

One of the main challenges facing aviation today is the encroachment of incompatible land uses near and around airports. Development of incompatible land uses can degrade airport operations, impede airport expansion, and reduce quality of life for airport neighbors. Encroachment is a key factor contributing to escalating operating costs and restriction of airport operations. It has even resulted in closures of numerous general aviation airports in the United States.

The *Airport and Compatible Land Use Program Guidebook* is designed to help airports, communities, and jurisdictions work cooperatively and proactively toward preventing incompatible development around airports in Washington State. Jurisdictions can use the tools and resources found in the guidelines to develop policies and development regulations that discourage the encroachment of incompatible land use adjacent to public use general aviation facilities. It does not prescribe a one size fits all approach to land use compatibility planning, rather it provides recommended best management practices for local land use jurisdictions. The guidebook will be revisited and updated on a regular basis to reflect new and emerging best management practices for aviation land use compatibility planning.

### Washington's Airport System

The *Washington Aviation System Plan* (WASP) encompasses 138 public-use airports that have statewide significance.

Washington has 65 airports listed in the 2009–2013 National Plan of Integrated Airport Systems (NPIAS). Airports on the NPIAS are deemed as having national significance and are eligible for federal funding. The high number of non-NPIAS airports in Washington has important funding implications because these airports are not eligible to receive federal grants for facility improvements and land use compatibility measures.

Of the 138 public-use airports in Washington, almost 80 percent are publicly-owned, either by municipalities, including port and airport districts, or by the state. Policy decisions involving publicly-owned airports in the state are typically made by elected officials of the entity owning the airport.

Funding to develop, maintain, and operate airports is derived from a variety of sources including user fees, revenues from land and facility leases and rents, local government funds, and federal and state grants. For those airports in NPIAS, a substantial proportion of development and major maintenance funding comes from the FAA grant program. State grants serve a similar function for the smaller NPIAS airports and others in the state airport system.

### ***Why should communities work to protect public-use airports?***

The state's system of 138 public use airports contributes significantly to its economy and serves a variety of roles and functions. Airports provide unique transportation access as part of Washington's multi-modal transportation system. They are crucial on a local, statewide, national, and global level as they efficiently move people and goods, promote business and commerce, and contribute to a better quality of life.

Washington's airports serve a wide range of transportation, economic and emergency activities, including:

- Business travel
- Tourism
- Freight, express, and mail services
- Agricultural
- Disaster management
- Firefighting
- Emergency medical transportation
- Aviation-related business
- Search and rescue
- Access to remote communities
- Recreation

### ***Why is land use compatibility a concern for airport preservation?***

#### **Airport activities affect adjacent areas.**

Most people are familiar with the negatives associated with proximity to an airport. The effects generated by airports affecting adjacent properties may include:

- Noise
- Vibration
- Smell
- Light
- Low-flying aircraft
- Safety risks – real and perceived
- Future increases in airport operations

#### **Adjacent land uses also affect airport activities.**

Fewer people understand the effect that adjacent land uses can have on airport activities. Development around an airport can reduce property available for operations and safety areas, create obstructions to the airspace needed for aircraft to safely approach and depart the runway, reduce clear airspace needed to support advanced technologies, and generate opposition to existing and future airport activities.

**These conflicts often degrade usefulness of an airport and have severe consequences for communities.**

Ultimately, incompatible development reduces opportunity for economic development, reduces transportation access, reduces the value of public investment in airport infrastructure, and reduces quality of life for communities.

## **Encroachment of Incompatible Land Uses**

Encroachment of incompatible land uses is a key factor contributing to constraints on expansion and restrictions on operations of airports in the U.S. In many cases, it can even lead to airport closures.

Why is encroachment occurring?

- Washington's population has doubled in the last 30 years.
- Urban areas are expanding and communities are pursuing denser development.
- Local land use authorities are either unaware of or not compliant with the requirements of Washington's Growth Management Act.
- Property adjacent to the airport may have services extended to it and be affordable due to its proximity to the aviation facility.
- Many airports are surrounded by flat, undeveloped land that is attractive for development because the land, in many cases, is served by utilities and other infrastructure.
- Communities underestimate the adverse impacts of incompatible land use development on airport operations.

### ***What is WSDOT's role in planning for airport land use compatibility?***

[RCW 37.70.547](#) of Washington's Growth Management Act requires towns, cities, and counties to discourage development of incompatible land uses adjacent to public use airports through adoption of comprehensive plan policies and development regulations.

WSDOT Aviation's role under the Growth Management Act is to address this issue by advocating for the preservation of public use airports and providing decision makers with the best available information about airport land use compatibility. The state's program emphasizes airspace protection and discourages residential development, schools, hospitals, and other medical facilities adjacent to airports, especially in the extended centerline of the airport runway. The program identifies most industrial and commercial land uses as airport-compatible. WSDOT does not have regulatory authority over land use decisions; however, we offer a technical assistance program to help towns, cities and counties address aviation issues.

### ***What is the purpose of the compatibility planning checklist?***

WSDOT Aviation has provided a step-by-step checklist to make airport land use compatibility resources easier to use and understand. The checklist communicates state guidelines and best management practices, and directs users to more detailed reference materials.

## **How should you use this checklist?**

This checklist outlines a six step process for airport land use compatibility planning. The steps take you through research and analysis that will help your jurisdiction make informed decisions about airport land use compatibility. The products you develop as you move through the checklist provide background materials that will help the jurisdiction “show their work” by demonstrating how they arrived at their decisions. This type of transparency supports public outreach programs and is useful for supporting local decision-making if challenged before the Growth Management Hearings Boards. This checklist will help you craft defensible, objective policies and zoning regulations.

### **Step 1: Getting Started and Gathering Data**

In this step, you will begin your work on airport land use compatibility planning by laying a foundation for your process. Your other major task in this step will be to gather the airport and land use data that will enable you to address airport land use compatibility issues.

You will know you have been successful when:

- You have conducted formal consultation with aviation stakeholders.
- You have identified applicable state laws.
- A process is in place to help stakeholders work together.
- You can describe the airport’s role, features, and activity.
- You know what land uses exist around the airport and what land use plans are in place.
- You have identified the initial study area.

### **Step 1: Products**

- Record of consultation meeting
- Creation of a compatibility planning working group.
- Findings that outline your airport land use compatibility planning responsibilities under state law.
- Understanding of the airport’s context within the community, state, and nation.
- Inventory of airport facilities, activities, and services for use in subsequent land use compatibility planning steps and in the transportation element of the comprehensive plan as well as the capital facilities element, when applicable.
- Summary of data regarding compatible and incompatible land uses around the airport.
- Map of the initial study area.

## **Step 2: Delineate the Airport Influence Area**

Now that you have learned about the airport and its setting and have created a framework for your planning process, the next step is to define the area you need to consider for land use compatibility planning.

You will know you have been successful when:

- You can define the noise, airspace protection, and safety impacts of the airport and know what areas in the airport environs are affected.
- You have designated an airport influence area.

### **Step 2: Products**

- Map of noise contours (if applicable).
- Overall boundary of the airport influence area.
- Map of the airport influence area.
- Airport airspace map showing FAR Part 77 *Imaginary Surfaces and Elevations*.
- Map of compatibility zones applicable to each runway end.

## **Step 3: Identify Compatibility Concerns**

You have set a foundation that described key information about your airport and community. You have also identified the airport influence area that is relevant. Now it is time to examine the level of compatibility in your community. This step will help you understand the various issues involved in determining compatibility.

You will know you have been successful when:

- You have determined the compatibility status of existing land uses in the airport influence area.
- You have identified potential compatibility conflicts that could arise from future development.
- You have identified the particular compatibility concerns that will require further review in the next step.

### **Step 3: Products**

- List of current community policies affecting land use development in the airport influence area.
- Evaluation of current compatibility status.
- Identification of potential future compatibility conflicts.
- List of specific compatibility issues to be addressed by new policies.

#### **Step 4: Prepare Comprehensive Plan**

Steps 1 through 3 led you through the research and analysis needed to describe and assess the interactions between airports and surrounding land uses. You now know what constitutes compatible land uses around your airport and have identified key challenges to prevention of more incompatible uses. What are your options for addressing those challenges? This step will help you think through the various compatibility strategies available, then evaluate and incorporate the best strategies into the draft of your comprehensive plan.

You will know you have been successful when:

- You have weighed the comparative advantages and disadvantages of available planning strategies.
- You have identified preferred planning strategies.
- You have decided upon specific compatibility criteria.
- You have fully considered airport land use compatibility measures in your comprehensive planning process and incorporated compatibility policies into the draft comprehensive plan where appropriate.
- You are ready to circulate the proposed comprehensive plan for review and adoption.

#### **Step 4: Products**

- List of current policies affecting airport land use compatibility in your community whether positively or negatively ([Worksheet 4A](#)).
- Assessment of the adequacy of current policies ([Worksheet 4B](#)).
- Evaluation of alternative compatibility strategies ([Worksheet 4C](#)).
- Draft of specific compatibility criteria.
- Adjustment of airport influence area boundary if necessary ([Worksheet 4D](#)).
- Draft comprehensive plan policies.
- Draft comprehensive plan land use map.

#### **Step 5: Adopt the Comprehensive Plan**

This short step takes the comprehensive plan update you prepared in Step 4 through the adoption process. Particular emphasis is given to gaining support for the airport land use compatibility measures you have incorporated into the draft plan.

You will know you have been successful when:

- Airport stakeholders feel that their concerns regarding compatibility matters have been understood and appropriately considered in the comprehensive plan update.
- You have gained public acceptance of the importance of airport land use compatibility planning.

- WSDOT Aviation provides comments supporting the compatibility measures you propose to take in your comprehensive plan update.
- Your community's decision-makers have adopted a comprehensive plan update that contains appropriate measures to protect the airport from encroachment by incompatible land uses.

### **Step 5: Products**

- A strategy to gain public and decision-maker support of the compatibility measures.
- Information materials describing the importance of the airport and airport land use compatibility.
- An adopted comprehensive plan incorporating airport land use compatibility measures.

### **Step 6: Implement the Airport Land Use Compatibility Policies**

Congratulations! You have shepherded airport land use compatibility matters through the research and analysis process to successful reflection of the concerns in your draft comprehensive plan update which has now been adopted by your community's decision-makers. But, you can't stop there. The one final step involves preparing implementing regulations, getting them adopted, and then using them on a day-to-day basis to ensure that compatibility concerns continue to be recognized and avoidable conflicts do not occur.

You will know you have been successful when:

- You have proposed revised development regulations to implement the policies.
- You have begun to put the policies to use.

### **Step 6: Products**

- Draft and adopted implementing regulations such as an airport overlay zoning ordinance that contains the specific compatibility criteria to be met
- Identification of continuing actions and specific points in the development review process where airport land use compatibility concerns will be addressed

## **Public Outreach**

WSDOT Aviation conducted an extensive public outreach process to obtain feedback on the *Airports and Land Use Compatibility Program Guidebook*. Among its outreach efforts, WSDOT released a draft copy of the guidebook on May 6 at the annual Washington Airport Managers Association meeting in Wenatchee. Airport sponsors, elected officials, local planners, and other airport groups were invited to review and comment on the draft guidebook. The 30-day review period began on Monday, May 10.

Stakeholders were also encouraged to recommend real or hypothetical land use challenges for the guidebook's scenarios section. WSDOT staff selected several scenarios and wrote appropriate responses to the challenges presented.

Additionally, WSDOT held four community meetings across the state to obtain feedback on the guidebook. The meetings were scheduled as follows:

- Monday, May 24, 3–5 p.m., Arlington Airport office, 18204 59th Drive NE, Arlington, WA 98223
- Tuesday, May 25, 3–5 p.m., Port of Chehalis Office, 321 Maurin Road, Chehalis, WA 98532
- Wednesday, May 26, 3–5 p.m., Yakima Library, downtown branch, 102 N Third Street, Yakima, WA 98901
- Thursday, May 27, 3–5 p.m., Spokane Library, downtown branch, 906 West Main, Spokane, WA 99201

WSDOT incorporated comments received during the 30-day comment period and re-released the draft guidebook for an additional 10 day final public comment period on Tuesday, October 26.

## **Use Your Resources**

This guidebook gives you concrete tools to assist you in your planning efforts. Remember that effective, proactive land use planning benefits all parties and interests. It is important that local jurisdictions, planners and airports work cooperatively to achieve their planning goals.

WSDOT Aviation is also a resource. The department provides technical assistance that supports and facilitates informed decision making. You can contact our planning department for airport land use compatibility technical assistance at 360-651-6300. More information about WSDOT Aviation's Land Use Compatibility Program is located at [www.wsdot.wa.gov/aviation/planning](http://www.wsdot.wa.gov/aviation/planning).