



Arizona Airport Land Use Manual (ALUM) Primer

Airports are critical transportation assets that provide public access to and from communities all over the state of Arizona and beyond. Not only do they connect people and places quickly, but they generate significant economic contributions to communities on an annual basis.

Over time, as Arizona communities and airports continue to grow to meet a rising population, so too does the need for enhanced compatibility between airports and surrounding land uses. Certain developments proximate to airports can pose risks to health and safety, and impact quality of life for those living, working, or recreating within the airport environment. As the state agency responsible for airports' safe and continued operation, the Arizona Department of Transportation's Aeronautics Group (ADOT Aeronautics) developed the ALUM to aid airports and their communities in planning proactively for development that is compatible with nearby airports, while meeting the needs of communities.

The ALUM was developed in partnership with a diverse advisory committee, representing the many stakeholder groups impacted by airports and development, including airport sponsors, municipal governments, developer associations, and more. This diverse input resulted in an ALUM that is useful to a wide audience of varying aviation, planning, and development backgrounds.

What are airport-compatible land uses?

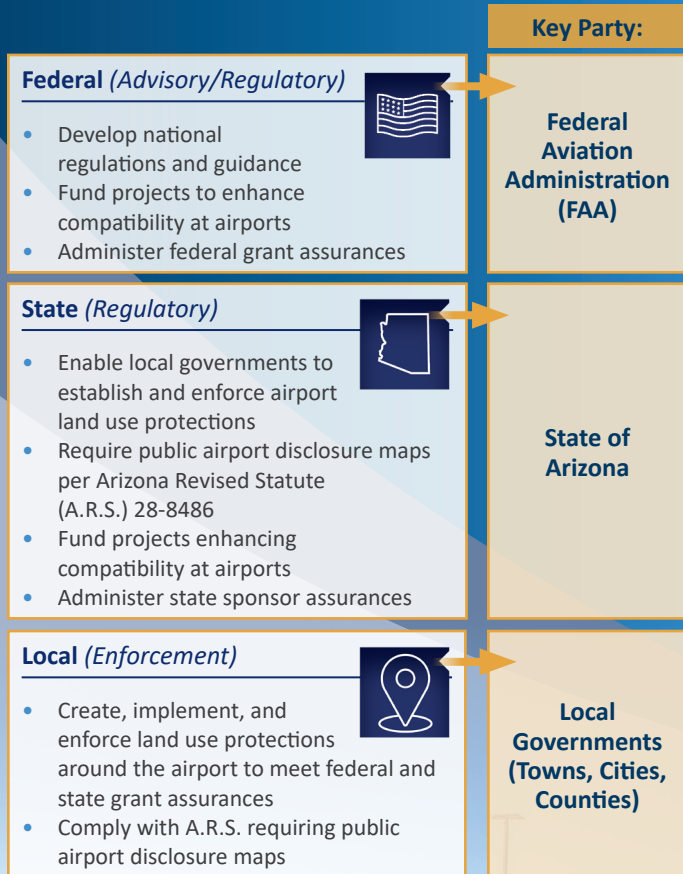


"...those uses that can coexist with a nearby airport without either constraining the safe and efficient operation of the airport or exposing people living and working nearby to unacceptable levels of noise or hazards."
– Airport Cooperative Research Program (ACRP) Report 27

Who is responsible for creating and maintaining compatibility?



Achieving land use compatibility around airports is a shared responsibility between several parties.



How do I know if a land use is compatible with an airport?



Review key characteristics of incompatible land use.

Tall Structures



Can present physical obstructions and hazards to aircraft in flight. Examples include buildings, power lines, trees, ventilation stacks, antennas, and other structures of tall heights.

Visual Obstructions, Electronic, and Atmospheric Interference



Can visually impair pilots and air traffic controllers who need clear line of sight. Examples include dust, glare, light emissions, smoke/steam, and fog. Uses that emit frequencies can impact radio, navigational, and communication systems.

Population Density



Can expose large concentrations of people to noise and presents greater risk of life-threatening injuries in the event of an aircraft accident. Examples include high density residential uses, arenas, and shopping malls.

Wildlife Attractants



Can draw birds and other animals close by providing a source of water, food, or roosting habitat. Examples include landfills, livestock operations, and bodies of water.

Noise



Can cause annoyance and vibration which can impact sleep, focus, and quality of life. Examples include residential developments, schools, hospitals, and places of worship.





What can I do to protect my airport and community?

Identify land use measures best suited for your situation.

👉 = Example(s) ✅ = Advantage
❌ = Disadvantage



Common Outreach and Education Tools

- 👉 Airport open houses, airport land use brochures, community outreach programs (social media, newsletters, etc.), advisory committees
- ✅ Engages the public and local government and can be used to meet requirements of the planning process

Long-Range Plan Coordination

- 👉 Comprehensive plans (for counties), general plans (for cities/towns), Airport Layout Plans (ALPs), airport master plans, airport noise compatibility plans
- ✅ Fosters local and regional interagency coordination to plan for community growth alongside airport needs for growth

Land Use Regulations

- 👉 Zoning, airport overlay zoning, extraterritorial zoning, subdivision regulations, development agreements, building codes
- ✅ Regulates the types and characteristics of land uses allowed within municipal boundaries
- ❌ Actions such as zoning may be politically sensitive

Property Acquisition

- 👉 Fee simple purchase, purchase of development rights, aviation easements, and conservation easements
- ✅ Provides greatest direct control in preventing incompatible use
- ❌ Costly and can be difficult to establish fair market value

Disclosures and Notifications

- 👉 Airport disclosure maps and notices (airport disclosure maps required by state law), deed restrictions, hold-harmless/nonsuit agreements
- ✅ Provides direct notice to buyers of property near an airport and can protect airports from legal action
- ❌ Does not provide any direct control in preventing incompatible use and does not prevent property owners from experiencing annoyance from airport operations



Check out the ALUM to learn more about each of these strategies and when they might be useful



ALUM Tools and Resources

The ALUM includes several resources and templates that can be used by airports and their communities to enhance compatibility locally.

Visit the ADOT [Airport Land Use Dashboard](#) to:

- Download a copy of the ALUM
- Browse available resources and templates for tools such as example zoning ordinances, real estate disclosures, aviation easements, and rights of first refusal
- Watch tutorials on how to develop A.R.S. required public airport disclosure maps and how to use the FAA's Notice Criteria Tool
- Navigate GIS-based data including airport Part 77 surfaces and public airport disclosure areas
- **AND MORE!**

Other Helpful Resources

- [FAA AC 150/5190-4B - Airport Land Use Compatibility Planning](#)
- [ACRP Report 27: Enhancing Airport Land Use Compatibility, Volume 1: Land Use Fundamentals and Implementation Resources](#)
- For more information, contact ADOT Aeronautics at: <https://azdot.gov/planning/airport-development/contact-us-airport-development>

