

**APPENDIX A:**

**ACRONYMS AND GLOSSARY**



## ACRONYMS

AAC	Aircraft Approach Category
AAGR	Average Annual Growth Rate
AC	Advisory Circular
ACC	Aims Community College
ACIP	Airport Capital Improvement Program
ACGR	Annual Compound Growth Rate
ACRP	Airport Cooperative Research Program
ADG	Airplane Design Group
ADO	Airports District Office
AEP	Airport Emergency Plan
AFFF	Aqueous Film Forming Foam
AGL	Above Ground Level
AIA	Airport Influence Area
AIP	Airport Improvement Program
ALP	Airport Layout Plan
APMs	Airport Planning Manuals
ARC	Airport Reference Code
ARFF	Aircraft Rescue and Firefighting Facility
ASPM	Aviation System Performance Metrics
ASV	Annual Service Volume
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
AWOS III P/T	Automated Weather Observing System III Precipitation/Thunderstorm
BLF	Boarding Load Factor
BMP	Best Management Practice
BRL	Building Restriction Line
C&D	Construction and Demolition
CAGR	Compound Annual Growth Rate
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
CASP	Colorado State Aviation System Plan
CDAG	Colorado Discretionary Aviation Grant
CDOT	Colorado Department of Transportation
CDP	Conceptual Development Plan
CEIS	Colorado Aviation Economic Impact Study
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CIP	Capital Improvement Program



CPEP	Cost Per Enplaned Passenger
CPW	Colorado Parks and Wildlife
CRJ	Canadair Regional Jet
CSU	Colorado State University
CTAF	Common Traffic Advisory Frequency
CTX	Computer Tomography X-ray
CWA	Clean Water Act
DEN	Denver International Airport
DNL	Day-Night Noise Level
DoD	Department of Defense
DW	Dual Wheel
EPA	Environmental Protection Agency
ERJ	Embraer Regional Jet
ESA	Endangered Species Act
ETD	Explosive Trace Detection
eVTOL	Electronic Vertical Takeoff and Landing
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FBO	Fixed Base Operator
FCLWD	Fort Collins – Loveland Water District
FCT	FAA Contract Tower
FIS	Federal Inspection Station
FL	Flight Level
FMRA	FAA Modernization and Reform Act
FNL	Northern Colorado Regional Airport
FPPA	Farmland Protection Policy Act
FSS	Flight Service Station
FY	Fiscal Year
GA	General Aviation
GAMA	General Aviation Manufacturers Association
GARA	General Aviation Revitalization Act
GDP	Gross Domestic Product
GPS	Global Positioning System
GSE	Ground Service Equipment
HAZMAT	Hazardous Materials
HIRL	High Intensity Runway Lights
IFR	Instrument Flight Rules
IGA	Intergovernmental Agreement
ILS	Instrument Landing System
IPaC	Information, Planning, and Conservation
LFRA	Loveland Fire Rescue Authority
MALS	Medium Intensity Approach Lighting System



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MALSR	Medium Intensity Runway Lights with Runway Alignment Indicator Lights
MATCT	Mobile Air Traffic Control Tower
MBTA	Migratory Bird Treaty Act
MCI	Mass Casualty Incident
MITL	Medium Intensity Taxiway Lights
MSA	Metropolitan Statistical Area
MSL	Mean Sea Level
MSW	Municipal Solid Waste
MTOW	Maximum Takeoff Weight
NAAQS	National Ambient Air Quality Standards
NAS	National Airspace System
NASR	National Aerospace System Resources
NAVAIDS	Navigational Aids
NCLETC	Northern Colorado Law Enforcement Training Center
NDB	Non-Directional Beacon
NEPA	National Environmental Policy Act
NFHL	National Flood Hazard Layer
NHPA	National Historic Preservation Act
NM	Nautical Miles
NPE	Non-Primary Airports Entitlement
NPIAS	National Plan of Integrated Airport Systems
NPS	National Park Service
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O&D	Origin and Destination
OFA	Obstacle Free Area
OFZ	Obstacle Free Zone
OMB	Office of Management and Budget
PAPI	Precision Approach Path Indicator
PCI	Pavement Condition Index
PCN	Pavement Condition Number
PCV	Poor Visibility Ceiling
PDEW	Passengers Daily Each Week
PDSC	Planning and Development Subcommittee
PFA	Poudre Fire Authority
PFCs	Passenger Facility Charges
PHOP	Peak Hour Originating Passengers
PHTP	Peak Hour Terminating Passengers
PUD	Planned Unit Development
RCRA	Resource Conservation and Recovery Act
RCO	Remote Communications Outlet



RDC	Runway Design Code
REIL	Runway End Identifier Lights
RNAV	Area Navigation
ROFA	Runway Object Free Area
ROFZ	Runway Obstacle Free Zone
RPZ	Runway Protection Zone
RSA	Runway Safety Area
SARA	Superfund Amendments Reauthorization Act
SASOs	Specialized Aviation Service Operators
SFCSD	South Fort Collins Sanitation District
SHPO	State Historic Preservation Office
SIB	State Infrastructure Bank
SRE	Snow Removal Equipment
SSCP	Security Screening Check Point
SW	Single Wheel
TAF	Terminal Area Forecasts
TCPs	Traditional Cultural Properties
TDG	Taxiway Design Group
TESM	Taxiway Edge Safety Margin
TFMSC	Traffic Flow Management System Counts
TOFA	Taxiway Object Free Area
TRUE	Total Resource Use and Efficiency
TSA	Transportation Security Administration
TSS	Threshold Siting Surface
TTF	Through-the-fence
USC	United States Code
USFWS	United States Fish and Wildlife Service
VFR	Visual Flight Rules
VHF	Very High Frequency
VOR	Very High Frequency Omnidirectional Range
VORTAC	Very High Frequency Omnidirectional Range/Tactical Air Navigation
WSFR	Windsor Severance Fire Rescue



## GLOSSARY OF TERMS

- Above Mean Sea Level.** The elevation of an object above the average sea level.
- Aeronautical Development.** On-airport development requiring runway and taxiway access.
- Air Carrier.** A commercial airline with published schedules operating at least five round trips per week.
- Aircraft Apron Improvements.** In the context of the Capital Improvement Plan, this category includes all projects related to the construction, reconstruction or rehabilitation of all aircraft parking aprons, including the aprons associated with the new terminal building as well as all existing or planned general aviation aircraft parking aprons.
- Aircraft Operation.** An aircraft arrival (landing) or an aircraft departure (takeoff) represents one aircraft operation.
- Aircraft Rescue and Firefighting Facility.** A facility housing specifically trained personnel and equipment in response, firefighting, hazard mitigation, evacuation, and rescue of passengers and crew of an aircraft involved in a ground emergency.
- Airport Layout Plan.** The official, FAA approved drawing of an airport's existing and proposed facilities.
- Airport Reference Code.** An FAA design criteria based upon the approach speed (represented by a capital letter) and wingspan (represented by a roman numeral) of an aircraft that produces a minimum annual itinerant operations per year at an airport.
- Airport Traffic Control Tower.** A central operations tower in the terminal air traffic control system with an associated IFR room if radar equipped, using air to ground communications and/or radar, visual signaling, and other devices to provide the safe and expeditious movement of air traffic.
- Air Route Traffic Control Center.** A facility providing air traffic control to aircraft on an IFR flight plan within controlled airspace and principally during the enroute phase of flight.
- Air Traffic Control.** The control of aircraft traffic in the vicinity of airports from control towers, and in the airways between airports from control centers.
- Annual Service Volume.** A reasonable estimated of an airport's annual capacity (i.e., the level of annual aircraft operations that will result in an average annual aircraft delay of approximately one to four minutes).
- Approach Lighting System.** Radiating light beams guiding pilots to the extended runway centerline on final approach and landing.
- Area Navigation.** A method of navigation that permits aircraft operation on any desired course within the coverage of station-referenced navigation



signals or within the limits of a self-contained system capability, or a combination of these.

**ARFF Equipment.** In the context of the Capital Improvement Plan, this includes the acquisition or rehabilitation of aircraft rescue and fire-fighting equipment.

**Boarding Load Factor.** The ratio of aircraft seats available for passenger boarding compared to the number of passengers actually boarding.

**Cell Lot.** Vehicle parking lot for meeters and greeters to await a cell phone call from their passengers.

**Common Traffic Advisory Frequency.** The name given to a VHF radio frequency used at U.S., Canadian, and Australian airports that do not have an active or on-site control tower.

**Decibel.** A measurement used to quantify sound levels referencing a scale from the threshold of human hearing, 0 dB, upward toward the threshold of pain, about 120-140 dB.

**Distance Measuring Equipment.** Equipment used to measure, in nautical miles, the distance of an aircraft from the broadcasting facility.

**Day-Night Noise Level.** The daily average noise metric in which noise occurring between 10:00 p.m. and 7:00 a.m. is penalized by 10 db. DNL is often expressed as annual average noise levels.

**Federal Aviation Regulations.** The rules and regulations that govern the operation of aircraft, airways, airmen, and airports.

**Fixed Based Operator.** A facility on an airport providing various services for aircraft such as maintenance, fuel, storage, etc.

**Fleet Mix.** The mix or differing aircraft types operated at a particular airport or by an airline.

**Flight Plan.** Specific information related to the intended flight of an aircraft, filed with a Flight Service Station or Air Traffic Control facility.

**Funding Shortfall.** In the context of the capital implementation of this Master Plan, this term is used to describe funds insufficient in amount and timing to finance a number of capital projects planned for implementation during the mid and long term planning periods.

**General Aviation.** Civil aviation excluding air carriers, commercial operations, and military aircraft.

**General Aviation Private Facility Improvements.** In the context of the Capital Improvement Plan, this category includes non-pavement related improvements to the general aviation areas, specifically new FBO and hangar construction, which are typically privately funded.

**Glide Slope.** An angle of approach to a runway established by means of airborne instruments during instrument approaches, or visual ground aids for the visual portion of an instrument approach and landing.

**Global Positioning System.** A satellite-based radio positioning, navigation, and time-transfer system.





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**High Intensity Runway Lights.** High intensity light fixtures delineating the limits of a runway served by a precision instrument approach procedure.

**Instrument Approach.** A series of predetermined maneuvers developed for the orderly transfer of aircraft under instrument flight conditions, from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually.

**Instrument Flight Procedure.** Procedures developed by the FAA to guide aircraft to airports including distance, topography, elevation, coordinates, angle of approach, and missed approach procedures.

**Instrument Flight Rules.** Rules specified by the FAA for the flight under weather conditions in which visual reference cannot be made to the ground and the pilot must rely on instruments to fly and navigate.

**Instrument Landing System.** A precision instrument approach system that normally consists of a localizer antenna, glide slope antenna, outer marker, middle marker, and ad approach lighting system.

**Instrument Meteorological Conditions.** Weather conditions that require that pilots rely primarily on instrumentation for navigation under IFR, rather than by visual reference and VFR.

**Itinerant Operation.** An aircraft landing or takeoff that originates at one airport and terminates at another (place-to-place).

**Knots.** A measure of speed used in navigation. One knot is equal to one nautical mile per hour (1.15 knots – 1 mile per hour).

**Landing Minimums.** Prescribed altitudes and visibility distances that the pilot uses to make a decision as to whether or not it is safe to land on a particular runway.

**Local Operation.** An aircraft landing or takeoff that remains in the local traffic pattern (i.e. training or touch-and-go operation).

**Level of Service.** A measure that determines the quality of service provided by transportation devices, or transportation infrastructure, and is generally linked to time and speed of the vehicles.

**Low Intensity Runway Lights.** Low intensity light fixtures delineating the limits of a runway having no instrument approach procedures.

**Load Factor.** The percentage of seats occupied on an aircraft by passengers.

**Medium Intensity Approach Lighting System with Runway Alignment**

**Indicator Lights.** A medium intensity approach lighting system providing a visual lighting path for landing pilots, consisting of nine light bars with five steady burning white fixtures, five sequential flashing white fixtures, and a threshold bar of 18 steady burning green fixtures.

**Medium Intensity Runway Lights.** Medium intensity light fixtures delineating the limits of a runway supplied with a non-precision instrument approach procedure.



**Middle Marker.** A beacon that defines a point along the glide slope of an Instrument Landing System, normally located at or near the point of decision height.

**Missed Approach.** An instrument approach not completed by a landing. This may be due to visual contact not established at authorized minimums or instructions from air traffic control, or other reasons.

**National Ambient Air Quality Standards.** Standards established by the United States Environmental Protection Agency for six outdoor air pollutants considered harmful to the public health and the environment.

**National Airspace System.** The common network of U.S. airspace, air navigation facilities, equipment and services, airports or landing areas, aeronautical charts, information and services, rules, regulations and procedures, technical information, manpower, and material.

**National Plan of Integrated Airport Systems.** Established by the Airport and Airway Improvement Act of 1982, it is the identification of national airport system needs including short- and long-term development costs.

**Nautical Mile.** A measure of distance used in air and sea navigation. One nautical mile is equal to the length of one minute of latitude along the Earth's equator, officially set as 6,076.115 feet.

**Nav aids.** Any facility providing assistance or aid to pilots for navigating through the air.

**Noise Contour.** The "map" of noise exposure around an airport, computed by the Integrated Noise Model. The FAA defines significant noise exposure as any area within the 65 DNL contour, which is the area within an annual average noise exposure of 65 decibels or higher.

**Non-Aeronautical Development.** On-airport development NOT requiring runway and taxiway access.

**Non-Directional Beacon.** A navaid providing signals that can be read by pilots of aircraft equipped with direction finding equipment, used to determine bearing and can "home" in or track to or from the desired point.

**Non-Precision Approach.** A standard instrument approach procedure in which no vertical guidance is provided.

**Omnidirectional Approach Lighting System.** An approach lighting system consisting of five sequential flashing omnidirectional lights extended along the runway centerline and two located on either side of the runway threshold.

**Other Improvements.** In the context of the Capital Improvement Plan, this includes miscellaneous improvements not otherwise accounted for within the preceding categories. At FNL, these include the fuel farm relocation, remote tower permanent facility, E-charging stations, runway protection zone easement, MALS Approach Lighting Procedure improvements, drainage improvements, land acquisition and a future Master Plan update.



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**Outer Marker.** A navigational facility within the terminal area navigational system located four to seven miles from the runway threshold on the extended centerline indicating the beginning of the final approach.

**Precision Approach Path Indicator.** A visual navigational aid providing guidance information to help pilots acquire and maintain the correct approach (in the vertical plane) to a runway.

**Roadways, Parking and Related Landside Improvements.** In the context of the Capital Improvement Plan, this category includes the rehabilitation of existing roadways and parking lots as well as reconfiguration or expansion of roadways or parking lots. This also includes rehabilitation of vehicular roads within the general aviation area and planned future access roads to new general aviation areas.

**Runway.** A strip of pavement, land, or water used by aircraft for takeoff or landing.

**Runway Object Free Area.** A defined two-dimensional surface centered on a runway providing enhanced safety for aircraft operations by having the area free of objects protruding above the runway safety area edge elevation, except for objects that need to be located within the area for air navigation or aircraft ground maneuvering purposes.

**Runway/Taxiway Improvements.** In the context of the Capital Improvement Plan, this category includes all projects related to the construction, extension, reconstruction or rehabilitation of any runway, taxiway or taxilane. This includes pavements used by both commercial service aircraft as well as general aviation aircraft.

**Runway Safety Area.** A defined surface surrounding a runway prepared or suitable for reducing the risk or damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway.

**Runway Visual Range.** Facilities providing a measurement of horizontal visibility located adjacent to instrument runways.

**Single Event.** Noise generated by a single aircraft overflight.

**SRE Equipment.** In the context of the Capital Improvement Plan, this includes the acquisition or rehabilitation of snow removal equipment.

**Tactical Air Navigation.** An enroute navaid combining azimuth and distance measuring equipment into one unit and operated in the ultra-high frequency band.

**Taxiway.** A designated area that connects runways with aprons, providing the ability to move aircraft on the ground so they will not interfere with takeoffs or landings.

**Terminal Airspace.** The airspace controlled by a terminal radar approach control facility.

**Terminal Area.** A general term used to describe airspace in which approach control service or airport traffic control service is provided.



**Terminal Building and Expansion.** In the context of the Capital Improvement Plan, this includes the construction of the new terminal building as well as planned future expansions of the building.

**Terminal Radar Approach Control.** An FAA air traffic control service to aircraft arriving, departing, or transiting airspace controlled the facility.

**Transient Aircraft.** An aircraft that is not based at the airport in which it is currently located.

**Very High Frequency Omnidirectional Range.** A ground based electronic navigation aid transmitting navigation signals for 360° oriented from magnetic north.

**Very High Frequency Omnidirectional Range/Tactical Air Navigation.** A ground based electronic navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment at a single site.

**Visual Approach.** An aircraft approach conducted under IFR, which authorizes the pilot to proceed visually and clear of clouds to the airport. The pilot must, at all times, have either the airport or the preceding aircraft in sight.

**Visual Flight Rules.** Rules that govern the procedures for conducting flight under visual meteorological conditions.

**Visual Meteorological Conditions.** Weather conditions under which pilots have the ability to visually see and avoid stationary objects and other aircraft and fly without the use of instrumentation, under VFR.

