PREFACE AND SUMMARY OF THEMES IN COMPARISON MATRIX

Recently, members of the Burien Quiet Skies coalition began questioning Sea-Tac Airport's compliance with Part 150 regulations (14 Code of Federal Regulations, Part 150) and FAA's oversight of delayed implementation of noise abatement and mitigation policies dating to 1985. Consequently, our organization decided to complete a matrix comparing FAA's June 2014 Record of Approval (ROA) of Sea-Tac's 2013-2018 Part 150 Study with earlier examples of state and regional agencies' direction regarding inadequate noise reduction measures by the Port of Seattle (POS). This document was collaboratively compiled and is being shared with members of the coalition, elected officials, and public audiences to create meaningful oversight and prompt environmental justice action that has been—too long—denied to vulnerable populations within our South King County communities:

- Historically, POS has regarded sound mitigation of homes within eligible contour boundaries a low priority; consequently, hundreds of homes have not been insulated by the POS. In addition, many homes received inferior sound insulation improvements as a result of the POS' earliest sound insulation program.
- Why are there no noise modeling results for the period of 2007-2019; a twelve-year gap where POS is out-of-compliance with the FAA's 2013-2018 Record of Approval for Sea-Tac's Part 150 Study because decibel levels appear to have increased precipitously?
- Many noise abatement procedures recommended as long ago as 1996 remain un-implemented despite high level discussions by publicly-supported "blue-ribbon" panels (i.e. Expert Arbitration Panel's Review of Noise and Demand/System Management organized by Washington State Department of Transportation and Puget Sound Regional Council and the POS' StART committee). Why has FAA allowed this to occur?
- Why hasn't FAA held POS accountable for Alaska Airlines' Greener Skies Initiative (Required Navigation Performance (RNP) route) not meeting its intended environmental
 goals despite concentrating noise and emissions along a specific route over heavily populated areas of Puget Sound?
- When was the last time that Sea-Tac Airport was subjected to a *performance audit* by FAA or federal auditors of its noise management program? A recent internal POS financial audit of the sound insulation program revealed lax financial oversight and very, very slow implementation of noise mitigation efforts.
- There is evidence that Sea-Tac Airport's latest noise contours are outdated and unreliable because the FAA's April 2018 CATEX report to the City of Burien (in response to its litigation) included FAA's own noise analyses (because FAA admitted it could not rely on POS's latest 2013-2018 Part 150 Study) that revealed areas of Burien that had previously been located in the 40-45 dB DNL—but now at least 5.2% of that area--had new noise levels greater than 65 dB DNL, which is the decibel DNL (day-night level) that triggers eligibility for noise mitigation. Yet, the POS insists that it must complete its expensive SAMP (Sustainable Airport Master Plan) expansion first, despite ever-increasing flight operations that pollute with noise and toxic emissions.

Comparison of Expert Arbitration Panel's Review of Noise and Demand/System Management Issues at Sea-Tac Airport in March 1996¹ and FAA's Record of Approval of Sea-Tac's Part 150 Noise Compatibility Program²

To the people living in communities surrounding Sea-Tac Airport (Burien, Normandy Park, Des Moines, Sea-Tac, and Federal Way), aircraft noise is a constant lifestyle and health issues. When homeowners purchased their homes, there was either tolerable aircraft noise or none at all. However, unconstrained growth has shifted the so-called "balance" between livability to outright incompatibility with neighborhoods of families, retired folks living on fixed incomes, and economically-challenged populations that qualify as eligible for environmental justice. Consequently, local cities are demanding to know how much progress POS (Port of Seattle) has made on program elements contained in its latest 2013-2018 Part 150 Study by requesting current information using FAA's Record of Approval (ROA) released in June 2014 (that included only newly-opened third runway, not ALL three runways) as described in the matrix below and other program elements dating back to POS' first Part 150 Study in 1985.

Juxtaposed here is another "update" of all the incomplete and unfinished noise abatement and mitigation conditions outlined for the Port as a condition for building the third runway. There are meaningful quotes from a 50-page report also listing outstanding noise issues. One relevant quote from WSDOT and PSRC's (Puget Sound Regional Council) March 27, 1996 FINAL DECISION ON NOISE ISSUES on page 8: "As a result of the abatement and mitigation programs instituted by the Port under the 1990 Noise Mediation Agreement (NMA), the general direction of aircraft noise levels (measured objectively by noise monitors) has been downward since the PSRC General Assembly enacted Resolution A-93-03 in April 1993. The amount of change may be small, but it is not zero. When we rendered our January 1995 Noise Order, however, the panel determined that the Port had the burden of showing that the reductions in noise impacts were 'significant' or 'meaningful,' we held that some reductions, while desirable and beneficial, might be too small to be sufficient to satisfy the Resolution. Accordingly, we find that the noise reduction condition of Resolution A-93-03 is not satisfied by the mere existence of a slight downward trend in DNL and SEL, since 1993." WSDOT and PSRC March 27, 1996 FINAL DECISION ON NOISE ISSUES, page 8.

In summary, this document seeks to provide a diagnostic comparison of what the airport was directed to do as far back as 1990-1996, to a list of unresolved noise abatement and mitigation issues and directives from POS latest Part 150 Study. The comparison is intended to help assess whether there has been "significant" or "meaningful" progress by the POS; or are the apparent redundant failures in compliance evidence of the need for a cultural and systemic overhaul? Communities are frustrated by what is perceived as repetitive excuses and inaction. This document underscores that this perception is in fact, reality. It is stunning to see the same issues recycled more than two decades later with continued deterioration for the people living in impacted communities. The comparison suggests regulators have failed whether through lack of discipline, effort, desire, or negligence, to follow-through with holding the POS accountable for noise and air pollution.

¹ Washington State Department of Transportation and Puget Sound Regional Council's FINAL DECISION ON NOISE ISSUES by the Expert Arbitration Panel's Review of Noise and Demand/System Management Issues at Sea-Tac International Airport, March 27, 1996 (URL: https://seatacnoise.info/?s=PSRC+Final+Decision+on+Noise+issues.)

² Record of Approval, Federal Aviation Regulation Part 150 Noise Compatibility Program, Seattle-Tacoma International Airport, Seattle Washington, June 2014. (URL: http://www.airportsites.net/SEA-Part150/documents/SEA/20NCP%20Approval%20letter%20to%20sponsor%20-%206-14.pdf)

Expert Arbitration Panel's Review – March 27, 1996	FAA'S ROA of Sea-Tac's Part 150 Study – 2013-2018	Requests for Progress on Abatement & Mitigation
"2. That the demonstrated results of the noise abatement and mitigation programs the Port has "scheduled, pursued, and achieved" since 1989/1990 do not provide evidence strong enough to establish, with any degree of confidence, that there has been a "meaningful" reduction of real, on-the-ground impacts sufficient to satisfy the noise condition of Resolution A-93-03; and 3 ³ . "That the Port is not likely to achieve significantly more reduction in real, on-the-ground noise impacts in the near future with the abatement and mitigation measures it has scheduled to date and is currently pursuing." Page 37 of 50.	Element #1 – "voluntary rescheduling of aircraft flight times (earlier or later) of nighttime short-haul flights by jet aircraft" Element #2 – "This measure uses very high frequency (VHF) omnidirectional range (VOR) radials to curb departing aircraft from drifting off the runway heading tracks as specified in the Tower Order. Aircraft noise and overflights are reduced for areas that are not beneath the existing departure corridors."	Request: How often and how many, if any, nighttime flights have been granted "voluntary" status (short-haul or otherwise) since 1985 when voluntary rescheduling was first enacted? Request: While "voluntary" since 1985, is it still being implemented; and if so, how often? What are the statistics?
Recommendations from Expert Panel: "g. Continue to work with the airlines to minimize nighttime engine run-ups, we note that, although many of the events are exempt from the King County Code, the exempted nighttime events have levels higher than the code permits. Existence of an exemption does not mean elimination of the impacts on people." Page 40 of 50	Element #3 – "This measure was included in the 2002-2007 NCP updated to address maintenance run-upsThis measure is recommended to be modified to reflect the currently implemented run-up restrictions as outlined below: "All engine run-ups require approval of Airport Operations. No aircraft engine Run-ups shall be conducted during the nighttime quiet hours of 2200-0700. Engine run-ups necessary for maintenance checks above idle power not to exceed a total of two (2) minutes durations per aircraft."	Requests: How often is this modified measure actually approved by Airport Operations; and how many engine runups exceed the two minute duration limit? How many times have these operations been disclosed per this element and how many fees have been collected? Also, have engine runups occurred in locations not approved by the Director? What are the decibel levels of typical engine run-ups?
"a. Negotiate and obtain a public commitment from the FAA for full cooperation in rigorously and aggressively enforcing compliance with the current North Flow Nighttime Departure Noise Abatement Procedures Better, the Port should institute procedures to apply pressure, through enforcement	Element #4 – "This measure directs aircraft to follow the established noise abatement corridor during nighttime, thus reducing noise and overflights of areas outside the corridor."	Request: Since this is a "voluntary" measure, how many times a week/month/year is this measure utilized? Records of compliance and deviance should be provided.

³On page 3, "In April of 1993, after studying the conclusions of the Flight Plan report and environmental review documents, and in an effort to find the best method of meeting the region's long-term commercial air transportation needs, the Regional Council General Assembly...adopted Resolution A-93-03, which called for the region to pursue both a major supplemental airport and, subject to conditions, a third runway at Sea-Tac Internationa". (URL: <a href="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-Runway-Decision-Process?bidId="https://snohomishcountywa.gov/DocumentCenter/View/9328/PSRC-3rd-

reduce violations (for example, publishing fines and performance scorecards in the Region's newspaper's)." Page 39 of 50 "4. That the Port address the impact of ground-related aircraft noise by (i) implementing the thrust-reversal noise impact reduction activities called for in the Noise Mediation Agreement; and (ii) working to minimize the number, level. and duration of daytime engine run-ups, which are likely to increase as operations grow." Page 39 of 50 "d. Evaluate, with FAA and community input, the potential net benefits of a noise abatement departure profile employing a steeper angle of climb, coupled with an expanded residential acquisition and insulation program if, as a result of a steeper departure profile, the 75 dB DNL contour expands in the immediate vicinity of the airport while areas father out receive benefits." Page 41 of 50

penalties and/or the power of public opinion in the media, to

Element #5 – Development and implementation of a Fly Quiet Program. It was recommended to include:

- "Aircraft noise should be related to its effects on people including such factors as annoyance, speech interference and sleep disturbances;
- Comparative fleet quality between airlines should also be included;
- The program should utilize measured data from the Airport's noise monitoring system;
- A method of normalizing data to account for airlines that most efficiently serve the region's air transportation needs should be developed;
- Incentives of sufficient importance that airlines will take notice of the results; and Pilots and air traffic controllers should be included, if possible."

Requests: Have all six elements of this measure been implemented; and if so, what are the statistics for compliance by all airlines? How does the POS respond to airlines/aircraft that do not participate, or are found in violation of Fly Quiet recommendations? By what means does the POS determine compliance with Fly Quiet recommendations since the "use of the monitoring equipment for enforcement purposes" is not permitted by the FAA?

"There is little doubt that, absent important new initiatives, the Port's current noise abatement efforts will have little additional effect. The steady growth in aircraft operations expected by the Port – which provides the essential justification for constructing the new runway – is already slowing the small DNL improvements the Port has achieved in recent years, and is likely to undermine any additional noise reduction the Port may achieve in the future. In this context, the Port's noise mitigation efforts will become increasingly important; insulation is one area where the Port can readily take additional action. But even a substantially expanded mitigation program can ultimately provide only partial indoor relief." Page 38 of 50

Element #6 – Use of FMS (Flight Management Systems)
Procedures (aka RNP—required navigational performance, such as NextGen, and Greener Skies Initiative). "The Port is responsible for initiating coordination with the FAA and airlines on evaluating potential new FMS procedures. The FAA will work with the Port and airlines to determine if any other FMS procedures are feasible and would provide noise mitigation. The NCP analysis and preliminary FAA evaluation determined that FMS procedures and corridors recommended in the NCP were not feasible and could severely impact on airspace capacity in the area. Approval of this measure does not commit the FAA to implementing new procedures." (Bolding of this note was not added; it was

This measure was also approved in POS' 2002-2007 Part 150 Study. Requests: What are the performance statistics regarding reduced noise impacts and have they actually been realized as promised and has there actually been a reduction in fuel consumption as promised, especially in neighborhoods like Beacon Hill in Seattle and on Vashon Island, and elsewhere? Some recent studies deny the POS claims and are critical that any benefits from this type of FMS application have occurred at POS.* Why does this measure reference FMS procedures, instead of more legitimately referenced RNP measures? Is it to mask the real purpose of these procedures that concentrate noise and emissions? Haven't complaints increased among neighborhoods affected by the Greener

^{*} Reference http://aireform.com/faa-industrys-own-data-exposes-greener skies-a... published as Aviation Impact Reform: FAA/Industry's Own Data Exposes 'Greener Skies' as an Environmental Fraud, December 11, 2017.

	bolded in the document.)	Skies initiative? What actual statistics can POS provide that substantiate the claims denied by researchers? What impact has the Greener Skies Initiative had on airspace capacity? Is that why no others have been recommended?
	Element #7 – The POS withdrew this measure; therefore, the	
"g. Continue to work with the airlines to minimize nighttime engine run-ups, we note that, although many of the events are exempt from the King County Code, the exempted nighttime events have levels higher than the code permits. Existence of an exemption does not mean elimination of the impacts on people. 6. That the PSRC, the FAA, and the communities affected by airport noise participate actively and constructively in the Port's upcoming Part 150 review, to propose, evaluate, and assist in implementing any feasible noise reduction measures that will maximize the net benefits for the region and provide meaningful noise mitigation for the impacted area. "Page 40 of 50.	Element #8 – Construct a Ground Run-Up Enclosure (GRE) on the airport to minimize run-up noise. The POS recommended this measure in both its 2002-2007 Part 150 Study and also its 2013-2018 Part 150 Study. "This measure recommends the construction of a GRE based on the recommendation of the ongoing GRE Siting Study and a future GRE Design Study." However, the current SAMP (Sustainable Airport Master Plan) compiled in May 2018 (while the latest Part 150 Study was still in effect) does not include construction of a GRE, or a facility commonly known as a "hush-house." (Emphasis added.)	The POS recommended this measure in both its 2002-2007 and 2013-2018 Part 150 Studies. Well-meaning members of the affected communities did positively participate in the 2013-2018 Part 150 Study, only to have their recommendations over-ruled by the POS staff and commissioners. Requests: Why would this critical element and proven method of double-digit (15-20 dB) noise decibel reduction around three potential GRE sites that was included in two Part 150 Studies be rejected in favor of increased passenger facility development on the POS airfield? Why did this POS priority slip to non-existent?
 "Turning to the longer periods of evaluation which the Port has advocated, we observe that, had the Port accelerated its Residential Insulation Program just 18 months sooner – in January 1992, rather than in mid-1993 – it could have insulated an additional 2,000 homes by December 1995; 50 percent more than it did, in fact, complete by the end of 1995.	Element #10 – Standard Insulation. "This measure includes the sound insulation for eligible single-family residences within the revised Noise Remedy Boundary as depicted on Exhibit 6-1 in the NCP. The Port has an ongoing program to sound insulate eligible single-family residences within the currently (sic) Noise Remedy Boundary that was established in	1. Request: Was this simply an attempt by noise managers and consultants to understate projected increased flights and noise? Was it a method to reduce expenditures for sound insulation? For example, the latest Part 150 Study projected 366,000 operations (arrivals and departures) in 2018, yet the
Had the Port accelerated the program three years sooner, in mid-1990, an additional 4,000 homes could have been insulated by now. Doing so would have more than doubled the number of homes insulated by December 1995, from 3,647 to approximately 7,600. The number of people benefiting from that reduction in indoor sound levels would have also more than doubled, from 8,570 to about 18,000. Instead of a Residential Insulation Program about one-third completed, the Port would have presented this Panel with an important mitigation program that was approximately 75	the 1985 NCP. Completion of the single family sound insulation program was also an element of the Judy 3, 1997 Record of Decision for the Master Plan Update for the inclusion of the new third runway. Since that time, noise exposure has decreased at Sea-Tac Airport due to ongoing noise abatement efforts and the phase-out of older, louder aircraft and the lower number of operations. As a result, the noise exposure contours development for this Part 150 Study are much smaller than the noise exposure contours developed for the 1985 Part 150 Study upon which the Noise	actual number was 438,391! More operations means more noise and more air emissions misjudged by nearly 20%! Additionally, POS does not intend to conduct another Part 150 noise compatibility study until 2021 except perhaps for the noise created as a result of SAMP construction. 2. Request: What happened to the NEMs/NCP for the time period between the 2002-2007 Part 150 Study and the 2013-2018 Part 150 Study that only modeled use of the third runway and sound mitigation was

percent completed. We also note that the residents of those homes would have received the benefits sooner and would be enjoying them today." Page 28 of 50.

"We have nevertheless concluded, on the basis of all the evidence before us, that the ultimate results of these efforts, in terms of real on-the-ground noise impacts for the communities affected by Airport noise have not been sufficient to satisfy Resolution A-93-03. Many people at the Port, including its noise consultants, have labored long and hard to develop and implement abatement and mitigation programs; substantial resources have been dedicated to the effort; yet many people in the Region remain severely impacted by airport noise." Page 32 of 50

"On the mitigation side, the single-family residential insulation program could have been accelerated earlier, as we have previously discussed and the public buildings and multi-family residential insulation programs could have been pursued much more vigorously. In light of the Port's lack of progress on insulation projects after construction of the second runway, we believe it would have been in the Port's best interest to move as decisively as possible in carrying out its commitments under the 1990 Noise Mediation Agreement." Page 36 of 50

"We have also carefully reviewed the extensive documentation the Port and other parties provided on the size, nature, and effectiveness of the Port's noise mitigation projects under the Noise Remedy Program. We have found that the Port's mitigation work is effective in producing real indoor (closed-window) noise relief for the residents of insulated homes, but that the scope of the Port's scheduled insulation program remains incomplete with respect to schools, other sensitive-use public buildings, and multi-family

Remedy Boundary was based. It is recommended that the Noise Remedy Boundary be modified to be more consistent with the Future (2018) NEM/NCP noise exposure contour developed for this 2013 Part 150 Update."

The description of this measure is inaccurate and inflammatory for the following reasons:

The statements highlighted in red are completely misleading: During the five-year period of this latest 2013-2018 Part 150 Study, flight operations at POS increased dramatically. One POS document declared an increase of 33% from 2014-2016 alone.

based upon that runway alone? What about residences affected by the other two runways; why haven't they been noise modeled and mitigated?

3. Request: How many times was the FAA standard of a 1.5 dB increase in flight operations to trigger new Part 150 Study been exceeded since 2002-2007? Even the FAA's April 2018 CATEX report to the City of Burien in response to their litigation included noise analyses that indicated that areas of Burien that had previously been located in the 40-45 dB DNL, at least 5.2% of that area, had new noise levels of 65 dB DNL and greater, which is the decibel DNL that triggers eligibility for noise mitigation.

- 4. Request: Current sound insulation efforts focused only on use of the third runway. They do not include any eligible or qualified residences requiring mitigation from the other two runways since 2002-2007! Why were they ignored?
- 5. Request: Why did it take POS almost four years from the time the 2013-2018 Part 150 Study was approved in June 2014 to the fall of 2018 to hire a sound insulation contractor and begin this phase of mitigation? Why should homeowners have to wait until the POS gets its act together; or wasn't it a sufficiently high priority?

Element #11 – Insulation of Schools – "This measure includes a sound insulation program for eligible schools. A pilot program was initiated according to the original measure from the 1993 NCP update to determine the feasibility, procedures requirements, and costs, for sound insulating four public buildings based on the Building Committee recommendations....This measure is ongoing. As of August 2012, sound insulation has been installed in seven schools within the Highline School District, (that fall within the DNL 65

Requests:

1. Had the POS not just noise modeled the use of the third runway, but actually noise modeled all three runways, 24/7 in its 2013-2018 Part 150 Study (since there had not been any noise modeling since 2002-2007), wouldn't the Highline Community College funding been approved by FAA because the number of flight operations and concomitant decibel levels would have exceeded the 65 dB DNL?

give 13,2018 FAA guidance memarandum fr. Katherine andrag (AEE-400) re: NEPA responsibilities, dwellings. The Port's mitigation efforts, while substantial, have not yet reached, or been "scheduled" to reach in any concrete sense (i.e., with an explicit timetable and commitment of resources), a large enough portion of the affected population to allow us to conclude that, in combination with the abatement results, the resulting overall reduction in noise impacts has been "enough" to meet the test imposed by Resolution A-93-03." Pages 36-37 of 50

dBA) with eight schools remaining. Fourteen of 22 eligible buildings at the Highline Community Collee have also been sound insulated."

"FAA Determination: Approved in part and disapproved in part. The 2002 ROA approved the measure stating that insulation of schools within the 65 dB DNL will be based upon negotiated agreements between the Port, school districts/education facilities and FAA. The Port, FAA, and the State signed an MOA with the Highline School District on June 4, 2002 agreeing to fund eligible sound reduction elements of reconstruction of 15 schools. This agreement is still in place and allows the sound insulation of the schools outlined in the MOA using FAA AIP, Port and State funding; therefore, this measure remains approved. However, the FAA notified the Port on November 4, 2013 that the Highline Community College will no longer be eligible for AIP funding due to the campus location being outside the newly revised noise remedy boundary. Therefore, sound insulation of the Highline Community College is disapproved." (Bolding not added; it is contained in the original ROA signed by FAA in June 2014.)

- 2. Why was it such a low priority for the POS to postpone sound insulation in schools where children's and young adults' health and learning ability is at stake? Decades of research (Transportation Research Board (TRB), Airport Cooperative Research Program (ACRP), Federal Interagency Committee on Aviation Noise (FICAN), to name a few) reveal the deleterious effects of aircraft noise on a learning environment exist replete with case studies and results and are readily available to the POS managers and port commissioners.
- 3. Did the POS ever consult any scientific reports published by FICAN (or others mentioned above)?
- 4. Where is the environmental justice for these children and young adults? Not only as it relates to noise, but air pollution as well. What about the health and welfare of airfield workers?
- 5. Did anyone in the POS Noise Office or consultants, or Commissioners ever consult any of these documents? Are they aware the World Health Organization (WHO) recently released a report lowering the noise standard to 45 dB DNL during daytime hours, and 40 dB DNL during nighttime hours?
- 6. Not only was there no noise modeling from 2007 to 2019 of all three POS runways, there is now considerable evidence that aircraft emissions—particularly ultra-fine particles—enter the human body, even the brain. On May 17, 2019, *The Guardian* (theguardian.com) published an article by Damian Carrington, where he claims air pollution may be damaging "every organ in the body." Had there been sound insulation, mandated ventilation systems—both in-home and in-school—carcinogens would have been filtered out. School employees and children have

	been unnecessarily exposed because the POS commissioners and managers decided that sound insulation is a low priority.
Element #12. Property Advisory Service – "This measure provides residents and property owners within the Airport Environs with access to timely and factual information concerning 1) what noise remedies they may be eligible for assistance with making decisions when they are eligible for multiple options, 3) information regarding rumors about th mitigation program (either good or bad), and 4) assurances that the various programs are indeed aimed at improving the living, working and leisure time environment. This two-way communication can also provide the Port with information about the concerns of the residents/property owners and communication of the residents/property owners and communication can also provide a means by which the success or failure of program can be monitored."	 Systems (NPIAS) for 2019-2023, and on Page 1 writes: "Airports should be safe and efficient, located where people will use them, and developed and maintained to appropriate standards; Airports should be compatible with surrounding communities, maintaining a balance between the needs of aviation, the environment, and the

	two-way communication maybe the only contact the public has with the POS, it's critical that this communication is without reproach. Is it? 5. Have sound insulation written materials been provided in multiple languages or have pubic notices been translated into multiple languages in order to reach the diverse populations that reside in Burien and other south King County cities? Are translated materials readily available to diverse populations online? 6. Has the POS conducted any environmental justice analyses on the effects of noise and air emissions on low income or ESL populations? It is a federal requirement to do so. 7. Why is it apparently a low priority for the POS to take three years to sound insulate 40 homes when nearby King County Airport insulated nearly 100 homes/year? (Source: POS Audit from 2013-2019; Report No. 219-04)
Element #13 – Local Government Remedy Support "By insulating homes and assisting with real estate transactions, the Port can participate in making the Airport and surrounding residents better neighbors. However, the Port alone cannot accomplish all program goals. Local governments, with land use jurisdiction must also participate if the program is to be a success, especially in the long term. Under this measure, the Port encourages local jurisdictions to undertake projects, provide services, and adopt laws that reinforce neighborhoods and make them compatible with the Airport."	1. Given the self-serving nature of this noise remedy measure, it's important to examine the statutory authority of a local government compared to a "special purpose district" such as the POS because it has an entirely different mission under Title 53-25-100 RCW: unconstrained economic development! Whereas, municipal governments have a myriad of primary duties, including but not limited to, coordination of municipal services, law enforcement, collection of taxes and other revenues, land-use planning, maintenance of public facilitiesincluding streets and roadsand has the responsibility to protect the health, welfare and safety of residents in their communities; whereas, the POS last year

removed the requirement that it would "ensure a sustainable quality of life" for King County residents from its bylaws and mission statement.
2. How would the POS propose that local jurisdictions "adopt laws that reinforce neighborhoods and make them compatible with the Airport" when the POS is a 24/7 operation that has managed to avoid rigorous mitigation for its increasing operations by deliberately not catching up on its noise modeling obligations since 2002 to the present, and postponing any new noise modeling until 2021, after the SAMP construction is completed. (Please see requests associated with Element #21.)
3. Perhaps state law should require the POS' infrastructure improvements in the multi-million and billion dollar range subject to voter approval similar to what is required of Sound Transit so that there would be more transparency in the infrastructure improvements included in the Sustainable Airport Master Plan.
4. The POS governance has been questioned by state lawmakers in the past. Maybe Port Commissioners should be elected within separate districts so that they represent the geographical areas most impacted by POS facilities.
5. How does the POS assist with real estate transactions? Is it to provide decibel level and frequency of flights underneath POS flight paths? If so, how many real estate transactions do not occur because of this information? How many times per month is POS asked to provide this information? What type of follow-up occurs with real estate agents? Doesn't the POS know that property tax revenues are the lifeblood of cities, so how could they possibly "undertake"

		projects, provide services, and adopt laws that reinforce neighborhoods and make them compatible with the Airport" when property values decline and new residents are discouraged by environmental claims of excessive noise and air pollution?
	Element #14 – Funding for Land Use/Noise Compatibility Planning – This measure encourages public agencies to conduct land use/noise compatibility planning consistent with the principles and guidelines of 14 CFR Part 150 and the Port noise compatibility goals; however, the funding source is not identified.	Request: Is the funding provided by the POS, the FAA, or other entity since this measure is incomplete without that information?
"d. Work with the PSRC and the affected communities to design and implement alternative noise-compatible uses of the land within the current acquisition zone. We note that the acquisition program has some very strong critics because of its adverse effects on the quality of neighborhoods for the remaining houses and businesses." Page 41 of 50	Element #15 – Approach Transition Zone Acquisition. This measure recommended that the Port purchase residential properties experiencing noise levels of 65 dBA or greater, ad located within the Approach Transition Zones (ATZ) of Runway 16R/34L.	Request: How would a homeowner know whether or not their property was located within the ATZ of these runways since the Part 150 Study is outdated and contains inaccurate noise contours?
	Element #16 – Prepare Cooperative Development Agreements. The POS and the surrounding jurisdictions should work towards development of cooperative development agreements concerning land use, redevelopment of infrastructure of the ATZ, as well as other redevelopment areas as necessary.	Request: Same as listed above for Element #15.
	Element #17 – Sound insulate eligible tenant-occupied multi- family units (apartments) within the modified Noise Remedy Boundary as a Pilot Project.	Request: What is the disposition and status of this measure by the POS?
	Element #18 – Offer avigation easements to owners of individual lots on which mobile homes are located within the modified Noise Remedy Boundary.	Request: The POS fails to offer any motivation to an individual lot owner for signing away their legal air rights for such properties, especially since their mobile home is not eligible for sound insulation; and any newly constructed residence is not eligible for sound insulation according to FAA regulations.

Element #19 – Initiate a formal study to evaluate the noise levels at churches/places of worship located within the Noise Remedy Boundary for eligibility for sound insulation.	Request: What is the status of this "formal study"?
Element #20 – Evaluate and Upgrade Noise Monitoring and Flight Tracking Systems.	Requests: What is the status of this evaluation; and have any new system updates occurred and at what cost? If new system features have been added (i.e. new data or reports from each noise monitor, etc.), how are they being used to better communicate with the public and complainants?
Element #21 – Periodically review and, if necessary, update the Noise Exposure Maps (NEMs) and the Noise Compatibility Program (NCP). "The NEMS should be updated every five years or when there are significant changes in operating levels and patterns in accordance with the FAA's guidelines for determining what constitutes a potentially significant increase in operations (1.5 dB DNL increase in the area impacted by 65+ DNL). The NCP should be updated every five years, or as necessary, to reflect any broader changes in the nature of aircraft noise surrounding the Airport. Should any on-airport development, such as runway extensions or significant modifications to ground facilities, enlarge the area of incompatible use exposed to aircraft noise above 65 Day-Night Average Sound Level (DNL), the NCP should be updated prior to the implementation of those improvements. A full update may not be required, but rather, a targeted assessment of the changes occasioned by specific development projects may suffice to bring the NCP to conformity and to qualify additional areas for NCP programs, if appropriate. (Color added for emphasis.)	1. How is it possible that the POS has not already begun a new, comprehensive Part 150 Study—or at a minimum new NEMs? There are possibly hundreds—or more—of people living in homes where the decibel level is 10-20 decibels higher than it would be if it had been sound insulated and properly ventilated! What illnesses could have been avoided because of sleep deprivation or carcinogens in the air that is breathed even in a home's interior spaces? The laundry list of illnesses is stunning, yet people suffering will have to wait until 2021 or later? Why, because the POS doesn't have the time or resources? This is an immoral travesty perpetrated on people for no other reason that the POS—for some reason—does not want to acknowledge that each and every aircraft operation means more deadly noise and more deadly air pollution. 2. Why is the POS ignoring that there have been twelve years since there was a comprehensive Part 150 Study completed for 2002-2007? Why did the POS skip over all those years until they published a Part 150 Study on operations solely of the third runway? Why did they neglect the hundreds, if not thousands, of people who used to live in "quiet" areas—like Seahurst in



Burien—where some* (5.2%) have experienced a 20 decibel increase in DNL, and all decibel levels increased except that 60% remained in the below 45 dB DNL level? Remember: this CATEX (Categorical Exclusion for Letter of Agreement Update to Automate a 250 degree Westerly Turn for Southbound Turboprops When Seattle-Tacoma International
Airport is Operating in North-Flow Between the Hours of 6 am and 10 pm) was published the same year (2018) that the existing Part 150 Study ended. This is a clear irrefutable indication that decibel levels have increased and more residences are now eligible for noise mitigation!
3. FAA's own noise analyses contained in its April 2018 CATEX includes a rationale* for completing its own noise analyses within the Study Area, which is roughly Seahurst neighborhood in Burien, downtown Burien, parts of White Center and West Seattle. In the CATEX, FAA acknowledges that the current POS 2013-2018 Part 150 Study is inconsistent with reality In 2018 and this fact compelled FAA to conduct its own noise analyses within the General Study Area.
4. This is critical because at the time the CATEX was written in 2018, the POS' Part 150 Study was in full force and no noise modeling updates had occurred, nor were they planned sooner than 2021! Therefore, FAA was declaring that they could not rely on this Study as a determination of decibel contour levels;

^{*} On page 35 of Section 5.2.7, fourth paragraph that begins "As FAA started preparing NEPA documentation for the Preferred Alternative, the first noise analysis results were compared to the noise contours from SEA Part 150 Study dated October 2013. FAA discovered that the noise exposure levels in the Turboprop-Only Analysis were not consistent with the Part 150 noise contours. This resulted in FAA conducting a second noise analysis that used all arriving and departing aircraft to account for the noise from all aircraft operating within the General Study Area."

	and it's important to note that the NEMs demonstrated that the majority, if not all, of the General Study Area had previously been within the 40- 45 dB DNL. It's apparent to the residents living within surrounding Sea-Tac communities that the FAA is an inadequate steward of the Airport's regulatory compliance; and it appears that FAA is unwilling to step up to the challenge contained in its own Record of Approval! 5. Why hasn't the POS offered a window replacement program for those residences sound insulated after the 1985 Part 150 Study when window vendors went bankrupt; no ventilation products were offered to filter out dangerous carcinogens, where there was inferior and inconsistent contractor workmanship, and mold and mildew resulted; yet homeowners were required to sign an avigation easement forgoing their rights to litigate and they agreed they would only be eligible for sound insulation once!
Element #22 – Continue to operate the Noise Office. This measure was recommended to continue operation of the Noise Office; and FAA approved it.	Request: Given all the issues outlined in these Requests, it is apparent that the Noise Office management has a cozy relationship with FAA and together they have denied hundreds or more of local residents' environmental justice in the form of "balance" for living within an unhealthy area extensively polluted by the POS.

CONCLUSIONS

What these comparisons illustrate in great detail and with historic accuracy is that POS Commissioners and senior staff have deliberately redirected Port resources away from addressing the noise and health concerns of local communities. Since the late 1980s and early 1990s to the present time, noise abatement and mitigation have continually received low ranking when Port priorities were decided. Consequently, the livability of homes and schools near Sea-Tac Airport were relegated to "distressed" status. Realistically, there has been no balance between growth expectations expressed by Port officials and the health and living standards of people affected by excessive noise and air pollution. Leadership at the POS has demonstrated a habitual and legal disregard for its moral responsibilities to local residents. From the contents of this comparison, there is a clear history where the POS systematically delayed and avoided aggressive sound insulation programs. They have ignored the public's outcry for relief and jeopardized local economies. Excessive noise that's plagued homeowners, school children, and airport workers for nearly three decades were viewed as less compelling than passenger services, new gates and terminals. While illnesses and toxic air combine to sicken the old, the young, and other vulnerable people, as well as low-income populations living around Sea-Tac Airport, the POS exhibits extravagant designs for new and larger development. In summary, areas around Sea-Tac Airport have: highest noise levels in the State; highest poverty levels in King County; health risks and disparities including asthma and cancer; dense population with double the average children per household; risk, exposure and negative health outcomes in the 90-100th percentile for a large percentage of census tracks around the airport; according to University of Washington, aircraft related ultra-fine particle impacts highest under flight paths and no ideas, plans, or costs associated with mitigating this from the POS.

WHAT HAPPENS AROUND AN AIRPORT WHEN MORAL RESPONSIBILITY AND ACCOUNTABILITY DISAPPEAR?

Highest poverty and health disparities connected to Sea-Tac Airport

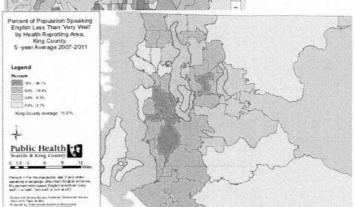


Highest poverty and health disparities

in the region mirror the areas with the

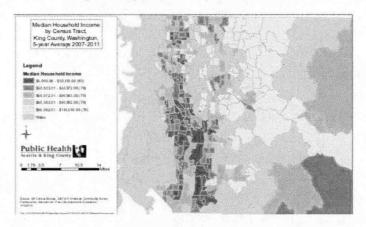
highest noise impact and follow the

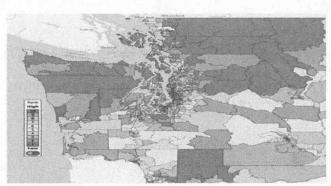
flight path. Blue teardrop is Sea-Tac Airport



King County Health and Economic Maps: Disproportionate impacts of pollution in King

King County Health Maps: Low Income





Language barrier in King County