation and has spent over \$300 million on sound insulation projects over the last few decades. To date, we have insulated more than 9,400 single-family homes and 5 condominium complexes (246 units), made financial contributions to the rebuilding of 8 schools within the Highline School District with a commitment for 7 more, and made contributions to the renovation of 14 buildings at Highline College. We also handled acquisition and relocation for 359 mobile homes and 1,469 single-family homes.
- Because the Sea-Tac sound insulation program is so much larger and in place for so much longer than King County Airport’s program, the comparison is misleading. A better comparison would be to look at the overall percentage of impacted homes near each airport. Because of our dedicated efforts, only about 140 single-family homes remain eligible. The pace at which these remaining homeowners decide to participate is one of the driving factors of the program speed, and many of those residents are purposefully choosing not to participate.
- The Port is also continuing work on additional programs including 3 condominium complexes comprised of 133 units, apartment complexes starting with 1 pilot project followed by up to 17 more complexes comprised of 877 units, places of worship starting with 1 pilot project followed by up to 6 more structures, and voluntary acquisition of 22 residential structures immediately south of the 3rd Runway.
- The Port also strives for program transparency through regular presentations to the Port of Seattle Commission, as well as in various community forums.

4. Question: *“Why is the Sustainable Airport Master Plan (SAMP) being prioritized over the Part 150 Study? There is evidence that the FAA’s own noise analyses contained in its April 2018 Categorical Exclusion Report to the City of Burien recognizes that 5.2% of the study area measured noise that exceeded 65 dB DNL. The FAA could not use Sea-Tac’s 2013-2018 Part 150 Study because it was already outdated. By not*

updating the Part 150 Study now, hundreds of homes will not be sound insulated for another decade at the Port's pace and noise abatement procedures will continue to be an illusory goal. Why should people continue to suffer based on noise at Sea-Tac Airport when 80% of the cost of sound insulation is borne by the FAA?"

The SAMP environmental review will include an assessment of airport noise impacts.

- As mentioned above, the SAMP NTP environmental review will include an assessment of noise impacts using methodology and noise modeling that is similar to what is used for a Part 150 study.
- If the SAMP NTP noise contours indicate that there is a substantial change, the Port would expect to undertake an update to the Part 150 study, including updated official Noise Exposure Maps and a revised Noise Compatibility Program. This work will determine whether noise exposure contours will change and whether new areas will be eligible for noise mitigation.
- The FAA has not deemed our Part 150 study to be outdated. The FAA's April 2018 Categorical Exclusion states that: "As part of the FAA's noise evaluation, FAA also compared the result of the All Arrival and Departure Operations noise analysis to the Part 150 Noise Compatibility Update for SEA, dated October 2013... *Geographically, the noise exposure levels in the All Arrival and Departure Operations noise analysis and Part 150 Study are reasonably close, which indicates that the results of the All Arrival and Departure Operations noise analysis is accounting for the cumulative impacts from all flights.*"
- The 65 DNL noise contour models noise on an average annual level, weighted extra for nighttime noise. While individual noise events may exceed 65 decibels, federal and airport noise mitigation is restricted to the FAA-approved contour.

5. Question: *"Why are StART subcommittee meetings not open meetings, recorded, summarized, or notes prepared? Why are speakers and agendas set solely by the Port? Why are "new" policy decisions announced by the Port even when the group had not taken a vote or reached consensus on specific issues? Why are alternatives such as slower growth in operations not considered as a means to address community concerns?"*

StART's meeting procedures are transparent and were developed in collaboration with all airport cities, including Burien.

- StART's operating procedures and areas of focus were developed in close collaboration with all six airport cities. They are the product of a series of working meetings in 2017 between the Sea-Tac managing director and the six city representatives, which included the Burien city manager, and were endorsed by all participating entities.
- Any decisions related to the structure and operating procedures are open to changes based on consensus among all parties; we welcome a discussion with StART member jurisdictions about how to improve our efforts.
- Transparency, collaboration and information sharing are key attributes of the operating procedures along with the strong desire to identify possible solutions for the neighboring communities.
 - Summaries of all StART meetings are developed and made available on the Port's website and full StART meetings are open to the public.
 - StART members regularly provide input on topics for StART meetings. In fact, the Part 150 panel discussion that occurred at the August 28 StART meeting was the direct result of an inquiry made by several StART members, including representatives from Burien. Unfortunately, Burien representatives were not at the August meeting, since it was after your decision to suspend participation.

- StART is not a formal decision-making body, but its programs and efforts that were recommended for implementation by StART were based on a process defined by consensus. Similarly, new initiatives can be developed at any time based on collaborative discussion by StART members.
- For further detail on meeting summaries, agenda-setting, consensus-based actions and StART's operational structure, please refer to StART's operating procedures, included in StART's annual report, at <https://www.portseattle.org/sites/default/files/2019-02/StART-2018-Annual-Report.pdf>.

6. Question: *"Page 40 of 50 of the March 27, 1996 Final Report of the Expert Arbitration Panel's Review, (Commissioned by WSDOT and PSRC) directs the Port as follows: "g. Continue to work with the airlines to minimize nighttime engine run-ups, we note that, although many of the events are exempt from the King County Code, the exempted nighttime events have levels higher than the code permits. Existence of an exemption does not mean elimination of the impacts on people." This admonition was written in 1996, but nighttime engine run-ups are still a huge generator of 15-20 dB for each occurrence. Why hasn't the Port moved its engine run-ups away from the airport in compliance with WAC 173-60-050(1)(d), which reads: "Provided, that aircraft testing and maintenance shall be conducted at remote sites whenever possible."? The Ground Runup Enclosure (GRE) has been dropped from further consideration by the Port due to the SAMP, despite the fact that this recommendation was included in two earlier Part 150 Studies. The Port argues that there is room on the airfield for a new maintenance campus. How can this be the case, when a GRE, that would improve livability for people living closest to the airport, cannot be accommodated?"*

Engine testing run-ups have decreased with newer aircraft and procedures. Sea-Tac will be working with StART to do a comprehensive study to identify ways to reduce ground noise.

- Recent changes to aircraft operations and maintenance procedures have significantly reduced the need for engine run-ups on the ground. Newer aircraft, including the predominant Boeing 737-800/900 series, do not have the same requirements for substantial maintenance. In 2018 there were fewer than one engine testing run-ups per day, including only 15 in the entire calendar year between the hours of 10 pm and 7 am; these run-ups each lasted two minutes or less.
- As part of the ongoing work of StART, the Port has contracted with a consultant to conduct a comprehensive ground noise study to identify sources of airport ground noise. The findings of this study will be essential to determining how to best focus our ongoing ground noise reduction efforts, and we look forward to working with all cities engaged in StART to successfully deliver on this work.

7. Question: *"Why has there been no discussion of mitigation for the impact on citizens of ultra-fine particle pollution (UW study underway and commissioned by the State Legislature)? Is it logical (or ethical) to move forward on airport projects while the health, air, and cost-benefit analyses associated with these projects remain unfinished?"*

The Port is financially supporting and engaged with the study of UFP emissions and is working on ways to reduce emissions with sustainable aviation fuels.

- Determining whether and how aircraft activity contributes to ultra-fine particulate emissions and any associated health impacts has been a top priority for the Port over the past several years.
- This which is why we contributed financially to the University of Washington (UW) study that you referenced; the Port also participates on the study's advisory committee. The Port has publicly endorsed legislation from U.S. Representative Adam Smith that would require a federal study of ultra-fine particulates related to aircraft.

- To this point, the science around ultrafine emissions from aircraft is still developing; therefore, there is not a regulatory basis at this time for determining an impact that would require mitigation. The SAMP NTP environmental review will include an analysis of the potential air quality impacts for the broad range of regulated pollutants associated with airport operations.
- Finally, we are encouraged by research that shows how Sustainable Aviation Fuels (SAF) might significantly reduce a wide variety of emissions from aircraft, including ultra-fine particulates. That is one of the many reasons that we are moving as quickly as possible to achieve the Port Commission's goal of implementing SAF for all flights fueling at Sea-Tac. We welcome your partnership in achieving this vision.

8. Question: *"Why does Sea-Tac Airport confine its air quality analysis to airport property when past predictions found Clean Air Act violations in communities and air quality impacts up to five miles away with far fewer operations than today's "8th busiest airport" numbers?"*

Sea-Tac's air quality analysis is not "confine[d] to airport property" and is done by an independent agency.

- The air quality analysis used by the Port is not confined to airport property and, in fact, extends to several miles outside the airport. Requirements for evaluating air quality impacts include analyzing emissions from airport property to the "mixing layer height," which is typically about 3,000 feet above the ground. Aircraft usually enter the mixing layer approximately ten miles away from the runways during aircraft landings and go above it approximately seven miles away during takeoffs.
- The Port partners with the Puget Sound Clean Air Agency, an independent body, to conduct air quality monitoring. We work with them and several federal agencies to ensure our compliance with air quality requirements. There are no current Clean Air Act violations associated with the Sea-Tac Airport.
- The SAMP Environmental Analysis will contain a complete air quality analysis consistent with regulatory standards. The City of Burien will have the opportunity to review and comment on that analysis.

9. Question: *"Why is the Port unwilling to stand up for the health and concerns of residents of surrounding communities, many of whom work to support Sea-Tac Airport operations? Why does the Port often use the excuse that its hands are tied because of FAA regulations rather than working with the communities to change procedures that may cause harm to our residents?"*

The Port is driving new measures to address health and community concerns.

- The current Port of Seattle Commission is more focused on addressing community concerns, ensuring sustainability and addressing quality of life than at any point in our organization's history.
- Over the last three years, we have looked beyond regulatory requirements to achieve those goals, including with the following actions:
 - Working with Congressman U.S. Representative Adam Smith to ensure eligibility of Highline schools for noise insulation;
 - Working with U.S. Representative Pramila Jayapal on an amendment to the 2018 FAA Reauthorization to study health impacts in the Sea-Tac Airport area;
 - Prioritizing resources for sustainable aviation fuels;
 - Establishing the Airport Community Ecology (ACE) fund and the South King County Fund;
 - Establishing StART, which has already resulted in several promising initiatives like the revised runway use plan and the late-night noise limitation program.

- These are only some of the examples of how the Port is continuing to invest in our communities, and we are unflinchingly committed to this work. For example, there are several new items that have been identified throughout the StART process – many of which are referenced above such as the ground noise study – that we believe will do even more to achieve our goals.
- The Port has also explicitly rejected the idea of our hands being tied by FAA regulations, which is why StART formed a Federal Policy Working Group to actively advocate for changes to federal policies and regulations that we believe unnecessarily hinder our ability to maximize our efforts to address community concerns.
- We are excited to work closely with all of the cities engaged in StART to ensure the success of this work over the coming months. We are proud of the achievements to-date and look forward to continuing to be deeply engaged on these issues.