

State Governance of Special Purpose Districts (Ports) and FAA Preeminence

*GMA Noise Control
RCW 70.107.030(1)
173-60 WAC ⁰⁴⁰ max permitted
env noise levels
173-62 WAC
10pm - 7am*

Emphasis on Statutory Powers of Port Districts and Local Planning Agencies (www.leg.wa.gov), and FAA's Preeminent Role (FAA Orders 1050.1F and 5190.6B)

1. Consistent with our "background" discussion at latest Airport Committee meeting.

*Cities, Counties history
see Municipal Research Services
Center MRSC.org*

Special Purpose Districts

- In 1911, legislation enabling port districts were authorized with wide-ranging powers.
- There are 53 categories of special purpose districts, including ports, in the State.
- As of 1988, Washington State had more special purpose districts than any other state in the US.
- Special purpose districts have unique powers and with one exception--Sound Transit--directly-elected governing boards.

Powers of Port Districts

Title 53 RCW (enabled in 1911)

- Provide a system of harbor improvements, belt line railways, water and land transfer and terminal facilities, airports, and construct toll bridges and tunnels and economic development
- Revenue: P, plus special levy outside 106% limitation, B, C, L
- Governing Body: **3** or 5 elected commissioners
- Formation: **1** or **3**
- Annexation: **1**, port commissioner petition, consolidation of port districts within one county, or joint resolution
- Dissolution: **3** or via petition by port commission
- There are currently 75 port districts in the State.

3. HB 1999; passed from House State Government Committee on Friday, Feb. 17 by deadline and in Rules Committee. Leave a comment at www.leg.wa.gov; sponsors will use your support to move from Rules Committee to floor for final passage. Easy to keep updated by status system.

Powers of Industrial Development Districts (Ports)

RCW 53.25.100

All port districts wherein industrial development districts have been established are authorized and empowered to acquire by purchase or condemnation or both, all lands, property and property rights necessary for the purpose of the development and improvement of such industrial development district and to exercise the right of eminent domain in the acquirement or damaging of all lands, property and property rights and the levying and collecting of assessments upon property for the payment of all damages and compensation in carrying out the provisions for which said industrial development district has been created; to develop and improve the lands within such industrial development district to make the same suitable and available for industrial uses and purposes; to dredge, bulkhead, fill, grade, and protect such property; to provide, maintain, and operate water, light, power and fire protection facilities and services, streets, roads, bridges, highways, waterways, tracks, and rail and water transfer and terminal facilities and other harbor and industrial improvements; to execute leases of such lands or property or any part thereof; to establish local improvement districts within such industrial development districts which may, but need not, be coextensive with the boundaries thereof, and to levy special assessments, under the mode of annual installments, over a period not exceeding ten years, on all property specially benefited by any local improvement, on the basis of special benefits, to pay in whole or in part the damages or costs of any improvement ordered in such local improvement district; to issue local improvement bonds in any such local improvement district; to be repaid by the collection of local improvement assessments; and generally to exercise with respect to and within such industrial development districts all the powers now or hereafter conferred by law upon port districts in counties with a population of one hundred twenty-five thousand or more: PROVIDED, That the exercise of powers hereby authorized and granted shall be in the manner now and hereafter provided by the laws of the state for the exercise of such powers by port districts under the general laws relating thereto insofar as the same shall not be inconsistent with this chapter.

4. Economic Development is principal goal of port districts and to provide important transportation facilities, considered essential. Likewise, Sea-Tac Airport provides critical interstate and intrastate commerce, protected by Supremacy clause of US Constitution and Interstate Commerce clause.

Regional transportation planning organizations authorized*

RCW 47.80.020

In 1990, Washington State Legislature passed the GMA (Growth Management Act) and empowered certain counties and cities to identify ***essential transportation facilities of statewide significance*** (emphasis added). The Puget Sound Regional Council (PSRC) is the appropriate planning organization for this region.

**Aka Council of Governments (COGs)*

5. These regional planning agencies are acknowledged nationwide via federal statutes and that federal "planning" funds for transit, for example, flow through PSRC; and there are COGS for every region of the state. PSRC includes Thurston, Pierce, Kitsap, Snohomish, and King Counties.

Essential Transportation Facilities

4. Siting of Essential Public Facilities (RCW 36.70A.150) “Each jurisdiction must identify lands useful for public purposes and essential public facilities, ***such as airports***, educational facilities, and utility corridors. ***State, regional, county, and local agencies are to coordinate in determining the need for and the location of public facilities.***” (emphasis added)

6. Locally, this responsibility is assumed by PSRC.

Transportation facilities and services of statewide significance—Level of service standards

RCW 47.06.140

- (1) The legislature declares the following transportation facilities and services to be of statewide significance: Highways of statewide significance as designated by the legislature under chapter [47.05](#) RCW, the interstate highway system, interregional state principal arterials including ferry connections that serve statewide travel, intercity passenger rail services, intercity high-speed ground transportation, **major passenger intermodal terminals excluding all airport facilities and services**, the freight railroad system, the Columbia/Snake navigable river system, marine port facilities and services that are related solely to marine activities affecting international and interstate trade, key freight transportation corridors serving these marine port facilities, and high capacity transportation systems serving regions as defined in RCW [81.104.015](#). The department, in cooperation with regional transportation planning organizations, counties, cities, transit agencies, **public ports**, private railroad operators, and private transportation providers, as appropriate, shall plan for improvements to transportation facilities and services of statewide significance in the statewide multimodal transportation plan. Improvements to facilities and services of statewide significance identified in the statewide multimodal transportation plan, or to highways of statewide significance designated by the legislature under chapter [47.05](#) RCW, are essential state public facilities under RCW [36.70A.200](#). (*emphasis added*)
- (2) **The department of transportation, in consultation with local governments, shall set level of service standards for state highways and state ferry routes of statewide significance.** Although the department shall consult with local governments when setting level of service standards, the department retains authority to make final decisions regarding level of service standards for state highways and state ferry routes of statewide significance. In establishing level of service standards for state highways and state ferry routes of statewide significance, the department shall consider the necessary balance between providing for the free interjurisdictional movement of people and goods and the needs of local communities using these facilities. When setting the level of service standards under this section for state ferry routes, the department may allow for a standard that is adjustable for seasonality.
- [[2009 c 514 § 3](#). Prior: [2007 c 516 § 11](#); [2007 c 512 § 2](#); [1998 c 171 § 7](#).]

7. NOTE bolded words in first bullet that airports are not coordinated by WSDOT; and that levels of service (2nd bullet) are NOT set by WSDOT.

State and Local Noise Ordinances

Washington State: The state exempts (from regulation) noise from aircraft and aircraft operations, sounds originating from aircraft in flight and sounds that originate at airports which are directly related to flight operations (~~RCW~~^{WAC} 173-60-050 (1) ~~(3)(B)~~ WAC; and sounds by aircraft engine testing and maintenance not related to flight operations between the hours of 7:00 a.m. and 10 p.m.: Provided, that aircraft testing and maintenance shall be conducted at remote sites whenever possible.

King County: KC Ordinance 14114, Section 11, adopted September 12, 2001 exempts: Sounds originating from aircraft in flight and sounds that originate at airports and are directly related to flight operations.

8. Most people don't know about these two statutes and imagine local counties, communities or the state can step into help regulate noise from aircraft noise.

FAA Order 1050.1F

(issued July 2015 updating earlier versions)

Section 11.1.4: FAA Approved Models for Detailed Noise Analysis:

- “All computer model input data should be collected early in the environmental process and should reasonably reflect current and forecast conditions relative to the proposed action and alternative(s).”

*** AEDT: Aviation Environmental Design Tool** --AEDT is a software system that dynamically models aircraft performance in space and time to produce fuel burn, emissions and noise. Full flight gate-to-gate analyses are possible for study sizes ranging from a single flight at an airport to scenarios at the regional, national, and global levels. AEDT is currently used by the U.S. government to consider the interdependencies between aircraft-related fuel burn, noise and emissions. Information about AEDT as well as links to AEDT documentation and FAA guidance, on the official website for AEDT at <https://aedt.faa.gov/>.

9. INM modeling does not consider one important issue regarding terrain: sound over water. Sound “bounces” over water!

FAA Requires Integrated Noise Modeling (INM) to Determine Noise Contours*

- From Sea-Tac's Part 150 Study approved by FAA in June 2014: "The noise levels were computed during this study using Version 7.0b of the INM, which was the latest version of the model at the time the study was initiated. The INM was developed under the guidance of the FAA and is the only model generally approved by the FAA for use in Part 150 studies. The noise pattern calculated by the INM for an airport is a function of several factors, including; the number of aircraft operations during the period evaluated, the types of aircraft flown, the time of day when they are flown, the way they are flown, how frequently each runway is used for landing and takeoff, and the routes of flight used to and from the runways. Substantial variations in any one of these factors may, when extended over a long period of time, cause marked changes to the noise pattern."

**INM was the preferred model typically used for FAR Part 150 noise compatibility planning and for FAA Order 1050 environmental assessments and environmental impact statements. However, see slide #20 for new 2015 FAA modeling and environmental requirements. (emphasis added)*

10. NOTE: INM modeling plus additional environmental requirements are now part of the process.

NUMBER OF OPERATIONS AND FLEET MIX IN Sea-Tac's Part 150 Study

- “The Existing Baseline noise exposure contour is labeled 2013, per 14 CFR Part 150 The Existing Baseline noise exposure contour is labeled 2013, per 14 CFR Part 150 guidelines which stipulate that the existing year be the same year in which the study is submitted to the FAA. The number of operations included in the Existing **(2013)** Baseline noise exposure contour is based on Airport Noise Monitoring and Management Systems radar data collected from June 2011 through May 2012, the most recent data that was available when the noise modeling began. During that period, **313,352 total annual operations** occurred at Sea-Tac Airport, which results in **858.12 average-annual day operations**. Specific aircraft types and times of operation were also obtained from the 2011 to 2012 ANOMS data. Table 3-6, Distribution of Average Day Operations by Aircraft Type Existing (2013) Baseline, provides a summary of the average daily operations and fleet mix at Sea-Tac Airport, organized by aircraft category, operation type, and time of day. Per 14 CFR Part 150 requirements, the future Noise Exposure Maps are to be dated five years after the date of submission. “
- “Therefore, the future year Noise Exposure Maps are dated **2018**. To represent Future (2018) condition, aircraft fleet mix data was developed from the Forecast of Aviation Activity prepared for this Part 150 Study. The forecast is based upon aviation industry trends and specific airline activity at Sea-Tac Airport. More information about this forecast is included in Chapter Two, Forecast, of this document. The Future (2018) condition includes **385,270 annual operations or 1,055.53 average-annual day operations**, an increase of 15.1 percent from the Existing (2013) Baseline operating levels. Table 3-7, Distribution of Average Day Operations by Aircraft Type Future (2018) Baseline, provides a summary of the average daily operations and fleet mix at Sea-Tac Airport, organized by aircraft type, operation type, and time of day for Future (2018) conditions.”

11. Explain 5-year differences in noise maps. Don't know why 2021 was used instead of 2018 in "future" NEM.

FAA Order 1050.1F

Affected Environment

- Section 11.2: “The steps generally required to describe the affected environment for noise and noise compatible land use for NEPA documents are as follows: An airport environs study area must be large enough to include the area within the DNL 65 dB contour, and may be larger. The study area for noise analysis of a proposed change in air traffic procedures or airspace redesign may extend vertically from the ground to 10,000 ft. AGL*, or up to 18,000 ft. AGL if the proposed action or alternative(s) are over a national park or wildlife refuge where other noise is very low and a quiet setting is a generally recognized purpose and attribute.”

**AGL is above around level.*

12. Direct committee's attention to NEM and noise-sensitive areas.

on 8/14

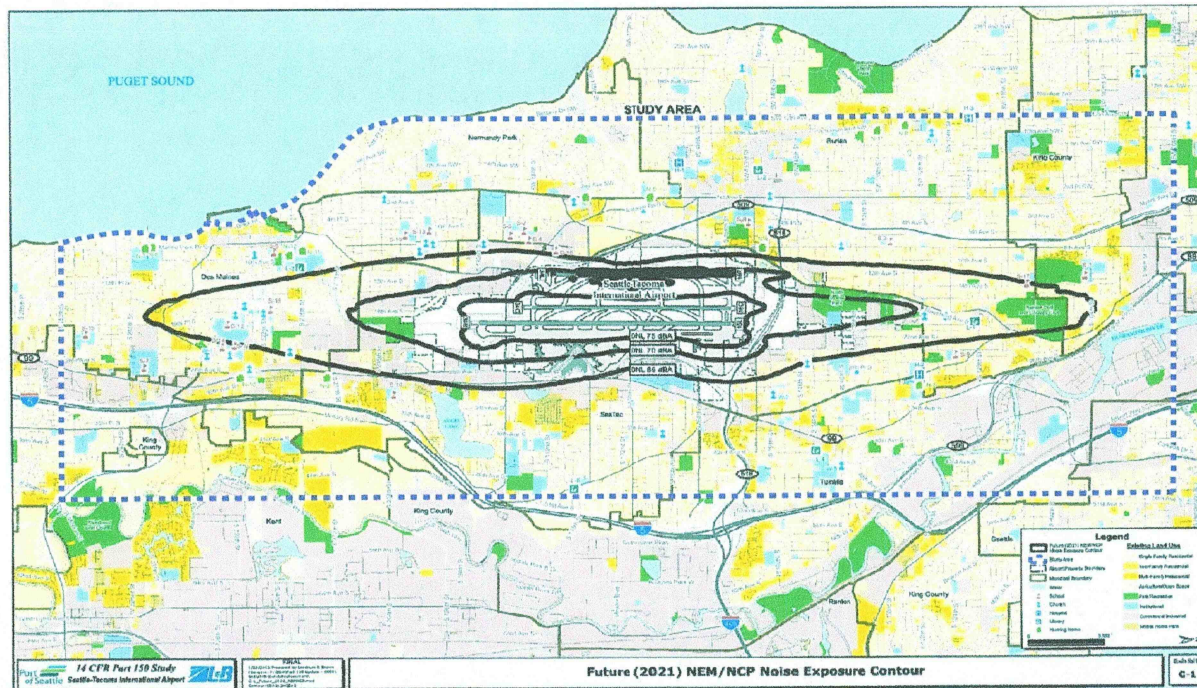
FAA Definition of Noise Sensitive Area

- A noise sensitive area, as defined in Paragraph 11-5.b(8) of FAA Order 1050.1F is: “An area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites. For example, in the context of noise from airplanes and helicopters, noise sensitive areas include such areas within the DNL* 65 dB noise contour.” According to Sea-Tac’s Part 150 Study, ***Seahurst is not located in a “noise sensitive area.”*** (emphasis added)

*DNL: Day-night-level of aircraft noise averaged over a 24-hour period with a 10 dB penalty between 10 p.m. and 7 a.m. to account for higher sensitivity to noise during sleep hours. SEL is a single aircraft noise event level expressed by maximum decibel level reached during the event and duration. It takes 100 SELs/day at 94.4 dBA (“A” is the weighted decibel level that equates to the human ear equivalent) to equal a 65 dB DNL.

13. Point out that Seahurst is not located in a “noise-sensitive area” despite Denton legal document.

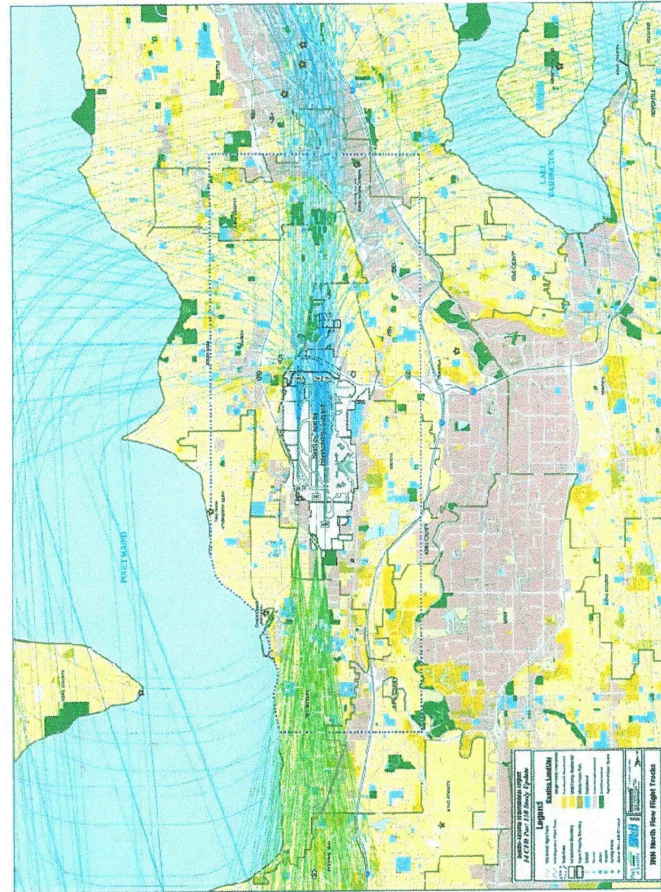
Sea-Tac's Projected 2021 Noise Contours



Note: Seahurst is located outside (below) Sea-Tac's 65 dB noise contour.

14. Walk committee through the graphics.

North Flow Flight Tracks in Sea-Tac's Part 150 Study (Base, 2013 or Future, 2018?--no date attributed)



15. Walk committee through the graphics.

City of Burien Airport Committee

15

Qualifications for Sound Mitigation

- Residences must be located in or above 65 dB noise contours.
- Residences qualifying as “historic” must meet criteria contained in Section 106 of the National Registry of Historic Residences and must be located in or above 65 dB noise contours.
- Schools must also be located within 65 dB noise contours or higher to be sound attenuated.
- Businesses and religious buildings do not qualify for sound mitigation regardless of noise contour.

16. KCIA and S/T replaced windows and exterior doors, sky lights, added attic insulation in order to sound attenuate/mitigate aircraft noise. Cost per home was approximately \$60,000 each at KCIA; and historic properties were \$200,000+.

FAA Order 5190.6B, Chapter 13

Airport Noise & Access Restrictions

- “The federal government has preempted the areas of airspace use and management, air traffic control, safety, and the regulation of aircraft noise at its source; and also substantial power to influence airport development through its administration of the Airport Improvement Program (AIP) grants.”
- “Other powers and authorities to control aircraft noise rest with the airport proprietor—including the power to select an airport site, acquire land, assure compatible land use, and control airport design, scheduling and operations—subject to constitutional prohibitions against creation of an undue burden on interstate and foreign commerce, and unreasonable, arbitrary, and unjust discriminatory roles that advance the local interest, other statutory requirements, and interference with exclusive federal regulatory responsibilities over safety and airspace management.”
- “State and local governments may protect their citizens through land use controls (planning and development, zoning, and housing regulations that are compatible with airport operations) and other police power measures not affecting airspace management or aircraft operations.”

17. Last meeting committee discussed “who controls FAA?” Feds are pre-eminent local jurisdictions control land-use planning and development.

Federal Role and Responsibility

FAA Order 5190.6B

- “Oversight and implementation of aviation laws and programs under the Federal Aviation Act of 1958. FAA subsequently promulgated wide-ranging and comprehensive federal regulations on the use of navigable airspace and air traffic control. Under the legal doctrine of federal preemption, which flows from the Supremacy Clause of the Constitution, ***state and local authorities do not generally have legal power to act in an area that already is subject to comprehensive federal regulation.***” (*emphasis added*)

18. Local jurisdictions are limited in their control and influence. Grass roots opposition is the most important angle, working collaboratively with local and regional governments.

*Proposed Aircraft Noise Restrictions by Local Communities Must Meet Six Statutory Criteria**

According to FAA Order 5190.6B issued 9/30/2009, "Proposed restrictions must meet the following FAA Part 161 Study criteria:

- 1) Reasonable, nonarbitrary, and nondiscriminatory.
- 2) Does not create an undue burden on interstate or foreign commerce.
- 3) Maintains safe and efficient use of the navigable airspace.
- 4) Does not conflict with any existing federal statute or regulation.
- 5) Applicant has provided adequate opportunity for public comment on the proposed restriction.
- 6) Proposed restriction does not create an undue burden on the national aviation system. "

**NOTE: To date, FFA has not approved a full Part 161 (aka curfews) application from any US airport; however, the City of Naples Florida Airport Authority was awarded restrictions via court proceedings after FAA declined to approve their study results in 2001. Naples AA spent several years and several millions of dollars in defense of their application. Voluntary restrictions are also subject to FAA approval, but are common at US airports. Some airports' existing curfews (i.e. John Wayne Airport in Orange County, CA) were "grandfathered" into the Airport Noise and Capacity Act of 1990 passed by Congress.*

NEW

Features of AEDT Noise Models in 2015 *(After Sea-Tac's Part 150 approval by FAA in 2014)*

"All FAA actions requiring noise, fuel burn or emissions modeling and for which the environmental analysis process has begun on or after September 12th 2016 are required to use AEDT 2c. Additional information on the use of AEDT versions and their modifications is outlined in a [versioning memo](#) available on the AEDT website.

- **AEDT Version 2c Functionality**

- A high level summary of AEDT 2c functionalities is listed below:

- All noise, emissions, and emissions dispersion metrics from INM, EDMS, and AEDT 2a

- Building and editing of flight tracks in the user interface

- Emissions dispersion from curved flight tracks

- Emissions from airplane and helicopter startup and taxi phases of flight

- Airplane taxi delay and sequence modeling

- Noise from helicopter taxi

- Emissions from auxiliary power units, ground support equipment, and a wide variety of other non-aircraft emissions sources

- Modeling of multiple airports in a single study

- Creation of custom altitude controls for airplanes

- Time audible noise metrics

- Fuel consumption and emissions for military aircraft

- Number above noise level

- Background emissions concentrations

- Environmental justice population identification

- Dynamic grid support for all dB-based noise metrics

- Emissions dispersion contouring and output selection – ability to select specific source groups, averages, and rankings

- Centralized feature control"