A

above ground level (AGL): Altitude expressed as feet above terrain or airport elevation (see mean sea level).

accelerate-stop distance available (ASDA): The runway plus stopway length declared available and suitable for the acceleration and deceleration of an aircraft aborting a takeoff.

acceptable minimum level of service: Minimum acceptable pavement condition index (PCI) rating for a category of pavement, such as a general aviation runway.

accrual-based accounting: Under the accrual basis, revenues and expenses are recorded when they are earned, regardless of when the payment is issued.

ACRP Legal Aspects of Airport Programs: Report on legal topics of special interest to the airport legal community.

ACRP reports: Products developed from a research process that may be accompanied by associated tools, and newer projects may include web resources (electronic libraries) related to the project.

ACRP syntheses: Reports on current knowledge and practice in a compact format, without the detailed direction usually found in handbooks or design manuals.

action plan: Describes the actions intended to achieve the stated goals and objectives.

advisory circular (AC): A series of external, informational FAA publications consisting of nonregulatory material about a policy and providing guidance for compliance.

aeronautical activity: Any activity that involves, makes possible or is required for the operation of aircraft or that contributes to or is required for the safety of such operations.

aeronautical chart: A representation of a portion of the earth, its culture and relief, specifically designated to meet the requirements of air navigation.

Aeronautical Information Manual (AIM): A primary FAA publication with the purpose of instructing airmen about operating in the national airspace system of the United States. It provides basic flight information, air traffic control procedures and general instructional information concerning health, medical facts, factors affecting flight safety, accident and hazard reporting and types of aeronautical charts and their use.

aeronautical revenue: Revenue generated from core aeronautical activities, defined as those activities that take place on the airfield or in nonpassenger-dependent activities around the terminal.

air carrier: A legal entity that undertakes directly by lease or other arrangements to provide air transportation.
**Air carrier, certificated route**: An air carrier holding a Certificate of Public Convenience and Necessity, issued by the U.S.DOT under Part 121 of the Federal Aviation Regulations, to conduct scheduled services over specified routes and a small number of nonscheduled operations.

**Air carrier, commuter**: An air taxi operator who, under FAR Part 135, (1) performs at least five round trips per week between two or more points and publishes flight schedules that specify the times, days of the week and places between which such flights are performed or (2) transports mail by air pursuant to a contract with the U.S. Postal Service.

**Aircraft accident**: An occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, and in which any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto or in which the aircraft receives substantial damage.

**Aircraft approach category (AAC)**: A lettering system used by the FAA to group aircraft based on approach speed.

**Aircraft classes**: For the purposes of wake turbulence separation minima, air traffic control classifies aircraft as heavy, large and small as follows:
- *Heavy* – Aircraft capable of takeoff weights of 300,000 pounds or more, whether or not they are operating at this weight during a particular phase of flight.
- *Large* – Aircraft of more than 12,500 pounds maximum certificated takeoff weight, up to 300,000 pounds.
- *Small* – Aircraft of 12,500 pounds or less maximum certificated takeoff weight.

**Aircraft incident**: An occurrence that meets the criteria for an aircraft accident, except there was no intention of flight.

**Aircraft operations area or air operations area (AOA)**: Any area of the airport used or intended to be used for the landing, takeoff or surface maneuvering of aircraft, including runways, taxiways and, in some cases, ramp areas.

**Aircraft Owners and Pilots Association (AOPA)**: A trade association that represents aircraft owners and pilots; its mission is to effectively serve the interests and needs of its members as aircraft owners and pilots and establish, maintain and articulate positions of leadership to promote the economy, safety, utility and popularity of flights in general aviation aircraft.

**Aircraft parking line limit (APL)**: A line established by the airport authorities beyond which no part of a parked aircraft should protrude.

**Aircraft rescue and firefighting (ARFF)**: A special category of firefighting that involves the response, hazard mitigation, evacuation and rescue of passengers and crew of an aircraft involved in an airport ground emergency.

**Airfield capacity**: The maximum number of aircraft operations (landings or takeoffs) that can take place on an airfield in one hour under specific conditions.

**Airline transport pilot (ATP)**: The most advanced of all pilot certificates, requiring the highest skill and experience levels. Requires a minimum of 1,500 hours flight experience, ATP written exam and flight test. Mandatory for captains of FAR Part 121 major scheduled airlines, regional carriers, Part 125 scheduled
commuter airlines and some FAR Part 135 operations. A hiring requirement for many pilot positions in corporate and commercial general aviation flying.

**Airline Use Agreement**: A contract between the airport operator and its tenant airlines that establishes the rights, privileges and obligations for each party and defines how the airport is to be used by the airlines.

**Airplane Design Group (ADG)**: A classification of aircraft by the FAA based on wingspan and tail height.

**Airport**: An area of land or water that is used or intended to be used for the landing and taking off of aircraft, including its buildings and facilities, if any.

**Airport Asset Management Plan**: A plan describing the activities and investments in infrastructure and assets required to achieve and maintain service outcome standards in the short and long term, according to the airport’s master plan or strategic plan for servicing customers, the community and other stakeholders.

**Airports Capital Improvement Plan (ACIP)**: A document prepared by the airport sponsor on an annual basis that represents the airport sponsor’s five-year program for capital development at the airport. Also referred to as a capital improvement program (CIP) or transportation improvement program (TIP).

**Airport Catchment Area**: The area surrounding the airport from which it attracts passengers. Most often influenced by the proximity of competing airports.

**Airport Certification Manual (ACM)**: A document that details how the airport operator will comply with the requirements of FAR Part 139: Certification of Airports.

**Airport Customer Experience**: The net impression of all experiences a customer has in an airport, as judged by customers based on their individual standards, expectations and perceptions.

**Airport Director or Airport Manager**: The person responsible for the day-to-day operation of an airport, including the business, administration, operational and communication aspects and the implementation of policy guidance and longer-term plans for the airport.

**Airport Economic Impact**: The contribution of an airport to the regional economy, quantified in terms of employment, payroll and output.

**Airport Elevation**: The highest point of an airport’s usable runways, measured in feet above mean sea level.

**Airport Hazard**: Any structure or natural object located on or in the vicinity of a public airport, or any use of land near such airport, that obstructs the airspace required for the flight of aircraft landing, taking off or taxiing at the airport.

**Airport Improvement Program (AIP)**: A program that provides financial grants to primarily public agencies for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems (NPIAS).

**Airport Influence Area**: An area adjacent to an airport that can affect or be affected by airports and aircraft operations that necessitate restrictions on those land uses.

**Airport Joint-Use Agreement**: An agreement between a military unit and a civilian airport that delineates responsibility and outlines payment arrangements.

**Airport Layout Plan (ALP)**: A set of drawings that provide a graphic representation of the sponsor’s long-term development plan for an airport, including property boundaries, existing and proposed airport facilities and structures and the location of existing and proposed nonaeronautical areas.
**airport master plan (AMP)**: An assembly of appropriate documents and drawings covering the development of a specific airport from a physical, economic, social and political jurisdictional perspective by assessing current and projected demands. The master plan typically has a time frame of 20 years, with short-term, intermediate and long-term goals within that time frame. The airport layout plan is a part of this plan.

**airport noise compatibility planning study**: A study designed to increase the compatibility of land and facilities in the areas surrounding an airport that are most directly affected by the operation of the airport. The specific purpose is to reduce the adverse effects of noise as much as possible by implementing on-airport noise control measures and off-airport land use control programs. Under FAR Part 150, local jurisdictions can prepare and submit to the FAA a noise exposure map for the airport’s environs and a noise compatibility plan.

**airport operating certificate (AOC)**: A certificate issued under 14 CFR Part 139 (FAR Part 139): Certification and Operations: Land Airports Serving Certain Air Carriers for the operation of a Class I, II, III or IV airport.

**airport operator**: The public or private operator or sponsor of a public-use airport.

**airport property**: Any property, when described as part of an airport in an agreement with the United States or defined by an airport layout plan or listed in an Exhibit “A” property map, that is considered to be obligated property for airport purposes.

**airport reference code (ARC)**: An airport designation by the FAA that signifies the airport’s highest runway design code (RDC), minus the third (visibility) component of the RDC. The ARC is used for planning and design only and does not limit the aircraft that may be able to operate safely on the airport.

**airport reference point (ARP)**: The approximate geometric center of all usable runways at the airport.

**airport revenue**: All fees, charges, rents or other payments received by the sponsor for use of the airport property and services; sale, transfer or disposition of airport real property; sale or lease of sponsor-owned mineral, natural or agricultural products or water taken from the airport; revenue from sponsor activities on the airport; and state or local aviation fuel taxes, except taxes in effect on December 30, 1987.

**airport security coordinator (ASC)**: An airport operator’s designated primary and immediate contact for security-related activities and communication with the Transportation Security Administration (TSA).

**airport sponsor**: Typically a public agency or tax-supported organization that is authorized to own and operate an airport, obtain funds and property interests and be legally, financially and otherwise able to meet all applicable requirements of laws and regulations. Occasionally, it is a private entity.

**airport surveillance radar (ASR)**: Approach control radar used to detect and display an aircraft’s position in the terminal area. ASR provides range and azimuth information but does not provide elevation data. Coverage of the ASR can extend up to 60 miles.

**airport survey**: The collection of data for the analysis of some aspects of the airport or airport operations.

**airport system plan**: Identification of general location and characteristics of airports within that system, such as a state or region, to meet the air transportation goals of the system under study.

**airport traffic control tower (ATCT)**: A raised facility on the airfield from which controllers visually, and by radar where available, monitor air traffic and use two-way radios on a designated frequency to direct traffic.
**airport user fee:** A tax levied on passengers for passing through an airport. The tax is generally paid for use of the airport and is one of a number of taxes that are typically included in the price of an airline ticket.

**Airports Geographic Information System (Airports GIS):** The FAA’s system of collecting and compiling airport and aeronautical data.

**air route traffic control center (ARTCC):** An FAA facility established to provide air traffic control to aircraft operating on an instrument flight rule flight plan within controlled airspace, principally during the en route phase of flight.

**air service development (ASD):** The practice of retaining and/or establishing air service to a given airport or community.

**airspace hazard:** An airspace obstruction that has been studied and determined to have a substantial adverse effect, affecting a significant volume of aeronautical activity.

**airspace obstruction:** An object, structure or element of terrain that exceeds federal obstruction standards, as defined in FAR Part 77.

**air taxi:** Operations performed by operators of aircraft holding an air taxi certificate under Part 135 of the Federal Aviation Regulations. 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 services. Typically, air taxis do not utilize aircraft with a payload capacity over 7,500 pounds or capable of carrying more than 30 passengers.

**air traffic control (ATC):** The FAA service providing separation services to participating airborne traffic and clearances to land, take off or taxi at airports with a control tower.

**airways:** Corridors of sky usually linking very high frequency (VHF) omnidirectional ranges or nondirectional radio homing beacons. Aircraft using airways are protected by internationally agreed-upon rules of separation.

**aligned taxiway:** A taxiway with its centerline aligned with a runway centerline. Sometimes referred to as an “inline taxiway.”

**alteration:** A change to a facility, including but not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, changes or rearrangement in structural parts and elements.

**altimeter:** A highly sensitive barometer that shows an aircraft’s altitude above mean sea level by measuring atmospheric pressure.

**altimeter setting:** A value related to local barometric pressure, usually provided to pilots by air traffic control. Used as a reference setting so that the aircraft altimeter indicates an accurate altitude. Above 18,000 feet, all pilots use a standard setting of 29.92 inches of mercury.

**Americans with Disabilities Act of 1990 (ADA):** Regulates accessibility by persons with disabilities in airport terminals, at curbs, on roadways and on surface transportation.

**approach (departure) control:** Radar-based air traffic control that provides traffic separation services outside the local immediate airport area to a distance of about 40 miles.

**approach lights:** A lighting system located off the end of the runway to aid the pilot in identifying the runway environment.

**approach or departure airspace:** The airspace, within 5 statute miles of an airport, through which aircraft move during landing or take off.
**approach procedure with vertical guidance (APV):** An instrument approach procedure (IAP) providing vertical and lateral electronic guidance.

**approach reference code (APRC):** A code signifying the current operational capabilities of a runway and associated parallel taxiway with regard to landing operations.

**approach surface:** A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based on the type of approach available or planned for that runway end.

**apron/ramp:** A defined area on an airport or heliport intended to accommodate aircraft for purposes of loading passengers or cargo, refueling, parking or maintenance.

**aqueous film-forming foam (AFFF):** A firefighting agent that is used to coat the burning material, cooling and preventing its contact with oxygen to suppress the fire.

**area navigation (RNAV):** A method of navigation that allows an aircraft to choose any course within a network of navigation beacons, rather than navigating directly to and from the beacons. It includes lateral navigation providing horizontal alignment guidance to the pilot and can include lateral navigation or vertical navigation providing horizontal and vertical guidance to a pilot.

**attainment/nonattainment:** An area that has monitored air pollutant concentrations below the established National Ambient Air Quality Standards (NAAQS) is considered “attainment.” An area with concentrations above the NAAQS is considered “nonattainment.”

**automatic terminal information service (ATIS):** A continuous broadcast on a separate air traffic control frequency of an airport’s current weather (updated at least hourly). Eliminates controller requirement to read local weather data to each landing or departing aircraft.

**Automated Weather Observing System (AWOS)/Automated Surface Observing System (ASOS):** A system of weather sensors that collect and disseminate weather data to pilots and flight dispatchers so they may prepare for and monitor weather forecasts. The ASOS program is entirely federally funded, whereas AWOS systems are generally operationally funded by the operator or airport sponsor.

**automatic dependent surveillance – broadcast (ADS-B):** A technological application for pilots and air traffic controllers that uses global positioning system (GPS) satellites to determine aircraft location, ground speed and other data, and provides traffic and weather information directly to the cockpits of properly equipped aircraft. ADS-B out equipment allows the aircraft to transmit its position. ADS-B in and out allows the aircraft to transmit its position and receive weather data and flight information services.

**automatic direction finding (ADF):** A basic guidance mode providing aircraft with lateral guidance to an aviation radio station. ADF equipment provides the pilot with a directional bearing to an aviation radio station that is relative to the user’s current location.

**auxiliary aids:** Qualified interpreters, note takers, transcription services, writing materials, telephone headset amplifiers, assistive listening devices, assisted listening systems, telephones compatible with hearing aids, closed- and open-caption decoders, text telephones (telephone devices such as TTYs), videotext displays or other aural delivery devices; qualified readers, taped text audio recordings, Braille materials, large-print materials or other materials for visual delivery.

**avgas:** Aviation gasoline used by piston-powered aircraft.

**avigation easement:** A type of acquisition of an interest in land or property that involves less than fee simple purchase. One form of avigation easement grants an airport 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 the right to perform aircraft operations on the property or the public acquisition of a landowner’s rights, restricting future development of the property for any use more intensive than that existing at the time of the transaction. This easement may also include prohibitions on the uses for which the property may be developed. The maximum heights of structures and other objects may also be specified.

**B**

- **baggage sort system:** Baggage tag readers and baggage conveyer switching or sorting equipment used to read baggage tags and divert bags to their intended destinations.
- **base:** The leg perpendicular to the final leg of the traffic pattern to the landing runway.
- **based aircraft:** Aircraft stationed at an airport on a long-term or permanent basis, usually by some form of agreement between the aircraft owner and airport management.
- **base leg:** (See base)
- **base rent:** A set amount, used as a minimum rent in a lease, with provisions for increasing the rent over the term of the lease.
- **benchmark study:** The practice of comparing key metrics for the airport and airport operations to other similar or competitive airports.
- **benefit-cost analysis:** A systematic approach to estimating the strengths and weaknesses of alternatives by determining options that provide the best approach to achieve benefits while preserving savings.
- **benefit-cost ratio:** A calculation, determined by the FAA, of the cost of the service provided compared to the benefit of that service.
- **biometric identification/security:** A mechanism utilized to identify and verify persons for security purposes. The most common type of biometrics are fingerprint scanners.
- **blast fence:** A barrier used to divert or dissipate jet or propeller blast.
- **blast pad:** A surface adjacent to the ends of runways provided to reduce the erosive effect of jet blast and propeller wash.
- **bond:** A debt investment in which an investor loans money to an entity that borrows the funds for a defined period of time at a specified interest rate. Common forms used by government entities to borrow money to finance a project include general obligation and revenue bonds.
- **brand:** An airport’s identity that differentiates your airport from its competition.
- **branding:** The process of creating a unique, positive and recognizable identity for an airport that attracts and retains customers.
- **budget:** An estimate of income and expenditure for a set period of time.
- **building restriction line (BRL):** A line established with respect to the runway centerline to assure that structures will not project above the imaginary surfaces required by Federal Aviation Regulations, Part 77, and obstruction clearance criteria.
- **business aviation:** The sector of general aviation (as defined by the International Civil Aviation Organization) that concerns the operation of aircraft by companies for carrying passengers or goods as an
aid to conducting their business, flown for purposes generally considered not for public hire and piloted by individuals having, at the minimum, a valid commercial pilot license with an instrument rating.

**business plan:** A written plan defining how the airport will operate on a day-to-day basis to achieve established goals and objectives. A business plan translates longer-term goals into action plans. A business plan focuses on the short term.

**bypass taxiway:** A taxiway used to reduce aircraft wait time by providing multiple takeoff points.

**C**

**capital improvement plan (CIP):** A document prepared by the airport sponsor on an annual basis that represents the airport sponsor’s five-year program for capital development at the airport.

**capital investment:** Expending capital to make improvements to an airport.

**cash accounting:** The cash method accounts for revenue only when the money is received and for expenses only when the payment is made.

**categorical exclusion (CATEX):** A category of actions that do not individually or cumulatively have a significant effect on the human environment and for which neither an environmental assessment nor an environmental impact statement is required. (Documentation in the form of a CATEX checklist still must be prepared by the airport or its sponsor.)

**center:** One of 24 FAA air route traffic control centers providing radar surveillance and traffic separation to participating en route traffic above and outside airspace handled by approach and departure control.

**certificate of authorization:** FAA authorization to operate a UAS for other-than-recreational purposes in the United States, limited to public UAS operations.

**certificated flight instructor (CFI):** A pilot holding a commercial pilot certificate who, after passing two written tests and a practical flight exam, is FAA rated to give flight instruction. The flight instructor rating is specific as to type of instruction authorized, e.g., single-engine airplane, multiengine airplane, instrument flying (CFII) or helicopter.

**charges:** A price paid for services rendered, such as fuel delivery.

**chart supplement (formerly airport/facility directory):** FAA publication containing data on public- and joint-use airports, seaplane bases and heliports.

**circling approach:** 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.

**Class A airspace:** Airspace between 18,000 and 60,000 feet mean sea level over the conterminous United States. Instrument flight rule clearances are required for all aircraft operating in Class A airspace. Formerly called the “positive control area.”

**Class B airspace:** Airspace area around the busiest U.S. hub airports, typically to a radius of 20 nautical miles and up to 10,000 feet above ground level. Operations within Class B airspace require an air traffic control clearance and at least a private pilot certificate (local waivers available), radio communication and an altitude-reporting (Mode C) transponder. Formerly called “terminal control area.”

**Class C airspace:** Airspace area around busy U.S. airports (other than Class B). Radio contact with approach control is mandatory for all traffic. This includes an area from the surface to 1,200 feet above
ground level out to 5 miles and from 1,200 to 4,000 feet AGL to 10 miles from the airport. Formerly called “airport radar service area.”

**Class D airspace:** Airspace around an airport with an operating control tower, typically to a radius of 5 miles from the surface to 2,500 feet above ground level. Radio contact with the control tower required prior to entry. Formerly called “airport traffic area.”

**Class E airspace:** General controlled airspace comprising control areas, transition areas, Victor airways, the continental control area, etc.

**Class F airspace:** International airspace designation not used in the United States.

**Class G airspace:** Uncontrolled airspace, generally the airspace from the surface up to 700 or 1,200 feet above ground level in most of the United States, but up to as high as 14,500 feet in some remote western and sparsely populated areas.

**clearance:** Formal instructions from air traffic control authorizing a specific route or action (e.g., climb or descend, or enter controlled airspace). Pilots may deviate from an ATC clearance in an emergency or when compliance would threaten the safety of a flight.

**clearway (CWY):** A defined rectangular area beyond the end of a runway cleared or suitable for use in lieu of runway to satisfy takeoff distance requirements.

**climate:** The long-term pattern (i.e., expected frequency) of weather in a particular location, including the interactions between atmospheric, oceanic and land states. Climate generally refers to a larger area than weather. Climate comprises average weather conditions or patterns over a period of time for a region. Standard averaging period is 30 years.

**climate change:** A change in the state of the climate that can be identified (by using statistical tests, for example) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forces, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.

**cockpit to main gear distance (CMG):** The distance in feet, from the cockpit to the main gear; used to determine the taxiway design group (TDG).

**Code of Federal Regulations (CFR):** The codification of the general and permanent rules and regulations (sometimes called administrative law) published in the Federal Register by the executive departments and agencies of the federal government of the United States.

**commercial pilot:** Holder of an FAA commercial pilot certificate, requiring a minimum of 250 flight hours (and other subrequirements), a commercial written test and a commercial flight test. The pilot certificate to fly for compensation or hire, often in a wide variety of commercial general aviation operations including sight-seeing, aerial application, glider towing and flight instruction. It does not necessarily imply flying for a scheduled airline.

**commercial service airport:** An airport with scheduled passenger service and at least 2,500 passengers boarding per year.

**commissioning (Cx) and retro-commissioning (RCx):** A comprehensive and systematic testing process of new (or existing, in the case of RCx) building components and systems to verify their design, installation and functionality in accordance with the client’s specifications and operational demands.
**common traffic advisory frequency (CTAF):** The radio frequency, sometimes called the UNICOM frequency, used by all traffic at an airport without an operating control tower to coordinate approaches, landings, takeoffs and departures. Pilots announce their positions, intentions and actions in the traffic pattern for the benefit of other traffic.

**common use:** A facility allocation and management approach intending to maximize airport facility access and allocation through nondedicated resources, shifting from traditional tenant-landlord relationship.

**common use space:** Nonexclusive areas of an airport used in common by airlines, along with other authorized users of the airport.

**common use system:** Airport-operator-provided hardware and software systems that provide an interface through which airline proprietary systems can operate with increased facility utilization and flexibility.

**community comprehensive plan:** Generally, a formally adopted general or master plan for a community, which elaborates and codifies the community’s long-range goals in the areas of land use, transportation, utilities, environmental and other areas, driven by established goals, objectives and implementing policies.

**compensatory rate methodology:** Under this methodology, an airport operator charges its airline tenants fees and rental charges in an amount necessary to recover the actual cost of operating and maintaining the facilities being leased and/or used by the airline parties.

**concurrent use:** The use of aeronautical land for a compatible, nonaeronautical revenue-producing purpose.

**conical surface:** A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

**construction safety and phasing plan (CSPP):** A document that outlines procedures to maintain operational safety on an airport during construction projects. CSPP identifies how to minimize construction impacts on operations.

**consultant:** A firm, individual, partnership, corporation or joint venture that performs architectural, engineering or planning services.

**contract tower:** An air traffic control tower (ATCT) facility for which the FAA will pay some to all of the cost of nonfederal employees and, in some instances, provide some of the operating equipment installed in the tower.

**controlled airspace:** A generic term including all airspace classes in which air traffic control services are available. Does not imply that all flight is under air traffic control. Visual flight rule aircraft may operate without air traffic control contact in most controlled airspace, as long as weather conditions will permit them to see and avoid other aircraft.

**cost per enplanement (CPE):** The average passenger airline payments per enplaned passenger at a given airport.

**Council on Environmental Quality (CEQ):** A division of the Executive Office of the President that coordinates federal environmental efforts in the United States and works closely with agencies and other White House offices in the development of environmental and energy policies and initiatives.

**crisis communication:** The ability to protect the reputation of the airport through a plan that provides timely and accurate information to passengers, stakeholders, the community and the media.
crisis communication plan: A document that helps determine how an airport will communicate to the news media, passengers, families, airport personnel and stakeholders.

crisis management team: A group of people trained to respond immediately to warning signals of crisis and execute relevant plans to overcome emergency situations. The team protects the airport against the adverse effects of crisis and prepares the airport for inevitable threats.

critical aircraft: The most demanding aircraft type or grouping of aircraft with similar characteristics that make regular use of the airport. “Regular use” is 500 annual operations, excluding touch-and-go operations. An operation is a takeoff or landing.

customer facility charge (CFC): A fee paid by airport customers for the use of some nonaeronautical services at an airport, commonly collected by rental car companies to pay for their facilities.

customer service: The assistance and advice provided by a company to people who buy or use its products or services.

Customs and Border Protection (CBP) Office of Field Operations: A federal law enforcement agency responsible for regulating and facilitating international trade, collecting import duties and enforcing U.S. regulations, including trade, customs and immigration.

cyberattack: A deliberate attempt to violate the security of a digital system. A successful attack is one that achieves its goal, typically causing harm to information, systems or infrastructure or disrupting operations that rely on these resources.

cybersecurity: Means and methods that protect data and systems from unauthorized access, inappropriate modification or unintentional loss.

D

day-night average sound level (DNL): The 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of 10 decibels to sound levels for the periods between 10 p.m. and 7 a.m.

decision altitude (DA): A specified lowest height or altitude in the approach of an aircraft to a runway which, if the required visual reference to continue the approach (such as the runway markings or runway environment) is not visible to the pilot, the pilot must initiate a missed approach.

declared distances: The distances the airport owner declares available for aircraft’s takeoff run, takeoff distance, accelerate-stop distance and landing distance requirements.

deed restrictions: A legal mechanism to restrict the use of a property to define certain conditions in perpetuity.

deicing: Removing ice and snow from an aircraft. The use of liquids, chemicals and heating equipment are used in cooler climates to reduce the effects of snow and ice.

departure obstacle clearance surface: A 40:1 surface originating at the location and elevation of the departure end of the runway, which is used to evaluate required climb performance from a particular departure runway end to the nearest (shortest distance) obstacle in the segment.

deplanements: Passengers leaving an aircraft (see enplanements).
**deregulation act**: Airline regulatory reform act of 1978. Designed, among other things, to encourage competition among domestic air carriers, the act allows an air carrier greater freedom to enter and leave any given market.

**design aircraft**: An aircraft with characteristics that determine the application of airport design standards for a specific runway, taxiway, taxilane, apron or other facility. This aircraft can be a specific aircraft model or a composite of several aircraft using, expected or intended to use the airport or part of the airport. (Also called “critical aircraft” or “critical design aircraft.”)

**detention ponds**: Stormwater management ponds that hold stormwater for short periods of time, generally less than 48 hours.

**direct economic impacts**: Jobs, payroll and output associated with:
- The businesses at an airport that are typically related to the provision of aviation services.
- The economic benefits from spending in the local area by visitors that arrive by air.
- The economic benefits of aviation-reliant businesses.

**Direct User Access Terminal Service (DUATS)**: A free FAA sponsored weather and flight planning service for pilots.

**disability**: With respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities; a record of such an impairment; or being regarded as having such an impairment.

**Disadvantaged Business Enterprise (DBE) Program**: A federal program developed to ensure qualified firms owned and controlled by minorities may take part in contracts supported with federal funds.

**discretionary funds**: AIP grant funds remaining within the obligation limitation, after entitlement calculation, subject to restrictions in legislation and available for distribution at the FAA discretion, per the FAA’s priority system.

**displaced threshold**: A runway landing threshold located at a point other than the designated beginning of the runway (where departures would begin).

**distance measuring equipment (DME)**: Aircraft equipment that provides pilots with a readout of the distance between the DME facility (airport) and the aircraft.

**downwind leg**: A flight path parallel to the landing runway in the direction opposite the landing direction.

**earned media**: Publicity gained through promotional efforts other than paid media.

**economic impacts**: Effects on the level of economic activity in a given region or in the contribution of airports to the level of economic activity in the U.S. Economic impacts are shown as (1) jobs; (2) business output (essentially business sales and expenditures by public agencies); (3) labor income; and (4) value added.

**effective rent**: The actual rental rate to be achieved by the landlord after deducting the value of concessions from the base rental rate paid by a tenant, usually expressed as an average rate over the term of the lease.
**emergency locator transmitter (ELT):** A radio transmitter automatically activated by the impact of an accident. Emits a warbling tone on the international emergency frequencies of 121.5 MHz, 243 MHz and (for newer models) 406 MHz. ELT signals can be received by nearby FAA facilities, aircraft overhead and search and rescue (SARSAT) satellites.

**emergency management:** The process of preventing, mitigating, responding to and recovering from all types of hazards and incidents that can threaten life and property.

**emergency operations center:** A central command-and-control facility that is responsible for carrying out emergency management functions.

**emergency planning:** A formal plan outlining essential emergency-related actions to ensure the safety of and emergency services for the airport populace and the community in which the airport is located. The plan also includes provisions for including local communities and state and federal organizations, as appropriate.

**emergency response providers:** Any agency providing emergency assistance, such as airport police, local police, fire departments and paramedics.

**endangered species:** A species of animal or plant that is seriously at risk of extinction.

**energy assessment or energy audit:** An investigation of systems in existing buildings, with the goal of replacing or retrofitting equipment. This is a quick process that may include building simulation and results in a list of energy conservation measures that involve significant capital investment.

**energy management system:** An automatic system used for controlling equipment in a building. Most likely, this will be a computer-based system, including pneumatic or digital components or both.

**engineered materials arresting system (EMAS):** A crushable material placed at the end of a runway to stop an aircraft that overruns the runway pavement.

**engine run-up area:** An area on an airport where aircraft engines are serviced or tested. The noise from such servicing or testing can affect neighborhoods adjacent to the airport.

**enplaned/deplaned passengers:** The volume of passengers outbound from an airport (enplaned) or inbound to an airport (deplaned). The annual passenger volume of an airport is the total enplaned and deplaned passengers.

**enplanements:** Passengers boarding an aircraft (see deplanements).

**En Route Flight Advisory Service (EFAS):** A flight service station dedicated to providing real-time weather information to airborne flights (rather than for preflight planning) on a single national radio frequency of 122.0 MHz (low altitude).

**entitlement funds:** A set minimum level of Airport Improvement Program funding for an airport, based on the Federal Aviation Administration’s (FAA) criteria. The minimum differs for primary and nonprimary airports based on enplanement levels for primary air carrier airports and standard allocation for each nonprimary airport.

**enterprise operating system:** Refers to standard, enterprise-wide collection of business processes used in diversified companies or public agencies. An enterprise system definition can also include in a common structure: financial/reporting, maintenance/asset management, IT backbone/communications, properties management, procurement and operational modules necessary to drive the wider organization.
**entrance taxiway**: A taxiway designed to be used by an aircraft entering a runway. Entrance taxiways may also be used to exit a runway. (See exit taxiway).

**environmental assessment (EA)**: An assessment of the environmental effects of a proposed action for which federal financial assistance is being requested or for which federal authorization is required. The EA serves as the basis for the FAA’s environmental impact statement or finding of no significant impact.

**environmental due diligence audit (EDDA)**: An audit performed to identify and minimize potential environmental liabilities prior to the purchase of a property.

**environmental impact statement (EIS)**: A document prepared under the requirements of the National Environmental Policy Act of 1969, Section 102(2)(c) representing a federal agency’s evaluation of the effect of a proposed action on the environment. (The FAA will serve as the sponsor of an EIS.)

**Environmental Protection Agency (EPA)**: An agency of the United States federal government; its mission is to protect human and environmental health.

**Envision**: A rating system for sustainable civil infrastructure; can be used alone or with other rating systems, such as LEED®.

**equipment maintenance**: A broad term used to describe the various processes that are utilized to keep equipment in proper working order.

**equipment maintenance management program (EMMP)**: A systematic approach to keeping equipment in proper working order.

**Essential Air Service (EAS)**: a U.S. Department of Transportation (DOT) program that guarantees that small communities that were served by scheduled airlines prior to deregulation will maintain a minimal level of scheduled commercial service.

**exclusive rights**: The provision of aeronautical services by a person or company other than the airport cannot be construed as exclusive by the provider.

**exclusive-use space**: An area rented to an airline for its sole use. Ticket counters, airline operational and administrative offices and airline club rooms are commonly designated as exclusive-use space.

**executive orders**: Directives from the president of the United States to officers and agencies of the executive branch for management of agency operations and have the full force of law.

**Exhibit “A” property map**: A drawing of the dedicated airport property, including detailed information about how the property was acquired, the funding source for the land and if the land was conveyed as federal surplus land or government property.

**exit taxiway**: A taxiway designed to be used by an aircraft only to exit a runway.

**Experimental Aircraft Association (EAA)**: Trade association that encourages and supports recreational aviation.

**extinct species**: An organism that has disappeared from Earth. In practice, a species not definitely located in the wildlife in the last 50 years is termed “extinct.”

**extraordinary circumstances**: When an action that is normally categorically excluded may cause significant adverse environmental impacts, including consideration of special-purpose law requirements.
F

**FAA notification:** A methodology of notifying the FAA of a certain condition or planned course of action.

**FAA order:** An internal FAA directive that sets standards, procedures and guidelines for the FAA to execute its various regulatory and grant administration mandates.

**Facebook:** A popular, free social networking website that allows registered users to create profiles, upload photos and videos, send messages and keep in touch with friends, family and colleagues.

**fair market value (FMV):** An estimate of the market value of a property, based on what a knowledgeable, willing and unpressured buyer would probably pay to a knowledgeable, willing and unpressured seller in the market.

**FAR Part 13:** Tittle 14 Part 13, an informal airport complaint process.

**FAR Part 16:** Tittle 14 Part 16, a formal airport compliance process.

**FAR Part 36:** Federal Aviation Regulations Part 36, which establishes noise standards for the civil aviation fleet. Some extensions for compliance are included in the Aviation Safety and Noise Abatement Act of 1979.

**FAR Part 77:** Objects Affecting Navigable Airspace. Part 77 establishes standards for determining obstructions in navigable airspace, outlines the requirements for notifying the FAA of certain proposed construction or alteration and provides for aeronautical studies of obstructions to air navigation in order to determine their effect on the safe and efficient use of airspace. Section 77.25 of this part establishes imaginary surfaces around airport runways, approach zones and navigable airspace in the vicinity of the airport.

**FAR Part 91:** General Operating and Flight Rules. Part 91 prescribes the rules governing the operation of aircraft within the United States, including the waters within 3 nautical miles of the United States coast. It also establishes the requirements for operators to take actions to support the continued airworthiness of each aircraft.

**FAR Part 107:** Small Unmanned Aircraft Systems. Part 107 establishes the registration of airmen and the certification and operation of small (weighing less than 55 pounds) unmanned aircraft systems within the United States.

**FAR Part 137:** Agricultural Aircraft Operations. Part 137 prescribes the rules governing agricultural aircraft operations within the United States and the issuance of commercial and private agricultural aircraft operator certificates for those operations.

**FAR Part 139:** Certification of Airports. Airports that agree to meet certain operational and safety standards as prescribed in 14 CFR Part 139, also referred to as FAR Part 139, to accommodate scheduled and unscheduled air carrier aircraft and issued an operating certificate by the FAA. Types of Part 139 airports:

- **Class I airport:** An airport certificated to serve scheduled operations of large air carrier aircraft that can also serve unscheduled passenger operations of large air carrier aircraft and/or scheduled operations of small air carrier aircraft.
• **Class II airport**: An airport certificated to serve scheduled operations of small air carrier aircraft and the unscheduled passenger operations of large air carrier aircraft. A Class II airport cannot serve scheduled large air carrier aircraft.

• **Class III airport**: An airport certificated to serve scheduled operations of small air carrier aircraft. A Class III airport cannot serve scheduled or unscheduled large air carrier aircraft.

• **Class IV airport**: An airport certificated to serve unscheduled passenger operations of large air carrier aircraft. A Class IV airport cannot serve scheduled large or small air carrier aircraft.

**FAR Part 150: Airport Noise Compatibility Planning.** Part 150 applies to the airport noise compatibility planning activities of public-use airports, including heliports. It outlines the procedures for developing and submitting airport noise compatibility programs.

**FAR Part 151: Federal Aid to Airports.** Part 151 provides detailed information regarding FAA airport construction and development grants. It also specifies that all airport development under the federal-aid airport program must be done in accordance with an approved airport layout plan. Each airport layout plan and any changes to the layout are subject to FAA approval.

**FAR Part 152: Airport Aid Program.** Part 152 applies to airport planning and development under the Airport and Airway Development Act of 1970, as amended. It outlines eligibility requirements and application procedures; funding, accounting and reporting requirements; nondiscrimination in airport aid programs; suspension and termination of grants; and energy conservation programs.

**FAR Part 156: State Block Grant Pilot Program.** Part 156 establishes the procedure by which a state may apply to participate in the state block grant pilot program, the program administration requirements, the program responsibilities for participating states and the enforcement responsibilities of participating states.

**FAR Part 157: Notice of Construction, Alteration, Activation and Deactivation of Airports.** Part 157 defines the requirements for notifying the FAA when proposing to construct, alter, activate or deactivate a civil or joint-use (civil/military) airport or to alter the status of such an airport.

**FAR Part 158: Passenger Facility Charges (PFCs).** Part 158 applies to the passenger facility charges that may be approved by the FAA and imposed by a public agency that controls a commercial service airport.

**FAR Part 161:** Airports may apply for approval of Stage 3 aircraft noise and access restrictions to the FAA, limiting the type of aircraft, establishing official noise abatement approach and departure procedures or limiting the hours of Stage 3 aircraft operations, subject to FAA review, approval and restrictions.

**FAR Part 170: Establishment and Discontinuance Criteria for Air Traffic Control Services and Navigational Facilities.** Part 170 sets the federal criteria for the establishment of air traffic control services.

**FAR parts 121 and 135:** The parts of Federal Aviation Regulations that specify certification and operational requirements for commercial operators of large aircraft and air taxis, respectively.

**Federal Aviation Administration (FAA):** The United States Department of Transportation’s agency for aviation. In addition to regulating airports, aircraft manufacturing and parts certification, aircraft operation and pilot certification ("licensing"), the FAA operates air traffic control, purchases and maintains navigation equipment, certifies airports and aids airport development, among other activities.
Federal Aviation Regulations (FAR): Regulations established by the FAA located in Title 14 of U.S. Code of Federal Regulations. These regulations are the rules that govern the operation of aircraft, airways, airports and airmen.

Federal grant assurance: A provision of a federal grant agreement to which the recipient of federal airport development assistance has agreed to comply.

Federal NOTAM System (FNS): United States digital NOTAM system.

Federal security director (FSD): A member of the Transportation Security Administration (TSA) in a leadership role responsible for security operations at federalized airports. An FSD may be responsible for an airport in a geography covering a group of airports.

Federally obligated airport: An airport that has accepted federal grant funds and the associated requirements known as grant assurances.

Fee simple ownership: Considered full property ownership in land wherein the owner has the exclusive right to use it, exclusively possess it, commit waste upon it, dispose of it by deed or will and take its fruits.

Field condition (FICON): Assessment of airfield conditions.

Final: The last leg of the traffic pattern when the aircraft is aligned to fly straight in to the landing runway.

Final approach segment: This is the segment of an approach procedure, in which alignment and descent for landing are accomplished. The segment begins at the final approach fix and ends at the missed approach point or decision altitude, and the dimensional criteria/slope vary based on airport conditions and approach type.

Finding of no significant impact (FONSI): An administrative determination by the FAA that a proposed action by the airport sponsor will have no significant impact on the environment.

Fixed-base operator (FBO): A commercial business granted the right by the airport sponsor to operate at an airport and provide aeronautical services, such as fueling, hangaring, tie-down and parking, aircraft rental, aircraft maintenance, flight instrument, etc.

Fixed-by-function navigational aid (NAVAID): An air navigational aid that must be positioned in a particular location in order to provide an essential benefit for aviation. (See NAVAID).

Flight information display system (FIDS): A networked system at an airport used to display real-time flight arrival and departure information.

Flight plan: Filed by radio, telephone, computer or in person with flight service stations, a record of aircraft number, type and equipment; estimated time of departure and time en route; route and altitude to be flown; amount of fuel and number of persons aboard; home base and contact phone number; and other information.

- Visual flight rules flight plan – Voluntary filing for cross-country flights under visual flight rules. For search and rescue use only, with no role for air traffic control.

- Instrument flight rules flight plan – Mandatory filing (at least one-half hour) before a flight under instrument flight rules. Based on flight plan information, air traffic control can issue (immediately before departure) an instrument flight rules clearance to enter clouds or low-visibility conditions for instrument rather than visual flight.

Flight service station (FSS): A facility that provides information and service to aircraft pilots before, during and after flight, but is not responsible for giving instruction or clearance.
**Flight Standards District Office (FSDO):** An FAA field office serving an assigned geographic area and staffed with flight standards personnel who serve the aviation industry and the general public on matters relating to the certification and operation of air carrier and general aviation aircraft. Activities include general surveillance of operational safety, certification of airmen and aircraft, accident prevention, investigation and enforcement.

**Flight Watch:** (See En Route Flight Advisory Service)

**force majeure:** A provision of an airport lease that addresses unavoidable causes, typically for the delay of capital projects due to acts of God and natural disasters. This clause is particularly important if the lease includes a schedule for completion of improvements by the lessee or airport sponsor.

**foreign object damage and foreign object debris (FOD):** Foreign object debris is a substance, debris or article alien to an aircraft or aircraft system that could potentially damage the aircraft. Foreign object damage is any damage attributed to a foreign object that can be expressed in physical or economic terms and may or may not degrade the aircraft’s required safety or performance characteristics.

**frangible:** An object that retains its structural integrity and stiffness up to a designated maximum load but on impact from a greater load, it breaks, distorts or yields in such a manner as to cause minimum damage to an aircraft.

**frangible coupling:** Mounting coupling for lights, signage and NAVAIDs designed to shear at a defined force, reducing the possibility of loss of aircraft control, damage and injury.

**fuel farm:** A consolidated location for bulk fuel storage and equipment, on or off an airport.

**fuel flowage fee:** A fixed fee added to each gallon of fuel pumped or percent added to fuel purchased at the airport to support airport operations, which is generally collected from a private entity that provides the fueling services and is remitted to the airport owner.

**fueling agent:** A person or company that sells fuel products on the airport.

**full-depth reclamation (FDR):** The full thickness of the asphalt pavement and a predetermined portion of the base, subbase and subgrade is uniformly pulverized and blended to provide a homogeneous material.

**functional annexes:** Plans organized around the performance of broad tasks such as command and control, communications, health and medical, etc. Because functional annexes are operations oriented, their target audiences are those who perform the tasks.

**G**

**general aviation (GA):** All civil aviation (excluding military) except those classified as air carrier or air taxi. The types of aircraft typically used in general aviation activities vary from multiengine jet aircraft to single-engine piston aircraft for purposes such as personal, business and instructional flying.

**general aviation airport:** Airport not classified as commercial service or military.

**general aviation operations:** Operations performed by all civil aircraft not classified as air carrier, military or air taxi aircraft.

**general liability insurance:** A standard insurance policy issued to businesses to protect them against liability claims for bodily injury and property damage.

**geographic information system (GIS):** A system designed to capture, store, manipulate, analyze, manage and present spatial or geographic data.
**glide path qualification surface (GQS):** An imaginary 30:1 trapezoidal surface applicable to approaches with vertical guidance, extending from the runway threshold along the runway centerline to 10,000 feet from the runway end. Also referred to as vertical qualification surface (VQS).

**glideslope:** An angle approach to a runway utilizing the glideslope antenna of an instrument landing system.

**global positioning system (GPS):** A satellite-based navigation system operated by the Department of Defense, providing accurate latitude and longitude positions, times and speeds to civilian and military users.

**graduated lease:** A lease that includes variable terms. The variable terms are triggered to change after a specific event takes place, such as periodic appraisals, the tenant’s gross income changes or the passage of time.

**grant assurances:** Obligations, undertaken by the airport sponsor, when they accept funds from the FAA-administered airport financial assistance program.

**greenhouse gases (GHG):** Any gas emitted into the atmosphere that has the potential to trap heat. The most common GHG occurring at airports are carbon dioxide, methane and nitrous oxide.

**ground power unit (GPU):** A ground equipment support device that provides electrical aircraft power.

**H**

**hangar:** A large building at an airport where planes can be stored and maintained.

**hard resiliency:** The direct strength of structures or facilities and their ability to absorb and function under the impacts of a natural or manmade disaster.

**hazard:** A condition, object or activity with the potential for causing damage, loss or injury.

**hazardous material:** Any item or agent, including biologic, chemical, radiologic or physical, that has the potential to cause harm to humans, animals or the environment.

**hazardous wildlife:** Any species of wildlife, both feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities or act as attractants to other wildlife that pose a strike hazard.

**hazard to air navigation:** An existing or proposed object that will have a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft.

**horizontal surface:** A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radii of the arcs are 5,000 or 10,000 feet, depending on runway category or approach type.

**hot spot:** A location on an airport with a history of potential risk of collisions identified by the FAA and where heightened attention by pilots is necessary.

**hub airport:** An airport where passengers transfer from one airplane to another to reach their intended destination.

**human resources (HR):** The department of a business or organization that deals with the hiring, administration and training of personnel.
Incident Command System (ICS): A standardized on-scene incident management concept designed to allow responders to adopt an integrated organizational structure equal to the complexity and demands of any single incident or multiple incidents without being hindered by jurisdictional boundaries.

incompatible land use: Residential, public, recreational and certain other noise-sensitive land uses that are designated as unacceptable within specific ranges of cumulative (Ldn) noise exposure, as set forth in Table 2 of Appendix A of FAR Part 150.

incremental budget: The most used budgeting technique. Typically adds increments to the prior year’s budget based on changing conditions and new requirements; anticipates line-item trends for the new budget year.

indemnification: The language for the tenant to hold harmless or indemnify the airport sponsor from legal action that may be filed against the lessee.

independent fee estimate (IFE): A process in which an airport sponsor requests cost estimates for professional services from sources other than the consultant selected for the work, to ensure the proposed fee for the work is reasonable.

induced, indirect and multiplier economic impacts: The benefits resulting from the recirculation of direct impacts within the economy.

information technology (IT): Study or use of system (especially computers and telecommunications) for storing, retrieving and sending information.

inner marker: Innermost marker beacon on an instrument landing system (ILS).

instrument approach procedure (IAP): A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the approach to a landing, or to a point from which a landing may be completed with visual references. (See instrument flight rules).

instrument flight rules (IFR): A set of regulations and procedures permitting qualified and current IFR pilots to penetrate clouds and low-visibility conditions. Aircraft must be equipped with radio and navigation instruments and operate under air traffic control flight plans and clearances. Flights are monitored and traffic is separated by air traffic control. (See also visual flight rules).

instrument landing system (ILS): A precision instrument approach system utilizing radio transmitters at the runway ends that provides precise descent and course guidance to the runway, permitting aircraft to land during periods of low ceilings or poor visibility.

- **Category I (CAT I)**: An instrument approach or approach and landing with a height above threshold (HATH) or minimum descent altitude not lower than 200 feet and with either a visibility not less than ½ statute mile or a runway visual range not less than 1,800 feet.

- **Category II (CAT II)**: An instrument approach or approach and landing with a height above threshold (HATH) lower than 200 feet but not lower than 100 feet and a runway visual range not less than 1,200 feet.

- **Category III (CAT III)**: An instrument approach or approach and landing with a height above threshold (HATH) lower than 100 feet or no HATH, or a runway visual range less than 1,200 feet.

insurance broker: An insurance intermediary that represents the insured.
International Civil Aviation Organization (ICAO): A United Nations specialized agency established to manage the administration and governance of the Convention on International Civil Aviation (Chicago Convention).

**into plane fee (ITP):** The fee charged to the fuel recipient for providing the fueling service when the recipient has prepurchased the fuel.

**irregular operations (IROPs):** Events that disrupt optimized flight schedules and negatively impact the normal flow of passengers through the air transportation system.

**irregular operations (IROPs) champion:** The point person who has been identified by an airport’s management as responsible for handling coordination between all service providers and developing an airport’s IROPs plan.

**island:** An unused paved or grassy area between taxiways, between runways or between a taxiway and a runway. Paved islands are clearly marked as unusable, either by paint or the use of artificial turf.

**itinerant operation:** An arrival or departure performed by an aircraft from or to a point beyond the local airport area. Also defined as all aircraft arrivals and departures other than local operations.

**J**

**Jet A:** A type of aviation fuel used in aircraft powered by gas-turbine engines.

**joint-use airport:** An airport owned by the Department of Defense, at which military and civilian aircraft make shared use of the airfield (14 CFR 139.5). This term may also be used to refer to the mixed military and civilian use of a civilian airport.

**joint-use areas:** The areas of a civilian airport that are used by civilian and military aircraft. This is generally limited to runways and taxiways.

**K**

**key performance indicator (KPI):** A defined, quantifiable performance measurement used to help assess how an organization is performing relative to its goals.

**knot (nautical mile per hour):** Most common measure of aircraft speed. 100 knots equals 115 statute miles per hour. (For mph, multiply knots by 1.15.)

**L**

**landing distance available (LDA):** The runway length declared available and suitable for landing an aircraft.

**landing fee:** A charge paid by an aircraft owner to an airport for landing at a particular airport.

**land lease:** A long-term land lease, generally for the purpose of erecting a building or buildings or for constructing improvements to the land to be used by lessee. The land lease should reference the airport’s rules, regulations and minimum standards. The land lease price per square foot could vary by location, possibly by the length of the term, and may be connected to a business permit or a fixed-base operator (FBO) lease.
land release: The release of airport property not needed for present or future aeronautical purposes but subject to federal obligations from the terms of the agreement with the United States government. It is defined as the formal, written authorization discharging and relinquishing the FAA’s right to enforce an airport’s contractual obligations.

land use compatibility: The compatibility of land uses surrounding an airport with airport activities, particularly with the noise from aircraft operations.

land use density: As it relates to residential land uses, a number of dwelling units allowed to be developed in a given area within a land use specified in a community’s comprehensive plan.

land use intensity: As it relates to uses other than residential, a measure of allowable square footage allowed to be developed in a given area within a land use specified in the comprehensive plan (or zoning document).

large aircraft: An aircraft with a maximum certificated takeoff weight of more than 12,500 pounds.

Leadership in Energy and Environmental Design (LEED®): A rating system created by the U.S. Green Building Council that recognizes best-in-class building strategies and practices for sustainable features.

lessee: The person or business that is leasing the property from the owner.

lessor: The owner of the property that is being leased. This is typically the airport sponsor or controlling agency with the authority to enter into contractual agreements.

liability limit: The set amount beyond which an insurance company is not liable for payments due to a third party. The insured remains legally liable above this limit.

liens: Financial costs associated with improvements on airport property funded through a lending institution typically require some sort of security for the face value of the loan.

local area augmentation system (LAAS): An enhancement of the global positioning system providing greater navigation accuracy and system integrity.

local area network: A computer network covering a smaller physical space, such as an airport terminal, without the need for long-distance cabling.

localizer (LOC): Part of an instrument landing system that provides lateral deviations from a preset course.

local operation: An aircraft operation that remains no more than 25 nautical miles from the departure point, or terminates at the point of departure or does not include a stop of a duration greater than 15 minutes. Touch-and-go operations are local operations.

local traffic: Aircraft operating in the traffic pattern or within sight of the tower, aircraft known to be departing or arriving from flight in local practice areas or aircraft executing practice instrument approaches at the airport.

loss: The basis for claim for damages under the terms of a policy.

low approach: An approach over an airport or runway following an instrument approach or a visual flight rules approach, including the go-around maneuver in which a pilot intentionally does not make contact with the runway.
**Magnetic heading:** Heading of the aircraft relative to magnetic north; a magnetic heading sensor provides this heading data.

**Magnetic variation (MVAR, MAGVAR):** Difference between true north and magnetic north, varying with position. Magnetic variation drifts with time.

**Main gear width (MGW):** The distance from the outer edge to outer edge of the widest set of main gear tires.

**Major airport development:** Airport development on such a scale as to require shifts in patterns of population movement and growth, public service demands and changes in business and economic activity.

**Marketing plan:** A comprehensive document that describes an airport’s marketing activities in the upcoming fiscal year and beyond.

**Market value:** The highest price a property would command in a competitive and open market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently and knowledgeably in the ordinary course of trade.

**Mean sea level (MSL):** Altitude expressed as feet above sea level, rather than above local terrain (i.e., AGL). To ignore varying terrain elevations, all navigational altitudes and barometric altimeters are based on height above MSL. Only radar altimeters, which measure the distance between the aircraft and the ground at low altitudes, indicate actual height above the ground.

**Media relations plan:** A document that provides the organized process of how to interact with the media with clarity and purpose.

**Memorandum of agreement (MOA) or memorandum of understanding (MOU):** A document outlining the cooperative agreement and the roles and responsibilities of each party to the agreement.

**Metropolitan statistical area (MSA):** A geographical area defined by the U.S. Office of Management and Budget (OMB) for use by federal statistical agencies in collecting, tabulating and publishing federal statistics.

**Microwave landing system (MLS):** An advanced electronic system of ground-based devices and aircraft avionics that provides the aircraft with lateral, longitudinal and vertical guidance necessary for an instrument landing. In the United States, MLS technology has been supplanted by GPS.

**Middle marker:** Marker beacon located where the center of the glideslope is 200 feet above the runway, utilized in some instrument landing systems.

**Military Airport Program:** FAA program that assist former military airports in transitioning to civilian ownership.

**Military operation:** Operations performed by military groups such as the Air National Guard, U.S. Air Force, U.S. Army, U.S. Marine Corps or U.S. Navy.

**Military operations area (MOA):** An airspace established outside of Class A airspace to separate or segregate certain nonhazardous military activities from instrument flight rules traffic and to identify for visual flight rules traffic where these activities are conducted.
** Minimums**: Weather condition requirements established for a particular operation or type of operation — e.g., instrument flight rules takeoff or landing, alternate airport for instrument flight rules flight plans, etc.

** Minimum standards**: Sponsor-established minimum service levels and development space requirements for commercial aeronautical activities at the airport.

** Missed approach**: A maneuver conducted by a pilot when an instrument approach cannot be completed for a landing. The route of flight and altitude are shown on instrument approach procedure charts. A pilot executing a missed approach prior to the missed approach point (MAP) must continue along the final approach to the MAP. The pilot may immediately climb to the altitude specified in the missed approach procedure.

** Missed approach point (MAP)**: A point prescribed in each instrument approach procedure at which a missed approach procedure will be executed if the required visual reference does not exist.

** Missed approach segment**: The segment of the approach procedure, which protects the safety of aircraft executing a missed approach procedure.

** Mission**: An airport’s mission statement is its reason for existing: its function and purpose. Mission statements typically emphasize an airport’s core values, identity and competencies.

** Mitigation**: A risk response strategy that involves minimizing either the probability of the threat event or the impact (or both).

** Mitigation measure**: An action that can be planned or taken to alleviate (mitigate) an adverse environmental impact.

** Mode A**: The operating mode of onboard radar transponders that transmits a return radio signal to enhance an aircraft’s radar return and identify it with one of 4,096 controller-assigned numerical codes.

** Mode C**: The transponder operating mode that also reports aircraft altitude by transmitting data from an encoding altimeter.

** Mode S**: Type of secondary surveillance radar (SSR) equipment that provides Mode A and Mode C interrogations, discrete address (Mode S) interrogations from the ground or air and a data link capability.

** Modification to standards (MOS)**: Any approved nonconformance to FAA standards to airport design, construction or equipment procurement. MOSs are issued by the FAA on a case-by-case basis while maintaining an acceptable level of safety.

** Mogas**: Automotive fuel that is used in some aircraft with the proper FAA certifications.

** Movement area**: The runways, taxiways and other areas of an airport that are used for taxiing or hover taxiing, air taxiing, takeoff and landing of aircraft, including helicopters and tilt-rotors.

** Multiplier economic impacts**: Estimated based on direct impacts using regional input-output models that use region-specific economic data to trace inter-industry relationships.

** Mutual aid agreement**: A voluntary, noncontractual arrangement to provide short-term emergency or disaster assistance between two or more entities. It typically does not involve payment, reimbursement, liability or mandatory responses.
National Airspace System (NAS): The airspace, navigation facilities and airports of the United States along with their associated information, services, rules, regulations, policies, procedures, personnel and equipment.

National Air Transportation Association (NATA): A trade association that represents aviation service businesses; its mission is to be the leading national trade association representing the legislative, regulatory and business interests of general aviation service companies and to provide education, services and benefits to members to help ensure long-term economic success.

National Ambient Air Quality Standards (NAAQS): Maximum acceptable levels of regulated air pollutants, including an acceptable margin of error, meant to safeguard human health.

National Business Aviation Association (NBAA): A trade association that represents organizations using general aviation aircraft for business purposes; its mission is to be committed to promoting an environment that fosters business aviation in the United States and around the world.

National Environmental Policy Act (NEPA): A United States environmental law that established a U.S. national policy promoting the enhancement of the environment. NEPA requires each federal agency to disclose to the public a clear, accurate description of the potential environmental impacts that the proposed federal action and reasonable alternative to those actions would cause.

National Incident Management System (NIMS): A systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations and the private sector in seamlessly working together and managing incidents involving all threats and hazards — regardless of cause, size, location or complexity — to reduce the loss of life, loss of property and harm to the environment.

National Plan of Integrated Airport Systems (NPIAS): Public-use airports considered necessary to provide a safe, efficient and integrated system of airports to meet the needs of United States civil aviation, national defense and the U.S. Postal Service.

National Pollutant Discharge Elimination System (NPDES): The Environmental Protection Agency’s (EPA) program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under the Clean Water Act.

National Transportation Safety Board (NTSB): The independent federal agency charged with investigating and finding “probable cause” of transportation accidents.

nautical mile: The most common distance measurement in aviation, equivalent to 1.15 statute (standard U.S.) miles.

navigable waters: Interstate waters; interstate lakes, rivers and streams that are used by interstate travelers for recreational or other purposes; interstate lakes, rivers and streams from which fish or shellfish are taken and sold in interstate commerce; and the tributaries of such waters.

navigational aid (NAVAID): Any form of aid to navigation designed to assist the pilot with position and height information and wind conditions. Examples: instrument landing systems, VASIs, PAPIs, wind cones and very high frequency omnidirectional ranges (VORs).

net lease: A lease which the payments to the lessor do not include insurance and maintenance expenses, which usually are separately paid by the lessee.
Next Generation Air Transportation System (NextGen): A federal program to transform the national airspace system from a ground-based system to a satellite-based system.

N-numbers: Federal government aircraft registration numbers. U.S.-registered aircraft numbers begin with N, Canadian numbers with C or CF, German numbers with D, United Kingdom numbers with G, French numbers with F, Japanese numbers with JA, etc.

noise contours: Lines drawn on a map that connect points of equal noise exposure values. They are usually drawn in 5 dB intervals, such as DNL 75 dB values, DNL 70 dB values, DNL 65 dB values and so forth.

noise control plans: Documentation by the airport sponsor of actions to be taken by the sponsor to reduce the effect of aviation noise. These actions are to be taken by the sponsor alone or in cooperation with the FAA, airport users and affected units of local government, with appropriate comments from affected citizens. Alternative actions should be considered, particularly when proprietary use restrictions on aircraft operations are involved.

nonaeronautical revenue: Revenue generated from nonaeronautical activity, which is a broad category that encompasses the passenger-dependent activities such as food and beverage, retail concessions, parking and rental cars as well as rent on land and nonterminal facilities and fees collected for activities and services on airport property. Ground lease and property-development revenues derived from property that has the long-term designation of “nonaeronautical,” or not needed in the long term for supporting aeronautical activities, can also be classified as nonaeronautical revenue.

nonaeronautical-use lease: Not all tenants on an airport may operate an aircraft or provide an aviation-related service. This type of lease will be specific to the type of nonaeronautical land use while complying with FAA grant assurance conditions, if the property was originally purchased through a federal grant. A common nonaeronautical use on a small airport is leasing ground for farming operations.

nonattainment area: An area that does not meet one or more of the criteria pollutants of the National Ambient Air Quality Standards, as defined in the Clean Air Act of 1970.

nondirectional beacon (NDB): An older radio navigation system in which an automatic direction finder points to the beacon, thus providing a relative bearing.

nonhub commercial service airport: Airport with more than 2,500 annual passenger boardings (enplanements) but less than 0.05 percent of the national passenger boardings.

nonmovement area: The areas of an airport that are used for taxiing or hover taxiing, or air taxiing aircraft including helicopters and tilt-rotors, but are not part of the movement area (i.e., the loading aprons and aircraft parking areas).

nonprecision approach procedure: A standard instrument approach procedure with minimums not lower than ¾ mile and/or 250-foot ceiling, for which at least horizontal guidance is provided with a ground-based navigational aid or global positioning system. A nonprecision approach utilizing GPS may also provide vertical guidance, depending on the approach and equipage of the aircraft.

nonprecision instrument runway: A runway where the best approach is a nonprecision instrument approach procedure and no precision approach facility or procedure is planned.

nonprimary airport: An NPIAS airport with 10,000 or fewer than 10,000 annual passenger boardings (enplanements).
nonprimary commercial service airports: Airports with scheduled passenger service and annual passenger boardings (enplanements) between 2,500 and 10,000.

nontowered airport: An airport without a control tower. The majority of America’s 13,000 airports are nontowered (only 680 airports have control towers). Nontowered airports are far from being “uncontrolled.” Pilots follow traffic pattern procedures and self-announce positions and intentions using the common traffic advisory frequency, usually called the UNICOM frequency.

nontraditional revenue sources: Any local source that can be developed at the airport for enhancing the revenue base (e.g., oil, gas and mineral rights, nonaeronautical property development, local agriculture, forestry, hunting rights, solar installations, airport cities or mixed-use development, etc.)

Notice to Airmen (NOTAM): A notice containing information concerning the establishment of, condition of, change to any component (facility, service or procedure) of or hazard in the National Airspace System, the timely knowledge of which is essential to personnel concerned with flight operations.

Notice to Airmen (NOTAM) Manager: The modernized NOTAM system that digitizes the collection, dissemination and storage of NOTAMs.

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object-free area (OFA): The area of the airport centered on the runway, taxiway or taxilane centerline provided to enhance the safety of aircraft operations by having the area free of objects, except for those that are necessary for air navigation or aircraft ground maneuvering, which are required to be mounted on frangible couplings.

obstacle: An existing object, object of natural growth or terrain at a fixed geographical location, or which may be expected at a fixed location within a prescribed area, with reference to which vertical clearance is or must be provided during flight operation.

obstacle clearance surface (OCS): A surface that defines the minimum required obstruction clearance for approach or departure procedures.

obstacle-free zone (OFZ): A volume of space above and adjacent to a runway and its approach lighting system, if one exists, free of all fixed objects except FAA-approved frangible aeronautical equipment and clear of vehicles and aircraft in the proximity of an airplane conducting an approach, missed approach, landing, takeoff or departure.

obstruction: An object that exceeds a limiting height or penetrates an imaginary surface described by current Federal Aviation Regulations (Part 77).

Obstruction Evaluation/Airport Airspace Analysis (OE/AAA): A public website provided by the FAA to enable individuals and organizations engaged in sponsoring the construction or alternation of potential obstructions on and off airport property to easily notify the FAA of their intents and activities. This allows the FAA to evaluate impacts of these activities on the airspace system.

Occupational Safety and Health Administration (OSHA): An agency within the United States Department of Labor, responsible for assurance of “safe and healthful working conditions” through setting and enforcing labor standards and educational and training outreach on workplace safety.

on-airport: Activities occurring on an airport. These activities broadly include airside activities, terminal services to passengers (including concessions), air-related services by government agencies, construction and airport administration.
**operating cost escalation**: Although there are many variations of escalation clauses, all are intended to adjust rents by reference to external standards, such as published indexes, negotiated wage levels or expenses related to the ownership and operation of buildings.

**operation**: A takeoff or a landing.

**operational maintenance**: Activities performed to keep an airport operating due to weather or environmental conditions, such as snow and foreign object debris removal.

**outer marker**: Marker beacon located 5 to 7 miles from the end of the runway and a component of incompatible land use.

**overlay zoning**: A regulatory tool that creates a special zoning district, placed over an existing base zone(s), which identifies special provisions in addition to those already in place in the underlying base zone.

**owned media**: Content the airport is in control of — its website, social media, etc.

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**paid media**: Advertising purchased through publications, radio or television stations, websites and social media.

**parallel taxiway**: A taxiway parallel to a runway.

**passenger facility charge (PFC)**: A program for the collection of fees per enplaned passenger per flight segment, with a maximum of two flight segments.

**passenger leakage**: The passengers that leave the airport catchment area to access air service from a competing airport instead of the nearest airport, often because of lower fares, more flights or better reliability.

**passenger revenue**: The multiplication of revenue passenger miles by the yield.

**passenger yield**: The average fare per passenger mile.

**pavement condition index (PCI)**: A numerical rating of the pavement condition based on a visual observation of distresses.

**pavement management program (PMP)**: Also referred to as pavement maintenance management program (PMMP) or pavement management system (PMS). Procedures for collecting, analyzing, maintaining and reporting pavement data to assist an airport in finding optimum strategies for maintaining pavements in a safe, serviceable condition over a given period of time for the least cost.

**pavement reconstruction**: May be necessary in situations when there is no redeemable pavement life (rehabilitation is not a viable option), corrections are needed in the subgrade, there are changes to geometrics or there is an increase in traffic volume.

**pavement rehabilitation**: Techniques include overlays and full-depth reclamation.

**pavement routine maintenance**: Maintenance required to preserve the pavement to achieve the design life, planned and performed on a routine basis, such as yearly crack sealing and regular inspection of the pavements.

**peer review**: Allowing airport operators to seek guidance and advice from airport-manager peers who have experienced similar circumstances or operate within similar constraints.
**performance-based budget**: This budgeting technique begins with established performance goals, or return-on-investment goals, and attempts to ensure that capital and operating expenditures are set to achieve these goals.

**performance-based navigation (PBN)**: The broad range of technologies that rely on the performance and capabilities of equipment on board the aircraft.

**phonetic alphabet**: A list of words are used in aviation with the intent to reduce the possibility of a misunderstanding.

**pilot-controlled lighting (PCL)**: A remote system controlled by a pilot to initiate and operate the runway lights. It is typically located at a nontowered airport.

**pilot weather report (PIREP)**: Voluntary pilot observation of in-flight weather conditions radioed to air traffic control or a flight service station. Information is used by other pilots to avoid adverse weather and by the National Weather Service to amend or update forecasts.

**policymakers**: Individuals who have the authority to set the policy framework of (or determine the policies for) an organization. In the case of small airports, policymakers include the members of the airport’s governing body or airport sponsor. Some examples of policymakers include city council members, county commissioners and airport board members.

**port of entry**: An official location where U.S. Customs and Border Protection (CBP) officers or employees are assigned to accept entries of merchandise and passengers, collect duties and enforce the provision of the CBP and related laws.

**post**: In regards to social media, an item on a blog or Facebook.

**precision approach path indicator (PAPI)**: A visual aid that provides guidance information to help a pilot acquire and maintain the correct approach, relative to aircraft altitude, to a runway.

**precision instrument procedure**: A standard instrument procedure for an aircraft to approach an airport in which a vertical and horizontal guidance is provided to the pilot using an instrument landing system, military precision approach radar or global positioning system (GPS), with visibility of ¾ mile or less and or a ceiling less than 250 feet.

**precision instrument runway**: A runway with an instrument approach procedure utilizing an instrument landing system, microwave landing system, precision approach radar or global positioning system providing precision approach minimums.

**preferential runway use (program)**: A noise abatement action whereby the FAA Air Traffic Organization, in conjunction with FAA Airports, assists the airport sponsor in developing a program that gives preference to the use of a specific runway(s) to reduce overflight of noise-sensitive areas.

**preferential-use space**: Space rented to an airline in which it has preferred, but not exclusive, use of the space and may be required to share the space if a certain level of activity is not maintained.

**premises**: The premises, or leased area, define the land and improvements subject to the lease agreement. It should include a legal description of the premises, including size and location, included improvements and equipment.

**press kit**: A document that contains information and photos about the airport and is used to submit publicity materials to the media for consideration.
**Preventive maintenance**: Actions performed to detect, preclude or mitigate the infrastructure system or its components, including routine scheduled activities, to keep a system performing at its best.

**Preventative maintenance program**: A program designed to identify and correct deficiencies before failures occur, thus preventing costly repairs or replacements.

**Primary airport**: Publicly owned airport with scheduled air carrier service and more than 10,000 passenger boardings (enplanements) per year.

**Primary surface**: A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The surface width varies from 250 feet to 1,000 feet, based on the runway category and approach type.

**Private pilot**: A certificate that allows a pilot to fly passengers for personal transportation and business. It requires the pilot to be at least 17 years old, have a minimum of 40 hours of flight experience and training (35 hours under Part 141), and pass at least a third-class medical exam, a written exam and flight test. A private pilot may not “fly for hire or compensation” but may share expenses equally with passengers.

**Prohibited area**: An airspace area for which flight is prohibited, except by prior arrangement with the controlling agency. An example is the P-56 area over downtown Washington, D.C., which prohibits flight over the White House.

**Proprietary exclusive rights**: The owner of a public-use airport may provide aeronautical services to the public at the airport. This right may be exercised by the airport in the absence of a qualified commercial operator or when it is in the best interest of the public and must be provided by the airport owner’s staff.

**Public accommodation**: A facility, operated by a private entity, with operations that affect commerce and provide one or more of the following: lodging, food and beverage service, exhibition or entertainment, places for public gathering, sales or rental of goods or services, public transportation, recreational services, educational services, social services and places for exercise or recreation.

**Public entity**: Any state or local government, or any department, entity, special district or other instrumentality thereof.

**Public hearing**: A gathering under the direction of a designated hearing officer for the purpose of allowing interested parties to speak and hear about issues of concern.

**Public airport**: Any airport that is used or to be used for public purposes, in the control of a public agency, the land area of which is publicly owned.

**Public-use airport**: Airport available for public use; may be publicly or privately owned.

**Qualifications-based selection**: A fair and open selection process based on the qualifications and experience of the firms. It is required for architectural, engineering and planning services for AIP grant-funded projects and may be required for non-AIP projects based on state procurement laws.
rates: A fixed price paid for something for which there is value, usually property, buildings or fixed assets.

reactive maintenance: Fixing something after it breaks.

record of decision (ROD): A written decision of the FAA’s approval or disapproval of an action proposed in an environmental impact statement. The ROD explains what the airport sponsor proposes to do and why, identifies actions the FAA and other federal agencies must take, explains the alternatives analyzed and which one is environmentally preferred and identifies required mitigation measures.

recreational pilot: A pilot certificate requiring less training than a private certificate. Privileges are limited according to flight within 50 nautical miles of base, carrying no more than one passenger; using nontowered airports; and flying during daylight hours only, unless restrictions are removed through further training. A recreational pilot may not share expenses. Few new pilots currently choose the recreational certificate.

regional airport: An airport that is geographically associated near a hub airport and therefore is an important participant in coordinated planning.

regulations: Rules issued by the executive branch departments and agencies of the federal government and are codified in the Code of Federal Regulations (CFR).

reliever airports: General aviation airports in metropolitan areas that provide pilots with an alternative to using congested commercial service airports or provide general aviation access to the surrounding area.

remote pilot airman certificate: FAA authorization to operate a UAS for other-than-recreational purposes in the United States. This replaces the previous certificate of authorization under Section 333.

remote pilot in command with UAS rating: A certified remote pilot airman responsible for the small UAS operation.

renewal option: A clause giving a tenant the right to extend the term of a lease, usually for a stated period of time, and at a rent amount given for in the option language.

required navigation performance (RNP): A type of PBN that allows an aircraft to fly a specific path between two 3-D defined points in space.

residual rate methodology: Signatory airlines agree to pay any costs of operating the airport system, airport or a specific cost center that are not allocated to other users or covered by nonairline revenues. Signature airlines assume the risk of overall revenue shortfall and receive the benefit from any revenue surpluses.

restricted area: Airspace that (when “active” or “hot”) usually excludes civilian aircraft. Examples include airspace for rocket flights, air-to-air combat practice or ground-based artillery practice. Temporary restricted areas are established for events such as forest fires, natural disasters or major news stories. Flight through a restricted area may be authorized by the “controlling agency” or the FAA.

retention ponds: Stormwater management ponds that hold water for long periods of time, generally more than 48 hours.

revenue diversion: Use of airport revenue for nonaeronautical uses or payment, in lieu of taxes of services in excess of rates or services received.
**reversionary clause**: The reversion of ownership of the improvements by the lessee to the landlord at the end of the lease agreement.

**right of entry**: The lessor needs to have the right to enter the hangar for inspection purposes and to make repairs.

**risk**: The chance of loss or injury measured in terms of severity and probability.

**risk management**: The practice of dealing with risks in a process-oriented fashion to keep risks within organizational tolerances.

**risk management plan**: A document outlining the details of risk management approaches, responsibilities, resources, terms, tolerances, timing and processes.

**rotating beacon**: A rotating light providing visual guidance for the airport between sunset and sunrise and during times when the reported ceiling or visibility is below basic visual flight rules minimums.

**rules and regulations**: The document adopted by the airport sponsor to govern the general conduct of the public, tenants, employees and commercial users of the airport.

**runway (RWY)**: A defined rectangular area on a land-based airport that is prepared for the landing and takeoff run of aircraft along its length. Runways are normally numbered in relation to their magnetic direction, rounded off to the nearest 10 degrees, e.g., Runway 01, Runway 25.

**Runway Condition Assessment Matrix (RCAM)**: Chart providing the criteria to assist airport operators in identifying the runway conditions during winter or rain events.

**runway design code (RDC)**: A code signifying the design standards to which the runway is to be built.

**runway edge lights**: Lights used to define the lateral limits of a runway.

**runway end identifier lights (REILs)**: Two synchronized flashing lights, one on each side of the runway threshold, that provide a pilot with a rapid and positive visual identification of the approach end of a particular runway.

**runway heading**: The magnetic direction indicated by the runway number. When cleared to “fly/maintain runway heading,” pilots are expected to comply with the air traffic control clearance by flying the heading indicated by the runway number without applying any drift correction — e.g., Runway 4, 040 magnetic heading; Runway 20, 200 magnetic heading.

**runway holding position (hold line)**: The purpose of holding-position markings are to prevent aircraft and vehicles from entering critical areas associated with a runway or navigational aids or to control traffic at the intersection of taxiways.

**runway incursion**: A top FAA safety concern, runway incursions are defined by the FAA as “any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and takeoff of aircraft.” Runway incursions can be caused by pilot deviations, air traffic controller operational incidents and ground vehicle deviations.

**runway protection zone (RPZ)**: A trapezoidal area at ground level off the runway end to enhance the protection of people and property on the ground, which is achieved through airport owner control over RPZs. Such control includes clearing RPZ areas (and keeping them clear) of incompatible objects and activities. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ.

**runway safety area (RSA)**: A cleared, drained, graded and preferably turfed area symmetrically located about the runway which, under normal conditions, is capable of supporting snow removal, firefighting and
rescue equipment and of accommodating the occasional passage of aircraft without causing major damage to the aircraft.

**runway threshold**: The beginning of that portion of a runway usable for landing or takeoff.

**runway visual range (RVR)**: Visibility along a runway. At major airports, it is measured automatically by transmissometer.

### Safety Terms

**safety management system (SMS)**: A top-down, organization-wide approach to managing safety risk and assuring the effectiveness of safety-risk controls. It includes systematic procedures, practices and policies for managing safety risk.

**safety risk assessment (SRA)**: Assessment of a system or component, often by a panel of system subject matter experts and stakeholders, to compare an achieved risk level with the tolerable risk level.

**safety risk management (SRM)**: A standard set of processes to identify and document hazards, analyze and assess potential risks and develop appropriate mitigation strategies.

**safety risk mitigation**: Anything that mitigates the safety risk of a hazard.

**scheduled operation**: Any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier, for which the air carrier or its representatives offers in advance the departure location, departure time and arrival location.

**scoping**: An early and open process for determining the scope of issues to be addressed in an environmental assessment or environmental impact statement and identifying the significant issues related to a proposed action. The purpose of scoping is to identify significant environmental issues to be analyzed in greater depth, identify and eliminate from detailed study issues that are insignificant or that have been covered by prior environmental review and set the temporal and geographic boundaries of the environmental impact statement.

**secondary containment**: A control measure placed or built around a storage vessel to prevent its contents from flowing into the drainage system during a spill or discharge, typically associated with a fueling system.

**Section 333**: Part of the FAA Modernization and Reform Act of 2012 that grants the FAA the authority to determine and grant UAS operators the authorization to operate in the NAS, subject to certain restrictions and requirements.

**Section 333 exemption**: Predated Part 107; a case-by-case approval process for UAS commercial operations in the NAS that provides operators with a safe and legal entry into the NAS, subject to certain requirements and restrictions.

**sector or area planning**: Area plans may be developed as a segment of a community master plan/comprehensive plan to set forth overarching goals and growth strategy for a large geographical area.

**security**: The type of deposit or security fee, and the conditions under which it is to be paid and returned to the lessee, should be identified as part of the lease.

**security fencing**: Fencing of chain link fabric used to secure the AOA or airport perimeter. This can be accomplished in a variety of ways, including installation of fencing of heights from 6 to 10 feet, and may be topped with three strands of barbed wire.
security identification area (SIDA): A secure area of the airport that requires an appropriately vetted employee to have and display a security identification badge.

self-fueling: The fueling or servicing of an aircraft by the owner of the aircraft.

self-inspection program: A program to find potential hazards and address them to keep the airport in good operating condition. The program includes four types of inspections generally used by airports as part of a self-inspection program: routine or scheduled, continuous surveillance, periodic condition and special inspections.

sensitive security information (SSI): Information that, if publicly released, would be detrimental to transportation security. SSI is not classified information, but there are specific procedures for recognizing, marking, protecting, safely sharing and destroying SSI.

service animal: A dog that has been trained to do work or perform tasks for an individual with a disability. The tasks performed by the dog must be directly related to the person’s disability.

set-aside funding: Minimum percentages or amounts that represent requirements for dedicated Airport Improvement Program funding, including funding of noise-compatibility projects, military airport programs, certain reliever airports and projects for capacity, safety and security.

shoulder: An area adjacent to the defined edge of paved runways, taxiways or aprons, providing a transition between the pavement and the adjacent surface.

signatory airline: An airline that executes an agreement with a particular airport. At many airports, these airlines pay lower rates and charges than nonsignatory airlines.

small aircraft: An aircraft with a maximum certificated takeoff weight of 12,500 pounds or less.

small airport (as defined for this project): General aviation, nonhub commercial service and airports with limited and/or volunteer staff.

Small Community Air Service Development Program (SCASDP): Established by Congress under the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century to help small communities enhance their air service. Administered by the U.S. Department of Transportation, the program provides grants to help small communities achieve sustainable air service.

small unmanned aircraft: An unmanned aircraft weighing less than 55 pounds (25 kilograms), including everything that is onboard or otherwise attached to the aircraft.

small unmanned aircraft system (sUAS): An unmanned aircraft and its associated elements, including communication links and the components that control the small unmanned aircraft, that are required for the safe and efficient operation of the small unmanned aircraft in the National Airspace System.

snow and ice control plan (SICP): A document describing the airport’s approach to snow removal operations, including pre- and postseason subjects, as well as the procedures for addressing winter storms and notifying users of airfield conditions.

snow removal equipment (SRE): Equipment, typically trucks and tractors, used at an airport to remove snow.

social media: The interaction among people in which they create, share and/or exchange information and ideas in virtual communities and networks.

social media management: The utilization of tools to grow social media presence, monitor accounts and keep track of online activities of various social platforms.
**soft resiliency:** The ability of systems to absorb and recover from the impacts of disruptive events without fundamental changes in function or structure.

**solar farm:** The large-scale application of solar photovoltaic panels to generate green, clean electricity at scale, usually to feed into the grid.

**Solar Glare Hazard Analysis Tool (SGHAT):** A web-based tool that predicts energy production and the potential for solar glare and ocular impacts from an array of photovoltaic panels.

**solar installation:** Any ground-based solar energy installation and those solar energy installations co-located with a building or structure (e.g., rooftop installations).

**special event:** An activity that occurs for a limited or short duration, presented to a live audience.

**specialized aviation service operation (SASO):** Sometimes known as single-service providers or special FBOs, performing less than full service. These types of companies differ from a full-service FBO in that they typically offer only specialized aeronautical service, such as aircraft sales, flight training, aircraft maintenance or avionics services.

**special-use airspace (SUA):** All airspace for which restrictions or prohibitions to flight are imposed for military or government needs (See military operations area, restricted area and prohibited area).

**Spill Prevention, Control and Countermeasure (SPCC) plan:** Required by EPA (40CFR112.7) for any facility with a product storage capacity over 1,320 gallons.

**split-load:** The term applied to the purchase and delivery of less than a full tanker of fuel.

**stakeholder:** A person, group or organization that has interests or concerns in the airport and can affect or be affected by the airport’s actions, objectives and policies, examples of which are employees, tenants, first responders and air traffic control tower personnel.

**stakeholder involvement:** The meaningful, timely engagement of various groups, such as passengers, tenants, state and federal agencies and the general public, who have an interest in airport activities.

**stand-alone financial system:** An “off the shelf” financial module that can be used for accounting and bill processing to support airport operations, but would not be tied to a larger, all-inclusive enterprise operating system.

**standard instrument departure (SID):** A planned instrument flight rules air traffic control departure procedure printed for pilot use in graphic and/or textual form. SIDs provide transition from the terminal to the appropriate en route structure.

**standard terminal arrival route (STAR):** A planned instrument flight rules air traffic control arrival route published for pilot use in graphic and/or textual form. STARs provide transition from the en route structure to an outer fix or an instrument approach fix/arrival waypoint in the terminal area.

**state apportionment:** Available for all airports within a state, excluding primary airports but including reliever and nonprimary commercial service airports, with the available funds being apportioned for airports within that state, on the basis of the state’s proportional population to the total population of the eligible states and the state’s proportional area to the total area of the eligible states. Only in block grant states are the state apportionment funds apportioned to the state. In non-block grant states, FAA Airports programs and disburses the funds, but the state may provide input into programming, along with using the FAA priority system.
**State Block Grant Program**: An FAA program in which 10 states participate that provides Airport Improvement Program (AIP) funds to the state to allow the states to program, prioritize, select and fund AIP projects at small airports.

**state system plan**: A planning tool to identify the development needed to establish a viable system of airports within the state.

**statutes**: Laws enacted by Congress; statutes with continuing effects are generally codified in the United State Code (USC).

**sterile area**: An area of controlled access for passengers boarding aircraft.

**stopway**: An area beyond the takeoff runway, no less wide than the runway and centered upon the extended centerline of the runway, able to support the aircraft during an aborted takeoff, without causing structural damage to the aircraft, and designated by the airport authorities for use in decelerating the aircraft during an aborted takeoff.

**stormwater pollution prevention plan (SWPPP)**: A stormwater management plan addressing stormwater discharge from the airport that incorporates best management practices.

**straight-in instrument approach**: An instrument approach wherein final approach is begun without first having executed a procedure turn, and not necessarily completed with a straight-in landing or made to straight-in landing weather minimum.

**strategic plan**: A written plan identifying the vision and long-term directional goals for an airport; typically, it has a time frame of 10 to 20 years.

**strengths, weaknesses, opportunities and threats (SWOT) analysis**: An exercise that identifies an airport’s strengths, weaknesses, opportunities and threats.

**student pilot**: A pilot training for a private pilot certificate, either before or after the first solo. A student must obtain a third-class medical certificate through an examination by an FAA-designated aviation medical examiner before being allowed to fly solo in a powered aircraft. The medical certificate for a student pilot has a student “license” printed on the back.

**sublease**: Typically between tenants on the airport and an additional private tenant. Standard airport lease or rental agreements should include provisions, which regulate the legal authority of a tenant to sublet all or portion of a property they lease from the airport sponsor and the requirement to obtain approval from the airport sponsor prior to subleasing the property. Sublease agreements must also conform to the airport’s minimum standards.

**substantial adverse aeronautical effect**: An impact on navigable airspace that necessitates a change to an instrument approach procedure, an approach minimum, an element of an airport or a navigational aid or a change in a vectoring altitude, so as to meet minimum procedure or facility design standards. The impact has to affect at least one daily operation (or a similar cumulative annual number of operations) in order to be considered significant.

**substantially complete**: When a project is sufficiently complete in accordance with the contract documents so that the owner can occupy or use the project for its intended purposes.

**substantial use**: A situation in which a military unit has a significant enough impact on a civilian airport that reimbursement for operations and maintenance costs is warranted.

**surface movement guidance and control (SMGC)**: A combination of signage, lighting and markings that allow safer airport operations in low-visibility and normal weather conditions.
**Surplus Property Act of 1944**: An act of Congress that provided for disposition of surplus government property and infrastructure, including airports, to state and local subdivisions.

**sustainability master plans**: An FAA initiative to incorporate sustainability into the master planning process.

**T**

**takeoff and landing performance assessment (TALPA)**: A method to accurately and consistently determine the runway condition when a paved runway is not dry.

**takeoff distance available (TODA)**: The takeoff run available (TORA) plus the length of any remaining runway or clearway beyond the far end of the TORA; the full length of TODA may need to be reduced because of obstacles in the departure area.

**takeoff run available (TORA)**: The runway length declared available and suitable for the ground run of an aircraft taking off.

**taxi**: The movement of an airplane under its own power on the surface of an airport; also, the surface movement of helicopters equipped with wheels.

**taxilane**: The portion of the aircraft parking area used for access between taxiways, aircraft parking positions, hangars, storage facilities, etc.

**taxiway (TWY)**: A defined path, from one part of an airport to another, selected or prepared for the taxiing of aircraft.

**taxiway design group (TDG)**: A classification of airplanes based on outer to outer main gear width (MGW) and cockpit to main gear distance (CMG).

**taxiway/taxilane safety area (TSA)**: A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft deviating from the taxiway.

**tenant**: Any person, other than an aircraft operator or foreign air carrier, that has an agreement with the airport operator to conduct business on airport property.

**terminal area**: The space of a building used to provide passenger service to the traveling public.

**T-hangar**: A hangar building, typically containing multiple units. This type of hangar derives its name from the shape of the interior of the units (in the form of a T), which increases the efficiency of the design so as to accommodate the wingspan and the tail section of an aircraft.

**threatened species**: Any species (including animals, plants, fungi, etc.) that are vulnerable to endangerment in the near future.

**threshold**: The beginning of that portion of the runway usable for landing.

**threshold sitting standards**: Runway threshold sitting criteria, based on runway approach type and airplane design group.

**through-the-fence**: Access to the airfield granted by the sponsor or a public airport to a person or business that owns property adjacent to the airport for the person’s or business’ aircraft, or authorized aircraft to taxi onto and use the airport.

**Title 49 Code of Federal Regulations (CFR) Part 1500**: Refers to applicability, terms and abbreviations.


**Title 49 Code of Federal Regulations (CFR) Part 1542**: Refers to airport security.

**Title 49 Code of Federal Regulations (CFR) Part 1544**: Refers to aircraft operator security.

**Title 49 Code of Federal Regulations (CFR) Part 1546**: Refers to foreign air carrier security.

**Title 49 Code of Federal Regulations (CFR) Part 1548**: Refers to indirect air carrier security.

**Title 49 Code of Federal Regulations (CFR) Part 1550**: Refers to aircraft security under general operating and flight rules (12,500 Rule).

**Title 49 Code of Federal Regulations (CFR) Part 1552**: Refers to flight schools.


**total cost of ownership**: Includes the cost to procure and construct a physical asset and the long-term cost to operate and maintain the asset.

**total economic impacts**: Direct impacts, plus multiplier impacts for jobs, payroll and output.

**touch-and-go operation**: A practice maneuver consisting of a landing and a takeoff performed in one continuous movement: the aircraft lands and begins takeoff roll without stopping. A touch-and-go is considered two operations.

**traffic pattern**: A standard rectangular flight pattern around the landing runway at an airport. It includes 45-degree or crosswind entry to the rectangle, with downwind, base and final legs as sides of the rectangle. Standard are 90-degree left turns around the rectangle (a nonstandard right-hand traffic pattern is noted in airport facility directories) with downwind flown at a specified altitude, usually 1,000 or 1,500 feet above the airport elevation. At airports with a control tower, the pattern may be modified or short cut according to air traffic control instructions.

**transfer of development rights arrangements**: Can be used as either a pro-active measure or a mitigation measure. The program allows local governments to set up “sending” and “receiving” areas within their jurisdictional boundaries, permitting land owners to sell or transfer their land development entitlements from a less desirable (e.g., less compatible area) to an area that is more suitable for dense development.

**transient aircraft**: Aircraft not based at the airport.

**transitional surface**: Surfaces that extend outward and upward at right angles to the runway centerline, and the runway centerline is extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface, which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

**transponder**: A special onboard 1090 MHz radio transmitter to enhance and code an aircraft’s radar return. When interrogated by ground radar, it transmits a return signal that controllers can use to identify
and tag the flight on their computerized video display radar screen. Paired with an altitude encoder, Mode C transponders also transmit the aircraft’s altitude. All aircraft flying in Class B airspace or higher than 10,000 feet are required to have Mode C transponders.

**transport airport**: An airport designed, constructed and maintained to serve airplanes, having approach speeds of 121 knots or higher.

**transportation network company (TNC)**: A company that uses an online platform to connect passengers with drivers using their personal, noncommercial vehicles.

**Transportation Research Board (TRB)**: Part of the nonprofit National Research Council; provides leadership in transportation innovation and progress through research and information exchange.

**Transportation Security Administration (TSA)**: An agency of the U.S. Department of Homeland Security responsible for protecting the U.S. transportation systems and the traveling public.

**Transportation Security regulations**: Regulations issued by the Transportation Security Administration in Title 49 of Code of Federal Regulations (CFR), contained in parts 1500 to 1699.

**triple net lease**: A lease in which the lessee pays rent to the lessor as well as all taxes, insurance and maintenance expenses that arise from the use of the property.

**true heading**: Heading of the aircraft relative to true north.

**turbojet aircraft**: An aircraft having a jet engine in which the energy of the jet operates a turbine that in turn operates the air compressor.

**turboprop**: An airplane using a turboprop engine, a jet rather than piston engine connected to a propeller. Such aircraft can be single-engine or multiengine. Turboprop engines are increasingly used when more horsepower is needed for speed or payload than the 300 to 400 horsepower available from current light-aircraft piston engines.

**turboprop aircraft**: An aircraft having a jet engine in which the energy of the jet operates a turbine that drives the propeller.

**Twitter**: A free social networking service that allows registered members to broadcast short posts called “tweets.” Twitter members can broadcast tweets and follow other users’ tweets by using multiple platforms and devices. Tweets and replies to tweets can be sent by cellphone text message, desktop client or by posting on the Twitter.com website.

**U**

**ultralight vehicle**: An aeronautical vehicle operated for sport or recreational purposes that does not require FAA registration, an airworthiness certificate or pilot certification. Primarily a single-occupant vehicle, although some two-place vehicles are authorized for training purposes. Operation in certain airspace requires authorization from air traffic control.

**uncontrolled airport**: (see nontowered airport).

**undue burden**: Significant difficulty or expense.

**UNICOM**: A common, multipurpose radio frequency used at most nontowered airports as the common traffic advisory frequency. The Aircraft Owners and Pilots Association coined the term (derived from the words “universal communications”) in the 1950s. UNICOM is also used by a fixed-base operator for
general administrative uses, including fuel orders, parking instructions, etc. Originally 122.8 MHz universally, it now includes 122.7, 123.0 and other frequencies.

unmanned aerial vehicle (UAV): Also known as a drone or unmanned aircraft system (UAS) is an aircraft without a human pilot aboard. The flight of UAVs may operate either under remote control by a human operator, or fully or intermittently autonomously, by onboard computers.

unmanned aircraft: An aircraft operated without the possibility of direct human intervention from within or on the aircraft.

unscheduled operation: Any common carriage passenger-carrying operation for compensation or hire, using aircraft designed for at least 31 passenger seats, conducted by an air carrier for which the departure time, departure location and arrival location are specifically negotiated with the customer or the customer’s representative.

urban growth management (UGM): The identification and management of the demands on municipal facilities, improvements or services created by any proposed residential, commercial, industrial or other type of development. UGM is intended to (1) provide the means for satisfying such demands; (2) identify any harmful effects of development; and (3) protect the jurisdictions and their residents against such harmful effects by minimizing the costs of municipal facilities, improvements and services. The intent of UGM is usually not to prevent development or growth, but rather to avoid free or disorganized development or growth in the UGM area, which is generally located in and around the fringe of an urban area. The UGM area is usually either relatively undeveloped or predominantly agricultural and lacks most, if not all, municipal facilities, improvements or services.

U.S. Customs and Border Protection (CBP): A federal law-enforcement agency that regulates and facilitates international trade, collecting import duties and enforcing U.S. regulations, including trade, customs and immigration.

use of premises: The use of premises portion of the lease document specifically states what activities can and cannot be performed within the leasehold.

user-fee airports (UFA): Small airports approved by a commissioner of the CBP to receive, for a fee, the service of a CBP officer for the processing of aircraft, their passengers and cargo entering the United States.

U.S. terminal instrument procedures (TERPS): Procedures for instrument approach and departure of aircraft to and from civil and military airports.

utility airport: An airport designed, constructed and maintained to serve airplanes having approach speeds less than 121 knots.

V

vehicle gate: Vehicle gates can be as straightforward as single- or double-swing, manually operated or electrically operated.

very light jets (VLJs): Jet aircraft with a maximum take-off weight of 10,000 pounds, certified for single-pilot operations, equipped with advanced avionic systems and priced below other business jets.

very high frequency (VHF) omnidirectional range (VOR): A type of radio beacon on which a tried-and-tested radio navigation system is largely based. It broadcasts 360 radial signals like spokes in a wheel; equipment on the aircraft determines which of these radials the aircraft is on to provide direction to and from an airport or given location.
**Victor airway:** A control area, or portion thereof, established in the form of a corridor, the centerline of which is defined by VHF omnidirectional range.

**visibility:** The ability, as determined by atmospheric conditions and expressed in units of distance, to see and identify prominent unlighted objects by day and prominent lighted objects by night. Visibility is reported as statute miles, hundreds of feet or meters.

- **flight visibility:** The average forward horizontal distance, from the cockpit of an aircraft in flight, at which prominent unlighted objects may be seen and identified by day and prominent lighted objects may be seen and identified by night.
- **ground visibility:** Prevailing horizontal visibility near the earth’s surface, as reported by the National Weather Service or an accredited observer.

**visual approach:** An approach to an airport wherein an aircraft on an instrument flight rules flight plan, operating in visual flight rules conditions under the control of a radar facility and having an air traffic control authorization, may deviate from the prescribed instrument approach procedure and proceed to the airport of destination, served by an operational control tower, by visual reference to the surface.

**visual approach slope indicator (VASI):** A system of lights arranged to provide visual descent guidance information during the approach to a runway (see also precision approach path indicator).

**visual area surface:** The 20:1 visual area surface is defined within Section 3.3.2.c of the TERPS order. The surface has a vertical slope of 20:1, extending from the runway’s threshold elevation to the decision altitude of the specific approach. It begins 200 feet prior to the runway threshold and is intended to protect aircraft during the last stages of an approach, which follows the transition from instruments to visual guidance.

**visual flight rules (VFR):** A defined set of FAA regulations covering the operation of aircraft, primarily by visual reference to the horizon (for aircraft control) and see-and-avoid procedures (for traffic separation). VFR weather minimums for controlled airspace require at least a 1,000-foot ceiling and 3 miles of visibility, except for “special VFR” clearances to operate “clear of clouds.”

- **marginal VFR** — Weather of less than the 3,000-foot ceiling and 5 miles of visibility, but above the required “1,000 and three” (see instrument flight rules).

**visual line of sight:** Unaided (corrective lenses and/or sunglasses exempted) visual contact between a pilot in command or a visual observer and a UAS, sufficient to maintain safe operational control of the aircraft, know its location and be able to scan the airspace in which it is operating, to see and avoid other air traffic or objects aloft or on the ground.

**visual observer:** A person designated by the remote pilot in command to assist the remote pilot in command, and the person manipulating the flight controls of the small unmanned aircraft system, to see and avoid other air traffic or objects aloft or on the ground.

**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.

**Voluntary Airport Low Emission Program (VALE):** FAA grants available to commercial service airports in nonattainment or maintenance areas for National Ambient Air Quality Standards for eligible project types, including mobile and stationary equipment that reduce on-airport emissions.
**VORTAC:** Collocation of VHF omnidirectional range (VOR) and UHF tactical air navigation aid (TACAN) providing distance and bearing to a station; a basic guidance mode, providing lateral guidance to a set of a VOR station and a TACAN station that are collocated.

**W**

**wake turbulence:** Turbulent air condition caused by small, tornado-like horizontal whirlwinds trailing an aircraft’s wingtips (wingtip vortices). Wake turbulence associated with larger aircraft flying at slow speeds (as on takeoff or landing approach) is the most severe and can cause loss of control for smaller aircraft following close behind. Controllers use defined separation standards to avoid the problem for takeoff, landing, approach and departure operations. The term includes vortices, thrust stream turbulence, jet blast, jet wash, propeller wash and rotor wash, on the ground and in the air.

**wastewater treatment facility:** Any devices or systems used to store, treat, recycle or reclaim municipal sewage or liquid industrial wastes.

**Wide Area Augmentation System (WAAS):** An enhancement to the global positioning system providing greater navigation accuracy and system integrity and permitting GPS to be used for precision instrument approaches to most airports.

**wildlife:** Any wild animal, including without limitation any wild mammal, bird, reptile, fish, amphibian, mollusk, crustacean, arthropod, coelenterate or other invertebrate, including any part, product, egg or offspring thereof.

**wildlife attractants:** Any human-made structure, land use practice or human-made or natural geographic feature that can attract or sustain hazardous wildlife within the landing or departure airspace, apron areas or aircraft parking areas of an airport.

**wildlife control personnel:** Airport personnel trained and equipped to respond to wildlife hazards on the airfield.

**wildlife hazard:** A potential for a damaging aircraft collision with wildlife on or near an airport.

**wildlife hazard assessment (WHA):** An evaluation of wildlife-related attractants and potential hazards to aircraft operations, often mandated by the FAA following a hazardous event or new potential threat.

**wildlife hazard management plan (WHMP):** A document that identifies measures to alleviate or eliminate wildlife hazards, as identified in a wildlife hazard assessment.

**wildlife hazard site visit (WHSV):** A truncated version of a wildlife hazard assessment (WHA), conducted over a shorter period of time to determine if more extensive study is required per FAA guidelines.

**wildlife hazard working group (WHWG):** A committee formed to monitor and implement the wildlife hazard management plan (WHMP) and program.

**wildlife strike:** A wildlife strike has occurred when:

- A pilot reports striking one or more birds or other wildlife;
- Aircraft maintenance personnel identify aircraft damage as having been caused by a wildlife strike;
- Personnel on the ground report seeing an aircraft strike one or more birds or other wildlife;
- Bird or other wildlife remains, whether in whole or in part, are found within 200 feet of a runway centerline, unless another reason for the animal’s death is identified; or
The animal’s presence on the airport had a significant negative effect on a flight, i.e., aborted takeoff, aborted landing, high-speed emergency stop, aircraft left pavement area to avoid collision with animal.

**windrow**: A long line of piled snow.

**wind shear**: Large changes in either wind speed or direction at different altitudes that can cause sudden gain or loss of airspeed. Wind shear is especially hazardous when aircraft airspeeds are low on takeoff or landing.

**wingspan**: The maximum horizontal distance from one wingtip to the other wingtip, including the horizontal component of any extensions, such as winglets or raked wingtips.

**written re-evaluation**: Documentation of the validity of a previously prepared environmental assessment (EA) or environmental impact statement (EIS). If substantial changes are found, a supplement to the previously prepared EA or EIS may be required.

**Z**

**zero-based budget**: Budget line items from the prior year are zeroed out, and the new line-item budget is built from a zero baseline; used primarily to set up the airport’s operating budget.

**zoning**: (See zoning ordinances)

**zoning ordinances**: Ordinances that divide a community into zones or districts, according to the present and potential use of properties, for the purpose of controlling and directing the use and development of those properties.