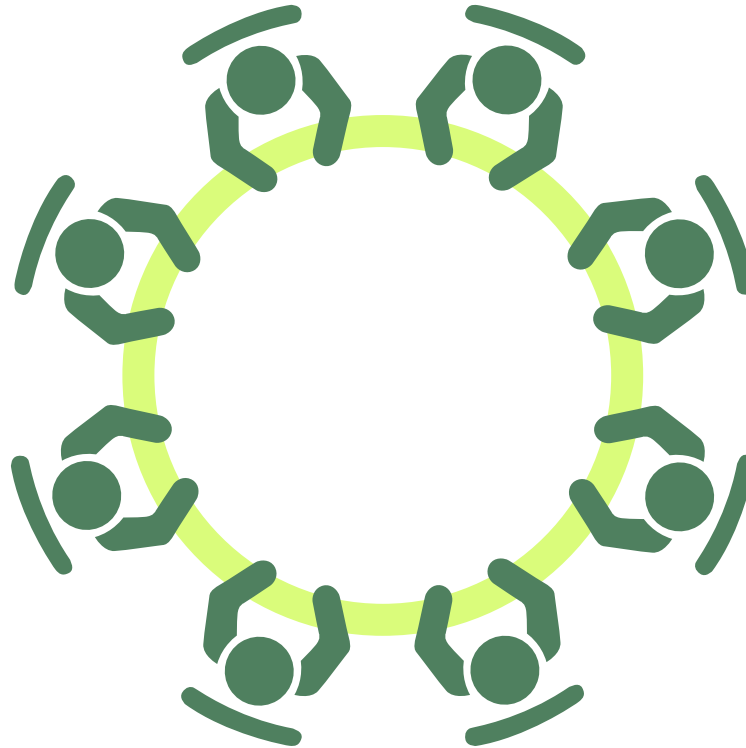




2020 StART Annual Report



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FINAL

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List of Acronyms and Abbreviations

Acronym/ Abbreviation	Definition
AN Working Group	StART Aviation Noise Working Group
DNL	Day-Night Average Sound Level
FAA	Federal Aviation Administration
FP Working Group	StART Federal Policy Working Group
ICAO	International Civil Aviation Organization
NADP	Noise Abatement Departure Profile
Port	Port of Seattle
SAF	Sustainable Aviation Fuel
SEA	Seattle-Tacoma International Airport
StART	SEA Stakeholder Advisory Round Table
UFP	Ultra-fine particle
UW	University of Washington

1. Summary and Accomplishments

Background

The Port of Seattle (Port) developed the SEA Stakeholder Advisory Round Table (StART) in 2018 to enhance cooperation between the Port and the Highline Forum-member cities of SeaTac, Burien, Des Moines, Normandy Park, Tukwila and Federal Way. This voluntary, non-governing, regional roundtable is convened by the Port's Aviation Managing Director and influenced by discussions with leadership from the Highline Forum-member cities and other representational bodies.

StART creates the opportunity to:

- Support meaningful and collaborative public dialogue and engagement on airport-related operations, planning and development;
- Provide an opportunity for the Highline Forum-member cities to inform the airport-related decision making of the Port of Seattle and other jurisdictions/organizations;
- Raise public knowledge about the airport and its impacts, and
- Focus on practical solutions to reduce the impact of the airport on Highline Forum-member cities.

StART seeks to establish a forum that fosters good will, respect, and openness in order to collaboratively solve problems. StART is most effective when all parties are willing to fully discuss matters of mutual concern; therefore, all members are asked to pledge their good faith in striving to achieve those ends.

StART is not a formal decision-making body or an inter-local agency. It is not governed by the requirements of the Washington State Open Public Meetings Act Chapter 42.30 RCW. StART does not follow procedural rules of order, entertain motions, or record votes. StART uses consensus to shape feedback and provide guidance to the Port. Consensus among the members is achieved by distinguishing underlying values, interests, and concerns, which are in turn used to develop feedback and action agendas. Feedback conveys both areas of agreement and areas of concern that require further exploration. StART also values feedback from individual StART members, even when there is no consensus on specific guidance.

Impacts of COVID-19

2020 was an unprecedented year for Highline Forum-member communities, the airline industry, and the airport. By StART's second meeting of the year in April, the magnitude of COVID-19's impacts was extreme. StART quickly shifted from holding in-person meetings to virtual meetings. The April meeting focused on gaining perspective by discussing the impacts of COVID-19 on the aviation industry and the challenges facing the Highline Forum-member cities. During the meeting, Lance Lyttle (Managing Director of SEA) emphasized that health and safety was the Port's number one priority and explained that SEA had been hit very hard:

- The number of travelers coming through SEA was down 90-95%
- In 2019, there were approximately 50,000 people a day moving through security checkpoints and in April 2020 there were approximately 2,500 a day
- Airlines canceled hundreds of flights
- 62 airport dining and retail locations closed
- Many airport workers were laid off

Lyttle also noted that the Port had established financial relief and response efforts to assist SEA's impacted tenants and business partners. SEA was awarded \$195 million in federal grants as part of a \$10 billion-dollar relief package for airports across the US. He added that some capital projects were to be delayed.

City representatives discussed the impacts of COVID-19 on their communities. Significant issues included a business downturn, a decrease in tax revenues, and an uncertainty surrounding future impacts and conditions. Addressing the immediate community needs for health and safety was critical. Yet, cities were challenged to meet these basic needs, such as feeding students and seniors.

StART representatives from Delta Air Lines and Alaska Airlines discussed the impacts of COVID-19 on air carriers. Alaska flight schedules were down by 70-80%, and Delta flight operations were down 80%. Throughout the year, these representatives kept StART updated on their operational statuses, as well as their new initiatives and stringent health and safety procedures:

- Enhancing aircraft cleaning and installing hospital grade HEPA filters
- Maintaining empty middle seats
- Utilizing cargo planes to send medical equipment across the country
- Donating one million meals
- Flying health care workers for free
- Parking unused aircraft
- Initiating a company-wide hiring freeze
- Reducing executive salaries
- Negotiating pay reductions with vendors

Moving forward from that April meeting, there was great uncertainty surrounding the duration and degree of harm to public health and the economy. The cities continued to report worsening conditions at the subsequent StART meetings, held against a backdrop of the spreading pandemic inflicting a disproportionately high burden on South King County. By mid-year, when it became clear that the pandemic was not waning, StART focused discussions on the Port's Economic Recovery Framework: a plan designed to guide support for recovery, prioritize economic

development and community investment programs, and maximize partnerships to leverage funding for projects in the Highline Forum-member cities. Throughout the year, Lyttle continued to outline the health and safety initiatives being implemented at SEA.

As the pandemic continued, what became clear is that there would be significant long-term changes in the airline industry. Some of these changes, like retiring older aircraft, may reduce aviation noise. As the region, country, and world continue to recover, StART is poised to modify previous initiatives and identify new actions based on current realities.

2020 Membership

StART is convened by the Airport's Managing Director, who serves as the chair and the sponsor, directing staff to provide technical analysis and expertise to the group. An independent, neutral facilitator provides assistance in the preparation, management, and documentation of each StART meeting.

Each of the member cities appoints two community representatives to serve on StART alongside a non-elected city employee, typically a city manager. Members are appointed to a 2-year term. The first cycle of appointments concluded in 2019, so for 2020, cities reappointed or identified new community representatives.

Representatives from Alaska Airlines, Delta Air Lines, and TransGroup Global Logistics participate as members, and representatives from the Federal Aviation Administration participate as non-members to provide agency expertise. Depending on the nature of the action items, StART contracts with issue-specific consultants to provide analysis and technical expertise. In 2020, consultants included Vince Mestre (technical advisor and resource to the Aviation Noise Working Group), Brad Nicholas (consultant, HMMH), and Steve Alverson (consultant, ESA).

StART provides updates to the Highline Forum, including a briefing on the StART Annual Report. The Highline Forum provides cities (elected representatives and senior staff), educational governing bodies, and the Port (elected representatives and senior staff) with the opportunity to share information with each other, interact with outside speakers and other governmental organizations, and partner on initiatives that benefit their shared constituency.

During 2020, the cities of Des Moines, Burien, and Federal Way, temporarily suspended their membership; therefore, membership consisted of the three remaining airport-area cities until late in 2020, when all three suspended cities reinstated their involvement in StART for 2021. The following chart reflects representatives in place for most of 2020.

2020 StART Membership List

Member/Association	Name	Title
Normandy Park	Eric Zimmerman	Community Member
	Tim Sorensen	Community Member
	Mark Hoppen	City Manager
	Jennifer Ferrer-Santa Ines (Alt)	Finance Director
SeaTac	Tejvir Basra	Community Member
	Robert Akhtar	Community Member
	Carl Cole	City Manager
	Kyle Moore (Alt)	Government Relations and Communications
Tukwila	Erica Post	Community Member
	Tod Bookless	Community Member
	Brandon Miles	Business Relations Manager
Port of Seattle	Lance Lytle	Aviation Managing Director
	Arlyn Purcell (Alt)	Director of Aviation Environment and Sustainability
	Eric Schinfeld (Staff)	Sr. Manager, Federal Government Relations
	Marco Milanese (Staff)	Community Engagement Manager
	Stan Shepherd (Staff)	Airport Noise Program Manager
	Tom Fagerstrom (Staff)	Noise Programs Coordinator
	Tim Toeber (Staff)	Airline Resource and Scheduling Manager
Delta Air Lines	Tony Gonchar	Vice President – Seattle
	Scott Ingham (Alt)	Public Affairs Advisor
Alaska Airlines	Scott Kennedy	Manager, State and Local Government Affairs
	Matt Shelby (Alt)	Managing Director, Airport Affairs
Air Cargo	Shan Hoel	TransGroup Global Logistics
FAA (non-members)	Dave Suomi	Regional Administrator, Northwest Mountain Region
	Justin Biassou	Community Engagement Officer and Regional Ombudsman, Northwest Mountain and Alaskan Regions

2020 Accomplishments and Results

Efforts and programs that began implementation in 2019 and early 2020 saw results in 2020. Most significantly, the Revised Runway Use Agreement between the Port and the FAA dramatically decreased late-night operations on the 3rd Runway, with most late-nights absent of any 3rd Runway operations. Another accomplishment was the completion of the Distant Noise Abatement Departure Profile (NADP 2) Analysis, which confirmed that a distant NADP would lessen aircraft departure noise for farther out communities. Additional accomplishments include a new noise comment reporting system and a revised federal policy advocacy plan. In addition to these achievements, StART members developed recommendations for enhanced engagement with near-airport communities, continued to provide guidance to programs, and discussed new initiatives. The following graphic is a snapshot of 2020's accomplishments and results.

More details about action items, accomplishments, and results are attached in Appendices I, II, and III.

Snapshot of StART 2020 Accomplishments and Results

Objective	Action Item/Accomplishment	Results (as of December 31, 2020)
 Reduce late-night noise by incentivizing air carriers to fly at less noise-sensitive hours or transition to quieter aircraft.	Late-Night Noise Limitation Program implemented. Late-night noise exceedances will be a new category in the Fly Quiet Incentive Program, designed to convey the community impacts of aircraft noise to airlines and pilots. Identified and analyzed which air cargo carriers, flight schedules, and aircraft types operate during late-night hours.	Issued in-person and written communications to all air carriers, focusing on those who exceeded the late-night noise thresholds—positive responses from and dialogues with a number of airlines. Considering new strategies to increase focus on the role of air cargo carriers in reducing late-night noise.
 Reduce late-night noise for communities underneath the 3rd Runway's flight path by minimizing the use of the 3rd Runway during late-night hours.	Implemented the Revised Runway Use Agreement between the Port and the FAA.	Late-night operations on the 3rd Runway dropped dramatically in 2020 with the majority of nights absent of any late-night operations on the runway.
 Lessen aircraft approach noise for communities south of the airport.	Provided funding for preliminary design work for a glide slope adjustment of Runway 34R.	Preliminary design work began. Project implementation contingent on completion of the Sustainable Airport Master Plan (SAMP) and FAA approval.
 Reduce whistling noise created by pre-2014 A320 series aircraft for communities underneath the flight path.	Continued asking all relevant air carriers to install a vortex generator on pre-2014 A320 series aircraft to lessen descent noise.	Many A320 aircraft were grounded due to the impacts of COVID-19. It is anticipated that many older A320 aircraft will be retired by airlines leading to a substantial noise improvement.
 Lessen aircraft departure noise for communities more distant to the airport.	Distant Noise Abatement Departure Profile (NADP 2) Analysis confirmed to lessen aircraft departure noise for more distant communities.	Completed NADP Analysis that included recommendations on feasibility, potential benefits, and any potential tradeoffs. Implementation is contingent on community and FAA approval.
 Reduce aviation noise for close-in communities surrounding the airport.	Developed initial scope and timeline for a ground noise analysis as well as provided recommendations for location of noise monitors.	Due to COVID-19's impact on airport operations, ground noise study is currently on hold.
 Provide up-to-date data for the public and increase accessibility and usability of noise complaints received by the Port.	Established monthly noise comment and complaint reports that are posted on the Port's website.	Public can access new monthly data that show noise comments and complaints, sorted by city, zip code, and distinct household, along with the subject matter of the complaint.
 Identify additional actions that may reduce noise.	Identified additional issues to be analyzed, including: propeller aircraft operations, proposed noise standards for supersonic aircraft, and international noise and green aviation standards.	Focus for 2021.

Snapshot of StART 2020 Accomplishments and Results

Objective	Action Item/Accomplishment	Results (as of December 31, 2020)
 Influence federal policy relating to jointly agreed aviation priorities.	Updated joint Port-Cities Federal Policy Advocacy Plan to reflect new priorities, including four new policy focus areas. Supported progress in Congress, including U.S. House passage of several priority policies, as well as supporting initial FAA action on key regulatory items from the 2018 FAA reauthorization legislation.	Scheduled meetings with Members of Congress and the Biden Administration for early 2021 to discuss shared efforts to implement the Port-Cities Federal Policy Advocacy Plan.
 Address the issue of secondary noise insulation failure.	Congress passed appropriations legislation that included House of Representatives’ language addressing homes insulated prior to 1993. Worked closely with U.S. Representative Adam Smith and airport community members to refine draft legislation addressing this issue.	Moving toward introduction of the legislation and engaging airport industry associations on this topic.
 Establish constructive relationships with Congressional staff and elected officials who represent our region and state.	Engaged Congressional staff in regular meetings of the StART Federal Policy Working Group.	Expanded outreach to new Members of Congress as well as elected officials from other regions throughout the country with similar concerns.
 Consider ways to connect aviation recovery to promoting environmental sustainability.	Reviewed the European Union aviation industry’s initiatives.	Additional study and strategies will be considered.
 Broaden and deepen community engagement in StART and issues that StART addresses.	Convened a committee to develop recommendations for enhanced community engagement.	Community engagement recommendations and initial steps for implementation developed.
 Deepen understanding of ultrafine particles and their potential impacts.	Presentation to StART on University of Washington MOV-UP (Ultrafine Particles) Study.	Reviewed emerging studies on ultrafine particles and their health impacts. Identified possible action items, particularly relating to federal policy.
 Strengthen partnerships between the Port and airport area communities to address issues related to the impacts of COVID-19.	Engaged members in discussion and identification of needs including input into the Port’s Economic Recovery Strategy.	Port’s Economic Recovery Strategy in process of implementation.

2. Overview of 2020 Meeting Objectives, Presentations, and Discussion Topics

In 2020, StART continued to utilize the priorities and interests that were identified in 2019. These priorities focused on three main areas: aviation noise, federal policy, and air quality/health impacts. As the pandemic worsened, StART also began to consider how best to strengthen partnerships to address the impacts of COVID-19. This included a discussion of the Port's Economic Recovery Framework and how communities might benefit from the opportunities it identifies. StART also focused on understanding the impacts of COVID-19 on the airline industry and Port operations so as to anticipate what operational and/or fleet changes that reduce aviation noise may occur during recovery. In addition to vetting the action items from both Working Groups, briefings and discussion focused on reviewing the results of ongoing initiatives and gaining a greater understanding of noise monitoring systems.

By the end of the year, the three suspended cities returned to StART. This provided a robust opportunity to discuss what had been learned, determine what was needed to further StART's objectives, and begin to identify priorities for 2021.

The following graphic shows the meeting objectives and progress in 2020. Meeting summaries are attached as Appendix I.

StART–2020 Meeting Progress

February 2020	April 2020	June 2020	August 2020	October 2020	December 2020
Objectives: To provide input into the upcoming federal policy advocacy trip to Washington, D.C. To recap the Aviation Noise Working Group meeting. To provide the Late-Night Noise Limitation Program 4th Quarter results. To brief and discuss the University of Washington study on ultrafine particles. Discussion Topics: • Briefing: Sound Insulation Program • Briefing and Discussion: Federal Policy Working Group Update • Briefing and Discussion: Aviation Noise Working Group Update • Briefing and Discussion: Late-Night Noise Limitation Program 4th Quarter Results • Presentation and Discussion: University of Washington MOV-UP (Ultrafine Particles) Study • Public Comment	Objectives: To gain perspective on and discuss the impacts of COVID-19 on aviation as well as the challenges facing the airport area cities. Discussion Topics: • Discussion: COVID-19 Impacts—Neighboring Cities’ Perspectives • Discussion: COVID-19 Impacts—Airports’ Perspective • Discussion: COVID-19 Impacts—Air Carriers’ Perspectives • Discussion: COVID-19 Impacts—FAA’s Perspective • Discussion: COVID-19 Impacts—Fleet Mix Changes That May Affect Noise • Public Comment	Objectives: To provide an update on the StART Federal Policy Working Group and the Aviation Noise Working Group. To discuss and provide initial input to the Port’s Economic Recovery Framework. Discussion Topics: • Briefing and Discussion: Federal Policy Working Group • Briefing and Discussion: Aviation Noise Working Group • Presentation and Discussion: Port’s Economic Recovery Framework • Small Group Discussions and Report Out • Public Comment	Objectives: To discuss ideas for StART community engagement. To provide an update on the StART Federal Policy Working Group and the Aviation Noise Working Group. To review noise comment monthly reports. To discuss the updated timeline for the Sustainable Airport Master Plan. Discussion Topics: • Discussion: Community Engagement Ideas and Recommendations • Briefing and Discussion: Federal Policy Working Group • Briefing and Discussion: Aviation Noise Working Group • Briefing and Discussion: Noise Comment Monthly Reports • Briefing and Discussion: Sustainable Airport Master Plan Timeline • Public Comment	Objectives: To provide an update on the StART Federal Policy Working Group and the Aviation Noise Working Group. To present on and discuss the Port’s aircraft noise monitoring program. Discussion Topics: • Briefing and Discussion: Federal Policy Working Group • Briefing and Discussion: Aviation Noise Working Group • Briefing and Discussion: Noise Comment Monthly Reports • Presentation and Discussion: SEA Aircraft Noise Monitoring Program • Public Comment	Objectives: To provide an update on the StART Federal Policy Working Group. To begin identification of StART’s 2021 priorities through reflection on what has been learned and what is needed to further StART’s objectives. Discussion Topics: • Briefing and Discussion: Federal Policy Working Group • Discussion: 2021 Priorities, StART Reflections, Development of Priorities • Public Comment • Facilitator’s Closing Comments

3. Overview of Aviation Noise (AN) Working Group Meeting Objectives, Presentations, and Discussion Topics

The AN Working Group focused on refining and reviewing the results of initiatives implemented in its Near-Term Aviation Noise Action Agenda. These included the Late-Night Noise Limitation Program, Revised Runway Use Plan, Glide Slope adjustment, A320 Aircraft Noise, and Monthly Noise Comment Reporting. Productive conversations were had with multiple airlines regarding late-night noise exceedances.

The AN Working Group continued to analyze and provide input to the Noise Abatement Departure Profiles (NADP) Study, which concluded that farther out communities will benefit from noise reduction associated with a distant NADP, while closer-in communities will have a non-detectable change. The AN Working Group agreed with the consultant's recommendation for the Port of Seattle to request that all aircraft operators implement the Distant NADP (or its equivalent) at SEA. Implementation of a distant NADP was put on hold until the three suspended cities could return to StART and provide additional input.

During 2020, a noise consultant was hired to provide a comprehensive analysis of airport ground noise and develop recommendations for reducing ground noise. However, the analysis had to be delayed due to operational and financial constraints stemming from the COVID-19 pandemic. The AN Working Group recognized that conditions had significantly changed in the airline industry and that uncertainty about how and when the industry recovers will have an important impact on the focus of its action agenda. Discussions focused on identifying emerging trends in air traffic and exploring new initiatives and action items that could be undertaken. Two new areas for exploration were identified: analyzing potential noise reduction initiatives related to air freight cargo and providing input to the FAA regarding proposed noise level standards for supersonic aircraft.

The following graphic shows detail about the goals, descriptions, components, key parties responsible, status, accomplishments, and results of the Near-Term Aviation Noise Action Agenda. It is followed by another graphic that shows the meeting objectives and progress in 2020. Aviation Noise Working Group Meeting Summaries are attached as Appendix II.

2020 StART Near-Term Aviation Noise Action Agenda

	Near-Term Action Item						
	Late-Night Noise Limitation Program	Runway Use Program	Glide Slope Adjustment	Ground Noise Analysis	Noise Abatement Departure Profiles Study	A320 Aircraft Noise	Noise Comment Report
Description	Incentivize air carriers to fly at less noise sensitive hours or transition to quieter aircraft through a voluntary measure to reduce late-night (12:00 AM to 5:00 AM) noise	Revise the current informal Runway Use Program to minimize use of the 3 rd Runway during the late-night (12:00 AM to 5:00 AM)	Raise Runway 34R's glideslope to lessen aircraft approach noise	Analyze airfield ground noise sources and identify potential mitigation measures	Implement a Noise Abatement Departure Profile to lessen aircraft departure noise for farther out airport communities	Encourage air carriers to install a vortex generator on pre-2014 A320 series aircraft to lessen descent noise	Provide up-to-date, accessible information on noise complaints and comments submitted by the public
Components	Ongoing outreach with air carriers about possible late-night schedule and aircraft fleet changes Recognizing there are reasons why many air carriers fly during the late-night hours, established noise thresholds that identify aircraft exceeding noise thresholds during the late-night hours Late-night noise threshold observance tracked and reported out on a quarterly basis and beginning in 2021, publicized as part of the Fly Quiet Program (new fourth category)	Updated language for: 3rd Runway daytime/evening runway usage 3rd Runway late-night runway usage	Considered various strategies and timelines for raising Runway 34R's 2.75 degree glideslope, and settled on plan to permanently relocate 34R's navigational aids and pursue a 3.1 or 3.0 degree glideslope with the FAA. Once confirmed, consider options for raising the glideslope on all runways to higher than 3 degrees.	Analysis is expected to include (but not limited to): - Aircraft taxiing - Reverse thrust - Aircraft breaking - Auxiliary Power Units - Aircraft powering up to cross runways - Aircraft queuing prior to takeoff - Engine maintenance - Ground Support Equipment	Analyze the tradeoffs and feasibility of implementing the "distant" versus the "close-in" departure profile and the noise impact it would have on communities south and north of the airport	Ongoing outreach with air carriers with pre-2014 A320s to inquire about their vortex generator installation timelines	Monthly statistic and heat map reports posted on Port website detailing totals and trends by city, zip code and subject matter
Change	Reduction of aircraft noise during late-night hours	Reduction of aircraft noise for communities adjacent to the 3 rd Runway and those underneath its flight path	Reduction of aircraft noise for communities south of airport	Reduction of aviation noise for close-in communities surrounding the airport	Reduction of aircraft noise for farther out communities directly south and north of airport	Reduction of aircraft noise for communities underneath the flight path	Transparent and convenient information on noise complaints and comments submitted by public
Key Parties Responsible	Port of Seattle, airlines, and air cargo operators	Port of Seattle and FAA	Port of Seattle and FAA	Port of Seattle, FAA, airlines and air cargo operators	Port of Seattle, FAA, airlines and air cargo operators	Port of Seattle, airlines and air cargo operators	Port of Seattle
Status Update	UNDERWAY – Program commenced in July 2019. First report out (Quarter 3) occurred in October 2019. Next report out (Quarter 4) to be released in January 2021.	UNDERWAY – Implemented in September 2019. Late-night operations on the 3 rd Runway dropped dramatically in 2020 with the majority of nights absent of any late-night operations on the runway.	UNDERWAY – The 34R glide slope adjustment is incorporated into a larger taxiway reconfiguration project estimated to be complete in 2023. Preliminary design work has begun. Timeline contingent on Sustainable Airport Master Plan's completion and the FAA's approval.	ON HOLD – Preliminary work conducted by consultant in early 2020. Because of COVID-19's impact on airport operations, all work is currently suspended.	Consultant has studied both departure profiles and confirmed the "distant" profile lessens noise for farther out communities and provides the most noise benefit. Before having conversations with the FAA and air carriers to request use of "distant" profile at airport, Port will have additional conversations with StART members.	Because of COVID-19's impact on air carriers, it is anticipated that many older A320 series aircraft will be retired. Port will closely track any fleet changes to see how it impacts aircraft noise.	UNDERWAY – Monthly reports began with June 2020.

StART Aviation Noise Working Group Meeting Progress

 February 2020	Objectives: To provide an update on and discuss the Ground Noise Analysis. To review and discuss additional analysis completed as part of the Noise Abatement Departure Profiles Study. To review the Late-Night Noise Limitation Program 4th Quarter Results. To provide an update on StART reengagement with cities.	Discussion Topics: • Update on Ground Noise Analysis • Additional Analysis—Noise Abatement Departure Profiles Study • Late-Night Noise Limitation Program 4th Quarter Results • Update on StART Reengagement
 March 2020	Objectives: To provide an update and input on the Ground Noise Analysis. To discuss the FAA’s Terminal Flight Data Manager program. To review and discuss additional analysis completed as part of the Noise Abatement Departure Profiles Study. To provide a briefing on the Aviation Noise and Emissions Symposium.	Discussion Topics: • Update on Ground Noise Analysis • Terminal Flight Data Manager Overview • Additional Analysis—Noise Abatement Departure Profiles • Aviation Noise and Emissions Symposium Debrief
 May 2020	Objectives: To provide an update on the StART Aviation Noise Working Group Work Plan and discuss next steps.	Discussion Topics: • Late-Night Noise Limitation Program 1st Quarter 2020 Results/Program’s Continuation • Runway Use Plan • Glide Slope Adjustment • Ground Noise Analysis • Noise Abatement Departures Profile Study • A320 Aircraft Noise • Noise Comment Monthly Reporting
 August 2020	Objectives: To provide an update on the Late-Night Noise Limitation Program 2nd Quarter Results. To discuss the noise comment monthly reporting. To review proposed noise level standards for supersonic aircraft and the Port’s response letter. To discuss current and projected trends in air traffic.	Discussion Topics: • Late-Night Noise Limitation Program 2nd Quarter 2020 Results • Finalized Noise Comment Monthly Reporting • Supersonic Aircraft and Proposed Noise Level Standards • SEA 2020 Air Traffic Activity • 2020 Domestic/International Air Traffic Activity
 October 2020	Objectives: To provide an update on the 2020 Fly Quiet Awards and the Late-Night Noise Limitation Program 2020 3rd Quarter Results. To discuss air cargo operations at SEA and to consider specific actions to reduce noise specific to air cargo.	Discussion Topics: • 2020 Fly Quiet Awards • Late-Night Noise Limitation Program 3rd Quarter Results • SEA Air Cargo Overview

4. Overview of Federal Policy (FP) Working Group Meeting Objectives, Presentations, and Discussion Topics

The goal of the FP Working Group is to provide an opportunity for collaboration and engagement between Members of Congress and regional stakeholders engaged in airport issues. The FP Working Group seeks to create a shared understanding of information, influence legislation, and accelerate the implementation of policies most important to StART. Membership includes policy staff from several U.S. Senate and Congressional offices.

Early in 2020, StART assembled a group of representatives from a majority of member cities, two Port Commissioners, the Airport Managing Director, and two State legislators to take an advocacy trip to Washington, D.C. A few days before departing, the trip was cancelled due to COVID-19 travel and quarantine restrictions. The intent of the trip was to meet with the FAA and members of Congress to discuss policy issues relevant to StART. The group was to meet with FAA leadership, US Department of Transportation, US Senators Murray and Cantwell, US Representatives Smith, Jayapal, and Larsen; and, if time allowed, potentially other members of Congress, such as US Representatives Lynch and Speier.

Since Congress and the FAA have been focused on COVID-19, the FP Working Group chose to minimize its number of meetings until the middle of 2020 when there was a firmer understanding of the impacts of COVID-19 and a greater likelihood of congressional action. At that point, the FP Working Group then shifted toward what might still be possible in Congress. It reviewed what was still relevant and discussed what could be added to the Federal Policy Advocacy Plan. New ideas included:

- Identifying funding opportunities for noise insulation and other programs/initiatives
- Addressing climate change
- Promoting aviation biofuels
- Helping to expedite newer aircraft fleets
- Exploring EU policies to make airplanes more environmentally friendly, including looking at ICAO regulations
- Focusing on issues related to the future of aviation and noise from vehicles such as supersonic aircraft, drones, and autonomous flying vehicles

The year ended with an overview of the potential impact of the national election results on policies of interest to StART, as well as a plan to reorganize the advocacy trip to Washington D.C. in a virtual format early in 2021.

The FP Working Group Federal Policy Advocacy Plan is displayed in the following graphic. It is followed by another graphic that shows the meeting objectives and progress in 2020. The FP Working Group Meeting Summaries can be found in Appendix III.

2020 StART Federal Policy Working Group Federal Policy Advocacy Plan

Issue	Topic	Goal	Update
65 DNL evaluation and alternative metrics	FAA Reauthorization Implementation	Encourage timely release of the "noise annoyance survey" and relevant accompanying policy guidance	In April 2020, the FAA submitted a report to Congress in response to Sections 173 and 188 of the FAA Reauthorization Act: https://www.faa.gov/about/plans_reports/congress/media/Day-Night-Average-Sound-Levels-COMPLETED-report-w-letters.pdf . The report concludes that the DNL continues to be the recommended metric. However, members of Congress, including Representatives Jayapal and Smith, sent a letter to the FAA deeming this report insufficient. The FAA released the "noise annoyance survey" in January 2021.
Overflight noise/human health study	FAA Reauthorization Implementation	Help shape the scope and implementation of the study	In 2019, the FAA funded the Air Transportation Center of Excellence for Alternative Jet Fuels and Environment to study the health impacts of noise from overflights
Environmental Mitigation Pilot Program	FAA Reauthorization Implementation	Help shape the scope of the grant program and secure funding for an innovative local pilot for noise or other environmental impact mitigation	Congress passed its FY21 appropriations legislation with House language that "directs the Administrator to utilize available funds to implement the Environmental Mitigation Pilot Program and to conduct a series of studies and reports on aircraft noise in accordance with the Airport Noise and Environmental Streamlining subtitle of the FAA Reauthorization Act"
The Future of Aircraft: Supersonic, Electric and Urban Air Mobility	FAA Reauthorization Implementation	Ensure that noise standards for supersonic aircraft meet or exceed commercial aircraft noise standards. Continue to support federal investments and policies that drive cleaner aircraft, such as electric jets and electric vertical take-off and landing aircraft (eVTOL), while ensuring that these new planes do not increase noise impacts.	In June 2020, the Port submitted a comment letter to the federal rulemaking process underway regarding supersonic aircraft noise standards
Air Traffic Noise and Pollution Expert Consensus Act	Legislation	Advocate for passage	No update at this time
Protecting Airport Communities from Particle Emissions Act	Legislation	Advocate for passage	Last year, the US House of Representatives-passed HR 2, the Moving Forward Act, which includes this legislation as an amendment. In 2021, Congress is likely to propose this legislation as part of a new infrastructure bill to be considered as part of President Biden's first 100 days.
Secondary Insulation for "Failed" Packages	Legislation	Advocate for passage	US Representative Adam Smith is currently finalizing this legislation for introduction. In addition, Congress passed its FY21 appropriations legislation with House language that included direction to the FAA to "consider residences that were mitigated prior to 1993 with sound insulation as 'unmitigated' if an airport can verify that the residences continue to fall within the latest day-night average sound level (DNL) 65 decibel (dB) contour, and have an interior noise level of DNL 45 dB or higher."
Noise Program Funding	Legislation	Significantly increase funding for noise insulation of eligible buildings near SEA	The US House of Representatives-passed HR 2, the Moving Forward Act, which includes a set aside of 5% of airport improvement grants for airport emission reduction projects, aviation noise mitigation and other airport projects that reduce the adverse effects of airport operations on the environment and surrounding communities (increased from 4.5% thanks to an amendment from Representative Jayapal). In 2021, Congress is likely to propose this legislation as part of a new infrastructure bill to be considered as part of President Biden's first 100 days.
Sustainable Aviation Fuels Funding and Other Alternative Energy Investments	Legislation	Significantly increase funding for deployment of Sustainable Aviation Fuels (SAF) for airplanes, as well as for other low-/zero-carbon alternative fuels for ground transportation vehicles, such as natural gas and electricity	The Port has joined the national SAF Coalition in support of an SAF-specific blender's tax credit as a way to increase fuel availability and affordability

2020 StART Federal Policy Working Group Federal Policy Advocacy Plan

Issue	Topic	Goal	Update
Aircraft Modernization and Environmental Performance Incentives	Legislation	Investigate steps that could be taken—including those currently underway in Europe—to incentivize environmental performance of aircraft, including upgrading fleets to more modern airplanes	The EU has tied relief for the aviation industry to environmental initiatives such as SAF development, replacing older aircraft, and upgrading airport facilities. The Port will develop a one-pager on these efforts to share with federal policymakers for consideration.
WHO Environmental Noise Guidelines for the European Region Study	Other	Request FAA formal explanation of interpretation of the study, and how they are including it in its policymaking	The FAA responded via email to US Representative Smith that they do not consider this study to be valid
GAO Study of Community Noise Impacts	Other	Request Congressional letter asking GAO to include "single site" airports and metroplexes in its analysis	In June 2020, the GAO reached out to SEA staff to begin its study of this issue at SEA. SEA staff have connected them to airport communities and provided them with requested noise complaint data.
High Speed Surface Transportation Investments	Other	Support federal funding for innovative high speed surface transportation options	In 2021, Congress is likely to consider a new infrastructure bill as part of President Biden's first 100 days.
Late-Night Noise Limitation Program	StART AN Working Group Initiatives	Build awareness of, and support for, this effort from the Washington Congressional delegation	Ongoing
Runway Use Plan Agreement	StART AN Working Group Initiatives	Build awareness of, and support for, this effort from the Washington Congressional delegation	Ongoing
34R Glide Slope	StART AN Working Group Initiatives	Build awareness of, and support for, this effort from the Washington Congressional delegation; get its help in identifying federal funding for implementation	Ongoing
Ground Noise Analysis	StART AN Working Group Initiatives	Build awareness of, and support for, this effort (currently on hold during the pandemic) from the Washington Congressional delegation	Ongoing
Noise Abatement Departure Profiles Study	StART AN Working Group Initiatives	Build awareness of, and support for, this effort (currently on hold) from the Washington Congressional delegation	Ongoing

StART Federal Policy Working Group Meeting Progress



August 2020

Objectives:

To provide an update on Congressional efforts. To review and discuss the Port-Cities Federal Policy Advocacy Plan, including ideas on the approach to the Advocacy Plan during COVID-19.

Discussion Topics:

- Update on Congressional Efforts
- Recap of Federal Policy Advocacy Plan
- Discussion of Federal Policy Advocacy Plan



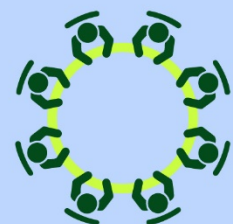
October 2020

Objectives:

To provide an update on Congressional efforts and legislation from U.S. Representative Adam Smith. To discuss changes to and finalize the Federal Policy Advocacy Plan.

Discussion Topics:

- Update on Congress
- Review of Current Aviation Legislation from U.S. Representative Adam Smith
- Discussion of Changes to the Federal Policy Advocacy Plan



December 2020

Objectives:

To provide a post-election update and analysis. To discuss the aviation and environmental policies being developed and implemented in the European Union. To discuss next steps for virtual Washington, D.C. advocacy meetings.

Discussion Topics:

- Post-Election Update and Analysis
- European Union Aviation and Environmental Policy Update
- Virtual Washington, D.C., Fly-In Next Steps

5. Review of Initial Recommendations for Enhanced Community Engagement

A number of StART members initiated a task force meeting to develop ideas for increased community engagement related to and/or hosted by StART. Several ideas were provided for broadening engagement, including:

- Provide time for StART community representatives to discuss issues separate from the rest of the group to share interests and concerns
- Host broader community forums to hear community interests and concerns
- Better communicate the progress achieved by StART to the Port and neighboring communities
- Create short, quarterly videos with basic graphics showing StART's updates, actions, and programs
- Distribute a one-page chart, similar to the one in the StART Annual Report, that summarizes actions and programs
- Create and distribute infographics via Facebook and other social media platforms
- Increase opportunities to educate the broader community similar to the way StART members are developing a shared understanding of operations and issues
- Research how other airports with StART-like stakeholder groups engage and communicate with communities impacted by airport operations
- Create educational opportunities for city elected officials to increase their understanding of topics covered by StART. This could be done online through videos, briefings, or educational forums. Also, consider developing an educational orientation for newly elected officials about airport operations and StART.

Port staff will follow up on these ideas and continue to gather input from StART in 2021.

6. StART in 2021

Priorities for 2021 were solicited through a survey of StART members and initially discussed at the December 9, 2020 StART meeting, where additional ideas were generated. The newly formed StART Steering Committee will utilize this information to develop agendas and potential action items for 2021. The reengagement of all six Highline Forum member cities with StART will provide new opportunities to strengthen relationships, influence national policy, and consider new initiatives based on mutual interest during an unprecedented time of change and uncertainty.

The following is a synopsis of the 2021 initial key priorities for StART. More detailed survey responses and discussion notes from the December meeting can be found in Appendix IV.

SYNOPSIS OF INITIAL KEY 2021 PRIORITIES

Overall Priorities:

- Be action oriented. Focus on the development and implementation of actions that provide tangible improvements, mitigation of impacts and/or results
- Analyze and then prioritize which initiatives would have the highest likelihood of feasibility

Topical Priorities:

Aviation Noise

- Identify and review additional actions to reduce aviation noise including:
 - Practices at other airports
 - Additional operational procedures for pilots
 - Propeller/turbo prop flight paths and operations
 - Ground noise analysis and recommendations to reduce noise
 - Additional actions to address reverse thrust
 - Potential reductions related to cargo flights including review of WA State Air Cargo Movement Study
 - Additional funding for noise mitigation in communities

Health Impacts/Air Quality

- Further phases of University of Washington ultra-fine particle study
- Other ways to focus on air quality issues including:
 - Port air quality programs
 - Sustainable aviation fuels and other alternatives
 - Regional air quality

Federal Policy

- Continue to expand and implement the Federal Policy Advocacy Plan
 - Implementation of key FAA Authorization provisions
 - Legislation that furthers Port-cities priorities
 - Federal investments in aviation noise and emissions mitigation and reduction

Community Engagement

- Broaden community engagement and maximize the role of community representatives including considering the recommendations that came out of the community engagement discussion
- Develop and implement better ways to communicate StART's accomplishments to community members and local elected officials
- Identify additional ways to build trust with communities
- can partner on recovery initiatives and needs

(cont.)

SYNOPSIS OF INITIAL KEY 2021 PRIORITIES *(cont.)*

Airport Growth

- Consider initiatives that can reduce growth at the airport and that can help mitigate the impacts of growth
- Review Puget Sound Regional Council's regional aviation baseline study and consider if there is any potential advocacy related to the study

Economic Development/COVID-19 Community Recovery

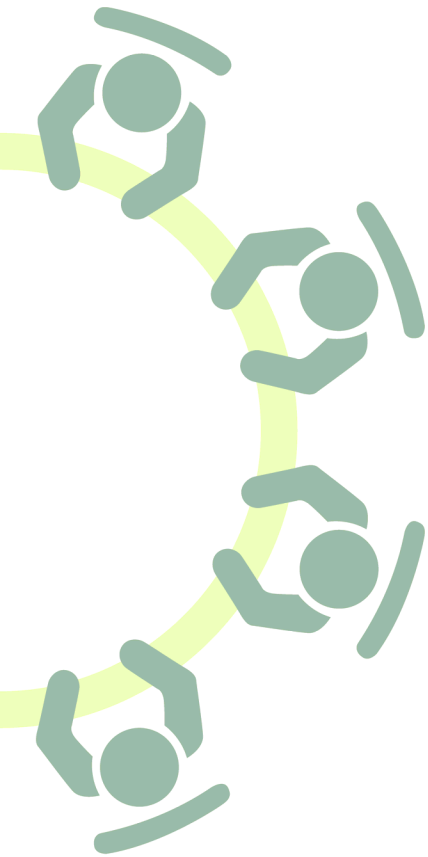
- Continue to explore ways the Port and communities

Overall

- Reach out to other similar airport committees or roundtables in other states to explore their action agendas and successes
- Develop community principles and priorities to be shared with airlines, FAA, and the Port during recovery from COVID-19 to help inform decisions as the industry recovers

Appendix I

StART Meeting Summaries



StART ✈️

SEA STAKEHOLDER ADVISORY ROUND TABLE

StART FACILITATOR'S MEETING SUMMARY

Wednesday, February 26, 2020
6:00-8:00 pm, SEA Airport Conference Center

Participant	Interest Represented		Participant	Interest Represented	
Eric Zimmerman	Normandy Park	X	Scott Kennedy	Alaska Airlines	X
Tim Sorensen	Normandy Park	X	Matt Shelby (Alt)	Alaska Airlines	-
Mark Hoppen	Normandy Park	X	Grady Stone	FAA	X
Jennifer-Ferrer-Santa Ines (Alt)	Normandy Park	-	Justin Biassou	FAA	X
Tejvir Basra	SeaTac	X	Chris Schaffer	FAA	X
Robert Akhtar	SeaTac	X	Jason Richie	FAA	-
Carl Cole	SeaTac	X	Lance Lyttle	Port of Seattle	X
Steve Pilcher (Alt)	SeaTac	-	Tom Fagerstrom	Port of Seattle	X
Erica Post	Tukwila	X	Marco Milanese	Port of Seattle	X
Brandon Miles	Tukwila	X	Arlyn Purcell	Port of Seattle	-
Tony Gonchar	Delta Air Lines	-	Eric Schinfeld	Port of Seattle	-
Scott Ingham (Alt)	Delta Air Lines	X	Stan Shepherd	Port of Seattle	-

Additional Participants: Dr. Tim Larson, University of Washington

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives

To provide input into the upcoming federal policy advocacy trip to Washington DC. To recap the Aviation Noise Working Group meeting. To provide the Late-Night Noise Limitation Program 4th quarter results. To brief and discuss the University of Washington study on ultrafine particles.

Welcome

Lance Lyttle, Port of Seattle

The Airport Managing Director, Lance Lyttle, welcomed participants including two new StART members, Erica Post, Tukwila Community Representative, and Tim Sorensen, Normandy Park Community Representative. The new members provided brief introductions of themselves and their interest in joining StART. Lyttle provided an update on the status of reengagement with the three self-suspended cities. All six cities met in a productive meeting in January and the hope is that the three self-suspended cities will be returning to StART in the spring.

Port staff provided a quick update on the acceleration of the sound insulation program implementation. With Commission's approval, the program will accelerate implementation from a 15 year to a seven year plan. This acceleration will include insulating three condominium complexes, eighteen apartment complexes, seven places of worship, and voluntary acquisition of homes south of the 3rd runway.

StART Federal Policy Working Group Update

Marco Milanese, Port of Seattle

The Federal Policy Working Group (FP Working Group) will be sending a delegation of Port representatives and elected officials from five of the six StART cities to Washington DC on March 11 and 12. Due to budget constraints, Normandy Park is unable to send a representative at this time. The goal of this trip is to meet with congressional representatives and members of the FAA to share concerns, discuss priority issues identified by StART, and advocate for a number of pieces of legislation. Additionally, discussion will focus on the identification of new areas of interest and approaches as well as sharing StART's accomplishments. StART members responded that the issues highlighted for discussion in DC were consistent with what has been discussed in StART. *(Note: The trip was postponed due to COVID -19.)*

StART Aviation Noise Working Group Update

Tom Fagerstrom, Port of Seattle

Fagerstrom reviewed the StART Aviation Noise Working Group's February 10 meeting. He provided an update on the Ground Noise Analysis and the status of the consultant's work. The first phase of the analysis is data collection to identify noise sources and impacts. The Port provided data that will be utilized as part of the analysis. Next steps involve developing draft measurement protocols, identifying appropriate sites for noise monitoring, and surveying airlines on their ground operations. Measurements will be taken at approximately five sites over five days. Direct observations will be utilized along with statistics for identifying noise sources. The survey will focus on identifying how airlines operate on the ground including taxiing, run-up activities, and use of reverse thrust. It is anticipated that the survey will be distributed soon. Internal planning has begun for analysis methods to identify mitigation options. It is anticipated that preliminary findings will be ready in the summer and a final report in the fall.

StART participants asked a number of questions. Based on these questions, Fagerstrom provided some additional information including:

- Suggestions for monitoring sites were received from StART participants as well as from the Highline Forum
- The southwest corner of the airfield and the northeast area where cargo takes place are two obvious areas for monitoring
- Monitoring sites will provide additional data to analyze

It was requested that the ground noise consultant be asked whether there is any additional information or hard data that would be helpful to look at that is not part of the survey.

Fagerstrom also provided an update on the Noise Abatement Departure Profiles (NADP) Study. He briefly shared the consultant's conclusions that a distant NADP would be of benefit to communities further from

the airport and that additional analysis is being performed to determine if there are any neighborhoods that would experience a perceptible increase in noise.

Late-Night Noise Limitation Program: 4th Quarter Results

Tom Fagerstrom, Port of Seattle

Fagerstrom provided an update on the Late-Night Noise Limitation Program 2019 4th quarter results and outreach to airlines regarding the Program. He reminded StART that the focus of the program is between 12:00 am and 5:00 am. Outreach was to all airlines who had noise exceedances as well as to airlines that flew during the late night hours. 4th quarter data showed that the top three airlines for exceedances were the same as the 2019 3rd quarter: EVA Air, FedEx Express and China Airlines Cargo. Fagerstrom detailed the positive responses that are coming out of discussions with the airlines notably:

- EVA Air has committed to changing one of their two late night flights to a significantly quieter aircraft. They shared their challenges in implementing this change, but wanted to respect community interests.
- FedEx Express has plans to retire its fleet of MD-11s. Though they haven't established a timeline, discussions will continue to try to expedite the fleet change at SEA.
- China Airlines Cargo discussions have been constructive. They fly one type of aircraft and don't have a quieter alternative available. Discussions about whether they can move flights out of the late night hours continue.
- A number of airlines have engaged in constructive dialogue including Air Transport International, Korean Air Cargo, Alaska Airlines, Delta Air Lines, and Cathay Pacific.

Fagerstrom mentioned that all airlines who had exceedances will receive a letter from the Port that includes data on their exceedances. The overall drop in 4th quarter exceedances is mainly due to seasonal fluctuations. It was stated that conversations with Boeing about the data and exploration of noise reduction/retrofits in aircraft are also in process.

StART participants suggested that a letter of appreciation be sent to the airlines that are making changes from StART as well as from cities. It was suggested that the letters be sent once the changes occur. A StART participant commented that there was initially skepticism as to whether airlines that had noise exceedances would actually consider voluntary changes. It was stated that it is humbling and surprising and it is important to recognize the amount of work from Port staff that went into making this happen.

The presentation can be found [here](#).

University of Washington MOV-UP (Ultrafine Particles) Study Briefing

Dr. Tim Larson, University of Washington

The focus of the meeting was a briefing by Dr. Tim Larson, University of Washington, on the Mobile Observations of Ultrafine Particles (MOV-UP) Study (Study). Dr. Larson stated that the Study was funded by a budget proviso from the Washington State Legislature to analyze the concentrations of ultrafine particles (UFP) in areas surrounding and directly impacted by air traffic and to develop methodology to distinguish between and compare concentrations of UFP from aircraft and other sources such as motor

vehicles. The study included community engagement and the establishment of a study advisory group who provided feedback. The Study objectives were to:

- Study the implications of air traffic at SEA
- Assess the concentrations of ultrafine particulate matter (UFP) in areas surrounding and directly impacted by air traffic
- Distinguish between and compare concentrations of aircraft-related and other sources of UFP
- Coordinate with local governments, and share results and solicit feedback from community

Dr. Larson described that particle size (e.g., ultrafines versus ultra-ultrafines) is the main distinguishing characteristic between the two sources of ultrafine particles. Important characteristics of UFPs include:

- They have a large amount of surface area, relative to their size.
- They are small enough to enter the bloodstream, cross the placenta, and cross the blood-brain barrier.
- Because they are small, they have very little mass.
- Typically, they are measured differently than PM_{2.5}, which includes both smaller and larger particles, and therefore has appreciable mass that can be weighed. UFPs are typically measured by counting the number of individual particles in a volume of air.

It was noted that motor vehicles sources emit ultrafine particles resulting in elevated levels near major roadways and jet aircraft emit “ultra” ultrafine particles.

Dr. Larson reviewed the study region including mobile transects and fixed monitoring site locations. Measurements were taken by a few stationary monitoring stations as well as a mobile monitoring platform that drove through the region. Study results mapped areas of concentration for traffic related pollutants and concentrations related to aircraft distributions. He summarized the Study results:

- UFP are emitted from both traffic and aircraft sources.
- Total concentration of UFP (10-1000nm) did not distinguish roadway and aircraft features.
- The spatial impact of traffic and aircraft UFP emissions can be separated using a combination of mobile monitoring and standard statistical methods.
- There are key differences in the particle size distribution and the black carbon concentration for roadway and aircraft features.
- Fixed site monitoring confirms that aircraft landing activity is associated with a large fraction of particles between 10-20 nm.
- Mobile derived Fuel Based Emissions Factor (# Ultra UF/kg_{Fuel}) may lead to future air quality modeling scenarios (Findings in the Project Report).

Dr. Larson concluded the presentation by discussing the knowledge gaps in information about the health effects of ultrafine particles, what can be done to reduce human exposure, and difficulty in assigning exposure estimates to specific locations or populations. He mentioned that there are numerous studies in process to understand the health effects which should provide more data in the next few years.

StART participants asked a number of questions. Based on those questions, Dr. Larson provided some additional information including:

- For all sizes and sources of particles, from sources including wildfires, filtration is needed to minimize exposure.
- Utilizing biofuels in airplanes could reduce ultrafine particle pollution.
- There have been many studies on ultrafine particles related to cars and trucks and less studies related to airports/aircraft. It will be important for future studies to look at what correlations exist or don't exist. Partnerships with other research institutions would be beneficial.
- Data is not clear as to what the impacts of weather are on UFP.

The presentation can be found [here](#).

The full report can be found at: <https://deohs.washington.edu/sites/default/files/Mov-Up%20Report.pdf>

Public Comment

Compiled public comments are included as Appendix A.

Meeting Wrap Up

Lance Lyttle, Port of Seattle

Lyttle thanked the community representatives, air carriers, FAA representatives, and the public for participating, as well as Dr. Larson for his presentation. He shared some information about the airport's response to COVID-19 stating that SEA is one of 11 airports that were selected as funnel airports for travelers returning from China. New procedures are in place that include additional screening provided by the CBP and CDC. SEA has also increased cleaning. The situation is being monitored very closely.

Next Meeting:

**April 22, 2020- 6:00 pm - 8:00 pm,
Location: Video Conference Call**

Appendix A

Summary of Public Comments

David Goebel (Vashon Island) (oral comments):

- Commented that NextGen is important, that it is the elephant in the room. Recommended discussing this as a topic during the Washington DC federal policy advocacy trip.
- Stated that when it comes to total gross noise complaints – Vashon has twice as many complaints as any other zip code, even though Seattle has 70 times as many households. Vashon has been greatly impacted by increased noise which is contrary to the rural nature of the place and community. Community members are averse to aviation noise.
- Stated that flights were once spread out, but are now concentrated. There is now more emissions and more noise. There is unpredictability as to when loud noise will occur - like water torture.
- Commented that the number of lawsuits related to aviation noise is increasing. Asked that this be a topic in discussions in Washington DC.

Marianne Markkanen (SeaTac) (oral comments):

- Commented that this was a great meeting, that she has been coming to StART meetings for two years, and is happy to hear about the results of the Late-Night Noise Limitation Program's 4th Quarter results. Stated that she appreciates the airlines who are making changes.
- Stated that she lives under the 3rd runway and asked what can be done for people like her who were not warned and purchased their house after the cut-off date for sound insulation.
- Mentioned that community input makes a difference and that the outcomes from the Late-Night Noise Limitation Program should be posted in social media outlets, blogs, etc.
- Thanked the Port for paying for the ultrafine particle study. Stated that It was terrifying to see that these particles can penetrate the brain. Commented that cancer rates are higher in this area. Questioned whether research needs to be done on cancer rates and whether air filters need to be installed in homes.
- Shared concerns about the impacts of COVID-19, that there are many travelers coming off of airplanes and shopping in the local communities. Inquired as to whether the airport will be communicating with communities about COVID-19 precautions.

StART FACILITATOR'S MEETING SUMMARY

April 22, 2020

5:00-7:00 pm. Video Conference

Participant	Interest Represented		Participant	Interest Represented	
Eric Zimmerman	Normandy Park	X	Scott Kennedy	Alaska Airlines	-
Tim Sorensen	Normandy Park	X	Matt Shelby (Alt)	Alaska Airlines	-
Mark Hoppen	Normandy Park	X	Shan Hoel	Air Cargo	X
Jennifer-Ferrer-Santa Ines (Alt)	Normandy Park	-	Justin Biassou	FAA	X
Tejvir Basra	SeaTac	-	Dave Suomi	FAA	X
Robert Akhtar	SeaTac	X	Lance Lyttle	Port of Seattle	X
Carl Cole	SeaTac	X	Arlyn Purcell	Port of Seattle	X
Kyle Moore (Alt)	SeaTac	-	Marco Milanese	Port of Seattle	X
Erica Post	Tukwila	X	Eric Schinfeld	Port of Seattle	-
Brandon Miles	Tukwila	X	Tom Fagerstrom	Port of Seattle	X
Tod Bookless	Tukwila	X	Stan Shepherd	Port of Seattle	X
Tony Gonchar	Delta Air Lines	-			
Scott Ingham (Alt)	Delta Air Lines	X			

Additional Participants:

Randy Fiertz, Alaska Airlines; Vince Mestre, Consultant; Clare Gallagher, Port of Seattle; Dave Kaplan, Port of Seattle

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives

To gain perspective on and discuss the impacts of COVID-19 on aviation as well as the challenges facing the airport area cities.

Welcome

Lance Lyttle, Port of Seattle

The Airport Managing Director, Lance Lyttle, welcomed participants including two new StART members, Tod Bookless, Tukwila Community Representative, and Shan Hoel, Air Cargo Representative. The new members provided brief introductions of themselves.

COVID-19 Impacts: Airport Perspective

Lance Lyttle, Port of Seattle

Lyttle provided an overview of the impacts of COVID-19 on the airport (SEA). He stated that SEA has been hit very hard and provided a number of details including:

- The number of travelers coming through SEA is down around 90-95% from 2019.
- In 2019, there was 50,000 people a day moving through security checkpoints and currently there is approximately 2,500 a day.
- Airlines have canceled hundreds of flights.
- 62 airport dining and retail locations are closed.
- Many airport workers have been laid off.

Lyttle emphasized that health and safety is the number one priority. SEA has made many changes to comply with social distancing including having all staff who can work from home, do so; all essential workers have been provided with masks; there is increased and continuous cleaning and sanitation; hand sanitizer stations have been installed throughout SEA with an App available to locate them; and all meetings are being held virtually.

Lyttle briefly discussed the Port's approaches to COVID-19 stating that the Port is considering ways to weather the economic impacts and spur economic development. The Port continues to establish relief and response efforts for SEA's impacted tenants and business partners. SEA was awarded \$195 million dollars in federal grants as part of a \$10 billion-dollar relief package to airports across the US. The funding requires continued airport operations and 90 percent staff capacity. The Port is currently reviewing capital projects to determine which projects can proceed and which have to be delayed. Projects that are continuing include the North Satellite Renovation, the International Arrivals Facility (IAF) and the baggage optimization project.

COVID-19 Impacts: Neighboring Cities Perspectives

Carl Cole, City of SeaTac; Mark Hoppen, City of Normandy Park; Brandon Miles, City of Tukwila

City representatives discussed the impacts of COVID-19 on their communities.

Carl Cole, SeaTac City Manager, reported that the biggest issue for SeaTac is the business downturn. He stated that the City relies heavily on sales and use tax revenue, primarily parking taxes and the tax revenue from businesses that serve/exist because of the airport. The City is modeling different potential scenarios including a fast rebound, a slow rebound, and a recession, but the current level of uncertainty makes it difficult to project what recovery may look like. There is anticipation that there may be some federal relief funding siphoned through the state to assist cities and counties, but at this time this is uncertain. SeaTac is augmenting many of their services to serve immediate community needs given the high level of unemployment.

Mark Hoppen, City of Normandy Park City Manager, shared that the City does not have many businesses that pay sales and use tax; therefore, city revenue is not as dependent on those revenues. Most City employees are working from home, although there have been a few layoffs/furloughs. Essential

personnel, such as policy and public works employees, are working in single person operations and no longer working in pairs.

Brandon Miles, Tukwila Business Relations Manager, reported that the City is heavily reliant on sales and use tax revenue and that they are projecting significant cuts to City revenue which will translate into budget cuts. The City declared a State of Emergency in March. He stated that the City has a healthy emergency reserve fund and will be tapping into it, as needed. The focus now is mostly on meeting the community's basic needs including feeding students and seniors, and assisting businesses. They are partnered with the Tukwila food bank. They launched "The Great Tukwila Carry-Out" campaign and are planning to launch a city program to encourage people to buy gift cards from local businesses. Most city employees are also working from home.

The presentations were followed by questions and discussion by StART participants. Based on the questions and discussion, additional information included:

- SEA has worked with airport tenants to develop numerous strategies for social distancing at the airport now and into the future, acknowledging that as more people start flying, social distancing will be more challenging. These strategies include stickers that designate where to stand, possibly putting up plexiglass at gates, check-in counters, and TSA gates, exploration of how to maximize a touch free experience, temperature checks of all travelers and various staffing, and technology options.
- Personal Protective Equipment (PPE) have been distributed to airport workers.
- Cities have been coordinating and sharing information amongst themselves and through the Sound Cities Association and South Seattle Chamber of Commerce. They also are coordinating with the Highline School District.
- Staggering flights and/or staggering when passengers arrive has been considered in partnership with the airlines, FAA and TSA. One idea that has been floated is virtual queuing. If large numbers of people start traveling again, there will need to be innovation. There may be past practices that are useful. Reducing the number of people at SEA at any given time will have impacts on the airport retail businesses.

COVID-19 Impacts: Air Carriers Perspective

Randy Fiertz, Alaska Airlines; Scott Ingham, Delta Air Lines

Randy Fiertz from Alaska Airlines and Scott Ingham from Delta Air Lines discussed the impacts of COVID-19 on air carriers. Fiertz stated that Alaska flight schedules are down 70-80% and that it is anticipated that demand will not begin to increase for at least a few months. He shared that funds received from the federal government will be used to cover about 70% of employee salaries and benefits until September. He commented that these are extremely difficult times for all airlines. He emphasized his and the airline's appreciation for Lytle's efforts on behalf of the Port to work cooperatively with the air carriers.

Ingham echoed Fiertz's statements of appreciation to Lytle and his staff for handling the challenges of operating the airport in the midst of a pandemic. He emphasized that the team at the airport are top notch, highly skilled and that airlines are fortunate for their assistance and cooperation. He stated that Delta domestic and international operations are down by 80%. He reviewed the new and stringent

cleaning and boarding procedures. Delta is offering free flights to medical professionals and utilizing their fleet, where possible, for cargo flights. Many employees have taken a voluntary leave of absence. Many airplanes are currently parked. He commented that Delta is utilizing CARE funds and are working on strategies for a staged approach to recovery. He acknowledged that it will take several months to be able to start implementing those strategies.

COVID-19 Impacts: FAA

Dave Suomi, Northwest Mountain Regional Administrator, FAA

David Suomi, FAA Northwest Mountain Regional Administrator, provided information related to the impacts of COVID-19 from the FAA's perspective. He shared that only about 20-25 of 1,450 FAA employees are working on location at the regional office in Des Moines. Social distancing is being implemented at air traffic control centers and other facilities. Operating hours will be adjusted at 100 control centers nationwide, but currently not at SEA. Suomi shared that air travel is down around 95%, overall airline traffic is down 80%, and tens of thousands of aircraft are grounded. A few airlines have gone into bankruptcy and it is possible that there will be others.

COVID-19 Impacts: Fleet Mix Changes That May Affect Noise

Vince Mestre, Consultant

Vince Mestre, consultant to the StART Aviation Noise Working Group, discussed COVID-19 impacts related to airline fleet mix changes and how it may affect aviation noise. He noted that in the near term, with a reduction in passenger jet operations, there is a significant reduction in the movement of aircraft belly cargo. This is putting pressure on cargo freight operators which has resulted in some additional cargo freight flights being flown. For example, Amazon has added a couple of new flights and an Asian carrier is operating a passenger flight with just cargo. He stated that there are some positive noise-related developments since these new cargo flights are not being flown by Boeing 747s. There are attempts to utilize some passenger jets for cargo with some potential modifications in the passenger seating area. He noted that passenger carriers have parked all Boeing 747 and Airbus A380 aircraft. In general, he reported that it is likely that as airlines increase flights, they will utilize the most fuel efficient and quietest aircraft in their fleets and that this would likely accelerate the retirement of the noisier, older aircraft. It is likely that short haul travel will recover more quickly than long haul travel.

The presentations were followed by questions and discussion by StART participants. Based on the questions and discussion additional information included:

- The greatest challenges for Delta Air Lines and Alaska Airlines are increasing demand for flying, cleanliness and health related safety precautions and building consumer confidence.
- A silver lining might be the ability for cargo companies to fly less at night and more in the daytime hours.
- Airlines are exploring possible additional uses for their fleets including distribution of PPE and other critical medical equipment and essential personnel.
- There are challenges to converting passenger planes to cargo carriers. There are very stringent requirements for cargo aircraft regarding fire prevention.

- The importance of working together -- airlines, the airport, and cities -- to rebuild passenger confidence.
- An essential element for recovery will be the status of COVID-19 and antibody testing and a vaccine.
- The StART Aviation Noise Working Group will continue their work and focus on what is possible in the near-term.
- There is a need for business assistance.
- The International Airport Association (ACI-NA) has formed a task force to look at aviation issues globally. Two representatives from the Port are part of the task force.
- The importance of signage and on-going communication regarding the importance of social distancing and proper hygiene.
- Airlines are exploring ways to decrease crowding in the gate areas and in aircraft.

Lyttle concluded the discussion stating that he is concerned about the significant impacts of the pandemic on the neighboring cities and asked how the Port can best assist the cities at this time. This will be a topic for further discussion at StART.

Public Comment

Compiled public comments are included as Appendix A.

Meeting Wrap Up

Lance Lyttle, Port of Seattle

Lyttle thanked the community representatives, air carriers, FAA representatives, and the public for participating. He stated that he thought that 9/11 was the most devastating experience he had ever witnessed for the aviation industry, but the impacts of COVID-19 are unlike any previous crisis. He emphasized that he believed there will be an eventual recovery. It is important that the Port, airlines, and local communities be here for each other and partner to assist businesses, especially small businesses, in these challenging times. He believes that now is the time to stick together and do what is possible to help the people and families that live in the communities that neighbor SEA.

Next Meeting:
June 24, 2020- 6:00 pm - 8:00 pm,
Video Conference Call

APPENDIX A
Summary of Public Comments

Ernest Thompson, (Normandy Park) (oral comments)

- Stated that he is spending lots of time on medical industry ZOOM calls and no one has a crystal ball of what's going to happen. If there is a second or third wave of COVID-19, this could be a catastrophe and then the airlines won't be flying for years. Testing and antibody testing is incredibly complex. We will need 500k tests to determine herd immunity. Then what happens if there is mutation?
- Commented that he is happy to hear you all taking about out-of- the box ideas and hope that StART can free itself to think out- of -the -box. Requested that consideration be given to applying for infrastructure grants to become the hyperloop Sea-Tac airport. He suggested that the Port begin to work on this idea and wished everyone the best of luck.

Anne Kroeker and Richard Leeds (Des Moines) (written comments)

April 22, 2020

Dear Phyllis and the StART Committee,

Since the massive reduction of air flights to Seatac over the past 6 weeks, the communities directly under the flight paths have experienced an increasing quiet and sense of calmness, reminding longer term residents of the way it once was. Breathing cleaner air, specifically NOT jet fuel, was immediately noticeable as the barrage of daily flights lessened. Slowly, heart rates have returned to normal and brain focusing enhanced, along with the desire to remain outside more in the Spring sun.

However, despite the vast relief, there are still a significant number of flights and the flight paths of old disturbing our newfound peace – many in a row, lower than 3000', sometimes 2000', 10+ miles out along with sleep-disruptive cargo and long-haul flights leaving between 10 PM and 6 AM.

"...even though passenger numbers have plummeted, flights are still taking off all across the country. "The number of flights has only dropped something like 50 or 60 percent," said Daniel Rutherford, program director for marine and aviation at the International Council on Clean Transportation. Flights that were once mostly full are now carrying a few passengers."

So, Seatac still has quite a number of flights coming in and out, whether or not they are full of passengers or cargo and we are still the victims below.

The draft report of the Dept of Commerce Seatac Airport Effects Study talks about their goal being to include the principles of the National Plan of Integrated Systems, in particular Principle 5:

“Every two years, the Secretary of Transportation is required to submit to Congress the National Plan of Integrated Airport Systems (NPIAS) –

...

On page 1 of the most recent Report to Congress (26 September 2018), the NPIAS defines a list of eight attributes that should be followed. These principles were articulated more than 25 years ago and were reaffirmed by both the Federal Aviation Administration and the aviation industry in 2011. Of the eight attributes, principle number 5 is especially appropriate with regards to how airport-area communities are addressed:

“Airports should be compatible with surrounding communities, maintaining a balance between the needs of aviation, the environment, and the requirements of residents.”

Why then, given the chance, wouldn't the FAA, airlines and Port of Seattle at least TRY to change up these flight patterns which are most disturbing to the residents below - especially now that they are homebound - given the opportunity? I realize that this is not a simple process to change but it is possible and there seems to be no will, once again, to work to benefit the communities who suffer the worst of the pollution and the least of the economic gain. Violation of Principle Number 5 of the NPIAS is again the norm.

Please advocate for further relief from flight operations pollution, both temporary and permanent, for our communities.

Thank you for your attention to this matter,

Anne Kroeker and Richard Leeds

Des Moines, WA

StART FACILITATOR'S MEETING SUMMARY

June 24, 2020

5:00 pm – 7:00 pm. Video Conference

Participant	Interest Represented		Participant	Interest Represented	
Eric Zimmerman	Normandy Park	X	Scott Ingham (Alt)	Delta Air Lines	X
Tim Sorensen	Normandy Park	-	Scott Kennedy	Alaska Airlines	-
Mark Hoppen	Normandy Park	X	Matt Shelby (Alt)	Alaska Airlines	-
Jennifer-Ferrer-Santa Ines (Alt)	Normandy Park	-	Shan Hoel	Air Cargo	X
Tejvir Basra	SeaTac	X	Justin Biassou	FAA	X
Robert Akhtar	SeaTac	-	Lance Lyttle	Port of Seattle	X
Carl Cole	SeaTac	X	Arlyn Purcell	Port of Seattle	X
Kyle Moore (Alt)	SeaTac	-	Marco Milanese	Port of Seattle	X
Erica Post	Tukwila	X	Eric Schinfeld	Port of Seattle	-
Brandon Miles	Tukwila	X	Tom Fagerstrom	Port of Seattle	X
Tod Bookless	Tukwila	X	Stan Shepherd	Port of Seattle	X
Tony Gonchar	Delta Air Lines	-			

Additional Participants: Lyndall Bervar, Office of Representative Adam Smith; Randy Fiertz, Alaska Airlines, Dave McFadden, Port of Seattle; Bookda Gheisar, Port of Seattle; Clare Gallagher, Port of Seattle; Andy Gregory, Port of Seattle

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives

To provide an update on the StART Federal Policy Working Group and recap the Aviation Noise Working Group. To discuss and provide initial input to the Port of Seattle's Economic Recovery Framework.

Welcome

Lance Lyttle, Airport Managing Director, Port of Seattle

Lyttle, welcomed participants and gave a brief update on airport operations. He stated that the airport is beginning to see some signs of positive change including a slight increase in passengers and that 51 of the airport's retail and dining entities have reopened. Lyttle emphasized that the Port is continuing to offer support to retail and dining businesses including lease extensions. Also, the airport is prioritizing the health of airport employees and passengers including enhanced sanitizing and cleaning, the requirement that everyone wear masks, numerous hand sanitizer stations, and ensuring that all dining and retail entities are operating by health and social distancing requirements.

Randy Fiertz, Alaska Airlines and Scott Ingham, Delta Air Lines provided brief updates on airline operations. Fiertz stated that airline travel has shown some signs of rebounding and serious measures are being taken to maintain the health and safety of employees and passengers. These measures include:

- Enhanced cleaning on aircrafts and installation of hospital grade HEPA filters
- Maintaining empty middle seats
- Utilizing cargo planes to send medical equipment across the country
- Donating one million meals
- Flying health care workers for free and providing them with a free vacation ticket
- Parking of 126 aircraft
- Initiating a company-wide hiring freeze
- Reduction of executive salaries
- Negotiated pay reductions with vendors

Ingham stated that similar actions are being taken by Delta Air Lines including intensive cleaning between each flight and plexiglass barriers at ticketing and boarding areas. He noted that Delta is planning to resume a flight to Shanghai and are adding 1,000 flights system-wide at the beginning of July, but the number of flights, in general are significantly lower than last year at this time.

Update: Federal Policy Working Group

Eric Schinfeld, Senior Manager, Federal and International Government Relations, Port of Seattle

Schinfeld provided an update on the status of the StART Federal Policy Working Group. He stated that Working Group meetings have been on hiatus due to Congress and the FAA being entirely focused on COVID-19 issues. In March, a group representing many of the neighboring communities was days away from taking an advocacy trip to Washington DC to meet with Congressional members, but the trip was canceled due to the pandemic. He acknowledged that there will likely be limited opportunities for proposing and passing legislation during the remainder of this year, but that it makes sense for the Working Group to begin to meet again.

Lyndall Bervar, from U.S. Representative Adam Smith's office, emphasized that this year will be particularly challenging for the passage of new legislation. However, she shared that there are potential opportunities where legislation could be proposed as part of COVID stimulus package(s), appropriations legislation or an infrastructure package. Rep. Smith continues to be committed to airport related legislative priorities. There are three pieces of legislation that Representative Smith is developing:

- The Aviation Impacted Communities Act
- The Protecting Communities from Emissions Act
- Legislation that would allow re-insulation of certain homes for which the initial noise package has "failed"

Bervar stated that Rep. Smith is working to build support for these bills, but she noted that, even if there is success in the House, there may be challenges in the Senate.

Recap of Aviation Noise Working Group Meeting

Tom Fagerstrom, Airport Noise Program Coordinator, Port of Seattle

Fagerstrom provided a recap of the May 11 StART Aviation Noise Working Group meeting. He reviewed the status of several items on the Working Group's near-term aviation noise action agenda. The StART Aviation Noise Working Group May 11 Meeting Summary can be found [here](#)

Late Night Noise Limitation Program

Program monitoring began in the 3rd quarter of 2019. Operations during the first quarter of 2020 were for the most part normal and saw similar exceedances in noise as the previous quarter and from typically the same carriers. Due to the impacts of COVID, there was a dramatic drop in passenger flights beginning in late March. There has also been a small increase in cargo flights at night. He expects that 2nd quarter exceedances will mostly be due to increased cargo flights, which tend to be the noisier aircraft.

Runway Use Plan

Because of the dramatic reduction in flights, the 3rd runway is averaging close to zero landings during the late-night hours.

Glide Slope Adjustment

The project, which will raise 34R's glideslope to 3.0 or 3.1 degrees, was scheduled to be completed in 2023; however, due to the impacts of COVID-19 it is unknown whether this date will be impacted. The date is dependent on the completion of analysis and approval by the FAA.

Ground Noise Analysis

The project has been put on hold given how flight frequency and noise has changed as a result of COVID-19. Conducting noise sampling during this time would not provide a representative sample of noise experienced in the surrounding communities.

Noise Abatement Departures Profile Study

The results of the study concluded that a distant procedure would be beneficial to communities further from the airport. There will be imperceptible impacts on a few neighborhoods directly north and south of the airport. Next steps are to reach out to these cities to discuss further.

A320 Aircraft Whistling Noise

Airlines who fly A320s received letters inquiring about their plans and timelines for retrofitting aircraft. However, because of COVID, airlines are making major changes to their fleet mixes and reducing flights. Given this uncertainty, additional communications on this issue will be on hold until there is more clarity on fleet changes.

PlaneNoise Monthly Reporting

The Port is using a new aviation noise comment system and reporting structure and the monthly statistics will be shared in a report and posted on the Port's website every month. The Working Group provided input and feedback on the draft report's design including listing noise complaints by city and zip code.

Port of Seattle's Economic Recovery Framework

Dave McFadden, Managing Director, Economic Development Division, Port of Seattle; Bookda Gheisar, Senior Director for Equity, Social Justice, and Inclusion, Port of Seattle

The focus of the meeting was a presentation and discussions on the Port of Seattle's Economic Recovery Framework (Framework). The presentation can be found [here](#). Dave McFadden, Managing Director, Economic Development Division, and Bookda Gheisar, Senior Director for Equity, Social Justice and Inclusion, presented the Framework and stated that the goals of the Framework are for Port investments to support the recovery, prioritize economic development and community investment programs, maximize partnerships to leverage funding and impact, and capitol program investments. McFadden reviewed some of the airport's early actions which include:

- Protecting Port employees' health, safety, and wellbeing through supportive human resource policies and guidance and by ensuring a safe work environment.
- Supporting tenants and concessionaires by providing rent relief and fee relief.

Gheisar provided a brief overview of the Port's Office of Equity, Diversity, and Inclusion, explaining how SEA is the first Port in the country to establish an office focused on equity and inclusion. She explained how these principles are interwoven throughout all the Port's departments and priorities. Gheisar explained that the strategies for equity and inclusion were developed after interviewing multiple community members and employees. Based on these interviews, three strategies were created:

1. Infuse equity principles and practices into organizational structure, programs, policies, and processes.
2. Provide equitable and tangible benefits to impacted communities.
3. Build a center of expertise for equity by establishing the Port as a resource internally and externally.

The vision of the Office is stated as: "Develop a Port that mirrors the diversity of our community, instills principles of equity in its culture, and ensures a fair and intentional distribution of opportunities with the goal of expanding economic development and quality of life for all". This vision and principles of the Office informs the strategies and elements of the Framework. Gheisar stated that the recovery actions outlined in the Framework complement the Port Commission's directives on COVID-19 response:

- Integrate values of equity and inclusion
- Prioritize the most vulnerable
- Mitigate economic costs
- Ensure language and cultural competence
- Support community-based organizations

Key recovery initiatives and investments include:

- Youth Employment Initiative
- South King County Fund
- Small business assistance

- Travel/Tourism partnership
- Capital project investments
- Leveraging grants and partnerships

Additional information on the South King County Fund can be found on the fund's [website](#). Also, the following links provide information related to South King County Fund motions over the last three years: [2018](#), [2019](#) and [2020](#).

The presentation was followed by questions and comments by StART participants. Questions, responses, and comments included:

- Suggest not spending money on promoting travel since people are not going to want to travel until they know it is safe.
- Spend funds on business assistance and less on tourism marketing.
- Tourism investments will be made in phases and focus is currently on local tourism and regenerating consumer confidence.
- The focus of the South King County Fund will be on economic development and support for local communities.
- The South King County Fund will prioritize the six cities in the Highline Forum, but will also consider the communities most impacted by economic stresses based on data.

After the presentation all participants on the video conference call held small group discussions to provide input into ways the Framework can support their communities. The small groups then reported out their ideas. The summaries of the discussions are included as Appendix B.

Next Steps

In closing, Jennifer Kester, City of SeaTac Planning Manager and Phyllis Shulman, StART Facilitator, are initiating a meeting for interested StART participants to explore additional ways that StART can create community engagement opportunities. This suggestion was brought forth by Kester at the StART Aviation Noise Working Group meeting. Volunteers were solicited.

Public Comment

Compiled public comments are included as Appendix A.

Next Meeting:
August 26, 2020- 5:00 pm - 7:00 pm
Video Conference Call

Appendix A Summary of Public Comments

Earnest Thompson, City Councilmember (Normandy Park) (oral comments)

- Commented that a number of people in the community have suggested that it may be a good time to do the ground noise study that is being delayed in order to develop a baseline for the level of noise desired.

Anne Kroeker (Des Moines) (oral comments)

- Asked whether the Port will be notifying the airlines and passengers that masks are required and inquired how the notification would occur.
- Stated that the past status quo regarding economic recovery is unlikely to be what happens in the future. The issues that are arising from the pandemic are similar to what we are likely to experience with climate change. Considers this a perfect time to learn and plan including what infrastructure we will need, for example hyperloop, and to not go back to the heavy use of fossil fuels. Commented that she did not see the Port taking steps to plan for a new normal and encouraged the Port to take this opportunity to change.

APPENDIX B

Small Group Discussion Notes

Port of Seattle Economic Recovery Framework Discussion Questions:

1. For existing small businesses, what are their needs, including those within disadvantaged communities?
2. The Port's recovery initiative provides significant resources to support community driven workforce and small business development projects. What are some of the needs and opportunities these resources could address within your community?
3. What types of capital projects are particularly important to South King County and are there partnership opportunities?
4. How can the Port's recovery initiative help revitalize tourism and travel in South King County and across the state?

Group Participants:

Group 1:

- Eric Zimmerman
- Erica Post
- Carl Cole
- Lance Lyttle
- Randy Fiertz
- Dave McFadden
- Tim Toerber – notetaker
-

Group 2:

- Shan Hoel
- Tom Fagerstrom
- Justin Biassou
- Mark Hoppen
- Tod Bookless
- Stan Shepherd
- Amanda Murphy – notetaker

Group 3:

- Brandon Miles
- Tejvir Basra
- Aryln Purcell
- Marco Milanese – notetaker

Group 4 (public audience):

- Earnest Thompson
- JC Harris
- Dave Kaplan
- Sally del Fierro
- Nic Longo
- Marielle Trumbauer
- Colin Rice
- Anne Kroeker
- Clare Gallagher
- Andy Gregory – notetaker

Question 1. For existing small businesses, what are their needs, including those within disadvantaged communities?

Group 1	Comes down to money. The businesses that will make it through this downturn, planned ahead and have rainy day reserves. In order to pull through this economic downturn, they need money. They need recovery money to get back on their feet (financial support to reopen doors). They need no strings attached money (doesn't help if it is a loan which is difficult to qualify for). Grants are better than loans. Life needs to return to normal, so businesses have a consumer base. Schools need to open so parents can work.
Group 2	• How do we define small businesses? Those based on MIACS industry classification codes or those like women owned? Is certification required? Majority probably don't certify so are they excluded from those programs? In our industries there are many that are not certified. So how is a small business defined, and who is eligible? These questions need to be answered for me first in order to answer the question. My industry, we need Cargo. That's what our freight industry needs. We do a lot of work with cruise lines, so not just air cargo and we rely on the mom and pop businesses to provide services. We contract out using local services like warehouses. So, when our business is impacted, others are too. Not sure there is much knowledge within the small business community about these types of programs and how they can engage. • Most businesses in Normandy Park are closed. They need to open. Some restaurants have been assisted. I know all businesses have been given resources on available Small Business services. We depend on certain businesses and all are struggling to make a living. Businesses need foot traffic, and we will need the discipline for social distancing. Currently, we aren't seeing the foot traffic. We need to cooperate with epidemiological evidence and ways to increase the foot traffic. We are seeing an increase in cases now. So, what does this mean? May be just a bump but what if it isn't? Again, future is uncertain. We also need greater flexibility in the CARES Act so it's not so restrictive that it's difficult to deliver it. Also, not sure who is going to stay in business and their ability to survive shouldn't be the criteria to qualify for resources.
Group 3	• I am an owner of two airport remote parking lots/small business owner – occupancy is way down at those lots. There are some federal programs in place to support businesses like mine. General marketing/promotional efforts aren't going to really help at this

	point. The public needs to feel safe when they travel and until that happens – things won't dramatically improve. Like many business owners, I have taken steps and implemented new procedures to increase safety. And I appreciate the efforts the airport has taken to increase health/safety – that's helps with building confidence. The kind of marketing/promotional efforts I think would help would be those than emphasize all the steps businesses and the airport have taken to increase safety. • The needs of small businesses are relatively simple – financial grants/loans to survive and PPE to conduct their work. Tourism marketing at this point is not going to help. It's not what local businesses say they need.
Group 4	• They need help to get back on their feet, maybe back pay, getting through forms to apply for funding? • They need to open state to get things rolling. • The impacts are related to poverty.

Question 2. The Port's recovery initiative provides significant resources to support community driven workforce and small business development projects. What are some of the needs and opportunities these resources could address within your community?

Group 1	Working from home will become more prevalent. Help small business owners with training to use the technology to transition to this new reality. Helping service-related industries that still have not opened (nail salon, etc.). Provide ergonomics experts to ensure home offices are suitable for full working days.
Group 2	• The criteria are broad enough that it can go forward. We are working with the Chamber and think their efforts will be successful. But there is a lot of uncertainty. Hopefully, we will know more as things unfold. • With small businesses, there isn't much cost but if there continues to be limited foot traffic, then it doesn't matter how low costs are. With no revenue being made, it's going to be very hard for many businesses. What happens may be 25% of businesses end up closing. The future is unknown at this point.
Group 3	• There is fear that those who they've had to lay-off, won't be available once businesses start hiring again. I continue to remain connected to my employees and been able to provide support/assistance. But many businesses don't have those resources. When things do recover, and

	businesses begin ramping up again – there's a good chance that employees won't come back to their former employers. They've had to move on – to Amazon for example. So retraining support, recruitment assistance, career fairs – all of those will be needed by small businesses. It would be catastrophic if the demand was to return and there were enough or enough well-trained employees to respond to that demand.
Group 4	• There are limited small businesses in Normandy Park. • People need to feel comfortable being out purchasing. They want money in their pockets and stability to invest. Unemployment does help with some of that. But where is the market?

Question 3. What types of capital projects are particularly important to South King County and are there partnership opportunities?

Group 1	The best capital projects employ lots of people and take a long time to complete (Metro/transit related). Can capital projects be connected to workforce development (perhaps supporting training for trades groups)?
Group 2	N/A
Group 3	• All cities have capital projects on their books that are ready to go except they don't have a budget or funding has had to be cut. We don't need to create any new lists of projects – let's work from the existing lists in a city's current CIP. The 42nd Avenue Bridge project in Tukwila is a good example. And one word of advice – the Port needs to simplify their RFP process for any grants/funding they offer to the cities. The simpler the application – the better.
Group 4	• Transportation cuts affect folks without cars who need to get to work, etc. On regional transportation issues, maybe partner with South County Area Transportation Board? • Will COVID has led to long term changes in transportation habits? What is the plan for local transportation?

Question 4. How can the Port's recovery initiative help revitalize tourism and travel in South King County and across the state?

Group 1	I Loved to hear that the Port was investing in tourism and travel. Get Seattle/King County/Tacoma in front of people when they have time on their hands and when they'll be able to move about more freely. We should continue to highlight all the wonderful things to do in Washington State so that as travel opportunities resume, our state will be front of mind with travelers. We should partner with hotel chains to ensure local hotels/lodging establishments to build confidence with traveling again.
Group 2	N/A
Group 3	N/A
Group 4	• Build the hyperloop

StART FACILITATOR'S MEETING SUMMARY

August 26, 2020

5:00 pm – 7:00 pm Video Conference

Participant	Interest Represented		Participant	Interest Represented	
Eric Zimmerman	Normandy Park	X	Scott Ingham (Alt)	Delta Air Lines	-
Tim Sorensen	Normandy Park	-	Scott Kennedy	Alaska Airlines	X
Mark Hoppen	Normandy Park	X	Matt Shelby (Alt)	Alaska Airlines	-
Jennifer-Ferrer-Santa Ines (Alt)	Normandy Park	-	Shan Hoel	Air Cargo	-
Tejvir Basra	SeaTac	-	Justin Biassou	FAA	X
Robert Akhtar	SeaTac	-	Lance Lyttle	Port of Seattle	X
Carl Cole	SeaTac	X	Arlyn Purcell	Port of Seattle	X
Kyle Moore (Alt)	SeaTac	-	Marco Milanese	Port of Seattle	X
Erica Post	Tukwila	X	Eric Schinfeld	Port of Seattle	-
Brandon Miles	Tukwila	X	Tom Fagerstrom	Port of Seattle	X
Tod Bookless	Tukwila	X	Stan Shepherd	Port of Seattle	X
Michael Matthias	Des Moines	X			
Tony Gonchar	Delta Air Lines	-			

Additional Participants: Clare Gallagher, Port of Seattle; Steve Rybolt, Port of Seattle; Alison Beason, Port of Seattle; Tim Toerber, Port of Seattle; Dave Kaplan, Port of Seattle

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives:

To discuss ideas for StART community engagement. To provide an update on the StART Federal Policy Working Group Advocacy Plan and the Aviation Noise Working Group. To review noise comment monthly reports. To discuss the updated timeline for the Sustainable Airport Master Plan.

Welcome

Lance Lyttle, Airport Managing Director, Port of Seattle

Lyttle, welcomed participants and welcomed back the City of Des Moines. He provided a brief update on airport operations. He stated that the airport is continuing to see some signs in the right direction including a slight increase in operations and the continuing opening of airport concessions. He shared that a recent public survey showed the airport's FlyHealthy@SEA efforts are appreciated by the traveling public. Lyttle also encouraged nonprofits within the airport cities to consider applying for South King

County Fund grants. Contact Alison Beason for questions regarding the South King County Fund. Beason.a@prtseattle.org

Community Engagement Discussion **Erica Post, Tukwila Community Representative**

Post provided an overview of a meeting held on August 13 with a group of StART members to discuss StART community engagement. At the meeting, Port Staff, Sally Del Fierro and Marco Milanese, provided an overview of the Port's existing community engagement initiatives, with an emphasis on explaining the ways the Port builds connections to a wide variety of organizations, communities, and businesses. Del Fierro focused on describing community engagement and Port advisory groups with other near-port communities. Milanese focused on describing educational activities the Port sponsors, as well as forums such as StART and the Highline Forum that the Port participates in and administers. He also discussed ways the Port carries out community outreach specific to certain projects as well as examples of ways written communications enhance community outreach. Discussion focused on whether the Port has a set of guiding principles/core values for community engagement.

Several ideas were provided for broadening engagement. These ideas included:

- Provide an opportunity for StART community representatives to have time for discussion of issues just amongst themselves to share interests and concerns
- Host broader community forums to hear community interests and concerns
- Progress achieved in StART needs to be better communicated to airport and neighboring communities

Recommendations included:

- Create short quarterly videos with basic graphics and updates showing StART's actions and programs
- Distribute a one-page chart, similar to the one in the StART Annual Report, that summarizes actions and programs
- Create and distribute infographics via Facebook and other social media
- Increase opportunities to educate the community similar to the way StART members have developed and are developing shared understanding of operations and issues
- Research how other airports with StART-like groups engage communities and utilize social media
- Create educational opportunities for city councilmembers to increase their understanding on topics being covered by StART. Could do as videos, briefings, or educational forums, at least on a quarterly basis and could be done online. Also, consider developing an educational orientation on airport operations and what is being discussed at StART for newly elected officials.

Port staff will follow up on the ideas and will continue to gather input from StART.

Recap of Federal Policy Working Group

Eric Schinfeld, Federal Government Relations Manager

Schinfeld provided a recap of the work of StART's Federal Policy Working Group. On August 3, the Working Group met and discussed how best to focus their Advocacy Plan especially considering the limited opportunities for congressional actions for the remainder of 2020, due to the November election and focus on COVID-19 relief negotiations. The Working Group recommended continued work with U.S. Representative Adam Smith on his aviation-related legislation, increased outreach with other communities nation-wide to develop relationships, and the addition of four new policy priorities:

1. Increasing funding for existing noise insulation programs
2. Increased focus on sustainable aviation fuels and climate change efforts
3. Incentives for aircraft modernization and emissions reductions programs
4. Advocate for stringent noise requirements and standards for supersonic aircraft.

He requested that the revised Advocacy Plan be vetted by cities, and that they provide feedback by September 15 so that the Working Group can continue their discussion at their October meeting.

Questions and comments from StART participants included:

- Suggest that funding be considered for electrifying ground transportation vehicles and make this effort one of the Port's environmental sustainability goals. It was noted that the Port has pursued federal funding for tugs and buses to be electrified and for the development of alternative fuels. This could be added to the Federal Advocacy Plan.

Recap of Aviation Noise Working Group

Marco Milanese, Community Engagement Manager, Port of Seattle

Milanese provided an update of the discussion at the August 10 Aviation Noise Working Group. Late night operations on the Third Runway have dropped dramatically, due to the Runway Use Agreement, and are down to approximately one landing every third night during the late-night hours. Data from April through June related to the Late-Night Noise Limitation Program shows that there has been an increase in e-commerce which has increased cargo flights during the late-night hours. There has also been an increase in cargo flights that has exceeded the noise thresholds. The Working Group also discussed the noise certification process for supersonic aircraft as well as reviewed the statistics related to passenger and operations levels. It was noted that due to the impacts of COVID-19, fleet changes are occurring across the industry.

The Working Group will consider further analysis around the following issues:

- Noise impacts associated with air cargo flights
- Propeller aircraft flight patterns
- Supersonic aircraft proposed noise standards
- Learning about international noise and green aviation standards

Noise Comment Monthly Reports

Tom Fagerstrom, Airport Noise Programs Coordinator, Port of Seattle

Fagerstrom provided an overview of the finalized noise comment reports that will be posted on the Port's website each month. The report shows monthly totals and trends for noise comments and complaints by cities, zip codes, and distinct households. He also described the number of ways comments are submitted, including through third party web applications. The report also shows information about the subject matter of the complaint. He noted that Vashon Island residents are heavy user of the third party web complaint app. Fagerstrom also noted that complaints have declined accordingly as operations have decreased.

Sustainable Airport Master Plan Timeline

Steve Rybolt, Senior Environmental Program Manager, Port of Seattle

Rybolt, reviewed the updated Sustainable Airport Master Plan (SAMP) Near-Term Projects environmental review timeline. He highlighted that the schedule was updated in July and reflects a three month delay due to COVID-19. He mentioned that the draft of the National Environmental Policy Act (NEPA) Environmental Assessment will be available in early 2021 and the Port will be seeking agency and public comments at that time. The goal is to have both NEPA and State Environmental Policy Act (SEPA) processes completed by the end of 2021. More information about the SAMP Near-Term Projects environmental review can be found on the project's [website](#)

Public Comment

Compiled public comments are included as Appendix A.

Next Meeting:
October 28, 2020- 5:00 pm – 7:00 pm
Location: video conference

Appendix A Summary of Public Comments

Public Comment

JC Harris (oral comments)

- Commented that at the next Port Commission meeting there will be a vote to approve a contract with L3Harris on noise monitoring. Commented that the noise monitoring has been known to be inaccurate from time for time. Recommended that the new contract include auditing of their work and that the Aviation Noise Working Group also discuss and monitor how L3Harris is calibrating and maintaining the accuracy of the equipment. Noted that this has been a persistence problem.

David Goebel (Vashon) (written comments)

My name is David Goebel.

I'm the president of the 501(c)3 Vashon Island Fair Skies (VIFS.org), and I think most of you are familiar with our fight against the NextGen flight path and procedure changes over Vashon Island. I wanted to bring up something time critical that was surprisingly not covered in today's StART meeting, but is absolutely central to the majority of what the SeaTac noise office does. It's the five year renewal of the contract with the L3Harris Corporation that is currently in the works. L3Harris creates most of the actual public-facing product that the Noise Office uses to engage and inform impacted communities. That contract defines the terms and conditions of those products and so is the most important document shaping how the Port is able to respond to the communities most negatively impacted by the direct environmental consequences of 450,000 flight operations, pre-COVID, a year.

Approving this contract was pulled from the Unanimous Consent Calendar – which it **never** should have been on, but that's another issue – of the last Port of Seattle Commission meeting a couple weeks ago. So, we now have until the next Commission Meeting on Sep 9th to help shape that contract to best serve the environmental needs of airport communities. I would urge anybody who has concerns about the environmental impacts of the airport, especially noise, to please help perfect that contract before it is executed.

Thank you to the Noise Office for finally pulling together the PlaneNoise data onto the Port's web site. Community members shouldn't have to make Public Records Requests to get this data.

Thank you.

Andrew Wood (Federal Way) (written comments)

Thank you for permitting me to comment on the meeting. I heard a number of items discussed and would like to make the following observations:

- A report was made stating the numbers of planes that have exceeded the nighttime noise threshold. Nothing was said about the action taken against those planes. This is like saying 18% of people exceed the speed limit on this road but we are not doing anything about it. Nobody would condone that. The plane owners/operators who exceed these limits should be penalized.

If the Port say they cannot penalize them, then the Port should be actively campaigning so they can penalize them.

- We were presented with a number of items that were being pursued. It would be more meaningful if we had a table showing the items pursued and the successful outcome of each. Saying we are pursuing twenty areas without showing the successful close out is meaningless. We could produce a list of 100 items which makes it look good but if none or few are successfully closed out it is worthless.
- Nobody appreciates another person's issues unless they have experienced it themselves. A suggestion for what the Port could do in outreach is to sit for a few hours in the neighborhoods where the noise complaints originate and experience first-hand what these residents have to tolerate.
- On specifics, there was an item being investigated that mentioned the 34R glide path for landing. The same is true of the 34L glide path and this should also be followed.

I think if this body is not to have the reputation of being a talking shop, it has to demonstrate some real changes taking place, and I did not see much evidence of that. It is certainly not acceptable to listen to concerns and have no way forward to resolving them. Therefore, I think the structure of the meeting should be: (a) Here is the issue; (b) Here is how the Port suggests we handle/mitigate this issue; (c) Here are the Items that we resolved. I think that most people are reasonable and they know all planes cannot stop, but they also know that taking the stance that nothing can change is not a solution.

I hope that these points are accepted and that this forum can become a real vehicle for change and that the Port and citizens can together champion an improvement in the quality of life for all.

Earnest Thompson, (Normandy Park) (oral comments)

- Asked three questions:
 1. When noise complaints are filed, do you have the exact household location for where the complaint came from? And if so, what do you do with that data?
 2. Regarding Representative Smith, what is his timeline for pushing forward his legislation?
 3. Regarding the safety of people who fly – I was talking to a pilot friend and he was telling me that the chemicals being used to clean planes are good for a month. I would like to know what chemicals are being used and the safety of these chemicals.

Dave Berger (Marine Hills/Federal Way) (oral comments)

- Noted a discrepancy between the graphic shown in the meeting of the release date for the Draft SEPA and what is shown on the Port's website.

Bernedine Lund (Federal Way) (initial oral comments read by Anne Kroeker. Written comments provided post meeting)

Hello, I am Bernedine Lund, resident of Federal Way and a member of 350 Seattle Aviation Group and QSPS. I have 2 comments:

The first is about the DNL noise calculation:

Although the 2018 FAA reauthorization bill requested the FAA to examine and develop a more realistic measure, the FAA did not change it. Could you have a StART working group look at the noise measure and develop a more realistic noise measure that better represents what we are hearing? It would be helpful to also include the low rumble that shakes the windows of homes, and can be felt more than heard. And rather than having a measure for the entire day, it would be helpful to have it represent 30 or 60-minute periods rather than 24 hours?

The second is about Noise complaints

I have been one of the people who used the airnoise.io button to complain about the flight noise. I realized last month that I was not reporting what I was really concerned about - the negative health effects to the people who live under the flight paths. While the reports included in the packet today show number of noise complaints and people complaining, these reports do not really capture the negative effects on public health. Unfortunately, most people are not aware of these effects so would not be reporting them. Instead it would be more meaningful to have reports of the number of extra health events for those who live under the flight paths; including:

- high blood pressure, heart attacks and stroke (see the 2018 WHO report on Noise)
- allergies, asthma and autoimmune diseases
- decreased learning in school
- increase in low birth weight babies
- effects of exposure to other heavy metals and other emissions

StART FACILITATOR'S MEETING SUMMARY

October 28, 2020

5:00 pm – 7:00 pm Video Conference

Participant	Interest Represented		Participant	Interest Represented	
Eric Zimmerman	Normandy Park	X	Scott Kennedy	Alaska Airlines	X
Mark Hoppen	Normandy Park	X	Matt Shelby (Alt)	Alaska Airlines	
Jennifer Ferrer-Santa Ines (Alt)	Normandy Park	-	Tony Gonchar	Delta Air Lines	-
Carl Cole	SeaTac	X	Scott Ingham (Alt)	Delta Air Lines	X
Kyle Moore (Alt)	SeaTac	-	Shan Hoel	Air Cargo	X
Robert Akhtar	SeaTac	-	Justin Biassou	FAA	X
Tejvir Basra	SeaTac	-	Lance Lyttle	Port of Seattle	X
Michael Matthias	Des Moines	X	Arlyn Purcell	Port of Seattle	X
Brandon Miles	Tukwila	X	Marco Milanese	Port of Seattle	X
Erica Post	Tukwila	X	Eric Schinfeld	Port of Seattle	X
Tod Bookless	Tukwila	-	Tom Fagerstrom	Port of Seattle	X
Bill Vadino	Federal Way	X	Stan Shepherd	Port of Seattle	X
Dave Berger	Federal Way	X			
Chris Hall	Federal Way	X			
Brian Wilson	Burien	X			

Additional Participants: Vince Mestre, Consultant

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives:

To provide an update on agenda items at the StART Federal Policy Working Group and the Aviation Noise Working Group October meetings. To present on and discuss the Port's aircraft noise monitoring program.

Welcome

Lyttle welcomed participants. The cities of Des Moines, Burien and Federal Way have reinstated their membership on StART. Lyttle, welcomed back the cities and emphasized his interest in working together on shared priorities. He emphasized that he believes that even though there may be differences of opinion, that good work can still be accomplished together.

Recap of Federal Policy Working Group

Eric Schinfeld, Federal Government Relations Manager

Schinfeld provided a briefing on the October meeting of the StART Federal Policy Working Group (FP Working Group). Schinfeld provided background on the shared agenda and the impacts of COVID-19 on the advocacy work. He stated that now is a good time to reenergize the work. The FP Working Group came to agreement on two items:

1. An updated federal policy advocacy plan that now includes four new policy priorities.
2. Organizing virtual meetings with Congressional representatives and FAA leadership to replace the trip to Washington DC that had been originally planned for last March.

Schinfeld asked each city to identify participants for the virtual meetings. He will follow up with coordination and the development of talking points. He acknowledged the congressional representatives who have kept these issues a continuing priority for Congress. Schinfeld stated that these issues are non-partisan, but that legislation can be stalled by overall lack of legislative progress in Congress these days. A StART member suggested that leadership at the US Department of Transportation be included in the meetings.

Recap of Aviation Noise Working Group

Marco Milanese, Community Engagement Manager, Port of Seattle

Milanese provided a recap of the October Aviation Noise Working Group (AN Working Group). The AN Working Group discussed the following items:

- The winners of the 2020 Fly Quiet Award.
- Reviewed the latest data on the Late-Night Noise Limitation Program 2020 3rd Quarter Results showing that though late-night operations have dropped, the highest percentage of late night exceedances are related to cargo carriers.
- Reviewed the latest data on the Runway Use Agreement noting that in September there were only five late-night landings on the 3rd runway during the whole month.
- A presentation on SEA air cargo to better understand and determine how best to work with freight operators to reduce aviation noise. The presentation focused on freight cargo data including identification of freight carriers, their flight schedules, and aircraft type.
- Discussed the interest in engaging with FAA on NextGen procedures, engaging with airlines to understand future fleet plans, especially late night operators.

Noise Comment Monthly Reports

Tom Fagerstrom, Airport Noise Programs Coordinator, Port of Seattle

Fagerstrom provided an overview of the Noise Comment Monthly Report for September. The report shows monthly totals and trends for noise comments and complaints by household, zip code, and city. The report shows the type of comment/complaint and the method in which it was received. The most

common complaint is “noise annoyance” and the most common method of reporting is through the third-party web application called Airnoise. Information is also shown through a heat map by zip code which shows where the intensity of complaints originate. In September, the most complaints registered were from Vashon. A suggestion was made to also report the data on number of complaints via flight paths. Monthly reports are posted on the [website](#).

SEA Aircraft Noise Monitoring Program

Vince Mestre, Consultant

Stan Shepherd, Manager Airport Noise Programs, Port of Seattle

Tom Fagerstrom, Airport Noise Programs Coordinator, Port of Seattle

Overview of Noise Monitoring Systems

Mestre discussed the history of noise monitoring systems, system design, equipment and components, best practices, and how the data can and cannot be used. Mestre identified technical considerations for site selection, samples of technical reports, and compared noise monitoring versus noise modeling. He discussed the importance of flight track analysis data. This data provides the location of aircraft to maximize flight tracking accuracy. Flight tracking systems identify location, flight, speed, and altitude of each aircraft. Mestre pointed out that as aircraft have gotten quieter, their noise levels can be closer to other ambient noise in the community. When ambient noise is high it is more difficult for noise monitors to differentiate aircraft noise. Due to the difficulty of separating ambient noise from aircraft noise, noise modeling provides the best estimate of aircraft noise. Mestre’s presentation can be found [here](#).

SEA Permanent Noise Monitors

Shepherd and Fagerstrom’s presentation can be found [here](#).

Shepherd presented information on the SEA permanent monitoring system including the number of monitors, their location, and how the permanent noise monitors connect to the flight tracking system. He shared examples of what data the noise monitoring system collects and how that data is utilized. Highlights of the presentation include:

Permanent Monitoring System

- 24 permanent monitors located in close-in communities surrounding SEA, or in locations generally north and south of the runways near a departure or arrival flight path
- Aircraft noise event data is gathered and shared on a monthly basis via the Port’s Noise Programs website.

Flight Tracking System

- Record of all flights that occurred at SEA
- Same radar data feed the FAA uses
- Historic record of flight details, including the altitude, aircraft type, location, speed, and airline
- Flight tracks are correlated with likely noise events
- Non-correlated noise is identified as community noise

Noise Monitoring Data

- The purpose of SEA's noise monitoring system is to identify aircraft overflights and correlate probable noise events. The metrics supplied by the Port are:
 - SEL – sound exposure level: metric represents all the acoustic energy in an individual noise event as if that event had occurred within a one second time period
 - LEQ – equivalent continuous sound level: measures the average acoustic energy over a period of time to take the cumulative effect of multiple noise events

Noise Monitor Data Utilization

- Providing aircraft noise event information to the public along with aircraft type, airline, flight number and time/date.
- Monitoring noise levels for the Fly Quiet and Late Night Noise Limitations programs. FAA does not use data from noise monitors as the basis for determining the sound insulation boundary area. FAA mandates that only noise modeling be used.
- Noise monitors do not provide as accurate depiction of annual DNL compared to modeling.
- Noise monitors are not used as the basis for flight path changes.

SEA Temporary Noise Monitors

Fagerstrom presented information on the Port's new Temporary Noise Monitoring Program. He stated that SEA recently acquired two portable monitors. Fagerstrom reviewed the Program's procedures including site selection criteria, deployment status, and data utilization. Highlights of the presentation include:

SEA's Temporary Noise Monitoring Program Procedures

- Portable noise monitoring will be considered if requested through a local jurisdiction such as a city council or city administrator.
- A standardized report will be provided to the requesting jurisdiction consisting of the following information: SEL, LEQ, and the number and type of aircraft noise events correlated.

Site Selection Criteria

- Distance from permanent monitoring sites – preferably not within 2 miles
- Proximity to established flight paths and airfield noise
- Availability of electric power
- Site accessibility for Port and vendor staff
- Site security
- Acoustically feasible
- Consideration of neighborhood equity and diversity

Deployment Status – First Monitor

- Received requests for monitor placement from the cities of Burien, Federal Way, and Normandy Park.
- Using the placement criteria, Burien was selected for the first placement, but they deferred to a later date.

- Federal Way accepted placement at the Nautilus Elementary School for two months. The monitor was installed in October for preliminary testing.
- The temporary monitor will be located next in Normandy Park.

Deployment Status –Second Monitor

- Port Commission directed placement of monitor on Vashon Island for 12 months.
- Port staff currently are working on an access agreement.
- Monitor will be used for shorter terms for other municipalities once the 12 month period on Vashon ends.

Additional information based on questions and comments included:

- The Port does not have current plans to utilize emission monitors, but are continuing to utilize the Puget Sound Clear Air Agency air emissions data.
- Recommendation that the Port partner with the University of Washington on their air quality study.
- Port staff are currently considering a request to move the permanent noise monitor from Sacajawea Elementary School to Nautilus Elementary School.

Public Comment

Compiled public comments are included as Appendix A.

Next Meeting:
December 9, 2020- 5:00 pm – 7:00 pm
Location: video conference

Appendix A Summary of Public Comments

Public Comment

Anne Kroeker (oral and written comments):

- Stated that she thought she had heard earlier at the meeting that the aircraft noise is not coming from NextGen, but she thought that it was due to NextGen. Commented that due to how the noise monitors work she is not sure that the noise monitors are a wise investment.
- Mentioned two reports. One is from the Euro parliament on the impact of noise on cities. Stated that the report stated that noise can lead to negative public health impacts as well as socio-economic impacts. The second report states that aviation noise may affect dementia risk over time.
- Requested that the work of StART include diversity and equity in its strategies and include diversity and equity when the Port decides the placement of temporary noise monitors.

The following are references to the studies:

Impact of aircraft noise pollution on residents of large cities:

[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/650787/IPOL_STU\(2020\)650787_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/650787/IPOL_STU(2020)650787_EN.pdf)

Abstract:

This study, provided by the Policy Department for Citizens' Rights and Constitutional Affairs at the request of the Committee on Petitions, aims to provide a clear and simple overview to the non-expert reader, on the Impact of aircrafts noise pollution on residents of large cities, as well as to give recommendations addressed to the most relevant actors. Noise is one of the most important problems linked to aviation. It can lead to health issues, as well as to negative social and economic effects. Examples of health issues produced by aviation are sleep disturbance, community annoyance, cardiovascular disease, and mental health problems.

Community noise may affect dementia risk:

<https://www.sciencedaily.com/releases/2020/10/201021085106.htm>

Summary:

Results from a new study support emerging evidence suggesting that noise may influence individuals' risk of developing dementia later in life.

Bernadine Lund (Federal Way) (oral and written comments):

StART meeting 10-28-2020, Public Comment, Bernedine Lund, resident of Federal Way

Hello, everyone,

I want to say thank you to the PoS Noise Monitoring staff the noise presentations and for agreeing to set up a Temporary Noise Monitor at Sacajawea Grade School here in Federal way. I look forward to being able to see and compare the data to Noise Monitor #22. I have one request for the reports – please do not use the word annoyance unless the DNL is below 45 (I find the use of the word very annoying). As reported in the 2018 WHO Noise Report, DNL levels above 45 are a health risk, and most of the residents do not agree with the FAA that the DBL has to be below 65 to just be annoying.

On a separate topic, I wanted to mention to the StART members that the PoS is preparing its 2021-2025 budget and is planning to spend about \$3.3 billion on capital investments. The Port is also considering a recommendation to increase the Port District tax levy by 3% for 2021, which would bring in about \$78 million. This spending is proposed while the Port also estimates the it will take to 2025 to reach the 2019 (the pre-Covid) flight levels. See the summary table for number of flights for 2019 and for Jan-Sept for 2020 so you can see the drop in number of flights this year.

At the PoS Commissioners meeting yesterday I asked that they use 0.1% of the \$33 billion (or \$33 million) in 2021 to provide air purifiers to local homes and schools, including ongoing money for replacement air filters every 6 months. This cost falls well within the \$78 million from one year of the tax levy. I also asked them to move forward on replacing or updating the Port sound mitigation packages that have failed and to provide new ones as requested. The local residents should not have to wait while the Port has the tax levy money to provide this work.

I asked the Port to take this step to protect the health of local residents. It is very important to me to keep the health of the local residents from deteriorating due to aircraft emissions and noise, and more important than improving the experience of travelers going through the airport. I hope that it is more important to you too.

Number¹ of Flights Measured by PoS Noise Monitors
Jan-Dec 2019

Noise Monitors	#	Site	2019												Ave # flights/ Mo	2019 Ave # flights/d av
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total 2019	
Air Cargo 4, SeaTac	#1		11,929	8,798	14,792	11,630	12,456	10,458	7,060	7,371	5,686	6,830	8,203	3,941	109,154	9,096
Maple Leaf Reservoir, Seattle	#3		714	361	505	737	476	631	588	410	607	780	425	1,158	7,392	616
C Blain School, Seattle	#4b		102	67	72	95	79	83	92	83	85	98	86	147	1,089	91
Median Ave, Medina	#5		861	1,895	2,874	1,875	2,565	1,710	1,248	1,938	1,477	1,239	2323	262	20,267	1,689
Hamilton View Park, SW, Seattle	#6		47	59	80	48	104	65	67	58	57	56	63	19	723	60
Central Area Sr Center, Seattle	#7		496	696	1,224	778	1,286	870	1,154	1,120	994	550	1065	522	10,755	896
Mercer View Community Center	#8		12	5	8	16	20	4	21	13	5	9	7	14	134	11
Beacon Hill Reservoir	#9		10,883	18,575	20,960	22,067	9,141	18,367	17,181	14,172	14,454	17,001	20,753	27,509	211,063	17,589
Brighton Playfield, S Seattle	#10		515	537	580	592	603	582	852	738	641	690	753	724	7,807	651
Beverly PK School, SeaTac	#11		16,064	13,450	15,639	15,763	16,785	17,629	18,900	18,586	16,897	16,844	15,644	17,361	199,562	16,630
S 126, Burien	#12		4,662	5,567	8,102	6,542	7,867	6,538	7,194	8,161	5,466	6,135	7,478	3,042	76,754	6,396
Cedarhurst Middle Sch, Burien	#13		11,460	8,841	10,075	11,698	12,099	12,003	12,582	12,493	12,244	11,720	11,585	12,850	139,650	11,638
N Clear Zone, SeaTac	#14		14,311	11,524	13,179	15,135	14,383	14,082	13,410	13,089	11,688	11,653	11,115	11,642	155,211	12,934
Sylvester Mid Sch, Burien	#15		2,849	369	42	455	423	270	173	210	315	344	394	490	6,334	528
Chinook Mid Sch, SeaTac	#16		1,642	859	704	1,312	1,419	1,376	222	91	923	1,263	953	1,155	11,919	993
S 207th St, SeaTac	#17		15,668	13,675	15,892	15,997	17,295	18,114	19,211	19,549	17,369	17,339	15,774	16,381	202,264	16,855
S 226 St, Des Moines	#18		14,811	13,057	15,480	15,341	16,644	17,523	18,619	19,028	16,806	16,655	15,645	15,824	195,433	16,286
Midway Ele, 24 Ave S, Des Moines	#19		12,580	9,557	9,470	11,432	11,654	13,946	14,712	13,630	14,145	13,677	10,721	16,070	151,594	12,633
Parkside Ele, S 247, Des Moines	#20		11,982	8,933	9,379	10,993	11,275	13,410	14,469	13,387	13,449	12,621	9,958	15,202	145,098	12,092
Mark Twain Ele, Star Lake, FW	#21		11,619	8,125	8,643	10,419	10,109	12,536	12,199	12,371	12,939	12,040	9,481	14,881	135,362	11,280
Sacajawea Jr H, FW	#22		12,121	10,717	13,450	13,264	14,748	15,431	16,063	16,665	14,502	13,825	13,757	13,684	168,227	14,019
Meredith Hills Sch, S300, Auburn	#23		139	170	144	132	115	166	218	101	252	293	114	243	2,087	174
Twin Lakes Ele, 42 PI SE, FW	#25		358	230	343	272	404	454	366	238	366	391	236	653	4,311	359
Woodmont Ele, 16 Ave S, Des Moines	#28		13,906	12,089	14,350	14,803	16,292	16,854	18,050	18,273	16,186	9,078	14,764	15,361	180,006	15,001

1 - Count of SEL measures used to estimate count of flights; there may be small percentage (< 5%) of the counts that are due to noise other than aircraft
2 - Location of noise monitor in relation to airport. See Noise Monitor Locations map.

Number of Flights¹ Measured by PoS Noise Monitors 2020 Jan-Sept

Noise Monitors			2020												Summary Data		
	Site ²	#	Jan	Fed	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Jan-Sept 2020	Ave # flights/month	Ave # flights/day
	Air Cargo 4, SeaTac	#01	4,263	5,033	7,620	5,471	4,979	6,788	8,820	8,733	7,943				59,650	6,628	221
	Maple Leaf Reservoir, Seattle	#03	1,243	723	482	73	101	173	150	141	185				3,271	363	12
	C Blain School, Seattle	#04b	122	110	116	53	43	52	44	38	104				682	76	3
	Median Ele, Medina	#05	87	616	866	419	775	1,052	1,353	1,343	1,381				7,892	877	29
	Hamilton View Park, SW, Seattle	#06	13	36	83	33	42	53	62	72	29				423	47	2
	Central Area Sr Center, Seattle	#07	336	447	304	117	214	311	368	437	299				2,833	315	10
	Mercer View Community Center	#08	8	39	5	1	14	5	3	5	1				81	9	0
	Beacon Hill Reservoir	#09	29,711	25,077	19,233	5,224	See Data Notes			7,405	11,568				90,813	18,163	605
	Brighton Playfield, S Seattle	#10	567	693	520	222	5,067	7,745	202	178	217				15,411	1,712	57
	Beverly Pk School, SeaTac	#11	16,758	15,207	13,556	4,512	5,067	7,745	9,415	11,052	10,291				93,603	10,400	347
	S 126, Burien	#12	2,551	3,493	4,654	2,817	2,509	3,373	4,850	5,661	5,098				35,006	3,890	130
	Cedarhurst Middle Sch, Bruten	#13	12,447	10,859	8,209	2,093	2,535	3,955	4,605	5,439	5,863				56,005	6,223	207
	N Clear Zone, SeaTac	#14	12,884	10,494	9,038	3,008	2,837	4,586	6,407	7,253	6,908				63,415	7,046	235
	Sylvester Mid Sch, Burien	#15	389	264	171	91	139	115	208	198	232				1,807	201	7
	Chinook Mid Sch, SeaTac	#16	1,840	1,460	623	89	117	101	81	65	144				4,520	502	17
	S 207th St, SeaTac	#17	15,605	14,793	13,812	4,953	5,343	7,728	10,032	11,995	10,751				95,012	10,557	352
	S 226 St, Des Moines	#18	14,970	14,242	13,301	4,737	5,047	7,439	9,669	11,539	10,280				91,224	10,136	338
	Midway Ele, 24 Ave S, Des Moin	#19	15,382	13,359	11,142	3,834	4,246	5,804	6,499	7,701	7,162				75,129	8,348	278
	Parkside Ele, S 247, Des Moin	#20	14,302	12,382	9,828	2,946	1,522	2,302	2,560	5,534	5,881				57,257	6,362	212
	Mark Twain Ele, Star Lake, FW	#21	14,387	12,019	8,934	2,461	3,016	4,383	4,478	5,565	6,088				61,331	6,815	227
	Sacajawea Jr H, FW	#22	10,886	11,329	8,724	3,184	3,771	5,505	7,334	9,145	8,290				68,168	7,574	252
	Meredith Hills Sch, S300, Auburn	#23	297	195	76	29	25	33	95	150	76				976	108	4
	Twin Lakes Ele, 42 Pl SE, FW	#25	374	356	236	67	83	188	115	103	95				1,617	180	6
	Woodmont Ele, 16 Ave S, Des M	#28	13,862	13,375	11,157	3,765	4,231	6,331	8,157	9,836	9,026				79,740	8,860	295

General Comments

- 1 - Count of SEL measures used to estimate count of flights.
- 2 - See Noise Monitor Map for location of noise monitors.

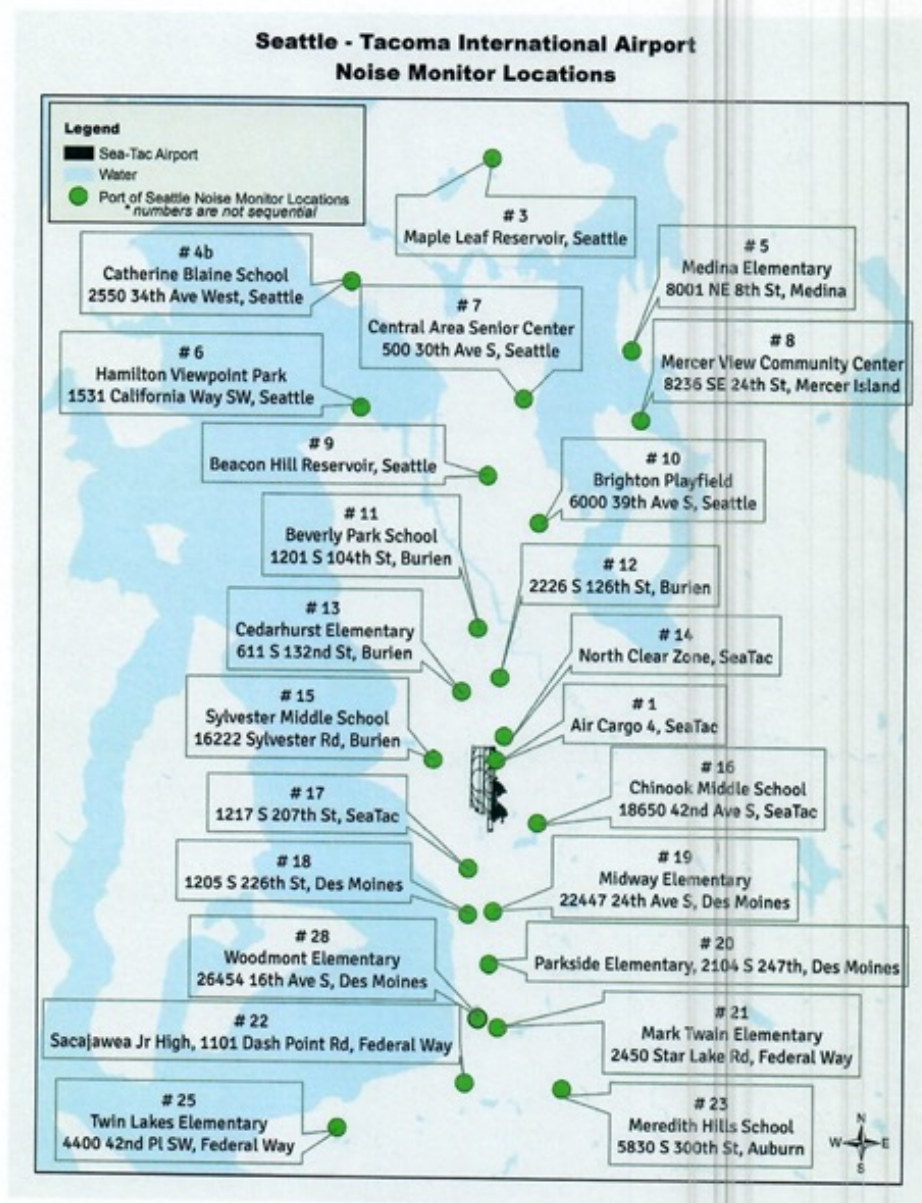
Data Notes - see outlined boxes in table

May - Aug: No data for Monitor #9 from May 1 - Aug 7, 98 continuous days; data for Aug represents 24 days. Summary data based on 5 months with data, Jan-April and Sept.

10-20-2020 Airlines/SEL data/Jan-Sept Table

10/28/2020

NMT locations as of 2020.jpg (3264x4224)



[https://www.portseattle.org/sites/default/files/inline-images/NMT locations as of 2020.jpg](https://www.portseattle.org/sites/default/files/inline-images/NMT%20locations%20as%20of%202020.jpg)

1/1

David Goebel (Vashon Fair Skies) (Oral and Written Comments):

- Commented that the algorithm measure of noise monitoring is important and is not shown in the data. Stated that it is not just the noise level but the number of these noise level events. For example, with noise monitor #12 – it registered 77 events; however, there were more than 500 events that didn't meet the noise threshold. While each noise event was small, there was A LOT of them which adds up.

The following written testimony was submitted with additional detail:

Vashon Island Fair Skies <http://www.vifs.org>
 PO Box 1250 info@vifs.org
 Vashon, WA 98070 (206)682-8638

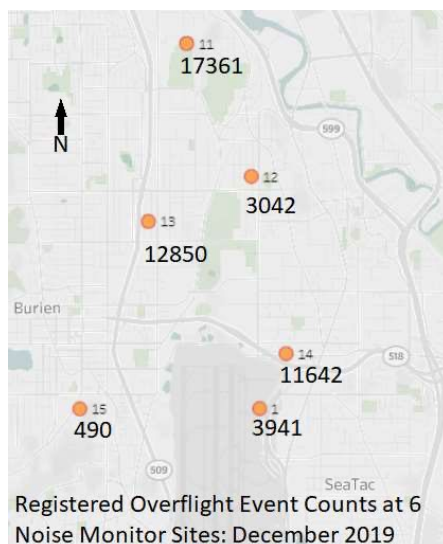
Dedicated to restoring the pre-NextGen dispersed arrival paths and more optimized profile descents at Seattle/Tacoma International Airport that had been in place since the introduction of commercial aviation to the Puget Sound region, many decades ago.



Oct 28, 2020

These written comments to Port of Seattle's "Seattle-Tacoma Airport Stakeholder Advisory Round Table" are intended to provide the detail and documentation behind David Goebel's spoken public comments to the same on 10/28/2020.

The layout of the runways and distribution of the noise monitors, specifically #11 and #12, are the central background information:



In Southflow, arrivals land on runways 16 L/C/R. Given their locations, monitor #11 is optimized for 16R and #12 for 16L. 16R has the large majority of arrivals in Southflow.



Due to this distribution of arrival runways, in Southflow monitor #12 correlates many fewer overflight events than monitor #11. For example, in December 2019:

	Runway (Southflow)		
Site	16L	16C	16R
SEA11	2344	306	31342
SEA12	4750	236	304

The flight correlation data has a variety of anomalies, including not just missed overflights, but single overflight events registering multiple correlations, and no, not go arounds. In this latter case the spurious correlations are a few seconds apart and have much lower intensity, combined with being few in number, mean they don't have a significant impact on the results, but do complicate the analysis process. In other cases, the wrong flight can be identified when there are parallel arrivals. These don't make a net change in LEQ, but again complicate analysis when trying to account for every single arrival.

Picking a random day in December 2019 with a small number of anomalies, Thursday December 5th, an analysis of the aggregate impact of the overflight events intentionally excluded from monitor #12's LEQ result was undertaken. This day also had zero 16C arrivals, which are always relatively small in number, but having it zero makes the analysis easier.

On Dec 5th monitor #12 had 77 correlations (74 16L and 3 16R). In addition to the three 16R arrivals that *were* correlated **there were 532 16R arrivals which were intentionally excluded**. Each of these excluded 16R arrivals had much lower intensity than the 16L ones as measured by monitor #12. In order to approximate the noise level that each of these excluded 16R arrivals *would* have been on monitor #12, I used the 33 arrivals on December 5th that were correlated by **both** monitors 11 & 12 to judge what the noise intensity likely would have been. In these joint 16R correlations, the SELs (Sound Exposure Level) on monitor #12 were approximately 9 dB lower than the same overflight measured by monitor #11.

This is an approximation as I have a day job. A rigorous analysis would use a method called "Floating Threshold" to investigate every overflight event individually using the raw Time History data from the noise monitor. I would contend the approximation of using these 74 joint 16R correlations as a Rosetta Stone of sorts is sufficiently accurate.

Taking into account these 532 excluded 16R arrivals on Dec 5th, the LEQ for monitor #12 on that day goes from ~53.4 dB to ~56.7 dB, which is about a doubling of intensity*.

I do recognize that FAA regulation 14 CFR Appendix A to Part 150 - Noise Exposure Maps: Part C - Mathematical Descriptions, Sec. A150.205(d) regarding the integration envelope for the Sound Exposure Level says:

"The time interval should be sufficiently large that it encompasses all the significant sound of a designated event. The requisite integral may be approximated with sufficient accuracy by integrating LA(t) over the time interval during which LA(t) lies within 10 decibels of its maximum value, before and after the maximum occurs."

So, you "should" include all significant events but "may" exclude those without a 10dB swing. Even using this standard, as shown by my earlier produced video, overflight events with > 10dB swings are still excluded. I didn't study how many events were incorrectly excluded using the above "may" rule. It's entirely possible that sticking with the "may" rule and performing a Floating Threshold analysis would have resulted in a very similar LEQ deficit. I would ask StART to please have the Port's noise consultant, Vince Mestre, [look at and comment on the specific numbers in this note](#), and not just generally comment on the nature of noise monitoring in the abstract.

Thank you,

David Goebel

President, Vashon Island Fair Skies

*The specific word "intensity" here is intentional and important as it has an explicit mathematical meaning.

Councilmember JC Harris (Des Moines) (oral comments):

- Commented that in a prior meeting, there was discussion on the failure of some sound mitigation projects. Pointed out that these failures were for very specific homes which had been insulated in the first round of noise mitigation projects. These specific failures (about 170 homes) have specific problems that need to be addressed. Stated it is important to not characterize these homeowners as whinners or their mitigation projects as failures.

Ryan Crompton (Des Moines)(written comments):

I live under the flight path in Des Moines and while the current turndown in aviation has temporarily reduced the noise overhead I know it won't last. That being said I would like the committee to continue to work with the FAA, airlines and the Port of Seattle to find ways to reduce the impact on me and my neighbors. From being involved with this effort in the past I still think that there is a lot that the FAA can do with regards to changing the glideslope and looking at moving the flight paths such that they spend more time over the water or highways (99 and I-15) instead of neighborhoods.

I just don't want this effort to lose steam because of the coronavirus. Those of us who live under the flight path are still struggling and hoping that solutions can be found that take into account our health and safety.

Sincerely,

Ryan

StART FACILITATOR'S MEETING SUMMARY

December 9, 2020

5:00 pm – 7:00 pm Video Conference

Participant	Interest Represented		Participant	Interest Represented	
Eric Zimmerman	Normandy Park	X	Scott Kennedy	Alaska Airlines	X
Mark Hoppen	Normandy Park	X	Matt Shelby (Alt)	Alaska Airlines	-
Jennifer Ferrer-Santa Ines (Alt)	Normandy Park	-	Tony Gonchar	Delta Air Lines	-
Carl Cole	SeaTac	X	Scott Ingham (Alt)	Delta Air Lines	X
Kyle Moore (Alt)	SeaTac	-	Shan Hoel	Air Cargo	-
Robert Akhtar	SeaTac	-	Justin Biassou	FAA	X
Tejvir Basra	SeaTac	X	Lance Lyttle	Port of Seattle	X
Michael Matthias	Des Moines	-	Arlyn Purcell	Port of Seattle	X
Brandon Miles	Tukwila	-	Marco Milanese	Port of Seattle	X
Erica Post	Tukwila	-	Eric Schinfeld	Port of Seattle	X
Tod Bookless	Tukwila	X	Tom Fagerstrom	Port of Seattle	X
Bill Vadino	Federal Way	X	Stan Shepherd	Port of Seattle	X
Dave Berger	Federal Way	X			
Chris Hall	Federal Way	X			
Brian Wilson	Burien	X			

Additional Participants: Dave Suomi, FAA; Clare Gallagher, Port of Seattle; Dave Kaplan, Port of Seattle; Tim Toerber, Port of Seattle; Kelly Schimelfenig, Port of Seattle

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives

To provide an update of what was discussed at the December 7 StART Federal Policy Working Group. To begin identification of StART's 2021 priorities through reflection of what has been learned and what is needed to further StART's objectives.

Welcome

Lyttle welcomed participants and thanked everyone for all of their work over the year. He stated that this is the last meeting of the year. He expressed enthusiasm for discussing priorities for 2021 and getting a greater understanding for what is important now for StART members. He shared that the city representatives and he discussed updates to StART's Operating Procedures and the conversation went

well. Lyttle concluded his opening comments with an acknowledgment that the facilitator, Phyllis Shulman, will be concluding her engagement with StART and that this was her final meeting. He commented that facilitating StART has not been an easy task and how important it has been to have a neutral, skilled facilitator to guide meetings and the overall process. He expressed appreciation for Phyllis' contribution to StART's success and her guidance from the beginning and throughout the last three years.

Recap of Federal Policy Working Group

Eric Schinfeld, Federal Government Relations Manager

Schinfeld provided a briefing on the December 7 meeting of the StART Federal Policy Working Group (FPWG). Schinfeld and representatives from congressional offices provided insights and analysis on how the national election results may impact the work of StART. He explained that while aviation and airport noise is not a partisan issue, the areas of policy that Congress focuses on can look different depending on which party controls the House and Senate. Whether the Republicans retain the Senate or whether they do not changes the likelihood of passing major legislative packages. He emphasized that it is important to have realistic expectations and to consider smaller or practical pieces of legislation that can be moved forward. It is important to note that there are also Executive Orders and regulatory actions that may be possible, and those options are being analyzed. It will be important to focus on what tactics and strategies are best utilized to influence decisions. He also noted that although there may be opportunities to address some of the airport issues in an infrastructure bill, there are differences between Republicans and Democrats regarding funding.

Schinfeld also reviewed the European Union aviation industry's initiatives to connect aviation recovery with increasing environmental sustainability. He referenced a recently completed report written by the EU Aviation Roundtable. In their recommendations, they specifically addressed how to meet environmental goals with operational goals, seeing recovery as an opportunity to improve upon addressing environmental issues. This is an important model to consider as StART develops strategies. The following are links to the reports that Schinfeld discussed:

https://www.beuc.eu/publications/aviation_round_table_report_on_the_recovery_of_eu_aviation.pdf
<https://www.transportenvironment.org/publications/air-frances-bailout-climate-conditions-explained>
<https://www.transportenvironment.org/publications/austrian-airlines-bailout-climate-conditions-explained>

Schinfeld provided an update on the virtual Washington DC Fly-In that will include meetings between the six cities engaged with StART and Port with members of Congress, the FAA, and the US Department of Transportation. He noted that, so far, five of the six cities confirmed their interest in participating and are in the process of deciding who would like to participate. Each city is limited to three people. Dates are in process of being confirmed. The next step will be to put together joint talking points. Consideration is being given to having the congressional conversations in January and then meetings with the FAA and administration in February or March. An agenda and list of participants, once finalized, will be shared with local congressional staff. The agenda will be presented as a StART policy agenda. In addition, participants from the cities and Port will have an opportunity to discuss anything that is important to them.

2021 Priorities: StART Reflections

Phyllis Shulman, StART Facilitator

Shulman reviewed the purpose of the priorities discussion, that the responses to the priorities survey and discussion at this meeting is a starting point that assists in setting the direction for 2021 and for developing future agendas. She reminded members that it is not a voting exercise. The discussion was structured on a series of reflection questions to be answered by specific StART participants.

Question 1: How has your perspective changed from when you began your involvement in StART? (All respond)

Responses included:

Eric Zimmerman, Normandy Park Community Representative:

Commented that this has been a great learning opportunity and has been an invaluable process for our city and staff to engage in dialogue with the Port. It has been a faithful process and a great opportunity for identifying important issues. StART has taken action and changed our city's understanding as well as our communities perspective of what can and can't be done. The community can see that they are actually being heard through StART's accomplishments. Zimmerman stated that he doubted this effort, at first, but now sees that the Port does care about the communities. He now sees both the Port and airlines as partners and looks forward to continuing the work.

Brian Wilson, Burien City Representative:

Stated that one of the greatest challenges for airport communities is to balance airport growth with the impacts on communities. StART is helping to meet this challenge by having an eye towards the future by identifying partners and working together to try and meet this balance. It all comes down to relationships. Wilson reflected that while Burien has had some tough litigation, it is important to build the relationships and work together in StART to take action. He emphasized his gratitude and stated, on behalf of Burien, that this effort is important.

Scott Kennedy, Alaska Airlines Representative:

Thanked Shulman for all her work over the last three years. That work has been critical to StART's success. Kennedy stated that when he started this effort he was skeptical, but now sees the value. It has been a great learning opportunity and an opportunity to share the issues facing the airline, how we operate, and why. He expressed his appreciation for the openness and the commitment to making incremental changes and exploring what is possible.

Tejvir Basra, SeaTac Community Representative:

Stated agreement with previous comments. Noted that at the beginning of StART there was a lot of uncertainty. Together StART members did a good job gathering feedback from everyone, identifying key issues, and learning what was important to others. While things have been challenging and combative at times, he sees that we have moved forward and continue to do good work together.

Mark Hoppen, Normandy Park City Representative:

Commented that his greatest realization was that the Port is not a monolith, it is a community. Even during the time when cities wanted to withdraw from StART, there was still communication and we have identified what is needed to change StART and are now moving forward. He emphasized that the working groups have been very important and successful. They have been incrementally addressing the needs of communities and this is important. Hoppen also stated that the Federal Policy Working Group is very important and the Washington DC virtual fly-in meeting is a very positive step in the right direction.

Bill Vadino, Federal Way City Representative:

Stated that the relationship building, the fellowship, and the learning has been great. As we move into the new year, StART has our work cut out because we have to find real solutions to the challenges. He emphasized that the Federal Policy Working Group will provide a good opportunity to make some things actionable.

Question 2: Taking the long view, what realistic outcomes would you like for StART to contribute to?
(Cities respond)

Carl Cole, SeaTac City Representative:

Echoed what Vadino said. Commented that good progress has been made. The health and environmental work are most important and he expressed surprise for how much progress StART has made to date.

Eric Zimmerman, Normandy Park Community Representative:

Commented that he had feared that the Port would one day not see the value of keeping StART operating which thankfully, did not occur. Stated that it is slow moving work, but it is important to continue so we can strengthen relationships and work and learn together.

Question 3: What have you learned about the issues and needs of the cities? What else is important to know? (FAA, Airlines and Port staff respond)

Arlyn Purcell, Port of Seattle:

Commented that she was new at the Port when StART began. Stated that it has been great just learning about the cities and their concerns and needs. For example, she stated that she learned how important it is for the cities to be able to understand the accuracy of the Port's noise monitoring program. Due to all the cities' input there has been the realization that the noise program needs to be more upfront and transparent regarding the noise monitoring system. There will be more frequent reporting on this system.

Lance Lyttle, Port of Seattle:

Stated how the Port views things from different lenses and the assumptions made are different from the cities' perspectives. As an example, conversations in StART have clarified that ground noise is an issue. This was previously not even contemplated if it wasn't for the cities bringing it

to light. An assumption was also made that cities would not want to install temporary noise monitors due to COVID-19, but cities were interested with continuing. This emphasizes that the assumptions that are made by staff at the Port are not always correct. Lyttle commented that he has increased his understanding of the concerns related to the third runway, which was build prior to his time at SEA.

Scott Ingham, Delta Air Lines Representative:

Commented that he learned that there was a significant gap in trust between the cities and the Port and airline carriers. Over time he has seen trust being built. Ingham noted the importance of the Port and airline carriers engaging to learn about what is important for cities. He emphasized that in the next few years there will be opportunity to reduce aviation noise due to fleet changes in response to the impacts of COVID-19.

Justin Biassou, FAA:

Commented that relationships have been paramount to building the level of trust so that engagement and communication with each other can be increased. We are now utilizing each other as a resource and there is a commitment to working together. Biassou noted that he has interacted with a number of aviation roundtables this year and that StART is incredibly successful and has accomplished much. He appreciated the opportunity to work with Shulman and the great work she has done.

David Suomi, FAA:

Shared that he certainly now understands the commitment and the duty the FAA has to communities. FAA now has community engagement officers. He stated that Justin is a great community engagement officer who communicates information from StART to the FAA. Suomi stated that he has learned the importance of reaching out to communities early and often and that they are committed to doing so.

Question 4: What else is needed to further strengthen the working relationships among StART members? *(All respond)*

Marco Milanese, Port of Seattle:

Commented that there is more StART can do regarding learning together beyond meetings, for example utilizing field trips and on-the-ground learning when we can convene in person.

Lance Lyttle, Port of Seattle:

Stated that StART needs some more “wins” like the implementation and results of the Runway Use Agreement. He would like to see StART accomplish more of these types of practical solutions in addition to some policy wins. These accomplishments will reflect StART’s seriousness in getting things accomplished. The working groups have the opportunity to create these achievements.

Brian Wilson, Burien City Representative:

Commented on the need to be able to articulate and promote what StART has accomplished together. This serves to show how important working together and strengthening relationships is

and how actionable solutions can be identified through StART. One example of that is the reduction of noise in Burien due to the Runway Use Agreement. Communities have commented on how important this has been. Wilson suggested to focus on the future and what we can do together and not on the past.

Eric Zimmerman, Normandy Park Community Representative:

Stated agreement with Wilson that the Runway Use Agreement was a huge win. Shared that this accomplishment was emotionally important for his family because they live near the runway and noise at night has been significantly decreased. He appreciated that there have been things that StART is not able to accomplish or were unfeasible, but feels that the process of discernment is important. Zimmerman shared that he wants to continue to be a champion of the process and that Normandy Park is engaged and committed to represent the interests of the community in StART.

2021 StART Priorities: Development of Priorities

Phyllis Shulman, StART Facilitator

The development of priorities discussion began with a review of StART's accomplishments and the recommendations from the StART task force on community engagement. Shulman then reviewed the results of the priorities survey. During the discussion, members provided additional topics for consideration and comments. All comments will be provided to the StART Steering Committee who will utilize them to inform StART's 2021 agendas. Survey results (as of 12-10) are attached as Appendix B. A number of priorities from previous years have been addressed through StART's accomplishments. These include:

Aviation Noise

- Part 150 and Part 161 Studies Overview
- Comprehensive Understanding of the Port's noise programs
- Noise monitoring – what is currently in place, limitations, utilization of data
- Understanding flight paths/air space
- Late Night Noise Limitation Program
- Runway Use Plan Agreement
- 34R Glide Slope Adjustment
- A320 Aircraft Noise

Federal Policy

- Development of a shared Port/Cities federal policy agenda
- Passage by the US House of the Protecting Airport Communities from Particle Emissions Act, and increased funding for FAA Noise Program grants
- Submitted a comment letter regarding the federal rulemaking on noise standards for supersonic aircraft

Priorities Discussion:

Discussion focused on sharing additional topics for priorities and comments related to topics already identified. Additional comments included:

Dave Berger, Federal Way Community Representative:

Inquired about an item listed under the Federal Policy Agenda regarding a study done by the GAO that may provide guidance regarding future policy.

Brian Wilson, Burien City Representative:

Noted that Burien provided comments that are stated at the end of the survey results. Stated that it is important to get some actionable items as a priority and not just items related to learning. Stated support for a lot of the items listed in the survey.

Eric Zimmerman, Normandy Park Community Representative:

Stated that there are all a lot of great topics listed in the survey. Zimmerman encouraged StART to utilize a feasibility metric for setting priority actions for next year so that StART can focus on impacting change. Requested that as potential actions emerge, the Port analyze and communicate the feasibility or lack of feasibility of those actions, so our time will be well spent.

Brian Wilson, Burien City Representative:

Commented that it would be helpful to discuss the connection between StART and the Highline Forum. He noted that mitigation is important to communities, so supporting initiatives and policies that mitigate impacts should be a priority for StART.

Tod Bookless, Tukwila Community Representative:

Commented that there are many important and valid concerns about noise and that a Working Group is focused on that. In addition to focusing on aviation noise, he encouraged StART to consider other issues, for example, economic development, thriving communities, and environmental issues. Bookless suggested that StART may want to add a working group or task force on environment, air quality, or economic development. Issues like charging stations or ground vehicles could be looked at.

Bill Vadino, Federal Way City Representative:

Recommended that StART increase its focus on economic development and environmental issues and ultrafine particle. He suggested that StART consider forming additional working groups to focus on those areas.

Dave Berger, Federal Way Community Representative:

Emphasized that what is most important is for StART to continue to build the trust of the communities. He encouraged the StART Steering Committee to look at priorities that would make a tangible, visual, and audible impact in the quality of life for communities being impacted. If there could be one or more tangible improvements for Federal Way, it would go a long way in building back both trust and seeing the Port as a credible entity. Berger noted that it is important to show that StART isn't just doing analysis, but is helping to make tangible improvements. It will be

difficult to demonstrate improvement in the near future because of the pandemic and the decreased level of flights, but when the number of flights increase, it will be important to demonstrate tangible improvements in noise reduction.

Chris Hall, Federal Way Community Representative:

Commented that it is important to move toward action items. He shared appreciation to the FAA scientists who attended StART and the discussion of ultra-fine particles. Hall shared the importance of identifying tangible action items now that can help to reduce impacts to communities as the airline industry recovers.

Public Comment

Compiled public comments are included as Appendix A.

Facilitator's Closing Comments

Phyllis Shulman, StART Facilitator

Shulman shared reflections based on her three years as the neutral facilitator for StART. She shared appreciation for the opportunity to help StART find constructive ways to address important issues. She acknowledged that there were some stressful and uncomfortable times, but that is to be expected when people who have a range of interests and who have historic conflict start to try to develop a more cooperative relationship. Shulman shared some overall observations of and guidance for StART:

- The importance of focusing more on relationship building and less on political dynamics including political stances, winning and losing, and political strategies and demands. A focus on strengthening relationships includes: engaging in authentic conversations, building respect, finding common interests (not positions), and truth telling. Building relationships often opens doors to unexpected outcomes.
- Minimize stereotyping and objectifying participants in StART including individuals who attend as part of the public. Shift from thinking of individuals involved as “the Port”, “the activist”, “the airlines”, “the FAA”, “the rabble rouser”...Acknowledge the humanity and most importantly the dignity of the people in the room. Practice putting oneself in the shoes of the others...what would it be like to do the job of the airport director, be a resident living under a flight path, be working for an airline, have the responsibility of ensuring safety for air travelers? She emphasized that the more individuals who participate in StART can break down barriers and find connection, the more possibilities emerge for common meeting interests.

Next Meeting: February 24, 2021, 5:00pm – 7:00pm via video conference

Appendix A Summary of Public Comments

Public Comment

Bernadine Lund, (Federal Way with Quiet Skies Puget Sound and volunteer with 350 Seattle Aviation Group) (oral comments):

- Stated that as of 2019 ,FAA reported 150,00 piston aircraft. She is not sure how many come into Seattle, but they still have leaded gasoline, which is harmful, especially to children. The FAA has shown that they are having trouble getting batteries to support alternative fuel sources for small planes so believes it is unrealistic to think we are close to being able to do this for big planes. Commented that a recent study has shown that air travel will be decreasing in the long term. She hopes that people will be decreasing air travel and using more sustainable travel options. This is the only way we can meet our climate goals for 2050.

Appendix B

StART Survey Compiled Results- Priorities 2021

(as of 12-10-20)

Respondents: Cities of Burien (B), Federal Way (FW), SeaTac (ST), Normandy Park (NP), Des Moines (DM) (some cities included combined responses with community reps), Eric Zimmerman (NPCR), Tod Bookless (TCR), Robert Atkar, (STCR), Tej Basra (STCR2)

Topic	Put an X by each item that you are <u>most</u> interested in discussing	Mark with an X your top 5 priorities
COMMUNITY ENGAGEMENT		STCR
Broaden community engagement and maximize the role of community representatives potentially including: ○ Provide an opportunity for StART Community Representatives to have time for discussion of issues just amongst themselves to share interests and concerns. ○ Host broader community forums to hear community interests and issues. ○ Progress achieved in StART needs to be better communicated to airport and other communities.	STCR2 ST ST	 ST ST
AVIATION NOISE		DM; STCR
Understanding Day Night Average Sound Level (DNL) and Sound Exposure Level (SEL) (see notes)	DM; NP; B; STCR; STCR2	NP
Review of practices to reduce noise at other airports including internationally and comparison of those practices to SEA's efforts	DM; NP; B; ST; STCR	NP; CRNP
Pilot operational procedures that could reduce aircraft noise and air pollution	DM; NP; B; ST	
Airline fleet modernization/ environmental performance & funding incentives	DM; NP; ST	
Implementation of NextGen programs/procedures	DM; NP; ST; STCR2	
Propeller/turbo-prop flight paths (see notes)	NP; B; STCR2	NP; B
Ground Noise Analysis (see notes)	NP; B; ST; NPCR; STCR; STCR2	NPCR
Noise Abatement Departure Profile Study	DM; NP; ST	
Noise Program funding/grants (see notes)	DM; NP; B; ST; STCR	B; NPCR

AIR QUALITY/HEALTH IMPACT	DM	DM; STCR
Further phases of University of Washington (UW) ultra-fine particle (UFP) Study	NP; B; ST; STCR2	ST; TCR; NPCR; STCR2
Regional air quality overview	NP; STCR2	TCR
Port air quality programs	NP; STCR; STCR2	TCR
International green aviation standards		TCR
Sustainable aviation fuels & other alternative energies	B	TCR
FUTURE OF AVIATION/MOBILITY		STCR
Washington State Air Cargo Movement Study (<i>see notes</i>)	DM; NP; B; STCR2	DM; NP; B
Aircraft design	ST	
Airport's role in regional economic development/impact of regional growth on the airport (<i>see notes</i>)	NP; B; ST; STCR; STCR2	NPCR; STCR2
Paine Field	NP; STCR2	
Airline recovery strategies and implementation	STCR2	
Community principles and priorities to be shared with airlines, FAA and Port during the recovery	DM; NP; ST; STCR; STCR2	STCR2
FEDERAL POLICY		STCR
Implementation of key FAA Reauthorization provisions, including 65 DNL evaluation and alternative metrics - Overflight noise/human health study	DM; NP; B; ST; STCR	NP; B
Legislation that furthers Port-cities priorities: - Air Traffic Noise and Pollution Expert Consensus Act - Protecting Airport Communities from Particle Emissions Act - Secondary Insulation for "Failed" Packages	DM; NP; B; ST; STCR; STCR2	DM; NP; B; ST; STCR2
Updated guidance on key studies: - WHO Europe Study - GAO Study of Community Noise Impacts	DM; B; STCR	
Regulation of noise and emissions issues related to Supersonic Aircraft, Electric Aircraft and Urban Air Mobility	NP; B; ST; STCR	ST
Additional Topics for Consideration - State legislative policies related to aircraft noise and emissions - Federal policies related to coronavirus relief and recovery - Federal policies related to economic and workforce development - Federal policies related to broader environmental or human health issues	DM; B; STCR; ST; STCR2	DM; STCR2

ADDITIONAL TOPICS ADDED:	
Late Night Noise Limitation Program	DM
- Community Engagement and dissemination of information through media - Aviation Noise Abatement Success and Failures - Need for secondary noise abatement program, and noise abatement program to include commercial/residential buildings - Training/education on Aviation Noise provided for Community Reps - Participation/discussion with other major airport committees to understand broader perspective of aviation noise issues and resolutions	STCR
Funding for secondary noise abatement program, funding for commercial and other residential (apartment buildings) noise abatement program. \$10M provided by port should be used for noise abatement programs - Review of 65 DNL evaluation and alternative metrics - Overflight noise/human health study. 65 DNL does not provide satisfactory health issues study and noise reduction for abatement consideration. Aviation noise area need to be broadened	STCR
Continued education/training on aviation policies pertaining to StART provided to all community representatives. And include participation in seminars and regional and national airport committee members meetings.	STCR
All presentations made by StART to federal, legislative or other high level officials must have community representation at all times. Community voices should be heard for in all affairs.	STCR
Assessing environmental impacts specifically of current and increased operations at SEA	DM

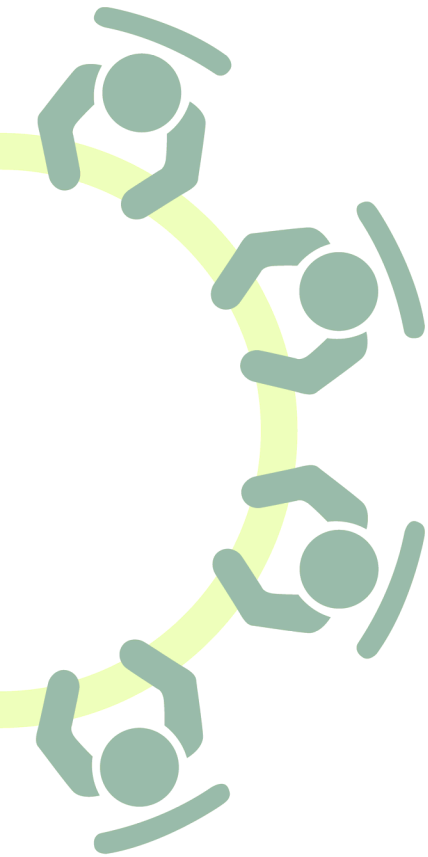
There should be substantial steps on the impacts of noise and emissions that have results. --Mitigation funded by the Port for noise/health impacts to Federal Way neighborhoods from continual use of third runway, which is inconsistent with its FEIS, including sound packages and financial relief. Federal Way is now eligible for Port noise mitigation funding under the 2020 Pellicciotti Bill that is now is state law. --The Port should explore further disincentives for unnecessary late-night flights, given that the pandemic has greatly increased daytime gate availability. There should be teeth and penalties such as surcharges on landing fees that could be used for mitigation. Since flights have dipped to 50% of pre-pandemic levels, so there should be less or no night time flights for at least the next two to four years that airlines estimate it will take to rebuild demand. --The Port should have a larger role in the Ultrafine particle follow-on studies, including financial participation. --Concerns from cities that suspended involvement from StART should be discussed including updates to the operating procedures. --Add to Port's Federal Legislative Advocacy plan urging the Congress to mandate the FAA to change the 65DNL standard, to conform to the new WHO noise impact standards as many other industrialized countries have done. -- Offset negative impacts to Federal Way homeowners, schools and businesses by making them whole. Set aside for grants a minimum of 1% of Port's \$3 billion capital spending program for air purifiers in schools, sound packages and other mitigations for citizens. Protecting the health and quality of life of Port taxpayers impacted by the airport is at least as important as public art set-asides for Port facilities.	FW FW
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NOTES FROM BURIEN:

TOPIC:	COMMENTS:
Understanding Day Night Average Sound Level (DNL) and Sound Exposure Level (SEL)	Need action steps to reduce noise, not enhanced understanding.
Propeller/turbo-prop flight paths	Seek FAA support to reduce the 250 degree turns over Burien. Number of flights over Burien higher in 2020 over 2019; even with significantly reduced number of overall flights.
Ground Noise Analysis	Need steps to reduce noise, not further analysis
Noise Program funding/grants	Need to address noise associated with reverse thrust. Encourage use to address safety.
Washington State Air Cargo Movement Study	Explore alternatives to Sea-Tac for air cargo.
Airport's role in regional economic development/impact of regional growth on the airport	Cap on Sea-Tac's growth given impacts to local communities. PSRC study of alternative airport capacity

Appendix II

StART Aviation Noise Working Group Meeting Summaries



StART 

SEA STAKEHOLDER ADVISORY ROUND TABLE



SEA-TAC STAKEHOLDER ADVISORY ROUND TABLE

AVIATION NOISE WORKING GROUP StART FACILITATOR'S MEETING SUMMARY

February 10, 2020; 5:30 pm – 7:30 pm

Seattle-Tacoma International Conference Center, Room 4A Conference Room
17801 International Blvd. ([Directions](#))

Attendee	Interest Represented
Eric Zimmerman	Normandy Park
Robert Akhtar	SeaTac
Tim Toerber	Port of Seattle
Jennifer Kester	SeaTac
Scott Ingham	Delta Air Lines
Tom Fagerstrom	Port of Seattle
Marco Milanese	Port of Seattle
Stan Shepherd	Port of Seattle
Justin Biassou	FAA
Vince Mestre	L&B

Additional Participants: Steve Alverson, ESA, (phone), Brad Nicholas (phone) Lance Lyttle, Port of Seattle

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives:

To provide an update on and discuss the Ground Noise Analysis. To review and discuss additional analysis completed as part of the Noise Abatement Departure Profiles Study. To review the Late Night Noise Limitation Program 4th Quarter Results. To provide an update on StART reengagement of cities.

Meeting Summary

Update on Ground Noise Analysis

Brad Nicholas, Consultant, HMMH

Nicholas provided an update on the initial steps for the analysis. The update included:

- The first phase of the study is data collection – to establish the facts, noise source and noise impacts. A year's data was provided by the Port including a log of every operation, its time of day, type of aircraft, and runway used and a log of engine maintenance run-ups.

- In process of completing preliminary analysis with two points of focus: (1) tracking aircraft movement on the airfield; (2) and a survey of air carriers that includes identifying procedures in use when aircraft are on the ground and the activities and location of those activities. The survey is being reviewed and finalized with Port.
- Analyzing the stated policy and use of reverse thrust by airline and aircraft type.
- In process of developing a draft noise measurement protocol – where to do ground noise monitoring.
- Once protocol is complete will monitor noise, keep and analyze aircraft activity logs from consultant staff on the ground and identify noise sources and levels in a range of locations.

Nicholas mentioned that the timeline for completing the work is by the end of 2020. He expects to have preliminary findings in the summer. Once data collection is complete there will be opportunities for StART participants to discuss areas of concerns and possible remedies. Next steps include sharing the survey questions with StART Working Group members and discussing monitoring location criteria at the March StART Aviation Noise Working Group meeting.

Additional Analysis- Noise Abatement Departure Profiles (NADP) Study

Steve Alverson, Consultant, ESA

The Working Group and the Port requested additional analysis be completed as part of the Noise Abatement Departure Profiles Study. This additional analysis included evaluating the impacts of Close-In and Distant NADPs for a Boeing 777 as compared to a Boeing 737 aircraft. Alverson reviewed the details of the additional analysis and shared conclusions and recommendations that included:

- Boeing 777 aircraft appear to provide similar proportional benefits of noise reduction as the 737 utilizing a Distant NADP.
- Based on the B737 and B777 NADP analysis results, ESA recommends that the Port of Seattle request all aircraft operators implement the Distant NADP (or its ICAO equivalent) at SEA.
- The Port's implementation process may benefit from direct meetings with the airlines.
- The Port should track and report on airline adoption and use of the Distant NADP.
- The Port should evaluate and report on the change in aircraft noise exposure levels over time due to the Distant NADP.

Working Group participants asked a number of questions. Based on these questions Alverson provided some additional information including:

- Most domestic airlines are already utilizing the Distant NADP. The Port is trying to get information to determine how many are currently using the Close-In NADP. The airport in Anchorage has reported a reduction in noise when more airlines began consistently using the NADPs.
- Finer grain analysis of whether there are any close in residential areas that could be negatively impacted needs to occur. There may be few to none that would see an increase in noise. Regardless, the analysis is needed before any final recommendation is made.
- What may be perceived as noise from reverse thrust in Normandy Park may be noise related to aircraft departures.
- Farther out communities will benefit from noise reduction associated with a Distant NADP.
- The Ground Noise Analysis may provide additional options for noise reduction for communities close to the airport.

Late-Night Noise Limitation Program 4th Quarter Results

Tom Fagerstrom and Tim Toerber, Port of Seattle

Fagerstrom and Toerber provided an update on the Late-Night Noise Limitation Program 4th quarter results and shared outcomes from their outreach to airlines about the program. Fagerstrom shared data showing the airlines that exceeded noise thresholds as well as those that operated during the late-night hours with no noise exceedances in the 4th quarter. At the top of the noise exceedance list was Eva Air, FedEx Express and China Airlines Cargo. The results are being shared with all of the airlines. Overall late night operations dropped when compared to the 3rd quarter, but this is mostly due to seasonal demand. Fagerstrom reviewed specific information about many of the airlines and reviewed responses from outreach to the airlines who had the most exceedances.

1. EVA Air:

- Operates two Boeing 777 departures to Taipei per night
- Meaningful dialogue with them has resulted in them agreeing to change one of the two late-night flights to a quieter Boeing 787 in May 2020
- They shared that this presents many operational challenges to EVA including fewer seats, loss of cargo revenue, and lack of interchangeable crews, but that they wanted to be respectful of the communities
- Continued outreach and communication between the Port and EVA Air will continue

Eric Zimmerman stated that Normandy Park will want to send a letter of appreciation. He encouraged other communities to do the same.

2. FedEx Express:

- Typically operates the MD-11 during late night hours
- Also operates the B777, 767, 757, A300 throughout the day
- Communications between the Port and FedEx Express have been positive
- Mid to long-term fleet plans include retiring the MD-11
- Port will continue to communicate and encourage them to operate newer aircraft in Seattle early in their fleet plans

3. China Airlines Cargo:

- Operates Boeing 747-400 during late night hours 3-4 times per week to Taipei
- B747 is the only aircraft in the fleet, so it is not feasible to switch to a different aircraft
- They discussed scheduling challenges, but remain open to continuation of communication

Fagerstrom shared details about communication with some of the other airlines including:

- Air Transport International: positive interest in the data
- Korean Air Cargo: information about the Program has reached high levels in the company
- Alaska Airlines and Delta Air Lines: both wanted more information about their exceedances; good dialog
- Cathy Pacific: interested in the data
- Horizon: interested in the data

Update on StART Reengagement

Marco Milanese, Port of Seattle

Milanese provided an update on the status of reengagement with the three self-suspended cities. Mayors from the three cities met with Port representatives in December and then Lance Lyttle met with city representatives from all six cities in January. Discussions were productive and encouraging.

Future Meeting Date/Times:

Next Meeting: March 9, 2020, 5:30pm - 7:30pm, Seattle-Tacoma International Conference Center, Room 4A Conference Room

Aviation Noise Working Group Facilitator's Meeting Summary

March 9, 2020; 5:30 pm – 7:30 pm
ZOOM VIDEOCONFERENCE

Attendee	Interest Represented
Steve Osterdahl	Alaska Airlines
Chris Schaffer	FAA
Marco Milanese	Port of Seattle
Vince Mestre	L&B
Scott Ingham	Delta Air Lines
Jennifer Kester	SeaTac
Stan Shepherd	Port of Seattle
Justin Biassou	FAA
Scott Kennedy	Alaska Airlines
Mark Hoppen	Normandy Park

Additional Participants: Brad Nicholas, HMMH

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives:

To provide an update on and provide input on the Ground Noise Analysis. To discuss the Terminal Flight Data Manager program. To review and discuss additional analysis completed as part of the Noise Abatement Departure Profiles Study. To provide a briefing on the Aviation Noise and Emissions Symposium.

Meeting Summary

Update on Ground Noise Analysis

Brad Nicholas, HMMH

Nicholas provided an update on the Ground Noise Analysis work to date. The update included:

- Completed collection and analysis of flight and run-up statistics
- Created air carrier survey
- Identified initial sites for ground noise monitoring
- Created draft noise monitoring protocol
- Identified and trained staff for data collection
- Began internal planning for analysis methods to identify mitigation options

Nicholas reviewed the three monitoring program goals, program methodology, potential sources of noise, and proposed noise monitoring sites.

Goals:

- Provide temporary noise monitoring east and west of airport to obtain data not captured by the permanent monitors.
- Identify aircraft types that may cause unusual ground-based noise.
- Capture noise levels from various operating scenarios including north flow, south flow, taxiway noise, ground run-ups and any other sources identified.

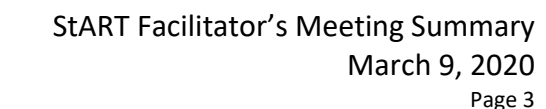
Monitoring Program Methodology:

- Measure at approximately five sites over five days
- Collect time histories recordings and observer logs (including airfield observations)
- Analyze results to determine frequency of various aircraft activities and their typical noise levels in noise sensitive locations
- Includes the capability to go back and listen to recordings and check the source
- Direct observations will be utilized along with statistics for identifying noise sources

Ground Noise Monitoring Sources: (see diagram below)

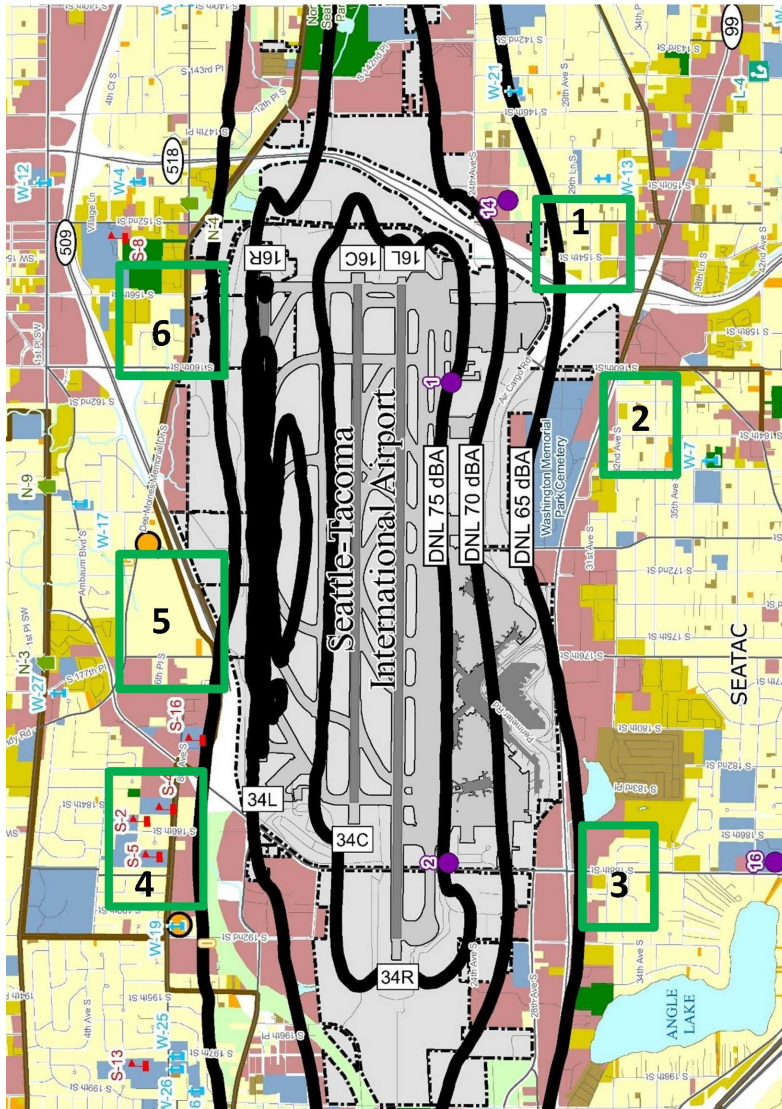
- Aircraft taxiing/idling
- Auxiliary Power Units (APUs)
- Ground service equipment
- Reverse thrust
- Engine maintenance run-ups

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



Ground Noise Monitoring Sites:

- Represent diversity of noise exposure
 - Areas that represent the geographic range of exposed communities
 - Experience the range of different ground noise sources



Ground Noise Study Next Steps will Include:

- Ground noise data research
 - Finalize operator survey including contact list, deploy survey, analyze results
 - Review ground run-up engine testing logs
- Noise Monitoring
 - Finalize schedule and sites
 - Conduct monitoring
 - Analyze results
- Identify Mitigation Options
 - Begin modeling set-up
 - Receive input from StART

Working Group participants asked a number of questions. Based on these questions, Nicholas provided some additional information including:

- Two consulting staff will be on site for the five days of monitoring moving between sites.
- Consultants will engage Port staff to identify airfield noise sources.
- Anticipated start is the first week of April (although that will be delayed due to COVID-19).

Terminal Flight Data Manager Overview

Justin Biassou, FAA Community Engagement Officer

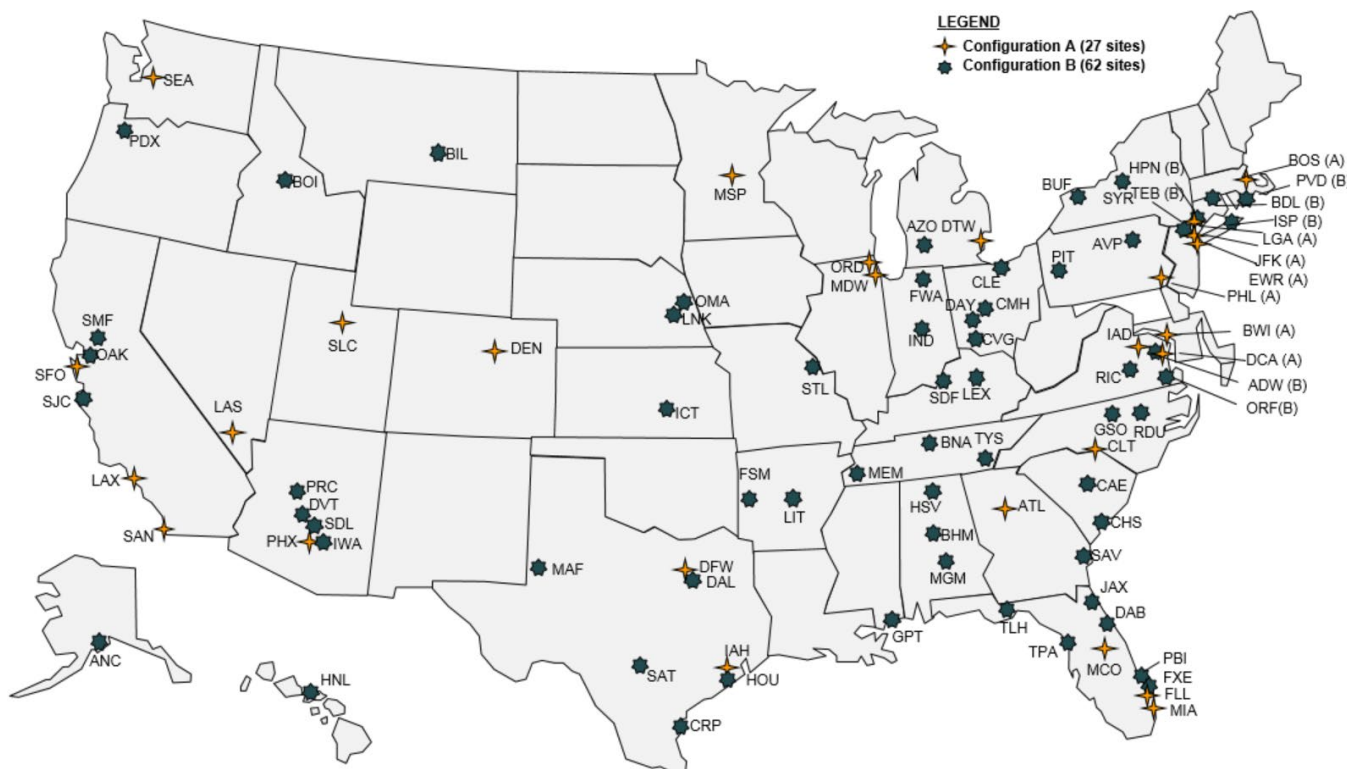
Biassou presented an overview of the Terminal Flight Data Manager (TFDM), which is part of the NextGen modernization of the National Airspace System. This newly developed system for surface management of aircraft is focused on increasing efficiency given limited ground space at airports. Biassou shared a video which explained the basics of TFDM. He explained that TFDM allows for arrivals and departures staging, manages surface traffic flow, provides stakeholders a shared awareness of flights on the ground, exchanges data electronically, and provides an updated picture of traffic volume.

The potential benefits will include:

- Improved predictability
 - Improves departure schedule prediction
 - Maximizes airport efficiency
 - Reduces taxi-time delays
- Collaborative decisions
 - Provides a departure scheduler and surface metering capability
- Environmentally friendly
 - Reduces taxi times
 - Reduced delays and missed connections
 - Reduced emissions and noise pollution due to less flights awaiting gates
 - Fuel savings
- System modernization
 - Electronic flight strips
- Improved safety
 - Reduced operational safety risk by increasing controllers heads up time

Deployment is scheduled in two phases, Configuration A (27 sites) and Configuration B (62 sites). Configuration A is for large, high density airports. SEA is considered a Configuration A airport. The TFDM will be fully operational in 2023 at SEA instead of the original date of 2025 due to the current surface limitations. Full functionality includes:

- Improved electronic flight data (EFD) exchange and electronic flight strips in towers
- Surface surveillance data integration
- Full decision support tools (DSTs), including surface scheduling/metering
- Traffic flow management (TFM) data exchange and integration



Working Group participants asked a number of questions. Based on these questions, Biassou provided some additional information including:

- Will look into what type of environmental review the TFDM went through
- At the time of the meeting, there were no potential roadblocks to meeting the 2023 schedule for implementation
- Airports in Phoenix and Cleveland will be implementing this system in the next few months
- TFDM will be implemented in a number of airports prior to SEA

Additional Analysis - Noise Abatement Departure Profiles Study

Vince Mestre, Consultant

Mestre provided information on the additional analysis requested for the Noise Abatement Departure Profiles (NADP) Study. A key issue is at what point is there a noticeable difference in sound, perceived by

listeners, if sound is increased? Mestre reviewed numerous sound studies which all conclude that up to a 3dBA increase in sound level for a single event is barely noticeable to the human ear. Sound levels need to raise by 5dBA or more before most listeners report a noticeable change. This is important information to consider when evaluating the trade off between noise reduction benefits of a distance NADP for neighborhoods further away from the airport and possible small increases in noise for a limited number of households north and south of the airport.

Mestre reviewed the results of analyzing noise for the Boeing 777 Close-In vs. the Distant NADP for Runway 16L and Runway 34R. He analyzed the data through a series of zoomed in grid points to determine if there are noise differences within the SEL 90 dBA contours for a Distant NADP vs a Close-In NADP (grid analysis data by ESA). Based on the analysis the conclusions included:

- There were no areas where noise increased more than 2 dB

Runway 16L:

- There were limited areas where the utilization of a Distant NADP for a Boeing 777-300ER increased noise between 1-2 dB
- No increases would be perceptible by a human

Runway 34R

- Change in noise level is less than 1 dB
- No increases would be perceptible by a human

Overall, Mestre stated that the analysis concludes that pursuing a distant NADP would be beneficial as it would reduce noise in neighborhoods further from the airport without making noise worse in close-in communities. The next steps would be for the Port to have additional discussions with StART and the airlines. Mestre stated that he recommends proceeding with the airlines to operationalize a pure distant NADP. Working Group participants emphasized the need for effective community outreach that includes demonstrating the difference in sound utilizing audio so that people can experience what the difference sounds like.

Aviation Noise and Emissions Symposium Debrief

Jennifer Kester, Planning Manager, City of SeaTac

Kester gave an overview of her experience at the Aviation Noise and Emissions Symposium in San Diego in early March. She explained that the conference was 60% about noise and the rest was topics related to emissions. There were a lot of community members in attendance. There was a diversity of attendees from the FAA, airlines, trade, academia, consultants, and European agencies. Kester shared some of her key take-aways which included:

- StART is young compared to other comparable groups that have been operating for a longer time
- Where there is robust outreach and a roundtable for discussion that includes the communities, FAA, airlines, and the airport operator, better outcomes can be achieved by working together
- Stress and physiological and psychological reactions to sound also determine how annoyed people get from aviation noise
- Studies show that the more trust that people have in the process and by being involved in the process, the less annoyed they feel

- It is important to get communities involved and build trust with cities that are impacted by an airport
- It is important to continue to develop sustainable aviation fuels and low carbon ground equipment
- Recommended that more cities from Puget Sound area attend next year

It was suggested to have a presentation on aviation biofuels at a future StART Working Group meeting.

Future Meeting Date/Times:

Next Meeting: May 11, 2020, 5:30pm - 7:30pm, Tentative Location: SEA International Conference Center, Room 4A Conference Room

Aviation Noise Working Group Facilitator's Meeting Summary

May 11, 2020; 5:30 pm – 7:30 pm

VIA ZOOM VIDEO CONFERENCE

Participant	Interest Represented
Eric Zimmerman	Normandy Park
Tim Sorensen	Normandy Park
Mark Hoppen	Normandy Park
Jennifer Kester	SeaTac
Erica Post	Tukwila
Steven Osterdahl	Alaska Airlines
Jason Richie	FAA
Marco Milanese	Port of Seattle
Lance Lyttle	Port of Seattle
Tom Fagerstrom	Port of Seattle
Stan Shepherd	Port of Seattle
Vince Mestre	L&B

Additional Participants: Lance Lyttle, Colin Rice, Clare Gallagher, Karen Kalanick, Port of Seattle

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives:

To provide an update on the StART Aviation Noise Working Group Work Plan and discuss next steps.

Meeting Summary

Late Night Noise Limitation Program: 1st Quarter 2020 Results/Program's Continuation

Tom Fagerstrom, Port of Seattle

Fagerstrom provided an update on the Late Night Noise Limitation Program's 1st quarter 2020 results. He explained that operations during the first quarter were for the most part normal. He explained that all airlines are contacted whether they exceed noise thresholds or not. The update included:

Carriers that exceeded noise thresholds Q1 2020:

- The airlines that continue to show noise exceedances are the same ones as previous quarters.
- There were a few new passenger airlines that also had noise exceedances.

Quarterly Comparisons

- Q3 is the busiest quarter at SEA.
- Q1 is the least busy quarter at SEA.
- Beginning in mid-March, there have been drastic cuts in passenger flights.
- Q2 will likely have a higher percentage of operations exceeding thresholds due to the slight increase of cargo flights.

Current Operations/Late Night Update

- In February, there was an average of 27 operations per night.
- So far in May, the average is 11 operations per night.
- Passenger flights have significantly dropped in May.
- Air Transport Intl (Amazon) has increased night operations from 2 to 4 flights a night. They operate the 767 without full fuel tanks which decreases takeoff weight and noise.
- Other cargo carriers are continuing to maintain normal schedules at night.
- FedEx operations have also remained constant and unchanged.
- EVA Air is operating one departure per night five times per week for cargo only. Their plan to switch one of their nightly aircrafts to a 787 is on hold, but they have communicated that are committed to trying to accommodate community needs.

One participant commented that they are encouraged by EVA Air's consideration and acknowledged that the Port has laid positive groundwork for the future. It was also noted that due to COVID-19, face to face meetings with carriers are on hold, but written correspondence and online reporting will continue.

Runway Use Plan

Tom Fagerstrom, Port of Seattle

Fagerstrom provided an update on the Runway Use Plan. The update included:

- Reminder that it's a voluntarily reduction by the FAA in the usage of the third runway from 12am-5am.
- Landings previously averaged 10 to as many as 30 landings per night.
- From September 2019 through February 2020 landings are averaging 2 per night.
- From March 1 to May 6 (66 nights) there were a total of 23 landings on the third runway. The usage is currently very low during the late-night hours.
- The runway is often not being used until after 6-7am.

One participant commented that the Runway Use Plan is a signature success of StART and applauds the cooperation between the FAA, airline carriers, and the Port.

Glide Slope Adjustment

Colin Rice, Port of Seattle

Rice gave an update on the Runway 34R glide slope adjustment project. Changing the glide slope is contingent on FAA analysis and approval. The project is projected to be completed by 2023, but it may

be delayed due to the financial impacts of COVID-19, an extended FAA timeline or if the Sustainable Airport Master Plan is held up.

Ground Noise Analysis

Stan Shepherd, Port of Seattle

Shepherd provided an update on the Ground Noise Analysis. He stated that the consultant and Port agreed that the project should be on hold given the changed conditions due to the impacts of COVID-19. At this time, noise monitoring would not provide a representable sample of noise levels in communities or at the airport. Prior to COVID-19 there were approximately 1,200 flights a day. Currently, there are approximately 300 flights a day. Also, the noise monitoring was dependent on the consultants' physical presence in the neighborhoods. At this time, due to social distancing recommendations, this is no longer feasible.

Noise Abatement Departures Profile Study

Vince Mestre, L&B and Marco Milanese, Port of Seattle

Mestre and Milanese provided an update on the Noise Abatement Departures Profile Study. The update included:

- The study concluded that a distant procedure would be beneficial to communities further from the airport with unnoticeable impacts on a few neighborhoods directly north and south of the airport.
- Next steps include developing communication materials to explain the study conclusions and outreach and input from the neighboring communities.

A320 Aircraft Noise

Tom Fagerstrom, Port of Seattle

Fagerstrom provided an update on the A320 aircraft noise mitigation effort. He explained how older models of the A320 aircraft have a fuel vent opening under their wings that creates a whistle noise when approaching the runway. He stated that the Port has sent out letters to the airlines who fly A320s to inquire about their plans to retrofit the aircraft. It is anticipated that airlines will have significant changes to their fleets due to the impacts of COVID-19. Given this uncertainty, additional communications on this issue will be on hold until there is more clarity on fleet changes.

PlaneNoise Monthly Reporting

Stan Shepherd and Tom Fagerstrom, Port of Seattle

Shepherd and Fagerstrom gave a presentation on the PlaneNoise Monthly Reporting work. Shepherd explained that last year the Port instituted a new aviation noise comment system and reporting structure. He shared a sample of the current findings. The monthly statistics are to be finalized in a report and posted on the Port's website every month.

Fagerstrom reviewed the four main components that the monthly reports will cover:

1. How many comments are received
2. Methods used to submit a comment
3. Location the comments originated from

4. What specifically people are commenting on

Fagerstrom reviewed data on total comments and comment trends from March 2020. The data showed:

- 26,192 total comments from 364 households
- From January through March, 88,951 comments from 506 households
- The zip codes and cities where comments originated from

The draft report is still being revised to include missing municipalities. Fagerstrom also mentioned that there is a 3rd party noise comment app, AirNoise, that is a one touch complaint system. It allows people to register a large number of comments in a very short amount of time. This method does not provide any information about the specifics of the comment. The Port also has a noise app as well as a comment form available on the Port's website that gives the user the ability to provide additional information. Fagerstrom shared a map that provides a visual representation of where comments originate and where the "hot spots" are. It also shows how many comments per household. Working Group participants were asked for feedback.

Working Group participants asked a number of questions. Additional information and comments included:

- The tool improves interaction with the public by providing more detailed information regarding comments received.
- It would be helpful to report comments not only based on zip codes, but also based on city.
- The number of Vashon comments are due to their location directly west of the airport and under the downwind approach. Also, the AirNoise app is utilized frequently on Vashon.

Working Group members commented that the report is very useful.

Discussion of Next Steps

Marco Milanese, Port of Seattle

The Working Group focused the remainder of the meeting on a discussion regarding what is relevant now for the Working Group's Work Plan, given the significantly changed conditions in the aviation industry and the impacts of COVID-19. Milanese emphasized that the current Work Plan was based on a set of assumptions/realities that have changed overnight. The Working Group discussed possible priorities and topics that would be of interest to the working group going forward. Members acknowledged the difficulty in planning for the future because of the uncertainty. For example, it was noted that business travel may never return to pre-COVID-19 levels. There was shared agreement that we are in the midst of dynamic change and significant uncertainty which makes it difficult to identify priorities for the Working Group's Work Plan. Members expressed support for, at a minimum, discussing the following topics:

- Further analyzing cargo operations at SEA
- Tracking trends, for example, fleet changes, business travel, airline bankruptcies, cargo operations, federal assistance to airlines/Ports, etc.
- Airline recovery strategies and implementation
- At the appropriate time, identifying community principles and priorities to be communicated to the Port, airlines, and FAA during recovery
- Increasing community outreach, engagement, and trust building

- Updates on the status of aviation related policy initiatives, studies, and operations, and capital projects nationally and locally
- Identifying how the cities and Port can best work together to assist neighboring cities with the economic impacts of COVID-19 and possibly building partnerships with other entities. Develop ways to align strategies among the Port and neighboring cities.

Future Meeting Date/Times:

Next Meeting: July 13, 2020, 5:30 pm -7:30 pm, Tentative Location: SEA International Conference Center, Room 4A Conference Room or by video conference

Aviation Noise Working Group Facilitator's Meeting Summary

August 10, 2020; 5:30 pm – 7:30 pm

VIA ZOOM VIDEO CONFERENCE

Participant	Interest Represented
Eric Zimmerman	Normandy Park
Susan Cezar	Des Moines
Mark Hoppen	Normandy Park
Erica Post	Tukwila
Scott Ingham	Delta Air Lines
Scott Kennedy	Alaska Airlines
Justin Biassou	FAA
Marco Milanese	Port of Seattle
Arlyn Purcell	Port of Seattle
Tom Fagerstrom	Port of Seattle
Stan Shepherd	Port of Seattle
Vince Mestre	Consultant

Additional Participants: Eric Weiss, Port of Seattle; Jeffrey Brown, Port of Seattle; Clare Gallagher, Port of Seattle

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Adam Ellner

Meeting Objectives:

To provide an update on the Late-Night Noise Limitation Program 2nd Quarter Results. To discuss the noise comment monthly reporting system. To review supersonic aircraft and proposed noise level standards and the Port's letter. To discuss current and projected trends in air traffic.

Meeting Summary

Late Night Noise Limitation Program 2nd Quarter 2020 Results

Tom Fagerstrom, Port of Seattle

Fagerstrom provided an update on the Late-Night Noise Limitation Programs' second Quarter Results. Highlights of the results included:

- Passenger operations were down
- EVA Air has moved to the air carrier with the 3rd most last-night exceedances, down from the first

- FedEx Express had the most exceedances
- Air Transport International (Amazon's Prime Air) greatly increased their late-night operations
- Passenger carriers have begun to return during the late-night hours in limited numbers

Overall, he noted that there was an increase in cargo operations as well as passenger aircraft carrying cargo only and that will likely be a trend that continues into the third quarter. Fagerstrom also noted that, due to the Runway Use Program, the number of landings on the third runway has dropped dramatically in the late-night hours with approximately one landing every three nights between March through July.

Finalized PlaneNoise Comment Monthly Reporting

Tom Fagerstrom, Port of Seattle

Fagerstrom provided an overview of the latest PlaneNoise comment monthly reporting. He stated that based on feedback from the Working Group the reporting now includes complaints by city and not only by zip codes. He noted that there was an increase in noise comments in May and June as operations began to grow from their COVID-impacted record low in April. The monthly reports are close to being ready to post on the Port's website. During discussion it was recommended that a list of actions the Port is taking to address aviation noise complaints be added to the website. Justin Biassou, FAA, shared that the FAA is undertaking a noise comment initiative to allow the public to comment online regarding aviation noise. Monthly noise comment totals and trends, by city, for May and June are attached as Appendix A.

Supersonic Aircraft & Proposed Noise Level Standards

Vince Mestre, Consultant; Stan Shepherd, Port of Seattle

Mestre presented information related to proposed noise level standards for supersonic aircraft. Information included:

- Before the sale of aircraft, testing must show compliance with noise level standards
- Supersonic overflight of land is prohibited by FAA regulation
- An FAA proposed rule applies a less stringent requirement for supersonic aircraft than current law requires for subsonic aircraft
- New supersonic aircraft may not comply with current noise level standards
- Currently, there are separate supersonic aircraft development programs underway: Boom and Aerion represent the two different approaches.
- Any new rules would need to be standardized by the International Civil Aviation Organization (ICAO) and the aircraft would be subject to the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

The Working Group was provided a copy of a letter sent to the FAA from SEA Airport Managing Director Lance Lyttle stating opposition to the less stringent requirements.

SEA 2020 Air Traffic Activity

Eric Weiss, Port of Seattle

Weiss updated the Working Group on statistics related to SEA operations from January through early July of 2020. Overall, there was a dramatic drop in operations beginning in March. As airlines developed COVID protocols, operations began to ramp up starting in May. TSA checkpoints have experienced peak days of almost 20,000 departing passengers and an average day of 16,000 to 18,000 passengers. SEA is

starting to see international carriers returning, though with reduced schedules. Air carriers traveling through SEA were averaging 15% capacity in April and 54% capacity in June. Weiss shared the data referenced in Appendix B.

A Working Group member inquired as to whether data is being correlated between increase of passenger volumes and increase of COVID -19 cases in South King County. Port staff said they would investigate how data is being tracked by the county health department.

2020 Domestic/Intl Air Traffic Activity

Vince Mestre, Consultant

Mestre stated that fleet changes continue to occur due to the impacts of COVID-19 and that some airlines are moving to newer, more efficient, quieter aircraft. He noted that there could be significant noise benefits if airlines replaced 777s with 787s and A350s. In general, the aircraft that are being parked tend to be the noisier ones. When the 737 MAX is back in service there could be some additional noise benefits. Scott Ingham, Delta Air Lines, noted that Delta has retired its MD 80/88 fleet and has announced the retirement of 777s. Scott Kennedy, Alaska Airlines, stated that no long-term decision on the use of the Airbus has occurred. There are no current plans to remove any aircraft from the fleet.

Discussion of Next Steps

Working Group Participants

Working Group participants engaged in discussion about what issues they want to focus on in the coming months given the uncertainties due to COVID-19. Ideas included:

- Impacts of air cargo flights on late-night noise and increasing the focus on communications with air cargo carriers
- Working with the FAA to consider procedure changes regarding diversion patterns to the west by prop planes
- Continue to try to influence the FAA regarding the supersonic aircraft proposed noise standards. Recommend to the StART Federal Policy Working Group to monitor the issue
- Learning about international noise standards as well as international efforts to instigate green aviation
- Learning about new ideas or proactive thinking internationally about noise reduction

Tentative Next Meeting:

October 12, 2020, 5:30pm – 7:30pm via video conference

Appendix A

Monthly Totals & Trends

339

Distinct Households

13,934

Comments

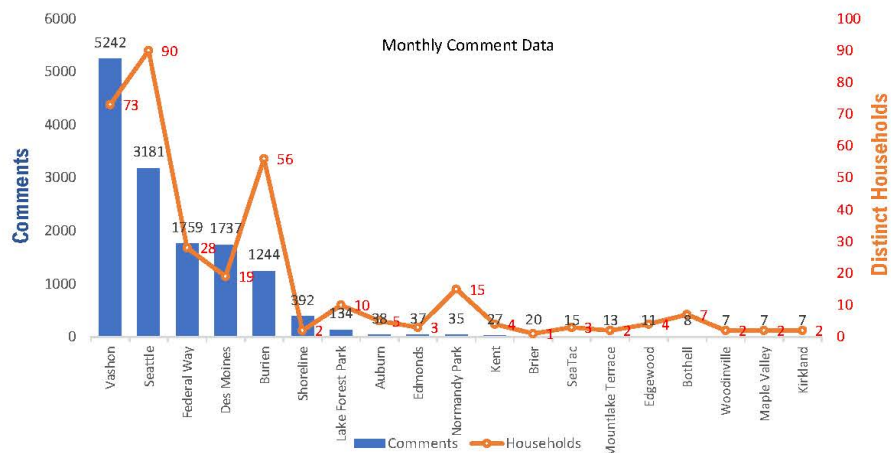
114,160

Comments YTD

622

Distinct Households YTD

Monthly Totals & Trends: By City



CITY	COMMENTS	DISTINCT HOUSEHOLDS	AVG COMMENTS/ HOUSEHOLD
Vashon	5,242	73	72
Seattle	3,181	90	35
Federal Way	1,759	28	63
Des Moines	1,737	19	91
Burien	1,244	56	22
Shoreline	392	2	196
Lake Forest Park	134	10	13
Auburn	38	5	8
Edmonds	37	3	12
Normandy Park	35	15	2
Kent	27	4	7
Brier	20	1	20
SeaTac	15	3	5
Mountlake Terrace	13	2	7
Edgewood	11	4	3
Bothell	8	7	1
Kirkland	7	2	4
Maple Valley	7	2	4
Woodinville	7	2	4
Issaquah	6	1	6
OTHER	14	10	1
Totals	13,934	339	41

Monthly Totals & Trends

390

Distinct Households

20,987

Comments

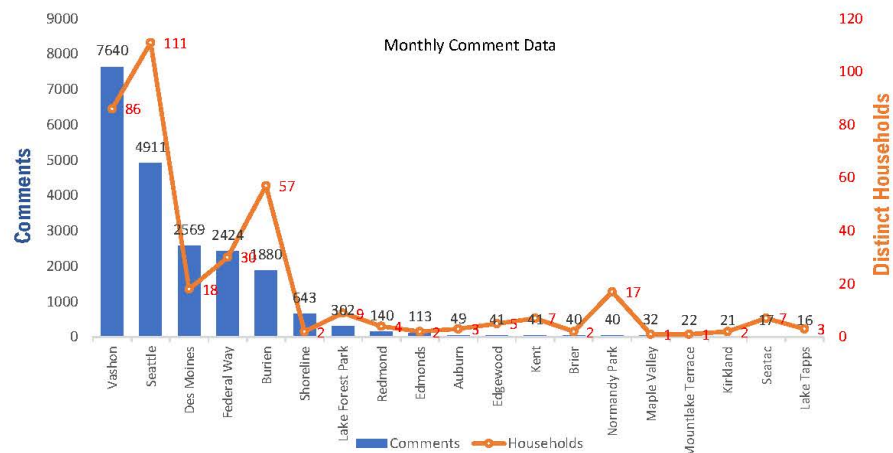
135,147

Comments YTD

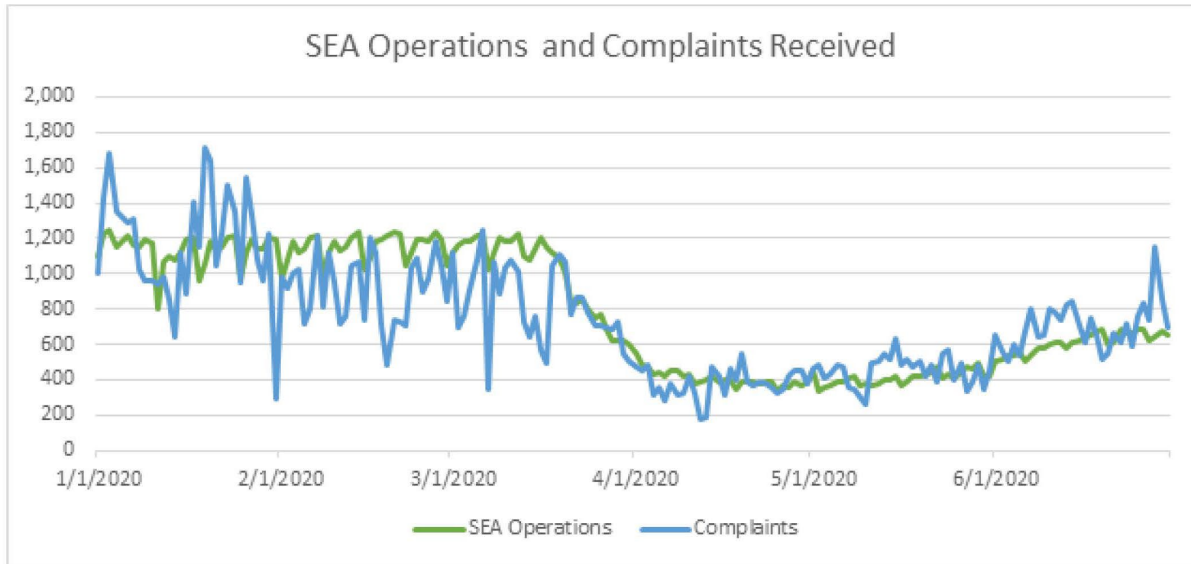
706

Distinct Households YTD

Monthly Totals & Trends: By City



CITY	COMMENTS	DISTINCT HOUSEHOLDS	AVG COMMENTS/ HOUSEHOLD
Vashon	7,640	86	89
Seattle	4,911	111	44
Des Moines	2,569	18	143
Federal Way	2,424	30	81
Burien	1,880	57	33
Shoreline	643	2	322
Lake Forest Park	302	9	34
Redmond	140	4	35
Edmonds	113	2	57
Auburn	49	3	16
Edgewood	41	5	8
Kent	41	7	6
Brier	40	2	20
Normandy Park	40	17	2
Maple Valley	32	1	32
Mountlake Terrace	22	1	22
Kirkland	21	2	11
Seatac	17	7	2
Lake Tapps	16	3	5
Tukwila	10	8	1
OTHER	36	15	2
Totals	20,987	390	54

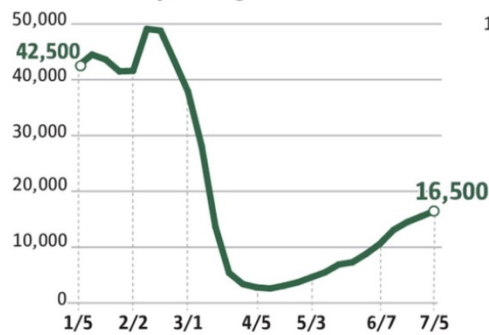


Appendix B

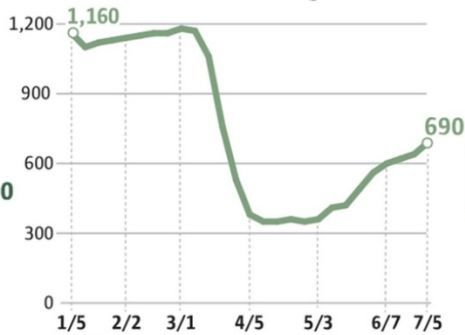
SEA Reduced Activity for Summer 2020

Week's daily average, for Sunday through Saturday

TSA-screened passenger volume



Aircraft takeoffs and landings

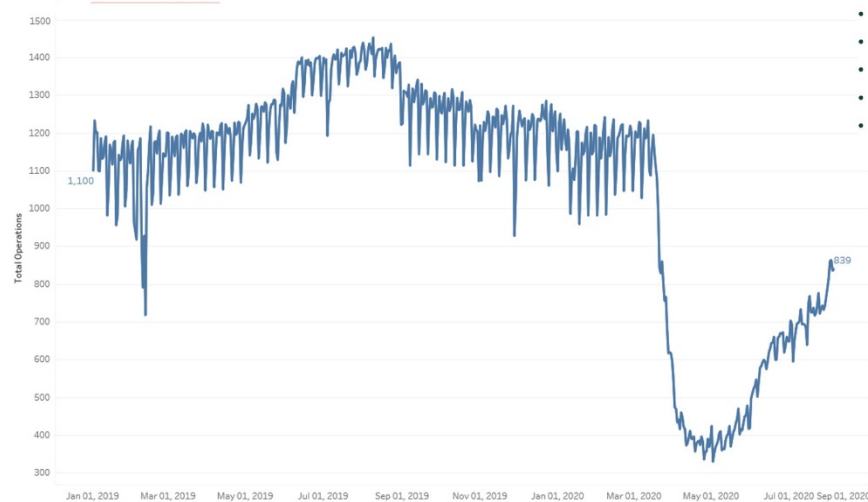


SEA Seattle-Tacoma International Airport

1

SEA Reduced Activity for Summer 2020

SEA airport operations by day



Source: FAA OPSNET
FAA ASPM

Prepared by Business Intelligence
Contact: BIteam@portseattle.org

SEA Seattle-Tacoma International Airport

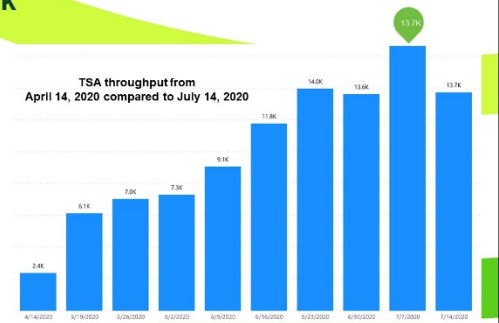
2

Summer Earliest / Latest Flights

- A-Conc 05:00/ 00:59
- B-Conc 05:04/ 00:59
- C-Conc 04:54/ 00:07
- D-Conc 05:15/ 23:58
- NSAT 05:27/ 23:57
- SSAT 05:04/ 02:10

Summer 2020 SEA Passenger Airline Activity Outlook

- YOY June passenger activity was down 78%
- International June passenger activity was down 95% YOY
- International flights continue to cancel into fall
 - EVA Air operating a reduced schedule (3x week) (777-300ER or 787-9)
 - Cathay Pacific canceled through end of September
 - Majority of foreign flag carriers have suspended service indefinitely until government travel restrictions are lifted



YOY Load Factor Comparisons (airport wide)

Month	2019	2020
January	80.1%	80.4%
February	78.7%	84.1%
March	87.9%	39.3%
April	86.2%	14.6%
May	87.6%	40.9%
June	89.9%	53.7%

Aviation Noise Working Group Meeting Agenda

October 12, 2020; 5:30 pm – 7:00 pm

VIA ZOOM VIDEO CONFERENCE

Participant	Interest Represented
Eric Zimmerman	Normandy Park
Mark Hoppen	Normandy Park
Brian Wilson	Burien
Susan Cezar	Des Moines
Scott Ingham	Delta Air Lines
Shan Hoel	Transgroup Freight
Steve Osterdahl	Alaska Airlines
Ken Galka	Port of Seattle
Tom Green	Port of Seattle
Marco Milanese	Port of Seattle
Lance Lyttle	Port of Seattle
Tom Fagerstrom	Port of Seattle
Arlyn Purcell	Port of Seattle
Stan Shepherd	Port of Seattle
Dave Kaplan	Port of Seattle
Vince Mestre	Consultant
Clare Gallagher	Port of Seattle
Tim Toerber	Port of Seattle

Facilitator: Phyllis Shulman, Civic Alchemy

Note Taker: Amanda Murphy, Amanda Gray Consulting

Meeting Objectives:

To provide an update on the 2020 Fly Quiet Awards and the Late Night Noise Limitation Program 2020 3rd Quarter Results. To discuss air cargo operations at SEA and to consider specific actions to reduce noise specific to air cargo.

Meeting Summary

Noise Monitoring

Stan Shepherd, Port of Seattle

Shepherd commented that there has been community interest in understanding the reliability of the airport's noise monitoring system. To respond to this interest, Port staff are developing a report that provides a variety of information regarding noise monitoring. He asked for feedback about the value of this type of report. Participants stated that they wanted to ensure the monitors are calibrated accurately and are operating correctly, which was one of the reasons stated to provide this report. It was stated that it would be helpful to have the report posted on the Port's website.

2020 Fly Quiet Awards

Tom Fagerstrom, Port of Seattle

Fagerstrom explained how every year the Port presents three awards – judged using three criteria:

- Noise levels of take offs and landings using four monitors
- Adherence levels to the Noise Abatement flight procedures
- Adherence to the ground maintenance engine run up regulations
- And beginning in 2021, a forth category connected to the number of late-night noise exceedances

Winning airlines are publicly acknowledged by the Port Commission and with a press release, advertisements, banners in the main terminal, and an award luncheon (pre COVID-19). The 2020 Fly Quiet Winning Airlines are:

- Southwest Airlines: quietest airline among the five busiest jet carriers operationally at SEA
- Frontier Airlines – quietest airline among jet carriers with at least 1,000 operations at SEA
- SkyWest Airlines: quietest among the regional jet carriers with at least 500 operations at SEA

Late-Night Noise Limitation Program

Tom Fagerstrom, Port of Seattle

Fagerstrom reviewed the Late-Night Limitation Program, Third Quarter 2020 Update. He highlighted a few details in the update including:

- EVA Air has returned to flying the 777 each night, but only 35% of those flights showed exceedances, compared to 60% in 2019. It is likely that these departures are quieter due to fewer passengers, which means a lighter aircraft. Port staff will look into this issue further.
- American Airlines had three exceedances.
- Air Transport International (Amazon's Prime Air) is now the busiest carrier during late nights.
- A greater percentage of overnight operations are cargo since COVID.
- In May – average of 11 operations per late-night – 3 passenger and 8 cargo.
- In July – average of 20 operations per late-night – 11 passenger, 8 cargo, 1 general aviation.
- In September - average of 17 operations per late-night – 9 passenger and 8 cargo.
- Airline scheduling and fleet mix decisions remain unpredictable

Fagerstrom provided a comparison of quarters:

Quarterly Comparison

	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020
Total Late Night Operations	3874 (13% Cargo)	2960 (15% Cargo)	2545 (16% Cargo)	1062 (61% Cargo)	1586 (43% Cargo)
Total Late Night Ops Exceeding Thresholds	239 (62% Cargo)	220 (56% Cargo)	213 (65% Cargo)	191 (84% Cargo)	235 (81% Cargo)
Percent of Total Ops Exceeding	6%	7%	8%	18%	15%



Runway Use Agreement with FAA

Tom Fagerstrom, Port of Seattle

Fagerstrom provided an update on the outcomes of the Runway Use Agreement which is an agreement that voluntarily reduces usage of the Third Runway from 12:00am to 5:00am. His comments included:

- The agreement has been in effect for a full year
- Previously averaged 10 to as many as 30 late-night Third Runway landings each night. First full year in effect, SEA averaged only 1.5 late-night Third Runway landings each night
- Five late-night landings occurred on the Third Runway during the entire month of September. Often the Third Runway is not used until after 6am (and note that 5am is the agreement time).

SEA Air Cargo Overview

Tom Green and Ken Galka, Port of Seattle

Green provided a few facts about air cargo at SEA

- Ranked 19th in the US for Cargo in 2019 with 453,550 metric tons flown
- Ranked 3rd largest airport for international cargo on the West Coast (excludes Alaska)
- 15 destinations are served with year-round scheduled all-cargo main deck or wide-body carrier services

Green reviewed some of the impacts related to COVID-19 including a change in “belly” vs freighter cargo tonnage market shares and how the suspension of many international passenger flights significantly reduced capacity for international air cargo; however, flights are returning and adding frequency. He also reviewed data showing the change in aircraft operations since January noting that aircraft operations has recovered more than the overall number of passengers. Green also stated that cargo freighter operations

are about 5% higher than in 2019. Green provided a graphic displaying elements of the air cargo market in 2019.

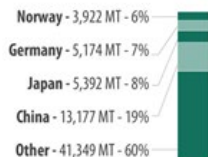
Air Cargo 2019

International trade value via SEA equaled:

- \$21.1B Total
 - \$10.2B of imports
 - \$10.9B of exports

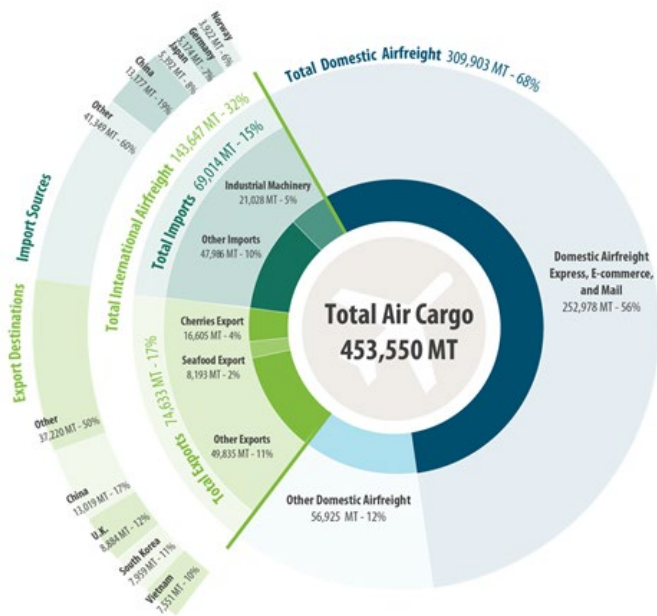
Total Imports 69,014 MT

Import Sources



Total Exports 74,633 MT

Export Destinations



SEA Seattle-Tacoma International Airport

Green presented information that included:

- Comparable Size and Growth of West Coast Airports 2012-2016 with Significant Air Cargo Operations
- Historic Air Cargo Activity at SEA
- Air Cargo Belly/Freighter Market Shares
- Freighter Market Shares
- Annual Freighter Flight Activity
- Freighter Operating Schedules
- Weekly Freighter Flight Schedules
- Daily Freighter Flight Schedules
- Detailed information about each of the freight carriers that utilize SEA

Discussion and comments focused on how best to utilize this information about air cargo to inform StART's noise reduction efforts and communication with communities about the role of air cargo in the local and global economy. It was stated that the information about air cargo shared in the presentation would be helpful to expand community awareness. It was suggested that now is the time to work with the FAA on many of the Next Gen programs and procedures that have yet to be implemented, for example, performance based descent and noise abatement departure procedures for air carriers. It was stated that it seems possible that due to the retirement of older fleets, that a number of the louder aircraft will not be brought back into service. It was emphasized that the Port, FAA, and airlines need to continue to work towards mitigating noise and pollution. Also suggested was trying to get fleet modernization plans from

the airlines to share with StART. Port staff are continuing to be in conversation with the airlines that have the most late-night noise exceedances in an effort to influence their schedules and aircraft choices.

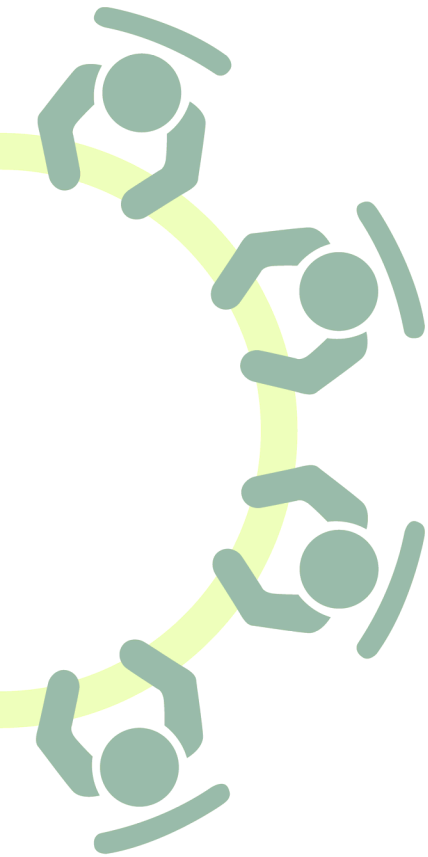
Tentative Next Meeting:

December 14, 2020, 5:30pm – 7:30pm via video conference

Appendix III

StART Federal Policy Working Group

Meeting Summaries



StART 

SEA STAKEHOLDER ADVISORY ROUND TABLE

StART Federal Advocacy Plan

Issue	Topic	Goal	Update
65 DNL evaluation and alternative metrics	FAA Reauthorization Implementation	Encourage timely release of the "noise annoyance survey" and relevant accompanying policy guidance	In April 2020, the FAA submitted a report to Congress in response to Sections 173 and 188 of the FAA Reauthorization Act: https://www.faa.gov/about/plans_reports/congress/media/Day-Night_Average_Sound_Levels_COMPLETED_report_w_letters.pdf . The conclusion of the report is that the DNL continues to be the recommended metric. However, members of Congress - including Representatives Jayapal and Smith - sent a letter to the FAA deeming this report insufficient. The FAA has not released the "noise annoyance survey" to-date.
Overflight noise/human health study	FAA Reauthorization Implementation	Help shape the scope and implementation of the study	In 2019, the FAA funded the Air Transportation Center of Excellence for Alternative Jet Fuels and Environment to study the health impacts of noise from overflights.
Environmental Pilot Program	FAA Reauthorization Implementation	Help shape the scope of the grant program, and secure funding for an innovative local pilot for mitigation	Congress passed its FY21 appropriations legislation with House language that "directs the Administrator to utilize available funds to implement the Environmental Mitigation Pilot Program and to conduct a series of studies and reports on aircraft noise in accordance with the Airport Noise and Environmental Streamlining subtitle of the FAA Reauthorization Act."
The Future of Aircraft: Supersonic, Electric and Urban Air Mobility	FAA Reauthorization Implementation	Ensure that noise standards for supersonic aircraft meet or exceed commercial aircraft noise standards. Continue to support federal investments and policies that drive cleaner aircraft, such as electric jets and eVTOL, while ensuring that these new planes don't increase noise impacts	In June 2020, the Port submitted a comment letter to the federal rulemaking process underway regarding supersonic aircraft noise standards.
Air Traffic Noise and Pollution Expert Consensus Act	Legislation	Advocate for passage	No update at this time.
Protecting Airport Communities from Particle Emissions Act	Legislation	Advocate for passage	Last year, the US House of Representatives-passed HR 2, the Moving Forward Act, includes this legislation as an amendment. In 2021, Congress is likely to consider a new infrastructure bill as part of President Biden's first 100 days.
Secondary Insulation for "Failed" Packages	Legislation	Advocate for passage	US Representative Adam Smith is currently finalizing this legislation for introduction. In addition, Congress passed its FY21 appropriations legislation with House language that included direction to the FAA to "consider residences that were mitigated prior to 1993 with sound insulation as 'unmitigated' if an airport can verify that the residences continue to fall within the latest day-night average sound level (DNL) 65 decibel (dB) contour, and have an interior noise level of DNL 45 dB or higher."
Noise Program Funding	Legislation	Significantly increase funding for noise insulation of eligible buildings near SEA.	The US House of Representatives-passed HR 2, the Moving Forward Act, includes a set aside of 5% of airport improvement grants for airport emission reduction projects, airplane noise mitigation and other airport projects that reduce the adverse effects of airport operations on the environment and surrounding communities (increased from 4.5% thanks to an amendment from Representative Jayapal). In 2021, Congress is likely to consider a new infrastructure bill as part of President Biden's first 100 days.
Sustainable Aviation Fuels Funding and Other Alternative Energy Investments	Legislation	Significantly increase funding for deployment of Sustainable Aviation Fuels for airplanes as well as other low-/zero-carbon alternative fuels for ground transportation vehicles such as renewable natural gas and electrification	The Port has joined the national SAF Coalition in support of a SAF-specific blender's tax credit, as a way to increase fuel availability and affordability.
Aircraft Modernization and Environmental Performance Incentives	Legislation	Investigate steps that could be taken - including those currently underway in Europe - to incentivize environmental performance of aircraft, including upgrading of fleets to more modern airplanes	The EU has tied aviation industry relief to environmental initiatives, including sustainable aviation fuel development, replacing older aircraft and upgrading of airport facilities. The Port will develop a one pager on these efforts to share with federal policymakers for consideration.
WHO Europe Study	Other	Request FAA formal explanation of interpretation of the study, and how they are including it in their policymaking	The FAA responded via email to US Representative Smith that they do not consider this study to be valid.
GAO Study of Community Noise Impacts	Other	Request Congressional letter asking GAO for inclusion of "single site" airports in their analysis, along with metroplexes	In June 2020, the GAO reached out to SEA staff to begin their study of this issue in our community. SEA staff have spoken with them and connected them to airport communities as well; we are also providing them requested noise complaint data.
High Speed Surface Transportation Investments	Other	Support federal funding for innovative high speed surface transportation options	In 2021, Congress is likely to consider a new infrastructure bill as part of President Biden's first 100 days.
Late Night Noise Limitation Program	StART Noise Working Group Initiatives	Build awareness of, and support for, this effort from the Washington Congressional delegation	Ongoing
Runway Use Plan Agreement	StART Noise Working Group Initiatives	Build awareness of, and support for, this effort from the Washington Congressional delegation	Ongoing
34R Glide Slope	StART Noise Working Group Initiatives	Build awareness of, and support for, this effort from the Washington Congressional delegation; get their help in identifying federal funding for implementation	Ongoing
Ground Noise Analysis	StART Noise Working Group Initiatives	Build awareness of, and support for, this effort (currently on hold during the pandemic) from the Washington Congressional delegation	Ongoing
Noise Abatement Departure Profiles	StART Noise Working Group Initiatives	Build awareness of, and support for, this effort (currently on hold during the pandemic) from the Washington Congressional delegation	Ongoing

Federal Policy Working Group Meeting

August 03, 2020; 5:00 pm – 6:30 pm

VIA ZOOM VIDEO CONFERENCE

Member	Interest Represented	Present
Jennifer Ferrer-Santa Ines	Normandy Park Finance Director	X
Kyle Moore	SeaTac Government Relations and Communication Manager	X
Robert Akhtar	SeaTac	-
Megan Utemei	Office of Sen. Patty Murray	X
Yasmine Mehdi	Office of Congresswoman Pramila Jayapal	X
Jessica Mulligan	Office of Congresswoman Pramila Jayapal	-
Amanda Wyma-Bradley	Office of Congressman Adam Smith	X
Madison Brown	Senator Maria Cantwell	X
Michael Matthias	City Manager, Des Moines	-
Tim Sorensen	Normandy Park	-
Anthony Hemstad	City of Des Moines	X
Resources	Title	
Eric Schinfeld	Port of Seattle, Sr. Manager, Federal & International Government Relations	X
Justin Biassou	FAA	-
Dave Kaplan	Port of Seattle	X
Stan Shepard	Port of Seattle	X
Lance Lytle	Port of Seattle	X
Clare Impett Gallagher	Port of Seattle	X
Consultants		
Phyllis Shulman	Facilitator, Civic Alchemy	X
Amanda Murphy	Note taker, Amanda Gray Consulting	X

Meeting Objectives:

To provide an update on Congressional efforts. To review and discuss the Federal Policy Work Plan including ideas on the approach to the Work Plan during COVID-19.

Meeting Summary:

Update on Congressional Efforts

Eric Schinfeld, Port of Seattle

Amanda Wyma-Bradley, Office of Rep. Adam Smith

Schinfeld provided an update on Congressional efforts given the current state of affairs. He reviewed the intent behind developing the Federal Policy Advocacy Plan a year ago, to identify policy issues that StART would like to address. These included:

1. Things that passed as part of the FAA Reauthorization Act.
2. Other introduced and new legislation that StART supported.

He stated that in March, a group representing many of the neighboring communities was days away from taking an advocacy trip to Washington DC to meet with Congressional members, but the trip was canceled due to the pandemic. Since then, Congress and the FAA have been focused on COVID-19 issues.

The intention for the Working Group's discussion is to clarify what might still be possible in Congress and to review the Federal Policy Advocacy Plan for what is still relevant and what the Working Group might want to add. Schinfeld reviewed that the current thinking at SEA is that air travel will recover in the next 3-5 years and will be back to 2019 levels of activity. He emphasized that now is the time to plan and focus on the reduction of aviation noise so that efforts can have future impacts.

Amanda Wyma-Bradley, Office of Representative Adam Smith, provided an update on the current status of legislative efforts and what opportunities might be possible for policy changes. She stated that last February Congressman Smith reintroduced the Aviation Impacted Communities Act with some changes that make the legislation more robust. She mentioned that there may still be some additional improvements to the legislation.

Two amendments were offered to HR 2, the infrastructure legislation that was passed by the US House of Representatives last month:

- 1) Representative Smith's Protecting Communities from Particle Emissions Act, which requires a federal study of aircraft particulate emissions impacts on airport communities (this was included in the bill that passed the House)
- 2) Representative Smith's new legislation that would allow re-insulation of certain homes for which the initial noise package has "failed". This amendment did not pass, but interest was expressed to adjust it so that it will pass in the future.

In addition, the US House passed an FY21 transportation appropriations bill that addresses two StART priorities: 1) a provision that would consider residences that were mitigated prior to 1993 with sound insulation as 'unmitigated' if an airport can verify that the residences continue to fall within the latest day-night average sound level (DNL) 65 decibel (dB) contour, and have an interior noise level of DNL 45 dB or higher, and 2) a provision that would require the FAA to report on the implementation of their community engagement efforts.

Neither HR2 nor the appropriations bills will be passed by the Republican Senate at this time. However, they are both positive signs for potential future progress.

At this time, the focus of Congress is on COVID relief packages which is providing the opportunity for staff to better connect with communities, interest groups, and caucus members to prepare and agree upon legislation. This can help with expediting legislation and enlisting support when future opportunities arise. Two opportunities for StART members to review and provide input include the Second Chance Noise Insulation Bill and the Aviation Impacted Communities Act.

Questions and discussion from Working Group members included:

- The proposed match for re-insulation draft legislation is an 80-20 split between the FAA and the Port. Currently, the FAA is paying 100% of the share.
- The institutional culture of the FAA seems less dependent on political changes, so a change in administration may not significantly impact their organizational chain of command or focus on aviation.
- Adding “quality of life” to their mission may be one way to expand their focus on community impacts of aviation.

Recap of Federal Policy Advocacy Plan

Eric Schinfeld, Port of Seattle

Schinfeld walked through the Federal Policy Advocacy Plan and provided updates on a number of items:

- 1) Alternative to and evaluation of the 65 DNL – FAA has released a report on alternatives to the 65 DNL (they found that the DNL is still the preferred metric), but has not released their noise annoyance survey
- 2) Overflight noise - FAA is to do this study and Seattle will be a part of the study due to the efforts of Congresswoman Pramila Jayapal
- 3) Environmental Pilot Program – has not been developed, but is an area to engage in
- 4) Aviation Impacted Communities Act – still in process of development
- 5) Legislation to direct NAS to do a comprehensive study of aircraft related noise and emissions issues
- 6) GAO study about NextGen flight paths and engaging communities around the noise of these flight paths is currently happening
- 7) StART Aviation Noise Working Group initiatives are continuing

Schinfeld suggested revisiting a number of the items post-election.

Discussion of Federal Policy Advocacy Plan

Working Group members discussed the Federal Policy Advocacy Plan including new ideas for focus, revision of existing items, and what community priorities may have changed. Ideas included:

- Identifying opportunities for funding, for example, noise insulation
- Addressing climate change
- Promoting aviation biofuels
- Helping to expedite newer aircraft fleets
- Exploring EU policies on opportunities to make airplanes more environmentally friendly including looking at ICAO regulations
- Focusing on issues related to the future of aviation and noise from flying objects, including supersonic aircraft, drones, and autonomous flying vehicles.

Schinfeld asked the Working Group members to reach out, in whatever ways they think are most appropriate for their community, to solicit feedback on the revised Federal Policy Advocacy Plan and additional ideas and priorities. Participants were asked to provide this feedback by September 15 prior to the next Federal Policy Working Group Meeting. Feedback will also be solicited at the next StART meeting.

Summary and Next Steps
Eric Schinfeld, Port of Seattle

Next steps included:

1. Update the Federal Policy Advocacy Plan to reflect the input from this meeting.
2. Reach out to the cities and StART to get feedback on priorities.
3. Review, analyze, and get feedback at the next Working Group meeting on the Second Chance Noise Insulation Bill and the Aviation Impacted Communities Act.
4. Learn about and share what the European Union is doing and if anything is relevant to add to the Federal Policy Advocacy Plan.
5. Send the Draft Revised Federal Policy Advocacy Plan via email to all of the cities involved in StART asking for feedback.

Tentative Next Meeting:
October 5, 2020, 5:00 pm – 7:00 pm
Zoom Video Conference

Federal Policy Working Group Meeting

October 5, 2020; 5:00 pm – 6:30 pm

VIA ZOOM VIDEO CONFERENCE

Member	Interest Represented	Present
Jennifer Ferrer-Santa Ines	Normandy Park Finance Director	-
Kyle Moore	Government Relations and Communication Manager, SeaTac	X
Robert Akhtar	SeaTac	-
Megan Utemei	Office of Sen. Patty Murray	X
Yasmine Mehdi	Office of Congresswoman Pramila Jayapal	X
Jessica Mulligan	Office of Congresswoman Pramila Jayapal	-
Amanda Wyma-Bradley	Office of Congressman Adam Smith	X
Alex Stone	Office of Congressman Adam Smith	X
Madison Brown	Senator Maria Cantwell	-
Brian Wilson	City Manager, Burien	X
Michael Matthias	City Manager, Des Moines	-
Tim Sorensen	Normandy Park	-
Anthony Hemstad	City of Des Moines	X
Resources	Title	
Eric Schinfeld	Port of Seattle, Sr. Manager, Federal & International Government Relations	X
Justin Biassou	FAA	-
Dave Kaplan	Port of Seattle	X
Stan Shepard	Port of Seattle	X
Lance Lytle	Port of Seattle	X
Clare Impett Gallagher	Port of Seattle	X
Consultants		
Phyllis Shulman	Facilitator, Civic Alchemy	X
Amanda Murphy	Note taker, Amanda Gray Consulting	X

Meeting Objectives:

To provide an update on Congressional efforts and legislation from US Representative Adam Smith. To discuss changes to and finalize the Federal Policy Work Plan.

Meeting Summary:

Update on Congress

Eric Schinfeld, Port of Seattle

Schinfeld emphasized that Congress is currently focused on negotiating a COVID-19 stimulus package and approving a Supreme Court nominee in advance of the November election. In addition, the Senate is in recess due to senators infected with COVID-19, and so there will be a few opportunities to make progress on StART's legislative priorities until after the November election. Schinfeld commented that it is important for StART to identify and focus on its priorities so that when the opportunity arises we are ready to engage. A new COVID-19 relief package could come in November, and federal government annual appropriations need to be addressed in December, so there may be opportunity to add legislation to both packages.

Based on questions and discussion, additional information included:

- It is still a priority to receive a thorough DNL study required of the FAA. Rep. Smith and Rep. Jayapal joined a Congressional letter to the FAA critiquing their study and stating that it was incomplete. StART will continue to push FAA to provide a more thorough assessment.
- For a brief time, Speaker Pelosi stated that there may be an opportunity to provide a relief package separately for airlines. This is no longer the case and relief for airlines would be part of a broader relief package.
- So far coronavirus funding is for relief. In the future there will need to be a more robust recovery package discussed.
- Quiet Skies Caucus planning for 2021 will be considered in Working Group discussions on priorities.

Review of Current Aviation Legislation from US Representative Adam Smith

Amanda Wyma-Bradley, Office of Rep. Adam Smith

Wyma-Bradley reviewed the Aviation Impacted Communities Act that Congressman Smith put forward to Congress last year and this year with modifications. The process established by the Act is:

- Communities notified of eligibility for "designated community" status
- Designated community selects board members
- Board meetings
- Assessment
- Action Plan
- Changes in flight operations and/or mitigation funds

The following are the problems that the bill is trying to solve:

1. Other than the 65 DNL, the FAA does not have a metric for deciding which communities are "impacted" by airplane noise.
2. The FAA will not engage with communities via community meetings/forums outside of the roundtables.
3. The FAA will not provide noise mitigation to communities outside of the 65 DNL.

Wyma-Bradley reviewed how the bill solves those problems:

Problem 1: Who is considered impacted?

- Currently, the FAA uses the 65 DNL contour around an airport to determine which communities are considered to be “impacted” by airplane noise
- The bill would enlarge the area of who is considered impacted to communities that are “within 1 mile at any point of 3,000 feet or less of a flight path to/from a large airport (100,000) annual enplanements or more).”
- The bill would require National Academy of Sciences to work with the FAA to develop a framework for examining noise impact on communities, as well as a tool (ideally, geospatial modeling) to examine the impact of noise on communities.

Problem 2: The FAA will not engage with these communities directly

- The bill would provide a path for communities who are impacted but that fall outside of the 65 DNL to demonstrate the impact aviation noise has on their communities and be granted status by the FAA
- If deemed “impacted”, that community would be eligible to establish a community board
- The board would be able to draft reports detailing concerns about aviation impacts on their community, and could request an assessment by the FAA to evaluate the impacts
- The FAA and the board would work together, based on the community assessment, to identify how these impacts can be minimized through:
 - Noise mitigation
 - Changes in flight operations or flight paths

Problem 3: The FAA will not provide noise mitigation to communities outside of the 65 DNL

- Under the bill, communities that have gone through the “community assessment” process will be eligible for noise mitigation if deemed appropriate via the action plan developed in tandem with the FAA.

Based on questions and discussion, additional information included:

- Communities could utilize either an existing roundtable, like StART, or create a new community board.
- The legislation provide some core elements as to who forms the boards and how many boards can exist. It will be up to the FAA to iron out the details.
- One intent of the legislation is to address the kind of historic disputes that communities have had with the FAA. One goal is to develop a process in which FAA has to engage with communities regarding noise issues and impacts prior to it escalating to a National Environmental Policy Act (NEPA) process and/or a lawsuit.
- Another intent of the bill is to require FAA to be more engaged with communities. The bill also will include a definition of community.
- There is concern that multiple neighborhoods in a municipality will establish a board creating competition and complexity. The bill does set up metrics and conditions for the establishment of a board.

- The bill requires FAA to consider impacts on communities, be transparent about what they can and cannot do to mitigate those impacts, and be in communication with communities regarding those impacts and any possible alternatives for mitigation.
- StART's initiative to work with FAA on reducing the use of the third runway during late night hours is an example of a productive relationship.
- This is a culture change with how FAA engages communities. This change will require additional resources. It will also be important to clarify responsibilities and funding for mitigations as this has not been FAA's role. If it becomes the responsibility of airports to follow up on implementation of mitigations there needs to be resources and the relationships built for success.
- There may be opportunities to break off specific parts of the bill for separate action. Also, the budget numbers in the bill will need to be revised based on current realities given the impacts of COVID-19 on the economy.
- The criteria for defining impacted communities is still being discussed.

Discussion of Changes to Federal Policy Advocacy Plan (Advocacy Plan)

Eric Schinfeld, Port of Seattle

Schinfeld reviewed discussion from the previous Working Group meeting regarding how conditions have changed and the interest in clarifying and identifying any new or continuing priorities for the Advocacy Plan. He stated that four new areas were identified in the previous meeting:

1. Noise Program Funding – it is a small fund and there is a need for greater funds for communities.
2. Sustainable Aviation Fuels – not only would they reduce carbon emissions, but utilizing them would also decrease other emissions. Perhaps climate and clean energy funding may become available if there is a change in administration.
3. Aircraft Modernization and Environmental Performance Incentives – incentives to the airlines to “green” the fleet, ground the old planes, and update to greener newer fleets.
4. Supersonic aircraft – make sure that noise standards for supersonic aircraft, at least meet, but prefer exceeds commercial aircraft noise standards.

Schinfeld asked for feedback on these additions as well as other possible additions or changes to the Advocacy Plan. Based on questions and discussion, additional information included:

- Recommendation to add issues related to electric aircraft, air taxis, and cargo to the list
- Recommendation to work with Senator Cantwell, Senator Murray and Boeing to look at incentives to “green” fleets. Also, to consider actions taken regarding environmental sustainability in the European Union
- Recommendation to prioritize analysis, prevention measures, and mitigation regarding particulate matter

The Working Group discussed strategy related to the revised Advocacy Plan. It was emphasized that it is important to take the time now to make the investments and policy changes so that they are in place as the aviation industry recovers. It was stated that it would be good to re-engage our region and state's

congressional members after the election, especially during the lame duck session. It was suggested that StART host a series of Zoom calls with congress members and the group who were originally scheduled to participate in the visit to Washington DC last March. It was noted that it will be important for all of the participants from the cities and Port to have a joint framework and talking points. One benefit to these meetings being virtual is that it may be possible to include more people.

Next Steps

- Schinfeld will update the revised Advocacy Plan.
- Schinfeld will coordinate planning for congressional meetings, messaging, and scheduling the meetings.
- Schinfeld will draft a pre-meeting letter from StART that serves as an update as to the priorities and issues the group wants to discuss as well as an invitation for discussion.

**Tentative Next Meeting:
December 7, 2020, 5:00 pm – 7:00 pm
Zoom Video Conference**

Federal Policy Working Group Facilitator's Meeting Summary

December 7, 2020; 5:00 pm – 6:15 pm

VIA ZOOM VIDEO CONFERENCE

Member	Interest Represented	Present
Jennifer Ferrer-Santa Ines	Normandy Park Finance Director	X
Kyle Moore	Government Relations and Communication Manager, SeaTac	-
Robert Akhtar	SeaTac	-
Megan Utemei	Office of Sen. Patty Murray	X
Yazmin Mehdi	Office of Congresswoman Pramila Jayapal	X
Jessica Mulligan	Office of Congresswoman Pramila Jayapal	-
Amanda Wyma-Bradley	Office of Congressman Adam Smith	-
Alex Stone	Office of Congressman Adam Smith	X
Madison Brown	Senator Maria Cantwell	-
Brian Wilson	City Manager, Burien	-
Michael Matthias	City Manager, Des Moines	-
Anthony Hemstad	City of Des Moines	X
Bill Vadino	City of Federal Way	-
Chris Hall	Federal Way	X
Brandon Miles	City of Tukwila	-
Erica Post	Tukwila	-
Resources	Title	
Eric Schinfeld	Port of Seattle, Sr. Manager, Federal & International Government Relations	X
Justin Biassou	FAA	-
Marco Milanese	Port of Seattle	X
Dave Kaplan	Port of Seattle	-
Stan Shepard	Port of Seattle	X
Lance Lytle	Port of Seattle	X
Clare Impett Gallagher	Port of Seattle	X
Consultants		
Phyllis Shulman	Facilitator, Civic Alchemy	X
Amanda Murphy	Note taker, Amanda Gray Consulting	X

Meeting Objectives:

To provide a post-election update and analysis. To discuss the aviation and environmental policies being developed and implemented in the European Union. To discuss next steps for virtual Washington DC advocacy meetings.

Meeting Summary:

Post-Election Update and Analysis

Eric Schinfeld, Port of Seattle

Schinfeld provided his insights on how the national election results may impact the work of StART. He explained that while aviation and airport noise is not a partisan issue, the areas of policy that Congress focuses on can look different depending on which party controls each house. Whether the Republicans retain the Senate or not impacts the potential for passing major legislative packages. He emphasized that it is important to have realistic expectations and to consider smaller or practical pieces of legislation that can be moved forward. It is important to note that there are also Executive Orders and regulatory actions that may be possible, and those options are being analyzed. It will be important to focus on what tactics and strategies are best utilized to influence decisions.

Schinfeld noted that the FAA Administrator is nominated for a five-year term. The current FAA Administrator (Dixon) was appointed in 2019; therefore, if he chooses to stay he will be in the position for the entire Biden administration.

Legislative staff in attendance at the meeting shared their insights. There was some optimism expressed considering that airport issues are generally non-partisan. They stated that the composition of the Senate will be an important determinant of whether progress can be made on bills. Staff also noted that although there may be opportunities to address some of the airport issues in an infrastructure bill, there are differences between Republicans and Democrats regarding funding.

European Union Aviation and Environmental Policy Update

Eric Schinfeld, Port of Seattle

Schinfeld reflected that a number of Working Group discussions have raised the question of how StART's goals for reducing the impacts of aviation noise tie into environmental and sustainability goals. The European Union (EU) recently completed a report written by the EU Aviation Roundtable. The purpose of the report was to identify how the airline industry can recover from the pandemic. In their recommendations, they specifically addressed how to meet environmental goals with operational goals seeing recovery as an opportunity to improve upon addressing environmental issues. One recommendation is to tie future aviation financial relief to meeting environmental goals including utilization of alternative fuels, and incentivizing airlines to update their fleets to more fuel efficient and quieter aircraft. Some of these recommendations are already being implemented, for example, Air France agreed to meeting certain carbon reduction goals in exchange for a bailout. This is an important model to consider as StART develops strategies. Schinfeld will be exploring whether the US airlines industry is working on a comparable effort. National industry organizations do exist in the US that could take on this approach.

Discussion and additional information from Working Group members included:

- Whether there can be focus on the creation of the Cascadia high speed rail line as part of focusing on infrastructure improvements.
- Barriers to the implementation of aviation alternative fuels at SEA are that there is insufficient fuel available and that the cost of alternative fuels are not affordable. There may be opportunities to incentivize their use. Corporate commitments may be one way to increase their use. For example, Microsoft has purchased alternative fuels for their corporate travel. It may be useful to focus on getting major purchasers of aviation fuel, like the Department of Defense to switch. It was noted that Amazon's new climate goals may provide an opening.

The following are links to the reports:

https://www.beuc.eu/publications/aviation_round_table_report_on_the_recovery_of_eu_aviation.pdf

<https://www.transportenvironment.org/publications/air-frances-bailout-climate-conditions-explained>

<https://www.transportenvironment.org/publications/austrian-airlines-bailout-climate-conditions-explained>

Next Steps:

Schinfeld will review the report in more detail and bring forward ideas that may be appropriate for StART's Federal Policy Advocacy Plan.

Virtual Washington DC Fly-In

Eric Schinfeld, Port of Seattle

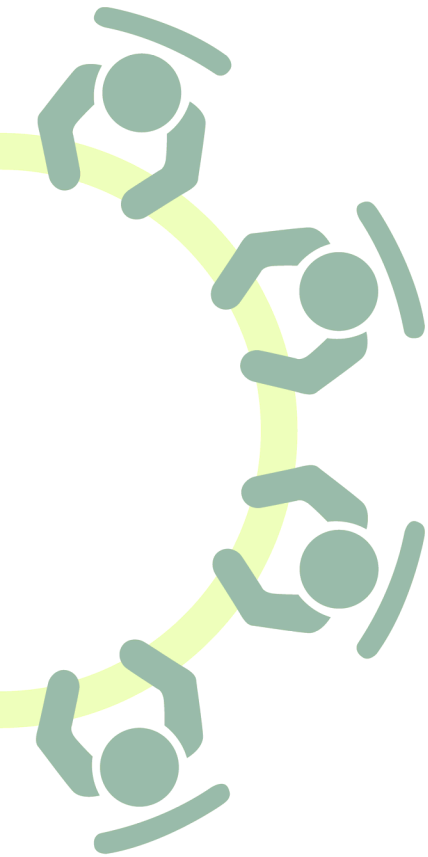
Schinfeld provided an update on the virtual meetings with members of Congress, the FAA, and the US Department of Transportation in Washington DC. He noted that, so far, five of the six cities confirmed their interest in participating and are in the process of deciding who would like to participate. Each city is limited to three people. Dates are in process of being confirmed. The next step will be to put together joint talking points. Consideration is being given to having the congressional conversations in January and the FAA and administration in February or March. An agenda and list of participants, once finalized, will be shared with local congressional staff. The agenda will be presented as a StART policy agenda. In addition, participants from the cities and Port will have an opportunity to discuss anything that is important to them.

Tentative Next Meeting:

February 1, 2021, 5:00pm – 6:30pm via video conference

Appendix IV

2021 Priorities Survey and Discussion Notes



StART ✈️

SEA STAKEHOLDER ADVISORY ROUND TABLE

StART Survey Compiled Results—Priorities 2021 (as of 12-10-20)

Respondents: Respondents: City of Burien (B), City of Des Moines (DM) (some cities included combined responses with community reps), City of Federal Way (FW), City of Normandy Park (NP), Eric Zimmerman (NPCR), SeaTac (ST), Robert Atkar, (STCR), Tej Basra (STCR2), Tod Bookless (TCR)

Topic	Items <u>Most</u> Interested in Discussing	Top 5 priorities
COMMUNITY ENGAGEMENT		STCR
Broaden community engagement and maximize the role of community representatives potentially including: - Provide an opportunity for StART Community Representatives to have time for discussion of issues just amongst themselves to share interests and concerns. - Host broader community forums to hear community interests and issues. - Progress achieved in StART needs to be better communicated to airport and other communities.	STCR2 ST ST	 ST ST
AVIATION NOISE		DM; STCR
Understanding Day Night Average Sound Level (DNL) and Sound Exposure Level (SEL) (see notes on page 2)	B; DM; NP; STCR; STCR2	NP
Review of practices to reduce noise at other airports including internationally and comparison of those practices to SEA’s efforts	B; DM; NP; ST; STCR	NP; NPCR
Pilot operational procedures that could reduce aircraft noise and air pollution	B; DM; NP; ST	
Airline fleet modernization/ environmental performance & funding incentives	DM; NP; ST	
Implementation of NextGen programs/procedures	DM; NP; ST; STCR2	
Propeller/turbo-prop flight paths (see notes on page 2)	B; NP; STCR2	B; NP
Ground Noise Analysis (see notes on page 2)	B; NP; NPCR; ST; STCR; STCR2	NPCR
Noise Abatement Departure Profile Study	DM; NP; ST	
Noise Program funding/grants (see notes on page 2)	B; DM; NP; ST; STCR	B; NPCR
AIR QUALITY/HEALTH IMPACT	DM	DM; STCR
Further phases of University of Washington (UW) ultra-fine particle (UFP) Study	NP; B; ST; STCR2	NPCR; ST; STCR2; TCR
Regional air quality overview	NP; STCR2	TCR
Port air quality programs	NP; STCR; STCR2	TCR
International green aviation standards		TCR
Sustainable aviation fuels & other alternative energies	B	TCR
FUTURE OF AVIATION/MOBILITY		STCR
Washington State Air Cargo Movement Study (see notes on page 2)	B; DM; NP; STCR2	B; DM; NP
Aircraft design	ST	
Airport’s role in regional economic development/impact of regional growth on the airport (see notes on page 2)	NP; B; ST; STCR; STCR2	NPCR; STCR2
Paine Field	NP; STCR2	
Airline recovery strategies and implementation	STCR2	
Community principles and priorities to be shared with airlines, FAA and Port during the recovery	DM; NP; ST; STCR; STCR2	STCR2
FEDERAL POLICY		STCR
Implementation of key FAA Reauthorization provisions, including 65 DNL evaluation and alternative metrics - Overflight noise/human health study	B; DM; NP; ST; STCR	B; NP
Legislation that furthers Port-cities priorities: - Air Traffic Noise and Pollution Expert Consensus Act - Protecting Airport Communities from Particle Emissions Act - Secondary Insulation for “Failed” Packages	B; DM; NP; ST; STCR; STCR2	B; DM; NP; ST; STCR2
Updated guidance on key studies: - WHO Europe Study - GAO Study of Community Noise Impacts	B; DM; STCR	
Regulation of noise and emissions issues related to Supersonic Aircraft, Electric Aircraft and Urban Air Mobility	B; NP; ST; STCR	ST
Additional Topics for Consideration - State legislative policies related to aircraft noise and emissions - Federal policies related to coronavirus relief and recovery - Federal policies related to economic and workforce development - Federal policies related to broader environmental or human health issues	B; DM; STCR; ST; STCR2	DM; STCR2

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NOTES FROM BURIEN

TOPIC	COMMENTS
Understanding Day Night Average Sound Level (DNL) and Sound Exposure Level (SEL	Need action steps to reduce noise, not enhanced understanding.
Propeller/turbo-prop flight paths	Seek FAA support to reduce the 250 degree turns over Burien. Number of flights over Burien higher in 2020 over 2019; even with significantly reduced number of overall flights.
Ground Noise Analysis	Need steps to reduce noise, not further analysis
Noise Program funding/grants	Need to address noise associated with reverse thrust. Encourage use to address safety.
Washington State Air Cargo Movement Study	Explore alternatives to Sea-Tac for air cargo.
Airport's role in regional economic development/impact of regional growth on the airport	Cap on Sea-Tac's growth given impacts to local communities. PSRC study of alternative airport capacity

PRIORITIES DISCUSSION NOTES FROM 12-09-20 StART MEETING

Discussion focused on sharing additional topics for priorities and comments related to topics already identified. Additional comments included:
Dave Berger, Federal Way Community Representative: Inquired about an item listed under the Federal Policy Agenda regarding a study done by the GAO that may provide guidance regarding future policy.
Brian Wilson, Burien City Representative: Noted that Burien provided comments that are stated at the end of the survey results. Stated that it is important to get some actionable items as a priority and not just items related to learning. Stated support for a lot of the items listed in the survey.
Eric Zimmerman, Normandy Park Community Representative: Stated that there are all a lot of great topics listed in the survey. Zimmerman encouraged StART to utilize a feasibility metric for setting priority actions for next year so that StART can focus on impacting change. Requested that as potential actions emerge, the Port analyze and communicate the feasibility or lack of feasibility of those actions, so our time will be well spent.
Brian Wilson, Burien City Representative: Commented that it would be helpful to discuss the connection between StART and the Highline Forum. He noted that mitigation is important to communities, so supporting initiatives and policies that mitigate impacts should be a priority for StART.
Tod Bookless, Tukwila Community Representative: Commented that there are many important and valid concerns about noise and that a Working Group is focused on that. In addition to focusing on aviation noise, he encouraged StART to consider other issues, for example, economic development, thriving communities, and environmental issues. Bookless suggested that StART may want to add a working group or task force on environment, air quality, or economic development. Issues like charging stations or ground vehicles could be looked at.
Bill Vadino, Federal Way City Representative: Recommended that StART increase its focus on economic development and environmental issues and ultrafine particle. He suggested that StART consider forming additional working groups to focus on those areas.
Dave Berger, Federal Way Community Representative: Emphasized that what is most important is for StART to continue to build the trust of the communities. He encouraged the StART Steering Committee to look at priorities that would make a tangible, visual, and audible impact in the quality of life for communities being impacted. If there could be one or more tangible improvements for Federal Way, it would go a long way in building back both trust and seeing the Port as a credible entity. Berger noted that it is important to show that StART isn't just doing analysis, but is helping to make tangible improvements. It will be difficult to demonstrate improvement in the near future because of the pandemic and the decreased level of flights, but when the number of flights increase, it will be important to demonstrate tangible improvements in noise reduction.
Chris Hall, Federal Way Community Representative: Commented that it is important to move toward action items. He shared appreciation to the FAA scientists who attended StART and the discussion of ultra-fine particles. Hall shared the importance of identifying tangible action items now that can help to reduce impacts to communities as the airline industry recovers.