

Introduction

→ *Incompatible land uses are one of the largest threats to airports today, causing conflicts between airports and their host communities.*

One of the greatest concerns facing airports today is the continued pressure of incompatible land uses. With the pressure to convert open space for development, the proliferation of telecommunication structures, the demand on the national airspace and the ground area around airports continues to increase. The list of incompatible land uses that continue to encroach on the airport airspace and off-airport approach areas is long. Encroachment by residential, and other noise-sensitive and high-density land uses near airports, are just two of the many incompatible land uses, which airports continually struggle against. Conflicts between airports and their urban environments escalate as the demand for developable land increases.

Essential to the ultimate growth and preservation of the aviation system of Oregon is education. The public and political entities must be advised of the detrimental impacts of incompatible land uses around airports and implementation of techniques to ensure compatible land uses around airports. The goal of this document is to follow in the footsteps of its predecessors, which was to develop a working guide to be used by planners, decision makers and other interested parties, to provide information and recommendations regarding methods of addressing incompatible land uses around airports.

History of the Land Use Guide

Since every acre of land in Oregon is zoned, every zone is planned and every plan is approved by the State, it is not surprising that the State of Oregon has long had a guide regarding land use issues related to airports. The first document, dating back to 1978, was developed as a “first step to provide the necessary understanding and information in the developing area of land use compatibility in the airport environs” (*Airport Compatibility Planning*, 1978). For nearly twenty-five years, the State of Oregon has been instrumental in addressing airport land use issues. As the Aeronautics Division of the Oregon Department of Transportation, significant effort was put forth to establish land use guidelines that were in their infancy nationwide. One of the standard documents used in the discussions of land use planning today, Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace, had just been issued in January of 1975, so communities were just becoming aware of the need to address land use issues and their impact on airports.

During the revision of the document in 1981, the Aeronautics Division recognized that it was being used as a guide and subsequently renamed the document *Airport Compatibility Guidelines*, and made it an element of the Oregon Aviation System Plan. As noted in the 1981 update, the pressures of urban growth continued to plague airports and their environs into the 1980s even though Oregon was a leader in strategic planning practices such as the development of urban growth boundaries (UGBs). To further strengthen the guidelines, this update incorporated additional information regarding specific regulatory actions that affected land use issues; i.e., the Department of Environmental Quality's Noise Control Regulations for Airports, Oregon Administrative Rules (OAR), Division 35, Chapter 340. The 1981 revision served the State as the primer on airports and compatible land uses for thirteen years until the second revision of the document in 1994.

In 1994, the renamed Oregon Department of Transportation, Aeronautics Section, undertook yet another revision to the guidelines. This time it addressed additional players in the area of compatible land use issues such as the Department of Land Conservation and Development and the Oregon Department of Environmental Quality. Significant urban growth and development took place nationwide between 1981 and 1994. Each update of the Land Use Compatibility Guidelines has made an effort to include additional regulatory changes and tools

for development of compatible land uses. The 1994 update is no exception. It addressed additional regulatory measures and included a very useful section dedicated to topics of preventive and corrective measures of land use strategies.

The Oregon Department of Aviation (ODA), now a separate entity from the Oregon Department of Transportation, has addressed the need for an updated document. This most recent update follows in the tradition of the previous updates with the same purpose and audience, as well as the underlying need for revision. The 2002 update reflects one of the biggest changes to state regulations related to airports - the development of the Airport Planning Rule (APR), Chapter 660, Division 13 of the Department of Land Conservation and Development. The APR provides many useful regulations to control development both on and off airport property. In addition, other state and federal regulations are incorporated to illustrate the intergovernmental responsibilities for land use planning. Land use strategies are also outlined to provide a comprehensive document for use in preserving the current capacity of airports, as well as their capability for future growth to serve the growing state population.

✈ *Each update of the Land Use Compatibility Guidelines has made an effort to include additional regulatory changes, as well as additional tools to assist land use planners and airports with development of compatible land uses.*

The Importance of Aviation

Aviation is an important industry to the State of Oregon. It provides a means of transportation, economic development, recreational aviation opportunities and educational venues to the citizens of the State, as well as visitors to the region. The Oregon aviation system serves a population base of over 3,306,000 and is part of the larger national aviation system. The growing population, coupled with increasing levels of tourists arriving by air, plays a significant role in the economy of the state. Additional factors to be considered, which affect not only the economy but also the quality of life of the residents of the state, include such activities as the shipment of cargo, emergency medical uses and agricultural spraying, military activities, recreational uses and search and rescue operations. All of these uses require a viable and reliable aviation system. The demands created by incompatible land uses threaten the viability of the state's airports and thus threaten the state's economy as a whole.

Establishing the value of an aviation system is a complicated procedure due to the many facets of service an airport provides. The monetary value of the airport can be calculated in many ways. For example, it can be based upon airport payrolls or passenger spending. There are also many benefits that cannot be quantified in monetary figures, such as the use of the airport for emergency medical flights, law enforcement activity and fire and rescue operations. All of these uses combine to create an overall value of the airport, not only to the local community, but also the region, state and national economy.

National Level

According to AOPA President, Phil Boyer, in a statement before the Subcommittee on Aviation, U. S. House of Representatives in 2001, public-use airports across the nation employ more than half a million people with a payroll of over \$14 billion, which results in \$47.5 billion annually being poured into the economy. However, airports are disappearing at an alarming rate. Developers are looking for more space for residential and commercial developments, and airports are trying by any means possible to keep them from further encroachment into their environs.

Many federal agencies are recognizing the tenuous relationship between airports and surrounding land uses and are taking steps to work together to mitigate impacts. As outlined in Chapters 4 and 5, numerous departments are working with land use issues and how they relate to airports.

→ Airports contributed 135,000 jobs and an estimated \$11.5 billion to the state economy in 1995.

State Level

Oregon’s system of airports is important for the convenience of the traveling public, and for the benefit it brings to the State. As noted in the 2000 Oregon Aviation Plan, Oregon’s 101 public use airports generated an estimated \$11.5 billion. The public benefit of these airports is also realized by the 135,000 jobs with an annual estimated payroll of \$2.4 billion. In addition, there is a benefit of over \$6 billion attributed to visitor spending associated with the 3 million annual visitors who arrive by air with an estimated annual output of \$5.9 billion. An additional 25,000 jobs are directly attributed to Oregon’s airports and related activities. These figures illustrate not only the monetary value of the airports, but also their role in the economy of the state.

The Oregon Office of Economic Analysis predicts that by the year 2020, the Oregon population will grow by 1.2 million people. Additionally, commercial passenger enplanements in Oregon have already increased more than 40 percent and this increase is expected to continue. The demand for quick and reliable transportation of perishable goods and just-in-time deliveries has greatly increased air cargo demand. The 2000 Oregon Aviation Plan predicts that over the next twenty years, total cargo volumes in the state could approach 1 million tons. These statistics are important when considering the necessity of land use planning to protect and preserve the existing and future aviation system.

Local Level

The total value of local airports to their host communities is far greater than the dollar figures attributed to fuel sales or employee payrolls. The importance of aviation to local communities can be quantified into three areas. First is the direct impact due to provision of aviation-related services and activities; i.e. air carrier operations, flight training, corporate flight operations, etc. The second area is more diverse and based upon a greater provision of services, i.e. search and rescue missions, medical emergency evacuation, forest fire control and crop spraying. The third area is the influence the existence of an airport has on the decision by entrepreneurial businesses to locate or remain in a community.

Purpose of the Guide

The purpose of this document is to provide a comprehensive source of information that can be used as a guide to preserve aviation facilities, and to provide for the safety of individuals near these airports through the use of compatible land uses. The document is intended to be a resource for planners, local officials and citizens, regarding airport land use compatibility issues. In an effort to provide a comprehensive picture of the issues surrounding land use compatibility topics, brief summaries of the various federal and state regulations related to airport planning are included. Discussion of environmental and noise-related issues is also included, along with methods of implementation for various preventive and corrective actions, as well as sample agreements, plans and programs.

→ Chapter 1 is a “hands-on” assessment of community comprehensive plans.

How is this Guide organized?

This guide contains seven chapters and numerous appendices related to land use compatibility and aviation. Chapter 1 provides a “hands-on” approach to the assessment of a community comprehensive plan with regards to airport-related land use issues. The first section of this chapter introduces the issues and requirements associated with airport planning, and presents a brief overview of applicable statewide regulations. The second section of Chapter 1 provides a questionnaire communities can use to review their comprehensive plan for compliance with statewide airport planning regulations. Chapters 2 through 7 provide the background and information on topics such as the goals and policies of the ODA (Chapter 2), the importance of land use planning (Chapter 3), the roles and responsibilities for land use planning (Chapter 4), the federal and state

→ Chapters 2-7 are resources to support land use compatibility issues.

regulations related to land use planning (Chapter 5), the techniques for establishing compatible land uses (Chapter 6), and the contacts necessary to address follow-up questions you may have (Chapter 7).

There are two primary ways to use this guide:

- The reader may use Chapter 1 to assist with the comprehensive plan review requirements if their community wishes to evaluate its existing plan and policies with regards to aviation land use compatibility.
- The remaining chapters may be used as a resource on specific aviation and land use compatibility issues.

Chapter 1 should be used by land use planners as a checklist when updating their community comprehensive plan to ensure adequate implementation of airport-related land use issues. Chapters 2 through 7 should be used as reference data once a community begins the process of updating their comprehensive plan or as a community faces issues or questions regarding airport compatible land use issues.

Summary

Incompatible land uses and their impact on airport development are a continuing threat to airports nationwide. As the population of the State of Oregon continues to grow, so does the demand for space and, with it, the potential for incompatible land uses near airports. Consequently, it is important to provide a document for the preservation of the state aviation system, and ultimately, the economic vitality of the state. This revised document serves as a statewide planning tool providing the basis for future land use decisions regarding compatibility within airport planning areas.