

StART

2021 Annual Report SEA Stakeholder Round Table

The logo for Seattle-Tacoma International Airport (SEA), featuring the letters 'SEA' in a bold, black, sans-serif font. The letter 'A' is stylized with a white, curved shape underneath it, resembling a wing or a stylized 'A'.

Seattle-Tacoma
International
Airport

2021 StART Members

Burien

Diana Smith
 Jeff Harbaugh
 Brian Wilson
 Garmon Newsom II (Alt)



Normandy Park

Eric Zimmerman
 David Lashley
 Amy Arrington
 Mark Hoppen
 Chief Dan Yourkoski (Alt)



Des Moines

Bob Leonard
 Peter Philips
 Michael Matthias
 Susan Cezar (Alt)



SeaTac

Tejvir Basra
 Robert Akhtar
 Carl Cole
 Kyle Moore (Alt)



Federal Way

Dave Berger
 Chris Hall
 Bill Vadino
 Steve McNey (Alt)



Tukwila

Erica Post
 Tod Bookless
 Brandon Miles
 Laurel Humphrey (Alt)



Aviation Noise Working Group

Arlyn Purcell
 Bill Vadino
 Bob Leonard
 Brian Wilson
 Carl Cole
 Chris Hall
 Christopher Schaffer
 Colin Rice
 Dave Berger
 Eric Zimmerman
 Erica Post
 Jeff Harbaugh
 Jennifer Kester
 Justin Biassou
 Lance Lyttle
 Lynae Craig
 Marco Milanese
 Amy Arrington
 Michael Matthias
 Robert Akhtar
 Scott Ingham
 Scott Kennedy
 Stan Shepherd
 Steven Osterdahl
 Susan Cezar
 Tim Toerber
 Tom Fagerstrom
 Vince Mestre

Federal Policy Working Group

Alex Stone
 Amy Arrington
 Anthony Hemstad
 Arlyn Purcell
 Bill Vadino
 Brian Wilson
 Chris Hall
 Dave Berger
 Diana Smith
 Eric Schinfeld
 Erica Post
 Jeff Harbaugh
 Justin Biassou
 Kyle Moore
 Lance Lyttle
 Marielle Trumbauer
 Megan Utemei
 Michael Matthias
 Robert Akhtar
 Tommy Bauer

Alaska

Scott Kennedy
 Randy Fiertz (Alt)



Delta

Scott Ingham (Alt)
 Tony Gonchar



Air Cargo

Shan Hoel

FAA (non-members)

Justin Biassou
 David Suomi



Port of Seattle

Lance Lyttle
 Arlyn Purcell (Alt)
 Eric Schinfeld
 Marco Milanese



Facilitation Team

Brian Scott
 Dori Krupanics



Welcome & Summary

Committed to Collaboration in 2022



I am pleased to present this report on SEA Stakeholder Round Table's (StART's) 2021 activities on behalf of the city government officials, community representatives, Port staff, and airline representatives who make this collaboration successful.

This report features a Summary of 2021 Activities (pgs. 4-7). Topics include a renewed culture of trust and collaboration, a new Steering Committee, pandemic and recovery, impact studies, and the Sustainable Airport Master Plan (SAMP) process, as well as summaries of the topics explored by the Federal Policy and Aviation Noise Working Groups. An overview of each StART and Working Group meeting agenda is also included (pgs. 8-9).

I want to especially recognize the 12 community representatives who each volunteered dozens of hours to learning, sharing knowledge, and advocating for the needs and desires of their neighbors and communities. Together, all of StART's members, presenters, and observers, including the Federal Aviation Administration (FAA), make this forum a powerful force for greater understanding and collaboration between SEA and the communities that surround the airport.

I was delighted to see everyone come back to the (virtual) table in 2021 after some challenges in earlier years. The new Steering Committee (composed of city representatives, Alaska Airlines, the FAA, and Port staff) played a key role in setting StART agendas and administering our new operating procedures. This new approach allowed procedural issues of concern to be arbitrated through collaborative dialogue, which expanded everyone's sense of trust.

I also want to call out the Port's Marco Milanese, Eric Schinfeld, Arlyn Purcell, Stan Shepherd, Tom Fagerstrom, and Clare Gallagher who worked tirelessly to coordinate meetings, organize presenters, prepare information, and follow-up on requests. Their spirit of community service is a credit to the Port of Seattle.

I am proud of StART's accomplishments in 2021 and look forward to an even more productive 2022.

In Community,

Lance Lyttle

SEA Airport Managing Director

Table of Contents

2 | 2021 StART Members

3 | Welcome Letter

4 | 2021 Summary

8 | 2021 Meetings & Agendas



2021 StART Activity Summary

For the SEA Stakeholder Advisory Round Table, 2021 was a year of renewal, group learning, and trust building.

StART provides Highline Forum-member cities, airline representatives, the Federal Aviation Administration (FAA) and the Port with a forum for meaningful and collaborative public dialogue; informing airport-related decision-making; raising public knowledge about airport operations and impacts; and a focus on practical ways to reduce the impact of the airport on Highline Forum-member cities. The intent is to foster a spirit of good will, respect, and openness while encouraging candid discussion between the Port and all StART members.

In its first three years, StART had many successes but also challenges with communication, cooperation, and trust. StART members addressed these issues head-on and approached 2021 as a new beginning with everyone committed to a spirit of collaboration. The following are highlights from the year. More detail is available on the Port's website (https://www.portseattle.org/page/StART_Partners) and in the StART meeting minutes.

(Meeting dates are included for reference)

Renewed Culture of Trust & Cooperation

The strongest feature of StART in 2021 was a renewed culture of trust and cooperation. Each of the StART member cities and the Port of Seattle agreed to an amended set of Operating Procedures that strengthen behavior expectations for StART membership, clarify the role of the facilitator, and establish a Steering Committee. The Steering Committee serves to guide implementation of the Operating Procedures, develop StART agendas, and troubleshoot any issues that arise. Brian Douglas Scott of BDS Planning & Urban Design also took over facilitation duties for StART, as well as Working Group, and Steering Committee meetings. These changes have helped build a spirit of collaboration on common objectives among the StART participants.

Steering Committee

The StART Steering Committee is made up of the SEA Managing Director, the designated executive representative of each StART member city, and an airline representative. The FAA also attends Steering Committee meetings. The group meets about a month before each StART meeting to set the upcoming agenda, outline topics for future meetings, and manage implementation of the Operating Procedures. During 2021, the Steering Committee addressed two substantial issues regarding StART membership. The group decided that community representatives whose circumstances change and make them no longer a resident, business, or property owner in their respective communities are allowed to finish their StART term representing that city but are ineligible for reappointment at the end of their term. The Steering Committee also reviewed the criteria for communities eligible for StART membership and decided to continue limiting membership to The six Highline Forum cities that immediately surround SEA.

Pandemic & Recovery

A major theme of Working Group and StART meetings during 2021 was passenger traffic at the airport. Traffic levels started slow but began growing early in the year and grew much more rapidly later in the year as pandemic impacts receded and passengers became more comfortable with air travel. Another key feature of airport traffic was the dramatic growth of air cargo, which continued growing steadily throughout the year.

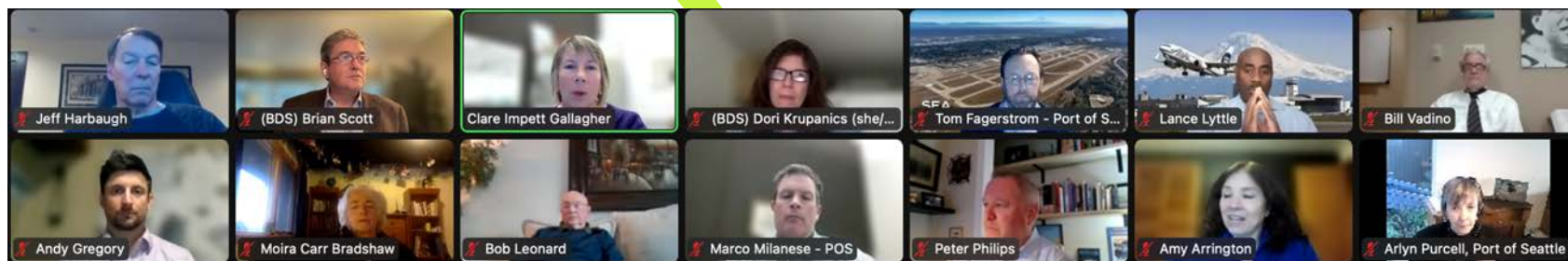
Impact Studies

The Working Groups and full StART also gave considerable attention to several studies related to the impacts of commercial air traffic. Studies reviewed included:

- Federal Aviation Administration Neighborhood Environmental Survey (February 24th)
- Seattle-King County Public Health: Health Impacts of Aviation Study (June 23rd)
- FAA and Boston University Aviation Emissions Research within the Vicinity of Airports (August 25th)
- HMMH Ground Noise Study (October 27th & December 8th)

Sustainable Airport Master Plan (SAMP) Process

Another theme of StART meetings in 2021 is the upcoming environmental review for the Sustainable Airport Master Plan Near-Term Projects (SAMP NTP). StART members see the SAMP process as an opportunity to share formal input regarding their concerns about airport operations, aircraft impacts on their communities, and the potential for future growth in flights and passenger volumes. Of particular interest are the timeline for the SAMP NTP environmental review and opportunities and timing for public input.



Federal Policy

The Federal Policy Working Group focused its energy on updating and implementing the shared Federal Policy Agenda that was developed in collaboration between the Port and the six cities. These policy priorities identify new resources, new flexibilities, and new policies that can address community concerns related to aircraft noise and emissions. 2021 saw a number of significant opportunities for progress, ranging from a joint comment letter in response to the FAA’s release of its “noise annoyance survey” to passage of the bipartisan infrastructure bill that included several airport and community provisions. A good example of positive momentum was the FAA’s formal recognition that homes with noise insulation installed before 1993 are eligible for upgrades with additional federal funding; the Federal Policy Working Group continues to work toward approval for secondary insulation for homes insulated pre-2001. The Working Group also held virtual “fly-ins” with U.S. Representative Pramila Jayapal (7th District) and U.S. Representative Adam Smith (9th District), each of whom represents a portion of the cities surrounding SEA. Looking forward, the Working Group plans to continue advocating for implementation of its priorities through FY23 appropriations and the 2023 FAA Reauthorization legislation.

Aviation Noise

The Aviation Noise Working Group, as part of its Aviation Near-term Noise Action Agenda, explored and discussed several issues related to aviation noise, including late night noise, how noise comments and complaints are captured, third runway usage, runway glideslopes, airfield ground noise, and rolling takeoffs. The group received quarterly reports on the Port of Seattle’s Late Night Noise Limitation Program, including a tally of late night noise exceedances by each airline and by type of aircraft. It is notable that late night cargo flights represent a majority of these exceedances and that nearly all exceedances are by older model aircraft since newer planes are typically quieter. The group also reviewed quarterly summaries of noise comments and complaints received by the Port, including where those complaints originate, with a strong majority from Vashon Island. The group also discussed reports on runway usage, with particular attention to the western-most runway (or “3rd Runway”), during the late night hours.

One well-received accomplishment for StART in 2021 was EVA Air, in response to the Late Night Noise Limitation Program, replacing their older and noisier aircraft with a newer and quieter Boeing 787 for their nightly late night flight between Seattle and Taipei. By doing this, they went from 85 noise exceedances in the third quarter of 2019 (the highest of all carriers in that quarter) to zero exceedances in the third quarter of 2021.



Guest Presenters at StART and Working Groups

- Donald Scata, Noise Division Manager, FAA & Sean Doyle, Senior Aviation Noise Policy & Research Specialist, FAA
- John Heimlich, VP and Chief Economist, Airlines for America
- Dr. Kris Johnson, Senior Social Research Scientist, Seattle/King County Public Health
- Dr. Elena Austin, Assistant Professor, UW School of Public Health
- Kevin Welsh, Executive Director, FAA Office of Environment and Energy & Dr. Jonathan Levy and Dr. Kevin Lane, Boston University
- U.S. Representative Adam Smith
- Annie Russo, Senior Vice President of Government and Political Affairs, Airports Council International – North America
- Amanda Wyma-Bradley, Legislative Assistant, Office of U.S. Representative Adam Smith
- Vince Mestre, Noise Consultant
- Gene Reindel, Vice President, & Mariano Sarrate, Consultant

Port of Seattle Personnel

- Michael Drollinger, Business Intelligence Director
- Clare Gallagher, Capital Project Delivery Director
- Tom Hooper, Manager of Aviation Planning
- Arlyn Purcell, Aviation Environmental Services Director
- Tim Toerber, Airline Resource and Scheduling Manager
- Colin Rice, Airfield/Airspace Planner
- Stan Shepherd, Airport Noise Programs Manager
- Tom Fagerstrom, Airport Noise Programs Coordinator



2021 StART Meetings



| | | |
|---|--|--|
| <p>February 24</p> <ul style="list-style-type: none"> • StART’s Revised Operating Procedures • Neighborhood Environmental Survey Results • Federal Policy Working Group Update • Aviation Noise Working Group Update • Public Comment | <p>April 28</p> <ul style="list-style-type: none"> • U.S. Airlines: Road to Recovery • SEA Aviation Forecast • Noise Insulation Program Overview • Federal Policy Working Group Update • Aviation Noise Working Group Update • Public Comment | <p>June 23</p> <ul style="list-style-type: none"> • Seattle-King County Public Health: Health Impacts of Aviation Study • SAMP Public Process • Federal Policy Working Group Update • Aviation Noise Working Group Update • Public Comment |
| <p>August 25</p> <ul style="list-style-type: none"> • Aviation Emissions Research within the Vicinity of Airports Update • SAMP Primer & Public Process Schedule • Federal Policy Working Group Update • Aviation Noise Working Group Update • Public Comment | <p>October 27</p> <ul style="list-style-type: none"> • Aviation Legislation • Federal Update • Ground Noise Study Progress Report • SAMP Update • Federal Policy Working Group Update • Aviation Noise Working Group Update • Public Comment | <p>December 8</p> <ul style="list-style-type: none"> • School Resilience to Air Pollution Study • Infrastructure Investment & Job Act Briefing • SAMP Update • Public Comment |

2021 Working Group Meetings

Federal Policy

February 1

- Biden Administration and Congressional Progress and Priorities Update
- Congressional Meetings: Opportunities for improvement

April 5

- Potential Aircraft Noise and Emissions Policy Opportunities for 2021
- Policy Updates
 - Airport Improvement Program Eligibility Expansion of Sound Insulation
 - Letter to FAA: Request for Input on Research Activities to Inform Aircraft Noise Policy
 - Appropriation Process/Member-Directed Spending Updates
- Next Virtual Fly-in Meetings

June 7

- New Federal Policy Agenda Items
 - EPA Grant Program
 - American Jobs Plan Update
 - The Sustainable Skies Act
- Policy Updates:
 - Congressional Earmarks
 - Upcoming Emission Rule by EPA
 - FAA Environmental Program Grants
 - Prepare for FAA Presentation at the next StART Meeting

August 2

- Federal Policy Update
- Community Feedback & Working Group Decision on New Federal Policy Agenda
- Prepare for FAA Presentation at the next StART Meeting

October 18

- Federal Policy Updates:
 - Infrastructure Bill
 - Build Back Better Act
 - Vaccine Policies
 - Federal Funding & Federal Debt Ceiling
 - 2023 FAA Reauthorization

Aviation Noise

February 8

- StART's New Operating Procedures
- Aviation Near-term Noise Action Agenda Update
- Aircraft Fleet Changes at SEA
- FAA Noise Annoyance Survey Results

April 12

- 34R Glideslope Adjustment Progress to Date
- Aviation Near-term Noise Action Agenda Update
- Temporary Noise Monitoring: Update & Next Steps
- Noise Abatement Departure Profiles Study Recap

June 14

- Aviation Near-term Noise Action Agenda Update
- 34R Glideslope Adjustment Progress to Date
- Noise Abatement Departure Profiles Study: Further Analysis
- Late Night Noise Limitation Program: Enhanced Outreach

August 9

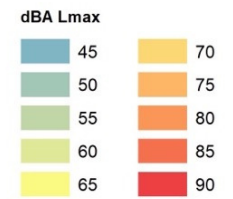
- Aviation Near-term Noise Action Agenda Update
- The Airport Noise & Capacity Act (ANCA) Primer
- Resumption of Ground Noise Study

November 11

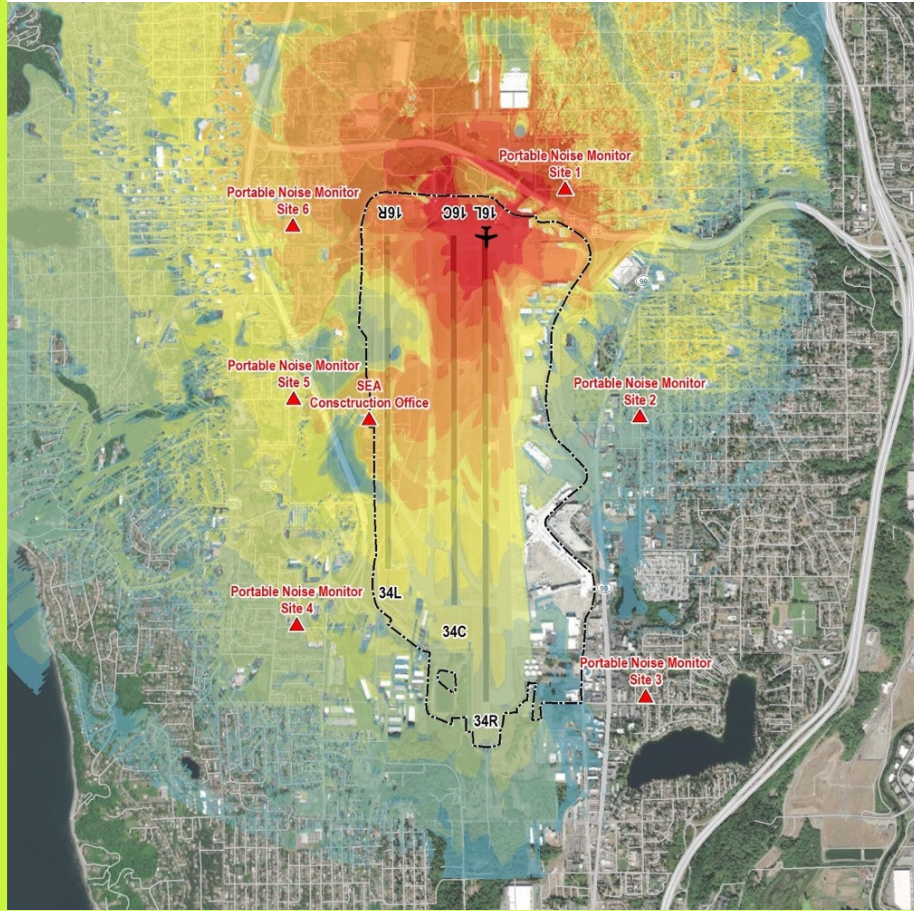
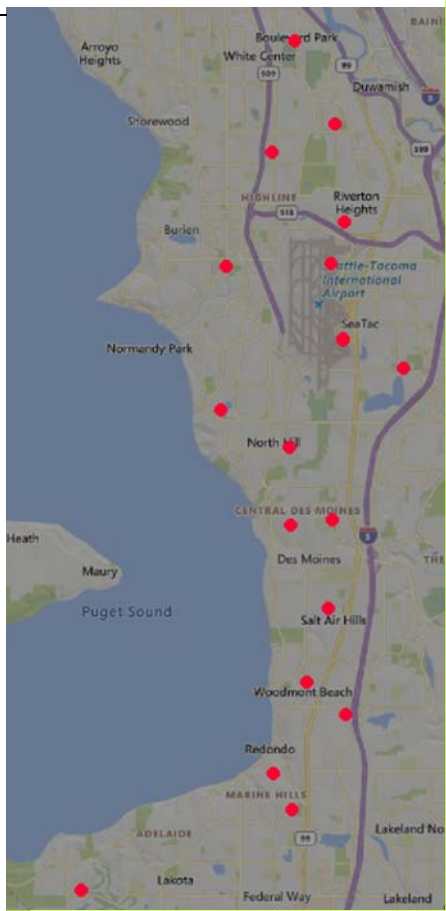
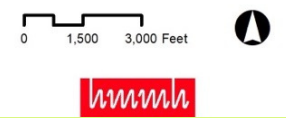
- Aviation Near-term Noise Action Agenda Update
- Ground Noise Study Progress Report
- Rolling Take-offs Primer

Seattle-Tacoma International Airport
Seattle, Washington

South Flow Start of Take-off Roll Runway 16L



- Airport Boundary
- Portable Noise Monitoring Locations
- B737 Aircraft Source
- Runway / Pavement
- Highway / Road

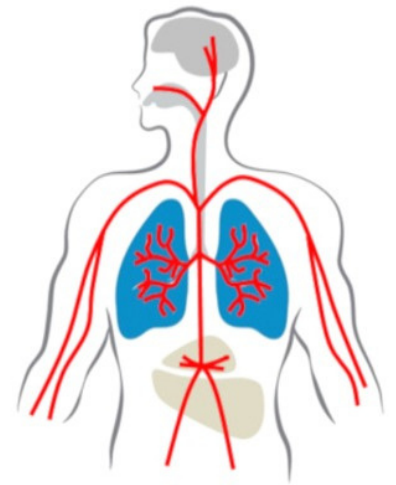
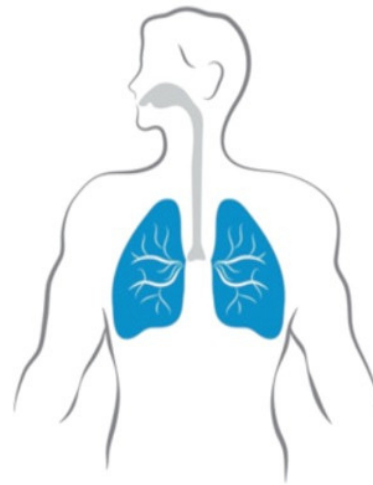
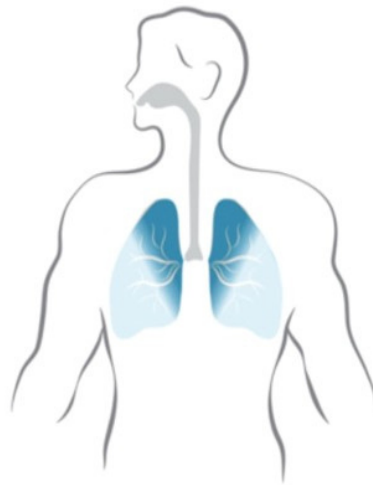


PM10

PM2.5

PM1

PM0.1

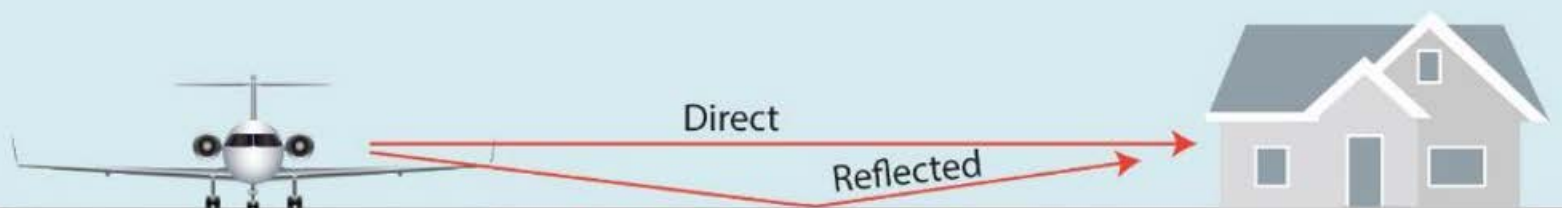


Coarse particles
Upper respiratory tract

Fine particles
Lower respiratory tract

Very fine particles
Alveolus

Ultrafine particles
Blood/Whole body



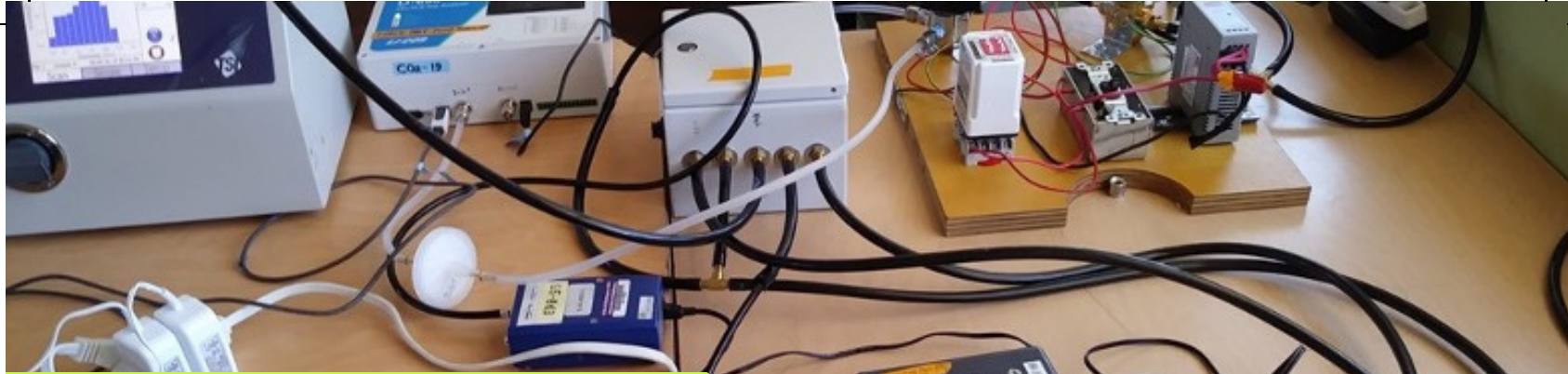


Photo Captions

Previous Page:

Upper Left: Aircraft noise monitor locations

Upper Right: Noise footprint of a take-off role in south flow

Middle: Airborne particles and the respiratory system

Bottom: Aircraft noise diagram

This page:

Top: Aircraft noise monitoring equipment

Middle: Residential noise insulation program

Bottom: Air cargo operations





SEA Seattle-Tacoma
International
Airport