

Appendix A.

Glossary and Acronyms

This Appendix includes a glossary of terms and associated acronyms referenced in this Part 150 Study.

- Appendix A-1: Glossary of Terms
- Appendix A-2: Acronyms

A-1 Glossary of Terms

GLOSSARY OF TERMS

Term	Definition
Title 14 Code of Federal Regulations (CFR) Part 36	This regulation, titled "Noise Standards: Aircraft Type and Airworthiness Certification," establishes noise standards for the civil aviation fleet. Certain extensions for compliance are included in the Aviation Safety and Noise Abatement Act of 1979.
14 CFR Part 77	This regulation, titled "Safe, Efficient Use and Preservation of the Navigable Airspace," establishes standards for determining obstructions and their potential effects on aircraft operations. Objects are considered to be obstructions to air navigation according to 14 CFR Part 77 if they exceed certain heights or penetrate certain imaginary surfaces established in relation to airport operations. Objects classified as obstructions are subject to an FAA aeronautical analysis to determine their potential effects on aircraft operations.
14 CFR Part 91	This regulation, titled "General Operating and Flight Rules," includes an amendment issued by the FAA on September 25, 1991 (to 14 CFR 91) in conformance with requirements of the Airport Noise and Capacity Act of 1990. The amendment to the aircraft operating rules required a phased transition to an all Stage 3 aircraft fleet operating in the 48 contiguous United States and the District of Columbia by December 31, 1999.
14 CFR Part 150	This regulation, titled "Airport Noise Compatibility Planning," sets forth criteria for developing a 14 CFR Part 150 Noise Compatibility Program, an FAA-assisted program designed to increase the compatibility of land and land uses in the areas surrounding an airport that are most directly affected by operation of the airport. The specific purpose is to reduce the adverse effects of noise as much as possible by implementing both on-airport noise abatement measures and off-airport noise mitigation measures. The basic products of a 14 CFR Part 150 program typically include (1) noise exposure maps for the existing condition and for 5 years in the future; (2) workable on-airport noise abatement measures (preferential runway use programs, new or preferential flight tracks), (3) off-airport noise mitigation measures (land acquisition, soundproofing, or special zoning); (4) an analysis of the costs and the financial feasibility of the recommended measures; and (5) policies and procedures related to the implementation of on- and off-airport programs. Community involvement opportunities are provided throughout all phases of noise compatibility program development.
14 CFR Part 161	This regulation, titled "Notice and Approval of Airport Noise and Access Restrictions," establishes a program for reviewing airport noise and access restrictions on the operations of Stage 2 and Stage 3 aircraft. This regulation is in response to specific provisions in the Airport Noise and Capacity Act of 1990 and is a major element of the national aviation noise policy required by that Act. Even if such an airport noise and access restriction is proposed as an element of an 14 CFR Part 150 Noise Compatibility Program, it is still subject to the guidelines of 14 CFR Part 161 prior to approval. Some of the public notice requirements, however, may be met during development of the 14 CFR Part 150 program.
A-Weighted Sound Level (dBA)	The ear does not respond equally to different frequencies of sound. It is less efficient at low and high frequencies than it is at medium or speech-range frequencies. Thus, to obtain a single number representing the sound level of a noise having a wide range of frequencies in a manner representative of the ear's response, it is necessary to reduce the effects of the low and high frequencies with respect to the medium frequencies. The resultant sound level is said to be A-weighted, and the units are decibels (dB); hence, the abbreviation is dBA. The A-weighted sound level is also referred to as the noise level. Sound level meters have an A-weighting network for measuring noise in A-weighted decibels.

Term	Definition
Absorption	Absorption is a property of materials that reduces the amount of sound energy reflected. Thus, introduction of an “absorbent” into the surfaces of a room will reduce the sound pressure level in that room because sound energy striking the room’s surfaces will be partially absorbed rather than totally reflected. The process of absorption is different from that of transmission loss through a material, which determines how much sound enters a room via the walls, ceiling, and floor. Absorption reduces the resultant sound level in the room produced by energy that has already entered the room.
Acceptable	Relating to noise Day-Night Average Sound Level (DNL) not exceeding 65 decibels. Noise exposure may be of some concern, but common building construction will make the indoor environment acceptable, and the outdoor environment will be reasonably pleasant for recreation and play. As defined by 14 CFR Part 150, Airport Noise Compatibility Planning.
Acoustics	(1) The science of sound, including the generation, transmission, and effects of audible and inaudible sound waves. (2) The physical qualities (such as size and shape) of a room or other enclosure that determine the audibility and perception of speech and music.
Advisory Circular (AC)	An external Federal Aviation Administration (FAA) publication consisting of non-regulatory material of a policy, guidance, or informational nature.
Aircraft Delay	The additional travel time, caused by airfield or airspace congestion, needed by an aircraft to move from point A to point B.
Aircraft Operation	An aircraft arrival (landing) or an aircraft departure (takeoff) each represent one aircraft operation; therefore, an arrival and departure is counted as two operations. A low approach, below traffic pattern or a touch-and-go operation is counted as both a landing and a takeoff, i.e., two operations. The FAA records aircraft operations in four categories: air carrier, air taxi, general aviation, and military.
Air Carrier	Operations performed in revenue service by certificated route air carriers.
Air Taxi/Commuter	Operations performed by operators of aircraft holding an air taxi certificate. This category includes commuter airline operations (excluding certificated commuter airlines), mail carriers under contract with the U.S. Postal Service, and operators of nonscheduled air taxi service.
General Aviation	All civil aircraft operations not classified as air carrier or air taxi operations.
Military	Operations performed by military groups, such as the Air National Guard, the U.S. Air Force, or the U.S. Marine Corps. Aircraft operations may also be described as local or itinerant:
Local	Local operations are performed by aircraft that (1) operate in the local traffic pattern or within sight of the airport, (2) are known to be departing for, or arriving from, local practice areas within a 20-mile radius of the airport, or (3) execute simulated or practice instrument approaches or low passes at the airport. Touch-and-go operations are counted as two local operations.
Itinerant	All aircraft operations other than local operations.
Air Navigation Facility (NAVAID)	A facility designed for use as an aid to air navigation, including landing aids, lights, any apparatus or equipment for disseminating weather information; for signaling for radio direction-finding or for radio or other electronic communication; and any other structure or mechanism having a similar purpose for guiding and controlling flight in the air or the landing or takeoff of aircraft.
Airport District Office (ADO)	The FAA’s Airports organization includes four headquarters offices, nine regional divisions, and 21 Airport District Offices nationwide. It provides leadership in planning and developing a safe, efficient national airport system and oversees programs related to airport safety, inspections, and standards for airport design, construction, and operations. The organization is also responsible for airport planning, environmental requirements, and policies related to airport rates and charges, compliance with grant assurances, and airport privatization.
Airport Environs	The area surrounding an airport that is considered to be directly affected by the presence and operation of the airport.

Term	Definition
Airport Improvement Program (AIP)	A program administered by the FAA to provide financial grants-in-aid for airport planning, airport development projects, and noise compatibility programs. The AIP was established through the Airport and Airway Improvement Act of 1982, which was incorporated as Title V of the Tax Equity and Fiscal Responsibility Act of 1982 (Public Law 97-248). Funds are appropriated by the U.S. Congress for the AIP annually.
Airport Noise and Capacity Act of 1990	Commonly referred to as the national noise policy; the Act was enacted on November 5, 1990 (Public Law 101-508). Two important provisions of the Act were the establishment of a national aviation noise policy (Sections 9308 and 9309) and the creation of a passenger facility charge (Sections 9110 and 9111), which enables airport sponsors to impose fees on the tickets issued to eligible enplaning passengers. An amendment to 14 CFR Part 91, "Transition to an All Stage 3 Fleet Operating in the 48 Contiguous United States and the District of Columbia," and new 14 CFR Part 161, "Notice and Approval of Airport Noise and Access Restrictions", implement the national noise policy. 14 CFR Part 158, "Passenger Facility Charges," implements that portion of the Act authorizing the imposition of such a charge.
Airport Surveillance Radar (ASR)	Radar providing aircraft position data in terms of azimuth and range. ASR does not provide altitude data. It is designed for range coverage up to 60 nautical miles and is used by terminal area air traffic control.
Airport Traffic Control Tower (ATCT)	A central operations facility in the terminal area air traffic control system, consisting of a tower cab structure and an associated instrument flight rule (IFR) room if radar equipped, using air/ground communications and/or radar, visual signaling, and other devices, to provide safe and expeditious movement of terminal area air traffic.
Air Traffic Organization (ATO)	This is the branch of FAA for managing the nation's airspace and providing air traffic control services. It oversees the safe and efficient movement of aircraft across the National Airspace System, including en route centers, terminal facilities, and air traffic control towers. The ATO also manages air traffic procedures, system operations, and the technologies that support air navigation and airspace management.
Air Route Traffic Control Center (ARTCC)	A facility established to provide air traffic control service to aircraft operating on an IFR flight plan within controlled airspace and principally during the en route phase of flight.
Airspace	Space in the air above the surface of the earth or a particular portion of such space, usually defined by the boundaries of an area on the surface projected upward.
Air Traffic Control (ATC)	A service operated by appropriate authority (the FAA) to promote the safe, orderly, and expeditious flow of air traffic.
Attenuation	Acoustical phenomenon whereby a reduction of sound energy is experienced between the noise source and the receiver. This energy loss can be attributed to atmospheric conditions, terrain, vegetation, man-made features, and natural features.
Aviation Environmental Design Tool (AEDT)	A computer model developed by the FAA and required by the FAA for use in 14 CFR Part 150 studies, environmental assessments, and environmental impact statements for developing existing and future aircraft noise exposure maps.
Aviation Safety and Noise Abatement Act of 1979	The purpose of the Act is to assist airport sponsors in preparing and carrying out noise compatibility programs and in assuring continued safety for aviation. The Act also contains provisions extending to January 1, 1988, the requirement for certain types of aircraft to comply with 14 CFR Part 36.
Automatic Terminal Information Service (ATIS)	Continuous radio broadcast of recorded air traffic control information at selected high activity airports.
Avigation Easement	A type of land acquisition that involves less-than-fee purchase. One form of avigation easement grants the right to perform aircraft operations over the designated property, including operations that might cause noise, vibration, and other effects. A stronger form of easement is a deed restriction that may include (1) the right to perform aircraft operations over the property, and (2) public acquisition of a landowner's rights restricting future development of the property in any use more intensive than that existing at the time of the transaction. This easement may also include specific prohibitions as to the uses for which the property may be developed. Maximum heights of structures and other objects may also be specified.

Term	Definition
Backblast	Noise generated by jet exhaust on takeoff characterized by high acoustic energy, low frequency, and high velocity air behind the aircraft engine.
Building Code	A legal document that sets forth requirements to protect the public health, safety, and general welfare as they relate to the construction and occupancy of buildings and structures. The code establishes the minimum acceptable conditions for matters found to be in need of regulation. Topics generally covered are exits, fire protection, structural design, sanitary facilities, lighting, and ventilation. Sound insulation may also be included.
Building Permit	A permit issued by a local political jurisdiction (village, town, city, or county) to erect or modify a structure.
Controlled Airspace	Airspace of defined dimensions within which air traffic control service is provided to IFR and to Visual Flight Rule (VFR) flights in accordance with the airspace classification.
Day-Night Average Sound Level (DNL)	A measure used to predict cumulative aircraft noise exposure, expressed in A-weighted decibels, accounts for the noise levels of all individual aircraft events over a year, the number of times those events occur, and the period of day/night in which they occur. The calculation of DNL logarithmically averages aircraft sound levels at grid locations over a 24-hour period, referred to as an “average annual day,” with a 10-decibel adjustment added to those noise events occurring between 10:00 p.m. and 6:59 a.m. Because of the increased sensitivity to noise during normal sleeping hours and because ambient (without aircraft) sound levels during nighttime are typically lower than during daytime hours, the 10-decibel adjustment, or “weighting,” represents the added intrusiveness of sounds occurring during nighttime hours. DNL can be expressed graphically on maps using either contours or grid cells.
Decibel (dB)	A unit for measuring the volume of a sound, equal to the logarithm of the ratio of the intensity of the sound to the intensity of an arbitrarily chosen standard sound.
Distance Measuring Equipment (DME)	Equipment (ground and airborne) used to measure and report to the pilot the slant range distance, in nautical miles, of an aircraft from the DME navigational aid.
Duration	The length of time that a noise event, such as an aircraft flyover, is experienced (typically reported in seconds). “Duration” may also refer to the length of time that the noise event exceeds a specified threshold noise level.
Equivalent Continuous Sound Level (Leq)	Leq is the sound level, expressed in dBA, of a steady sound which has the same A-weighted sound energy as the time-varying sound over the averaging period. Unlike Sound Exposure Level (SEL), Leq is the average sound level for a specified time period (e.g., 24 hours, 8 hours, 1 hour, etc.). Leq is calculated by integrating the sound energy from all noise events over a given time period and applying a factor for the number of events.
Federal Aviation Administration (FAA)	The FAA, an agency of the U.S. Department of Transportation, is charged with (1) regulating air commerce to promote its safety and development; (2) achieving the efficient use of navigable airspace of the United States; (3) promoting, encouraging, and developing civil aviation; (4) developing and operating a common system of air traffic control and air navigation for both civilian and military aircraft; and (5) promoting the development of a national system of airports.
Fee Simple Land Acquisition	The full purchase of land and improvements by an airport sponsor. The land is usually maintained or leased for uses that are compatible with airport operations. Alternatively, the airport sponsor can resell the land with an aviation easement (see also) and deed restrictions that specify the compatible land uses that are permitted. One benefit of the resale option is that the land is returned to the local tax rolls.
Flight Track	The average flight path flown by aircraft within specific corridors. Deviation from these tracks occurs because of weather, pilot technique, air traffic control, and aircraft weight. Individual flight tracks within a corridor are “averaged” for purposes of modeling noise exposure using the FAA’s Aviation Environmental Design Tool.
General Plan	An overall plan of a political jurisdiction setting forth the goals and objectives of the jurisdiction, policies for development and redevelopment, and maps showing the spatial arrangement of land uses, circulation routes, and community facilities. This is sometimes referred to as a comprehensive plan or community plan.

Term	Definition
Glide Slope	A FAA navigational system that: (1) provides the vertical (or altitude) profile followed by an aircraft during the approach and landing; (2) is an electronic vertical guidance provided by airborne and ground instruments for instrument approaches using equipment such as an instrument landing system (ILS) as well as visual ground aids, such as a visual approach slope indicator (VASI), for a visual flight rule (VFR) approach or for the visual portion of an instrument approach and landing.
Global Positioning System (GPS)	A navigational system that uses a series of satellites orbiting the earth to provide non-precision guidance in azimuth, elevation, and distance measurement.
Ground Effect	The excess attenuation of sound associated with absorption or reflection of noise by manmade and physical features on the ground surface.
Ground Track	The trajectory of an aircraft flight path projected onto the ground surface.
Helipad	A small area designated for takeoff, landing, or parking of helicopters.
Incompatible Land Use	Residential, public, recreational, and certain other noise-sensitive land uses that are designated as unacceptable within specific ranges of cumulative (DNL) noise exposure as set forth in 14 CFR Part 150, Appendix A, Table 1.
Instrument Approach	An aircraft approach to an airport, with intent to land, by a pilot flying in accordance with an IFR flight plan in instrument flight conditions.
Instrument Approach Runway	A runway equipped with electronic and visual navigation aids for which a precision or non-precision approach procedure having straight-in landing minimums has been approved.
Instrument Flight Rules (IFR)	Rules specified by the FAA for flight under weather conditions that do not meet the minimum requirements for VFR (see also). Under these conditions the pilot must rely on instruments to fly and navigate.
Instrument Landing System (ILS)	A system that provides, in the aircraft, the lateral and longitudinal (localizer), and vertical (guidance) electronic guidance necessary for an instrument landing.
Instrument Operation	An aircraft operation in accordance with an IFR flight plan or an operation where IFR separation between aircraft is provided by a terminal control facility or air route traffic control center.
Land Use Compatibility	The compatibility of land uses surrounding an airport with airport activities and particularly with the noise from aircraft operations.
Land Use Controls	Controls established by local or state governments to implement land use planning. The controls include zoning, subdivision regulations, land acquisition (in fee simple, lease-back, or easements), building codes, building permits, and capital improvement programs (to provide sewer, water, utilities, or other service facilities).
Land Use Planning	Comprehensive planning carried out by units of local government, for all areas under their jurisdiction, to identify the optimum uses of land and to serve as a basis for the adoption of zoning or other land use controls.
Less-Than-Fee Acquisition	The purchase of development rights from landowners by airport sponsors in areas that should remain at very low densities or in open space uses. The airport sponsor negotiates with the landowner to determine the fair market value of the unused development rights. Once sold, the land cannot be developed except in specified uses.
Localizer (LOC)	Navigational equipment that provides electronic course guidance. The ground-based equipment sends two signals, which, when received and receded by airborne equipment with equal intensity, indicate that the aircraft is on course. If the received and receded signals have unequal intensity, then the aircraft is off course. A localizer is the part of an ILS that provides lateral and longitudinal course guidance to the runway.
Localizer-Type Directional Aid (LDA)	A navigational aid used for non-precision instrument approaches with utility and accuracy comparable to a localizer; however, it is not part of a complete ILS and its signal is not typically aligned with the runway.

Term	Definition
Loudness	The judgment of the intensity of a sound by a person, loudness depends primarily on the sound pressure of the stimulus. Over much of the loudness range, it takes about a threefold increase in sound pressure (approximately 10 decibels) to produce a doubling of loudness.
Maximum Sound Level (Lmax)	The maximum A-weighted sound level, in dBA, for a given noise event. The peak noise level reached by a single aircraft event.
Noise	Noise is any sound that is considered to be undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying.
Noise Abatement Procedures	Changes in runway use, flight approach and departure routes and procedures, and other air traffic procedures that are intended to shift adverse aviation noise effects away from noise-sensitive areas (such as residential neighborhoods).
Noise Attenuation of Buildings	The use of building materials to reduce noise through absorption, transmission loss, and reflection of sound energy.
Noise Contours	Lines drawn on a map that connect points of equivalent noise exposure levels. For aircraft noise analyses conducted using DNL, noise contours are usually drawn in 5-DNL intervals, such as connections of DNL 75 exposure, DNL 70 exposure, DNL 65 exposure, and so forth.
Noise Compatibility Program (NCP)	The NCP can consist of a combination of preferred noise abatement procedures, land use controls, and administrative measures; as well as a plan for the implementation. For planning purposes, the implementation plan also includes the estimated cost for each of the recommended measures to the airport sponsor, the FAA, airport users, and the local units of government.
Noise Exposure Map (NEM)	A map prepared in accordance with 14 CFR Part 150 or other FAA environmental regulation that depicts actual (existing or historical conditions) or anticipated (future conditions) aircraft noise exposure and the affected land uses. NEMs for future conditions may take into account anticipated land use changes around the airport.
Noise Level Reduction (NLR)	The noise reduction between two areas or rooms is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. Noise reduction is measured by combining the effect of the transmission loss performance of structures separating the two areas or rooms and the effect of acoustic absorption in the receiving room.
Noise-Sensitive Land Use	A land use that can be adversely affected by high levels of aircraft noise. Residences, schools, hospitals, religious facilities, libraries, and other similar uses are typically considered to be noise-sensitive.
Nondirectional Radio Beacon (NDB)	A low/medium frequency radio beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction-finding equipment can determine the aircraft's bearing to or from the radio beacon and track to or from the station.
Non-Precision Instrument Approach Procedure	A standard instrument approach procedure for which no glide slope guidance is provided. Typical non-precision instrument approach procedures include VOR (see Very High Frequency Omnidirectional Range), GPS (see Global Positioning System), NDB (see Nondirectional Radio Beacon), and LOC (see Localizer) approach procedures.
Normally Unacceptable	DNL higher than 65 but not higher than 75 decibels (see Unacceptable) - the noise exposure is significantly more severe; barriers may be necessary between the site and prominent noise sources to make the outdoor environment acceptable; special building construction may be necessary to ensure that people indoors are sufficiently protected from outdoor noise.
Pattern	The configuration or form of a flight path flown by an aircraft, or prescribed to be flown, as in making an approach for landing.
Precision Approach Path Indicator (PAPI)	An airport lighting facility in the terminal area navigation system used under VFR conditions, through a single row of two to four lights, radiating high intensity red or white beams to indicate whether the aircraft is on, above, or below the required runway glide slope.

Term	Definition
Precision Instrument Approach Procedure	A standard instrument procedure for a pilot to approach an airport, in which both electronic course guidance and an electronic glide scope are provided. For example, an approach using an ILS is considered a precision instrument approach.
Preferential Runway Use (Program)	A noise abatement action whereby the FAA Air Traffic Division, in conjunction with the FAA Airports Division and Aviation System Standards Division, assists the airport sponsor in developing a program that gives preference to the use of a specific runway(s), unless weather or other conditions prevail, to reduce overflights of noise-sensitive areas.
Retrofit	The retroactive modification of existing jet aircraft engines for noise reduction purposes.
Runway	A defined rectangular area on an airport for the purpose of landing and taking off of aircraft. Runways are numbered in relation to their magnetic direction, rounded to the nearest 10 degrees (i.e., Runway 14, Runway 32).
Shielding	The attenuation of a sound by placing walls, buildings, plants, or other barriers between a sound source and the receiver. Also used with light to minimize impacts by introducing manmade or natural elements to reduce or eliminate glare.
Single Event	Noise generated by a single event, such as a single aircraft flyover.
Sound Exposure Level (SEL)	SEL is a time-integrated measure, expressed in decibels, of the sound energy of a single noise event. The sound level is integrated over the period that the level exceeds a threshold (normally 65 dBA for aircraft noise events). Therefore, SEL accounts for the duration of the sound. SELs for aircraft noise events depend on the location of the aircraft, the type of operation (landing, takeoff, or overflight), and the type of aircraft.
Sound Insulation	(1) The use of structures and materials designed to reduce the transmission of sound from one room or area to another, or from the exterior to the interior of a building. (2) The degree of reduction in sound transmission, or noise level reduction, by means of sound insulating structures and materials.
Sound Level (Noise Level)	The weighted sound pressure level obtained by the use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.
Sound Level Meter	An instrument consisting of a microphone, an amplifier, an output meter, and frequency-weighting networks used to measure noise and sound levels in a specified manner.
Standard Instrument Departure (SID)	A preplanned and published instrument departure route.
Standard Terminal Arrival Route (STAR)	A preplanned and published instrument arrival route.
TERPS	Certain airspace needs to be cleared for aircraft operations. This airspace is determined by the application of operating rules and terminal instrument procedures (TERPS). Removing obstructions to air navigation, except those that an FAA aeronautical analysis determined need not be removed, satisfies these requirements. Subpart C of 14 CFR Part 77 defines obstructions to air navigation. (See FAA Handbook 8260.3B.)
Terminal Area Forecast (TAF)	The Terminal Area Forecast (TAF) is the official FAA forecast of aviation activity for U.S. airports. Forecasts are prepared for major users of the National Airspace System including air carrier, air taxi/commuter, general aviation, and military.
Terminal Radar Approach Control (TRACON)	Radar approach facility generally serving more than one airport, providing separation; safety alerts; and sequencing of arrival, departure, and transitioning air traffic.
Transfer Of Development Rights (TDR)	TDR involves separate ownership and use of the various rights associated with a parcel of real estate. Under TDR, some of the property's development rights are transferred to another location, where they may be used to intensify allowable development. For example, lands within an area affected by aircraft noise could be kept in open space or agricultural uses, and development rights for residential or other uses could be transferred to locations outside the area. Landowners could be compensated for the transferred rights by their sale at the new locations, or the airport sponsor could purchase the rights. Depending on market conditions and legal requirements, the airport sponsor could either hold or resell the rights.

Term	Definition
Unacceptable	DNL above 75 decibels-Noise exposure at the site is so severe that the construction cost to make the indoor noise environment acceptable may be prohibitive and the outdoor environment would still be unacceptable.
Very High Frequency (VHF) Omnidirectional Range (VOR)	A radio transmitter facility in the navigation system radiating a VHF radio wave modulated by two signals, the relative phases of which are compared, resolved, and displayed by a compatible airborne receiver to give the pilot a direct indication of bearing relative to the facility.
VFR Airport	An airport without an authorized or planned instrument approach procedure.
Visual Approach	An approach to an airport wherein an aircraft on an IFR flight plan, operating in VFR conditions under the control of a radar facility and having air traffic control authorization, may deviate from the prescribed instrument approach procedure and proceed to and land at the airport of destination, served by an operational ATCT, by visual reference to the surface.
Visual Approach Slope Indicator (VASI)	An airport lighting facility in the terminal area navigation system used primarily under VFR conditions. It provides vertical visual guidance to indicate whether the aircraft is on, above, or below the glide slope to the runway.
Visual Flight Rules (VFR)	A set of regulations that a pilot may operate under when visibility is 3 miles or greater and cloud ceiling is 1,000 feet or greater.. The requirements are designed to provide sufficient visibility so that other aircraft can be seen and avoided. Under VFR, the pilot generally controls the attitude of the aircraft by relying on what can be seen out the window, although this may be supplemented by referring to the instrument panel.
Zoning And Zoning Ordinances	Ordinances that divide a community into zones or districts according to the current and potential use of properties for the purpose of controlling and directing the use and development of those properties. Zoning is concerned primarily with the use of land and buildings, the height and bulk of buildings, the proportion of a lot that buildings may cover, and the density of population of a given area. As an instrument for noise compatibility plan implementation, zoning deals principally with the use and development of privately owned land and buildings. The objectives of zoning are to establish regulations that provide locations for all essential uses of land and buildings and ensure that each use is located in the most appropriate place. In noise compatibility planning, zoning can be used to achieve two major aims: (1) to reinforce existing compatible land uses and promote the location of future compatible uses in vacant or underdeveloped land, and (2) to convert existing incompatible uses to compatible uses over time.

SOURCE ESA, 2025.

A-2 Acronyms

ACRONYM LIST

Acronym	Full Term
AAD	Average Annual Day
AC	Advisory Circular
ADO	Airport District Office
AEDT	Aviation Environmental Design Tool
AEE	Office of Environment and Energy
AFD	Airport Facility Directory
AFL	Above Field Level
AGL	Above Ground Level
ALSF2	High Intensity Approach Lighting System with Sequenced Flashing Lights
ANAC	Airport Noise Abatement Committee
ANCA	Airport Noise and Capacity Act of 1990
ARFF	Aircraft Rescue and Fire Fighting
ARTCC	Air Route Traffic Control Center
ATC	Air Traffic Control
ATCT	Air Traffic Control Tower
ATO	Air Traffic Organization
CAT	Category
CBP	Customs and Border Protection
CFR	Code of Federal Regulations
dB	Decibel
dBA	A-weighted decibel
DME	Distance Measuring Equipment
DNL	Day-Night Average Sound Level
DP	Departure Procedure
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMAS	Engineered Material Arresting System
ESA	Environmental Science Associates
FAA	Federal Aviation Administration
FBO	Fixed Base Operator
FMRA	FAA Modernization and Reform Act of 2012
GA	General Aviation
GIS	Geographic Information System
GPS	Global Positioning System
HIRL	High Intensity Runway Lighting

Acronym	Full Term
Hz	Hertz
IAP	Instrument Approach Procedures
IFR	Instrument Flight Rules
ILS	Instrument Landing System
LDA	Landing Distance Available
Leq	Equivalent Noise Level
Lmax	Maximum Sound Level
LOC	Localizer
MALSR	Medium Intensity Approach Light System with Runway Alignment Indicator Lights
MRO	Maintenance, Repair and Overhaul Facilities
MSL	Mean Sea Level
NAS	National Airspace System
NAVAIDS	Navigational Aids
NCDC	National Climate Data Center
NCP	Noise Compatibility Program
NDB	Non-Directional Beacon
NEM	Noise Exposure Map
NEPA	National Environmental Policy Act
NLR	Noise Level Reduction
NOMS	Noise and Operations Monitoring Systems
NPIAS	National Plan of Integrated Airport Systems
PA	Public Address
PAPI	Precision Approach Path Indicator
PAR	Precision Approach Radar
RNAV	Area Navigation
RNP	Required Navigation Performance
RPZ	Runway Protection Zone
RWY	Runway
SAMP	Sustainable Airport Master Plan
SEA	Seattle-Tacoma International Airport
SEL	Sound Exposure Level
SIP	Sound Insulation Program
STAR	Standard Terminal Arrival
StART	Stakeholder Advisory Round Table
TACAN	Tactical Air Navigation
TAF	Terminal Area Forecast
TRC	Technical Review Committee
TODA	Takeoff Distance Available

Acronym	Full Term
TRACON	Terminal Radar Approach Control
TWY	Taxiway
VFR	Visual Flight Rules
VHF	Very High Frequency
VOR	VHF Omni Directional Radar Beacon
VOR/DME	VHF Omni Directional Radar Beacon with Distance Measuring Equipment
VORTAC	VHF Omni Directional Range with Tactical Aircraft Approach & Navigation