

Above Ground Level (AGL) – An elevation datum given in feet above ground level.

Accident Potential Zones (APZs) – A set of safety-related zones defined by AICUZ studies for areas beyond the ends of military airport runways. Typically, three types of zones are established—a clear zone closest to the runway end, then APZ I, and APZ II. The potential for aircraft accidents and the corresponding need for land use restrictions is greatest with the clear zone and diminishes with increased distance from the runway.

Air Carriers – The commercial system of air transportation, consisting of the certificated air carriers, air taxis (including commuters), supplemental air carriers, commercial operators of large aircraft, and air travel clubs.

Air Installation Compatible Use Zones (AICUZ) – A land use compatible plan prepared by the U.S. Department of Defense for military airfields. AICUZ plans serve as recommendations to local governments bodies having jurisdiction over land uses surrounding these facilities.

Aircraft Accident – An occurrence incident to flight in which, as a result of the operation of an aircraft, a person (occupant or nonoccupant) receives fatal or serious injury, or an aircraft receives substantial damage.

- Except as provided below, substantial damage means damage or structural failure that adversely affects the structural strength, performance, or flight characteristics of the aircraft, and that would normally require major repair or replacement of the affected component.
- Engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered substantial damage.

Aircraft Approach Category – A grouping of aircraft based on a speed of 1.3 times the stall speed in the landing configuration at maximum gross landing weight. The aircraft approach categories are:

- Category A - Speed less than 91 knots;
- Category B - Speed 91 knots or more but less than 121 knots;
- Category C - Speed 121 knots or more but less than 141 knots;
- Category D - Speed 141 knots or more but less than 166 knots; and,
- Category E - Speed 166 knots or more.

Aircraft Incident – A mishap associated with the operation of an aircraft in which neither fatal nor serious injuries nor substantial damage to the aircraft occur.

Aircraft Mishap – The collective term for an aircraft accident or an incident.

Aircraft Operation – The airborne movement of aircraft operating in the airport traffic pattern or within sight of the airport. There are two types of operations: local and itinerant. An operation is counted for each landing and each departure, such that a touch-and-go flight is counted as two operations.

Airplane Design Group – A grouping of airplanes based on wingspan. The groups are:

- Group I: Up to, but not including 49 feet
- Group II: 49 feet up to, but not including 79 feet
- Group III: 79 feet up to, but not including 118 feet
- Group IV: 118 feet up to, but not including 171 feet
- Group V: 171 feet up to, but not including 214 feet
- Group VI: 214 feet up to, but not including 262 feet.

Airport – An area of land or water that is used or intended to be used for the landing and taking off of aircraft, and includes its buildings and facilities if any. (FAR 1) ([RCW 14.12](#))

Airport Classification – Washington State

1. **Commercial Service:** Accommodates at least 2,500 annual scheduled passenger boardings for at least three years
2. **Regional Service:** Serves large or multiple communities, all NPIAS relievers; at least 40 based aircraft and 4,000-foot long runway, with exceptions
3. **Community Service:** Serves a community; at least 20 based aircraft; paved runway
4. **Local Service:** Serves a community; fewer than 20 based aircraft; paved runway
5. **Rural Essential:** Other land-based airports, including residential airparks and remote back country airports.
6. **Seaplane Base:** Identified by FAA as a seaplane base, unless it is a Community Service airport

Airport Elevation – The highest point of an airport’s useable runways, measured in feet above mean sea level. (AIM)

Airport Land Use Compatibility Program (ALUCP) – A technical assistance program to help communities meet the requirements of ([RCW 36.70A.510](#), [RCW 36.70.547](#)). The law requires cities and counties to discourage encroachment of incompatible development adjacent to public use airports through adoption of comprehensive plan policies and development regulations.

Airport Layout Plan (ALP) – A scale drawing of existing and proposed airport facilities, their location on an airport, and the pertinent clearance and dimensional information required to demonstrate conformance with applicable standards.

Airport Master Plan (AMP) – A long-range plan for development of an airport, including descriptions of the data and analyses on which the plan is based.

Airport Overlay – A zoning district that establishes development standards in areas of special concern over and above the standards applicable to basic underlying zoning districts.

Airport Reference Code (ARC) – A coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at the airport. It is a combination of the aircraft approach category and the airplane design group.

Ambient Noise Level – The level of noise that is all encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the receiver.

Approach Protection Easement – A form of easement that both conveys all of the rights of an aviation easement and sets specified limitations on the type of land uses allowed to be developed on the property.

Approach Speed – The recommended speed contained in aircraft manuals used by pilots when making an approach to landing. This speed will vary for different segments of an approach as well as for aircraft weight and configuration. (AIM)

Aviation-Related Use – Any facility or activity directly associated with the air transportation of persons or cargo or the operation, storage, or maintenance of aircraft at an airport or heliport. Such uses specifically include runways, taxiways, and their associated protected areas defined by the Federal Aviation Administration, together with aircraft aprons, hangars, fixed base operations, terminal buildings, etc.

Based Aircraft – Aircraft stationed at an airport on a long-term basis.

Ceiling – Height above the earth’s surface to the lowest layer of clouds or obscuring phenomena. (AIM)

Circling Approach/Circle-to-Land Maneuver – A maneuver initiated by the pilot to align the aircraft with a runway for landing when a straight-in landing from an instrument approach is not possible or not desirable. (AIM)

Clear Zone – The military airport equivalent of runway protection zones at civilian airports.

Combining District – See [Airport Overlay](#).

Commercial Activities – Airport-related activities that may offer a facility, service, or commodity for sale, hire, or profit. Examples of commodities for sale are food, lodging, entertainment, real estate, petroleum products, parts, and equipment. Examples of services are flight training, charter flights, maintenance, aircraft storage, and tiedown. (CCR)

Commercial Operator – A person who, for compensation or hire, engages in the carriage by aircraft in air commerce of persons or property, other than as an air carrier. (FAR 1)

Compatibility Zone – A regulatory component of an airport overlay that address the issues of noise, light, vibration, fumes, safety and low flying aircraft through the establishment of additional standards to the underlying zoning district.

Comprehensive Plan – A comprehensive plan is a policy document that expresses a community’s vision about itself and what it would like to become. The plan forms the policy framework from which all future community planning actions will be judged, and it is the starting point for any discussion regarding local land use. The time range for the comprehensive plan is generally 20 years. Periodic updates every five to seven years are usually required. Comprehensive plans generally cover the following topic areas or “elements”: Capital Facilities, Economic Development, Housing, Land Use, Natural Resources, Parks and Recreation, Utilities, Rural (county comprehensive plans only), Transportation.

Conditional Use Permit – Is a permit used to allow a use or activity that may need additional scrutiny within a zoning district. These permits are use to ensure that the activity is compatible with neighboring land uses. The permitted use may be tailored to meet the limitations of the site or mitigate impacts. Conditional uses are decided by the governing body, hearing examiner, board of adjustment, or similar body.

Controlled Airspace – Any of several types of airspace within which some or all aircraft may be subject to air traffic control. (FAR 1)

County-Wide Planning Policies (CPPs) – A written policy statement or statements adopted by a county in cooperation with its cities and used solely for establishing a county-wide framework from which county and city comprehensive plans are developed and adopted (see [RCW 36.70A.210](#)).

Critical Areas – Areas and ecosystems which include wetlands; areas with a critical recharging effect on aquifers used for potable water; fish and wildlife habitat conservation areas; frequently flooded areas; and geologically hazardous areas (see [RCW 36.70A.030\(5\)](#)).

Day-Night Average Sound Level (DNL) – The noise metric adopted by the U.S. Environmental Protection Agency for measurement of environmental noise. It represents the average daytime noise level during a 24-hour day, measured in decibels and adjusted to account for the lower tolerance of people to noise during nighttime periods. The mathematical symbol is L_{dn} .

Decibel (dB) – A unit measuring the magnitude 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, specifically a sound just barely audible to an unimpaired human ear. For environmental noise from aircraft and other transportation sources, an A-weighted sound level (abbreviated dBA) is normally used. The A-weighting scale adjusts the values of different sound frequencies to approximate the auditory sensitivity of the human ear.

Deed Notice – A formal statement added to the legal description of a deed to a property or provided as a note of the face of a short subdivision or major subdivision plat map. As used in airport land use planning, a deed notice would state that the property is located adjacent to an airport and may be impacted by aircraft noise, odors, vibration, and low flying aircraft. Deed notices are used to provide disclosure and is as a form of buyer notification as a means of ensuring that those who are particularly sensitive to aircraft overflights can avoid moving to the affected areas.

Development Regulations – The controls placed on the development or use of land by a county or a city including, but not limited to, zoning ordinances, critical area ordinances, shoreline master programs, and subdivision ordinances. [RCW 36.70A.030\(7\)](#).

Displaced Threshold – A landing threshold that is located at a point on the runway other than the designated beginning of the runway (see [Threshold](#)). (AIM)

Easement – A less-than-fee-title transfer of real property rights from the property owner to the holder of the easement.

Encroachment – Is an action that affects the ability to take action in the future i.e. , actions that diminishes the utility or viability of an existing use.

Environmental Impact Statement (EIS) – A report prepared under NEPA fully analyzing the potential significant environmental impacts of a federally funded project.

Equivalent Sound Level (Leq) – The level of constant sound that, in the given situation and time period, has the same average sound energy as does a time-varying sound.

FAR Part 77 – The part of the Federal Aviation Regulations that deals with objects affecting navigable airspace.

FAR Part 77 Surfaces – Imaginary airspace surfaces established with relation to each runway of an airport. There are five types of surfaces: (1) primary; (2) approach; (3) transitional; (4) horizontal; and (5) conical.

Federal Aviation Administration (FAA) – The U.S. government agency that is responsible for ensuring the safe and efficient use of the nation’s airports and airspace.

Federal Aviation Regulations (FAR) – Regulations formally issued by the FAA to regulate air commerce.

Fixed Base Operator (FBO) – A business that operates at an airport and provides aircraft services to the general public including, but not limited to, sale of fuel and oil; aircraft sales, rental, maintenance, and repair; parking and tiedown or storage of aircraft; flight training; air taxi/charter operations; and specialty services, such as instrument and avionics maintenance, painting, overhaul, aerial application, aerial photography, aerial hoists, or pipeline patrol.

General Aviation – All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire. General aviation accounts for the majority of aviation activity and encompasses a wide range of private and commercial purposes. General aviation aircraft can be of almost any size or type, ranging from gliders to large jets.

Glide Slope – An electronic signal radiated by a component of an ILS to provide vertical guidance for aircraft during approach and landing.

Global Positioning System (GPS) – GPS uses a group of many satellites orbiting the earth to determine the position of users on or above the earth’s surface.

Growth Management Act (GMA) – Adopted in 1990, the GMA ([Chapter 36.70A RCW](#)) was enacted in response to rapid population growth and concerns with suburban sprawl, environmental protection, quality of life, and related issues. The act expands the Planning Enabling Act requirements for comprehensive planning in the state’s most populous and rapidly growing counties. Twenty-nine counties are either required to fully plan under the GMA or have chosen to do so. These counties make up about 95 percent of the state’s population. The remaining ten counties have limited planning requirements under the act.

Growth Management Hearing Board – Is a quasi-judicial panel, formed by the Washington State Legislature in 1990, to resolve land use disputes. The Board hears and decides challenges to official actions taken (usually ordinances) by city or county governments adopting or amending comprehensive plans or their implementing development regulations. The Board has the authority to hear only cases over which it has Subject Matter Jurisdiction. These include challenges to matters arising from the:

- Adoption of and/or amendments to a Comprehensive Plan
- Designation of Resource Lands and Critical Areas
- Adoption of and/or amendment to regulations to conserve Resource Lands and Protect Critical Areas
- Adoption of and/or amendments to County-Wide Planning Policies (not subject to a citizen-filed appeal)
- Adoption of and/or amendments to Urban Growth Areas

- Adoption of and/or amendments to Development Regulations that implement the comprehensive plan (zoning, subdivision, etc)
- Growth Management Planning Population Projections prepared by the State of Washington, Office of Financial Management
- Adoption of and/or amendments to a Shoreline Master Plan, as it relates to the GMA
- SEPA documents that accompany a GMA action
- Failure of the local government to act to meet a GMA statutory deadline

The jurisdictional regions for the three Growth Management Hearing boards are: Eastern Washington, Western Washington and Central Puget Sound.

Helipad – A small, designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp, or movement area used for takeoff, landing, or parking of helicopters. (AIM)

Heliport – A facility used for operating, basing, housing, and maintaining helicopters.

Incompatible Development ‘Aviation’ – Uses that diminish the overall utility of an existing use. Incompatible development may have both direct and indirect impacts. Directly, it may reduce property available for aviation operations, safety areas and navigatable airspace. Indirectly, incompatible development can lead to demands for limitations on the airport activity.

Infill – Is the practice of developing or redeveloping vacant or underutilized land in the midst of a community, especially land that is surrounded by existing uses similar to the ones proposed. This may mean further subdivisions of existing parcels to accommodate additional growth, redevelopment of under-utilized property to increase its density or intensity, or simply creation of new development on vacant land.

Instrument Approach Procedure – A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or to a point from which a landing may be made visually. It is prescribed and approved for a specific airport by competent authority (refer to Nonprecision Approach Procedure and Precision Approach Procedure). (AIM)

Instrument Flight Rules (IFR) – Rules governing the procedures for conducting instrument flight. Generally, IFR applies when meteorological conditions with a ceiling below 1,000 feet and visibility less than 3 miles prevail. (AIM)

Instrument Landing System (ILS) – A precision instrument approach system that normally consists of the following electronic components and visual aids: (1) localizer; (2) glide slope; (3) outer marker; (4) middle marker; (5) approach lights. (AIM)

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. (FAA ATA)

Instrument Runway – A runway equipped with electronic and visual navigation aids for which a precision or nonprecision approach procedure having straight-in landing minimums has been approved. (AIM)

Inverse Condemnation – An action brought by a property owner seeking just compensation for land taken for a public use against a government or private entity having the power of eminent domain. It is a remedy peculiar to the property owner and is exercisable by that party where it appears that the taker of the property does not intend to bring eminent domain proceedings.

Land Use Density – A measure of the concentration of land use development in an area. Mostly the term is used with respect to residential development and refers to the number of dwelling units per acre. Unless otherwise noted, policies in this compatibility plan refer to gross rather than net acreage.

Land Use Intensity – A measure of the concentration of nonresidential land use development in an area. For the purposes of airport land use planning, the term indicates the number of people per acre attracted by the land use. Unless otherwise noted, policies in this compatibility plan refer to gross rather than net acreage.

Large Airplane – An airplane of more than 12,500 pounds maximum certificated takeoff weight. (Airport Design AC)

Localizer (LOC) – The component of an ILS that provides course guidance to the runway. (AIM)

Mean Sea Level (MSL) – An elevation datum given in feet from mean sea level.

Minimum Descent Altitude (MDA) – The lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glide slope is provided. (FAR 1)

Missed Approach – A maneuver conducted by a pilot when an instrument approach cannot be completed to a landing. (AIM)

National Transportation Safety Board (NTSB) – The U.S. government agency responsible for investigating transportation accidents and incidents.

Navigational Aid (Navaid) – Any visual or electronic device airborne or on the surface that provides point-to-point guidance information or position data to aircraft in flight. (AIM)

Noise Contours – Continuous lines of equal noise level usually drawn around a noise source, such as an airport or highway. The lines are generally drawn in 5-decibel increments so that they resemble elevation contours in topographic maps.

Nonconforming Use – Any use, situation, lot, building or structure that legally existed prior to the adoption of a development regulation that would otherwise prohibit its use.

Nonprecision Approach Procedure – A standard instrument approach procedure in which no electronic glide slope is provided. (FAR 1)

Nonprecision Instrument Runway – A runway with an approved or planned straight-in instrument approach procedure that has no existing or planned precision instrument approach procedure. (Airport Design AC)

Obstruction – Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, the height of which exceeds the standards established in Subpart C of Federal Aviation Regulations Part 77, *Objects Affecting Navigable Airspace*.

Overflight – Any distinctly visible and/or audible passage of an aircraft in flight, not necessarily directly overhead.

Overlay Zone – See [Airport Overlay](#)

Precision Approach Procedure – A standard instrument approach procedure where an electronic glide slope is provided. (FAR 1)

Precision Instrument Runway – A runway with an existing or planned precision instrument approach procedure. (Airport Design AC)

Referral Area – The area around an airport defined by the planning area boundary adopted by an airport land use commission within which certain land use proposals are to be referred to the commission for review.

Resource Lands – land designated for natural resource use under the GMA (i.e. agricultural, mineral, or forestry).

Revised Code of Washington (RCW) – The Revised Code of Washington (RCW) is the compilation for all permanent laws now in force. It is a collection of Session Laws (enacted by the Legislature, and signed by the Governor, or enacted via the initiative process), arranged by topic, with amendments added and repealed laws removed. It does not include temporary laws such as appropriations acts.

Runway Protection Zone (RPZ) – An area (formerly called a clear zone) off the end of a runway used to enhance the protection of people and property on the ground. (Airport Design AC)

Approach Visibility Minimums	Length	Inner Width	Outer Width
Visual and not lower than 1 mile:			
A & B small aircraft exclusively	1000	250	450
A & B	1000	500	700
C & D	1700	500	1010
Not lower than ¾ mile - all aircraft	1700	1000	1510
Lower than ¾ mile - all aircraft	2500	1000	1750

Shoreline Management Act (SMA) – [Chapter 90.58 RCW](#); a statute that provides for the management of the shorelines of the state by planning and fostering all reasonable and appropriate uses. The goals and policies of the SMA are incorporated as goal 14 of the GMA.

Shoreline Master Plan (SMP) – Prepared by a city or county and approved by the Washington State Department of Ecology, this document contains regulations applicable to the use of shorelines within that city or county.

Single-Event Noise – As used in herein, the noise from an individual aircraft operation or overflight.

Small Airplane – An airplane of 12,500 pounds or less maximum certificated takeoff weight. (Airport Design AC)

Sound Exposure Level (SEL) – A time-integrated metric (i.e., continuously summed over a time period) that quantifies the total energy in the A-weighted sound level measured during a transient noise event. The time period for this measurement is generally taken to be that between the moments when the A-weighted sound level is 10 dB below the maximum.

Special Function Uses – These generally include children, elderly, the infirmed, or others regarded as having comparatively little control over their own lives. Land uses may include K-12 schools, hospitals, nursing homes, convalescent center and other similar uses.

State Environmental Policy Act (SEPA) – A statute that requires state and local agencies to consider the likely environmental consequences of a proposal before approving or denying the proposal (see [Chapter RCW 43.21C](#)).

Straight-In Instrument Approach – An instrument approach wherein a final approach is begun without first having executed a procedure turn; it is not necessarily completed with a straight-in landing or made to straight-in landing weather minimums. (AIM)

Taking – Government appropriation of private land for which compensation must be paid as required by the Fifth Amendment of the U.S. Constitution. It is not essential that there be physical seizure or appropriation for a taking to occur, only that the government action directly interferes with or substantially disturbs the owner's right to use and enjoyment of the property.

Terminal Instrument Procedures (TERPS) – Procedures for instrument approach and departure of aircraft to and from civil and military airports. There are four types of terminal instrument procedures – precision approach, nonprecision approach, circling, and departure.

Threshold – The beginning of that portion of the runway usable for landing (also see [Displaced Threshold](#)). (AIM)

Touch-and-Go – An operation by an aircraft that lands and departs on a runway without stopping or exiting the runway. (AIM)

Traffic Pattern – The traffic flow that is prescribed for aircraft landing at, taxiing on, or taking off from an airport. The components of a typical traffic pattern are upwind leg, crosswind leg, downwind leg, base leg, and final approach. (AIM)

Urban Growth Area (UGA) – A regional boundary, required by the GMA to control urbanization by designating the area inside the boundary for higher density urban and the area outside the boundary for lower density rural development. An urban growth boundary circumscribes an entire urbanized area designated for urban growth and is used by local governments as a guide to zoning and land use decisions. (See [RCW 36.70A.030\(20\)](#); [RCW 36.70A.110](#)).

Visual Approach – An approach where the pilot must use visual reference to the runway for landing under VFR conditions.

Visual Flight Rules (VFR) – Rules that govern the procedures for conducting flight under visual conditions. VFR applies when meteorological conditions are equal to or greater than the specified minimum—generally a 1,000-foot ceiling and 3-mile visibility.

Visual Runway – A runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan. (Airport Design AC)

Washington Advisory Code (WAC) – The Washington Administrative Code (WAC) are regulations of executive branch agencies are issued by authority of statutes. Like legislation and the Constitution, regulations are a source of primary law in Washington State. The WAC codifies the regulations and arranges them by subject or agency. The online version of the WAC is updated twice a month.

Zoning – A police power measure, enacted primarily by units of local government, in which the community is divided into districts or zones within which permitted and special uses are established, as are regulations governing lot size, building bulk, placement, and other development standards. Requirements vary from district to district, but they must be uniform within districts. A zoning ordinance consists of two parts—the text and a map.

Sources

FAR 1 – Federal Aviation Regulations Part 1, Definitions and Abbreviations

AIM – Aeronautical Information Manual

Airport Design AC – Federal Aviation Administration, Advisory Circular 150/5300-13
Airport Design

FAA ATA – Federal Aviation Administration, Air Traffic Activity

FAA Stats – Federal Aviation Administration, *Statistical Handbook of Aviation*

NTSB – National Transportation and Safety Board

