



AIRPORT LAND USE COMPATIBILITY

GUIDEBOOK

EXECUTIVE SUMMARY



Florida’s economy and quality of life rely on a robust and well-integrated transportation system, which is crucial for its continued vitality.

The Airport Land Use Compatibility Guidebook equips local governments with the knowledge and resources to establish airport zoning regulations, promoting safety and responsible development around airports, as mandated by state law. By implementing these regulations, communities can ensure the sustainability of Florida’s airports and foster balanced growth in surrounding areas. The Guidebook details the specific provisions and considerations for crafting these regulations. **This Executive Summary highlights the major findings of the Guidebook as well as elucidates the key roles of various stakeholders that should be included in the process.**

What Are Airport Zoning Regulations?

Airport zoning regulations are local government regulations that establish specific requirements and restrictions for land use and development in areas surrounding airports. These regulations aim to promote the compatibility of nearby land uses with aviation operations and are important for protecting public safety and preventing potential hazards to both aircraft and the surrounding community. It is important for local government planners to develop and enforce these regulations in compliance with federal and state laws.

What Is Compatible Land Use?

The Federal Aviation Administration’s (FAA) Advisory Circular (AC) on Airport Land Use Compatibility Planning (AC 150/5190-4B) defines airport compatible land uses as **“those that can coexist with a nearby airport without constraining the safe and efficient operation of the airport, or exposing people living or working nearby to significant environmental impacts.”** This definition goes beyond simply avoiding negative impacts; it outlines a holistic approach to balancing the needs of both the airport and adjacent communities.

Who Must Adopt Airport Zoning Regulations?

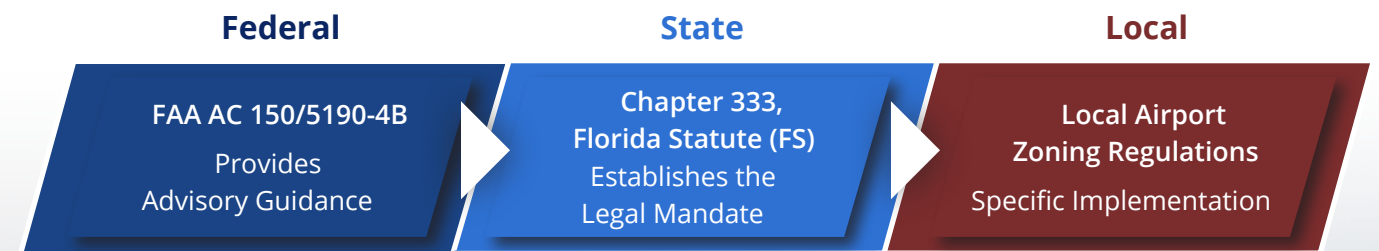
The placement of Florida’s numerous airports, along with their sizeable airport hazard areas, mean that **each local government in Florida must adopt airport zoning regulations, because each political subdivision in Florida has at least an airport hazard area within its jurisdiction.** These regulations are a necessary tool for managing land use in the vicinity of airports, even if that land is across jurisdictional boundaries.

Roles in Protecting Land Surrounding Airports

Federal. Provides guidance and advisory material in securing compatible land use development and planning surrounding airports. Airports that accept federal money through the Airport Improvement Program (AIP) must comply with all FAA Grant Assurances. These assurances are based on statutory requirements. The FAA is also authorized to carry out the provisions of Parts 77 and 150 of the Federal Aviation Regulations (FAR).

State. Sets regulations in Florida law, requiring local governments to take action.

Local. Holds the key to enforcement by adopting, administering, and enforcing airport zoning regulations.



Chapter 333, FS, defines the elements required of airport zoning regulations. As defined in Chapter 333, FS, airport zoning regulations consist of two categories.



NECESSARY COMPONENTS OF AIRPORT ZONING REGULATIONS

as defined by Chapter 333, FS

Airport Protection Zoning Regulations

Airport protection zoning regulations are intended to protect against airspace obstructions. Obstructions can be trees and natural growth, terrain, or any new construction and/or temporary construction equipment. The following describe how airport protection zoning regulations must be addressed as a part of local government's airport zoning.

Per Chapter 333, FS, obstructions can be "any existing or proposed object, terrain, or structure construction that exceeds the federal obstruction standards contained in 14 CFR part 77, subpart C."



1. Airspace Obstruction Permit Process for Potential Obstructions

Per Section 333.025(4), local governments are the permitting authority if:

1. Adequate airport protection zoning regulations are adopted
2. Regulations are on file with the FDOT
3. A permitting process is established



2. Marking and Lighting Requirements

All Airspace Obstruction Permits should contain provisions that require obstruction marking and lighting if the structure exceeds federal obstruction standards (see Section 333.03(1)(c)2., FS). Marking and lighting recommendations may be made by the FAA as a part of an aeronautical study to enhance a pilot's visual awareness of the structure's presence and location.



3. Interlocal Agreement or Joint Zoning Board Applicability

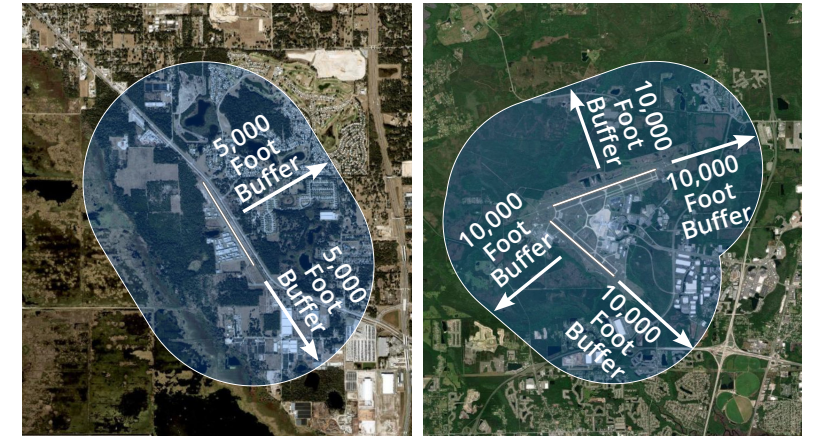
In scenarios where an airport's imaginary surfaces extend beyond a single jurisdiction, statute requires local governments to collaborate to create airport zoning regulations that apply to the relevant jurisdictions. They can either form a formal interlocal agreement or create a joint zoning board to ensure coordinated and effective management of land use near airports across jurisdictional boundaries.

Land Use Compatibility Zoning Regulations

Specific to the land surrounding an airport, local governments are required, at a minimum, to address five elements as part of their airport land use compatibility zoning regulations.

1. Prohibition of New Landfills and the Restriction of Existing Landfills

- Within 10,000 ft. from nearest point of any runway used by turbine aircraft.
- Within 5,000 ft. from nearest point of any runways used by only non-turbine aircraft.
- Outside the perimeters defined in the previous two bullet points, but still within the lateral limits of the civil imaginary surfaces defined in Part 77



2. Mitigation of Hazards via Bird Management Requirements

Regulations must address scenarios when a landfill is located and constructed in a manner that attracts or sustains hazardous bird movements from feeding, water, or roosting areas into, or across, runways or approaches and departures.



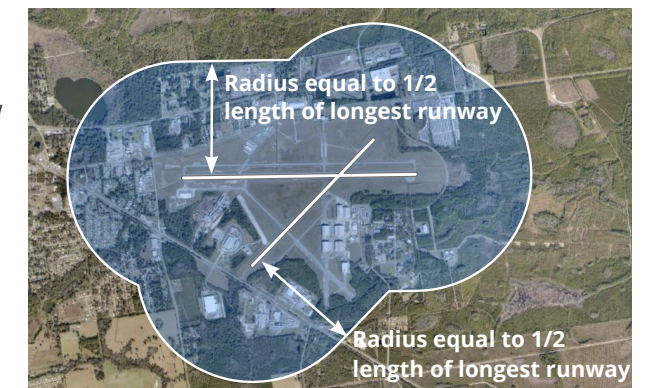
3. Prohibition of Incompatible Uses Within the Noise Contours Established by a Federally Approved Noise Study

Florida Statute requires that regulations prohibit incompatible uses within these zones, as established in the Part 150 noise study, or in Part 150 Appendix A.



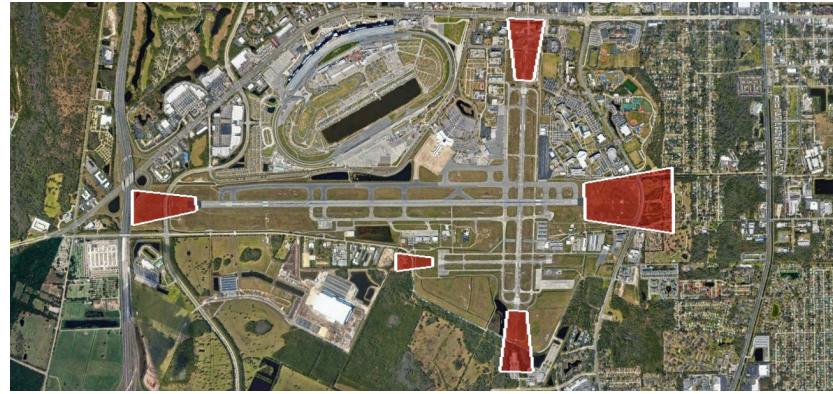
4. Prohibition of Incompatible Uses Near Airport With No Noise Study

In such cases, the airport zoning ordinance must prohibit new residential and educational development (except aviation schools or residential construction near a sole turf runway shorter than 2,800 feet) within an area half the length of the longest runway on either side and at the end of each runway.



5. Restriction of New Incompatible Uses Within Runway Protection Zones (RPZs)

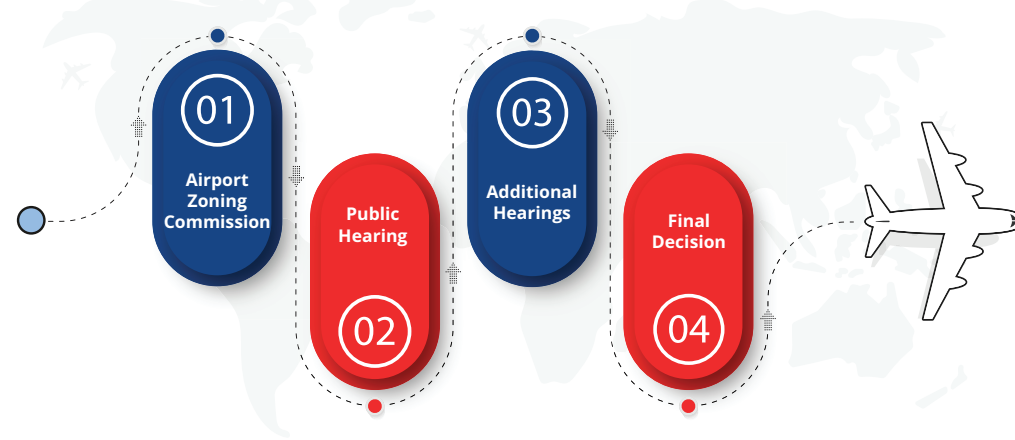
Regulations must address the restriction of new incompatible uses, activities, or substantial modifications to existing incompatible uses within RPZs.



When Incorporating New Airport Zoning Regulations...

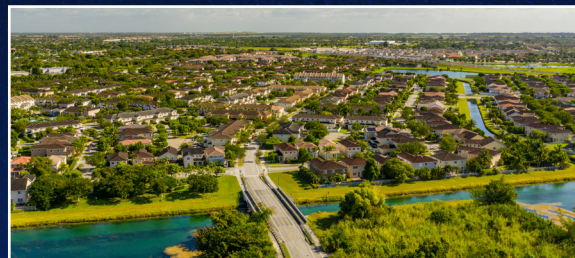
- Consider Comprehensive Plan alignment.
- Consider the need for an Interlocal Agreement or Joint Zoning Board.
- Ensure newly adopted airport zoning regulations are on file with the FDOT as required by section 333.03(3), FS.

Procedure for Adopting Airport Zoning Regulations Pursuant to Section 333.05 FS.



Land Use Impacts Near Airports

For successful airport operations, the community must identify and assess land uses that are incompatible with airports to understand their potential impacts. This is done by assessing the impacts each land use has on the core characteristics of compatibility listed above on page 7. According to Airport Cooperative Research Program (ACRP) Report 27, Enhancing Airport Land Use Compatibility, “compatible” land uses can coexist with airports without hindering safe operations or causing excessive noise or hazards for nearby communities.



Residential, Commercial, Institutional, and recreational land uses near airports may impact:

- Airspace safety
- Visual and/or atmospheric clarity
- Population density
- Wildlife presence
- Sensitivity to aircraft noise



Industrial land use near airports may impact:

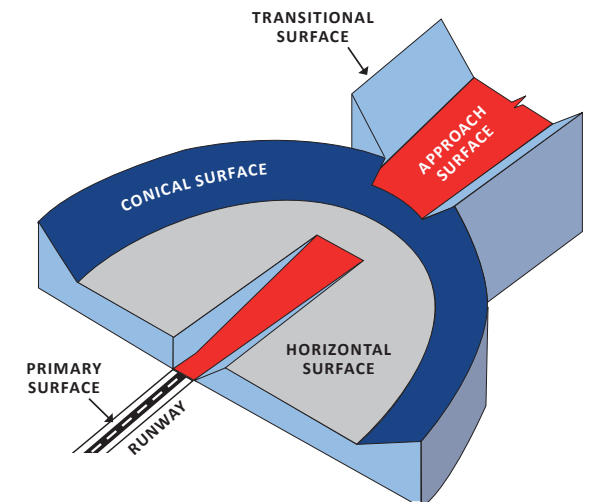
- Airspace safety
- Visual and/or atmospheric clarity
- Population density
- Wildlife presence

Core Characteristics of Airport Land Use Compatibility

- Airspace**
Confirming that the land use does not encroach upon or interfere with the designated airspace required for safe aircraft movement (i.e., tall structures, vegetation, or terrain).
- Visual/atmospheric interference**
Evaluating whether the proposed land use could create visual obstructions or atmospheric conditions that may affect pilot visibility or navigation (e.g., glare, light emissions, electronic frequencies).
- Population density**
Considering the intensity and density of people to be using the proposed land use and its proximity to runways and aircraft traffic patterns.
- Wildlife**
Considering the likelihood of the proposed use to be attractive to birds and other wildlife (e.g., providing source of food, water, shelter) which could potentially pose safety risks to aircraft and passengers in the event of a wildlife strike.
- Noise**
The potential impact of aircraft noise on the proposed land use and its ability to coexist with airport operations.

Civil Imaginary Surfaces

Understanding the FAA’s imaginary airspace surfaces is crucial when it comes to developing projects near airports. These surfaces are designed to ensure the safety and efficiency of air traffic operations. Part 77 establishes imaginary surfaces to protect airspace for safe aircraft navigation. These imaginary surfaces define volumes of airspace with specific dimensions and slopes. Penetrating an imaginary surface with an airport hazard has the potential to endanger aircraft during the critical landing and take-off phases of flight.



Infrastructure/Utilities/Energy Production related land uses near an airport may impact:

- Airspace safety
- Visual and/or atmospheric clarity
- Wildlife presence



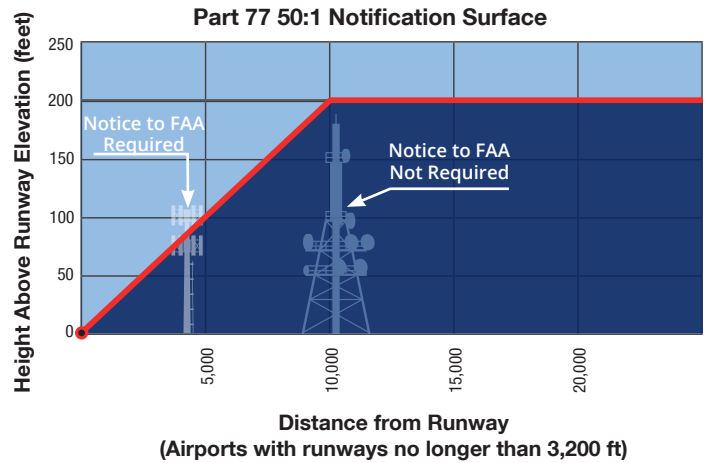
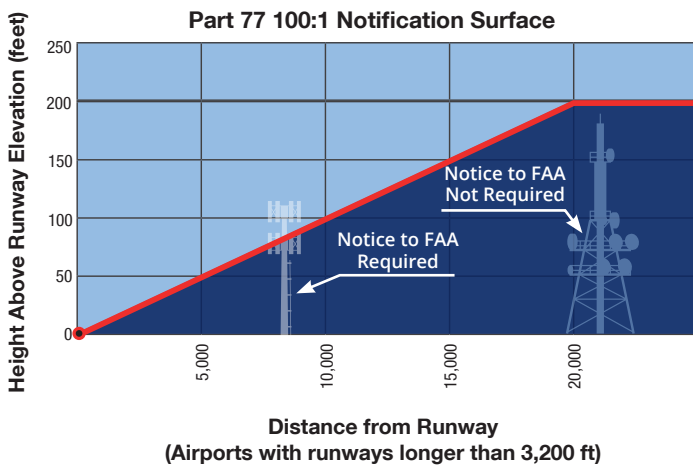
Agriculture & Open Space land uses near an airport may impact:

- Visual and/or atmospheric clarity
- Wildlife presence

Construction or Alteration Requiring Notice

In addition to being aware of the imaginary surfaces surrounding airports, those planning development anywhere in Florida should be aware of Part 77.9's notification requirement surfaces. These designated areas extend outward from runways and may trigger notification requirements to the FAA depending on the proposed structure's height and location. Among other requirements, Part 77.9 states that developers must file notice with the FAA of any construction or alteration:

- Exceeding 200 ft. AGL at its site.
- Exceeding a 100-1 slope out to 20,000 ft. from airports with runways longer than 3,200 ft.
- Exceeding a 50-1 slope out to 10,000 ft. from airport with runways no longer than 3,200 ft.
- Exceeding a 25-1 slope out to 5,000 ft. from the nearest heliport.



Filing notice with the FAA can be done using the **FAA's Notice Criteria Tool** which can be found on their Obstruction Evaluation/Airport Airspace Analysis (OEAAA) website <https://oeaaa.faa.gov/oeaaa/oe3a/main/>.

For more information on the Airport Land Use Compatibility Guidebook, please visit:
www.fdot.gov/aviation/flpub.shtm/airspace-protection-and-zoning

