

Airports face many challenging issues. Among those issues is the effect that aircraft noise can have on the communities surrounding an airport. Over the past several decades, as communities around airports have grown and air travel has expanded, aircraft noise continues to be a major community concern. Through smart land use planning, coordination, and operational awareness, airports can work towards reducing the impact of aircraft operations on the community.

Legislation and Regulations Associated with Aircraft Noise and Land Use Compatibility

With the introduction of larger aircraft, ever-increasing operations, and changes in operational procedures, aircraft noise is perceived to have a greater ability to negatively affect land uses adjacent to and nearby airports. To address the issues of aircraft noise and land use compatibility, legislation and regulation over the past three decades has focused on the following issues:

- Assistance with noise compatibility programs and mitigation
- Funding for noise compatibility and mitigation programs
- Maintenance of compatible land uses surrounding airports
- Establishment of national noise policy regarding the phasing out of noisier aircraft
- Inclusion of noise as a resource when evaluating potential environmental impacts of projects
- Development of specific mitigation measures addressing aircraft noise

Aircraft Noise Compatibility Planning

Local Land Use Planning

Local land use planning, as a method of determining appropriate (and inappropriate) use of properties around airports, should be an integral part of the land use policy and regulatory tools recommended by airports and land use planners, and implemented by local jurisdictions. Coordination with local governmental jurisdictions and use of compatible land use tools can help to ensure land use compatibility. Examples of local land use compatibility tools include comprehensive plans, zoning regulations, and building and housing codes, among others.

Coordination Regarding Airport Planning and Land Use Compatibility

Whether updating an Airport Master Plan, addressing existing noise issues or conducting noise/land use studies, coordination and communication between the airport and local planning agencies and the community can help provide opportunities for gathering input from different perspectives in the planning process. Communication with local, state, and federal agencies can help to guide land use compatibility planning and implementation, while regular and positive coordination with surrounding communities, affected neighbors, and stakeholders regarding potential noise issues can help to maintain good relations in the community. Overall, establishing and maintaining coordination could minimize or prohibit the development or continuation of non-compatible land uses.

Part 150 Noise Compatibility Study

From a land use perspective, airport noise compatibility planning focuses on reducing existing non-compatible land uses around airports and preventing the introduction of new non-compatible land uses. A Federal Aviation Regulation (FAR) Part 150 Noise Compatibility Study (14 CFR Part 150) is a voluntary noise exposure and land use compatibility study prepared by an airport to identify existing noise exposure, identify potential future noise exposure, to evaluate various alternatives, and to make recommendations as to viable noise abatement/mitigation measures. Typically recommended noise abatement measures fall into three categories:

1. Operational measures such as changes in runway use or changes in flight track location.
2. Preventive measures (i.e., compatible land use zoning or noise overlay zoning)
3. Mitigation or remedial measures (i.e., purchase of property or sound insulation of affected residential properties)