


TRANSPORTATION RESEARCH BOARD

Give the “All Clear” - Hazard Zoning at General Aviation Airports

Tuesday, December 10, 2019
2:00-3:30 PM ET

Learning Objectives

At the end of this webinar, you will be able to:

- List hazard zoning practices
 - Apply strategies to enhance airport land use compatibility planning
 - Describe how airports are implementing such strategies
 - Utilize communication and education tools in the guidebook to promote local outreach programs
- 

ACRP Webinar

Give the 'All Clear' – Hazard Zoning at
GA Airports

December 10, 2019



Joshua Abramson

Cypress Technology LLC

- ✈ 15 years experience as airport manager
- ✈ Vice Chairman of Small Community Air Service Working Group
- ✈ Chairman ACRP Synthesis Selection Committee
- ✈ ACRP volunteer since 2010



Five Ways to Get Involved!



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Today's Speakers

Maranda Thompson and Stephanie
Ward, Mead & Hunt

and

Mihir Shah, Arora Engineers

Presenting

ACRP Report 206:

*Guidebook on Effective Land Use Compatibility
Planning Strategies for General Aviation Airports*

Guidebook on Effective Land Use Compatibility Planning Strategies for General Aviation Airports

Mead & Hunt
Diana E. Fainberg Associates
Arora Engineers

Presenters



✈ Maranda Thompson, Mead & Hunt
(Principal Investigator)



✈ Stephanie Ward, Mead & Hunt



✈ Mihir Shah, Arora Engineers

ACRP Report 206 Oversight Panel

Jeffrey L. Bilyeu, Texas Gulf Coast Regional Airport (Chair)

David W. Fitz, Coffman Associates

Shelley Lamar, Aerotropolis Atlanta Alliance

Thomas F. Mahoney, Massachusetts DOT

Gary P. Mascaro, City of Scottsdale – Scottsdale Airport

Kay L. Thede-Hughes, Clapsaddle-Garber Associates

Holly Cyrus, FAA Liaison

Christine Gerencher, TRB Liaison

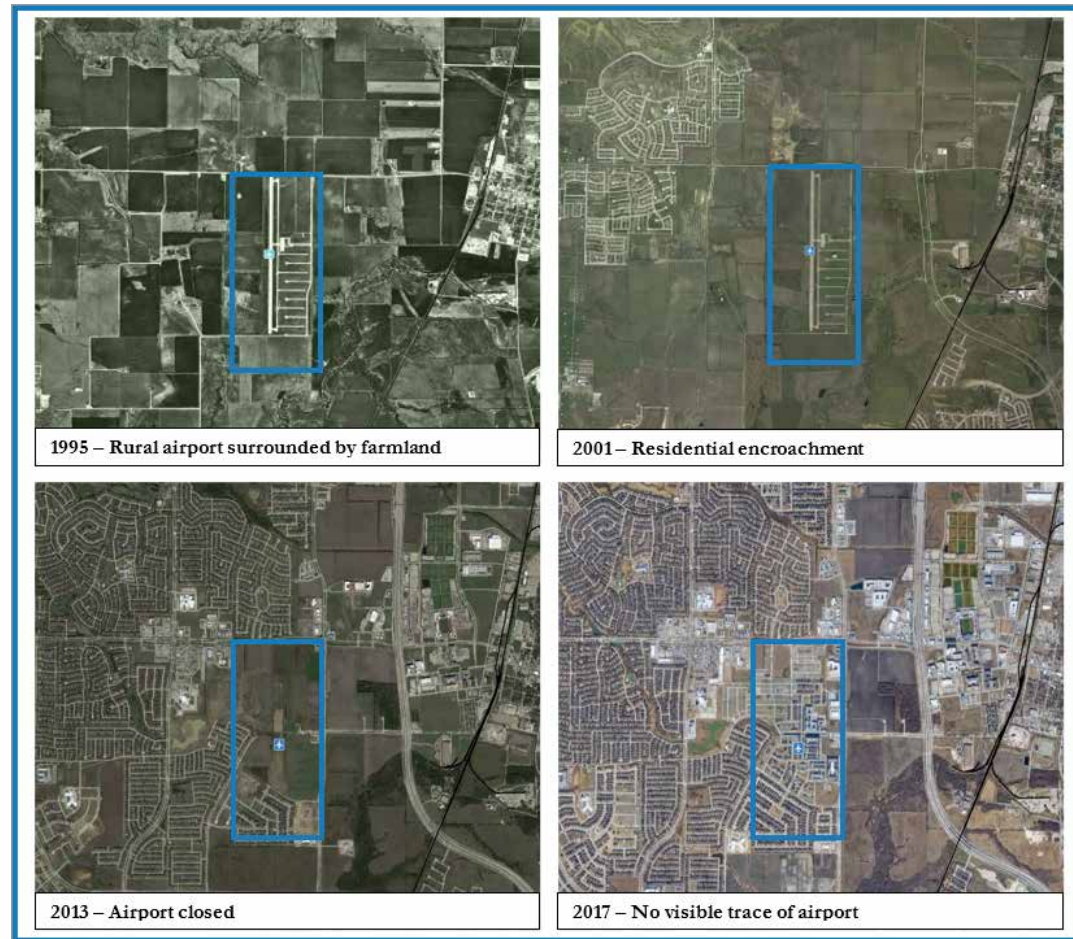
Marci A. Greenberger, ACRP Project Manager

ACRP Report 206: *Effective Land Use Compatibility Planning Strategies for General Aviation Airports*

- ✈ Focuses on effective airport compatibility planning practices
- ✈ Incorporates research findings from literature review, state aviation survey, and **interviews** of select general aviation airports and land use professionals
- ✈ Identifies successful planning strategies for **key stakeholders**
- ✈ Includes **toolkits** to promote effective compatibility regulations
- ✈ Published **December 2019**

Research Objective

Evaluate the **effectiveness** of Airport Compatibility Zoning for General Aviation Airports



Research Approach

Literature Review

- ✈ National resources (ACRP Reports, FAA/State Guidance)
- ✈ State AZO laws
- ✈ Local AZO regulations

Industry Interviews

- ✈ Cross-Section of Airports

Industry Review

- ✈ Draft Guidebook



Research Findings: State Role

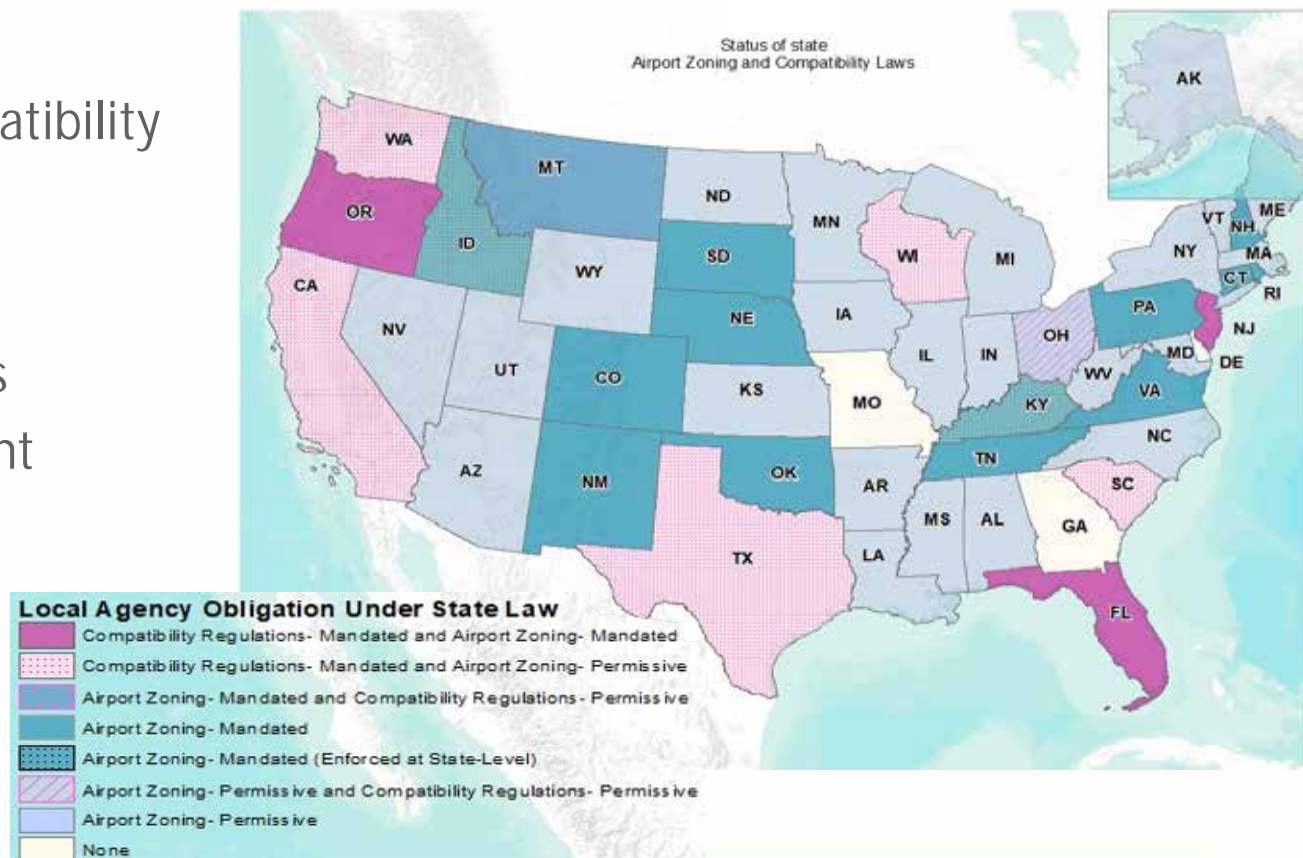
Does involvement by state aviation agencies in local compatibility influence success?

✈ Best Practices

- § State-level compatibility standards
- § State oversight

✈ Common Challenges

- § Rigid enforcement



Research Findings: Regulatory Context

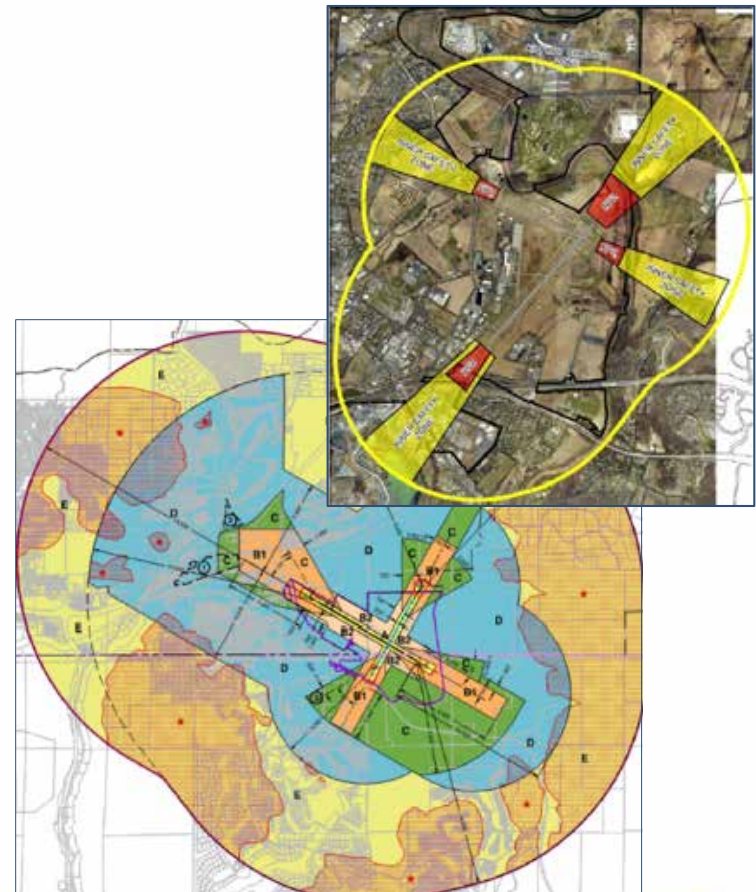
Is airport compatibility zoning the best method for regulating land uses around GA airports?

✈ Best Practices

- § Airport overlay zoning
- § Airspace protection (minimum)
- § Noise and safety (recommended)

✈ Common Challenges

- § Inconsistent



Research Findings: Adoption/Implementation

Are local agencies adopting and implementing airport compatibility regulations? If not, why not?

✈ Common Challenges

- § Inconsistent / Outdated
- § Not Needed (no compatibility issues)
- § Not Understood
- § Community Opposition

✈ Best Practices

- § Education / Training
- § Relationships / Outreach



Research Findings: Outreach

Is regular outreach important?

- ✈ Common Challenges
 - § Inconsistent
 - § Not needed or understood
 - § Community opposition
- ✈ Best Practices
 - § Regular communication
 - § Education
 - § Relationships



Premise of Guidebook: Communication

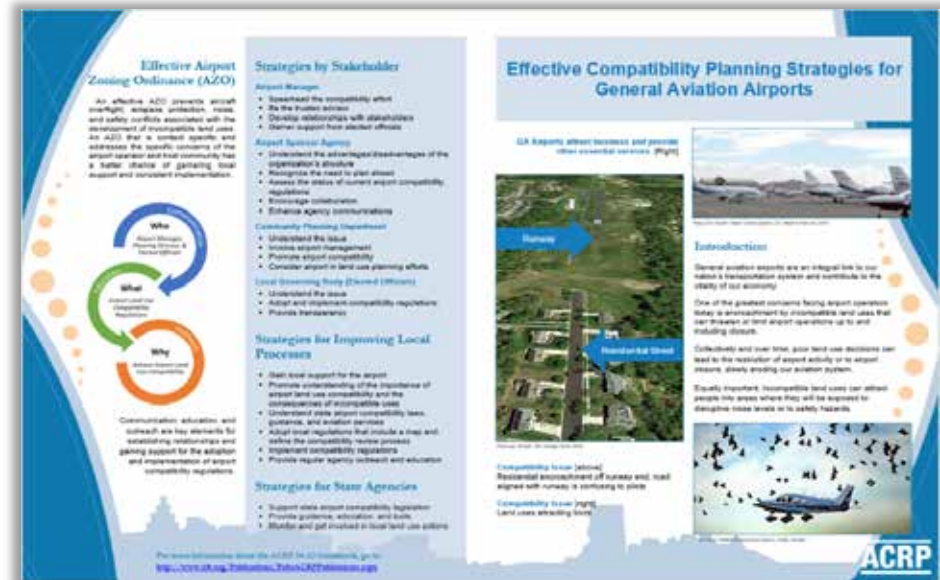
Strategies by key stakeholders

- ✈ State aviation officials
- ✈ Airport manager/sponsor
- ✈ Community planning/decision body



Toolkits

- ✈ Self-assessment checklist
- ✈ Educational brochure
- ✈ Presentation template



Strategies for States: Overview

Provide Oversight

- ✈ Varies based on state laws & regulations
- ✈ Local ordinance review, guidance, and approval
- ✈ Strategic outreach, education, and training
- ✈ Formal state-led Airport Zoning or Commission (if applicable)

Monitor Activity

- ✈ Priority Rating Model
- ✈ FAA Form 7460 Monitoring

Provide Tools

- ✈ Publish Guidance
- ✈ Online Tools

Create a New Submittal

1. Click **Add New Case (Off Airport)** or **Add New Case (On Airport)** as appropriate.
2. Fill in the form for the proposed project.

Note: There are differences in the required fields (marked with a red *) for **On Airport** and **Off Airport**. These differences are minor and self-explanatory.



 **For Off Airport** submittals there is a field for "requested marking/lighting." If the user does not have a preference, select **Other** from the pull-down menu and enter **No Preference** in the comment field.
3. Under **Notice of Construction/Alteration** (see **Figure 5**), select the appropriate response from the pull-down menu.

Figure 4. OE/AAA Portal Page – Create



Obstruction Evaluation Version: 2016.1.1.0	OE/AAA Portal Page
Home	My Account
FAA OE/AAA Offices	Reset:
View Determined Cases	Use Name:
View Proposed Cases	Login Time:
View Supplemental Notices (Form 7460-2)	IP Address:
View Circularized Cases	Actions:
Search Archives	What's New
Download Archives	Update Account Information
Circle Search for Cases	Change Password
Circle Search for Airports	Logout
Discretionary Review FAQs	
Notice Criteria Tool	
Sub Preliminary Screening Tool	
Distance Calculation Tool	
OE/AAA Account	
Portal Page	
My Cases (Off Airport)	
My Cases (On Airport)	
My Sponsors	
Add New Case (Off Airport)	
Add New Case (On Airport)	
Update User Account	

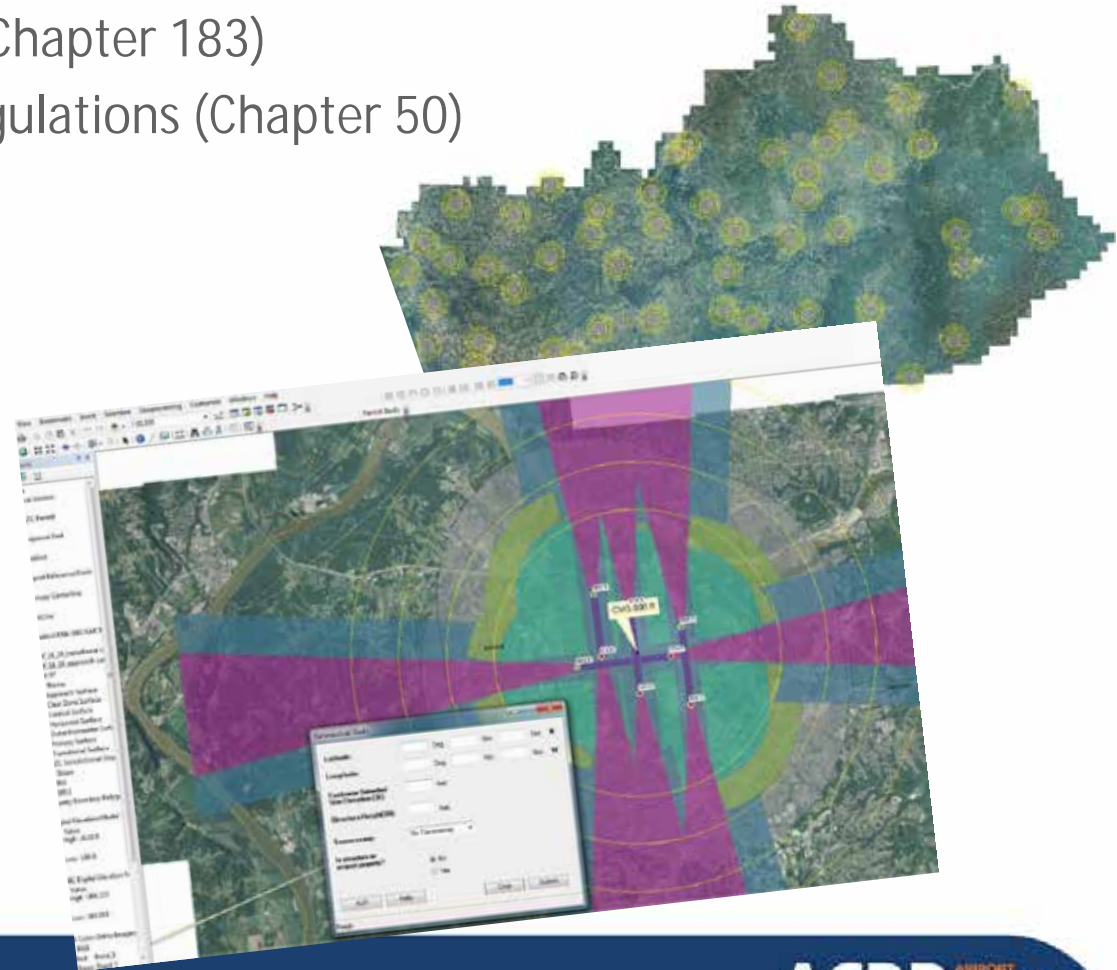
Strategies for States: Case Study #1

Case Study: Kentucky Airport Zoning Commission

- ✈ Kentucky Revised Statutes (Chapter 183)
- ✈ Kentucky Administrative Regulations (Chapter 50)

State Implementation

- ✈ State permit
- ✈ Aeronautical study
- ✈ Land use factors beyond airspace & obstructions



Strategies for States: Case Study #2

Case Study: South Carolina Aeronautics Commission

- ✈ Statewide Land Use Challenges
- ✈ South Carolina Title 55
- ✈ Compatible Land Use Evaluation (CLUE) Tool



South Carolina Airport
Compatible Land Use Evaluation (CLUE) Tool



Strategies for States: Case Study #2 (continued)

The Problem

- ✈ Local ordinances based on 1980s-era FAA Model
- ✈ Many incomplete, outdated, and poorly enforced
- ✈ SCAC had limited leverage
- ✈ Encroachment worsened as growth accelerated

The Solution

- ✈ SC law covering aviation (Title 55) included *enabling* of airport zoning; *mandatory* language not politically viable
- ✈ Solution was to provide a notification and comment provision, providing a mechanism for local planners and SCAC to communicate airport land use compatibility matters, regardless of ordinances
- ✈ Added provision for state to use legal action to abate imminent hazards



1995



2007

Strategies for States: Case Study #2 (continued)

Updated SC Title 55

- ✈ SCAC must develop and provide maps of airport safety and land use zones to local jurisdictions located near a publicly-owned airport
- ✈ Local jurisdictions must notify SCAC of land use changes in these zones
- ✈ SCAC must respond to these changes

State Implementation Goals

- ✈ Develop a web-based mapping program that:
 - § Meets Title 55, Section 55-13-5 provisions
 - § Outlines safety and land use zones
 - § Provides a mechanism for SCAC land use review
 - § Applicable to a wide audience



Strategies for States: Case Study #2 (continued)

CLUE Tool Benefits

- ✈ Initial auto-evaluation of actual proposed uses and permit applications
- ✈ Complements local zoning ordinances and FAA 7460s
- ✈ Assists planning officials in issuing permits
- ✈ Provides efficiency and clarity
- ✈ Cuts out guess-work



Strategies for Airport Sponsors: Overview

Airport Sponsor

- ✈ Understand organization's structure
- ✈ Recognize the need to plan
- ✈ Encourage collaboration
- ✈ Provide transparency

Airport Manager

- ✈ Spearhead compatibility efforts
- ✈ Be the trusted advisor
- ✈ Develop relationships
- ✈ Garner support for the airport



Strategies for Airport Sponsor: Case Study #3

Frederick Municipal Airport, Maryland

- ✈ Successful collaboration
- ✈ Airport Master Plan Update
- ✈ Airport land use compatibility issues addressed
- ✈ Airport overlay zoning initiated concurrently



Strategies for Airport Sponsor: Case Study #4

Truckee Tahoe Airport, California

- ✈ Community outreach
- ✈ Formal committee to represent impacted communities
- ✈ Regular communication and education (pilots and residents)



Strategies for Land Use Professionals: Overview

Planning Department Staff

- ✈ Understand the issue
- ✈ Assess current regulations
- ✈ Involve airport management
- ✈ Promote airport compatibility

Elected Officials

- ✈ Find mutual goals
- ✈ Adopt compatibility regulations
- ✈ Implement compatibility regulations



Strategies for Land Use Professional: Case Study #5

Northeast Philadelphia Airport, Pennsylvania

- ✈ Finding mutual goals
- ✈ Economic vitality and preservation of commercial and industrial uses



What can I do?

State Aviation Official

- ✈ Promote enactment of effective compatibility laws
- ✈ Provide guidance and tools
- ✈ Support local compatibility efforts

Airport Professional

- ✈ Spearhead local airport compatibility initiatives
- ✈ Build relationships with key stakeholders

Land Use Professional

- ✈ Be an advocate for airport compatibility
- ✈ Involve the airport in local planning efforts

All Key Stakeholders

- ✈ Understand the issue
- ✈ Communicate, educate, and conduct stakeholder outreach regularly
- ✈ Use ACRP Report 206 as a resource



FOR ADDITIONAL INFORMATION



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 - Maranda Thompson, *Mead & Hunt*, maranda.thompson@meadhunt.com
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ACRP is an Industry–Driven Program

- ✈ Managed by TRB and sponsored by the Federal Aviation Administration (FAA).
- ✈ Seeks out the latest issues facing the airport industry.
- ✈ Conducts research to find solutions.
- ✈ Publishes and disseminates research results through free publications and webinars.



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Visit ACRP's Impacts on Practice webpage to submit leads on how ACRP's research is being applied at any airport.

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Additional ACRP Publications Available on Today's Topic

Report 27: [Enhancing Airport Land Use Compatibility, Volume 1: Land Use Fundamentals and Implementation Resources; Volume 2: Land Use Survey and Case Study Summaries](#)

Report 38: [Understanding Airspace, Objects, and Their Effects on Airports](#)

Report 44: [Guidebook for the Preservation of Public-Use Airports](#)

Report 113: [Guidebook on General Aviation Facility Planning](#)

Report 168: [Runway Protection Zones \(RPZs\) Risk Assessment Tool Users' Guide](#)

Report 176: [Generating Revenue from Commercial Development On or Adjacent to Airports](#)

Report 195: [Best Practices for Airport Obstruction Management Guidebook](#)

Legal Research Digest 5: [Responsibility for Implementation and Enforcement of Airport Land-Use Zoning Restrictions](#)

Legal Research Digest 14: [Achieving Airport-Compatible Land Uses and Minimizing Hazardous Obstructions in Navigable Airspace](#)

Legal Research Digest 15: [Compilation of State Airport Authorizing Legislation](#)

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