

**Date:** October 12, 2009  
**To:** Airport Futures Planning Advisory Group  
**From:** Land Use/Transportation Subcommittee  
Chris Corich and Jay Sugnet  
**Subject:** Staff/Subcommittee Recommendations on Noise and Potential 3<sup>rd</sup> Parallel Runway Description

The Land Use/Transportation Subcommittee and Port and City staffs propose a three phase approach to address aircraft noise. First, the existing area covered by the City of Portland's Noise Impact Overlay Zone ("x" overlay) for insulation, easements, and disclosure will remain unchanged. Second, a new classification is proposed for an expanded City noise overlay zone – to include the area covered by noise disclosure out to the 2035 50<sup>th</sup> Percentile Forecast 55 day night level (DNL) noise contour. Third, the Port and City make a firm commitment to do follow-on work to explore other means to address noise outside the 65 DNL noise contour. The follow-on work would be done through a combined Citizen Noise Advisory Committee (CNAC) and Airport Futures Planning Advisory Group (PAG) committee. All three approaches are outlined below. Fourth and fifth are recommendations to address the Conceptual 3<sup>rd</sup> Parallel Runway on the Port Master Plan/Airport Layout Plan and the City of Portland Land Use Plan.

1. Do Not Modify the Existing City Noise Overlay Covering the 65 DNL. The existing City of Portland noise overlay, based on a 1990 PDX DNL noise contours, regulates the density and construction of new residential structures built between the 65 and 68 DNL noise contours. The City noise overlay requires that homes be sound insulated to ensure that interior noise is reduced to acceptable levels. Without sound insulation, residential uses are deemed to be incompatible with aircraft noise at levels higher than 65 DNL. The 65 DNL is the noise standard used by the Federal Aviation Administration (FAA), the State of Oregon Department of Environmental Quality (DEQ) the United States of Environmental Protection Agency (EPA), and United States Department of Housing and Urban Development (HUD). The City noise overlay requires that the effectiveness of the sound insulation be certified by an acoustical engineer paid for by the Port (usually costs about \$1,000), and that the Port receive both a noise easement and a disclosure statement. Since adoption of the requirements in 1985, 310 homes, condos, and townhomes have been built with certified acoustic insulation, easements, and or disclosure statements dedicated to the Port. Attachment #A includes a set of the papers given to developers with instructions on how to implement the requirements of the City noise overlay. The overlay has promoted land use compatibility by allowing only sound insulated homes to be built in an area impacted by aircraft noise at the 65 DNL level or higher.

Based on the noise analysis completed for Airport Futures in 2009, both the subcommittee and staff agree that the current City noise overlay (based upon the 1990 65 DNL noise contour) should be retained in City code to address the anticipated growth in noise contours and ensure land use compatibility over the long term within the 65 DNL and higher noise contours. The analysis of future airport noise contours was based upon accepted growth scenarios, including dual stream departures, triple stream departures (3<sup>rd</sup> parallel runway) and operations in excess of 500,000. The analysis does not show a need for expansion of the current City noise overlay based on comparison with the future 65 DNL contour. An expansion of the City noise overlay is not necessary to prevent incompatible uses within the 65 DNL noise contour that would be

associated with anticipated future growth at PDX. The existing 1990 City noise overlay is larger than both the base case 2008 65 DNL and 2035 50th percentile 65 DNL contours, and there are only marginal areas where the 2035 90<sup>th</sup> percentile 65 DNL extends beyond that overlay. Continuing to use that contour provides a measure of extra protection for residents by applying the extra sound insulation standards for new development in an area that is larger than the current 65 DNL contour.

2. Modify the City's Noise Overlay Beyond the Existing 65 DNL. Although the subcommittee and staff recommend leaving the City noise overlay boundary where it is today for acoustic certification, easements and noise disclosures, the subcommittee recommends a new noise overlay extending out from the current 1990 65 DNL to include land within the 2035 50<sup>th</sup> Percentile Forecast 55 DNL contour for a limited purpose of noise disclosure for new development (no easements or other provisions of the existing noise overlay – just disclosure). The disclosure would state that the home is in an area subject to aircraft overflight by jets and other aircraft arriving and departing PDX and that some people may be bothered by the aircraft flying overhead. A copy of the current disclosure statement which will continue to be used can be found in Attachment #A.

An issue not related to the City's regulations is point of sale disclosure. The Land Use/Transportation Subcommittee also recommends that PAG include a recommendation in its final report that the Port and City advocate at the state level for disclosure at time of sale (similar to the disclosure requirements for lead paint, asbestos, and underground oil tanks). Staff recommends that the Noise Working Group explore this issue, prior to a formal recommendation by PAG/OPIS/CNAC to the City and Port.

3. Convene a Noise Work Group to Address Noise Outside the 65 DNL. The subcommittee and the Port and City recognize that aircraft noise impacts residences beyond the 65 DNL contour. As a result, the Port and the City commit to exploring ideas related to noise mitigation beyond the 65 DNL threshold of significance defined by the FAA, EPA and Oregon DEQ. The subcommittee, Port and City believe that thoroughly exploring these ideas (disclosure, easements and other potential types of mitigation beyond the existing noise overlay) deserves more time and attention than it can be given within the current Airport Futures planning process. Furthermore, the Citizen Noise Advisory Committee has expertise and has expressed a strong interest in this discussion. The recommended plan moving forward, to be incorporated in the PAG recommendations, would be that the Port, the City, Planning Advisory Group and CNAC would develop a draft work plan and schedule to accomplish the task (including the membership of the work group). Specifically, the work plan will detail how and when the working group (anticipated to include CNAC, PAG, OPIS, other technical experts and the interested public) would report back to key stakeholders (OPIS committee, Port Commission, and City of Portland and Vancouver City Councils). This approach allows the following:

- Thoroughly explores the issue of noise by interested parties;
- Allows the PAG to complete its work on the Master Plan and Land Use Plan and to sunset; and
- Commits all parties to provide report-outs to their organizations and the broader community on the results of exploration.

It is anticipated that the group would begin work this fall and that the time required for the group to conclude the substantive work as outlined in the work plan is six months to a year. Attachment #B has two draft work plans for the noise work group to consider.

4. Show the potential 3<sup>rd</sup> parallel runway as a reserve on the ALP. The subcommittee proposes to depict the potential 3<sup>rd</sup> parallel runway as a dashed line to differentiate it from other facilities depicted on the Airport Layout Plan (ALP). A note on the ALP drawing will read as follows:

Conceptual 3<sup>rd</sup> Runway Reserve: While a 3<sup>rd</sup> parallel runway has not been identified as a required facility for the planning period ending in 2035, it is depicted so that potential future development of a 3<sup>rd</sup> parallel runway is not precluded by other airport development.

- Acceptance of this ALP by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein nor does it indicate that the proposed development is environmentally acceptable in accordance with the appropriate public laws.
- A 3<sup>rd</sup> parallel runway is not currently a permitted development in the City of Portland's Airport Plan District. Construction of the 3<sup>rd</sup> parallel runway would require a legislative amendment to the Airport Plan District to make it a permitted development.
- The need for a 3<sup>rd</sup> parallel runway as well as other alternatives related to preserving or expanding capacity will be the subject of further evaluation in future master plans.
- A 3<sup>rd</sup> parallel runway will require an Environmental Impact Statement (EIS) consistent with the National Environmental Policy Act. The EIS will be managed by the FAA.
- The width and length of the Conceptual 3<sup>rd</sup> Runway Reserve reflects facility planning criteria including desire to preserve flexibility/options, minimize impacts, maximize land use efficiencies, maximize operational efficiencies, maximize effective phasing and comply with FAA airport design criteria.
- If the 3<sup>rd</sup> parallel runway is ever needed, it is anticipated that Runway 3-21 (existing cross-wind runway) would be converted to a taxiway.

5. Show the needed facilities for 2035 in the City's Land Use Plan. The subcommittee and staff propose to amend the City's Comprehensive Plan to include a section specific to the airport in either the Public Facilities Goal (Goal 11) or the Transportation Goal (Goal 6). Many of the goals and policies developed through the Airport Futures planning process will be captured here and will include a diagram showing the 2035 projected airport facility needs based on the 50<sup>th</sup> percentile aviation forecast. The map will include the following facilities:

- Runways, taxiways, and aircraft storage;
- Passenger terminal buildings;
- Roadways;
- Facilities associated with maintenance, the military, general aviation, and cargo;
- Parking areas;

There will be a reference in the Goal language regarding the necessary legislative process to add a 3<sup>rd</sup> parallel runway in the City's Comprehensive Plan, if ever proposed. The Plan District in Title 33 (Zoning Code) will have a provision that specifically prohibits the development of any additional runways at PDX. Commentary in the Recommended Code Language will include direction and context for a future legislative action.





**CITY OF PORTLAND, OREGON - BUREAU OF DEVELOPMENT SERVICES**  
 1900 SW Fourth Avenue, Portland, Oregon 97201, [www.portlandonline.com/bds](http://www.portlandonline.com/bds)



## **Portland International Airport Noise Impact Zone (x-overlay) Orientation / Instruction Packet**

The purpose of this packet is to provide information and instruction necessary to fulfill the requirements contained in the City of Portland Zoning Code, Chapter 33.470. The Zoning Code is accessible online at [www.portlandonline.com/zoningcode](http://www.portlandonline.com/zoningcode). This packet includes copies of all pertinent forms and instructions to assist you through the process. If you have questions or need assistance, contact information is provided below. Included in this packet you will find:

**Section 1: Program purpose, goals and checklist for reimbursement**

**Section 2: Step-by-step instructions (for non-residential development)**

**Section 3: Step-by-step instructions (for residential development)**

**Section 4: List of approved acoustical engineers**

**Section 5: Aircraft Noise Easement form**

**Section 6: Aircraft Noise Disclosure Statement form**

### **Contact Information**

**City of Portland, Oregon - Bureau of Development Services  
 Planning and Zoning**

**Development Services Center (DSC)**  
 1900 SW 4th Avenue, Portland, Oregon 97201  
 Ph: 503-823-7526 • Fax: 503-823-7765  
 Hours: Monday - Friday 7:30 am - 3:00 pm

**Multnomah County Records Office**  
 501 SE Hawthorne Street, Portland, Oregon 97214  
 Ph: 503-988-3034 • Fax: N/A  
 Hours: Monday - Friday 8:00 am - 5:00 pm

**Portland International Airport Noise Management Department**  
 7000 NE Airport Way, Portland, Oregon 97218  
 Ph: 503-460-4100 • Fax: 503-460-4027  
 Hours: Monday - Friday 8:00 am - 5:00 pm

# Portland International Airport Noise Impact Zone

The Portland International Airport (PDX) Noise Impact Zone (x-overlay) was created by the City of Portland to promote the health and safety of those living in the vicinity of PDX. The zoning designation limits or restricts development within this area indicated on zoning maps by an 'x' (x-overlay). The zone is also intended to promote the general economic welfare of the region by protecting aviation commerce.

The Noise Impact Zone or x-overlay was adopted in 1980. It is an area encircling PDX where aircraft arrival and departure noise is loudest.

In order for a property owner/developer to obtain a building permit within the x-overlay, certain criteria must be met. The construction plans must be reviewed and certified by a state licensed acoustical engineer. This certification must show that once built, the interior of the structure will remain at or below a noise level of Ldn 45 dBA. Additionally, for residential development, a noise easement dedicated to the Port of Portland and a noise disclosure statement must be recorded with the Multnomah County Recorders Office.

The property owner/developer may be eligible for reimbursement by the Port of Portland for some or all of the costs associated with the acoustical certification and recording fees associated with the noise easement and noise disclosure statement. To qualify for reimbursement, the engineer must be selected from the Approved Acoustical Engineer List. (See Section 4)

**Under Portland Zoning Code Chapter 33.470, new residential development is prohibited within the 68+ Ldn or higher.** There are some exceptions for existing home that are unintentionally destroyed. For more information view the complete Zoning Code Chapter online at [www.portlandonline.com/zoningcode](http://www.portlandonline.com/zoningcode) or speak to a planner by calling Planning and Zoning at 503-823-7526 to determine which noise contour applies to your property.

## Section 2

**Instructions for meeting the requirements of the City of Portland Zoning Code Chapter 33.470 for:**

### **Non-Residential Development**

#### **STEP 1:**

##### **Review Information Packet**

Once it has been determined that your property is located within the PDX Noise Impact Zone (x-overlay), the City of Portland Development Services Center will provide the following information:

- The x-overlay Information Packet. This packet contains information that was designed to help you complete the requirements of the Zoning Code Chapter 33.470 with minimal confusion.
- The Ldn value associated with your property. The Ldn value identifies where your property is located within the x-overlay. You will be given an Ldn value (number) ranging from 65 to 75. Record this value for later use.

#### **STEP 2:**

##### **Acoustical Certification**

Select an acoustical engineer to review your building plans. The engineer must certify that once built, the interior noise level within the structure will be at or below an Ldn of 45 dBA. The Port of Portland (Port) will reimburse the property owner for the cost of this certification if requested. To be eligible for the reimbursement you must choose an acoustical engineer from the Approved Acoustical Engineer List (Section 4). If you do not wish to pursue reimbursement, you may choose any engineer registered in Oregon who is knowledgeable in acoustical engineering.

#### **STEP 3:**

##### **Submit a copy of the engineer's report as part of the building permit application**

Include the engineer's report or certification with your building permit information. Your building permit cannot be approved unless this documentation is attached to the permit submittal and reviewed by the City's Plans Examination staff. At this point you have completed the requirements of the PDX Noise Impact Zone for non-residential development. If you are requesting reimbursement from the Port for the acoustical certification, proceed to Step 4.

#### **STEP 4:**

##### **Reimbursement Checklist**

The Port of Portland may reimburse the eligible costs of the acoustical certification and recording fees. The Port does not reimburse for additional services including, but not limited to, consultations, field work, or expediency charges.

**In order to qualify for reimbursement you must choose an acoustical engineer from the Approved Acoustical Engineer List (Section 4).**

Submit the following documentation to the Port of Portland Noise Management Department:

- Copy of the engineer's report certifying that building plans include adequate insulation to achieve an interior noise level of 45 Ldn;
- Copy of the engineer's itemized invoice to the property owner or builder;
- Copy of cancelled check used to pay invoice or proof of payment.

Once all documentation has been received and accepted by the Port, the reimbursement check will be mailed, usually within two weeks. If you have any questions about this program, please contact the Portland International Airport Noise Management Department.

## Section 3

### Instructions for meeting the requirements of the City of Portland Zoning Code Chapter 33.470 for:

## Residential Development

### STEP 1:

#### Review Information Packet

Once it has been determined that your property is located within the PDX Noise Impact Zone (x-overlay), the City of Portland Development Services Center will provide the following information:

- This information packet contains information that is designed to help you complete the requirements of the Zoning Code 33.470 with minimal confusion.
- The Ldn value associated with your property. A planner can help you identify the Ldn value associated with your property. The Ldn value is a number between 65 and 75.

### STEP 2:

#### Acoustical Certification

Select an acoustical engineer to review your building plans. The engineer must certify that once built, the interior noise level within the structure will be at or below a day/night average of 45 dBA. The Port of Portland (Port) will reimburse the property owner for the cost of this certification if requested. To be eligible for the reimbursement you must chose an acoustical engineer from the Approved Acoustical Engineer List (see attached Section 4). If you do not wish to pursue reimbursement, you can chose any engineer registered in Oregon who is knowledgeable in acoustical engineering.

### STEP 3:

#### Noise Easement / Noise Disclosure forms

The property owner must sign and record an Aircraft Noise Easement (Section 5) and an Aircraft Noise Disclosure Statement (Section 6).

- Fill out both forms completely, including:
  - Date
  - Name and signature of property owner
  - Ldn value within the x-overlay
  - Street address of property
  - Legal description of property
- Send both forms to the Port of Portland for review. A Port representative will review the forms for completeness and legal sufficiency then return them.
- Have the forms notarized.
- Have the forms recorded with the Multnomah County Clerk's Office.

### STEP 4:

#### Submit copies of the following with your building permit application to the City of Portland Development Services Center

- Acoustical engineer's report or certification
- Recorded Aircraft Noise Easement
- Recorded Aircraft Noise Disclosure Statement

### STEP 5:

#### Reimbursement by the Port

The Port may reimburse the property owner for the cost of the acoustical certification and recording fees. The Port will not reimburse for the costs of additional services including, but not limited to; consultations, field work, or expediency charges.

In order to qualify for reimbursement you must chose an acoustical engineer from the Approved Acoustical Engineer List. (See Section 4).

Submit the following documentation to the Port Noise Management Department:

- Copy of the engineer's report certifying that your building plans will achieve an interior Ldn noise level at or below 45dBA.
- Copy of the engineer's itemized invoice to the property owner
- Copy of check used to pay invoice
- Copy of (recorded) noise easement
- Copy of (recorded) noise disclosure statement
- Copy of receipt for recording fees

Once all documentation has been received and accepted by the Port, the reimbursement check will be mailed, usually within two weeks. If you have any questions about this program, contact the Portland International Airport Noise Management Department.

## Section 4

# Airport Noise Impact Zone, x-overlay Approved Acoustical Engineers List

The following is contact information for State of Oregon licensed acoustical engineers operating in the Portland Metro area. Listing does not imply recommendation or endorsement by the Port of Portland's Noise Control Office or the City of Portland, but is offered only for informational purposes. The collection of names is not exhaustive and changes will be made as they become known.

Under Portland City Code 33.470.040, the Port of Portland has a program for reimbursing costs incurred in regard to obtaining certifications of acoustical engineering insulation as meeting standards for the Portland Airport Impact Zones standards. Use of the firms listed below will qualify for reimbursement by the Port.

Other licensed engineers may complete the work required by the code, but a developer or architect will not be eligible to have the code-required acoustical certification costs reimbursed by the Port of Portland. Acoustical engineering work completed prior to January 20, 2004 is valid for coverage only if an engineer was on the previous City of Portland Airport Impact Zone designated firms list.

### **A Acoustics, Elki Lahav**

9324 SW Camille Terrace, Portland, OR 97223-7043  
Ph: 503-977-2690 • Fax: 503-977-2690  
Email: [elki@aacoustics.com](mailto:elki@aacoustics.com)

### **Albert Duble**

16905 NE Kings Grade Road  
Newberg, OR 97132  
Ph: 503-538-8044 • Fax: 503-538-8044  
Email: [agd@hevanet.com](mailto:agd@hevanet.com)

### **Altermatt Associates Inc., Russell Altermatt**

522 SW 5th Avenue, Suite 1200  
Portland, OR 97204  
Ph: 503-221-1044 • Fax: 503-221-1445  
Email: [raltermatt@altermatt.com](mailto:raltermatt@altermatt.com)

### **Daly-Standlee & Associates, Inc., Kerrie Standlee**

4900 SW Griffith Dr., Suite 216  
Beaverton, OR 97005  
Ph: 503-646-4420 • Fax: 503-646-3385  
Email: [dsa@acoustechgroup.com](mailto:dsa@acoustechgroup.com)

### **Todd A. Matthais, P.E., Acoustic Design Studio**

519 SW Park Avenue, Suite 305  
Portland, OR 97205  
Ph: 503-646-4420 • Fax: 503-646-3385  
Email: [todd@acousticdesignstudio.com](mailto:todd@acousticdesignstudio.com)

Updated: 05/07/09

**Section 5 - pg 1 of 2**

(Adopted by Ordinance No. 158055, December 12, 1985)

**Aircraft Noise Easement**

A blank area of at least 1.5 ins. by 4 ins. must be left in the upper right corner to accommodate the Multnomah County stamp.

This Easement, made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, between

Property Owner or Legal Representative (Print name)

hereinafter referred to as "Grantor," and THE PORT OF PORTLAND, a port district of the State of Oregon, hereinafter referred to as "Grantee,"

1. For the consideration listed in Paragraph 2 of this Easement, the receipt and sufficiency of which is hereby acknowledged, the Grantor does hereby grant to the Grantee, its successors and assigns, to have and to hold a perpetual easement for aircraft noise impact at the \_\_\_\_\_ Ldn noise level as established by the official Noise Impact Zone boundaries (PDX 1990 Ldn contour map) on file with the City of Portland, and as set forth in the Portland International Airport Noise Abatement Plan, until Portland International Airport shall be abandoned or shall cease to be used for public airport purposes, over the following described parcel of land situated in the County of Multnomah, State of Oregon, as follows:

Property location (street address): \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

and is more particularly described below:

Legal description: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (attach additional sheets if needed)

2. Consideration for the mutual promises contained herein includes but is not limited to the following:
  - (a) The right to construct or reconstruct (as defined in Chapter 33.470 of the Portland City Code) the subject property for residential use.
  - (b) Grantee promises to be responsible for the costs of acoustical inspection and certification of building plans as set forth in Chapter 33.470 of the Portland City Code.
  - (c) Grantee promises to pay the recording fees of this document.
3. This Easement shall encompass the right, in the airspace above the surface of the Grantor's property having the same boundaries as the above described property and extending from the surface upwards to the limits of the atmosphere of the earth, to cause in said airspace a maximum of the Ldn noise level as set forth in Paragraph 1 of this Easement and as established by the 1990 Ldn contour map as set forth in the Portland International Airport Noise Abatement Plan. An official Ldn contour map is on file in the City Permit Center.
4. Grantors, for themselves, their heirs, administrators, executors, successors, and assigns, do hereby fully waive, remise, and release any right or cause of action which they may now have or which they may have in the future against Grantee, its successors and assigns, due to noise, and all other effects of any noise impacts at or below the annual average Ldn level set forth in Paragraph 1 of this Easement that may be caused or may have been caused by the operation of aircraft landing at, or taking off from, or operating at or on said Portland International Airport. If the permitted annual average Ldn level can be shown to have exceeded that specified in this instrument, this Easement shall remain valid and effective for that Ldn level set forth in Paragraph 1 of this Easement, but the exceeded Ldn level shall not be protected by this Easement.
5. The granting of this Easement shall establish the Grantor's right to construct or reconstruct (as defined in Chapter 33.470 of the Portland City Code) for residential use in accordance with all applicable laws. The Grantor's execution and offering of this Easement is sufficient to fulfill the requirements for the issuing of a building permit if all zoning and other legal requirements have been met.

**Section 5 - pg 1 of 2**

- 6. In the event any covenant, condition or provision herein contained is held to be invalid by any court of competent jurisdiction, the invalidity of such covenant, condition or provision shall in no way affect any other covenant, condition or provision herein contained.
- 7. It is understood and agreed that these covenant and agreements shall run with Grantor's land and shall be recorded, and the covenants and agreements shall be binding upon, heirs, administrators, executors, successors and assigns of the Grantor.
- 8. If the subject property is a houseboat, the easement and waiver granted herein shall also apply to the houseboat at any location to which the houseboat is moved within the 65 Ldn area and all references to "65 Ldn" shall mean 65 Ldn and any higher Ldn established for any location to which the subject property is moved."

IN WITNESS WHEREOF, the Grantor has herunto set his hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Property Owner: \_\_\_\_\_ (Print Name)

Property Owner Signature: \_\_\_\_\_

State of Oregon )

)

County of Multnomah )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared

\_\_\_\_\_ who being duly sworn, did say that he/she has read the Easement, fully understands the content of the Easement, and that the signing of this instrument is a voluntary act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first in this Easement written.

\_\_\_\_\_

Notary Public for Oregon

My Commission Expires: \_\_\_\_\_

ACKNOWLEDGED FOR THE PORT OF PORTLAND BY

\_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Section 6 - pg 1 of 2**

(Adopted by Ordinance No. 158055, December 12, 1985)

**Noise Disclosure Statement**

A blank area of at least 1.5 ins. by 4 ins. must be left in the upper right corner to accommodate the Multnomah County stamp.

Chapter 33.470 of the Portland City Code states that, as a condition for issuance of a building permit for new residential construction or reconstruction within the 1990 Ldn 65 noise contour as set forth in the Portland International Airport Noise Abatement Plan, the applicant shall sign and record a Noise Disclosure Statement in the following form:

**Disclosure Statement**

Property location (street address): \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

and is more particularly described below:

Legal description: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(attach additional sheets if needed)

The property lies within the Portland International Airport Noise Impact Zone as depicted on the official zoning map for the City of Portland. The owner of such land and any potential purchase are hereby notified that this land may be subject to noise impact resulting from aircraft on the approach and departure routes to and from Portland International Airport and is subject to noise levels that may be considered objectionable. By recording this document with Multnomah County Records, all future purchasers are hereby notified that this above described parcel is within the Portland International Airport Noise Impact Zone.

This noise disclosure in no way inhibits the property owner from developing his/her property in a manner consistent with the City of Portland Comprehensive Plan, and specifically for residential use where such use is permitted by the Comprehensive Plan and implementing ordinances.

The undersigned owner(s) of said land hereby certify (ies) that (he/she/they) (has/have) read and understand(s) the above disclosure statement and acknowledge(s) the pre existence of the above named airport and the potential for noise impact.





## Noise Follow-on Study Work Group (Noise Beyond 65 DNL) Process Proposal

### Core Team:

- Port Noise Management Department Staff – Lead Role/Project Management
- City of Portland Noise Office
- City of Vancouver
- City of Portland Bureau of Planning & Sustainability
- Port Long-Range Planning
- Port/City Legal Staff

### Noise Follow-on Study Work Group

- CNAC Members
- OPIS/PAG Members
- Other (e.g., FAA, ORANG, City Noise Review Board, regional cities and counties)

### Work Tasks:

- 1. Core Team develops work scope**
  - a. Noise Follow-on Study Work Group Input
- 2. Core Team Presents work scope**
  - a. CNAC Input/Endorsement
  - b. PAG Input/Endorsement
- 3. Execute work scope**
  - a. Core Team manages project with advice from Noise Follow-on Study Work Group
  - b. All meetings open to public
  - c. Periodic report outs to CNAC, OPIS/PAG, Cities, and others
- 4. Draft Report Prepared**
  - a. Input by Follow-on Noise Study Work Group
  - b. Review/Input by CNAC, OPIS/PAG, Cities, and others
- 5. Final Report by Core Team**
  - a. CNAC, OPIS/PAG, City Councils, Port Commission

## Noise Follow-on Study Work Group Example Work Scope 1

(Reviewed by the Land/Use Transportation Subcommittee, CNAC, City and Port staff)

1. Noise Follow-on Study Work Group establishes underlying goal of project
  - a. Reduce noise exposure
    - i. Indoor or Outdoor
  - b. Reduce noise impacts (Define impacts – including annoyance and explore levels of annoyance and factors which influence dose-response.)
  - c. Address acoustic or non-acoustic ‘noise’ impacts
  - d. Noise annoyance mitigation at airports by non-acoustic strategies
    - i. Increase awareness of noise exposure, noise program, etc. (*Focus on communities: Neighborhood (Enhancement) Grants*)
    - ii. Reduce indoor noise exposure. *Focus on individuals: Individual grants for home improvements*
  - e. Other
    - i. Explore concept of mapping all noise in a geography
    - ii. Explore partnership with a university to create some form of noise institute to study noise issues
  
2. Basic Training – Noise 101
  - a. Airport noise management
  - b. 3 Tiers of Part 150 Noise Study (operations, land-use, administrative)
  - c. Noise Regulations and Regulators
    - i. Why don’t more airports look beyond 65 DNL? (Obstacles)
      1. Federal regulations
      2. Funding issues
  - d. Basics of airport operations
  - e. Acoustics, measuring sound
    - i. Metrics (Day-Night Level (DNL), Time Above (TA), Number Above (NA), etc.)
  - f. Effects of aviation noise (outside 65 DNL) on human health – acoustic and non-acoustic

3. Advanced Training – Noise 401

- a. Noise annoyance mitigation at airports by non-acoustic measures
- b. Noise programs beyond 65 DNL (US and abroad)
- c. Current PDX measures beyond 65 DNL (Port, cities of Portland and Vancouver)

4. Identification of tools and approaches for mitigating airport noise beyond 65 DNL

- a. Review of available documentation
  - i. ACRP, ACI, ANNA, Wyle Labs, others
  - ii. FAR Part 150 Studies
  - iii. Boeing Airport Noise Regulations Website
- b. Opportunities for expansion or enhancement
- c. New programs or strategies

5. Identification of strategies

- a. Link each strategy to specific goal(s) from Step #1
  - i. Establish boundaries – tiered mitigation possible
  - ii. Identify possible phasing
  - iii. Identify responsibility for implementation
  - iv. Determine costs and potential funding sources

6. Draft Report

- a. Defines mitigation boundaries
- b. Details boundaries if tiered mitigation is recommended
- c. Identifies mitigation recommendations
- d. Review and comment (CNAC, OPIS, Port, Cities, other)
- e. Incorporated and document finalized

7. Final Report

- a. Submission to CNAC, OPIS, Port Commission, Cities (as applicable)

## Noise Follow-on Study Work Group Example Work Scope 2

(Offered by John Weigant and Erwin Bergman)

Context. PDX sees itself as a business serving its customers, and seeks to grow. Located on land zoned industrial, it generates industrial pollution in the form of noise and greenhouse gases. The two are slightly correlated, but this study will focus on noise. PDX generates substantial service and economic return to the region. As with most industrial pollution, noise is justified, since the benefit to the community outweighs the costs. It is an “externality,” an external cost born by a few for the benefit of the many. Pollution can be reduced or sequestered, but often at relatively high cost. The modern trend is to reduce or eliminate the pollution and spread its cost to the customers that use the product, internalizing the cost. When pollution cannot be eliminated, compensation is provided to those who bear the brunt of the cost. “Democracy is more about protecting the rights of minorities and less about the will of the majority.”

Not all pollution affects everyone equally. For example, air pollution may severely impact those with asthma, but have little impact on others. The standard says the minority should be protected, and not just have them leave. The fact that some people are not bothered is considered irrelevant. Disclosure is intended to prevent sufferers from locating near pollution sources, but when the pollution expands to new areas, existing citizens need compensation.

Two action standards apply, with priority from first to last. All apply.

- Related to consumption: Reduce, Reuse, Recycle. Some “reduction” is by substitution of a less polluting alternative.
- Related to pollution and other negative impacts: Avoid, Reduce, Mitigate

The purpose of the study is to recommend a comprehensive strategy mix to reduce noise or its impact on the most people for the least cost. The cost must eventually be borne by customers. Regulations apply to some strategies, but the Port has some flexibility in how it uses its general funds. Information strategies, like studies and public education, have value only to the extent that they result in actions that reduce noise or its impact.

Recognition of past work. Noise has been present, and a problem, for a long time, and substantial study has already been done. More study might yet pay dividends, but the law of diminishing returns predicts lower return on investment for it. Additional studies take time and delay implementation of strategies to manage noise. This follow-on study starts with the assumption that we know enough to take action. The intent is to avoid “paralysis by analysis.”

### Assumptions.

- PDX will not be moved
- The population, and demand for air travel, will continue to grow, but slower than in the past
- Technology will continue to reduce aircraft noise

- Greenhouse gas (GHG) emissions will be increasingly restricted.
- Energy efficiency will be accelerated.
- The economy will recover, but slowly. Funds for expensive projects will be scarce.

#### Strategies to cut aircraft noise at its source.

- Selection of quieter aircraft (Noise-based landing fees, other incentives, restrictions or subsidies—quiet props, no unmuffled piston aircraft)
- Congestion pricing of landings and takeoffs, to reduce divergent tracks.
- “Fly Quiet” programs (adherence to noise abatement flight tracks, thrust reversing policies, letters to chief pilots and the FAA, publication of adherence to noise abatement procedures.)
- Navigational solutions (computer-controlled high-efficiency approaches, GPS navigation)
- PDX construction solutions (GRE’s, blast fences, cross-field taxiways)
- Alternative airfields (rural training fields, move the military, GA, box-haulers, etc)
- Alternatives to air travel (high speed rail, high bandwidth convention centers)
- Reduced marketing, including no effort to retain fighter jets at PDX
- Larger aircraft to reduce number of operations, especially for box-haulers.
- Procedures to maintain approved noise abatement policies.

#### Strategies to cut noise impacts at destination

- Home insulation, tree/shrub planting, architectural standards (these have GHG credits, too)
- Noise overlay restrictions (restriction of noise-sensitive land uses.)
- Compensation for noise (mitigation grants to neighborhoods, noise easements)

#### Non-acoustic strategies.

- Community outreach and education
- Real estate disclosure
- Noise easements (what is appropriate compensation?)

Other strategies. In addition to those listed above, other strategies may surface that should be evaluated.

Connection to sustainability goals. PDX seeks to become the most sustainable airport in the world, and noise can be a measure of GHG emission and general efficiency of facility utilization. Each proposed strategy should be evaluated for its contribution to sustainability.

Performance Audit. Review current and past efforts, measurements, studies, and strategies and determine the cost-effectiveness of each. Review each for which have been mandated by law and which have been optional by the Port. Review recommendations of past studies and the degree to which recommendations have been implemented. Identify barriers to past recommendations and see if work-arounds are possible. Establish a project plan (using the Port’s project initiative process) for managing and evaluating the implementation of proposed and existing projects. (E.g., is “Fly Quiet” on schedule?) Propose which strategies can move forward, at least in pilot form, with current information. Set budgets and timelines for future projects.

Products. The work group should produce a report with its goals, objectives, findings, recommendations, and rough estimates of constraints, budgets and time frames needed to accomplish each recommended action. Identify programs that have made little difference, in proportion to their cost, and suggest redesign or cuts. Propose community agreements that may be needed to implement recommendations.