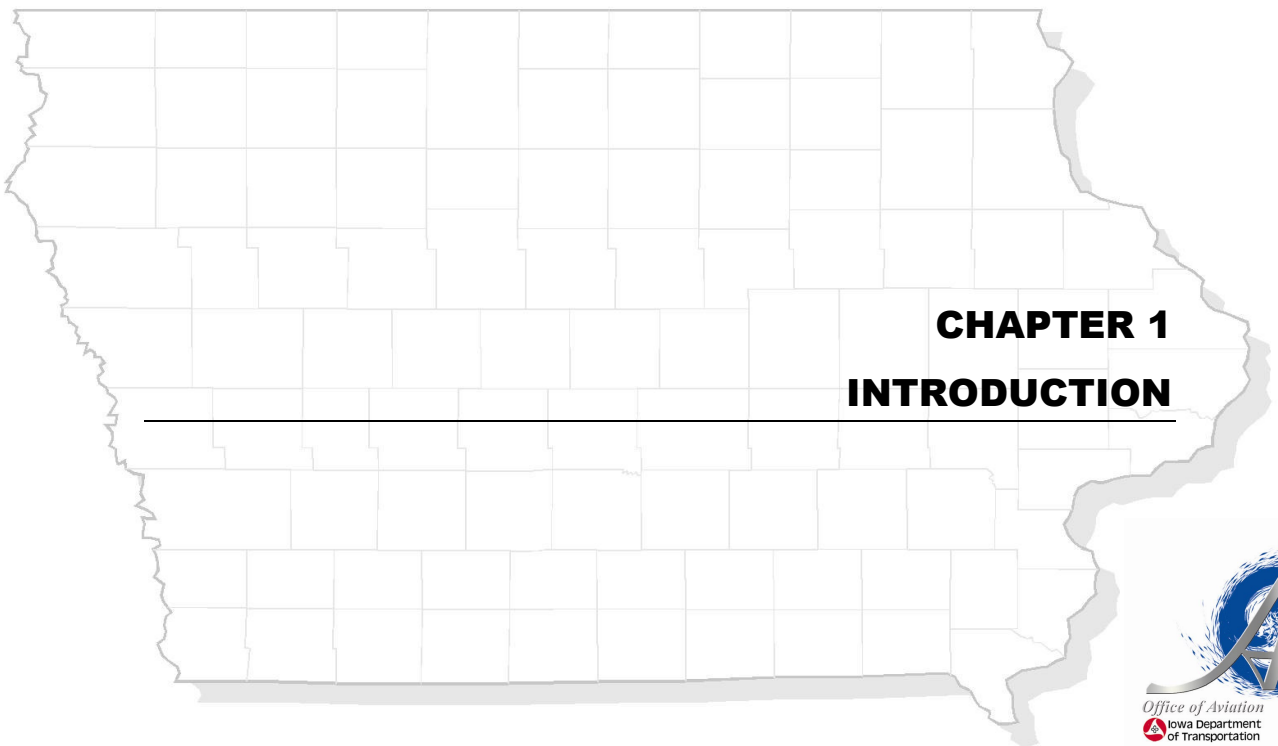




Iowa Airport Land Use Guidebook





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Iowa Airport Land Use Guidebook

1.0 Purpose of the Guidebook

Iowa has a diverse air transportation system of 111 publicly-owned airports that serves as an essential transportation and economic role in the overall state economy and quality of life. Preservation of airports from the possible encroachment of incompatible land use is an important goal of the Iowa Department of Transportation's Office of Aviation. The development of this document will provide airport sponsors and host communities with a comprehensive resource of information and guidelines that can be used to address land use compatibility issues and protect the viability of airports. Local communities and airport sponsors play a key role in the preservation of the aviation system.

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

The purpose of this document is to:

- Identify why land use around airports is a concern.
- Define compatible and incompatible land uses.
- Define the local, state, and federal government players in protecting airports and surrounding land uses.
- Identify how planning can be used to preserve compatible land use.
- Identify how to mitigate existing incompatible land uses.
- Identify resources for additional information.
- Provide sample tools, techniques, and forms for use.

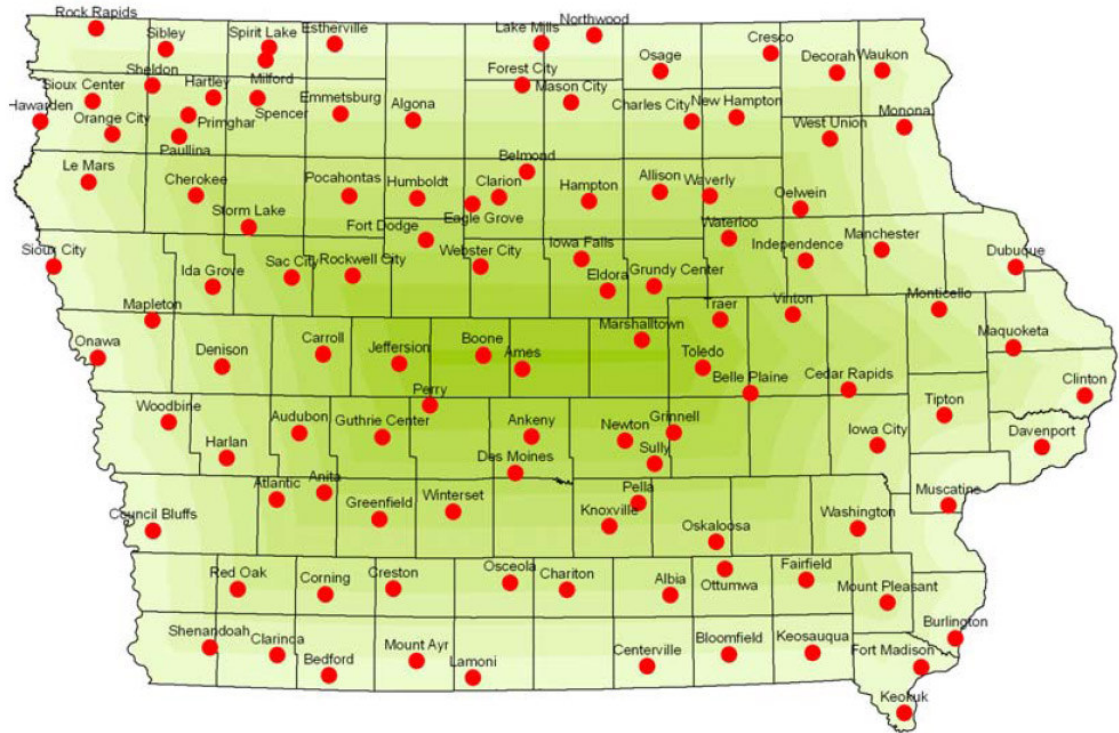
With the growth of the global economy, transportation of goods and passengers is increasingly becoming a key element of the aviation industry. The aviation system provides a variety of services for Iowans and plays an important role in attracting business and industry to the state. Airport sponsors in Iowa, as well as in other states, need to maintain and develop the existing aviation infrastructure to ensure that the aviation system is preserved to meet future needs. Due to the rural nature of the state, an adequate transportation system is critical for the movement of products and the general public. **Figure 1-1** illustrates the geographic area that is serviced by the existing aviation system.

Airports play an important role in retaining and attracting business and industry to communities.



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Figure 1-1 Location of Iowa’s Publicly-Owned Airports



Source: Iowa Aviation System Plan 2004-2024, Iowa DOT Office of Aviation

Why do we plan?

We plan to:

- Anticipate change
- Ensure wise use of resources
- Implement a vision for the future
- Protect our assets and environment
- Preserve our quality of life

Effective compatible airport land use planning needs to involve various planning agencies, along with documents, procedures, and regulations, including: airport master plans, regional transportation plans, airport zoning, and city and county comprehensive planning and zoning. Iowa law enables cities, counties, and airports to enact zoning to protect various land uses. This Guidebook identifies these legal resources, as well as suggests policies and procedures in order to implement effective compatible land use planning around airports.

The *Iowa Airport Land Use Guidebook* provides interested parties with a comprehensive resource of information related to airport land use compatibility planning. Further, it provides a process for implementing effective land use compatibility planning and zoning. This Guidebook provides information to be used in decision-making processes related to airport development and the growth of communities near publicly-owned airports.



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1.1 Iowa Aviation System Plan – Definition of Airport Roles

In its recognition of the importance of a strong air transportation system for the future of Iowa, the *Iowa Aviation System Plan 2004-2024* established a vision for an aviation system that has safe, quality facilities and services which support air transportation demands, while meeting the economic and quality of life needs in the state over a 20-year period. Goals established to help meet this vision include:

- Provide an airport system that meets current and future aviation needs.
- Promote an airport system that supports and enhances Iowa's economy.
- Promote a safe and secure airport system.
- Provide an airport system that is accessible from both the ground and the air.
- Support an airport system that provides education and career opportunities.
- Promote an understanding of the benefits of Iowa's air transportation system.

Airports contribute to the economic framework of Iowa in many different ways and at varying levels within Iowa's transportation network. Because airports within the aviation system have different roles, their needs for facilities and services vary accordingly. The airport role, type of aircraft using the airport, number of operations, and types of approaches into an airport can affect land use decisions and should be considered during the planning process.

The *Iowa Aviation System Plan 2004-2024* established five airport role categories that provide assessment of the airports based on the function of the airport, as well as the demand for aviation within Iowa. Compatible land use planning varies based on the role of the airport. **Figure 1-2** provides a summary of the roles as outlined in the 2004 aviation system plan and **Figure 1-3** shows the percentages of airports by roles.

A key goal of the state's aviation system plan is to promote a system that supports and enhances Iowa's economy.



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Figure 1-2 Iowa Airport Roles – 2004

Commercial Service Airports (8 airports)

These airports support some level of scheduled commercial airline service. These airports support a full range of general aviation aircraft to virtually all domestic and some international destinations.

Enhanced Service Airports (32 airports)

These airports support almost all general aviation aircraft, including most types of business jets. These airports generally serve as transportation centers and economic catalysts for the state.

General Service Airports (37 airports)

These airports support most twin- and single-engine general aviation aircraft and may experience occasional use by business jets. These airports support regional and in-state air transportation needs and local economic development.

Basic Service Airports (22 airports)

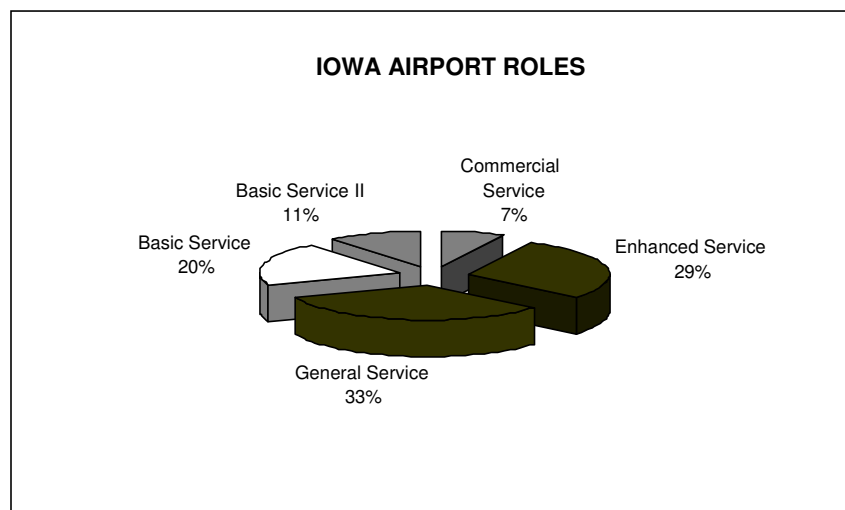
These airports support primarily single-engine general aviation aircraft but may also accommodate smaller twin-engine general aviation aircraft. These airports support local air transportation and special use aviation activities.

Basic Service II Airports (12 airports)

These airports support local air transportation, special use aviation activities, and may duplicate services in the area.

Source: *Iowa Aviation System Plan 2004-2024, Iowa DOT Office of Aviation*

Figure 1-3 Percentages of Airports by Airport Role



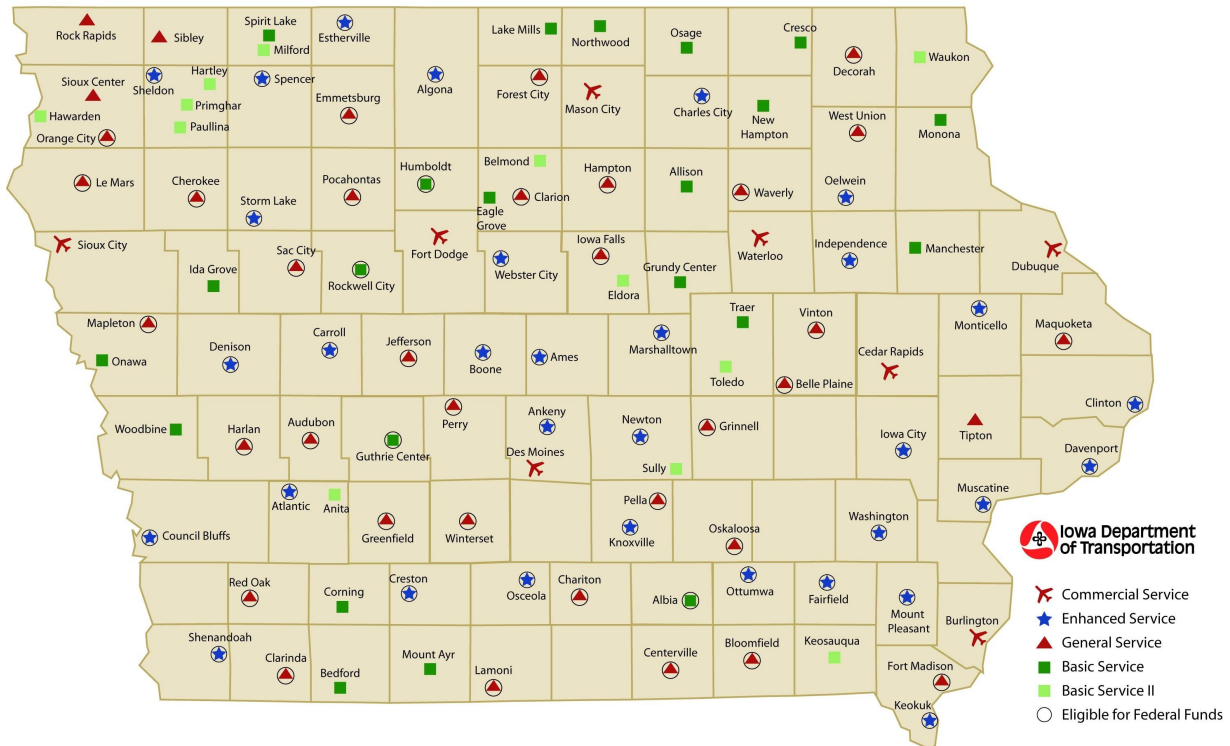
Source: *Iowa Aviation System Plan 2004-2024, Iowa DOT Office of Aviation*



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Figure 1-4 illustrates the 111 publicly-owned airports in Iowa with the designated airport role from the Iowa Aviation System Plan.

Figure 1-4 Publicly-Owned Airports in Iowa by System Role



Source: Iowa Department of Transportation Office of Aviation

1.2 Importance of Aviation in Iowa

In today's time-sensitive economy, the reliability and speed of air service allows businesses to improve efficiency, customer service, and the delivery of goods and services. Aviation also plays a crucial role in business, tourism, emergency services, agriculture, and even public safety. The combined variety of airports within Iowa serves as gateways to the nation's air transportation system.



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The public perception of aviation is often limited. For example, many citizens generally visualize only commercial airports when they think of airports or aviation. However, general aviation airports serve a critical component of the aviation system. In fact, 88 percent (88%) of aircraft operations in Iowa are general aviation aircraft that utilize smaller airports. It is important to protect airports from encroachment of incompatible land use to ensure the overall system can safely accommodate all aviation uses today and into the future.

1.2.a. Aviation Activity in Iowa

Aviation activity is projected to grow steadily over the next 20 years.

The Iowa DOT Office of Aviation, through the *Iowa Aviation System Plan*, has established a clear vision to ensure safety, quality facilities, and aviation services that supports transportation demands while meeting economic and quality of life needs throughout the state. **Table 1-1** illustrates that the demand for aviation in Iowa is expected to increase between 2004 and 2024.

Table 1-1 Statewide Aviation Demand in Iowa

| | Current | 2024 |
|--|----------------|-------------|
| Total Aircraft Operations | 1.3 million | 1.7 million |
| Based Aircraft at Public Airports | 2,364 | 2,877 |
| Enplaned Commercial Airline Passengers | 1.5 million | 2.6 million |
| Pilots | 6,714 | 7,264 |

Source: *Iowa Aviation System Plan 2004-2024, Iowa DOT Office of Aviation*

In order to meet current and future aviation needs in the state, it is necessary to protect airports from incompatible land use.

1.2.b. Economic Value

A 2006 national economic impact study concluded that general aviation activity accounted for nearly \$1.5 billion in annual economic impact in Iowa. In addition, a study conducted in 2000 by Iowa State University concluded that aviation generated more than 10,000 jobs for Iowans. The relationship between airports, aviation, and industry are interconnected as they support and sustain each other's growth and development. Iowa's air transportation system is vital to the economy as a whole.



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Businesses depend on airports that provide scheduled air service and air cargo transportation, as well as those airports that meet general aviation business needs. Airports are essential for job retention and recruitment for economic development groups and communities in Iowa. Many local businesses find it easier and faster to reach their customers and key business partners when they use a small local airport for their regional transportation needs. In many cases, these people have been able to expand their business to serve new customers, or to work with suppliers from other states by using general aviation as a routine means of transportation for their sales representatives and employees.

Aviation contributes an estimated \$1.5 billion in annual economic impact for communities within Iowa.

1.2.c. Improved Quality of Life

Airports provide vital transportation services to all citizens in Iowa, whether they use the air transportation system directly or benefit from it through the delivery of packages and goods, visits from family and friends, or the improved quality of life of a healthy economy. Everyone's quality of life improves through increased connectivity to the nation and the world.

Commercial service airports play a significant role in this increased connectivity by providing convenient access to airline services that get people anywhere they want to go quickly. Commercial service airports also provide important hubs for the shipment of goods by cargo airlines.

Everyone benefits from a viable aviation system whether they use it directly or benefit indirectly.

General aviation also plays an important role in the quality of life throughout Iowa. General aviation airports help make it possible for Iowans to lead safer, healthier, and more productive lives by providing activities such as, but not limited to the following:

- General transportation needs
- Airborne traffic reporting
- Emergency medical transport
- Flight training opportunities
- Search and rescue missions
- Agricultural spraying
- Locating new sources of energy



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Airports in Iowa support many vital and emergency services that improve the quality of life for residents. Whether medical specialists are flying into smaller towns or patients are being transported by air to larger hospitals, airports serve an important medical transportation function that makes needed medical treatment accessible throughout the state.

Developing a comprehensive approach to the management of land uses on and near airports is important to the preservation of Iowa's aviation infrastructure. Communities depend upon this system of airports to provide the needed services and added benefits of close accessibility.