

Airport Noise Programs Annual Report

2
0
2
5



TABLE OF CONTENTS

Fly Quiet Program		6
Fly Quiet Award Recipients		7
Engine Run-ups		8
Engine Run-up Statistics		9
Noise Monitoring		10
Noise Inquiries		11
Noise Inquiries Trends		12
Map of Caller Locations		13
SEA Flight Patterns		14
Runway Operations		15
Noise Abatement Flight Procedures		16
Flight Procedures - North Flow		17
Flight Procedures - South Flow		18
Late Night Noise Limitation Program		19
Sound Insulation - Acceleration Overview		20
Apartments		21
Single Family Homes		24
Condominiums		25
Places of Worship		26
Highline School District		28
High School Interns		29
Sound Insulation Assessment		30
SEA Stakeholder Advisory Round Table (StART)		31

Message from Manager of Airport Noise Programs

The Port of Seattle's (Port) Airport Noise Programs Office, part of the Aviation Environment and Sustainability Department at Seattle-Tacoma International Airport (SEA), continues to lead with innovation, collaboration, and a strong commitment to community well-being. In 2025, our team worked closely with the Federal Aviation Administration (FAA), airline partners, and our neighboring communities to advance long-standing programs while launching new initiatives that move us toward a quieter future.

For the Part 150 Noise and Land Use Compatibility Study (Part 150 Study), staff finalized the baseline and future conditions Noise Exposure Maps (NEMs), and delivered a strong year of community engagement, highlighted by three well-attended public workshops in September and October followed by a virtual public workshop in October. The Technical Review Committee (TRC) met three times during the SEA Stakeholder Advisory Roundtable (StART) Aviation Noise Working Group meetings. We also expanded our outreach to historically under-represented communities, broadening participation and ensuring more voices helped shape the study.

The Port's Sound Insulation Program made encouraging progress throughout 2025. Construction was completed on one single-family home, while the Accelerated Program delivered sound insulation for 200 apartment units across three complexes. Additionally, construction began on two places of worship which is another key milestone in reducing noise impacts for community institutions. A major focus of the year was the Sound Insulation Repair and Replacement Pilot Program, launched in response to Port Commission Order 2024-04. Staff finalized the Technical Assessment and Commission Reports in January 2025 and developed eligibility criteria aligned with the Federal Aviation Authority (FAA) approved Pre-1993 Program. Outreach to eligible homeowners in the current Noise Remedy Boundary generated strong engagement: 471 homeowners received information, 208 applied, and 117 homes were able to have acoustic testing completed in 2025 with more acoustic testing to follow in 2026. Five homes qualified, and three moved into design by the end of 2025, with the remaining two scheduled for design in 2026.

For the Fly Quiet Awards program, staff proudly recognized Air Canada, Frontier Airlines, and Air France for their leadership in noise-reducing operational practices. Notably, 2025 saw zero nighttime engine run-up violations. This is a significant achievement reflecting the continued partnership between the Port and our airlines.

We also advanced our commitment to transparency and accessibility by enhancing the Noise Programs website and strengthening outreach to airline partners, encouraging deployment of the newest, quietest aircraft operating at SEA.

This Airport Noise Programs Annual Report captures the full scope of our work, milestones, and 2025 accomplishments, as well as key airport statistics that help illustrate our progress.

Message from Manager of Airport Noise Programs cont'd

Looking ahead to 2026, momentum remains strong.

For the Part 150 Study, we anticipate submitting the Draft Final Noise Exposure Map (NEM) Report to the FAA and moving toward formal acceptance. Staff also plans to hold public meetings in the fall. Sound insulation construction is planned for one single-family home, along with the completion of the remaining 127 apartment units across seven complexes. Three places of worship will see construction completed as well. In the Pilot Program, acoustic testing for all remaining Pre-1993 homes within the Noise Remedy Boundary will be wrapped up, and construction will be completed on the three homes that entered design in 2025. These efforts, and more, set the stage for what promises to be an active and productive 2026.

Sincerely,
Ryan McMullan
Sr. Manager, Airport Noise Programs



Noise Programs Accomplishments in 2025

- The Fly Quiet program continued with the recognition of three deserving award winners: Air Canada, Frontier Airlines and Air France.
- Sound insulation construction was completed on one single-family home through the Sound Insulation Program.
- As part of the Accelerated Program for the Sound Insulation Program, construction was completed on 200 apartment units and construction associated with sound insulation began on two places of worship.
- For the Sound Insulation Repair and Replacement Pilot Program, staff completed the Technical and Commission Reports and provided those to Commission in January 2025. Then, staff conducted outreach to the potentially eligible homeowners within the FAA approved noise remedy boundary and was able to conduct acoustic testing on 117 homes. Five homes tested eligible and three homes have moved forward into design.
- Four high school interns spent six weeks producing videos to educate the public on airport noise, its impact, and mitigation strategies, while also engaging in interview exercises and receiving personalized resume guidance to boost their career readiness.



Fly Quiet Program

SEA's Fly Quiet Award Incentive Program assesses passenger and cargo airlines using four essential evaluation elements:

- **Noise Abatement Procedures** – The compliance rate with noise abatement flight procedures
- **Average Noise Levels** – Average noise level per airline taken from four noise monitors under the flight paths; measured using the Sound Exposure Level (SEL) noise metric
- **Ground Noise** – Each violation of the SEA's aircraft engine testing ground run-up rules and regulations results in a points deduction
- **Late Night Noise Levels** – Each operation exceeding a designated noise level during late night hours results in a points deduction

To be eligible to compete in the Fly Quiet Award Incentive Program, an airline must fly jet aircraft and meet a minimum requirement for number of flight operations. Propeller aircraft are not eligible because they fly at slower speeds and, therefore, cannot fly in the same noise abatement corridors as jet aircraft.

On an annual basis, each airline receives a total score based on the four combined evaluation elements listed above. At the end of the year, the two airlines with the most points are presented with Fly Quiet Awards. A third award is given to an airline that made a significant improvement over the previous year.

As part of the incentive program, the award recipients are publicly acknowledged for their achievements. In addition, a Port of Seattle press release is sent out and the information is posted on the Port's website. The winning airlines are also recognized in the main terminal with award signage, as shown below:



For detailed information about the scoring of the Fly Quiet Program visit
<https://www.portseattle.org/environment/airport-noise-programs>

Fly Quiet Award Recipients

The Port of Seattle announced the winners of the 17th annual Fly Quiet incentive program awards, recognizing noise reduction accomplishments during 2025.

Air Canada operates a modern fleet of 737 MAX and Airbus A220 aircraft. In 2025, Air Canada operated 983 takeoffs and landings at SEA.



Frontier Airlines is a low-cost carrier headquartered in Denver, Colorado. They operate a modern fleet of Airbus A320 and A321 aircraft, including the newest NEO versions. In 2025, Frontier operated almost 3,219 takeoffs and landings at SEA.

Air France is recognized for undertaking significant improvements to their aircraft fleet in 2025.

- Achieved high scores in all four categories
- Remarkably low takeoff and arrival noise utilizing a modern fleet of Airbus A350-900 and Boeing 787-9 aircraft.
- The utilization of the Airbus A350 and Boeing 787 aircraft significantly improved Air France's overall Fly Quiet score from 2024



Engine Run-ups at SEA

Engine run-ups are a routine procedure for testing an aircraft engine, conducted mainly for maintenance purposes. SEA acknowledges the impact that engine run-ups have on the surrounding communities, which is why the Airport generally restricts engine run-ups during the designated night-time hours of 10:00 pm to 7:00 am.

Because the Airport operates 24 hours per day, it is not anticipated that all engine run-ups will be eliminated during nighttime hours. Sometimes, it is necessary for an engine run-up to occur during the night-time hours. See the rules and regulations below for specific guidelines.



To conduct an aircraft engine run-up, the aircraft is taxied to one of four locations designated for run-ups on the airfield. There are two locations on the north end (shown in blue on the map above) of the airfield and two locations on the south end (shown in yellow above).

Monitoring Engine Run-ups

SEA's Schedule of Rules and Regulations Section 7 Part D indicates that:

7. All engine run-ups require approval of Airport Operations. No aircraft engine run-up shall be conducted between the nighttime quiet hours of 2200 and 0700 except:
- ☐ Aircraft that are regularly scheduled to depart between the hours of 0600 and 0830 shall be allowed to run-up as necessary between 0600 and 0700.
 - ☐ Engine run-ups necessary for maintenance checks above idle power, not to exceed a total of two minutes duration per aircraft.

Operations not in accordance with the run-up regulations are subject to public disclosures and fees as stated in the SEA International Airport Tariff #1.



Year	Daytime	Nighttime
2025	313	9
2024	412	5
2023	492	9
2022	469	7
2021	423	18

Engine Run-up Violation Fines

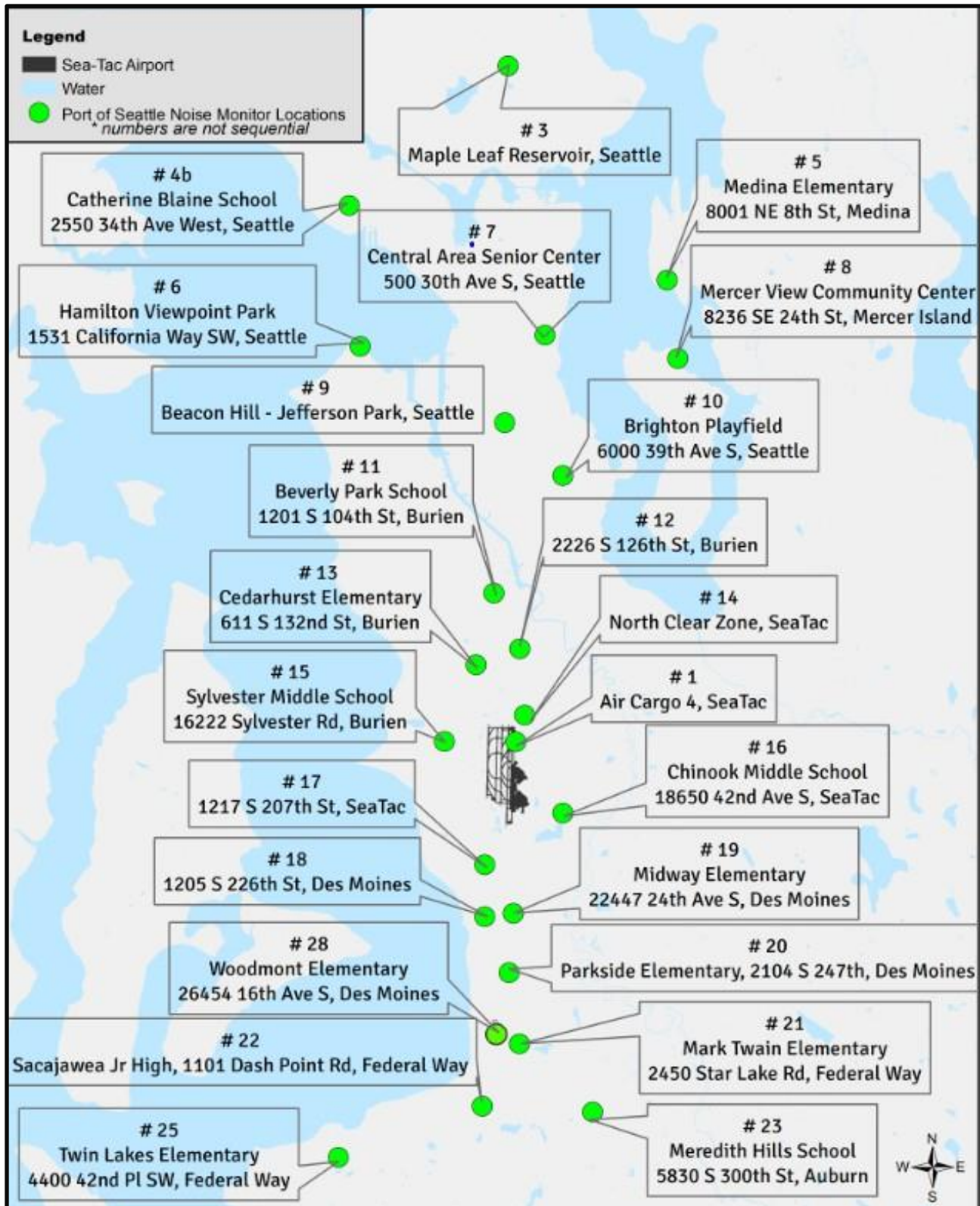
Tariff Fines for Nighttime (10 p.m. to 7 a.m.) Violations

- First offense in a calendar year is a letter of admonishment.
- Second offense in a calendar year is a fine of \$1,000.
- Third offense and each offense thereafter in a calendar year will be a doubling of the previous fine, not to exceed \$8,000.

Year	Violations	Airline
2025	0	
2024	2	Atlas and Delta Air Lines
2023	1	United
2022	0	
2021	1	Delta Airlines

Noise Monitoring System

The Port has an established Noise Monitoring Program. The airport's flight tracking system and 24 permanent noise monitoring sites help the Port monitor aircraft operations and flight paths, aircraft noise levels, and enables it to investigate citizen inquiries and identify trends.



Noise Comments at SEA

The Noise Programs Office at SEA provides multiple methods for submitting noise comments: an automated phone system where the community can leave a message, the online comment forms available on our website, PublicVue flight tracking, and the Port's mobile app.

Comments are tracked through software integrated with flight data to produce flight track maps and other data-driven reports.

All comments are transcribed and entered into our system. Copies of our monthly comment reports can be found on our website.

Traditionally, our office receives more calls during the summer months when people are outside more and windows are open.

This spreadsheet shows the number of comments received by month and year in comparison to the last few years.

Month	2025	2024	2023	2022	2021	2020
January	10,385	17,557	8,285	23,897	20,509	39,142
February	11,374	16,557	6,903	19,338	18,082	26,610
March	13,750	16,518	8,405	22,169	25,574	26,194
April	11,209	14,221	8,733	22,027	21,742	11,274
May	13,816	15,475	7,674	22,365	19,873	13,936
June	15,187	17,176	7,743	20,405	23,461	20,991
July	14,758	17,817	6,777	15,893	25,002	21,896
August	13,473	19,629	8,336	15,321	25,944	22,954
September	11,181	15,987	14,598	17,272	24,123	17,261
October	7,794	14,796	14,854	16,449	24,979	17,577
November	6,971	12,926	17,502	8,423	23,974	19,018
December	7,283	14,404	20,655	8,237	17,052	20,635
Total for Year	137,181	193,063	132,498	213,818	272,336	259,508

Any Information left on the noise hotline or in an email request are subject to public disclosure laws
The Port of Seattle operates under the State of Washington's Public Disclosure Act.

Noise Comments - Trends

The ways in which the community members reach out to the Airport Noise Programs is a trend the Port tracks.

Over the many years that the Noise Office at SEA has operated, the methods for submitting inquiries has expanded greatly. Currently, most inquiries are submitted through a non- Port of Seattle sponsored “third-party app”. The Port app (provided by PlaneNoise), webform (online comment form), automated Community Information Line, and the PublicVue online flight tracking map are the tools the Port uses to track these trends. The data for 2025 can be found in the table below.

Month	Web App	Plane Noise Mobile App	Website Comment Form	Community Information Line	Mobile Vue	PublicVue Map Comment Form	Manual, Live Call or Other
January	9,377	858	72	75	2	0	0
February	10,555	627	123	68	0	1	0
March	12,129	1,381	153	87	0	0	0
April	9,803	1,161	168	75	0	2	0
May	12,563	1,059	150	43	1	0	0
June	13,881	1,162	144	42	0	2	0
July	12,833	1,421	218	279	0	7	0
August	11,393	1,769	175	136	0	0	0
September	9,636	1,214	155	175	0	1	0
October	5,949	1,466	181	194	0	4	0
November	5,410	1,180	110	271	0	0	0
December	5,759	1,126	190	205	0	3	0
Total for Year	119,288	14,424	1,839	1,650	3	17	0

Noise Comments - Map of Caller Locations

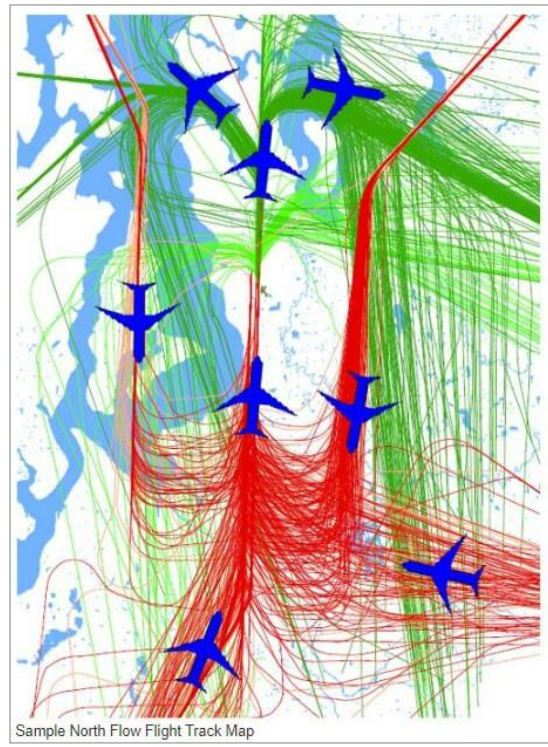
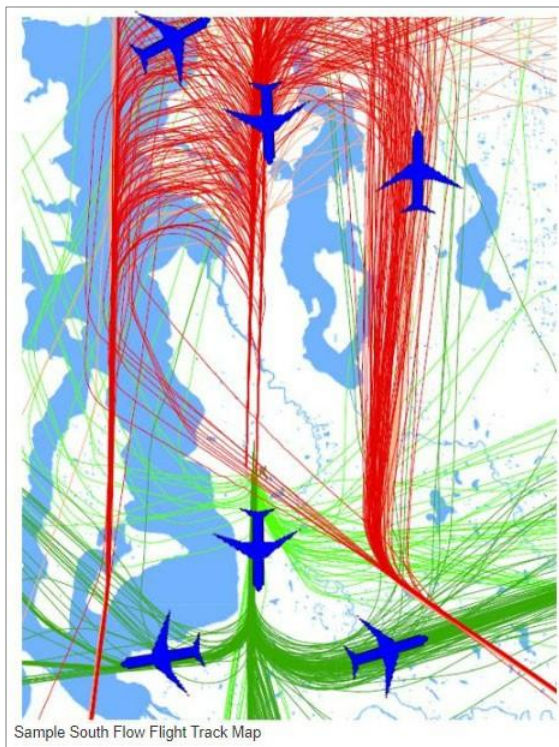
During 2025, SEA Airport Noise Programs received **137,178** comments from **806** distinct households. Map below shows the location of the households that contacted the Noise Programs office in 2025.



SEA Flight Patterns

Aircraft at SEA depart to the north (north flow) or the south (south flow) depending on wind conditions; aircraft arrive and depart heading into the wind. In the Puget Sound region, winds tend to flow from the south during overcast weather, meaning a majority of flights depart to the south and arrive from the north.

Conversely, winds generally flow from the north on clear days, changing the traffic flow from south to north. SEA experienced north flow approximately 33% of the time and south flow about 67% of the time in 2025—which is typical of an average year at our airport.



Graph below depicts monthly north flow and south flow percentages throughout 2025. During the winter months, and into spring, SEA is typically in south flow operations.

Month	Flow	Percentage
2025-01	North Flow	27%
	South Flow	73%
2025-02	North Flow	19%
	South Flow	81%
2025-03	North Flow	12%
	South Flow	88%
2025-04	North Flow	47%
	South Flow	53%
2025-05	North Flow	40%
	South Flow	60%
2025-06	North Flow	43%
	South Flow	57%

Month	Flow	Percentage
2025-07	North Flow	46%
	South Flow	54%
2025-08	North Flow	45%
	South Flow	55%
2025-09	North Flow	40%
	South Flow	60%
2025-10	North Flow	29%
	South Flow	71%
2025-11	North Flow	17%
	South Flow	83%
2025-12	North Flow	14%
	South Flow	86%

Runway Operations

SEA runway use is broken down by percentage of arrivals/departures on each runway in the table below. 16R/16C/16L are runway ends used during south flow operations while 34L/34C/34R are used for north flow operations. Runway usage is determined at the sole discretion of the FAA.

2025	16L	16C	16R	34L	34C	34R
January	37.3%	2.2%	33.6%	12.3%	0.3%	14.3%
February	41.4%	2.8%	37.1%	8.6%	0.2%	9.9%
March	44.4%	2.8%	33.6%	12.3%	0.3%	14.3%
April	26.7%	2.9%	23.7%	21.2%	0.8%	24.8%
May	28.6%	4.2%	27.0%	18.0%	1.0%	21.2%
June	27.7%	3.4%	26.3%	19.2%	1.0%	22.5%
July	26.1%	3.1%	24.5%	20.8%	1.4%	24.2%
August	25.6%	3.3%	24.3%	21.3%	1.3%	24.2%
September	30.3%	3.2%	28.8%	17.6%	0.6%	19.5%
October	34.9%	3.5%	32.3%	13.5%	0.6%	15.3%
November	41.8%	2.4%	38.6%	7.9%	0.3%	8.9%
December	43.4%	2.3%	40.2%	6.5%	0.3%	7.3%
Total for Year	33.3%	3.1%	30.8%	14.9%	0.7%	17.1%



Noise Abatement Flight Procedures

Noise abatement flight procedures are specific headings and altitudes that aircraft utilize during operation to minimize noise impacts on the surrounding communities. Years ago, the FAA, in cooperation with the Port and local communities, established the procedures. They were designed to take advantage of existing geographical and compatible land-use conditions, where possible. For example, the Duwamish industrial area, Elliott Bay and the Puget Sound provide opportunities for aircraft to fly over non-residential areas to the north of SEA.

The maps, on pages 17 and 18 of this report, depict the noise abatement procedures that are monitored for arrivals and departures. These procedures are used, air traffic and weather conditions permitting, to the maximum extent possible.



Although the FAA has sole authority over aircraft in flight, the Port, as operator of SEA, has taken the lead responsibility for monitoring and reporting jet air traffic activities as they relate to compliance with noise abatement procedures. Data from the Noise Programs flight tracking system is used to monitor aircraft and flights are evaluated every month for each of the noise abatement procedures. This information is used to track trends, show improvements, and identify problem areas. Results are shared with the FAA in an effort to improve compliance.



Noise Abatement Flight Procedures - North Flow

The table below presents the number of aircraft operations that flew the different noise abatement flight procedures for **north flow**, with the table additionally outlining the air carriers rate of compliance with the Noise Abatement Procedures in 2025.

North Flow Procedures	Operations Monitored	Met Objective	Success Rate
Initial Departure – turns to the east			
Daytime (6am to 10pm)	42,035	41,960	99.8%
(does not apply to nighttime hours)			
Initial Departure – turns to the West			
24 hours per day	26,751	26,596	99.4%
Elliott Bay Departures			
Nighttime (10pm to 6am)	10,188	9,556	93.8%
(does not apply to daytime hours)			
North-flow Totals	78,974	78,112	98.9%

Operations Monitored = Total flights for the year;

Met Objective = Total number of flights that followed the noise abatement procedure



The North Flow Initial Departure Corridor is in use 24 hours per day. However, once jet aircraft have passed through the North Flow Initial Departure Corridor, they should only be turned east during daytime hours. The west side of the corridor extends 5 nautical miles and the east side extends 8 nautical miles.

The Duwamish/Elliott Bay Departure Corridor is in use during the nighttime hours, between 10 p.m. and 6 a.m. Once through the initial departure corridor, jet aircraft are turned westward while remaining over the Duwamish industrial area and Elliott Bay. Once over Elliott Bay/Puget Sound, aircraft should not recross the shore-line until reaching an altitude of at least 10,000 feet.

Noise Abatement Flight Procedures - South Flow

The table below presents the number of aircraft operations that flew the different noise abatement flight procedures for **south flow**, with the table additionally outlining the air carriers rate of compliance with the Noise Abatement Procedures in 2025.

South Flow Procedures	Operations Monitored	Met Objective	Success Rate
Initial Departure – turns to the East			
24 hours per day	55,854	54,772	98.1%
Initial Departure – turns to the West			
24 hours per day	33,761	33,484	99.2%
Arrivals from the East			
24 hours per day	72,659	72,490	99.8%
Arrivals from the West			
24 hours per day	70,518	70,374	99.8%
South-flow Totals	232,792	231,120	99.3%
Operations Monitored = Total flights for the year; Met Objective = Total number of flights that followed the noise abatement procedure			



The South Flow Arrival Corridor is in use 24 hours per day. The objective of the western arrival procedure is to have jet aircraft remain north of West Seattle when arriving, preferably over Elliot Bay, if air traffic allows. Or, when arriving from the east, aircraft stay north of the 520 Bridge then initiate the turn to approach the airport.

The South Flow Initial Departure Corridor is in use 24 hours per day. This corridor is intended to confine departing aircraft to a narrow flight path straight out from the runways. Aircraft may initiate a turn once they have reached 5 nautical miles and at least 3,000 feet in altitude.

Late Night Noise Limitation Program

The Late Night Noise Limitation Program is a voluntary program designed to reduce late night noise at SEA Airport by encouraging air carriers to fly during less noise-sensitive hours or transition to quieter aircraft. The program was developed to increase air carrier awareness of the impact of aircraft noise on local communities.

- Focuses on the hours of 12:00 a.m. to 5:00 a.m. to help alleviate late night aircraft noise within the community
- Captures noise levels for any take-offs and landings between these hours using four close-in airport noise monitors; noise level data collection began in 2019
- Reports out any individual exceedances of noise thresholds to the public and air carriers on a quarterly basis
- Port staff meet with individual carriers periodically to discuss program results
- A penalty score is assigned as part of the Fly Quiet Incentive Program if an operation exceeds an established noise threshold
- Sound Exposure Level (SEL) is the metric the program uses to measure aircraft noise at the four monitors. SEL is measured in decibels and represents the total sound energy from an aircraft operation at a given location.

Air Carriers with the highest number of Late Night Noise exceedances in 2025

Air Carrier	Exceedances	
ATI – Amazon Prime Air	152	
FedEx Express	88	
EVA Airways	72	
China Cargo Airlines	64	
Cargolux	61	

Sound Insulation Programs - Acceleration Overview



As part of the Port's long-term commitment to communities surrounding the airport, the Port offers sound insulation for eligible properties within the current FAA approved noise remedy boundary. On February 25, 2020, the Port Commission adopted Motion 2020-04 to implement the acceleration of the airport's noise mitigation (sound insulation and acquisition) programs with direction to complete prior to 2026.

The Sound Insulation Program made significant progress in all target segments of Single-Family Homes, Apartments and Places of Worship. The focused effort has been to reduce the front-end process from outreach to construction-ready by reducing the time between each step. There were 200 apartment units and one residential unit completed in 2025. Construction began at two Places of Worship. Construction is on pace to complete all designed apartment and Places of Worship in 2026.

An additional seven-unit Apartment applied in 2024 and was confirmed as eligible via acoustic testing. Design work was completed in early 2025 with construction planned for 2026.



Sound Insulation – Apartments

Within the Noise Remedy Boundary, 18 apartments were identified as eligible for the Sound Insulation Program.

The Apartment Sound Insulation process includes outreach, acoustic testing, design & measuring, acquiring an avigation easement and lender subordination prior to products being ordered and construction being performed. This overall process generally takes two or more years.



Outreach Campaign and Applications

A multi-phase outreach campaign was developed to engage apartment property owners and encourage participation in the Sound Insulation Program. The outreach packet included the owner application, the Sound Insulation Handbook, and a press release summarizing the 2020 Sound Insulation Acceleration Motion approved by the Port Commission. To date, 15 of the 18 properties have submitted applications to participate in the program.

Acoustic Testing

The initial phase of acoustic testing commenced in Q4 of 2021, encompassing three properties, with additional testing conducted in the following years. In 2025, no new acoustic testing was performed for apartment applicants. To date, 13 properties have undergone acoustic testing, with one property determined ineligible for participation in the Sound Insulation Program based on test results.



Documents and Contracts

Of the 15 apartment properties that initially applied to participate in the program, four properties chose to opt out, and one was deemed ineligible after Acoustic Testing, resulting in 10 properties moving forward with the Sound Insulation Program in 2025. Participation in the Sound Insulation Program requires the Port to secure several key documents, including a Participation Agreement, an Avigation Easement, and, in certain cases, a Subordination Agreement. Staff successfully obtained all required documentation from the first nine participating apartment property owners in 2002 and the additional property owner in 2024.

Design and Briefing

In 2025, revisions to the mechanical specifications required the design team to revisit seven apartment complexes to re-verify mechanical components and confirm that the updated equipment dimensions would fit within each unit without reducing usable living space. These changes prompted minor design adjustments across multiple units to meet the new mechanical requirements.

Following this review, an updated design phase was initiated, resulting in a revised scope of work that incorporated all necessary modifications. Of the seven complexes originally included in the mechanical upgrade plan, one property chose to opt out, removing it from the mechanical improvement program.

Before construction began, staff also conducted construction expectation briefings for the properties scheduled to start work in 2025. These sessions helped property owners and managers understand the construction process, anticipated timelines, and potential operational impacts. The briefings also outlined safety protocols and explained how staff and contractors would coordinate to minimize disruptions.



Construction

Construction for the Sound Insulation Program commenced in May 2025 and is scheduled to continue through 2026. By the end of 2025, 200 of the 327 units were completed, moving the program closer to its goal of reducing interior noise levels in the neighborhoods surrounding the airport. Notably, one of the complexes that began construction is among the largest to apply, consisting of 112 units, representing a significant portion of the overall program scope.



Year	Apartment complexes	Apartment units
2025	3	200
2026	7	127
Total	10	327

Sound Insulation - Single Family Homes

Outreach Campaign and Applications

In 2025, staff performed outreach to potentially eligible homeowners. Before conducting outreach, staff checks each property for an ownership change and includes a complete handbook in their first mailer. The number of potentially eligible properties is down to 60, and most recent applicants are new homeowners. In 2025, one new application for the program was received. This home, and one applicant from 2024 that had requested a pause until 2025, underwent acoustic testing.

Homes	Applicants
2023	3
2024	1
2025	1
Total	5

Briefing

The Sound Insulation briefing provides homeowners with the opportunity to further learn about the Sound Insulation process, required program documents, and an opportunity to ask questions. Homeowners review documents and elect if they would like to proceed to the next step.

Acoustic Testing

To be eligible for the Program, the average interior noise level of eligible rooms within the homes must test at, or greater than, 45dB DNL.

Acoustic Testing	Homes Tested	Properties Tested Eligible
2023	2	2
2024	1	1
2025	2	2
Total	5	5

Documents and contracts

Participation in the Sound Insulation Program requires the Port to obtain the Participation Agreement, Avigation Easement, and in some cases, a Subordination Agreement. Staff worked with homeowners on their documents and finalized the documentations and field capture of design in 2025.

Design and Construction

Homes	Homes w/Completed Construction
2023	8
2024	3
2025	1
Total	12

In 2025, one home completed construction and two homes entered the design phase for planned construction in 2026.

Sound Insulation - Condos

Briefings

With no new applicants, we did not have any briefings with any new condominium associations. We continue to monitor those still potentially eligible and keep in contact with the HOAs. .

Acoustic Post Construction Testing

We did not conduct any acoustic testing in 2025 due to not having any new condominium applications.



Sound Insulation - Places of Worship.

Within the Noise Remedy Boundary, seven Places of Worship were identified as potentially eligible for the Sound Insulation Program.

The Places of Worship Sound Insulation process includes outreach, acoustic testing, design & measuring, acquiring an avigation easement and lender subordination (if needed) prior to products being ordered and construction being performed. This process will take more than two years.



Outreach Campaign and Applications

An outreach campaign was designed to capture the interest of the Places of Worships in the Sound Insulation Program. Outreach packets included Owner Application, Entry & Access Agreement, Places of Worship Sound Insulation Handbook, and the Press Release that outlined the 2020 Sound Insulation Acceleration Motion approved by commission. In 2025, staff did not continue outreach to any Places of Worship that had not yet applied to the program.

Status	Places of Worship
Application Received	5
No Response	2
Total	7

Acoustic Testing

The initial acoustic testing for Places of Worship was initiated in the second quarter of 2022 to the five properties that applied. Out of the five properties tested, one property did not test eligible for the Sound Insulation Program. In 2025, no additional applicants were received; therefore, no new acoustic testing was performed for Places of Worship.

Acoustic Testing	Places of Worship Tested	Places of Worship Tested Eligible
2022	5	4

Sound Insulation – Places of Worship



Briefing

With design briefings completed in 2023 and 2024, no additional design briefings were conducted in 2025. However, staff recognized the importance of preparing the participating Places of Worship for the upcoming construction activities. Throughout 2025, staff worked with each site to identify major events and activities within each congregation to help minimize construction-related impacts. Once this information was gathered, it was shared with the contractor to allow for schedule adjustments that would reduce disruptions during key activities.

Prior to the start of construction, staff also provided construction expectation briefings to the two Places of Worship beginning construction in 2025. These sessions helped stakeholders understand the construction process and anticipated timeline, as well as potential impacts on daily operations. The briefings also outlined safety protocols and described how staff and the contractor would coordinate efforts to minimize disruption.



Design work for the Places of Worship began in 2023. The design process includes several key steps, beginning with a preliminary field visit to gather the building and property information needed to prepare the design and scope of work. During this visit, the team documents existing site conditions, develops floor plans, and measures all windows and doors.

Due to the 2024 cyberattack, the bidding process was postponed until late 2024 that caused delays in the finalization of the contractor agreement. After a new contractor was selected at the end of 2024, staff conducted a field measurement visit with the contractor in early 2025 to verify window dimensions, allowing window orders to proceed. Staff also worked closely with the contractor to develop a construction timeline that would minimize disruption to the Places of Worship during crucial activity periods.

Sound Insulation - Highline School District

In 2002, the Port, FAA and Highline School District entered a Memorandum of Agreement (MOA) which would support sound insulation upgrades in 15 schools through a \$100 million-dollar joint investment by the Port and FAA. To date, 11 of the 15 schools have been completed.

Pacific Middle School will represent the 12th school with its bond measure receiving voter approval in November. The Port and FAA will be investing \$3.389 million in the project, which will support 950 students. The new re-built school has a planned opening of August 2027.

	School	Completed/ Target Date
1	Madrona Elementary	2003
2	North Hill Elementary	2005
3	Mt Rainier High	2005
4	Sunnydale (Closed)	2006
5	Cedarhurst Elementary	2006
6	Midway Elementary	2008
7	Parkside Elementary	2009
8	Olympic (Closed)	2013
9	PSSC (Puget Sound skills Center)	2014
10	Des Moines Elementary	2021
11	Highline high School	2022
12	Pacific Middle School	2027
13	Beverly Park Elementary	TBD
14	Southern Heights elementary	TBD
15	Hilltop Elementary	TBD

Noise Programs - Internship

This year, the Noise Programs hosted four high school interns for a period of six weeks. The interns were tasked with creating videos focused on the different aspects of Noise Programs, which aimed to educate the public about airport noise, its impact, and strategies for mitigating noise in the surrounding airport communities. Each video was designed to engage viewers through informative content, providing insights into the importance of noise mitigation and the various programs in place to address the noise issues. These videos were created to be published on the Port's Noise Programs website, offering a valuable resource to both the community and others that are interested in noise management work the Port has in place.



In addition to video production work, the interns gained valuable insights into the day-to-day operations of the airport. They observed how different departments collaborate to ensure smooth functioning and learned about the logistical and regulatory challenges involved in managing different airport activities. The interns also participated in interview practice sessions, which helped them refine their communication skills and build confidence for future professional interactions. They also received personalized resume suggestions to improve their job search readiness, with a focus on highlighting the skills and experience gained during their internship.

Furthermore, they engaged in discussions with various airport staff, attended informational workshops, and toured various airport facilities. These experiences provided a comprehensive understanding of both airport management and the importance of effective communication in professional settings.



Sound Insulation Repair & Replacement Pilot Program (SIRRPP)

Outreach

Work began on the SIRRPP in 2025 by providing Commission with the Technical and Commission Reports in January. Following completion of the reports, staff conducted outreach to homeowners in the current Noise Remedy Boundary whose homes had been insulated before January 1, 1993. The initial round of outreach was sent on March 12th and went to the potentially eligible homes in the 66-69 DNL noise contours. The outreach material was translated into the Port's Tier 1 and Tier 2 languages and mailed on 3 separate occasions. The last round of outreach went to the remaining homes in 65 DNL noise contour on October 22nd and November 19th with collection of applications continuing into 2026.

DNL	Homes	Applied
66-69	262	135
Remaining NRB	209	73
Total	471	208

Acoustic Testing

To be considered eligible for SIRRPP, homes that applied would need to undergo acoustic testing and achieve an Average Interior Noise Level of 45dB DNL or above. Of the 135 homes that applied for SIRRPP, 117 were tested during the initial round of Acoustic Testing. Testing dates that occurred in 2025: June 2 - 13, July 7 - 18, August 11 – 22, and September 15 – 26.

Homes Applied	Homes Tested	Homes Eligible
135	117	5

Documentation

With the initial Acoustic Testing round complete, five of the 117 homes tested eligible. Two of the five homes decided not to continue with the program for varying reasons. The remaining three homes advanced into the documentation stage. Since homes in the SIRRPP have already been insulated, they already have an Avigation Easement and Subordination Agreement (if needed) on their title. Homeowners in SIRRPP are required to sign, and have notarized, a Release of Claims that will then be filed through King County to be placed on their title.

Design

The design phase of SIRRPP began in December 2025 with initial design visits from Port staff, program consultant C&S Engineers, and subsequent subcontractors. Blueprints of the homes' layouts were sketched, as well as product identification, hazardous materials testing, and previous home conditions all captured on site. Future design visits would continue into 2026 that would include product selection, homeowner signoff, and measurement walks. Construction is currently planned for 2026.

SEA Stakeholder Advisory Round Table (StART)

Noise Programs contributes to the SEA Stakeholder Advisory Round Table (StART) in a technical advisory role, specifically to the Aviation Noise Working Group, a subcommittee of StART.

Since StART was formed in 2018, the Noise Working Group has explored several issues related to aviation noise, including late night noise, how noise comments and complaints are captured, third runway usage, runway glideslopes, departure profiles and continuous taxi to takeoffs. In addition, Noise Programs staff guided actions related to a comprehensive Ground Noise Study at SEA, another initiative developed through StART.

StART receives quarterly reports from Noise Programs staff on the Port's Late Night Noise Limitation Program, including a tally of late-night noise exceedances by each airline and by type of aircraft. Regular updates were also provided that included late night runway usage, monthly noise comment totals, monthly aircraft go-around data and sound insulation program information.

Noise Working Group accomplishments in 2025:

- Engaged specifically with Air Transport International (which operates on behalf of Amazon's Prime Air) due to high numbers of Late Night Noise exceedances
- Provided comprehensive overview of aircraft missed approaches/go-around operations at SEA that included comparisons with other commercial airports
- Noise Working Group members participated in three Technical Review Committee meetings associated with the Part 150 Noise and Land Use Compatibility Study Update

Looking ahead to 2026, Noise Programs staff at StART will continue to look for opportunities to address the sources of aircraft noise at SEA. Staff will assist in outreach efforts to our airline partners promoting the published language regarding reverse thrust, continuous taxi to takeoffs and use of minimal thrust when taxiing in gate areas. Additional meetings with carriers with high numbers of late-night noise exceedances will continue into the new year.

Learn more: https://www.portseattle.org/page/StART_Partners

Airport Noise Programs

www.portseattle.org/environment/airport-noise-programs

206-787-5393 or toll-free 1-800-826-1147

