

COMMUNITY INPUT



A. APPROACH

This study sought input from the community through:

- A series of 1-to-1 and small group stakeholder interviews composed of citizens, homeowners, business owners, and other interests in the study area cities.
- Two public workshops presented the study to the community. The first public workshop introduced the scope and schedule and requested citizen input via comment boards in an “open-house” format. The second public workshop shared early draft observations in a more formal presentation, with additional dialogue and comment by the public.

The consultant team also met monthly with the TAC as noted in Section 1. The TAC provided guidance and input to the consultant team but was not a formal public input process, and the meetings were not considered public meetings.

B. STAKEHOLDER INTERVIEWS

Each study area city was asked to name eight to 10 people to be interviewed as stakeholders for this project. During the months of June and July 2019, 48 people were interviewed in 36 sessions, either 1-to-1 or in small groups. These individuals represented a cross-section of people in the study area cities with various interests, including current and former elected officials, city staff, residents, business owners, and others. Sessions lasted from 30 minutes to two hours each – most were one hour.

As a beginning point for each interview, each stakeholder was asked the same two questions:

1. What are the benefits of living/working near Seattle-Tacoma International Airport?
2. What are the challenges of living/working near Seattle-Tacoma International Airport?

Stakeholder input will help identify areas of primary concern within the study area through the sharing of anecdotal experiences. This will help identify areas to be addressed that may not be currently mitigated. It will also help identify areas in need of further study (or areas where data does not exist).

It is important to note that the stakeholders did not speak with a unified monolithic voice. Responses generally varied by location:

- Stakeholders to the west and south cited **noise** and **air quality** much more frequently than in other areas.
- Stakeholders to the northeast and east tended to have more issues with noise from Boeing Field/King County International, noted more concerns with **traffic**, and were interested in methods to increase **economic development**.

The following areas were noted by the stakeholders. (Individual stakeholder interviews are summarized anonymously in Appendix B.)

Benefits

The 2020 study is considering both the positive and negative effects associated with operations at Seattle-Tacoma International Airport. Despite previous concerns stated by the public, it would be inaccurate to say there are only complaints. In the stakeholder interview process, there were positives noted associated with being near Seattle-Tacoma International Airport, including:

- economic benefit
- accessibility
- convenience.

Economic benefit comes generally in the form of increased **tourism** revenue – especially associated with hotel taxes, retail sales, and other similar revenues. There are thousands of hotel rooms in the Cities of SeaTac and Tukwila, and while airport proximity is not responsible for all their reservations, stakeholders noted the relationship did help economically. Tukwila also has a major attraction in the Westfield Southcenter Mall, which attracts millions of visitors annually throughout the metropolitan area, the region, and elsewhere. This is compatible with those who are flying into Seattle for shopping purposes.

Economic benefit is also associated with having a **major employer** in the study area. This includes jobs not only with the Port of Seattle, but also with the individual airlines and the myriad of support services they employ. However, many stakeholders also noted the desire for more better-paying jobs at or near Seattle-Tacoma International Airport.

Proximity also makes Seattle-Tacoma International Airport both **accessible** and **convenient** to study area residents. Some employers/employees and residents in the City of SeaTac can walk to the terminal. Others may also be able to bike to the terminal. These modes are a unique feature not found in many U.S. airports.

While proximity was viewed as a positive, it has a flip side in that it also results in more local traffic and congestion, especially on the local roads and highway interchanges with direct terminal access. Stakeholders noted some periods of excessive congestion, including holiday periods.

These represent the benefits that stakeholders would like to see capitalized so that the study area cities share in the benefits and opportunities afforded by Seattle-Tacoma International Airport.

Challenges

The second question asked stakeholders to identify challenges associated with Seattle-Tacoma International Airport. The top challenges noted were:

- **Noise**

It was not unexpected that this would be the top concern, especially of those stakeholders living in cities that are beneath approach and departure paths. Noise was a primary concern especially for stakeholders south and west of Seattle-Tacoma International Airport, including:

- Take-offs/landings over residential areas, including late-night passenger and cargo flights
- NextGen procedures that concentrate operations in a narrower and more compact noise contour zone
- Mid-field overflights by smaller regional aircraft (such as the Bombardier Q400s).

Noise concerns were not limited to operations aloft. There were concerns about noise associated with on-field operations, including:

- Reverse thrust on landing
- Throttle-up to taxi to gates
- Late night maintenance run-ups.

Noise mitigation was also voiced as a concern. Stakeholders reported failure of previous mitigation renovations (such as window systems). Others also noted that previously mitigated homes are not eligible for additional mitigation. And in both cases, there is no feasible method to mitigate outdoor areas.

▪ **Air quality**

Aircraft were also cited as concerns with air quality, usually noted in connection with noise concerns. Concerns noted by stakeholders included:

- Substance on structures, pools, and decks attributed to jet fuel (but not independently tested): Some stakeholders said they could “smell kerosene or jet fuel.”
- Damage to landscaping and lawns (inhibited plant growth)
- Negative effects on human health
- Poor air quality depresses home values relative to other areas in the region.

Some stakeholders discussed a research project by the University of Washington regarding ultrafine particulate matter (UFPs). That study is known as “Mobile Observations of Ultrafine Particles” (MOV-UP) and is researching particulate matter that is less than 100 nanometers in diameter. The MOV-UP study is a separate and parallel research effort that is not connected with the 2020 study. Results from MOV-UP may not be available until after the release of the 2020 study.

Some stakeholders referred a 2007 study performed by the European Regional Office of the World Health Organization (WHO), entitled “Health Relevance of Particulate Matter from Various Sources,” that raised concerns about the toxicity of particulate matter. While not a part of any current U.S. federal, state or regional regulations, the consultant team reviewed the WHO study to determine potential relevance to the 2020 study.

▪ **Public health**

Both noise and air quality/pollution were noted as having adverse effects on public health. Some stakeholders reported cancers, cardio-vascular disease and other health issues in their neighborhoods.

Some stakeholders cited the MOV-UP and WHO studies as proof of a connection between airport operations and adverse public health. However, the MOV-UP study has not reached conclusions as of this writing, and the WHO study calls for more study to determine UFP effects on human health.

▪ **Mobility**

These issues paralleled the previous comments about proximity, noting areas of congestion and traffic volume, particularly regarding accessing Seattle-Tacoma International Airport and on-airport congestion.

While Sound Transit Light Rail was generally seen as a positive, it has not shifted enough drivers to transit to significantly reduce local traffic congestion.

Stakeholders from the City of SeaTac noted that they were experiencing some illegal overnight parking that may be attributable to airport visitors, workers or travelers. The City of SeaTac has implemented a permit parking program in a residential neighborhood near Seattle-Tacoma International Airport to address the concern.

▪ **Relationship**

Stakeholders often cited a lack of trust and/or a deteriorating relationship with the Port of Seattle and the Federal Aviation Administration. The following issues were often cited as the reasons for the poor relationship:

- Airport operations have increased since 2011, but its effects have not been acknowledged by the Port of Seattle.
- Stakeholders say the third runway is used daily, which is a “misrepresentation” of how it was originally proposed (to be used only for landings during inclement weather).
- Since Port of Seattle Commissioners are elected at-large; “they are not accountable” to the study area cities.
- Stakeholders have concerns that the Port of Seattle’s primary driver is economic development over the concerns of the area communities.

It is important to note that issues surrounding the relationship with the Port of Seattle are not uniform across the study area, and sometimes vary within each city. For example, officials from the City of SeaTac report a good relationship with the Port of Seattle and point to an interlocal agreement between the two entities as an example.

▪ **Socio-economic effects**

Stakeholders reported that while home values have increased, the rate of increase is lower than other areas (such as in Seattle, Bellevue, Mercer Island, Medina, etc.).

Some stakeholders also noted that South King County is a “dumping ground” for undesirable uses, such as the Federal Detention Center and the airport. But direct causality to the airport was not provided.

This raises the question: Did the airport locate in South King County because it was a “low-income area” or did it cause it to decrease in value over time? (This is one of the questions this study will attempt to address.)

▪ **Public Safety**

Some stakeholders noted that the study area is subjected to some “crimes of opportunity” including:

- Thefts from baggage claim area (bags are carried out by thieves and taken across the street to areas in the City of SeaTac, where the discarded suitcases are left on residential lawns.)
- Car theft due to high number of parked cars at and around Westfield Southcenter Mall, the consolidated car rental garage, hotels and nearby short/long-term parking lots
- Prostitution and drug activity near area hotels.

Stakeholders noted that many crimes were no worse or no better than in other areas, and that many of these “crimes of opportunities” are occurring because of the presence of major destinations (retail centers, hotels, airport) that naturally attract thousands of vehicles. But few stakeholders reported other crimes that were directly attributable to Seattle-Tacoma International Airport.

C. PUBLIC WORKSHOP #1

On July 24, 2019, a workshop was held to present the study to the public. The workshop was conducted in the cafeteria of Tye High School (in the city of SeaTac) from 6 – 8 p.m. A total of 96 people signed in for the workshop, although more people were observed at the workshop than signed in. It is estimated that between 100 and 110 people attended. Figure 4.1 shows the sign-in sheets, and Figure 4.2 shows the breakdown of attendees by city who signed in.

Figure 4.1
Public Workshop #1: Sign-In Sheets

PLEASE SIGN-IN
PUBLIC MEETING #1 - July 24, 2019
Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Name	Which City Do You Live In?	Name	Which City Do You Live In?
Jyndal Barvar			
Steve Edmiston			
Glenn Erickson	Seatac		
Doreen Harper	Des Mo		
Jeremy Nottby	Des Moines		
Kent Palosani	Seatac		
J. Harris	Des Moines		
Blanche Hill	NP of Des Moines		
Primo Pells m into Morrow	Seatac		

PLEASE SIGN-IN
PUBLIC MEETING #1 - July 24, 2019
Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Name	Which City Do You Live In?	Name	Which City Do You Live In?
Shirley Krest	Des Moines		
LINDA WONG	SEA/BETH		
Cathy Boyson	Stachholder		
Heiberg	Represent Seatac		
JAG BASRA	Seatac		
Nancy Robinson	Des Moines		
Carol Mohler	Des Moines		
TRECI BURTON	SEA TAC		
Jay Johnson	Des Moines		
Wanda Roney	Unincorp. King Co.		
Samantha Mark	DES MOINES		

PLEASE SIGN-IN
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Name	Which City Do You Live In?	Name	Which City Do You Live In?
Mary Paynter	DM	JANICE TAYLOR	SEATAc
Rob BARK	D.M.	Michael Matthews	Des Moines
TRACI BURTON	Des Moines	Wendi Pickarel	Seattle-Central
Royan Tadd	Seatac	LOUISE WESSA	FEDERAL WAY, WA.
Tajvir Basra	Seatac	Helen Edmiston	Des Moines
Jag Basra	Seatac		
JUDY WILLIAMS	SEATAc		
Cynthia Stanley	Seatac		
RAY OVERHOLT	Seatac		
Sim Cho			

PLEASE SIGN-IN
PUBLIC MEETING #1 - July 24, 2019
Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Name	Which City Do You Live In?	Name	Which City Do You Live In?
JINDO OLGA	Des Moines	Shan Tombs	Seatac
BILL RYORDAN	BURDEN	SOPHIA ARABON	BURDEN
SHERA CHO	Normandy Park	Cristina Fishchenko	Federal Way
Andrea Rucy	Burien	Sergey Zhenakov	Federal Way
Joe Scaris	Tacoma	Shayn Parker	Burien
Marin Kypach	Burien	Jean Fay	Keat
Bob Sanders	Burien	Bill Adams	Des Moines
Ryan Grogan	Des Moines	JIM ORWELL	Des Moines
JOHN OBER	Seatac	Cecilia Lind	Federal Way
Pam Farnold	Seatac	Jeff Heiberg	Normandy Park

PLEASE SIGN-IN
PUBLIC MEETING #1 - July 24, 2019
Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Name	Which City Do You Live In?	Name	Which City Do You Live In?
Paige Stiles	BURIED	Mike Pijan	Seattle
SUSAN WHITE	Des Moines	Lorraine Madhe	Burien
David Rehelem	Rent	Deirdre Cub	Seattle
Linda Rehelem	Rent		
Peter Kwon	Seatac		
Brian Wilson	Burien		
Claire Smith	Des Moines		
Ann Anna	Des Moines		
John Shurker	Normandy Park		
Michelle Ishimaru	Seattle		

PLEASE SIGN-IN
PUBLIC MEETING #1 - July 24, 2019
Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Name	Which City Do You Live In?	Name	Which City Do You Live In?
LUCY	Des Moines	Leslie Baker	Seatac
Kathleen Shear	Normandy Park	Peg	
Bob & Sandy Bisardi	Des Moines	Stuart Jensen	Normandy Park
Scott Kennedy	Seattle		
Kris Johnson	Seattle		
Tallie Golan	Seatac		
Rick Johnson	Redondo Beach		
JANE BOYSEN	NORMANDY PARK		
Carolyn Cloutier	Seatac		
Stacy Oaks	Seattle		

PLEASE SIGN-IN
PUBLIC MEETING #1 - July 24, 2019
Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Name	Which City Do You Live In?	Name	Which City Do You Live In?
Vicki Lockwood	Seatac	Susan Ceasar	City of Des Moines
Pat Coogan	BURDEN	Amy Gregory	Shoreline
Jim McMillen	BURDEN	The Boyers	Normandy Park
Roscoe Holmes	Seatac	Mark Volkers	Normandy Park
Kathy Scott	Des Moines	BRETT FISH	NORMANDY PARK
DANA HALLAWAY	FEDERAL WAY	Kirri Milne	BURDEN
Nina MacInez	Seattle	Olivia Jaskin	Des Moines
MARG BRADY	SEATTLE	M. Chan	Bacon Hill, Seatac
Anne Kroecker	Des Moines		
Att Mahony	Des Moines		

Figure 4.2
Public Workshop #1: Attendance by City

City	Attendees	Percentage
City of Burien	10 people	10.4%
City of Des Moines	31 people	32.3%
City of Federal Way	6 people	6.3%
City of Normandy Park	9 people	9.4%
City of SeaTac	22 people	22.9%
City of Tukwila	0 people	0.0%
Outside the study Area	18 people	18.8%
TOTAL	96 people	100.0%

Source: Stantec Public Workshop sign-in sheets

More than half of the attendees (55.2%) represented the cities of Des Moines and SeaTac. A little less than 20% of the attendees were from outside the study area – from Seattle, Kent, and unincorporated King County. Only the city of Tukwila did not have anyone in attendance who signed in (there may have been attendees from Tukwila who did not sign in).

During this first workshop, the public had the opportunity to meet with members of the consultant team and ask questions regarding various aspects of the study. This was a chance to introduce the study to the public – no findings or analyses were presented.

Attendees were also asked to write their comments on a large comment board. A total of 89 comments was received. Figure 4.3 shows the breakdown of comments by type.

Figure 4.3
Public Workshop #1
(photo by Stantec)



Figure 4.4
Public Workshop #1: Comments

General Topic Area	Comments	Percentage
Comments about Noise	31	34.6%
Comments about the study Approach	13	14.6%
Comments about Air Quality/Environment	11	12.4%
Comments about Port of Seattle	11	12.4%
Comments about the Workshop	7	7.9%
Comments about Transportation	5	5.6%
Comments about Public Health & Safety	5	5.6%
Comments about the study Area	4	4.5%
Other Comments (not related to the study)	2	2.2%
TOTAL	89	100.0%

Source: Stantec Public Workshop comment cards

The comments received at public workshop #1 have been transcribed and are listed in Appendix B. They are summarized as follows.

- **Comments about noise (31 comments)**

Noise was the most-often cited concern among those in attendance – more than one-third of all comments involved noise, including the following:

- Noise has increased in the last few years.
- Noise disrupts sleep patterns, especially from late-night passenger and cargo flights.
- Noise disrupts education at schools.
- There were more complaints in areas directly underneath flight paths.
- Noise has an adverse effect on homes and home values.

This parallels the concerns and comments received during the stakeholder interview process – noise is the #1 complaint heard from the public.

It also has contributed to other concerns, such as a deteriorating relationship with the Port of Seattle and Seattle-Tacoma International Airport (the public does not distinguish between these two entities). Many comments indicate a concern that increased operations have had a parallel increase in noise, without the port/airport seeking public input before increasing operations.

Concerns about noise also include dissatisfaction with previous mitigation strategies offered to abate noise as part of the third runway project.

Noise concerns also tended to parallel general concerns about air quality and the environment. Simply stated, if there was aircraft activity above an area, there were combined concerns relating to noise, air quality, and the environment.

- **Consultant team response** – The 2020 study is evaluating the effects of noise in the study area, both from data and from anecdotal information from study area residents and business owners.

▪ **Comments about the study (13 comments)**

There was a significant number of comments (13 comments or 14.6%) about the project itself. This is to be expected, since the purpose of this first workshop was to introduce the study to the public.

Comments regarding the study generally sought to expand the scope and approach to the project – from expanding the study area cities to doing actual environmental monitoring.

There were also other suggestions regarding the airports selected for comparison as case studies (the reasons for those airports being used as case studies has described in Section 3).

- **Consultant team response** – The study scope is defined by the contract, budget and schedule established by the Washington Department of Commerce. Those requirements were developed in concert with members of the Technical Advisory Committee (at least 5 TAC members attended the first workshop and had signed in). The scope and study area were crafted to meet the state’s real-world requirements of budget and schedule. However, should there be a continuation of this project (a potential Phase 2 study), these comments would be appropriate to consider at that time when scoping any future follow-up.

▪ **Comments about air quality and the environment (11 comments)**

These comments largely tracked those regarding noise and aircraft activity, since both concerns also involve air pollution and perceived effects on air quality and the environment.

Commenters noted concerns about residue on the ground, grass, plants, trees, structures, vehicles, and pools. While there was no indication that this material had been tested by an independent laboratory, those commenting were attributing the residue to aircraft. Some noted that they could “smell kerosene and jet fuel.”

Many of the other similar comments were linked to concerns with overall climate change. Those comments tended to want to see the study greatly expanded to account for these extant conditions.

- **Consultant team response** – Air quality and environmental concerns are included in the 2020 study scope. Data from agency sources and input from study area residents and business owners will be considered.

▪ **Comments about the relationship with the Port (11 comments)**

Those commenting did not distinguish between the Port of Seattle, Seattle-Tacoma International Airport, the airlines, or the Federal Aviation Administration. These comments uniformly blame “the Port” for all the concerns in the study area. There is a high degree of mistrust by the commenter with “the Port” and allegations of lying or otherwise not being honest and open with the public. Specific examples included:

- How the third runway is used versus how it was initially presented
- Increasing airport operations without public input
- Changing flight paths with no public input
- Poor previous experience with Port-offered mitigation packages.

This degree of mistrust was evident at the beginning of the workshop when the Department of Commerce made some brief introductory opening remarks. Some attendees immediately accused the consultant team of “working for the Port” and that the workshop was not interested in public opinion.

- **Consultant team response** – The 2020 study cannot resolve years (or decades) of previous political issues that may exist between the study area cities and the Port of Seattle. The 2020 study is objectively evaluating information from a variety of sources to attempt to identify what effects are attributable to aviation activity at Seattle-Tacoma International Airport. Both sides (cities and the Port) can further work together to help build a working relationship built on trust and mutual respect.

▪ **Comments about public workshop #1 (7 comments)**

A few commenters thought the workshop would be a formal presentation and were disappointed in the town hall/come-and-go approach. Some wanted more information than was presented, but the purpose of the first workshop was to present the scope and schedule of the project and to solicit public comment.

- **Consultant team response** – Public workshop #1 was advertised as an introduction to the study, including the format and what information would be shared. A more formal presentation was included as part of public workshop #2.

▪ **Comments on transportation and mobility (5 comments)**

Public comments regarding traffic and mobility were analogous to those from the stakeholders. Congestion, wayfinding and parking in residential areas were all noted as areas of concern.

- **Consultant team response** – The 2020 study will evaluate mobility for a variety of modes, including cars/trucks, transit (rail and bus), bicycles, pedestrians, and parking.

▪ **Comments about public health and safety (5 comments)**

A few commenters noted the ongoing concerns with South King County’s reputation as a “dumping ground” and how that affects health and safety. A few requests were made to expand the study to include more detailed health studies and risk assessments.

- **Consultant team response** – The 2020 study will evaluate effects on public health and public safety. Requests for additional studies outside of the contract scope may be warranted as part of follow-up studies.

Figure 4.5
Public Workshop #1: Presentation Boards

1 WELCOME TO PUBLIC MEETING #1

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Why We Are Here:

- To introduce the Project and the members of the consulting team;
- To share with you the Project's scope and schedule. (More detailed information on preliminary findings will be presented at the next Public Meeting); and,
- Most importantly, for you to share your thoughts and ideas with us.

Meeting Format:

- SIGN IN** Please sign in (your name and City only) and fill out a name tag.
- VIEW** Visit each Information Station to learn more about the Project.
- DISCUSS** Chat with the Consultants and share your thoughts with us.
- COMMENT** Please feel free to use the provided Post-It note pads to write your comments and place them on Board #10.

THANK YOU
for your participation and insights

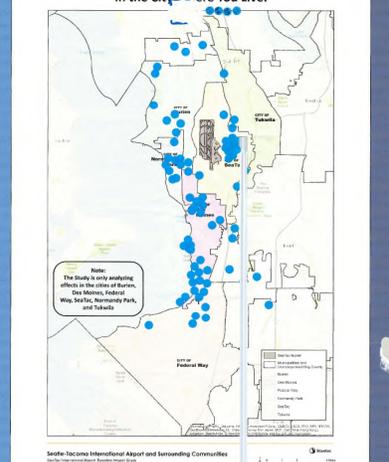
July 24, 2019
6:00 PM to 8:00 PM

Stantec BICKER CUMMINGHAM

2 WHERE IS THE STUDY AREA?

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Please Place a Colored Adhesive Dot in the City Where You Live:



Note: The Study is only analyzing effects in the cities of Burien, Des Moines, Federal Way, Seattle, Normandy Park, and Tukwila.

Seattle-Tacoma International Airport and Surrounding Communities

July 24, 2019
6:00 PM to 8:00 PM

Stantec BICKER CUMMINGHAM

3 WHAT IS THE PROJECT SCOPE & SCHEDULE?

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Project Scope:

- Funded by a grant through the Washington Department of Commerce to review various impacts associated with operations at Sea-Tac Airport from 1997-2019 (with baselines in 1997, 2005, and 2019).
- Covers the 6 miles close to the Airport – Burien, Des Moines, Federal Way, Normandy Park, SeaTac and Tukwila.
- The Project is not anti-airport. It is not an extension of the 2007 Third Runway Study, and it does not advocate on behalf of any particular city.
- The Project is Objective, Unbiased and Independent. Both Positive and Negative impacts are evaluated.
- The Project asks: "To what extent do the Study Area Cities benefit from proximity to the Airport; and to what extent do they shoulder a disproportionate share of the costs associated with the Airport?"
- The Project will attempt to de-couple impacts associated with airport operations versus those associated with natural regional growth.
- The Project scope is defined in the contract with the Department of Commerce and includes the following:
 - Construction with other airport communities
 - Stakeholder involvement
 - Effects on Air Quality
 - Effects from noise
 - Effects from light
 - Effects on noise quality
 - Effects on air quality
 - Effects on Public Health
 - Effects on Economic Metrics
 - Effects on Public Safety

Project Schedule:

May-Oct 2019

DATA COLLECTION

- Visual Environment
- Air Quality
- Socio-Economics
- Stakeholder Involvement
- Comparative Airport Comparison

Nov 2019-Jun 2020

FINAL REPORT

- Final Findings
- Presentations to Study Area Cities
- Presentations to other groups and communities
- Deliver final report

This is where we are at the present

Aug-Oct 2019

ANALYSIS & REVISION

- Cost Assessment
- Cost Presentations to Study Area Cities
- Cost Presentations to other groups and communities
- Review and Revision as needed

The Project is to be completed by June 2020

July 24, 2019
6:00 PM to 8:00 PM

Stantec BICKER CUMMINGHAM

4 AIRPORT COMMUNITIES & STAKEHOLDER INTERVIEWS

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Airport Communities:

- The Project is researching the experience of other US international airports (of comparable acreage) located in urban areas.
- Comparable airports could include:
 - Miami International Airport (3300 acres);
 - Boston Logan International Airport (2308 acres); and,
 - John Glenn Columbus International Airport (2265 acres).
- Comparison is to determine if there are similar issues and how they were addressed.



Boston Logan International Airport

Stakeholder Interviews:

- 50+ stakeholders were interviewed during June 2019.
- Stakeholder input is used to:
 - Confirm anecdotal information; and,
 - Help establish ordinal ranking of issues.
- Stakeholders represented a cross-section of the Study Area Cities and included Elected & Appointed Officials, City Staff, Residents, and Business Owners.
- Each Study Area City named their own stakeholders to be interviewed.
- Input will be summarized but not attributed to any single individual.
- Most often raised concerns heard: **Noise, Air Quality, and Public Health**
- Positive comments heard: **Economic Benefits of the Airport, Accessibility and Convenience.**
- Issues mentioned tended to vary by geographic location of stakeholders – for example, most comments about Noise and Air Quality were raised by those south of the Airport.

July 24, 2019
6:00 PM to 8:00 PM

Stantec BICKER CUMMINGHAM

5 CONSIDERING IMPACTS FROM NOISE

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Noise Data Being Researched:

- The Project is researching Noise Issues, including:
 - An overview of Noise-related issues at Sea-Tac Airport;
 - Noise changes and impacts (including vibration);
 - Single Event Noise (SEN);
 - Noise monitor measurements;
 - Airport operations noise impacts on residences, businesses (including structures) and human health;
 - Summary of complaints; and,
 - Trend of Noise issues from 1997 through the present.
- Noise includes overflights and on-airport operations.
- Information volunteered by citizen groups and stakeholders will be reviewed and verified before being incorporated.
- Current research points to more Noise concerns in cities and neighborhoods South and West of the Airport, including Des Moines, Federal Way, and Burien.
- Documents reviewed to date include:
 - "A Review of Literature Related to Potential Health Effects of Aircraft Noise", Hales Swift (list of references): July 2002.
 - "Airport Noise and Capacity Act of 1990", Federal Aviation Administration, Washington DC: 1990 (PL 101-508).
 - "Workshop Noise and Health Effects: Recent Findings", Civil Aviation Authority, United Kingdom: 2016.
 - "Airport Compatible Land Use Program Update", Puget Sound Regional Council, Seattle, Washington: December 2013.
 - "Assessing Airport Noise Conditions Affecting Student Learning", Airport Cooperative Research Program, Washington, DC: 2017.
 - "Critical Issues in Aviation and the Environment", Transportation Research Board, Washington DC: 2014.
 - "Effects of Aircraft Noise: Research Update on Selected Topics", Airport Cooperative Research Program, Washington, DC: 2008.
 - "Environmental Noise Guidelines for the European Region", World Health Organization: 2018.
 - "FAA Modernization and Reform Act of 2012 (PL 112-055)", Federal Aviation Administration, Washington DC: February 14, 2012.
 - "Quiet and Healthy Sleep: Task Force Report", City of Federal Way, Washington: August 2018.
 - "Sea-Tac International Airport Part 150 Noise Study Update", Landrum & Brown: August 2013.
 - "Sea-Tac Sustainable Airport Master Plan" Technical Report #8 and #9, Leigh Fisher: May 2018.
- Research includes harvesting and reviewing available data, and identifying any data gaps.



History of an airport noise monitor from Noise Research Group

July 24, 2019
6:00 PM to 8:00 PM

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6 CONSIDERING IMPACTS ON AIR QUALITY

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Air Quality Data Being Researched:

- The Project is researching Air Quality issues, including:
 - A Summary of current national and relevant global standards plus proposed methodologies for the Study;
 - Air quality changes and impacts (all relevant studies), and trend of Air Quality issues from 1997 through 2019;
 - Particulate Matter – Ultra-Fine Particles (UFP) and fine particulate matter;
 - Mobile Sources – NOx (nitrogen oxides), SOx (sulfur oxides), other "smog" precursors, and CO related to traffic congestion increases; and,
 - Air Toxins – metals, aerosols, fuel venting & evaporative emissions; and other sources.
- Air Quality includes both mobile and stationary sources.
- The Project is running parallel with a UFP study being conducted at the University of Washington. Currently reviewing UW's data, as well other research (such as from the World Health Organization).
- Information volunteered by citizen groups and stakeholders will be reviewed and verified before being incorporated.
- Stakeholder input indicated concerns with particulates that may be from aviation sources which settle on structures and landscaping (material has not yet been tested by an independent testing laboratory).
- Research includes harvesting and reviewing available data, and identifying any data gaps.



Seattle as published Seattle Post-Intelligencer, April 2016

July 24, 2019
6:00 PM to 8:00 PM

Stantec BICKER CUMMINGHAM

Figure 4.5 (continued)
Public Workshop #1: Presentation Boards

7 CONSIDERING IMPACTS ON WATER & SOIL QUALITY

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Lead Firm: Stantec

Water Quality Data Being Researched:

- The Project is researching Water Quality issues including a review and assessment of changes and impacts between 1997 and 2019.
- Stakeholders noted concerns with a "film" left on the surface of swimming pools and ponds (composition needs to be verified by an independent lab).
- Research includes harvesting and reviewing available data, and identifying any data gaps.



Soil Quality Data Being Researched:

- The Project is researching Soil Quality issues, including:
 - A review and assessment of soil-related issues between 1997 and 2019; and,
 - Any changes in flora, fauna, and habitats.
- Stakeholders noted concerns with:
 - Air pollution and particulate matter impeding the ability to grow and maintain gardens, lawns, and landscaping; and,
 - An unidentified "black soot" that coats structures, outdoor decks, and groundcover (composition needs to be verified by an independent lab).
- Research includes harvesting and reviewing available data, and identifying any data gaps.



July 24, 2019
6:00 PM to 8:00 PM

Stantec RICKER CUNNINGHAM

8 CONSIDERING IMPACTS ON MOBILITY & LIGHT

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Lead Firm: Stantec

Mobility Data Being Researched:

- The Project is researching Mobility issues, including a review and assessment of:
 - Traffic congestion (travel delay times);
 - Parking in residential areas;
 - Pedestrian access to and around the airport; and,
 - Impacts between 1997 and 2019.
- Changes in Airport access since 1997 include Sound Transit Link Light Rail and ride-hailing services (such as Uber and Lyft).
- Some reports of parking by airport users in residential areas in the City of SeaTac, which has prompted a pilot parking permit program to determine if this will address residents' concerns.
- Research includes harvesting and reviewing available data, and identifying any data gaps.



Light Data Being Researched:

- The Project is researching changes in nighttime Luminosity from 1997 to 2019.
- To the extent possible, nighttime satellite and aerial photos will be used to gauge nighttime light issues (there may be some availability issues for the earlier years).
- Stakeholder input will assist in identifying potential light-associated issues.
- Research includes harvesting and reviewing available data, and identifying any data gaps.



July 24, 2019
6:00 PM to 8:00 PM

Stantec RICKER CUNNINGHAM

9 CONSIDERING IMPACTS ON PUBLIC SAFETY, PUBLIC HEALTH & SOCIO-ECONOMICS

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Lead Firm: Ricker Cunningham

Public Safety Data Being Researched:

- The Project is researching Crime statistics in the Study Area Cities between 1997 to 2019, including:
 - Human trafficking;
 - Illegal fire torching;
 - Violent crimes;
 - Harboring & property crimes;
 - Vandalism; and,
 - Vehicle crimes (including theft & vandalism).
- Research includes harvesting and reviewing available data, and identifying any data gaps.



Public Health Data Being Researched:

- The Project is researching Public Health statistics in the Study Area Cities between 1997 and 2019, including:
 - Morbidity and mortality statistics;
 - Hearing/auditory dysfunction;
 - Respiratory disease;
 - Cardiovascular disease;
 - Neurological disease;
 - Cancer; and,
 - Overall life expectancy.
- Research includes harvesting and reviewing available data, and identifying any data gaps.



Socio-Economic Data Being Researched:

- The Project is comparing Socio-Economic statistics in the Study Area Cities with jurisdictions north of the Airport, including:
 - Changes (increase/decrease) in residential and non-residential property values;
 - Constraints and/or Expansions on future residential and non-residential property development;
 - Changes in economic development opportunities;
 - Increase/decrease in housing development;
 - Increase/decrease in city tax revenues (all types);
 - Increase/decrease in employment opportunities;
 - Changes in family and individual income – increase/decrease in wages and taxes plus poverty statistics in the Study area;
 - Positive and/or negative impacts on small retail businesses; and,
 - Changes and impacts on education – school structures, academics, and student health statistics.
- Research includes harvesting and reviewing available data, and identifying any data gaps.

July 24, 2019
6:00 PM to 8:00 PM

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10 WHAT ARE THE NEXT STEPS?

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport

Next Public Meeting:

November 06

- Present an update on the Consultant Team's data collection and analysis
- Hear additional community input

Please Write Your Comments Here:

Use this space to write your comments on the project. You can also use this space to write your questions or concerns. We will be reviewing all comments and responding to them as soon as possible.

THANK YOU
for your participation and insight

July 24, 2019
6:00 PM to 8:00 PM

Stantec RICKER CUNNINGHAM

▪ **Comments about the study area (4 comments)**

A few commenters were adamant about expanding the study area to include other areas not currently defined in the state’s scope. This included a neighborhood northeast of the study area and portions of the city of Seattle.

- **Consultant team response** – The study area was established by the project contract, the state grant, and the Department of Commerce. It may be worthwhile to study these additional areas, but they would have to be addressed as a part of a future follow-up study.

▪ **Other comments (2 comments)**

There were two comments that were basically unrelated to the study. One involved the closure of a local post office. The other was promoting the benefits of hyperloop technology (currently being tested in several locations but not a proven technology yet).

- **Consultant team response** – The 2020 study has a very defined study area, scope, schedule and budget. There may be other areas and topics worthy of study that would have to be considered as part of a future follow-up study.

Public workshop #1 validated many of the comments heard during the stakeholder interview process – namely the prominence of **noise, air quality**, the **environment, transportation, public health**, and **public safety** as public concerns.

D. PUBLIC WORKSHOP #2

The second public workshop was conducted on Nov 6, 2019 at Burien City Hall (multi-purpose room/council chamber). Unlike the first workshop, this included a more formal presentation, along with a question-and-answer portion. A total of 49 people attended public workshop #2 (based on the sign-in sheets). Attendees were also asked to fill out comment cards so their questions could be part of the study document.

Figure 4.6
Public Workshop #2: Attendance by City

City	Attendees	Percentage
City of Burien	10 people	20.4%
City of Des Moines	8 people	16.3%
City of Federal Way	7 people	14.3%
City of Normandy Park	7 people	14.3%
City of SeaTac	10 people	20.4%
City of Tukwila	0 people	0.0%
Outside the study area	7 people	14.3%
TOTAL	49 people	100.0%

Source: Stantec Public Workshop sign-in sheets

Members of the Department of Commerce and the consultant team presented the initial observations of the study, which included summaries of the research and analysis of:

- Air quality
- Noise and vibration
- Mobility
- Water and soil
- Light
- Socio-economic metrics.

A Question & Answer/Discussion session followed the presentations. The attendees gave some helpful input regarding the data and their personal observations. The general tone of the questions was more confrontational than public workshop #1, attributable to residents' years of frustration with dealing with issues associated with the airport. The consultant team understands this is the result of those who have dealt with these concerns for a long time. The questions and consultant team response are detailed in Figure 4.7.

Figure 4.7
Public Workshop #2: Questions and Responses

Subject	Questions	Consultant team response
Question #1: Air Quality	<p>a) "What monitoring station is the team using to determine air quality in and around the airport?"</p> <p>b) "Acknowledge that the closest monitoring station closed in 1998."</p> <p>c) "Acknowledge that the next closest monitoring station is in Georgetown (Seattle), and it does not monitor all sources."</p> <p>d) "Acknowledge that the monitoring station in Bellevue provides full air quality monitoring, whereas it is far from the airport."</p> <p>e) "Understand the concern that the data sources appear to be unreliable and it appears to be 'fake data'."</p> <p>f) "Acknowledge that the airport accounts for 25% of the carbon emissions, but jets are exempt from the monitoring."</p> <p>g) "Acknowledge that a Normandy Park resident can smell jet fuel when outdoors at her residence."</p> <p>h) "Identify methods for better/accurate air quality monitoring."</p> <p>i) "Clarify how the project team will form their recommendations."</p> <p>j) "Clarify whether aircraft emissions and air quality will poison people. "</p>	<p>a) The EPA data is used in the 2020 study may be limited due to inoperable monitoring stations.</p> <p>b) Working and inoperable monitoring stations will be identified in the 2020 study.</p> <p>c) Working and inoperable monitoring stations will be identified in the 2020 study.</p> <p>d) Working and inoperable monitoring stations will be identified in the 2020 study.</p> <p>e) The EPA data is used in the 2020 study may be limited due to inoperable monitoring stations.</p> <p>f) EPA data is used in the 2020 study, understanding that some data may be limited or is not current.</p> <p>g) Anecdotal evidence is included in the 2020 study.</p> <p>h) Working and inoperable monitoring stations will be identified in the 2020 study.</p> <p>i) Historical data from 1997 to 2019 is used to form an assessment of effects attributable to aviation activity.</p> <p>j) Historical data from 1997 through 2019 is used to form an assessment of effects attributable to aviation activity.</p>
Question #2: Noise	<p>a) "Incorporate the noise complaint map (from the presentation) into the final report."</p> <p>b) "Include noise complaints outside the study area (e.g., Tacoma)."</p> <p>c) "Acknowledge that Federal Way has experienced population turnover; whereas, there has been in and out-migration over the years."</p> <p>d) "Clarify what are air taxis."</p> <p>e) "Identify airport impacts even though they comply with standards."</p>	<p>a) Noise complaint information is included in the 2020 study.</p> <p>b) The 2020 study is limited to the study area as defined by the grant and the Department of Commerce.</p> <p>c) Population growth in all study area cities is included in the 2020 study.</p> <p>d) Air taxis are small aircraft that make short on-demand flights. They may include helicopters and small single-engine aircraft.</p> <p>e) The 2020 study studies a variety of positive and negative effects, many of which are not governed by established standards (such as health, home values, etc.).</p>
Question #3: Noise Mitigation Program	<p>a) "Acknowledge that only one house in 2018 was retrofitted with the noise abatement program; explore why the program is not widely implemented."</p> <p>b) "Acknowledge that the criteria for retrofits make many newer homes ineligible for the program."</p>	<p>a) The 2020 study considers the previous mitigation program and its concerns.</p> <p>b) The 2020 study considers the previous mitigation program and its concerns.</p>

Figure 4.7 (continued)
Public Workshop #2: Questions and Responses

Subject	Questions	Consultant team response
Question #4: Data Sources	<p>a) <i>“Acknowledge that the data in the presentation has several errors (sources).”</i></p> <p>b) <i>“Employ caution when making recommendations to policy makers since the data sources appear to be unreliable.”</i></p>	<p>a) Data gaps or inconclusive data are noted in the 2020 study.</p> <p>b) Data gaps or inconclusive data are noted in the 2020 study.</p>
Question #5: Negative Effects	<p>a) <i>“Incorporate disproportionate impacts to less-affluent populations as referenced in the 1997 report.”</i></p> <p>b) <i>“Spell out impacts and make recommendations on how to spend public money to address impacts.”</i></p> <p>c) <i>“Clarify that the study will identify areas where the airport impacts are greater than the benefits.”</i></p>	<p>a) The 2020 study compares effects on the study area to other areas in the region.</p> <p>b) The 2020 study will make recommendations for further study, but it is up to individual agencies to determine how public money is allocated.</p> <p>c) The 2020 study will identify all positive and negative effects by study area city.</p>
Question #6: Crime	<p>a) <i>“Acknowledge concern for Tukwila crime statistics; whereas, the city’s daytime population increases with workers and shoppers.”</i></p> <p>b) <i>“Identify flaws or gaps in the data.”</i></p>	<p>a) The 2020 study is limited to issues due to aviation-related effects. Tukwila has a large concentration of retail that may also be contributing to crime concerns.</p> <p>b) The 2020 study is tasked with identifying data gaps and/or flaws.</p>
Question #7: Input	<p>a) <i>“Clarify how people can provide input through the process and the report components.”</i></p>	<p>a) The 2020 study provides multiple opportunities for public input including meetings, presentations, the TAC group, and the report, which will be posted online for draft comment.</p>
Question #8: Process & Data	<p>a) <i>“Clarify the criteria the team used to interview local stakeholders.”</i></p> <p>b) <i>“Acknowledge concern that the criteria/process was not random (since the individual cities identified the interviewees).”</i></p> <p>c) <i>“Acknowledge that life expectancy would be contributed to lifestyle/living conditions from the past.”</i></p>	<p>a) The interview approach has been described in the 2020 study.</p> <p>b) The study area cities were responsible for identifying the stakeholders to be interviewed.</p> <p>c) The 2020 study details life expectancy and potential contributing factors.</p>
Question #9: Mobility	<p>a) <i>“Explore how parking prices will affect trips and travel modes to/from the airport (e.g., people taking rideshare or other modes to be dropped off at the airport – multiple vehicle trips).”</i></p> <p>b) <i>“Explore origin and destination data.”</i></p> <p>c) <i>“Acknowledge that there is a perception that airport employees park at the Angle Lake light rail station to avoid parking fees; the parking lot is full by 7 a.m.”</i></p> <p>d) <i>“Examine the parking fees for the airport employees.”</i></p>	<p>a) Pricing incentives/disincentives are not part of the 2020 study scope but could be part of a follow-up study.</p> <p>b) Existing available origin/destination data is included in the 2020 study. More current origin/destination data could be part of a follow-up study.</p> <p>c) The 2020 study will be looking at parking patterns in and around the airport.</p> <p>d) The 2020 study will be looking at parking patterns in and around the airport.</p>

**Figure 4.8
Public Workshop #2: Sign-In Sheets**

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport		Public Workshop #2 November 6, 2019
Please <u>Print</u> Your Name & the City Where You Live		
Name	City Where You Live	
1. Jeff Cox	Tacoma	
2. Beth McCasland	Burien	
3. DANA HOLLOWAY	FEDERAL WAY	
4. John Resing	FW	
5. JEFF HARBAUGH	BURIEN	
6. JC HARRIS	Des Moines	
7. Stamora Mock	Des Moines	
8. Steve Edmiston	Des Moines	
9. Matt Meloy	Des Moines	
10. Sam Ohm	Kirkland	
11. Vicki Lockwood	SeaTac	
12. Anne Kroecker	Des Moines	
13. Ben Bakkenst	Seattle	
14. Nancy Tostz	Burien	

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport		Public Workshop #2 November 6, 2019
Please <u>Print</u> Your Name & the City Where You Live		
Name	City Where You Live	
1. Jimmy Mattha	Burien	
2. MARITANE MARCKAEN	SeaTAC	
3. Debi Wagner	Burien	
4. Amy YAHONKE	NORMANDY PARK	
5. Ira Wayne	Normandy Park	
6. Kathleen Sherry	Normandy Park	
7. Blanche Hill	Normandy Park	
8. Vicki Hartley	Burien	
9. Rose Winterhalder	Burien	
10. Peter Kwon	SeaTac	
11. JUDY WILLIAMS	SEATAC	
12. Meg Van Nigh	Burien	
13. Kent Paloscani	SeaTAC	
14. LARRY CRIPA	BURIEIN	

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport		Public Workshop #2 November 6, 2019
Please <u>Print</u> Your Name & the City Where You Live		
Name	City Where You Live	
1. Joel Wachtel	SeaTAC	
2. Pam Furdell	SeaTac	
3. Sue Peterson	Fed Way	
4. Penny Thomas	SeaTac	
5. Mark Fopping	Federal Way	
6. Mike Resilio	Bellevue	
7. Ryan Crompton	Des Moines	
8. Dave Kaplan	Des Moines	
9. LYDIA ASSEFA-DAWSON	city of Federal Way	
10. Lauren Wheeler	Seattle	
11. Madison Brown	Seattle	
12. Bill Vorina	Fed Way	
13. ERIN SITTERLEY	SEATAC	
14. Kathleen Waters	Normandy Park	

Study of the Current and Ongoing Effects of the Operation of the Seattle-Tacoma International Airport		Public Workshop #2 November 6, 2019
Please <u>Print</u> Your Name & the City Where You Live		
Name	City Where You Live	
1. Bernedine Lund	Federal Way	
2. Annie-Rose Ucht	Normandy park	
3. Robert Halpin	Olympia	
4. ROGER KAEG	SeaTac	
5. Whi Gregerson	SeaTac	
6. Michelle Sipes-Morrin	Normandy Park	
7. Sue Ann Hokimer	Normandy Park	
8. Rose Clark	Burien	
9.		
10.		
11.		
12.		
13.		
14.		

Comment Cards

In addition to the Q&A/Discussion, attendees were given the opportunity to write their comments on provided comment cards (some of these comments were also discussed in the Q&A portion). A total of 17 individuals submitted comment cards that contained 34 comments. While the majority of the comments were constructive and offered helpful information, a few were critical, such as those that focused on how the information was presented (rather than the information itself). The comment cards have been transcribed verbatim and are offered below with no editorial commentary and in no order of hierarchy.

Figure 4.9
Public Workshop #2: Comment Cards and Responses

Subject	Questions	consultant team Response
Comment Card #1: SeaTac Resident	<i>“Are you aware of the Purple Air devises [sic] around the airport & around the world? What is your monitoring of PM 2.5 indoors?”</i>	The 2020 study will consider Purple Air monitors as a potential recommendation to enhance the existing monitor network. The 2020 study is relying on existing data for all outdoor and indoor air quality information. Additional monitoring or data collection may be part of a future study.
Comment Card #2: SeaTac Resident	<i>“All stats relative to SeaTac & Tukwila need to be tempered by the fact that both cities have a population during the course of the day that are 100 times the size of the resident population. I’ve been politically active & involved with the Port for 45 years. The Port has always been a bad neighbor and untruthful & unreliable. I was on the south slope of Queen Anne in Seattle, calling the Port about airplanes so low and close I could give them #’s off the planes without the need for binoculars for 40 of those 45 years. If the data shows no pollution – noise, light, etc. – are within OK limits you need to closely review who did monitoring & where the monitors are. None are where the large impacts are.”</i>	The 2020 study accounts for economic issues in all study area cities. The relationship between the Port and the study area cities is not uniform and varies from city to city. Issues concerning operable air quality monitors close to the study area will be incorporated into the 2020 study.
Comment Card #3: Normandy Park Resident	<i>“Many of the area citizens in attendance could have presented more accurate information because we live with the impacts of the airport growth on our health, environment, significant impact to housing values due to increasing air traffic and endless noise. A significant portion of the material presented was irrelevant to the issues at hand.”</i>	The 2020 study accounts for economic issues in all study area cities. The relationship between the Port and the study area cities is not uniform and varies from city to city. Issues concerning operable air quality monitors close to the study area will be incorporated into the 2020 study.
Comment Card #4: Normandy Park Resident	<i>“This evening was largely worthless. The people in this room know all this and more. Your time was wasted if this is all you have. Don’t waste tax money again. Read Lights Out by Wiley & Formby & Over my head by Debi Wagner. You have no data!”</i>	The 2020 study seeks input from various sources, including agencies and the public. The information presented at public workshop #2 was draft and public input helps the consultant team. The full study will be completed by May 2020.
Comment Card #5: Federal Way Resident	<i>“Utilize Washington Environmental Health Disparities Map. Its online interactive mapping tool created by UW Dept. of Environmental & Occupational Health Sciences (DEOHS), DOH, ECY, PSSCAA for health risks, exposure, etc. Contact Pat Defeo, Admin to Facebook page “Flight Pattern Kids @SeaTac Airport @Santa Monica @McChord AFB. He has testing data around city of SeaTac. Has “disease cluster maps”, cancer, autoimmune diseases, birth defects. Has tested soil, blood, hair, urine, etc. got toxic chemicals/minerals. I don’t understand why your presentation did not show either of these sources. You need to show “gas” or lack of air monitoring near airport as printed out by Debi Wagner.”</i>	The 2020 study will consider information from various public agencies as well as information volunteered from the public. The latter must be independently verified/validated in order to be further included in the 2020 study. As stated earlier, locations of operable air quality monitors will also be included in the 2020 study.

Figure 4.9 (continued)
Public Workshop #2: Comment Cards and Responses

Subject	Questions	Consultant team response
Comment Card #6: SeaTac Resident	<i>"Thank you for coming and presentation. Are you going to be able to collect evidence of ultrafine particles? Need monitors of air quality. On noise presentation, where did [you] get the figures on how many homes were given Port packages? Only homes built before 1987 are eligible. Speaker at a previous meeting said only one home was approved."</i>	UFP's are being researched separately by the University of Washington. That information will be referenced in the 2020 study, but it is not being led by the consultant team. The Port package information will be included in the 2020 study and is being addressed separately by Rep. Tina Orwall for potential legislation.
Comment Card #7: Burien Resident	<i>"My concern is about tax structure. All \$ [dollars] spent within the FAA is considered federal. So, communities do not benefit from my property tax revenue. This affects our schools. Highline has to pay more in levy \$ than other districts with high property tax income like downtown Seattle or Bellevue. And we have to live with the negative output of the Port (pollution, noise, traffic). This is not equitable. The car rental agency should not be allowed in FAA area. Economics of this should be considered."</i>	The 2020 study is considering the economic effects of aviation activity in the study area cities.
Comment Card #8: Des Moines Resident	<i>"Why aren't Port packages and mold being studied? Why is study giving "causal valence" (?) to probability, water/soil, etc. when all most residents care about is direct effects from flights (noise, pollution)? You need to open up a new set of interviews not based on city manager simply ask for volunteers."</i>	The 2020 study scope is limited by schedule and budget. Additional studies relating to Port packages could be included in future follow-up studies. The 2020 scope was defined by the Department of Commerce and state grant and is a comprehensive evaluation of aviation-related effects, including noise and pollution. As for stakeholder interviews, the study area cities were asked to name which individuals would be interviewed. Additional stakeholder interviews could be conducted as part of a follow-up study.
Comment Card #9: Burien Resident	<i>"Would like to ask you about a few pieces of underlying data on the AQ presentation? Tire wear emits copper – geologic. There are a lot if tire wear events @ the airport. No studies available on ground, water, soil, fauna impact if falling debris of combustible fuel. The AQ Engineer – please address?"</i>	The 2020 study is reviewing air quality data from various local, regional, and federal sources – tire wear data was not available from existing sources and would likely require new data collection or modelling. Data relating to effects on groundwater, surface water, soil, and plants is being evaluated but there was no information specific to "falling combustible debris."
Comment Card #10: Des Moines Resident	<i>"The light study used data from satellites and on-the-ground visual points. Could the noise study also take unbiased data and on-the-ground monitor points, too, and not use FAA-filtered data?"</i>	The 2020 study is reviewing the best available data relating to noise. Additional monitoring or modelling could be included in a follow-up study.
Comment Card #11: Burien Resident	<i>"I live in a home near 128th and 12th Avenues. When the large planes that are loud fly over my area, it causes my TV to change stations. Example – 116 to station 82. It takes a few seconds to a half hour to automatically change back to station I was watching. Is this something that can be researched or would Dish TV have to buy (?) to take care of it or would triple pane windows help that?"</i>	The issue of indiscriminate station-switching was not reported by others. This may be a unique equipment problem with a set-top box (satellite or cable) or some other issue specific to this home, but this issue is not included in the 2020 study scope.
Comment Card #12: Burien/North Highline Resident	<i>"I live directly under the north end flight path of the 3rd runway. I have measured dcb [decibels] of 85 in my backyard. The planes are incoming at a rate of 1 to 1.3 minutes. The "port package" gave me insulation that consists of cellulous (ground up newspaper!). Sleep deprivation is a way of life. I am regularly awakened at 4:00 AM. Why isn't anyone talking to me and my neighbors about the impacts we are experiencing?"</i>	Public input is encouraged. The study area cities named the individuals to be interviewed as stakeholders – additional stakeholder interviews could be conducted as part of a follow-up study. Public input is also provided through the two workshops (July and November 2019) and the draft report will be available for public review and comment.

Figure 4.9 (continued)
Public Workshop #2: Comment Cards and Responses

Subject	Questions	Consultant team response
Comment Card #13: Des Moines Resident	<i>"I'm concerned the DNL is not a good measure to quantify how much people are effected. I don't believe the FAA has/is taking into account noise impacts on the local community. I know they have flight path other options that they have used at other airports and could be used here. I believe the Port of Seattle could be a bigger advocate to the FAA but have chosen not to."</i>	The 2020 study agrees that DNL contours are not the best way to represent the effect of noise on area communities and is recommending alternative approaches. The FAA and Port of Seattle are required to consider the effects of aviation activity upon surrounding communities and the 2020 study will reiterate this
Comment Card #14: Anonymous (no city given)	<i>"The prior study measured the disparate benefit in other areas of King County vs the airport cities from the airport. # flights take per capita in Mercer Island vs Federal Way. Has the increase in cost of an overnight parking at the airport caused people to not park but have a 2x increased in traffic due to friends & family drop-off and pick-up?"</i>	The 2020 study is not an extension of the 1997 and is evaluating information differently – the 1997 study projected future effects while the 2020 study is looking at existing historical data. Effects in the study area cities will be compared to other areas in the region. The price of overnight parking at the airport is one of many factors that may be contributing to area traffic. Other factors include increased regional population, the increased use of on-demand rideshare services (such as Uber and Lyft), and other factors.
Comment Card #15: Anonymous (no city given)	<i>"I smell jet fuel in Normandy Park frequently (mornings when it's cold & clear). Does smell equate to terrible air quality?"</i>	The 2020 study is considering various aspects of air quality. Smell may be also affected by the direction of prevailing winds and the sensitivity of the receptor. The 2020 study has not reviewed data that equates smell with the quality of air, but this could be part of a follow-up study.
Comment Card #16: Anonymous (no city given)	<i>"EPA sample locations are not located in the primary communities of interest, so acute AQ [air quality] impacts are completely missed in that data. AQ changes with time & weather conditions. In our communities, AQ during winter cold inversions is VERY BAD. At 6:30 AM when the planes are idling/warming up for first flights, fumes sit at ground level (I have to wear a mask to walk my dogs on those mornings – yesterday 11-5-19 for example). That's on the west side of 1st Avenue in Normandy Park. I am very concerned about the health impacts on days when the air is utterly unbreathable. For socio-economic impacts & mortality factors being very high in NP [Normandy Park] – look at age demographics. NP met its GMA density req's by adding affordable senior housing."</i>	The 2020 study is including the concerns about the locations of operable air quality monitors relative to the study area cities. The effects on public health, life expectancy and other socio-economic metrics is also included in the 2020 study scope.
Comment Card #17: Anonymous (no city given)	<i>"The presenters exhibited the least amount of enthusiasm as I've ever experienced since 4th grade oral book report presentations. As a group, the presenters were drones. None had any desire to inform the audience. Your ability to read between the lines with the data you have gathered is nil. You present like statistics 101 student & not a detective or anyone who can bring statistics to life. I left your presentation offended because you wasted my time. I suggest you bring some human-ness to your analytics, some personality to your presentations, some enthusiasm from your employees. I'd give your presentation a minus 10 on a scale of 0 to 100."</i>	The consultant team is composed of subject matter experts in multiple disciplines. The information presented at public workshop #2 was highly detailed but still in draft form, so public input was an important component of the workshop. At this stage in the 2020 study, a detail-oriented presentation was necessary in order to share information and receive public feedback.

D. SUMMARY

During the public input process in 2019, there were almost 200 participants (some of them at meetings and workshops). The city of Tukwila appeared to not have any representation at either public workshop (July and November 2019), as no Tukwila residents were listed on the sign-in sheets for either meeting. (However, it is possible that some Tukwila residents attended and simply chose not to sign-in.)

The benefit of citizen input and community participation is that it helps point out areas of concern that are not immediately obvious from technical information and agency resources. Technical information often does not adequately reflect the concerns of individual homeowners and residents, so this study sees this as an opportunity to enhance the technical review with real-world experience of the residents of the study area. This study is not, however, a forum for the airing of long-term grievances against the airport.

Through the process of soliciting input from the community, the following issues became evident:

▪ **Noise**

Noise continues to be a primary concern among the residents who have commented during the study. The noise complaints have been ongoing for quite some time, dating back to the development of the third runway more than 20 years ago. In a few cases, some long-time residents raised issue with the noise from the addition of the second runway (1970). While noise complaints are frequently experienced by areas close to airports nationwide, the noise issues in the study area cities do not seem to be reducing. There have been noticeable increases in noise complaints registered at the airport, many of which are associated with late-night flights, small Q400 flights which take an early departure angle across some of the communities, and similar issues. Noise issues are not improving according to almost all community input.

▪ **Air quality**

Public input indicates their concerns regarding air quality are almost equal to those regarding noise. Air quality issues include such concerns as:

- Effect on health
- Effects on landscaping, gardens, trees, lawns, etc.
- Being able to smell jet fuel
- Concerns about ultrafine particles (UFPs). This is being researched in a parallel study conducted by the University of Washington, but that study has not indicated effects on human health. (Some residents have cited a World Health Organization report conducted in Europe that investigated UFPs, but to-date there is no U.S. standard, federal policy, or mitigation measures that address UFPs).
- There were reports of a “black soot” on rooftops, cars, lawns, and other horizontal surfaces. (While the “black soot” is attributed to air pollution associated with the airport, no independent scientific laboratory testing was provided to indicate the chemical makeup and possible source of this material).

▪ **Failure of mitigation packages**

Many people who received airport mitigation packages during the third runway expansion have reported the failure of those mitigation measures. Rep. Tina Orwall has conducted public meetings to gather information from residents and their complaints include:

- Failure of window systems
- Failure of insulation materials
- Failure to properly ventilate and allow for air exchange, resulting in mold and stale indoor air

- Mitigation of only a portion of a house (i.e., insulating bedrooms and living areas, but not closets or bathrooms)
- Poor construction practices and contractors that are no longer in business
- Not properly mitigating homes that might be considered historic
- Being unable to qualify for follow-up mitigation repairs because of the way the program policies were written
- Other general failures of the mitigation measures.

▪ **Traffic congestion**

Traffic congestion appears to be a periodic problem, often around peak travel periods and when cruise passengers are arriving/departing. Traffic tends to become congested immediately upon airport roadways, specifically Airport Expressway. Other spot problems are located along International Boulevard/U.S. Highway 99 at Arrivals Drive/South 182nd Street, on State Route 518 westbound (west of the I-5/I-405 interchange), and State Route 518 eastbound (west of the Des Moines Memorial Drive interchange).

▪ **South King County is a “dumping ground”**

Many residents noted that South King County has become a sort of “dumping ground” for a variety of unwanted land uses. Such land uses include:

- The Federal Detention Center (2425 South 200th St., west of International Boulevard/U.S. Highway 99) which is part of the Federal Bureau of Prisons
- The Federal Aviation Administration Flight Standards District Office (2200 South 216th St. in Des Moines)
- The location of the Seattle-Tacoma International Airport was viewed as an undesirable use, even though it has been in South King County since it began military operations in 1944.

Residents objected to federal installations like the prison and the Flight Standards District Office for several reasons, not the least of which is that these do not pay local property taxes and further depress the local communities’ ability to be able to generate economic revenue. There are also concerns as to the quality of these developments and how they reflect on the community at-large.

▪ **Distrust**

Many people who attended the public workshops expressed a distrust of information and policies from the Federal Aviation Administration and the Port of Seattle/Seattle-Tacoma International Airport. This appears to be the result of years of poor experience by many residents in the study area cities. This level of skepticism appears to most acute in areas generally south and west of Seattle-Tacoma International Airport – Burien, Des Moines, Federal Way, and Normandy Park.

However, these relationships vary from one study area city to another and are not consistent throughout the study area. Some report better relationships with the Port of Seattle than others, so it should not be misconstrued that the study area is uniformly distrustful of the Port of Seattle.

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