

# **APPENDIX O RESPONSE TO COMMENTS**

The comment period for this Part 150 Noise Compatibility Update Study began on April 15, 2013 and ended on May 30, 2013. A copy of each comment that was received during the comment period is located in Appendix E. This section includes the responses to each of the comments that were received during the comment period. Comments are categorized into the following general topics:

**1.0 GENERAL NOISE**

**2.0 NOISE ABATEMENT MEASURES**

**3.0 LAND USE MEASURES**

**4.0 SAFETY**

**5.0 ENVIRONMENTAL / STATE ENVIRONMENTAL POLICY ACT (SEPA)**

**6.0 PART 150 PROCESS**

**7.0 OTHER TOPICS**

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**RESPONSE TO COMMENTS**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
<b>1.0</b>	<b>GENERAL NOISE</b>		
1.1	Marianne Markannen; BJ Durante; Carmen Rodriguez; Liz Inman; Hannah & Baba Salia; Mary Joy Lopez; Lynda Collie Johnson & Ernest Belford Johnson; Nancy Siegel; Stuart Jenner, Mary Oneal; Carl Mealy; Cynthia Linden	Nighttime noise disrupts television viewing, regular sleep patterns and shakes the house.	There have been no new procedures implemented recently that would result in increased air traffic at night. In general, activity during nighttime hours at Sea-Tac has stayed relatively consistent in the last year. The FAA has developed guidelines for determining land use compatibility with certain noise levels. In general, noise levels below 65 DNL are considered compatible with all land uses. At or above 65 DNL, residential land uses are not considered compatible. Sleep disturbance due to aircraft noise can be a major concern of residents living near an airport. The extent to which environmental noise disturbs individual sleep patterns varies by individual. The DNL metric is designed to take higher sensitivity to nighttime noise by applying a 10 dB penalty to flights that occur between 10:00 p.m. and 6:59 a.m. Therefore, the concerns of sleep disturbance are being taken into consideration in the study due to the use of the DNL metric. There are multiple noise abatement measures in place at SEA to help minimize nighttime noise over residential areas. See Chapter Six, Noise Compatibility Program Measures A-1, page 6-13; A-10, page 6-17; A-11, page 6-18; A-12, page 6-19. At the present time there is no universally or FAA accepted method of describing low frequency noise (which can induce structural building response that may cause rattle of windows, fixtures, pictures) and its impact on communities around airports.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
1.2	Tracy Bjork; Suzanne Vargo	Seems like more noise not less.	The perception of whether there is more noise or less noise around an airport is specifically related to where an individual is located and their tolerance for noise. The commenters make the general assertion that there is more noise now than in the past. It is recognized that people residing under the flight path of the third runway now receive more direct overflights than they did before it was open. However, this does not necessarily mean that the DNL level at their homes is louder. This Part 150 Study developed noise contours for Existing (2013) conditions and Future (2018) conditions at Sea-Tac. Both the Existing and Future conditions noise exposure contours are substantially smaller than contours prepared for previous Part 150 Studies. This reduction in the size of the noise exposure contours is primarily due to the phase out of noisier aircraft, ongoing abatement and program measures, and decreases in operations at the airport.
1.3	Melody Ehresman; Marianne Markannen; Hannah & Baba Salia; Mary Joy Lopez; Lynda Collie Johnson & Ernest Belford Johnson; Marilynn Thulin; Georgia Filipowicz; Alex Deriugin; Joe & Jean Sullivan; Emma Jones/ Georgia Filipowicz; Suzanne Vargo; Joe Gleason; Dave & Michelle Haney	Cannot use back porch and enjoy outdoors due to noise disrupting conversation. Noise makes open windows and watching TV impossible. Rainier Valley naturally echoes with sound making over flights much louder.	The Federal Aviation Administration (FAA) has developed guidelines for determining land use compatibility with certain noise levels around airports. In general, noise levels below 65 DNL are considered compatible with all land uses. The Port has implemented several programs to help reduce noise within a home. Noise interference with outdoor activities is a concern that is often mentioned by residents living near an airport. The Port has implemented operational measures that have the goal of minimizing overflights of residential areas. While these have been effective in reducing overflights of some residential areas, in some cases, it is technically infeasible to remove overflights due to the location of the homes in relationship to the runways. The FAA and airlines have safety limits that require aircraft to fly in certain locations in relationship to the runways. Mitigation that would violate these limits cannot be implemented.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
1.4	Dale Riley	Wants any way to decrease indoor noise.	Many studies have been conducted related to the effect of noise on conversation and other human activity. These studies have concluded that 45 dB is the highest steady noise level that allows normal conversation throughout an average room with 100 percent sentence intelligibility. The typical home, with doors and windows closed, can reduce outdoor noise levels by approximately 20 dB or more. Installing energy efficient insulated windows, doors and positive air ventilation are methods used to decrease indoor noise levels.
1.5	Renate Wines; Robin Cole; Suzanne Vargo; Mark Brady; Stacey Anderson; Kathy Hopf; Marianne Markannen; Lowell & Renate Wines; Scott Chase	Low flying planes, you can see the landing gear and it shakes buildings. Federal Way suffering for your need to try to appease the Marine Hills area.	Flight corridors are planned to ensure the safest route to and from the runways and incorporate abatement procedures whenever possible. Generally, aircraft on arrival are at lower altitudes than departing aircraft. The pilot of the aircraft makes the decision when to deploy the landing gear to ensure a safe landing. At the present time, there is no universally accepted method of describing low frequency noise (which can induce structural building response that may cause rattle of windows, fixtures, pictures) and its impact on communities around airports. No modifications to flight procedures or other abatement programs are being recommended in order to appease Marine Hills.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
1.6	Robin Cole; Scott McCormick; Anthony Curran; Janice Stewart; Lowell Wines; Jeffery Howard; William Douglass; Stuart Jenner; Georgia Filipowicz; Carl Mealy; Mary Jane Anderson; Marilyn Thulin; Suzanne Vargo; MaryJoy Lopez; Nancy Siegel; Hannah & Baba Salia; Alex Deriugin	Third runway disproportionately affects south Seattle. South Seattle has an increase in noise in general. Usage of the third runway has not been only in bad weather as it was projected, but seems in continuous use and the noise is worse.	FAA Air Traffic Control dictates how the aircraft are assigned to runway based on safety and efficiency. There is currently a Runway Use Agreement that provides a framework for the FAA's decisions during different periods of the day, as well as under various weather conditions; however, there are no restrictions on the use of the third runway. For more information, see <a href="http://www.portseattle.org/Environmental/Noise/Pages/Runway-Use-Info.aspx">http://www.portseattle.org/Environmental/Noise/Pages/Runway-Use-Info.aspx</a> . Spreading aircraft is not considered a viable option because it would simply redistribute noise from one community to another.
1.7	Kennard Nelson	Third runway has not increased noise	Your comment has been noted.
<b>2</b>	<b>NOISE ABATEMENT MEASURES</b>		
2.1	Brett Fish; Marlyn Wahlstrom; Sue Smith; Tanya Engeset; Carl Mealy	Port agreed to not site Ground Run-Up Enclosure (GRE) at proposed site A. Other various comments on the GRE. Specifically, GRE facing west would affect more population, why is it even an option? Request GRE be built - especially for use during nighttime. GRE location should help, and produce no other environmental concerns.	The Port is unaware of an agreement in regard to the siting of a GRE at Alternative Site A. A GRE Study was prepared and used various criteria to determine the optimum location and orientation for the GRE (See Appendix K). Three alternative locations (site A, B, and D) were determined to be feasible sites based on operational and noise reduction criteria. A final site has not been selected at this time.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
2.2	Hanna Salia & Baba Salia; Robin Cole; MaryJoy Lopez; Nancy Siegel	Wants a more equitable distribution of noise among all neighborhoods	Your comment has been noted. FAA Air Traffic Control dictates how the aircraft are assigned to a runway based on safety and efficiency. Alternatives that explored changing air traffic patterns were examined in this Part 150 Study. The results showed that these changes would result in simply shifting noise from one area to another and therefore the alternatives were not recommended for inclusion in the Noise Compatibility Program. (See Chapter Five, Table 5-1).
2.3	Kathy Hopf	Wants more information on blast screens. Says it worked at previous apartment on north end of runways.	Blast walls/noise berms were evaluated for locations at the airport (see Chapter Five, Table 5-1). No locations were selected due to terrain or other obstructions in the area.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
2.4	Kathy Hopf; Kerry Tinker, Ronald Wilson; Scott Chase	Other airports compared to SeaTac have less impacts on their surrounding communities, including restrictions and local flight procedures. Some by using secondary airports instead of increasing operations at the primary airport. Steeper rate of climb out and nighttime curfew for all loud jets is another option.	It is difficult to compare impacts between airports. Development surrounding an airport is unique to that specific airport and as a result there are also examples of airports that have more impacts on the surrounding communities. The Port of Seattle does not have the ability to restrict or dictate where an airline chooses to operate. In accordance with the Airport Noise and Capacity Act of 1990, airport sponsors seeking to establish aircraft noise and aircraft access restrictions to a specific airport are forbidden from doing so unless they follow the FAA regulations at 14 CFR Part 161 (Part 161) Notice and Approval of Noise and Access Restrictions. Part 161 provides airports with a methodology to place limits on aircraft types and/or other restrictions, primarily for the purpose of reducing noise impacts. The methodology for an airport conducting a Part 161 is a cost-benefit analysis, where the benefit is the amount of money not spent to mitigate significantly noise-impacted land uses is weighed against the cost, which is the potential reduction in revenue and interstate commerce that would occur as the result of a restriction being placed at an airport. The determination of whether land uses are compatible under Part 161 is based on the FAA 14 CFR Part 150 Land Use Compatibility standards. In general the Part 150 Land Use Compatibility standard is that all activities are compatible with noise levels below 65 DNL. The FAA has not approved any airport Part 161 restrictions at a major air carrier airport to date.
2.5	Kathy Hopf	Would like to see airport continue to look into new technologies to decrease run-up noise.	A GRE Study was prepared and used various criteria to determine the optimum location and orientation for the GRE (See Appendix K). The GRE Study evaluated various types of technologies used in building GREs. A final site has not been selected at this time.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
2.6	Tracy Bjork; Mary Jane Anderson; Carolyn & Brian Kraemer; Tom George; Leah Boehm; Mark Brady; Scott Chase; Alex Deriugin; Mark Brady	Several comments received suggesting flight location changes. These included: Changing air traffic patterns means there are planes on all sides of house instead of where they used to be and there has been no compensation for this change. Suggestions by other commenters to move traffic over I-5 would negatively impact Kent. A contrary suggestion is to move the traffic over Puget Sound. Planes flying over I-5 or Pacific Highway would reduce noise in Federal Way. Determination of Non Significance fails to address changing landing patterns.	While the Port of Seattle has limited control over air traffic procedures, alternatives explored changing air traffic patterns were examined in the Part 150 Study. The results showed that these changes would result in simply shifting noise from one area to another and therefore the alternatives were not recommended for inclusion in the Noise Compatibility Program. (See Chapter Five, Table 5-1).  Comments regarding the DNS are outside the scope of the Part 150 Study. For further questions, please contact the Port of Seattle, Seattle-Tacoma International Airport Noise Programs Office at (206) 787-5393 or toll-free 1 (800) 826-1147.
2.7	Allyson Jackson on behalf of the City of Medina	City of Medina supports the continued operation of the Noise Office to deal with various abatement actions included in the Noise Compatibility Program. In addition, that the Office be chartered with additional responsibilities to review and assess data, form a follow-up public committee, and initiate a review of the Port's noise abatement procedures.	Your comment has been noted. The continued operation of the Noise Office was recommended. (See Chapter Six, Measure P-3). The Noise Office routinely reports to and solicits feedback from the Highline Forum, comprised of elected members from the Port, the airport cities (SeaTac, Burien, Des Moines, Normandy Park, Tukwila and Federal Way), Highline Public Schools and Highline Community College.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTER</b>	<b>COMMENT</b>	<b>RESPONSE</b>
2.8	Carolyn & Brian Kraemer	Change heavy cargo to daytime hours because they seem to fly lower on takeoff and exceed the noise created by smaller planes.	Neither the Port of Seattle nor the FAA have the ability to change the schedule of a specific airline or group of airlines. It is the decision of each airline to determine the schedule that it operates at an airport.
2.9	Alex Deriugin	Daily noise has increased substantially and is getting worse. Recommends quicker altitude gain and turn east ASAP.	Alternatives that explore immediate turns off the runways and gaining altitude quicker were examined in the Part 150 Study. The results showed that these changes would result in simply shifting noise from one area to another and therefore the alternatives were not recommended for inclusion in the Noise Compatibility Program. (See Chapter Five, Table 5-1)
2.10	Stacey Anderson	Changing air traffic patterns and flight procedures (flaps and landing gear) has not reduced, but rather concentrated noise.	Your comment has been noted.
2.11	Scott McCormick; Hanna Salia & Baba Salia; MaryJoy Lopez; Nancy Siegel	Return air traffic patterns to historical norms further west instead of turning east so quickly (return to No Right-Turn-Agreement from 10 years ago).	Alternatives that explore changing air traffic patterns were examined in the Part 150 Study. The results showed that these changes would result in simply shifting noise from one area to another and therefore the alternatives were not recommended for inclusion in the Noise Compatibility Program. (See Chapter Five, Table 5-1). Neither the Port nor the FAA are aware of a No-Right-Turn agreement that was in effect or removed in the last 10 years.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
2.12	Allyson Jackson on behalf of the City of Medina	City of Medina requested at the beginning of this Part 150 Study a review of the 13 year old Duwamish/Elliott Bay corridor study. Aiming for an increased/restored use of the Duwamish/Elliott Bay corridor during other periods of the day and on weekends. This corridor is highly favored by all communities because it is the only flight track that does not severely impact residential communities.	Increased use of the Duwamish/Elliott Bay corridor was determined by the FAA to greatly impact the efficiency of the air traffic system in the region and degrade safety, which would not be consistent with 14 CFR Part 150, section 150.35(b)(3)(iii). This position by the FAA has not changed; therefore this Part 150 Study did not recommend increased use of the corridor.
2.13	Allyson Jackson on behalf of the City of Medina;	Supports Fly Quiet Program and operation and upgrades to noise monitoring and flight tracking system	Your comment has been noted. The Fly Quiet Program has been recommended to continue with new elements (See Chapter Six, Measure A-12 and page 6-26 Alternative A-19). In addition, the Part 150 is recommending to upgrade the noise monitoring and flight tracking system. (See Chapter Six, Measure P-1).

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
2.14	Stuart Jenner	Table 5-1 summarizes many of the suggestions citizens submitted but did not include my suggestion to apply sound absorption materials to airport buildings.	The suggestion to include sound absorption materials to airport buildings was evaluated, however, it inadvertently was left out of Table 5-1. The Final Part 150 has been updated to reflect this suggestion. The use of sound absorbing materials could reduce noise from aircraft taxiing on the airfield, but the noise reduction would occur within a few hundred feet of the building. Beyond that, the noise reduction would be imperceptible because noise from taxiing aircraft becomes indistinguishable from roadway and aircraft flight noise. As a result, this option would have little effect on residential uses due to the location of the airport buildings in relationship to nearby residential uses. This Part 150 did not recommend including sound absorption materials on airport buildings.
2.15	Stuart Jenner	Concerned about school insulation and funding inadequacy. How much has the state kicked into this process?	To date, the State has paid \$18,657,430 to assist with the reconstruction of Highline School District noise impacted schools that are identified in the June 2002 Memorandum of Agreement. For further information on state funding please contact your local state representative.
2.16	Stuart Jenner	Stage 3 Aircraft Phase-out. Has anything happened on Stage 3 since 2010? Reference in document is dated.	The statements on Page 3-29, that no action has been taken to establish a phase out for Stage 3 aircraft remains valid. Chapter Three, Page 3-29 in the Final Part 150 has been updated to reflect this.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
<b>3</b>	<b>LAND USE MEASURES</b>		
3.1	No Name; Tracy Bjork; Mary Jane Anderson; BJ Durante; Jim Jollimore; Liz Inman	Believes remedy boundary should grow as a result of increased air traffic, not shrink. Remedy boundary needs modification, more squared off instead of arrowhead shape. Should take topography into consideration. Not eligible for insulation on newer homes because of codes put in place by city of Des Moines.	This Study developed noise contours for Existing (2013) conditions and Future (2018) conditions at SEA. The Future (2018) noise exposure contours represent the best estimate of noise exposure in the future. Per FAA requirements, the noise remedy boundary was modified to reflect the location of the Future (2018) noise exposure contour. The final shape of the noise remedy boundary is slightly larger than the Future (2018) noise exposure contour in order to follow natural and geographic features based on guidance in FAA Order 5100.38. The zoning codes put in place by the City of Des Moines (and other cities near Sea-Tac) were developed in 1990 and once implemented required materials and techniques that met or exceeded the noise level reduction requirements in the program.
3.2	Jeffery Howard	Home previously not eligible for sound insulation. Is my home eligible now?	The original Noise Remedy Boundary was established in the 1985 Noise Compatibility Program. All of the homes located within the original Noise Remedy Boundary have been evaluated for inclusion in the sound insulation program. All of the homes that were determined eligible were offered sound insulation. Since that time the noise exposure contours have decreased and this Part 150 Study is recommending the Noise Remedy Boundary be updated to reflect the reduction in noise exposure (See Chapter Six, Exhibit 6-1). Therefore, if your home was not eligible for sound insulation previously, it would not be eligible today.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
3.3	Yvette Garcia; Vivian Everts; Marty Yellam; William Douglass	Wants sound insulation. How do we apply for the Port's package?	The original Noise Remedy Boundary was established in the 1985 Noise Compatibility Program. All of the homes located within the original Noise Remedy Boundary have been evaluated for inclusion in the sound insulation program. All of the homes that were determined eligible were offered sound insulation. Most of the offers were accepted; however, some were declined. Since that time the noise exposure contours have decreased in size and this Part 150 Study is recommending the Noise Remedy Boundary be updated to reflect the reduction in noise exposure (See Chapter Six, Exhibit 6-1). Therefore, homes located within the updated Noise Remedy Boundary that have not previously received sound insulation may be still eligible to receive sound insulation. Contact the Port of Seattle to determine if your home is eligible for sound insulation.
3.4	Richard Engel; Joe Gleason	Wants sound insulation with air conditioning. Concerned that Noise Compatibility Program alternative M-A (retrofit positive ventilation for previously attenuated single family residences) is not being recommended except for home that were not previously insulated.	The Port of Seattle has agreed to consider incorporating air conditioning into the sound insulation packages in the future. This is not a commitment to include air conditioning, because several criteria must be met including, FAA funding, the structure itself, and a review of building codes. Due to Federal restrictions on funding, air conditioning cannot be offered to homes that have previously received sound insulation.
3.5	Brett Davis	Port Should Insulate Regardless Of Owner	Your comment has been noted. The Ports sound insulation program is based on home eligibility, not homeowner.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
3.6	Melody Ehresman; Anthony Curran; Carmen Rodriguez; Joe & Jean Sullivan; John Cruse; Marilyn Thulin	Interested In voluntary buyout. Not willing to upgrade existing house as owners hope they will be bought out eventually. Recommendation of buyout of all residential to south 272nd Street with redevelopment as industrial.	The Part 150 Study recommends voluntary acquisition for residential areas located within the South Approach Transition Zone (see Chapter Six, Measure M-11). This is the only area that is being recommended for any form of acquisition.
3.7	Kathy Hopf	Does not want buyout but hopes for airport to take measures to make living there more comfortable.	The Port of Seattle has implemented numerous measures through the Part 150 program over the years to help reduce noise exposure in the communities surrounding the Airport. There are several new measures that are being recommended as part of this Part 150 Study.
3.8	Reverend Jon Cortese	Wants Burien Free Methodist Church sound insulated.	The Part 150 Study is recommending to initiate a formal study to evaluate the noise levels at churches/places of worship located within the Noise Remedy Boundary (See Chapter Six, Measure M-17). However, the Burien Free Methodist Church is not located with the Recommended Noise Remedy Boundary and therefore would not be evaluated in the recommended formal study of churches.
3.9	Debi Wagner; Stuart Jenner	Requested noise berm to be included as part of Part 150 process. Independent testing has found noise levels to the west of the airport above the threshold triggering mitigation.	This Part 150 Study considered a noise barrier on the west side of the airport. As a general rule, a noise barrier is most effective when it is close to the source of the noise and at least 24 feet in elevation above the elevation of the runway. In order to meet Part 77 Surfaces protecting navigable airspace, a noise barrier at 24 feet above the runway elevation at any location to the west of the airport would need to be constructed at least 668 feet from the runway centerline. As this would not provide a benefit within the DNL 65 dB noise exposure contour, it was not recommended to be included in the Noise Compatibility Program.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
3.10	Dave & Michelle Haney; Marilyn Thulin; Stuart Jenner; Emma Jones/Georgia Filipowicz	Feel sound insulation inadequate as you can still feel vibration in the house. Also, opening of the windows negates any benefits. People hiring contractor for windows have no guidance from the Port, or if the windows Port installed fail, they are on their own.	At the present time there is no universally accepted method of describing low frequency noise (which can induce structural building response that may cause rattle of windows, fixtures, pictures) and its impact on communities around airports. The benefits of the program are designed to reduce interior noise levels only.
3.11	Janice Stewart; Tracy Bjork	Why has airport not come back with the offer to pay the difference of what we could sell our home for in another area away from the airport? There should be compensation for noise impacts.	The Port of Seattle has implemented numerous measures through the Part 150 Program over the years to help reduce noise exposure in the communities surrounding the Airport. There are several new measures that are being recommended as part of this Part 150 Study. Compensation for noise impacts is not one of the measures being recommended because the Port believes sound insulation programs are a more effective way to reduce noise levels in the community.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTER</b>	<b>COMMENT</b>	<b>RESPONSE</b>
3.12	Carl Mealy	Why did Port buy land adjacent to 24th Ave S but did not buy out properties closer and more directly under the runways? Based on noise and safety, the area appears to no longer be required and should be put back in private hands to generate money and taxes for the public good.	The Port of Seattle in the past has purchased land for a variety of reasons, some of which were for noise purposes, while other times was for maintaining safety. For lands purchased to maintain safety, the Port of Seattle will continue to hold onto the land for that purpose. For land purchased for noise purposes, they have and continue to attempt to sell or redevelop the land for uses that are compatible with the noise levels present at the site. All properties north of South 216th Street between 24th Ave S and 15th Ave S were purchased for noise purposes in the 1980s based on the 75 DNL noise contour developed at that time. In the 1980's, there were no residential areas north of South 216th Street directly under the flight tracks of the first two runways on the south end of the airport that were not purchased for noise. Due to the reduction in noise contours since the 1980's, some of the land is no longer required to be held for noise purposes and the area adjacent to 24th Ave S and 216th Street is being returned to public use as airport compatible land zoned as industrial/commercial use.
<b>4</b>	<b>SAFETY</b>		
4.1	Janice Stewart; Marilynn Thulin	Scared to be outside sometimes due to turbulence breaking trees.	Your comment has been noted. The Part 150 process deals specifically with noise and land use compatibility. FAA guidance contained in FAR Part 77 deals specifically with protection of flight from obstructions, like trees, near the end of the runway. SeaTac currently complies with all FAA guidance regarding Part 77 clearance distances. In general, aircraft turbulence generates far less wind than a typical thunderstorm. It is a property owner's responsibility to maintain trees in a way to remove dead/broken portions of trees in their yards.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
4.2	Marianne Markannen; Debi Wagner; Dave & Michelle Haney; Scott McCormick; Marty Yellam	Until you live below a runway, it's hard to understand the impact on your quality of life. Carbon, soot and particulates from jet operations is closer to homes on west side of the airport.	Your comment has been noted. The Part 150 process deals specifically with noise and land use compatibility. In the past, the FAA has conducted soot analysis at many airports across the country with the uniform result that samples collected on and near the airport bore little chemical resemblance to either unburned jet fuel or soot from jet exhaust. Instead, the collected material was found to be chemically similar to general urban pollution, particles from burning heavy fuels, and motor vehicle exhaust.
4.3	Sheri Richardson	Blind Person - noise interferes with her safety since she relies on hearing.	Your comment has been noted. The Part 150 process deals specifically with noise and land use compatibility. Auditory signals for people with vision impairments, such as crosswalk indicators, are set at a loudness to be heard over the other typical noises in the area. If there is a specific intersection that the commenter is concerned about, they should contact that jurisdiction to inquire about increasing the volume of that signal. Aircraft are one contributor to the urban noise levels in the area. There are other noise sources, such as lawn mowers and construction equipment, that produce noise levels equal to or higher than aircraft noise levels in the area where the commenter lives. Mitigating noise levels in areas outside of the 65 DNL is not allowed under Part 150 guidelines.
4.4	Debi Wagner	Higher cancer rates around Seattle have been documented (WDOH 1998-2001). Extremely concerned about health effects of airport operations and cites several points from studies to that effect.	Your comment has been noted. The Part 150 process deals specifically with noise and land use compatibility.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
<b>5</b>	<b>ENVIRONMENTAL/SEPA</b>		
5.1	BJ Durante; Janice Stewart; Suzanne Vargo; Liz Inman; Joe & Jean Sullivan	Concerned about fuel dumping and fumes being bad for our health.	The purpose of a Part 150 Study is to develop a balanced and cost-effective plan for reducing current noise impacts from aircraft operations and to limit additional noise impacts in the future. This comment is outside of the scope of a Part 150 Study. Most commercial aircraft do not have the ability to jettison fuel. Dumping fuel would be one of the last options for a pilot and would only occur during an emergency situation. What people see and mistakenly refer to as fuel dumping is condensation (water) streaming off the engines and wings. Exhaust from aircraft are similar in composition to other gasoline burning engines. In general, the greatest contributor to air pollution in an urban/suburban area are automobiles. Aircraft exhaust, while a contributor, is much lower in relative contribution.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTER	COMMENT	RESPONSE
5.2	John Ochoa;	Reference to news clipping "Airport Called Health Disaster For Community." Port not following up on programs to safeguard the health of residents. Numerous studies listed including ones specific to SeaTac showing cancer risk, higher rates of emissions than industrial uses, and higher levels of NO2 and greenhouse gas emissions.	This comment is outside the scope of the Part 150 Study. For further questions, please contact the Port of Seattle, Seattle-Tacoma International Airport Noise Programs Office at (206) 787-5393 or toll-free 1 (800) 826-1147.
5.3	Allyson Jackson on behalf of the City of Medina	Airport using flawed data with respect to the 1999 Four Post EA and ROD. Port's noise abatement compliance tracking parameters may be inconsistent with the FAA flight procedures laid out in said document. City of Medina requests that the Part 150 A-19 recommendation be amended to include that the Port of Seattle conduct a review of its noise abatement corridors and compliance tracking parameters.	The Port of Seattle has no regulatory requirement under the 1999 Four Post EA/ROD to monitor procedure compliance. The FAA is currently reviewing the South Flow East Turn arrival procedures as compared to the Four Post Plan. If any inconsistencies are identified by the FAA that are not consistent with the Port of Seattle's Noise Abatement Procedures, they will communicate these to the Port.
5.4	David E Ortman	Since the aircraft noise from SeaTac has an actual significant adverse impact on the human environment, airport should conduct an EIS instead of Part 150. Port's Determination of Non Significance violates State Environmental Policy Act.	This comment is outside the scope of the Part 150 Study. For further questions, please contact the Port of Seattle, Seattle-Tacoma International Airport Noise Programs Office at (206) 787-5393 or toll-free 1 (800) 826-1147.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
5.5	David E Ortman	Aircraft noise from Sea-Tac Airport has an actual significant adverse impact on the human environment. As a result, the Port should prepare an environmental impact statement that would examine alternatives, including FAA traffic control measures that reduces noise, and alternative airport locations in the future, such as Joint Base Fort Lewis/McCord.	The preparation of an EIS is outside of the scope of a Part 150 Study. The Port of Seattle did however examine several alternatives that suggested rerouting aircraft to different locations. None of these were found suitable for implementation. See Chapter Five for explanation. Alternative airport locations is outside the scope of a Part 150 Study and therefore was not evaluated as an alternative.
5.6	David E Ortman	The DNS addresses aircraft noise in a very limited area around Sea-Tac Airport. The DNS fails to address the fact that traffic landing patterns into Sea-Tac Airport have changed significantly, and for the worse, since the Port began using its "third-runway," advertised by the Port to allow two runway landings during bad weather conditions.	The area within which detailed study of potential mitigation programs or flight changes occurred in the Part 150 was based on the location of the 65 DNL noise exposure contour for the Future (2018) conditions. The FAA identifies 65 DNL as the noise level where impacts to residential land use occurs. The Future (2018) noise exposure contour was prepared using the FAA's methodologies and the best available data. Therefore, the area identified within the Part 150 was appropriately sized.  Comments regarding the DNS are outside the scope of the Part 150 Study. For further questions, please contact the Port of Seattle, Seattle-Tacoma International Airport Noise Programs Office at (206) 787-5393 or toll-free 1 (800) 826-1147.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTER</b>	<b>COMMENT</b>	<b>RESPONSE</b>
5.7	David E Ortman	<p>The DNS fails to adequately describe the existing and recommended noise remedy boundaries (Figure 1). It appears from the scale given that the recommended remedy boundary is approximately 15,000 feet south of the south end of the "third-runway", 10,000 feet north of the north end of the "third-runway", and 4,000 feet west of the edge of the "third-runway." If aircraft landing and taking off from Sea-Tac are a noise problem 4,000 feet west of the airport, than aircraft on a landing pattern into Sea-Tac at an altitude of less than 3,000 feet are also a noise problem. This is what occurs in northwest Seattle.</p>	<p>The updated Noise Remedy Boundary is based on the Future (2018) noise exposure contour. The Future (2018) noise exposure contour is calculated using FAA methodologies and are dependent upon multiple factors including aircraft type, flight tracks, time of day, and runway utilization. The noise exposure contours are not a result of any individual flight track and attempting to use the distance from the airport versus the distance from an aircraft overflight as a surrogate for comparison of DNL levels is flawed. The only way to calculate future noise levels in accordance with FAA guidelines for Part 150 Studies is to use the methodologies and the noise model prescribed by the FAA.</p> <p>Comments regarding the DNS are outside the scope of the Part 150 Study. For further questions, please contact the Port of Seattle, Seattle-Tacoma International Airport Noise Programs Office at (206) 787-5393 or toll-free 1 (800) 826-1147.</p>

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
5.8	David E Ortman	<p>Why does the FAA continue to create noise problems over north Seattle (16 miles north of Sea-Tac Airport) for landings into the Port's "third-run away", under the following circumstances: - Asia or Alaska in bound flights heading south to Sea-Tac that are vectored directly over northwest Seattle at altitudes under 3,000 feet from 4:30 AM until at least 1:30 AM? Why can't FAA vector these aircraft into Sea-Tac by shifting the flight path slightly to the west so that they come into Sea-Tac over Elliott Bay and avoid all the residential population of northwest Seattle? - California/Oregon inbound flights heading north to Sea-Tac that are vectored northbound up Puget Sound and then make a right hand turn over northwest Seattle at altitudes under 3,000 feet from 4:30 AM until at least 1:30 AM? Why can't FAA vector these aircraft into Sea-Tac by making their right hand U-turns over Elliott Bay and avoid all the residential population of northwest Seattle? This would have the added benefit of aviation fuel savings.</p>	<p>Flight corridors are planned to ensure the safest route to and from the runway while incorporating abatement procedures whenever possible. The procedures aircraft follow are first and foremost to ensure safety as well as to maintain capacity at the airport.</p>

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
5.9	David E Ortman	Why does the FAA continue to create noise problems over northwest Seattle (16 miles north of Sea-Tac Airport) by directing outbound flights to the southeast United States to head north from Sea-Tac, then vectoring to the west over Elliott Bay then making a right hand turn over northwest Seattle particularly from 10:00 PM to 1:30 AM to destinations such as Atlanta and Florida? This, again, causes significant noise nuisance particularly after midnight and results in increase aviation fuel usage.	The FAA Air Traffic Control determines the flight procedures for aircraft arriving and departing Sea-Tac. Some of those flight procedures do route aircraft over north Seattle, as well as other areas of the city. Flight corridors are planned to ensure the safest route to and from the runway while incorporating abatement procedures whenever possible. The procedures aircraft follow are first and foremost to ensure safety as well as to maintain capacity at the airport.
5.10	David E Ortman	The Port has also violated WAC 197-11-330(2)(c), which provides: "Consider mitigation measures which an agency or the applicant will implement as part of the proposal, including any mitigation measures required by development regulations, comprehensive plans, or other existing environmental rules or laws."	The proposed Part 150 Study recommendations are designed to further reduce aircraft noise exposure. The Part 150 Study report documents the various options that were considered to reduce aircraft noise. As the recommendations are not expected to increase aircraft noise, further mitigation to the consequences of the proposed recommendations are not needed. Comments regarding the DNS are outside the scope of the Part 150 Study. For further questions, please contact the Port of Seattle, Seattle-Tacoma International Airport Noise Programs Office at (206) 787-5393 or toll-free 1 (800) 826-1147.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
5.11	David E Ortman	The Port has not provided any mitigation for northwest Seattle from the noise nuisance created by the use of the Sea-Tac "third-runway." Mitigation should include making U-turns over Elliott Bay not over north Seattle, bringing in Alaska Airlines and other inbound flights from the northwest over Elliott Bay and not over northwest Seattle, and looping outbound flights to Atlanta and Florida to the south, not to the north.	The FAA Air Traffic Control determines the flight procedures for aircraft arriving and departing Sea-Tac. Some of those flight procedures do route aircraft over north Seattle, as well as other areas of the city. The Port of Seattle is required to follow FAA guidelines regarding offering mitigation, which restricts the use of Federal funds for mitigation programs outside of the 65 DNL. The area the commenter is referring to is outside the 65 DNL and therefore is not eligible for mitigation programs.
5.12	David E Ortman	The Port's "third-runway" and the FAA's landing and take-off patterns continue to have a significant adverse impact to residents in northwest Seattle. The SEPA environmental checklist specifically requires that noise be addressed: 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. 3) Proposed measures to reduce or control noise impacts, if any: WAC 197-11-960.B.7.b.	The SEPA Checklist addresses the issues raised by the commenter in section B.7b and elsewhere. The levels of aircraft operational noise are shown in figures that were attached to the Checklist. As the Checklist is programmatic, and construction plans have not been prepared for each of the actions requiring construction, as much detail about construction noise and traffic is provided as is available. The entire program is designed to reduce noise from airport-related sources.  Comments regarding the DNS are outside the scope of the Part 150 Study. For further questions, please contact the Port of Seattle, Seattle-Tacoma International Airport Noise Programs Office at (206) 787-5393 or toll-free 1 (800) 826-1147.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
<b>6</b>	<b>PART 150 PROCESS</b>		
6.1	Marianne Markannen; John Ochoa	Disappointed there was no public hearing tonight/meeting format.	Your comment has been noted. The Public Hearing held on May 15, 2013 from 6:00-8:00 p.m. at Cedarhurst Elementary in Burien satisfied all local and Federal standards. A court reporter and hearing officer were present to receive oral comments. In addition, written comments were accepted through May 30, 2013. The Open House included presentation posters so that attendees could come and view the materials and ask questions at their convenience instead of a formal presentation that would have required attendees to arrive at a specific time to view such a presentation. The Port will consider your comments when preparing for future public meetings.
6.2	Janice Stewart	Frustrated and feels like no one cares about the residents and doesn't give them many answers.	The Port of Seattle held five public workshops, including the Public Hearing, to accept comments and to offer the public the opportunity to ask questions in relationship to the Part 150 Study. The Port of Seattle has implemented numerous measures through the Part 150 Program over the years to help reduce noise exposure in the communities surrounding the Airport. There are several new measures that are being recommended as part of this Part 150 Study. Outside of the Part 150 process, the Port has other extensive public outreach efforts. See the Port's website <a href="http://www.portseattle.org">www.portseattle.org</a> .
6.3	Jim Jollimore	Wants more on the ground visits to affected locations and not all just theory and formulas to determine remedy boundary.	The FAA requires the noise exposure contours be generated using the Integrated Noise Model. However, the public provided several suggested locations where noise testing was conducted as part of this study. Information collected from these ground visits was incorporated into the modeling, however, it may not be substituted for the modeled data.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
6.4	Stuart Jenner	Page 363 shows Hush House sites A, B, D. Where is Site C?	The three alternative sites for the recommended Ground Run-up Enclosure are presented on Exhibit 5-2, page 5-21 of Chapter Five. These sites are based on recommendations from a GRE Siting Study. The GRE Siting Study is included in Appendix K of the Part 150 Study report. The location of Site C is described on page 32 of the GRE Siting Study in Appendix K. Site C is located north of the terminal area and was not carried forward as an alternative site because ground run-ups occurring in this location could cause jet blast impacts to the surrounding facilities.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
6.5	Marlyn Wahlstrom; Stuart Jenner; Scott Chase	Monitoring locations are from previous sites, not near third runway. Data from most sites is sparse and does not support good science or engineering. Footnote regarding Site M monitoring shows rain on a hot tub cover as rationale for why readings were off. Were there any other problems with the measurements at this site?	Temporary noise monitors were placed at 13 locations to capture noise from aircraft operations. The sites were selected relative to flight patterns, proximity to existing permanent noise monitors, and in response to community suggestions on where to place the monitors. The data collected was supplemented with data from Sea-Tac's permanent monitors. Most of the temporary monitoring locations were located north and east of the airport because the south and west areas have numerous permanent noise monitors. While noise monitors can provide information regarding existing noise levels at one specific location, they are subject to noise contamination from other non-aircraft sources. In addition, the noise monitors cannot predict the noise exposure in the future. Therefore, the FAA requires the noise exposure contours be generated using the Integrated Noise Model (INM) <sup>1</sup> and does not allow monitoring data to be substituted for the INM. The note the commenter is referring to in Chapter Three, page 3-42 is explaining why the community (non-aircraft) noise levels were high and hence why some of the aircraft noise events had high readings. This is not considered an issue with the measurements but rather a disclosure of why the noise readings were higher on this day than a day with no heavy rain. Any other sites that had specific issues were noted in the document.

<sup>1</sup> The INM is a computer noise modeling program that was developed under the guidance of the FAA and is the only model generally approved by the FAA for use in Part 150 studies.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
6.6	Debi Wagner; Stuart Jenner	Process is flawed with undue emphasis on cost, and biased because other airports in the U.S. have hush houses but SeaTac does not. FAA is in charge of evaluating their own impacts and writing the regulations they will abide by. Airports are exempted from air quality regulations while being one of the largest producers of emissions.	Your comment has been noted. It should be noted that one of the recommendations in the Part 150 Study is to build a Ground Run-up Enclosure through Measure A-18 (see Chapter Six, page 6-25). While cost was one of the factors considered in evaluating the Ground Run-up Enclosure, it was not the only one. Other factors included, impact to ground operations at the airport, the ability to expand the site for future development, and the distance traveled by aircraft to reach the Ground run-up Enclosure. Regarding air quality regulations, public airports, such as SeaTac are not exempt from Federal, state, and local air quality laws. Part 150 Studies are planning studies with a specific focus on noise and land use compatibility. They do not require analysis of air emissions like NEPA/SEPA approval documents do. However, if the Port wishes to implement recommendations from the Part 150 Study, each action will be reviewed by the FAA to determine the applicability of NEPA and if warranted the preparation of a NEPA approval document. Likewise, the Port will evaluate each action to determine the appropriate level of SEPA approval necessary prior to implementation.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTER</b>	<b>COMMENT</b>	<b>RESPONSE</b>
6.7	Allyson Jackson on behalf of the City of Medina; Stuart Jenner	Use of complaint data was not used in developing recommendations. Exhibit 1-11 is misleading and is not representative of the times the public is most annoyed by airport noise. Request for the report is to include a chart with both the number of complaints and the contours. Then create a table showing how many locations of people filing complaints are outside of the boundaries. And why does the data only run through May 2011? also suggest graphing individual types of complaints.	Noise complaint data was evaluated and included in the Part 150 Study in Chapter One (see page 1-47). As explained on page 1-52 regarding Exhibit 1-11, in some cases the time of the complaint may not directly correspond to the time of the event that triggered the complaint. Providing an exhibit with the number of complaints and the contours does not provide the reader relevant information. Noise complaints do not always occur where the noise is the loudest. Perceived noise is subjective to the degree in which the noise is unwanted or causes annoyance to an individual. Many factors influence how a sound is perceived and whether or not it is considered annoying to the listener. Therefore noise complaints cannot be directly correlated to the noise levels. The noise complaint data in Chapter One, from page 1-47 through page 1-54 was based on data from January 1, 2005 through June 1, 2012. Text references in the Final Part 150 have been updated to reflect the correct dates. All of the exhibits and tables present data from January 1, 2005 through June 1, 2012 and therefore have not been updated. Exhibit 1-10 on page 1-51 is a graph that depicts the types of complaints received from January 1, 2005 through June 1, 2012.
6.8	Stuart Jenner	Delay of communication to community and elected officials. Two year gap since the last communication to the public. Why is the report and implementation so far behind schedule?	Due to required document reviews by both internal and external parties, the study encountered unavoidable delays

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
6.9	Stuart Jenner	The passiveness of the Part 150 report does not show evidence of proactivity at reducing noise at the source. Perhaps the report could suggest changing additional nighttime flights to daytime flights.	The Port of Seattle and the FAA do not have the ability to dictate the type of aircraft the airlines fly and what time of day they fly to and from the airport. Therefore no recommendations were made to change the nighttime operations to daytime operations.
6.10	Stuart Jenner	Believes process does not address issues outside the 65 DNL.	The FAA has developed guidelines for determining land use compatibility with certain noise levels. In general, noise levels below 65 DNL are considered compatible with all land uses. At or above 65 DNL, residential land uses are not considered compatible. As a result the FAA requires that Part 150 Studies focus on reducing the noise levels within the 65 DNL noise contour and will not approve recommendations for measures with no benefits within the 65 DNL.
6.11	Stuart Jenner	Concerned process only looks out 5 years	The FAA Part 150 guidelines require programs to evaluate noise conditions for existing conditions and 5 years in the future. The FAA recommends that airport noise contours be updated every five years or sooner if conditions warrant. The FAA has developed guidelines for Part 150 studies that require Noise Compatibility Programs to be based on noise exposure five years in the future. Recommendations that look beyond the five year time frame are not included for that reason. The forecast used in the Part 150 Study was prepared in July 2010 and approved by the FAA in August 2010.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
6.12	Stuart Jenner	Feels public involvement plan is inadequate and citizens are not heard	The public involvement plan (See Appendix A) included numerous opportunities for the public to submit comments on the Part 150 Study. Five Public Workshops including a Public Hearing were held during the course of the study. At each Public Workshop the public was given the opportunity to discuss concerns with Port of Seattle staff and the consultant team. In addition, comment forms were provided to allow for written comments to be submitted. Specific comments on how to improve the public involvement process will be considered in the future.
6.13	Scott Chase	No Open House For South Of Airport	Five open house/workshops were held for the Part 150 Study, two of which were located to the south of SeaTac at Mt. Rainier High School in Des Moines and two were held to the north of SeaTac at Cedarhurst Elementary. One was held at the airport, which was considered a central location.
6.14	Carl Mealy	Part 150 needs to address the impacts on quality of life around the airport rather than just speak to monitoring and mitigation measures.	Your comment has been noted. Part 150 is a section of the Code of Federal Regulations that sets forth rules and guidelines for airports desiring to undertake airport noise compatibility planning. The purpose of a Part 150 study is to develop a balanced and cost-effective plan for reducing current noise impacts from aircraft operations and to limit additional impacts in the future.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
6.15	Scott Chase	Federal Way not part of study boundary	The commenter is correct; Federal Way was not included in the Study Area (see page 1-57, Exhibit 1-14). Federal Way is located approximately nine miles south of SeaTac. The Study Area for this Part 150 Study was determined by examining the boundaries of previous DNL 65 dB noise exposure contours (FAA-defined threshold for significant noise impacts), and by reviewing flight tracks of aircraft operating in the airport vicinity and/or under the control of the SeaTac ATCT. The purpose of the Study Area was to identify an area for preparing maps where the noise mitigation programs would likely be focused, again based on FAA requirements for 65 DNL. The definition of the Study Area in no way limited the noise analysis used in preparing the noise exposure contours and in no way limited Federal Way's citizens or elected officials ability to participate in the Study.
6.16	Carl Mealy	Flight pattern data should provide delineation by the level of ground noise created, and not just the pattern of the flights.	The flight tracks (shown in Chapter Three) to describe only one of the inputs used to calculate the noise levels on the ground. It would be impossible to determine DNL noise levels as required by the FAA, exclusively from flight tracks. The DNL noise exposure contours are dependent on multiple factors including aircraft type, time of day, and runway utilization. The noise exposure contours are not a result of any individual flight track but rather the sum of all of the flight tracks, aircraft types, time of day, runway use, and flight profile. Therefore, it is not possible to provide a level of ground noise created by each flight track.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
6.17	Stuart Jenner	<p>Section of Part 150 referencing two additional weekly non-stop flights to Latin America is out of date. Brings into question how carefully the Part 150 study has been proof read and whether there may be some other omissions or dated material that are going to result in problems for the public later. Why can't airport noise be forecast to 2021 if flights can be forecast out that far? Did this happen - "In 2010 Northwest/Delta is replacing all of the A330-200 aircraft from its international fleet at SeaTac airport with A330-300 and B767 aircraft"</p>	<p>The forecast used in the Part 150 Study was prepared in July 2010 and approved by the FAA in August 2010. At that time the two non-stop flights to Latin America was valid. It is typical for these types of studies to use the best available data at the time the analysis is prepared, which is the case for these assumptions used in the forecast. As airline schedules change daily it would be a fruitless effort to continue to update the data every time a flight is added/removed from an airline's schedule. The FAA has developed guidelines for Part 150 studies that require Noise Compatibility Programs to be based on noise exposure five years in the future. Recommendations that look beyond the five year time frame are not included for that reason. The statement of Delta replacing international A330-200s with A330-300 and B767 aircraft is valid and has occurred.</p>

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTER</b>	<b>COMMENT</b>	<b>RESPONSE</b>
6.18	Stuart Jenner	Part 150 tends to dumb down noise impacts. So the question shouldn't just be "what is typical", but rather "what can help the people who are outliers in the way they are impacted by noise?"	The FAA has developed guidelines for determining land use compatibility with certain noise levels. In general, noise levels below 65 DNL are considered compatible with all land uses. At or above 65 DNL, residential land uses are not considered compatible. The noise analysis for this Part 150 Noise Compatibility Study Update was conducted according to these guidelines. One of the goals of the Port's Part 150 study was to educate the public about activity at the airport, the FAA guidelines regarding Part 150 Studies, and provide enough information for people to understand the reasons for selecting or not selecting a recommendation. The topic of aircraft noise, how it is calculated, and the part 150 guidelines are technically complex. The Part 150 Study and the Port team strived to present this technical information in a way that was easily understood by all of the public.
6.19	Stuart Jenner	Isn't the Part 150 at SeaTac supposed to review new noise study impacts? A January 2011 article referencing a study in Germany is not included in the Part 150 report? Thus SeaTac has failed one of its objectives by not including new studies.	Part 150 is a section of the Code of Federal Regulations that sets forth rules and guidelines for airports desiring to undertake airport noise compatibility planning. The purpose of a Part 150 study is to develop a balanced and cost-effective plan for reducing current noise impacts from aircraft operations and to limit additional impacts in the future. The FAA has developed guidelines for determining land use compatibility with certain noise levels. In general, noise levels below 65 DNL are considered compatible with all land uses. At or above 65 DNL, residential land uses are not considered compatible. While other countries have chosen different standards, this standard has been adopted by the United States Congress and changing this standard is beyond the authority of the Port of Seattle.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTER</b>	<b>COMMENT</b>	<b>RESPONSE</b>
6.20	Stuart Jenner	Requests Part 150 to include a comparison of flight tracks before and after the third runway opened. Would also like actual vs. forecasted third runway planning documents.	Part 150 is a section of the Code of Federal Regulations that sets forth rules and guidelines for airports desiring to undertake airport noise compatibility planning. Part 150 guidelines require an airport to evaluate existing conditions and five years in the future. These guidelines were followed for the Sea-Tac Part 150. The purpose of a Part 150 study is to develop a balanced and cost-effective plan for reducing current noise impacts from aircraft operations and to limit additional impacts in the future. Therefore, looking at flight tracks from the past is not required and more importantly would not provide relevant data to assist in reducing current and future noise impacts.
6.21	Stuart Jenner	It is impossible to compare the flight track data of forecast vs. current with the way the data is set up. Requests a comparison of large jets. Where and why is large jet usage going to increase? What are you going to do about the increase?	Flight track locations are expected to remain the same as the current conditions in the future. Table 3-10 on page 3-59 and Table 3-11 on page 3-69 provide the percentages for large jets that use the flight tracks presented in Exhibits 3-12 and 3-13 for current conditions. Table 3-12 on page 3-81 and Table 3-13 on page 3-91 provide the percentages for large jets that use the flight tracks presented in Exhibits 3-12 and 3-13 for future conditions. This data was used to develop the Existing (2013) and Future (2018) noise exposure contours. These contours were used when developing the recommendation in the Part 150 Study.
6.22	Stuart Jenner	Commenter has very little confidence on the estimates on page 304 being current.	Your comment has been noted. The methodologies used to prepare the noise exposure contours conforms to FAA guidelines. The forecast used in the Part 150 Study was prepared in July 2010 and approved by the FAA in August 2010.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
6.23	Suzanne Vargo	How do I stay involved in the process.	As part of the FAA's Record of Approval process there will be a comment period. In addition, any updates on the Part 150 Study will be posted on the Study website ( <a href="http://www.airportsites.net/sea-part150">www.airportsites.net/sea-part150</a> ). Therefore we encourage periodically checking the website for updates.
<b>7</b>	<b>OTHER TOPICS</b>		
7.1	Cynthia Linden; Kathy Hopf; Janice Stewart; Marianne Markannen; Marilynn Thulin; David E Ortman; Liz Inman	Decreased home values and undesirable locations force people to stay in current home even though it is unpleasant to live there. King County Department of Assessment has ruled that noise nuisance from SeaTac lowers property values in northwest Seattle	Your comment has been noted. Part 150 is a section of the Code of Federal Regulations that sets forth rules and guidelines for airports desiring to undertake airport noise compatibility planning. Home values is not within the scope of a Part 150 Study. However, it should be noted that property values are affected by a variety of factors, such as national and local market conditions, availability of financing, availability of similar housing, and are not controlled by one factor such as noise levels. To the Ports knowledge home assessment values are not affected by aircraft operations.
7.2	Richard Engel; Melody Ehresman; Joe & Jean Sullivan	Noise bothers pets	Your comment has been noted. Part 150 is a section of the Code of Federal Regulations that sets forth rules and guidelines for airports desiring to undertake airport noise compatibility planning. Effects of noise on pets is not within the scope of a Part 150 Study.
7.3	Carmen Rodriguez; William Douglass	Concerned about having to pay for parking near home	Your comment has been noted.
7.4	Lowell Wines	Are the bonds for the third runway paid off yet?	No, all 3rd runway bonds have not been paid off. Bonds are expected to be paid off by 2031.
7.5	John Ochoa	Previous Litigation Of Cities Vs. Port Of Seattle was dropped due to a lack of money	Your comment has been noted.
7.6	John Ochoa; Kerry Tinker	It's all about money; selfish airport; information provided is to benefit of the airport, not the community.	Your comment has been noted.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
7.7	Debi Wagner	The FAA knows fully what the impacts will be and whom they will affect. The consultant team, at the direction of the FAA and the Port, misled public regarding impacts.	The FAA has developed guidelines for determining land use compatibility with certain noise levels. In general, noise levels below 65 DNL are considered compatible with all land uses. At or above 65 DNL, residential land uses are not considered compatible. As a result the Part 150 Study focuses on reducing the noise levels within the 65 DNL noise contour and does not provide recommendations for land uses that experience less than 65 DNL noise levels. The consultant team, the Port of Seattle and the FAA followed these guidelines and provided several venues for people to participate in the process.
7.8	Carolyn & Brian Kraemer	Commenter is gracious to all involved for working on these issues. Feels situation should improve in the coming years with advancements and modifications being considered.	Your comment has been noted.
7.9	David E Ortman	FAA creating problems over north Seattle based on landings to third runway, specifically Asia, Alaska, California, and Oregon inbound flights. Port has not provided any mitigation for northwest Seattle. Suggest vectoring these flights over Elliott Bay.	The FAA Air Traffic Control determines the flight procedures for aircraft arriving and departing SeaTac. Some of those flight procedures do route aircraft over north Seattle, as well as other areas of the city. The Port of Seattle is required to follow FAA guidelines regarding offering mitigation, which restricts the use of Federal funds for mitigation programs outside of the 65 DNL. The area the commenter is referring to is outside the 65 DNL and therefore is not eligible for mitigation programs.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
7.10	David E Ortman	Port has violated WAC 197-11-330(2)(c)	<p>The proposed Part 150 Study recommendations are designed to further reduce aircraft noise exposure. The Part 150 Study report documents the various options that were considered to reduce aircraft noise. As the recommendations are not expected to increase aircraft noise, further mitigation to the consequences of the proposed recommendations are not needed.</p> <p>Comments regarding the DNS are outside the scope of the Part 150 Study. For further questions, please contact the Port of Seattle, Seattle-Tacoma International Airport Noise Programs Office at (206) 787-5393 or toll-free 1 (800) 826-1147.</p>
7.11	Marty Yellam	Moved once because of airport, unfortunately it was prior to third runway being built and the move only put them in another flight path.	Your comment has been noted.
7.12	Allyson Jackson on behalf of the City of Medina	Hope that the Port will take its regional responsibility one step further by taking advantage of the expertise and data made available during this study to look at alternatives to improve the overall Puget Sound environment.	Your comment has been noted. The Port of Seattle has and will continue to look for opportunities to reduce noise associated with aircraft operations at Sea-Tac Airport.

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
7.13	Stuart Jenner	Disagrees with Part 150 assertion that renters are less impacted than people who own condos. Measure M-2c relating to multi-family developments ignores the social justice reality that apartment renters tend to be poorer than non-renters.	Measure M-2c is not being carried forward for recommendation in the Part 150 Study. However, two new measures (M-14 and M-15) are being recommended to address owner-occupied and tenant-occupied multi-family dwellings.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
7.14	Stuart Jenner	(A) What is driving the air cargo market and how could it be dropping for several years then suddenly increase? (B) Are the changes in cargo at one time of day vs. another? (C) If the goal is to reduce noise, why is the 2021 forecast of cargo increasing?	(A) Cargo volumes are a direct reflection of the health of the economy, which experienced a downturn that led to declining cargo tonnage from 2006 through 2009 followed by a recovery in 2010 and a slowly increasing trend thereafter. Over a longer term, air cargo has experienced a mode-shift from air to truck that primarily reduced mail and domestic cargo volumes. International tonnage has experienced long term gains, dampened by the economic downturn noted above. (B) Cargo freighter operations primarily occur during two times of the day: morning and early evening. This pattern is not expected to change in the future. (C) Reducing noise is a goal of the airport, but the Part 150 Study also recognizes that a projected increase in flights of both cargo and passenger will have an overall contribution to noise. This was modeled in the 2018 forecasted DNL contour. The Port Commissions Century Agenda Goals include increasing the volume of air cargo, for the benefit of the regional trade-related economy.
7.15	Stuart Jenner	Review RCW 53.54.030(5) with respect to parking structure revenue. Could some of the money be used to replace worn out noise insulation?	Parking structure revenue cannot be used for providing updated/replacement sound insulation to homes that have previously received sound insulation.

**RESPONSE TO COMMENTS (Continued)**

COMMENT NUMBER	COMMENTS	COMMENT	RESPONSE
7.16	Ronald Wilson	<p>I live 25 miles from the airport and 65 dB is not being observed in this location and never has. I live near the Summa 7 departure path. Many times aircraft are over my house and close nearby. Alaska Airlines is the biggest culprit, although there are others. The general procedure is low power and rate of climb until just before Orting and then the power comes up and the noise is EXPORTED to the Orting/Graham area and beyond. During clear weather when they can be seen, the power is usually kept down and they look to be at 6-7 thousand feet. When the weather is overcast, it changes to higher power and elevated noise that is greater than 65db and it seems to be higher flow. When this started in 1996, I was told they were over 10 thousand feet. They were lying then and will now. It appears that the FMS system is being used to export this noise. This information is missing from the public sight. Is this legal to cloak this information on power settings, rate of climb and physical points?</p>	<p>The area the commenter is referring to is well outside the area of 65 DNL, which is the noise level the FAA identifies residential land use to be impacted. The commenter may be confusing 65 DNL with 65 dB. It is possible that individual aircraft overflying the area exceed 65 dB. However, that is not the same as being located within a 65 DNL area. See Chapter Three for a complete description of noise metrics and how sound levels are calculated for this Study.</p>

**RESPONSE TO COMMENTS (Continued)**

<b>COMMENT NUMBER</b>	<b>COMMENTS</b>	<b>COMMENT</b>	<b>RESPONSE</b>
7.17	Hannah & Baba Salia; MaryJoy Lopez; Nancy Siegel;	Implementation of Greener Skies corridors and lower altitudes impacts south Seattle more than ever. Seward Park and Mt Baker residents have seen increase in noise.	Your comment has been noted. The implementation of Greener Skies is being conducted by the FAA and is outside of the scope of this Part 150 Study.
7.18	Stuart Jenner	FICAN has published research since 1997 and should be included in the Part 150 Study.	The Final Part 150 has been updated to include the most recent FICAN publications.

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