

AGENDA

DES MOINES CITY COUNCIL
ENVIRONMENT COMMITTEE
City Council Chambers
21630 11th Avenue S, Des Moines, Washington
Thursday, June 13, 2024 - 5:00 PM

Environment Committee: Chair JC Harris, Vice Chair Yoshiko Grace Matsui, Gene Achziger

CALL TO ORDER

AGENDA

- Item 1. APPROVAL OF THE MINUTES FROM THE MEETING OF 05.09.2024
[05.09.24 Draft Environment Committee Minutes](#)
- Item 2. PUBLIC WORKS YARD GROUNDWATER REMEDIATION UPDATE
- *Staff will provide a summary and update regarding the ongoing groundwater remediation efforts at Public Works Yard.*
- [Public Works Yard Remediation Update 06.13.2024](#)
[Site Plan](#)
- Item 3. CAPITAL IMPROVEMENT PLAN PROJECT UPDATE
- *Staff will provide an overview of active Capital Improvement Projects*
- [Environment Committee CIP Update June 2024](#)
- Item 4. START UPDATE
- *The City's START Representatives will provide an update to the Committee.*
- [StART Update](#)
[StART Update Print Outs](#)
[6-10-24 StART Noise Program Updates](#)
[Proposed Single Engine Taxiing Language PPT](#)
[SIRRPP Presentation StART 6.10.2024 SEA](#)
[START Ops Presentation 6-10](#)
[TRC Mtg1 Part150 Kickoff](#)

ADJOURNMENT

DRAFT MINUTES – ENVIRONMENT COUNCIL COMMITTEE MEETING 05.09.2024

The meeting was called to order at 5:00 PM, Thursday, May 9th, 2024 in the Council Chamber with the following in attendance:

Council Members

J.C. Harris (Chair)
Yoshiko Grace Matsui (Vice Chair)
Gene Achziger

City Staff

Tim George – Interim City Manager
Tommy Owen – Acting Public Works Director
Denise Lathrop – Community Development Director
Michael Posey – SWM Engineering Technician I
Cong Nguyen – Civil Engineer I
Matt Hutchins – Assistant City Attorney
Bonnie Wilkins – Director of Community and Admin Services
Sara Lee – Deputy City Clerk
Laura Hopp – Administrative Coordinator I

Guests – Mayor Traci Buxton and Councilmember Matt Mahoney

AGENDA

1. Approval of the minutes from the 04.11.2024 meeting
2. Operations and Maintenance Overview
3. Comprehensive Plan Update Memo (Follow up to the 04.11.24 Presentation)

MEETING:

1. Unanimous approval of the 04.11.2024 minutes.
2. Acting Public Works Director Tommy Owen introduced Engineering Technician Michael Posey to provide the committee with an overview of the Surface Water Utility Operations and Maintenance. This is a requirement of the City's NPDES permit. The City adopted the Western Washington Phase 2 Municipal Stormwater Permit in 2007. At that time a stormwater maintenance crew was established. We have six staff on the maintenance crew. They are responsible for maintaining this rather large system. Mr. Posey stated credit should be given to the crew for their diligence. He reviewed the details of inspection requirements and the Stormwater Pollution Prevention Plan (SWPPP) for City maintenance and storage facilities, (Attachment #2). Cong Nguyen, Civil Engineer I, provided the overview for the Asset Management and Programs and Stormwater Manual Update sections of Attachment #2. Currently there are four drainage concerns under investigation, one citizen requested pipe program project underway and five City pipe maintenance and improvement projects scheduled.

The Committee discussed the lifespan of replacement pipe that will take the place of corrugated metal pipe, catch basin quantities for areas north and south of S 240th, outreach for the Pipe Program, and recommended inviting a Zero Poo speaker to participate at a City event.

3. Attachment #3 was included as a follow-up to the April 11, 2024 Environment Committee Meeting. The Memo is a response to the questions posed by the Committee. Community Development Director Denise Lathrop stated that once all of the Comprehensive Plan element updates have been presented to the various committees for review and feedback, it will be packaged and presented to the full council. There was discussion concerning Middle Housing and tree preservation requirements.

Following the staff presentation, the Committee Chair sought direction from his colleagues regarding requesting a START representative to attend next month's committee meeting. This was approved by the committee.

Meeting adjourned at 5:28 p.m.

Minutes respectfully submitted by: Jodi Grager, Admin Coordinator

**Public Works Yard Groundwater Remediation Project Update – Environment Committee
6/13/2024**

Background:

Over the past 31 years, the City of Des Moines has been actively remediating and monitoring the site at 21650 11th Avenue South. The site is the location of two underground storage tank (UST) releases: one 4,000-gallon gasoline UST and one 1,000-gallon diesel UST located between the City of Des Moines shop and engineering building (see Figure 1). The USTs were removed in 1992, and 1,500 cubic yards of contaminated soil was excavated from the tank cavities.

The City of Des Moines has been in the Voluntary Cleanup Program (VCP) since 2000 (Site ID #NW0529) and provides annual reports to the Washington State Department of Ecology (Ecology) summarizing the quarterly groundwater monitoring and the remedial activities conducted.

Since then, 15 monitoring wells have been installed, and a groundwater recovery and air diffusing treatment system were installed in 2008. The groundwater treatment system operated until 2021 when the aging system failed. The wells have continued to be monitored, and concentrations of the constituents of concern (COCs) have been below the cleanup levels for at least four quarters in all but two wells. The last two wells, MW-3 and MW-14, have yielded results of gasoline and benzene concentrations that fluctuate slightly above and below the cleanup levels.

Recent Efforts:

- **MIHPT Investigation (April 2022)**

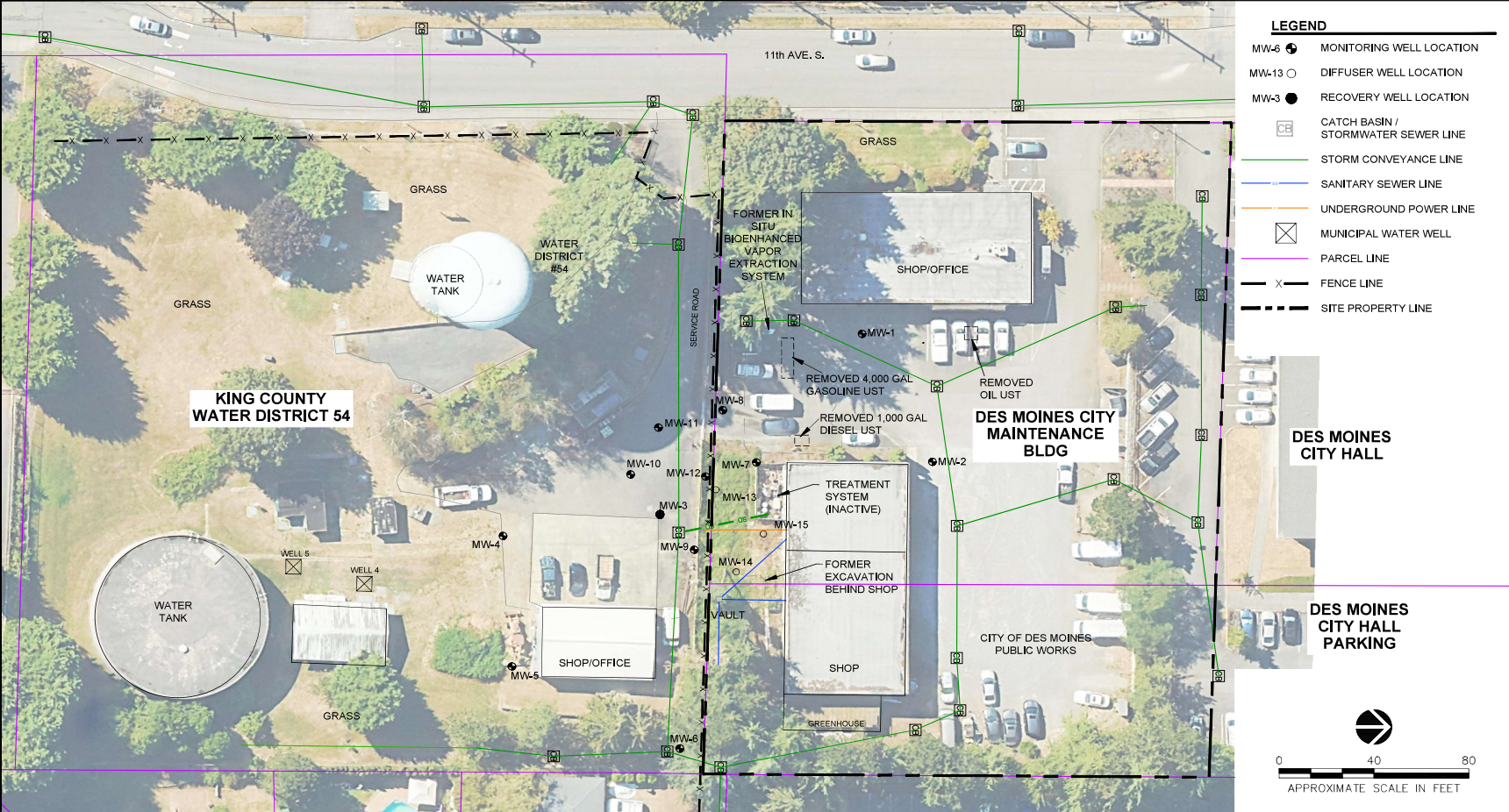
A subsurface membrane interface hydraulic profiling tool (MIHPT) investigation was performed in April 2022. This study estimated the extent of residual subsurface contamination. The MIHPT results indicated that soil contamination is greatest near the shop (north of MW-14) and the former excavation by the shop. The area upgradient of MW-3 and to the west of MW-15 showed little residual contamination (see figure 1).



- **ISCO Injection (April 2024)**

One round of in-situ chemical oxidation (ISCO) solution injection was completed in April 2024. This involved using a temporary direct-push rig that injected caustic-activated persulfate into the subsurface over an approximate 7-foot depth interval. The persulfate promotes the degradation of the remaining COCs. The field effort for the drilling and injection effort involved drilling 23 borings using push probe technology in the areas of noted residual contamination.

Future Efforts:

- Groundwater monitoring will be conducted after the injection activities.
- The results of follow-up groundwater monitoring will be evaluated to determine the need for additional injection(s). Subsequent groundwater monitoring could indicate that the concentrations of COCs continue to fluctuate around the cleanup levels in the last two wells. Additional injection event(s) could be warranted to degrade the residual contamination fully.
- Once all wells have attained the cleanup levels for two quarters following the last injection, the wells will be sampled for two additional quarters for the final compliance sampling. After the wells have yielded at least four quarters with all COCs results below cleanup levels, a request for a No Further Action determination will be made to Ecology.
- The City of Des Moines intends to stay in the VCP and remain active until the remediation is sufficiently complete to obtain a no further action determination.



	CLIENT CITY OF DES MOINES		PROJECT CITY OF DES MOINES PUBLIC WORKS FACILITY 21650 11th Avenue S, Des Moines, Washington	DATE JULY 2023
	WSP USA Environment & Infrastructure Inc. 4020 Lake Washington Blvd NE, Suite 200 Kirkland, Washington 98033		TITLE SITE PLAN	SCALE AS SHOWN
			FIGURE 1	

**Environment Committee
June 2024
Capital Project Update**

Current Construction	Phase	Status/Comment
Kent-Des Moines Culvert Replacement	CN	WSDOT Led Project; Culvert installation is complete; Final pavement restoration (Spring)
24th Ave S Pipeline Replacement Project	CN	Transportation Led Project; Construction suspended
1st Ave S Pump Replacement Project	CN	Construction 90% completed
Kent-Des Moines/16th Ave S (Segment A)	CN	Final Design & Permitting initiated with consultant KPG-PSOMAS; Construction 2024

Planning, Engineering, ROW Acquisition	Phase	Status/Comment
Des Moines Memorial Drive (208th-212th)	PE	Final Design & Permitting initiated with consultant Perteet
216th Pl/Marine View Dr Pipe Upgrade	PE	Final Design & Permitting initiated with consultant Perteet
Deepdene Outfall Project	PE	Final Design & Permitting initiated with consultant Tetra Tech; Easement secured
Massey Creek Pocket Estuary and Fish Project	PE	Preliminary Design & Permitting initiated with consultant Parametrix
Des Moines Creek Pocket Estuary Project	PE	Preliminary Design & Permitting initiated with consultant Parametrix

Projects Targeted for Grant Funding:	Phase	Status/Comment
6th Pl/287th Street Pipe Project	PE	Application to be submitted for King County Flood Control District Funds.

- Working on
- Planning on, some risk
- Resource/Schedule Risk

ENVIRONMENT COMMITTEE MEETING

June 13, 2024

StART MEETING SUMMARY

Meetings To-Date

StART – Full Meetings

Feb. 28, 2024

April 24, 2024

Federal Policy Working Group

Feb. 2, 2024

April 1, 2024

June 3, 2024

Noise Working Group

Feb. 12, 2024

March 8, 2024

June 10, 2024

PART 150 OPEN HOUSE

Mount Rainier High School

June 6, 2024

MEETING SUMMARIES

StART – Full Meetings

- Sustainable Airport Master Plan – SAMP
 - SEPA – This summer
 - NEPA – Q4 2024
 - Start of community engagement process
- Near-Term Projects – (Attachment)
- Discussion topics for 2024 meetings
 - (Attachment)

Federal Policy Working Group

- FAA Authorization
 - Funding for failed noise insulation packages and particle emissions. Funding is for study and pilot program. There is also some funding from the State, (Dept. of Commerce, \$1.0 million) and from the Port, (\$6.5 Million, funded from tax levy)
 - Funding for particle emissions.

Noise Working Group

- Part 150 Study proceeding.
 - Determines the 65 DNL Boundary?
 - Open Houses scheduled
- Report – Late Night Noise Limitation Program – Q1
- More late-night (11 PM – 2 AM) flights coming. Starting this summer.
- Sound Insulation Repair and Replacement Pilot Program. (Attached – Noise Working Group Meeting Summary)

PROCESS QUESTIONS

- Distribution of StART agendas and meeting summaries..
- City's policy/response to SAMP?
- Continue to advocate for the largest possible noise impact area.
 - More transparency on metrics used to establish impacts.
- Continue to advocate for ultra-fine particles studies and mitigation.

Aviation Noise Working Group

MEETING SUMMARY

APRIL 8, 2024; 5:00 PM – 6:30 PM

VIA ZOOM VIDEOCONFERENCE

Meeting Objectives: A review of the airport's recent and expected operational trends along with the latest on the Aviation Near-term Noise Action Agenda, the 2024 Fly Quiet Awards and the Port's new Sound Insulation Repair and Replacement Pilot Program.

Meeting Summary:

- I. Facilitator Welcome, Introduction, and meeting agenda, Andrés Mantilla, Uncommon Bridges
- II. SEA Operations Recap and Preview, Steve Vittner, Airline Scheduling Manager, POS
 - Flight operations will continue to increase in the coming weeks and months
 - Q2/3 Operational Outlook: phased approach with added arrivals and departures
 - Kicked off airfield improvement work – replacing pavement
 - Busiest summer to date potentially with new services coming to SEA
 - International flights increased by 17.8% versus 5.6% for domestic
 - Increase in wide-bodied late night departures
 - New international operations begin in July
 - Noise team will track all new international flights' noise levels
 - Most of the new international carriers are flying the newest, quietest aircraft available
 - More north flow operations typically in July and August due to weather patterns
 - Members would like to understand more about the new flights and schedules and how that information might be shared within their cities
- III. Aviation Near-term Noise Action Agenda, Tom Fagerstrom, Noise Programs Manager & Paris Edwards, Noise Programs Coordinator, POS
 - Late Night Noise Limitation Program Q1 Updates
 - Noise level thresholds established for departures and arrivals between 12:00 AM and 5:00 AM
 - China Airlines Cargo had the highest number of noise exceedances at 39 with 48% of flights exceeding the noise threshold
 - High number for China Cargo Airlines because of the fuel stops they make at SEA
 - Q1: 183 total noise exceedances
 - Most are Boeing 747 with 70 exceedances
 - Almost all exceedances due to departures occur on the east runway

- Members inquired if there was a correlation between the increase in complaint numbers and the increase in late night noise exceedances?
 - Late Night Runway Use
 - Average of 1.3 third runway landings per late night in 2024 thru March
 - No late night third runway landings in April to date
 - Noise Comment Report Summary for February
 - 2023: 6,903 noise comments
 - 2024: 16,557 noise comments
 - 42% percent increase but similar numbers to months prior to 2023
 - A member encouraged people to make complaints through the Port app as it aggregates additional information
 - Current complaint levels do not correlate with noise levels
- IV. 2024 Fly Quiet Awards, Paris Edwards, Noise Programs Coordinator, POS
- Encourages airline compliance with noise abatement efforts
 - Three winning airlines: Air Canada and Frontier Airlines (also last year's winners)
 - Low levels of operational noise
 - Utilizing new and quieter aircraft
 - Delta Air Lines: For significant improvement efforts at minimizing noise
 - 40% of Delta's operation included newer, quieter Airbus A220, Airbus A321Neo, and Airbus A33Neo aircraft
 - Announcement at Port Commission meeting 5/14, Port press release, advertisements
- V. One Engine Taxiing Language, Marco Milanese, Community Engagement Manager, POS
- One Engine Taxiing language has modest noise benefits
 - Language promoting its use in development
 - Hope to share new language at the next meeting
- VI. Sound Insulation Repair and Replacement Pilot Program, Ryan McMullan, Noise Programs Senior Manager, POS
- Incorporates Equity Guidelines
 - \$6.5 M funded by tax levy
 - Review of what will be studied and why, key decisions, and finalizing an approach document
 - Boundary of assessment
 - Methods of outreach
 - Acoustic testing
 - Criteria for participation
 - ESA (consultants)
 - Development of assessment

- Development of database for collection of responses
- Analysis of data
- Report composition
- Now – drafting survey
 - Sharing survey questions with Working Group in early May via email
- Will share results of survey and criteria for the pilot program
- Engaging with the Port’s Office of Equity, Diversity, and Inclusion

VII. SEA Sound Insulation Update

- Continue to conduct outreach every quarter for those eligible who have not participated
- Completed acoustic testing on two homes and planned two additional acoustic testing dates
- Provided maps of potentially eligible properties, 2024 projects and recently completed work.

VIII. Wrap Up

- Next meeting June 10th

MEMBER	INTEREST REPRESENTED	PRESENT
ADOLFO BAILON	BURIEN - CITY	✓
AMY ARRINGTON	NORMANDY PARK – CITY	✓
BILL VADINO	FEDERAL WAY – CITY	✓
BRYAN TOMICH	NORMANDY PARK – COMMUNITY	✓
GARMON NEWSOM II	BURIEN – CITY	-
CARL COLE	SEATAC – CITY	-
DAVE BERGER	FEDERAL WAY – COMMUNITY REPRESENTATIVE	✓
DENISE LATHROP	DES MOINES - CITY	-
JASON WOYCKE	DES MOINES – CITY	✓
JEFF HARBAUGH	BURIEN – COMMUNITY REPRESENTATIVE	✓
JENNIFER MARTIN	AIR CARGO REPRESENTATIVE	-
JOE DUSENBURY	DES MOINES – COMMUNITY REPRESENTATIVE	✓
MICHAEL BRUGATO	FEDERAL WAY – COMMUNITY REPRESENTATIVE	
LANCE LYTTLE	PORT OF SEATTLE	✓
LYNAE CRAIG	ALASKA AIRLINES	✓
RANDY FIERTZ	ALASKA AIRLINES	-
ROGER KADEG	SEATAC – COMMUNITY REPRESENTATIVE	✓
SCOTT INGHAM	DELTA AIR LINES	✓
SCOTT KENNEDY	ALASKA AIRLINES	✓
ZACH SHIELDS	SEATAC – CITY	✓
RESOURCES		
SARAH COX	PORT OF SEATTLE	-
STEVE VITNER	PORT OF SEATTLE	✓
DAVE KAPLAN	PORT OF SEATTLE	✓
MARCO MILANESE	PORT OF SEATTLE	✓
CLARE GALLAGHER	PORT OF SEATTLE	-
TOM FAGERSTROM	PORT OF SEATTLE	✓

StART Aviation Noise Working Group

4/8/24

RYAN McMULLAN	PORT OF SEATTLE	✓
PARIS EDWARDS	PORT OF SEATTLE	✓
JOSEPH BURT	FAA	✓
CHRIS SCHAEFFER	FAA	✓
RYAN ZULAUF	FAA	-
CONSULTANTS		
ANDRES MANTILLA	UNCOMMON BRIDGES	✓
SKYLAR BENSON	UNCOMMON BRIDGES	✓
VINCE MESTRE	CONSULTANT	✓

NEXT MEETING: JUNE 10, 2024, 5:00 - 7:00 PM
LOCATION: ZOOM VIDEOCONFERENCE

Sustainable Airport Master Plan Near-Term Projects Environmental Review

Steve Rybolt
Senior Environmental Program Manager

StART – February 28, 2024

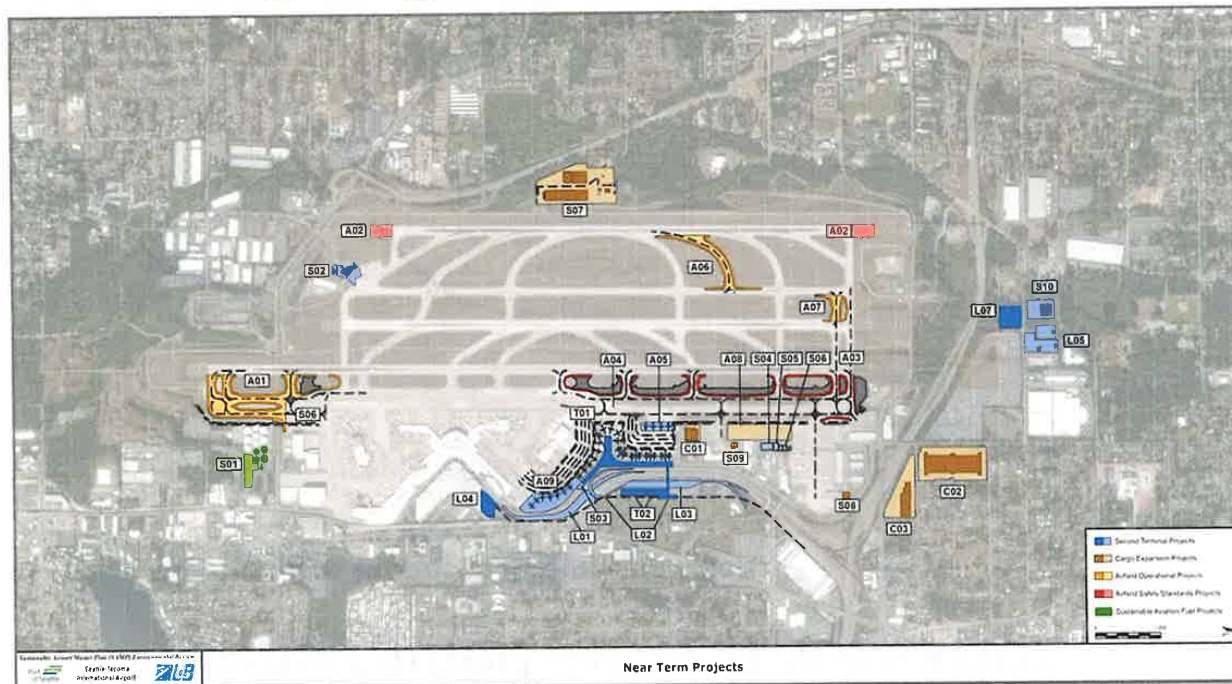


Sustainable Airport Master Plan

Near-Term Projects

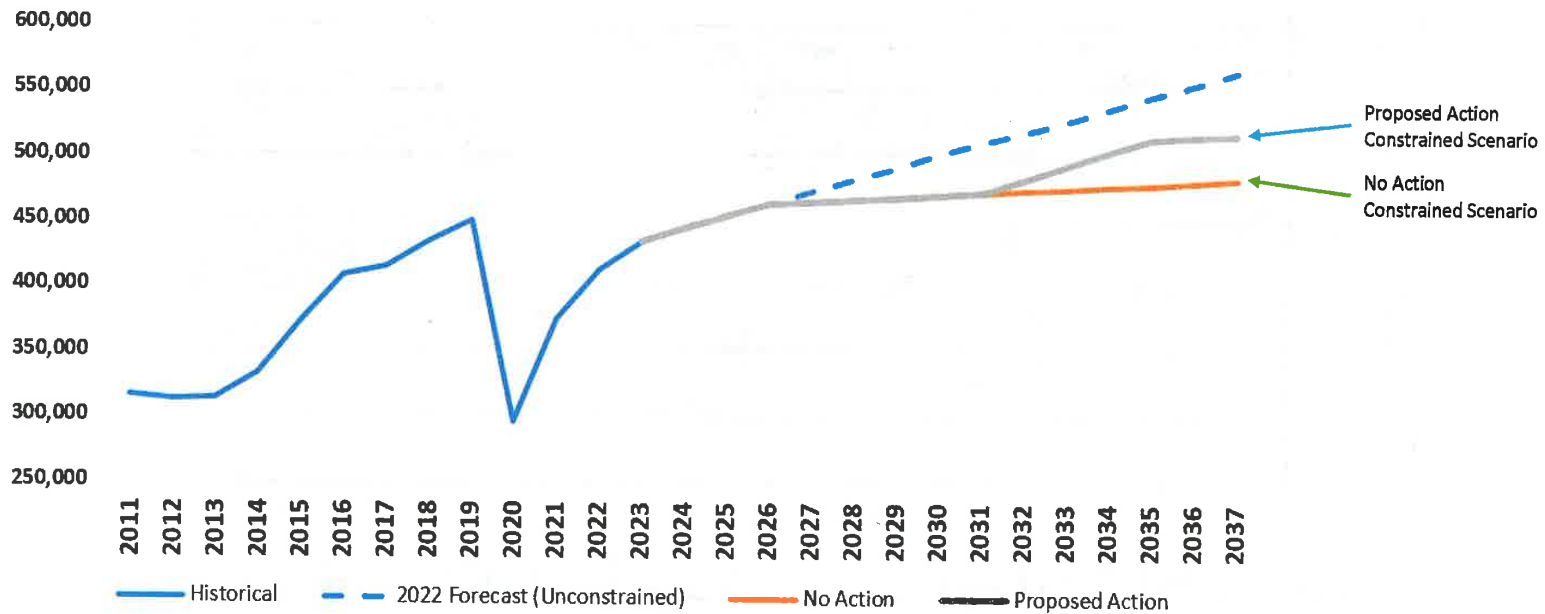
- Additional passenger processing facilities and gates to accommodate projected 56 Million Annual Passengers (MAP) at an optimal Level of Service
- Additional cargo facilities to accommodate projected cargo demand
- Airfield infrastructure modifications to meet current Federal Aviation Administration airport design standards
- Improvements to enhance the efficiency of the overall taxiway layout
- Additional fuel storage facilities to meet projected demand and the Port's Sustainable Aviation Fuel initiative

Near-Term Projects Undergoing Environmental Review



Environmental review analysis based on constrained growth scenarios

No Action vs Proposed Action Operations



NEPA Resource Categories

- Air Quality
- Biological Resources
- Climate
- Coastal Resources
- Department of Transportation (DOT) Section 4(f)
- Farmlands
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Land Use
- Historical, Architectural, Archeological, and Cultural Resources
- Natural Resources and Energy Supply
- Noise and Noise-Compatible Land Use
- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- Visual Effects
- Water Resources
 - Wetlands, floodplains, surface waters, groundwater, wild and scenic rivers

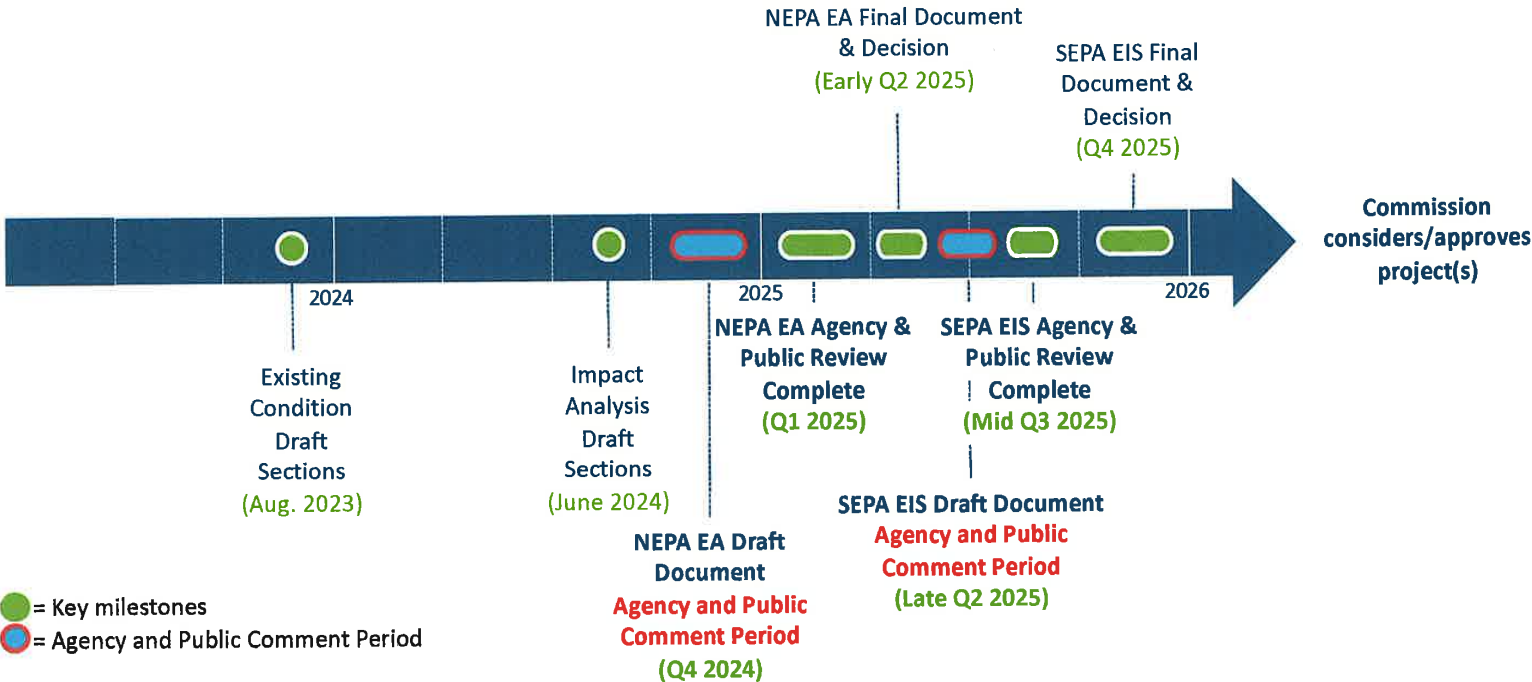
FAA is lead agency for NEPA and the document will cover an extensive set of resource categories

SEPA Elements of the Environment

- Earth
 - Geology soils, topography, Unique physical features, Erosion/enlargement of land area
- Air
 - Air quality, odor, climate
- Water
 - Surface water movement/quantity/quality, runoff/absorption, floods, groundwater movement/quantity/quality, public water supplies
- Plants and animals
 - Habitat for and numbers or diversity of species of plants, fish, or other wildlife, unique species, fish or wildlife migration routes
- Energy and natural resources
 - Amount required/rate of use/efficiency, source/availability, nonrenewable resources, conservation and renewable resources, scenic resources
- Environmental health
 - Noise, risk of explosion, releases or potential releases to the environment affecting public health, such as toxic or hazardous materials
- Land and shoreline use
 - Relationship to existing land use plans and to estimated population, housing, light and glare, aesthetics, recreation, historic and cultural preservation, agricultural crops
- Transportation
 - Transportation systems, vehicular traffic, waterborne, rail, and air traffic, parking, movement/circulation of people or goods, traffic hazards
- Public services and utilities
 - Fire, police, schools, parks or other recreational facilities, maintenance, communications, water/stormwater
- Sewer/solid waste

Port is the lead agency for the SEPA and the document will cover an extensive set of environmental elements

Schedule



APRIL 24, 2024

FULL START MEETING: ISSUES

AIRCRAFT NOISE

- > NIGHT NOISE
- > NEW LEGISLATION (STATE)
- > CARGO AIRCRAFT EQUIPMENT (COMMUNITY IMPACTS)
- > COMMUNICATION TO PUBLIC BY SEA
- > FUEL INCENTIVES/ POLICY
- > SOUND ABATEMENT

□ INFORMATION + SOLUTIONS/ RESTRICTIONS

POLICY

- > STATE LEGISLATION
- > FUEL INCENTIVES/ POLICY
- > 65 & 4
- > 5955
- > NOISE METRICS
- > SECOND AIRPORT +

> COMPENSATION OF MUNICIPALITIES + SCHOOL DISTRICTS FOR NOISE IMPACTS

> STATE-FUNDED PILOT PROGRAM

PROCEDURES

- > EMISSIONS
- > ULTRAFINE PARTICLES
- > + DATA INTERPRETATION
- > FURTHER STUDIES
- > AIR QUALITY METRICS

→ IMPACTS ON AREA SCHOOLS

BRAINSTORM

PLANS

- > USABILITY OF THE EXISTING AIRPORT
- > LAND STEWARDSHIP PLAN
- > TREE CANOPY
- > NORTH SEATTLE PARK
- > MULTI-MODAL TRANSPORTATION
- > CAMP

NOISE STUDY

NON-AIRCRAFT TOPICS

- > NON-AIRCRAFT NOISE + MITIGATION/BARRIERS
- > QUALITY OF LIFE (BEYOND AIRCRAFT)



e.g. AIR QUALITY

- > STORM WATER QUALITY, SALMON RUN INITIATIVES
- > PUBLIC SAFETY ULTRAFINE PARTICLE IMPACTS
- > LAND USE
- > TRANSPORTATION IMPACTS
- > WORKFORCE HOUSING

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BILL VADINO	FEDERAL WAY – CITY	✓
BRYAN TOMICH	NORMANDY PARK – COMMUNITY	✓
GARMON NEWSOM II	BURIEN – CITY	-
CARL COLE	SEATAC – CITY	-
DAVE BERGER	FEDERAL WAY – COMMUNITY REPRESENTATIVE	✓
DENISE LATHROP	DES MOINES - CITY	-
JASON WOYCKE	DES MOINES – CITY	✓
JEFF HARBAUGH	BURIEN – COMMUNITY REPRESENTATIVE	✓
JENNIFER MARTIN	AIR CARGO REPRESENTATIVE	-
JOE DUSENBURY	DES MOINES – COMMUNITY REPRESENTATIVE	✓
MICHAEL BRUGATO	FEDERAL WAY – COMMUNITY REPRESENTATIVE	
LANCE LYTTLE	PORT OF SEATTLE	✓
LYNAE CRAIG	ALASKA AIRLINES	✓
RANDY FIERTZ	ALASKA AIRLINES	-
ROGER KADEG	SEATAC – COMMUNITY REPRESENTATIVE	✓
SCOTT INGHAM	DELTA AIR LINES	✓
SCOTT KENNEDY	ALASKA AIRLINES	✓
ZACH SHIELDS	SEATAC – CITY	✓
RESOURCES		
SARAH COX	PORT OF SEATTLE	-
STEVE VITNER	PORT OF SEATTLE	✓
DAVE KAPLAN	PORT OF SEATTLE	✓
MARCO MILANESE	PORT OF SEATTLE	✓
CLARE GALLAGHER	PORT OF SEATTLE	-
TOM FAGERSTROM	PORT OF SEATTLE	✓

StART Aviation Noise Working Group

4/8/24

RYAN McMULLAN	PORT OF SEATTLE	✓
PARIS EDWARDS	PORT OF SEATTLE	✓
JOSEPH BURT	FAA	✓
CHRIS SCHAEFFER	FAA	✓
RYAN ZULAUF	FAA	-
CONSULTANTS		
ANDRES MANTILLA	UNCOMMON BRIDGES	✓
SKYLAR BENSON	UNCOMMON BRIDGES	✓
VINCE MESTRE	CONSULTANT	✓

NEXT MEETING: JUNE 10, 2024, 5:00 - 7:00 PM
LOCATION: ZOOM VIDEOCONFERENCE

Sustainable Airport Master Plan Near-Term Projects Environmental Review

Steve Rybolt
Senior Environmental Program Manager

StART – February 28, 2024

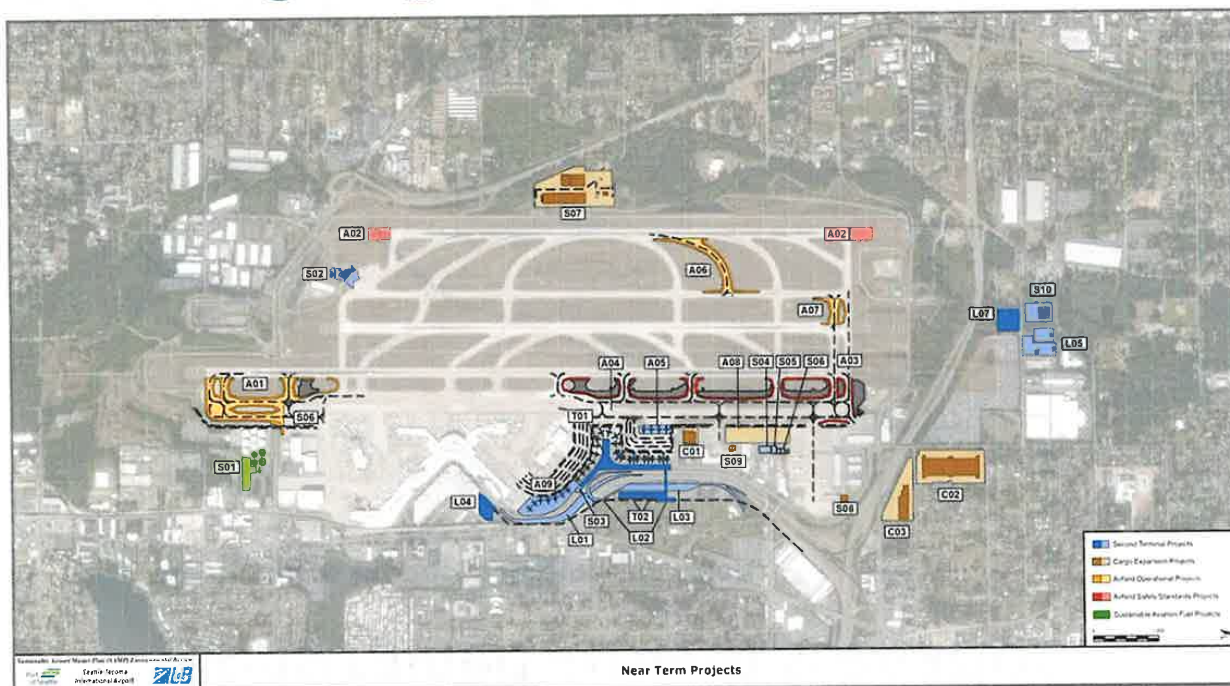


Sustainable Airport Master Plan

Near-Term Projects

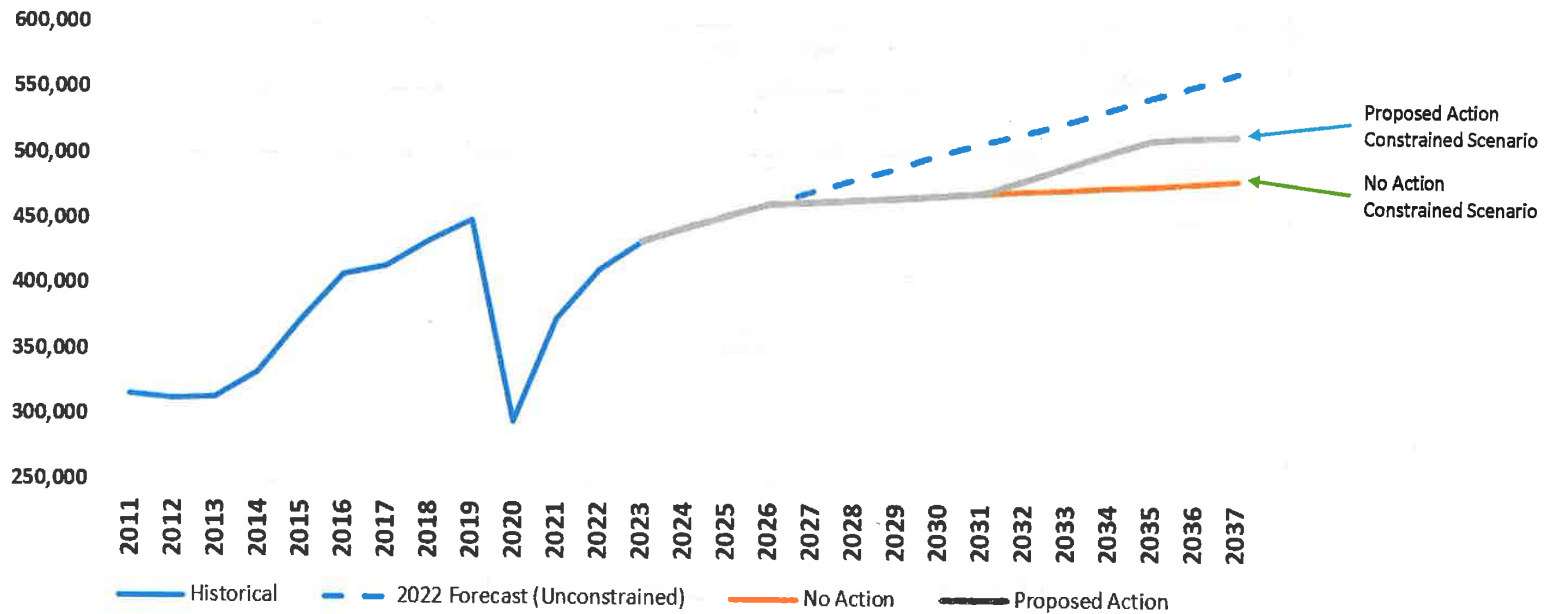
- Additional passenger processing facilities and gates to accommodate projected 56 Million Annual Passengers (MAP) at an optimal Level of Service
- Additional cargo facilities to accommodate projected cargo demand
- Airfield infrastructure modifications to meet current Federal Aviation Administration airport design standards
- Improvements to enhance the efficiency of the overall taxiway layout
- Additional fuel storage facilities to meet projected demand and the Port's Sustainable Aviation Fuel initiative

Near-Term Projects Undergoing Environmental Review



Environmental review analysis based on constrained growth scenarios

No Action vs Proposed Action Operations



NEPA Resource Categories

- Air Quality
- Biological Resources
- Climate
- Coastal Resources
- Department of Transportation (DOT) Section 4(f)
- Farmlands
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Land Use
- Historical, Architectural, Archeological, and Cultural Resources
- Natural Resources and Energy Supply
- Noise and Noise-Compatible Land Use
- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- Visual Effects
- Water Resources
 - Wetlands, floodplains, surface waters, groundwater, wild and scenic rivers

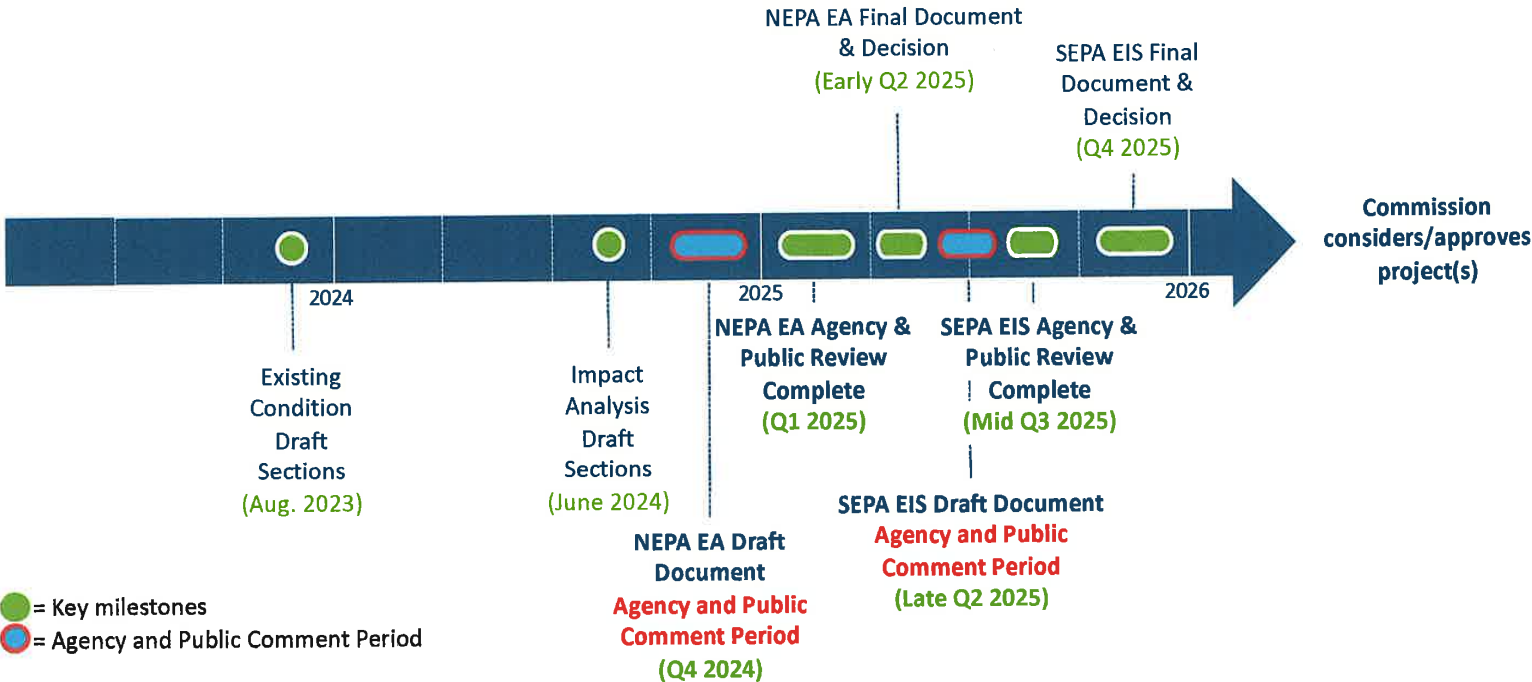
FAA is lead agency for NEPA and the document will cover an extensive set of resource categories

SEPA Elements of the Environment

- Earth
 - Geology soils, topography, Unique physical features, Erosion/enlargement of land area
- Air
 - Air quality, odor, climate
- Water
 - Surface water movement/quantity/quality, runoff/absorption, floods, groundwater movement/quantity/quality, public water supplies
- Plants and animals
 - Habitat for and numbers or diversity of species of plants, fish, or other wildlife, unique species, fish or wildlife migration routes
- Energy and natural resources
 - Amount required/rate of use/efficiency, source/availability, nonrenewable resources, conservation and renewable resources, scenic resources
- Environmental health
 - Noise, risk of explosion, releases or potential releases to the environment affecting public health, such as toxic or hazardous materials
- Land and shoreline use
 - Relationship to existing land use plans and to estimated population, housing, light and glare, aesthetics, recreation, historic and cultural preservation, agricultural crops
- Transportation
 - Transportation systems, vehicular traffic, waterborne, rail, and air traffic, parking, movement/circulation of people or goods, traffic hazards
- Public services and utilities
 - Fire, police, schools, parks or other recreational facilities, maintenance, communications, water/stormwater
- Sewer/solid waste

Port is the lead agency for the SEPA and the document will cover an extensive set of environmental elements

Schedule



APRIL 24, 2024

FULL START MEETING: ISSUES

AIRCRAFT NOISE

- > NIGHT NOISE
- > NEW LEGISLATION (STATE)
- > CARGO AIRCRAFT EQUIPMENT (COMMUNITY IMPACTS)
- > COMMUNICATION TO PUBLIC BY SEA
- > FUEL INCENTIVES/ POLICY
- > SOUND ABATEMENT

□ INFORMATION + SOLUTIONS/ RESTRICTIONS

POLICY

- > STATE LEGISLATION
- > FUEL INCENTIVES/ POLICY
- > 65 & 4
- > 5955
- > NOISE METRICS
- > SECOND AIRPORT +

> COMPENSATION OF MUNICIPALITIES + SCHOOL DISTRICTS FOR NOISE IMPACTS

> STATE-FUNDED PILOT PROGRAM

PROCEDURES

- > EMISSIONS
- > ULTRAFINE PARTICLES
- > + DATA INTERPRETATION FURTHER STUDIES
- > AIR QUALITY METRICS

→ IMPACTS ON AREA SCHOOLS

BRAINSTORM

PLANS

- > USABILITY OF THE EXISTING AIRPORT
- > LAND STEWARDSHIP PLAN
- > TREE CANOPY
- > NORTH SEATTLE PARK
- > MULTI-MODAL TRANSPORTATION
- > CAMP

NOISE STUDY

NON-AIRCRAFT TOPICS

- > NON-AIRCRAFT NOISE + MITIGATION/BARRIERS
- > QUALITY OF LIFE (BEYOND AIRCRAFT)



e.g. AIR QUALITY

- > STORM WATER QUALITY, SALMON RUN INITIATIVES
- > PUBLIC SAFETY ULTRAFINE PARTICLE IMPACTS
- > LAND USE
- > TRANSPORTATION IMPACTS
- > WORKFORCE HOUSING



Noise Working Group Program Updates

June 10, 2024

StART Noise Ongoing Initiatives Updates

- Late Night Noise Limitation Program update
- Late Night Runway Usage to date in 2024
- Noise Comment Report Summary for April

Late Night Noise Limitation Program

Voluntary program - monitors noise levels of takeoffs and landings from **12:00am to 5:00am**



- Noise level thresholds established for departures and arrivals
- Noise level exceedances are tracked and reported on a quarterly basis
- Airlines are contacted regarding their noise exceedances

Late Night Operations Notes

- Average late-night operations (takeoffs and landings) totals in May: **34** operations – **29** passenger and **5** cargo
- Consistent nightly cargo ops include 2 ATI (Amazon) and 1 FedEx
- 67% of China Airlines Cargo operations during late night hours in Q2 (thru 6/4) were with their new Boeing 777
- Boeing 777 is approximately 5 dB SEL quieter on takeoff than 747-400
- Full Q2 update at next Noise Working Group meeting

Late Night Runway Use

12:00am to 5:00am

2023 Totals:

- Average of **1.8 third runway landings** per late night

2024 Update:

- Average of **1.4 third runway landings** per late night thru 6/3
- 101 late nights with no operations on third runway thru 6/3
- Planned nighttime runway closures in late May caused some increased usage
- Continuing to monitor usage totals on a daily/weekly basis

April 2024 Noise Comment Report Totals

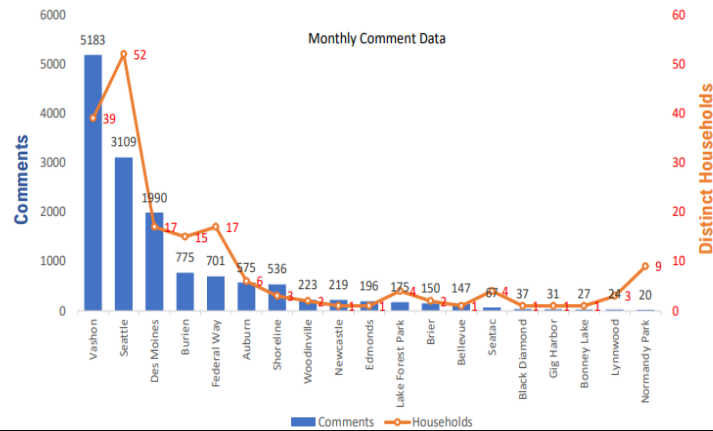


NOISE PROGRAMS OFFICE COMMENT REPORT
APR 2024

Monthly Totals & Trends

190 Distinct Households **14,221** Comments **64,853** Comments YTD **439** Distinct Households YTD

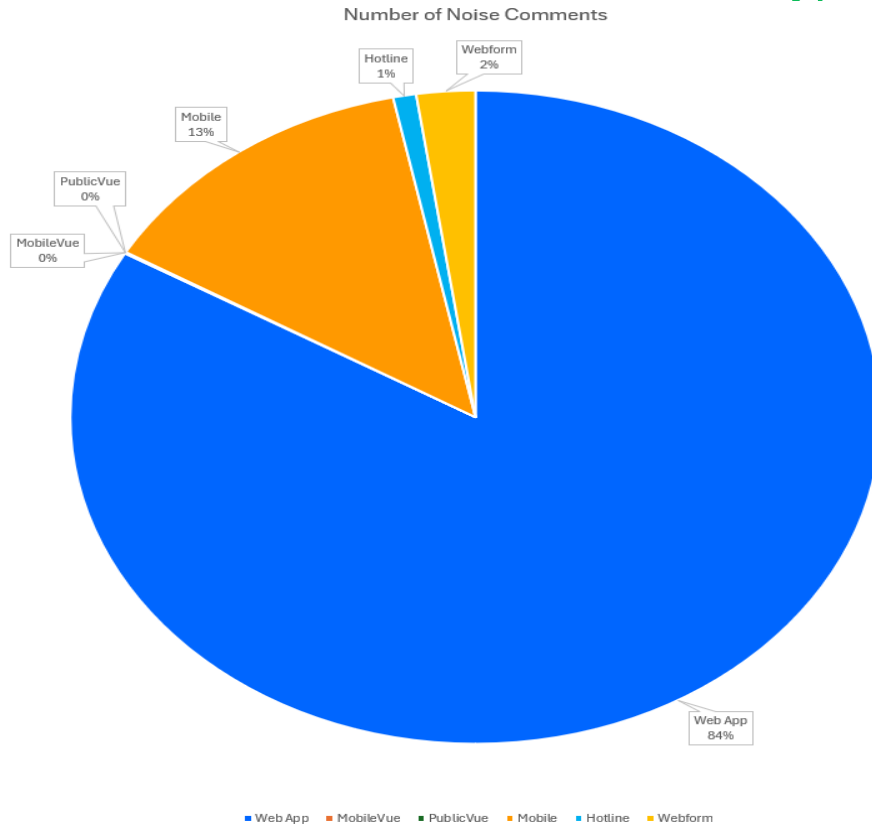
Monthly Totals & Trends: By City



CITY	COMMENTS	DISTINCT HOUSEHOLDS	AVG COMMENTS/HOUSEHOLD
Vashon	5,183	39	132.9
Seattle	3,109	52	59.8
Des Moines	1,990	17	117.1
Burien	775	15	51.7
Federal Way	701	17	41.2
Auburn	575	6	95.8
Shoreline	536	3	178.7
Woodinville	223	2	111.5
Newcastle	219	1	219.0
Edmonds	196	1	196.0
Lake Forest Park	175	4	43.8
Brier	150	2	75.0
Bellevue	147	1	147.0
Seatac	67	4	16.8
Black Diamond	37	1	37.0
Gig Harbor	31	1	31.0
Bonney Lake	27	1	27.0
Lynnwood	24	3	8.0
Normandy Park	20	9	2.2
Kent	13	1	13.0
OTHER	23	10	2.3
Totals	14,221	190	74.8



Noise Comment Breakdown: Types & Filing Method – April 2024



COMMENT TYPE	COMMENTS
Noise Annoyance	13495
Increase in Flight / Noise	328
Aircraft too low	200
Unspecified	118
Other	41
Request Sound Insulation Info	24
Aircraft deviations	15
B739 at 6900FT flying over my home	1
Fuel Smell / Air Quality	1

	METHOD RECEIVED	COUNT
Web App	Third party web application	11883
Mobile	PlaneNoise mobile application	1867
Webform	Comment submitted via Port of Seattle website	329
Hotline	Voicemail message via phone system	131
MobileVue	Received via PublicVue mobile app from cell phone	8
PublicVue	Received via PublicVue flight tracking website	3

Noise Comment Monthly Comparison

Comments					
Month	2020	2021	2022	2023	2024
Jan	36,142	20,509	23,897	8,285	17,557
Feb	26,610	18,082	19,338	6,903	16,557
Mar	26,194	25,574	22,169	8,405	16,518
Apr	11,274	21,742	20,027	8,733	14,221
May	13,936	19,873	22,365	7,674	
Jun	20,991	23,461	20,405	7,743	
Jul	21,896	25,002	15,893	6,777	
Aug	22,954	25,944	15,321	8,336	
Sep	17,261	24,123	17,272	14,598	
Oct	17,577	24,979	16,449	14,854	
Nov	19,023	23,974	8,423	17,502	
Dec	20,635	17,052	8,327	20,665	
	254,493	270,315	209,886	130,475	64,853



Single Engine Taxiing

Proposed SEA Language

StART Aviation Noise Working Group

June 10, 2024

Single Engine Taxiing – 2022 Ground Noise Study Recommendation


Encourage voluntary use of “single engine taxiing” when safe and all considerations are met. Institute new airport master record language and conduct outreach to carriers to increase awareness.

Benefits

- Modest noise reduction for nearby communities
- Reduces aircraft fuel burn & emissions
- Already in use by many air carriers

Challenges

- An airport cannot require single engine taxiing
- Larger aircraft require both engines when taxiing




Proposed
SEA
Language

Current Language:

None

Proposed Language:

Single Engine Taxiing – To minimize noise and fuel burn, SEA encourages airlines to single engine taxi when safe and conditions permit.



Single Engine Taxiing Awareness Campaign

Proactively reach out to air carriers about the new language through:

- StART
- Airline/Airport Affairs Committee
- Airline Station Managers
- Intl. Airline Station Managers
- Air Cargo Stakeholders
- Federal Aviation Administration
- Written/Online Communication
- Other Ideas?



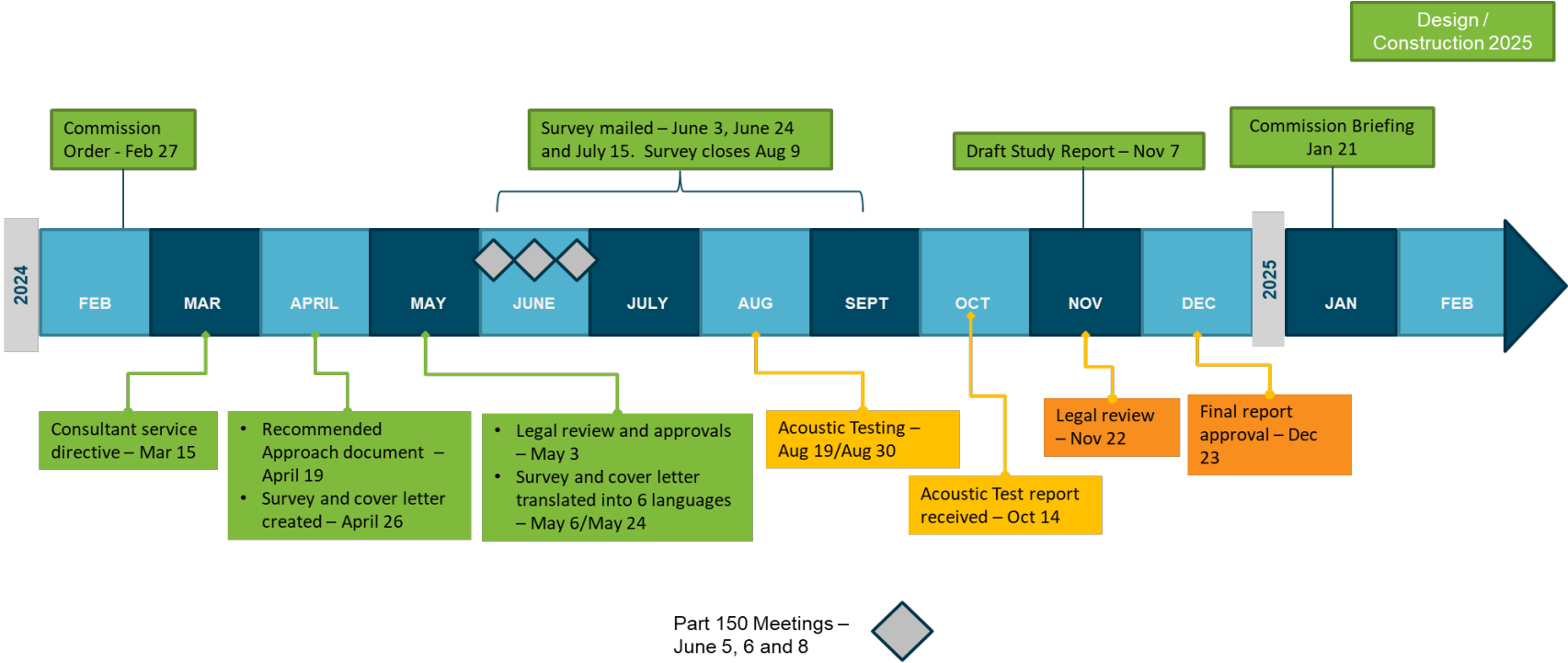
Sound Insulation Repair and Replacement Pilot Program Update

June 10, 2024

Commission Order 2024-04

- February 27, 2024 – Commissioners approved Order 2024-04
 - Sets timeline for completion of an assessment (by end of 2024)
 - Establishment of a Sound Insulation Repair and Replacement Pilot Program
 - Pilot Program will incorporate equity guidelines for participation
- Funded by tax levy
 - Total authorized budget of \$6.5M
 - \$5M set aside for design/construction
- Three defined phases of assessment: Planning Phase; Study and Testing Phase; and Report Phase

Pilot Program Schedule



Planning Phase of Assessment

- Planning Phase
 - Onboard consultant to assist the Port (Environmental Science Associates / ESA)
 - Establish scope of the assessment
 - Is there a correlation between defects in existing Port-sponsored sound insulation packages and potential increases in noise levels in the interior of homes? If so, what is the correlation?
 - Development/translation of survey and mailer

Study and Testing Phase of Assessment

- Study Phase
 - Send out mailers for access to survey (June 3, June 24, July 15)
 - Describes the survey as a method to gather data to assist the Port in gaining a better understanding about the current condition of Port-sponsored sound insulation packages
 - Participation in the survey does not guarantee repair, replacement, or maintenance
 - Allows for residents to provide additional comments and upload pictures
 - Takes approximately 10 minutes to complete
 - Unique QR code/link associated with each address to take survey on phone/computer
 - Survey responses will be compiled in a database (survey response closes August 9) and data will be analyzed

Study and Testing Phase of Assessment (cont.)

- Testing Phase
 - As a result of the study phase, a sampling of homes will be acoustically tested in the 2nd half of August 2024
 - Acoustic Testing of approximately 30 homes
 - Acoustic testing will include different manufacturers of Port-sponsored installations over a 25-year period
 - Entire home will be acoustically tested
 - Acoustic Testing Report mid-October 2024

Report Phase of Assessment

- Report Phase
 - Analysis of survey and acoustic testing data
 - Compilation and review of Draft Report by November 22
 - Compilation and review of Final Report by December 23
 - January 21, 2025 - Commission Briefing

The logo for Seattle-Tacoma International Airport, featuring the letters 'SEA' in a bold, green, sans-serif font. A thin blue horizontal line is positioned below the letters.

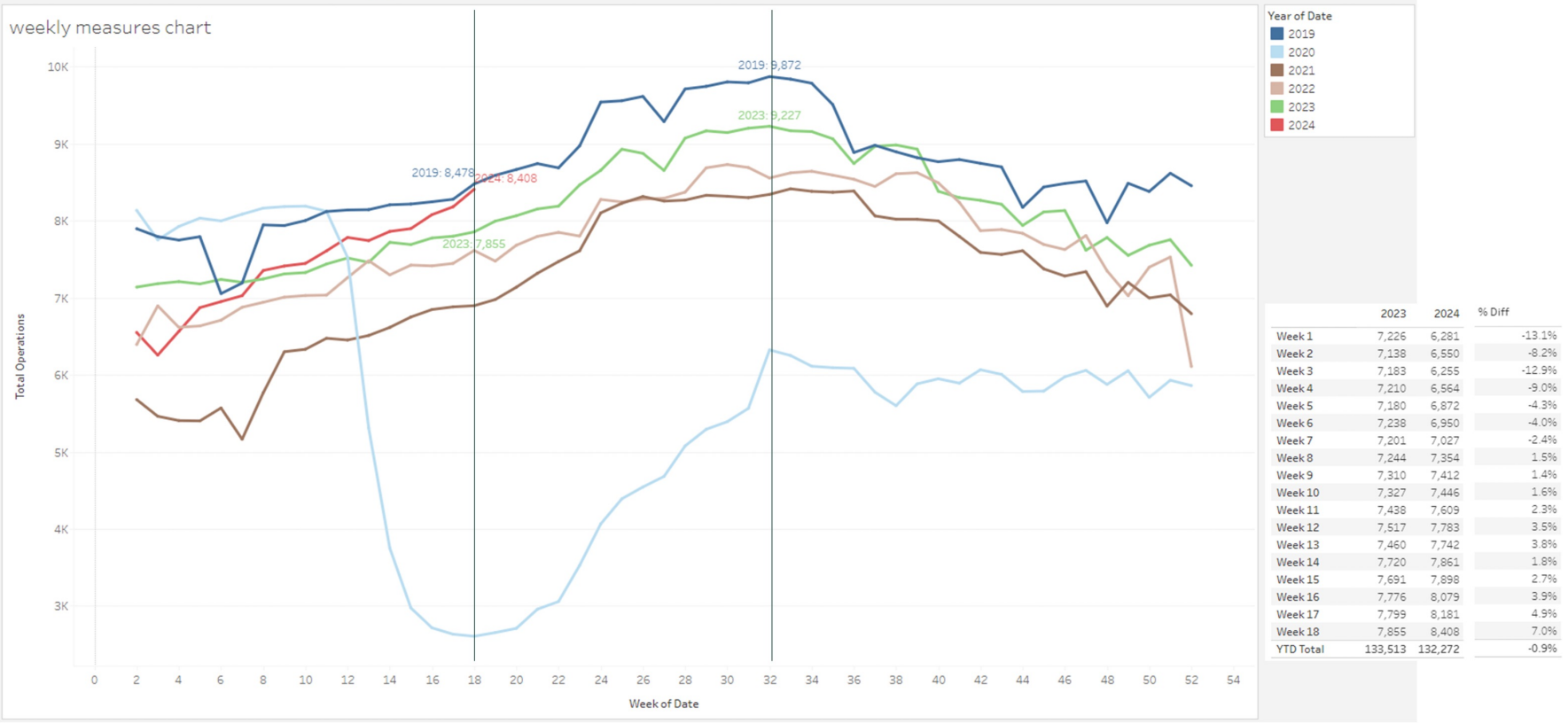
Seattle-Tacoma
International
Airport

START

Operations Update

June 10th, 2024

Flight Operations Year over Year



2024 IATA Summer Schedule

Month	Airline	Destination	Frequency	Date Range	Comment
April	Hainan Airlines	Beijing (PEK)	3x/week (Tu/Th/Sa)	4/2 – 10/26	Resuming Service
May	Icelandair	Reykjavik (KEF)	3x/day	5/23- 9/8	Increasing Service
	Lufthansa	Munich (MUC)	3x/week (Tu/Fr/Su)	5/31 – 10/26	New Service
June	Finnair	Helsinki (HEL)	3x/week (Tu/Th/Sa)	6/1 – 8/30	Returning Seasonal Service
	Delta	Taipei (TPE)	Daily	6/6 – 10/26	New Service
	EVA Air	Taipei (TPE)	10x/week	6/25 – 9/8	Adding 2 nd flight 3x/week
July	China Airlines	Taipei (TPE)	5x/week (Mo/Tu/We/Th/Sa)	7/14 – 10/26	New Service
August	STARLUX	Taipei (TPE)	3x/week	8/16 – 10/26	New Service
	Turkish Airlines	Istanbul (IST)	10x/week	8/13 -10/26	Adding 2 nd flight 3x/week (Tu/Th/Sa)
October	Philippine Airlines	Manila (MNL)	3x/week (We/Fr/Su)	10/2 – 10/26	New Service

▪ **Summer 2024 International Outlook:**

- This is shaping up to be our busiest summer to date
- We will see a **phased** increase throughout the summer and will peak out in operations and passengers in August.
- Increase in hardstand operations during peak periods of the day.

Q3 (July/Aug/Sept) YOY Comparison:

Routing	Flights	Seats
Domestic Flights	5.6%	3.7%
International	17.8%	18.2%

2024 IATA Summer Schedule: Late Night Flights

Summer 2023

Airline	Scheduled Departure	Aircraft Type	Frequency	Data Range
Volaris	23:00	A320	Daily	
EVA Air	02:10	787-1000	Daily	

Summer 2024

Airline	Scheduled Departure	Aircraft Type	Frequency	Date Range
Icelandair	23:00	757-300	Daily	5/23 – 9/8
Volaris	23:11	A320	Daily	4/2 – 10/26
Philippine Airlines	23:40	777-300ER	We/Fr/Su	10/2 – 10/26
EVA Air	01:10	777-300ER	We/Fr/Su	6/26 – 9/8
China Airlines (Passenger)	01:30	A350-900	Mo/Tu/We/Fr/Su	7/14 – 10/26
EVA Air	02:10	787-1000	Daily	3/31 – 10/26
STARLUX	02:10	A350-900	Mo/Th/Sa	8/16 – 10/26



- Anticipated Growth in Late-Night Widebody Operations
- Increased Remain Overnight Night (RON) Activity
- Rise in Domestic Hardstand Operations.

Taxi Time by Hour

Average hourly taxi times (in minutes) for the past 10 days

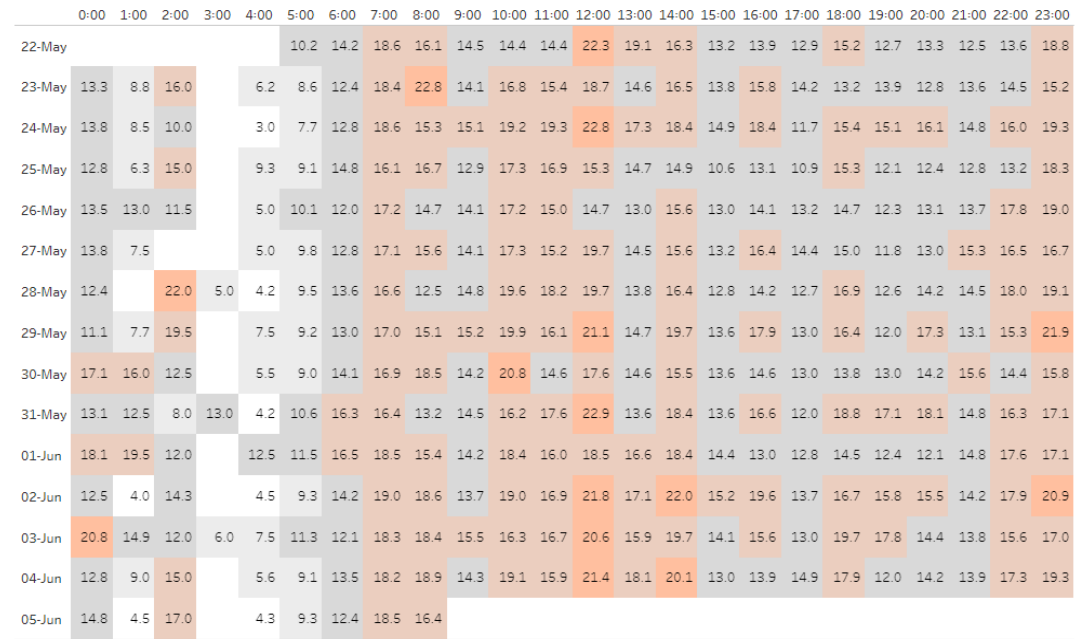
Arrival, Departure, or both?

First available record: 22-May-24 5:35 AM
 Last available record: 5-Jun-24 8:45 AM

Concourse
 Airline

- Snapshot showing average taxi times for arrivals and departures combined for the last 10 days. Our goal is to avoid exceeding an average 20 minutes.

Number of times hourly avg exceeded 20 minutes	Week 21 2024 (19May-25May)	Week 22 2024 (26May-01Jun)
Daytime (0500-1700)	9	3
Evening (1700-0500)	1	1
Total	10	4

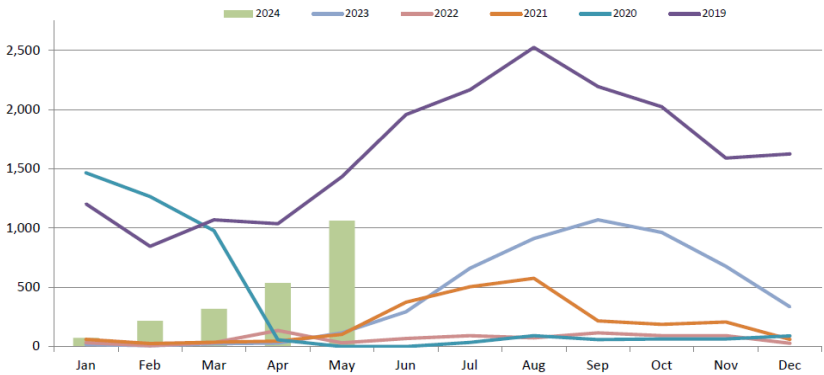


Source: POSGroundstar

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Prepared by Business Intelligence
 Contact: [BI Team](#)

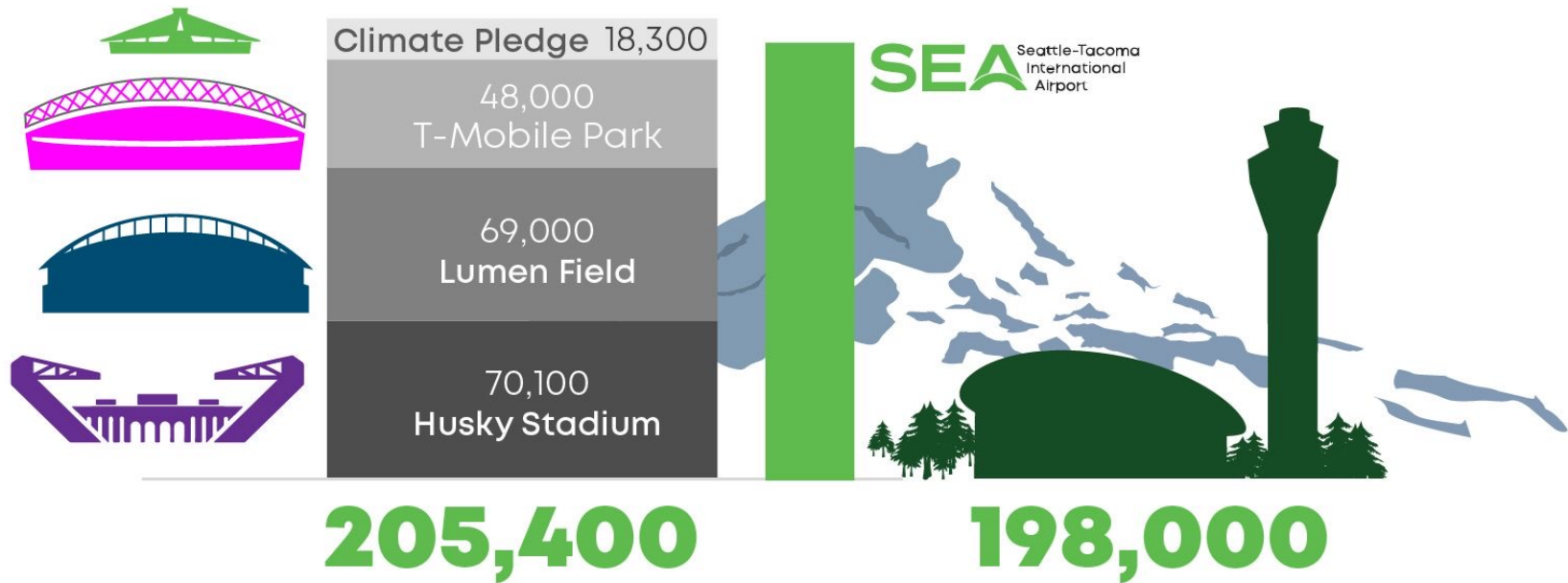
Current Hardstand Operations Volume



	2016	2017	2018	2019	2020	2021	2022	2023	2024
Jan			209	1,205	1,466	60	33	17	73
Feb		1	112	846	1,267	25	7	7	215
Mar		1	114	1,070	978	36	32	24	317
Apr	3	3	203	1,036	56	44	135	28	535
May	5	1	361	1,434	0	102	31	116	1,064
Jun	35	9	639	1,959	0	375	66	292	
Jul	33	20	761	2,168	34	504	90	660	
Aug	88	10	719	2,527	91	575	72	912	
Sep	55	9	644	2,195	57	215	116	1,069	
Oct	32	173	536	2,025	63	187	91	964	
Nov	3	207	469	1,592	64	206	90	677	
Dec	3	184	673	1,626	89	61	27	336	
Total	257	618	5,440	19,683	4,165	2,390	790	5,102	2,204

Monday, July 24th, 2023

- 73,651 passengers screened by TSA
- Estimated 198,000 departing, connecting, and arriving passengers went through the airport.



Thank You!



SEA

Seattle-Tacoma
International
Airport

Operated by the
Port of Seattle

Samer Tirhi
Airline Resource and Scheduling Coordinator

FlySEA.org

E-Mail: Tirhi.S@portseattle.org





Part 150 Study Technical Review Committee

Meeting #1 | June 10, 2024



Agenda

- Welcome and Introductions
- Purpose and Role of the Technical Review Committee (TRC)
- Airport Overview
- Part 150 Study Overview
- Introduction to Aircraft Noise and Modeling
- Overview of Land Use Compatibility
- Project Schedule
- Questions

Welcome and Introductions – Consultant Team

Environmental Science Associates (ESA)

- 700+ person environmental consulting firm
- Experience at more than 230 airports nationally
- Highly complex projects
 - LaGuardia Part 150
 - John F. Kennedy International Part 150
 - Fort Lauderdale-Hollywood International Part 150
 - Los Angeles International Part 150
 - Tampa International NEM Update
 - San Antonio NEM Update
 - San Francisco International NEM Update



Welcome and Introductions – Consultant Team



Barry Technologies, Inc.

Noise Monitoring



BridgeNet International

Visualization/Graphics



Diverse Vector Aviation Consulting (DVAC)

Air Traffic Control/Airspace



PRR, Inc.

Community Engagement



Ricondo

Forecasting, Airspace, Modeling, and Integration



VMC

Airspace/Flight Procedures

Welcome and Introductions – TRC

TRC Members

- Alaska Airlines – Lynae Craig
- Delta Airlines – TBD
- Des Moines – Jason Woycke
- Burien – Liz Stead
- Federal Way – Brian Davis
- Normandy Park – Nicholas Matz
- SeaTac – Zach Shields
- Tukwila – Neil Tabor

TRC Liaisons

- FAA
 - Western Service Center ATO – Joe Bert
 - Seattle ADO – TBD
 - SEA ATCT – TBD
- Port of Seattle
 - Tom Fagerstrom
 - Ryan McMullan
 - Paris Edwards
 - Tom Hooper

Technical Review Committee

Purpose and Role of the TRC

- TRC members represent the interests of their organization and/or constituents
- The TRC's role is to support the SEA Part 150 Study
 - Review study assumptions
 - Provide technical feedback within the context of the Part 150 Study
 - TRC members are encouraged to express their opinions and expected to respect the range of opinions expressed by their fellow TRC members
- TRC members are expected to advise their organization and/or constituents of the TRC's discussions
- The Port will respect and consider the TRC's technical input, but retains responsibility for, and decision-making authority on, the SEA Part 150 Study

Role of the TRC Meeting Facilitator

- To ensure that the TRC meetings are effective, meetings will be facilitated by a professional meeting facilitator
- The meeting facilitator:
 - Is responsible for ensuring that the TRC meetings adhere to the meeting agenda
 - May extend or shorten the length of a discussion related to an agenda item at their discretion
 - As well as the Port, may cancel or suspend a TRC meeting due to disrespectful or disruptive behavior

TRC Charter and Participation Agreement

- The TRC Charter and Participation Agreement are included in today's meeting materials
- The Charter describes the role of the TRC and describes the conduct of the TRC meetings
- Please return the signed Participation Agreement to The Port
- The Port anticipates there will be 15 to 20 TRC meetings during the Study's duration
- TRC meetings will typically be held every other month
- TRC membership is voluntary and TRC members will not be compensated for their time

Airport Overview

SEA Overview

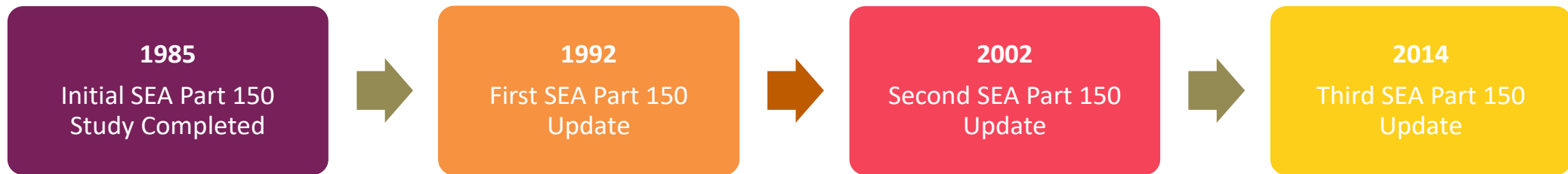
- SEA is one of the Pacific Northwest's leading economic engines
 - 151,400 jobs, including 87,300 direct jobs
 - \$7.1 billion in total personal income
 - \$22.5 billion in total business revenue
 - \$415 million in state taxes reflecting direct and secondary activities
- In 2023, the Airport had 422,500+ operations
- Served 50 million passengers in 2023
- Processed 417,000+ metric tons of cargo in 2023
- The only large hub airport in the PNW
- Non-stop flights to over 120 domestic and international cities



Part 150 History at SEA

The 14 CFR Part 150 process is the Airport Sponsor's mechanism to improve the compatibility between the Airport and surrounding communities

SEA's Part 150 Efforts Span Four Decades



Part 150 Study Overview

Regulations and Guidelines

- Interim Rule on Federal Aviation Regulations (FAR) Part 150, *Airport Noise Compatibility Planning*, issued in 1981 and finalized in 1985, later recodified as Title 14 Code of Federal Regulations (CFR) Part 150
- Issued in response to provisions contained in the Aviation Safety and Noise Abatement Act (ASNA) of 1979
- Establishes the methodology to be followed when preparing aircraft noise exposure maps and developing airport/airport environs land use compatibility programs
- Part 150 studies are voluntary, but...
- Part 150 studies must adhere to 14 CFR Part 150 guidelines to be considered and accepted and approved by FAA

Regulatory Framework

- Three core organizations are involved in aircraft operations at SEA:
 - **Federal Aviation Administration (FAA)** - Directs the safe movement of aircraft in the air and on the ground
 - **The Port:** Manages the airport, improves and maintains airport facilities; has no control over where aircraft fly
 - **Pilots:** The pilot in command has ultimate responsibility for the safe operation of his/her aircraft
- **Federal law**
 - Sets aircraft noise standards, prescribes operating rules, establishes the compatibility planning process, and limits airport proprietor's ability to restrict aircraft operations.
- **State law**
 - Sets forth compatibility planning guidelines and noise standards but aircraft are exempt.
- **Local noise ordinances**
 - Set noise standards and provide for compatible land use planning but aircraft are exempt

Who Can Regulate Airport Noise

- **Federal Aviation Administration**

- Controls aircraft while in flight
- Responsible for controlling noise at its source (i.e., aircraft engines)
- Certifies aircraft and pilots

- **Airport Proprietors/Port of Seattle**

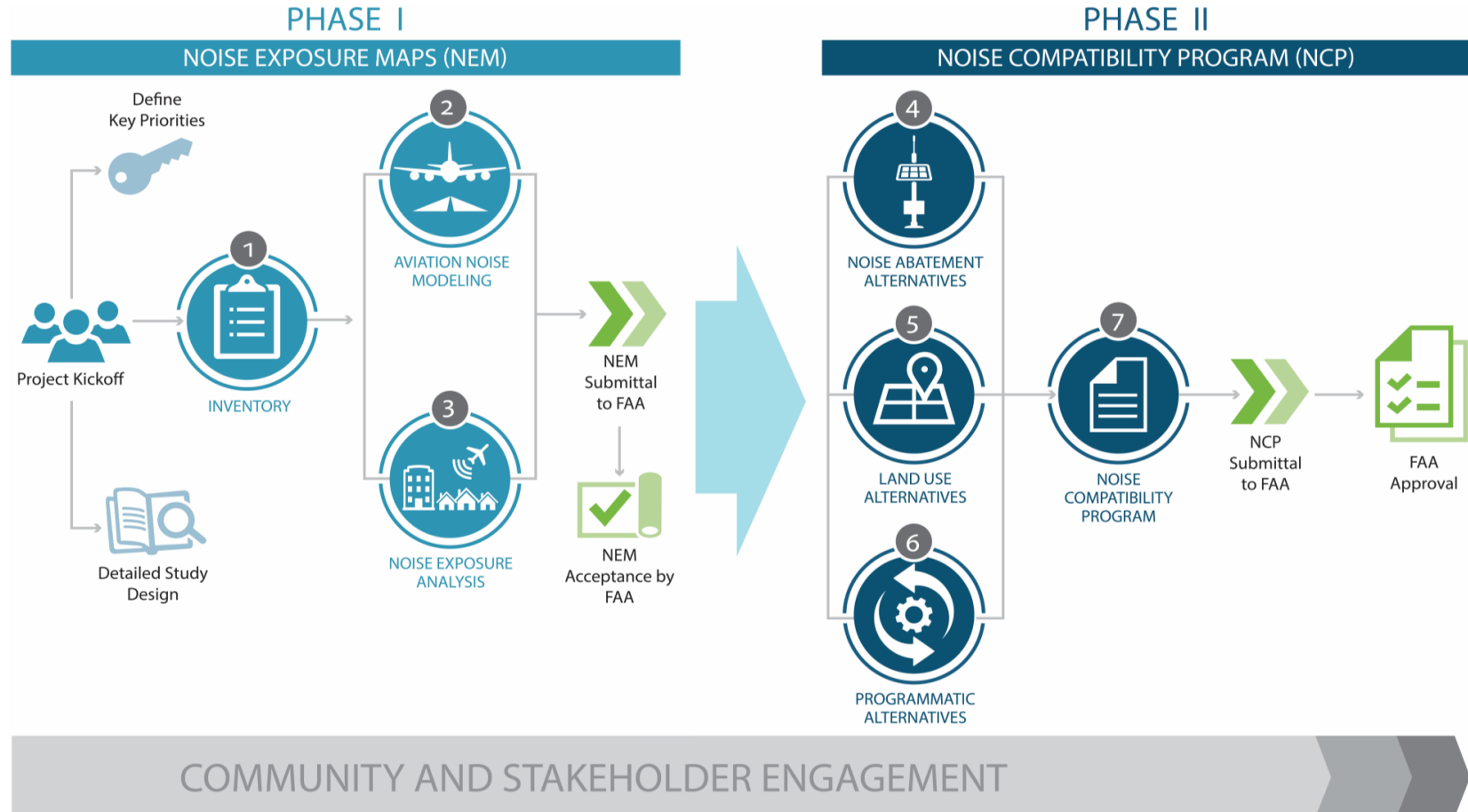
- Responsible for capital improvement projects and infrastructure.
- Can establish a "noise office", which services as a bridge between the Airport, FAA, and the community to minimize the impact of aircraft noise while ensuring the Airport operates safely and efficiently.
- Very limited authority to adopt local restrictions though can adopt and promote voluntary noise abatement measures

- **Local Governments and States**

- Promote compatible land use through zoning
- Can require real estate disclosure
- Can mandate sound-insulating building materials

**FEDERAL LAW TAKES PRECEDENCE
OVER STATE AND LOCAL
REGULATIONS**

Phases of a Part 150 Study



Part 150 Study Overview

- **Noise Exposure Map Report (NEM)**
 - Develop a comprehensive database of current conditions
 - Noise contour development and impact analysis
 - Prepare and submit NEM Report
- **Noise Compatibility Program (NCP)**
 - Identify and evaluate noise abatement alternatives
 - Identify and evaluate compatible land use alternatives
 - Identify and evaluate administrative measures
 - Prepare and submit NCP Report
- **Stakeholder Outreach Program**
 - Local Jurisdictions/Agencies
 - FAA
 - Public

Analyze, Evaluate, Educate

- Determine existing and future noise conditions in the vicinity of an airport
- Identify noncompatible uses
- Identify measures to improve compatibility
 - Evaluate the feasibility of possible flight procedure/land use changes
 - Submit locally-endorsed recommendations to the FAA regarding noise reduction measures
 - Approved measures may be eligible for Federal grant funding
- Educate communities on the Federal process and what can and cannot be done to address aircraft noise concerns

Part 150 Studies Must Adhere to 14 CFR Part 150 Guidelines to be Accepted and Approved by FAA

Key Priorities for this Part 150 Study

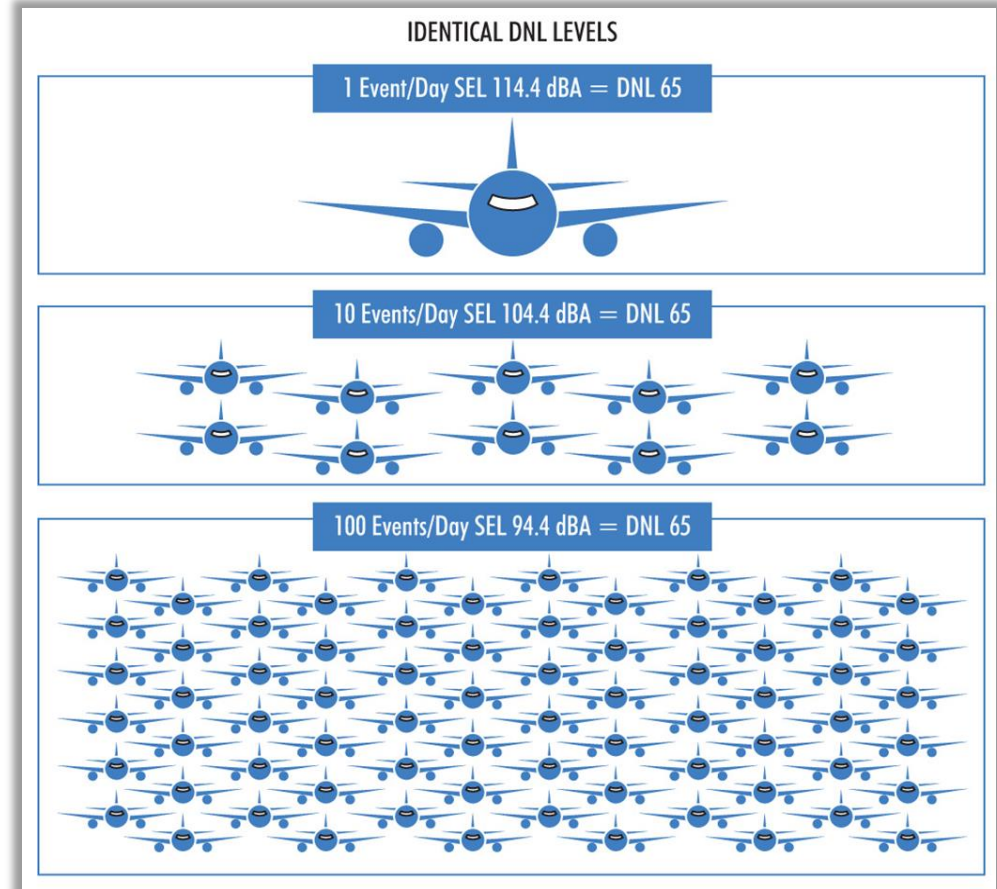
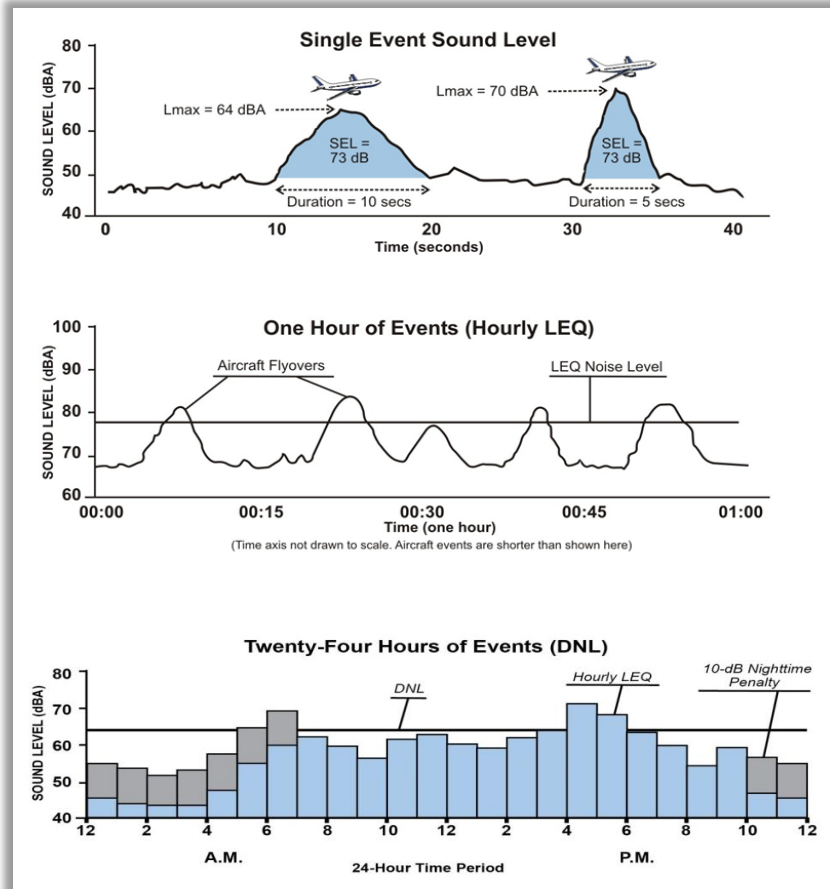
- Understanding community concerns about aircraft operations
 - Seasonal operations (north flow typically in summer)
 - Increase in annual aircraft operations
- Meaningful community engagement
- Communicating the Part 150 Study process and managing expectations
- Avoiding confusion about ongoing Port programs separate from the Part 150 Study:
 - Sustainable Airport Master Plan Near-Term Projects (SAMP NTP)
 - Ongoing Sound Insulation Program
 - Sound Insulation Repair and Replace Pilot Program

Noise and Noise Modeling

Introduction to Aircraft Noise

- Day-Night Average Sound Level (DNL)
 - 24-hour time weighted energy average noise level based on A-weighted decibels (dBA)
 - Noise occurring between 10 p.m. to 7 a.m. is penalized by 10 dB to account for the higher sensitivity to noise during nighttime hours and for the expected decrease in background levels that typically occur in the nighttime
 - FAA requires the use of DNL for airport noise analyses
 - Average Annual Day (AAD) aircraft noise exposure is calculated over a broad area and then depicted using contour lines of equal noise levels

Introduction to Aircraft Noise



Noise Modeling

- Aircraft noise modeling allows:
 - Calculation of noise exposure at any point
 - Depicting annual average aircraft noise exposure
 - Predicting future aircraft noise exposure
 - Assessing changes in noise impacts resulting from runway configuration changes or new runways
 - Assessing changes in fleet mix and/or number of operations
 - Evaluating operational procedures
- Aviation Environmental Design Tool (AEDT) replaced the Integrated Noise Model (INM) when it was released in 2015. The current version, AEDT 3f, will be used for the SEA Part 150 Study.

Noise Model Inputs

- The Amount of Noise Exposure is determined by:
 - Aircraft types
 - Stage length (AEDT input for takeoff weight based on distance to destination)
 - Number of average annual day operations
 - Nighttime weighting (1 nighttime operation = 10 daytime operations)
- The Noise Exposure Distribution is determined by:
 - Runway configuration and use
 - Flight track locations
 - Flight track use
- Other Factors
 - Meteorological conditions



**Aviation Environmental
Design Tool (AEDT)
Version 3f**

Land Use Compatibility

Land Use Compatibility

- 14 CFR Part 150 Appendix A, Table 1 provides noise and land use compatibility guidelines
- Considers levels below DNL 65 dB to be compatible with all land uses
- Allows for the adoption of appropriate local land use standards for land use compatibility planning purposes

The 14 CFR Part 150 process is the Airport Sponsor's mechanism to improve the compatibility between the Airport and surrounding communities

LAND USE	Yearly Day-Night Average Sound Level (Ldn) in decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
RESIDENTIAL						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
PUBLIC USE						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
COMMERCIAL USE						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
MANUFACTURING AND PRODUCTION						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
RECREATIONAL						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

Numbers in parenthesis refer to notes.

*The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

NOTES

- (1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- (2) Measures to achieve NLR 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (4) Measures to achieve NLR 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal level is low.
- (5) Land use compatible provided special sound reinforcement systems are installed.
- (6) Residential buildings require an NLR of 25.
- (7) Residential buildings require an NLR of 30
- (8) Residential buildings not permitted.

KEY TO TABLE

SLUCM Standard Land Use Coding Manual.

Y (Yes) Land Use and related structures compatible without restrictions.

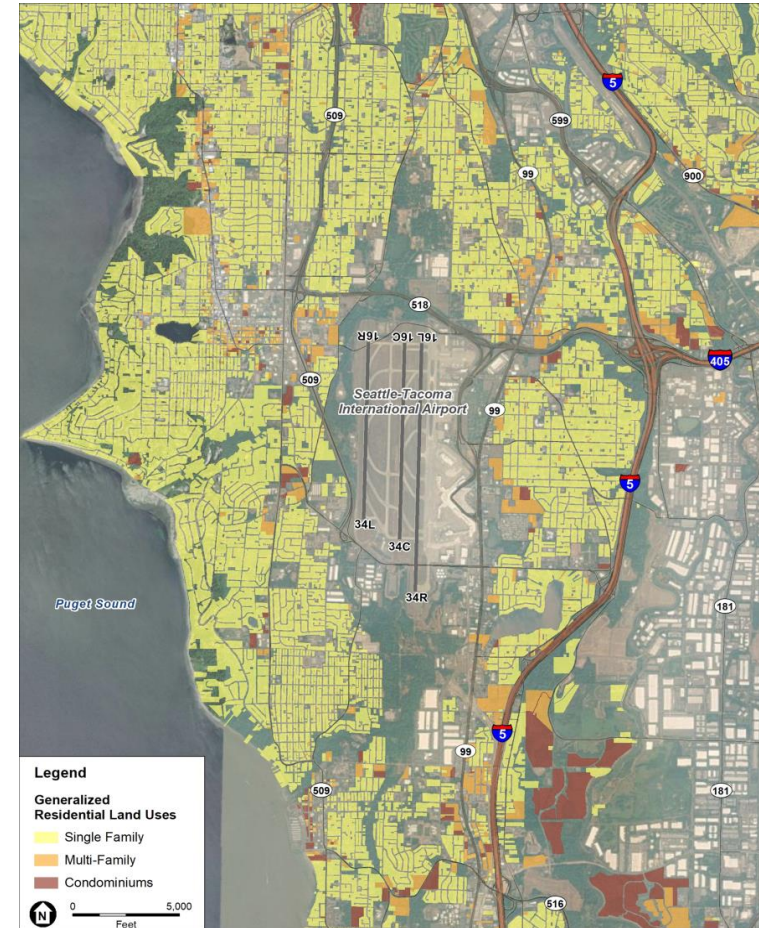
N (No) Land Use and related structures are not compatible and should be prohibited.

NLR Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.

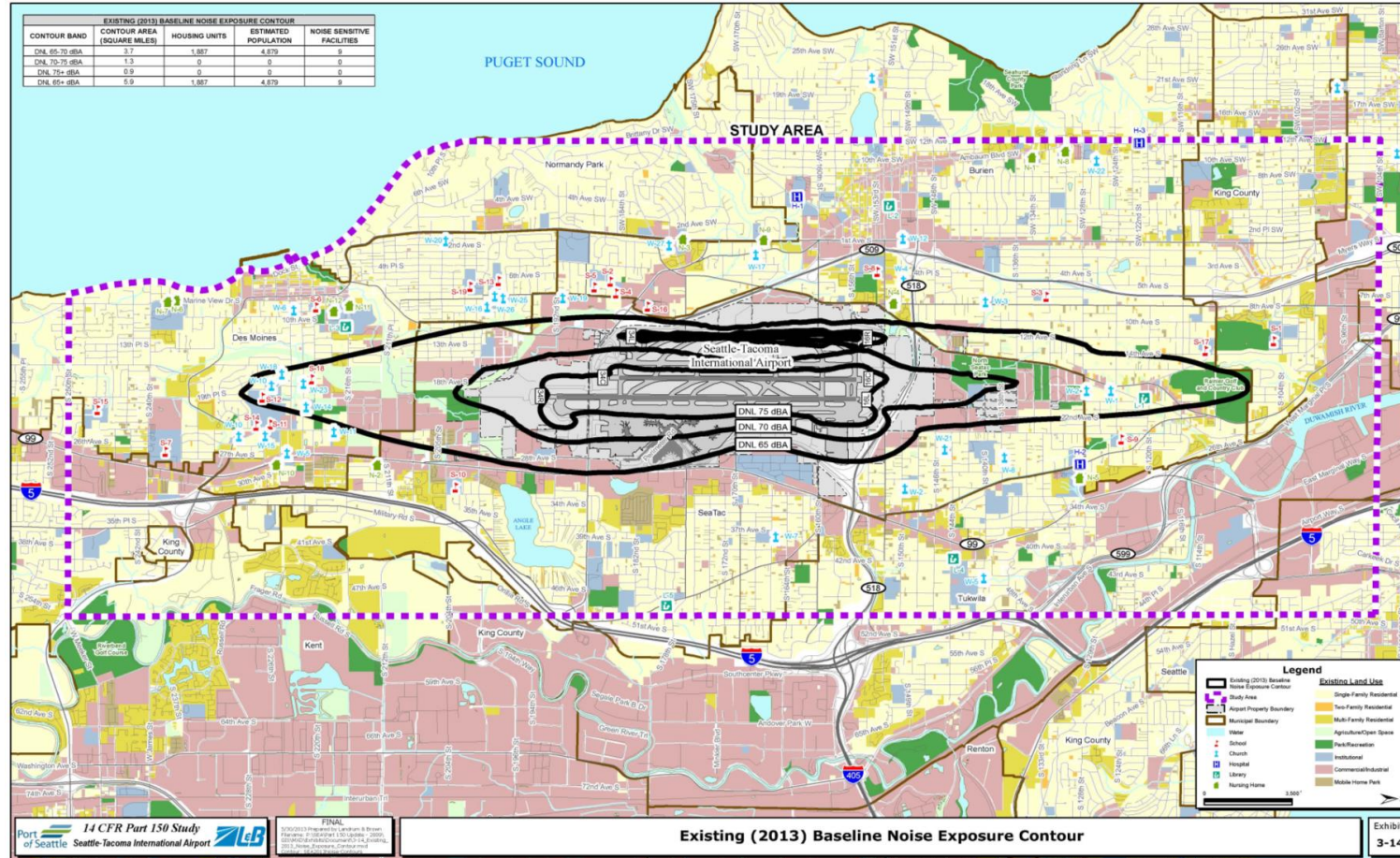
25, 30, or 35 Land use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

Land Use Compatibility

- Land Uses
 - Existing and future land use
 - Land parcel data
 - Zoning
 - Jurisdictional boundaries and neighborhoods
- Noise Sensitive Uses
 - Residential
 - Places of worship
 - Schools, colleges and universities
 - Libraries/cultural institutions
 - Hospitals and residential healthcare facilities
 - Daycare and assisted living facilities
 - Historic properties



Sample Noise Exposure Map



Frequently Asked Questions

- Will the study “fix” all the noise issues around the airport?
 - No, overflights of residential areas are unavoidable and sensitivity to noise varies by person
- What type of noise monitoring will be conducted?
 - While all analysis is modeling based, which allows consistency and evaluation of future conditions, noise monitoring will be conducted to identify trends that should be evaluated in the operational data
- Will the Study address concerns about safety, soot, or other concerns related to aircraft operation?
 - The Part 150 process focuses exclusively on noise and land use compatibility

Part 150 Study Schedule

Preliminary Part 150 Study Schedule

Preliminary 14 CFR Part 150 Schedule

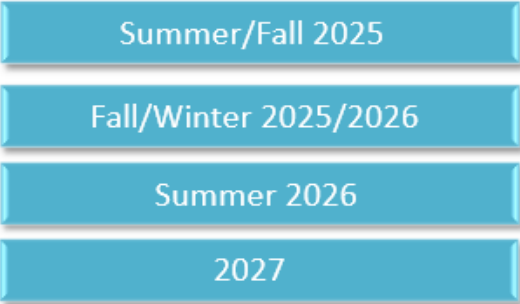
- Noise Exposure Maps

- Data Collection
- Public Outreach
- Noise Modeling
- NEM Report/FAA Acceptance



- Noise Compatibility Program

- Alternatives Analysis
- NCP Report
- Public Hearing
- FAA 180 Day Review/ROA



Summary of Kickoff Public Workshops

(1) Gregory Heights Elementary School

16216 19th Avenue SW
Burien, WA 98166
6:00 P.M. – 8:00 P.M.

June 5th, 2024

(2) Mount Rainier High School

22450 19th Avenue S
Des Moines, WA 98198
6:00 P.M. – 8:00 P.M.

June 6th, 2024

(3) Glacier Middle School

2450 S 142nd Street
SeaTac, WA 98168
10:00 A.M. – 12:00 P.M.

June 8th, 2024



Future Meetings

Technical Review Committee

- TRC Meeting #2 (Tentative)
- TRC Meeting #3 (Tentative)

August 2024

October 2024

- Reminder notices will be sent out in advance of each meeting
- Following the meeting, TRC materials will be posted on the Project Website at www.seapart150.com

Communications

- Project Website
 - Project Information
 - Process
 - FAQs
 - Tentative Schedule
 - Public Draft and Final NEM and NCP Reports
 - Reference Material
- Communication and Feedback:
 - Upcoming meetings including location/dates/times
 - Comment portal during public comment periods
 - Links to other websites/resources

Questions?