APPENDIX A. TERMS & ABBREVIATIONS

The following terms and abbreviations are used in this report or are relevant to the aviation industry and may be helpful to the reader.

TERM	DEFINITION
100LL	100 octane low lead aviation fuel (see AVGAS and UL102)
Accelerate-Stop Distance Available (ASDA)	ASDA is the amount of runway plus stopway length declared available and suitable for the acceleration and deceleration of an aircraft aborting a takeoff. See Declared Distances.
Approach Reference Code (APRC)	A code signifying the current operational capabilities of a runway and associated parallel taxiway with regard to landing operations.
Departure Reference Code (DPRC)	A code signifying the current operational capabilities of a runway with regard to takeoff operations.
AIP	Airport Improvement Program
Aircraft Approach Category (AAC)	A letter classification (A-E) that identifies a range of speeds associated with the final landing (approach) speed of an aircraft. It's a reference landing speed (V_{REF}). If $V_{RE}F$ for a particular aircraft is not specified, then the AAC is 1.3 times the aircraft staff speed (V_{SO}).
Airplane Design Group (ADG)	A classification of aircraft 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 takeoff of aircraft, and includes its buildings and facilities, if any.
Airport Classifications	While several methods are currently in use for classifying public airports in the United States, the most common system is a functional classification used in the NPIAS: • Commercial service airports receive scheduled airline service and board more than 2,500 passengers annually. • Primary airports are commercial service airports that board more than 10,000 passengers annually. • General aviation airports include those that may have a small amount of scheduled airline service, but board less than 2,500 passengers annually. • Reliever airports are general aviation airports located in large metropolitan areas that are specially designed to reduce congestion at busy commercial service airports nearby. • The hub classifications apply to commercial service airports and are based on the airport's enplanements (boarded passengers). These include large hubs, Medium Hubs, Small Hubs, and Non-Hubs.
Airport Commission	The City of Westfield has a three-person airport commission is empowered under Massachusetts General Laws, Title XIV, Chapter 90, Section 51E. The Commission establishes policy, sponsors and ensures compliance with FAA and

TERM	DEFINITION
	MassDOT Aeronautics regulations, sponsors capital projects and operations funding, and is responsible for revenue generation and airport development.
Airport Elevation	The elevation of the highest point of an airport's usable landing area expressed in feet above mean sea level (MSL).
Airport Imaginary Surfaces	See Imaginary Surfaces
Airport Improvement Program (AIP)	The AIP is a grant program administered by the Federal Aviation Administration (FAA) providing funds to qualified airports for qualified projects. Revenues to support this program are derived from taxes on aviation users, the most significant source being the tax on domestic airline tickets.
Airport Layout Plan	The Airport Layout Plan shows the orientation and location of key airport facilities, such as runways and navigational aids that must be planned with consideration for approach zones, prevailing winds, airspace use, land contours and many other special factors. The dimensional relationships even within the airport boundaries, between operational and support facilities and allocation of reasonable space to allow for orderly expansion of individual functions must be clearly established in advance. This is essential if such facilities are to be subsequently positioned where they can best serve their intended purposes while conforming to applicable safety and construction criteria.
Airport Reference Code	The Airport Reference Code (ARC) is a coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at the airport. a. Coding System. The airport reference code has two components relating to the airport design aircraft. The first component, depicted by a letter, is the aircraft approach category and relates to aircraft approach speed (operational characteristic). The second component, depicted by a Roman numeral, is the airplane design group and relates to airplane wingspan or tail height (physical characteristics), whichever is the most restrictive. Generally, runways standards are related to aircraft approach speed, airplane wingspan, and designated or planned approach visibility minimums. Taxiway and taxilane standards are related to airplane design group.
Airport Reference Point (ARP)	The approximate geometric center of all usable runways at the airport.
Airport Sponsor	The entity that owns or controls an airport.
Airside	That portion of an airport where aircraft operate, such as runways, taxiways, parking aprons.
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 that exceeds the obstruction standards identified in FAR Part 77.23 that upon FAA evaluation is determined to be required to be properly marked, lighted, and identified on aeronautical publications so that it can be recognized by aircraft navigating through the airspace.
ALP	Airport Layout Plan

TERM	DEFINITION
Apron	A prepared surface for parking aircraft. Also referred to as a ramp.
ARC	Airport Reference Code
ARP	Airport Reference Point
ASDA	Accelerate-Stop Distance
ASTM	American Society for Testing and Materials
ATCT	Air Traffic Control Tower
AVGAS or 100LL	Avgas is an aviation fuel used to power piston-engine aircraft. Avgas is distinguished from Mogas (motor gasoline), which is the everyday gasoline used in cars and some non-commercial light aircraft. Unlike Mogas, avgas contains tetraethyl lead (TEL), a toxic substance used to enhance combustion stability. The most commonly used aviation fuel is 100LL, i.e., "low lead". It is dyed blue and contains a relatively small amount of tetraethyl lead.
Avigation Easement	An avigation easement is a property right acquired from a landowner which protects the use of airspace above a specified height and imposes limitations on use of the land subject to the easement. Generally, uses that attract birds or interfere with pilot visibility and instrumentation are prohibited.
BAF (KBAF)	The FAA airport identifier for the Westfield-Barnes Regional Airport. KBAF is the international identifier.
Based Aircraft	An aircraft permanently stationed at an airport by agreement between the aircraft owner and the airport management.
Blast Fence	A barrier used to divert or dissipate jet blast or propeller wash.
BRL	Building Restriction Line
Building Restriction Line (BRL)	The BRL is an imaginary line that identifies the nearest location buildings can be located in relation to the runway. The BRL is identified with a height, whereas taller building must be located further away and shorter buildings can be located closer to the runway.
Capital Improvement Program	Capital Improvement Program. It consists of the five-year eligible capital requirements at designated airports. It is not a funding plan since the actual funding of development will depend on annual limitations for the Airport Improvement Program (AIP) as imposed by Congress. The CIP provides a systematic approach to identify unmet needs, determine optimum distribution of available grant funds, foster cooperation among states, local, and federal authorities, advise and inform the public, identify problems and determine their impacts on the system, and provide FAA with a rational, need-based process for distribution of limited airport grant funds. It also provides a basis for responding to new legislative proposals
Ceiling	The height of the base of the lowest clouds that cover more than half of the sky
CIP	Capital Improvement Program

TERM	DEFINITION
Circling Approach	A maneuver initiated by the pilot to align the aircraft with a runway for landing when a straight is not possible or is not desirable.
Cockpit to Main Gear Distance (CMG)	The distance from the pilot's eye to the main gear turn center.
DA	Decision Altitude
Decision Altitude (DA) or Decision Height (DH)	The altitude on final approach at which a missed approach must be conducted if the runway environment cannot be seen. Decision altitude is expressed above mean sea level, and decision height is expressed above ground level.
Declared Distances	The distances the airport owner declares available for a turbine powered aircraft's takeoff run, takeoff distance, accelerate-stop distance, and landing distance requirements. The distances are: TORA, ASDA, LDA, and TODA (as defined in this appendix).
Departure End of Runway (DER)	The end of the runway that is opposite the landing threshold. It is sometimes referred to as the stop end of runway.
Departure Obstacle Clearance Surface	A 40:1 OCS originating at the location and elevation of the departure end of the runway (DER) is used to evaluate the required climb performance from a particular departure runway end to the nearest (shortest distance) obstacle in the segment. Impacts to this surface may result in the addition of required climb gradient restrictions to the DER.
DER	Departure End of Runway
DH	Decision Height
Displaced Threshold	A runway threshold located at a point on the runway, other than the beginning of the runway, not available for aircraft landing but available for aircraft taxiing and taking off.
Easement	See Avigation Easement
Entrance Taxiway	A taxiway designed to be used by an aircraft entering a runway. Entrance taxiways may also be used to exit a runway.
Exhibit A Property Map	The Exhibit "A" property map is 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.
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FBO	Fixed-Base Operator
Federal Aviation Administration	The Federal Aviation Administration (FAA) is an agency of the United States Department of Transportation with authority to regulate and oversee all aspects of civil aviation in the U.S. (National Airworthiness Authority). The Federal Aviation Act of 1958 created the group under the name "Federal

TERM	DEFINITION
	Aviation Agency" and adopted its current name in 1967 when it became a part of the United States Department of Transportation.
Federal Aviation Regulations	The Code of Federal Regulations (CFR) is 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.
Federal Funds	Money or property conveyed from the United States Government. Any airport that consists in whole or in part of property, improvements, or other assets conveyed by the United States Government -- without monetary consideration -- for airport purposes, or that was acquired, developed, or improved with federal assistance must be considered as an airport upon which federal funds have been expended.
Final Approach Fix	A specified point on a precision or a nonprecision instrument approach that identifies the commencement of the final approach segment.
Final Approach Segment	The part of the instrument approach procedure in which alignment with the runway and descent for landing are accomplished.
Fixed Based Operator	Fixed-base operator. An individual or firm operating at an airport and providing general aircraft services such as maintenance, storage, and ground, and flight instruction.
Full Parallel Taxiway	A parallel taxiway extending the full length of the runway.
GA	General Aviation
General Aviation	General aviation (GA) is one of the two categories of civil aviation. It refers to all flights other than military and scheduled airline and regular cargo flights, both private and commercial. General aviation flights range from gliders and powered parachutes to large, non-scheduled cargo jet flights. Most the world's air traffic falls into this category, and most of the world's airports serve general aviation exclusively.
Glideslope (GS)	Equipment in an Instrument Landing System (ILS) that provides vertical guidance to landing aircraft.
GPS	The Global Positioning System (GPS), is a space-based radio navigation system owned by the United States government and operated by the United States Air Force. It is a global navigation satellite system that provides geolocation and time information to a GPS receiver anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites.
Grant Assurance	A grant assurance is a provision contained in a federal grant agreement to which the recipient of federal airport development assistance has voluntarily agreed to comply in consideration of the assistance provided.
Hazard	See Airspace Hazard
IAP	Instrument Approach Procedure

TERM	DEFINITION
ILS	An instrument landing system (ILS) operates as a ground-based instrument approach system that provides precision lateral and vertical guidance to an aircraft approaching and landing on a runway, using a combination of radio signals and, in many cases, high-intensity lighting arrays to enable a safe landing during instrument meteorological conditions (IMC), such as low ceilings or reduced visibility due to fog, rain, or blowing snow. The ILS consists of two transmitters; the glideslope (GS) located near the runway landing threshold, and the localizer (LOC) located on the far end of the runway. The GS provides vertical landing signals and the LOC provides lateral alignment signals.
Imaginary Surfaces	A set of geometric surfaces overlying and surrounding the airport, which visually depict the airport and airspace obstruction evaluation criteria contained in FAR Part 77 and other airspace regulations and sets of criteria and are used to establish whether a structure, object of natural growth, or terrain constitutes an airspace obstruction.
Instrument Approach Procedure (IAP)	A series of predetermined maneuvers for the orderly transition of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or a point from which a landing may be visually made.
Instrument Departure Runway	A runway identified by the airport operator, through the appropriate FAA Airports Office, to the FAA Regional Airspace Procedures Team intended primarily for instrument departures.
Itinerant Operation	An aircraft operation involving flight away from an airport.
Landing Distance Available (LDA)	LDA is the runway length declared available and suitable for landing an aircraft. See Declared Distances.
Landside	That part of an airport used for activities other than the movement of aircraft, such as vehicular access roads and parking.
Large Aircraft	Large aircraft means aircraft of more than 12,500 pounds, maximum certificated takeoff weight.
LDA	Landing Distance Available
Local Operation	An aircraft takeoff or landing where the aircraft remains within 20 miles of the airport and does not land at another airport.
Main Gear Width (MGW)	The distance from the outer edge to outer edge of the widest set of main gear tires.
MassDOT	Massachusetts Department of Transportation
Missed Approach	A procedure followed by a pilot when an instrument approach cannot be completed to a full-stop landing.
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 tiltrotors, exclusive of loading aprons and aircraft parking areas. See Non-Movement Area.
NAVAID	Navigation Aid

TERM	DEFINITION
Navigation Aid	Electronic and visual air navigation aids, lights, signs, and associated supporting equipment.
Nonprecision Approach Procedure (NPA)	A standard instrument approach procedure with minimums not lower than 3/4 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 a global positioning system may also provide vertical guidance, depending on the approach and equipage of the aircraft.
Non-Precision Runway	A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, for which a straight-in non-precision instrument approach procedure has been approved. The normal markings for such runways include a centerline marking, a designation marking, a threshold marking, a fixed distance marking on runways that are 4000 feet or longer.
NPA	Nonprecision Approach
NPIAS	National Plan of Integrated Airports System
Object	Any element of natural growth, terrain, man-made structure, or clearance zone representing passing vehicles on a traverse way that vertically protrudes into the airspace.
Obligated Airport	An airport that has received federal grants under the Airport Improvement Program or prior federal airport grant program or operates on property that was conveyed to the airport under a federal surplus property program.
Obstacle	Any object that does or would penetrate an obstacle clearance surface or other clearance requirements for a specific flight procedure. An obstacle is known as a controlling obstacle when it is used as the limiting factor for vertical clearance for the flight procedure.
Obstacle Clearance Surface (OCS)	An evaluation surface that defines the minimum required obstruction clearance for approach or departure procedures.
Obstacle Identification Surface	The sloped surface used to identify the lower limit of the airspace to be protected from obstacles.
Obstruction	See Airspace Obstruction
Obstruction Evaluation/Airport Airspace Analysis (OE/AAA)	FAA's electronic resource for submission and tracking of notices required under FAR Part 77.17 by the public and the FAA internal review coordination of the notices.
Obstruction to Air Navigation	An object of greater height than any of the heights or surfaces presented in Subpart C of Title 14 CFR Part 77, Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities.
OEI	One Engine Inoperative
OIS	Obstacle Identification Surface

TERM	DEFINITION
One Engine Inoperative Obstacle Identification Surface (OEI OIS):	An imaginary surface used by air carriers operating under the provisions of FAR Parts 121 or 135 or ICAO Annex 6, which allows operators to analyze the net takeoff flightpaths at airports for obstruction impacts during engine-out departures.
Operation	An aircraft movement with the intent of flight.
Parallel Taxiway	A taxiway that runs parallel to a runway.
Partial Parallel Taxiway	A parallel taxiway extending less than the full length of the runway.
Pavement Condition Index (PCI)	The PCI is a numerical indicator that reflects the structural integrity and surface operational condition of a pavement. It is based on an objective measurement of the type, severity, and quantity of distress.
PCI	Pavement Condition Index
Precision Approach (PA)	An instrument approach procedure that provides course and vertical path guidance.
Precision Instrument Procedure	A standard instrument procedure for an aircraft to approach an airport, in which vertical and horizontal guidance is provided to the pilot using an instrument landing system, military precision approach radar, or a global positioning system, with visibility of 3/4 mile or less or a ceiling less than 250 feet.
Precision Runway	A runway with at least one end having a precision approach procedure.
Public-Use Airport	An airport publicly or privately owned that is open for aviation use by the public without prior permission.
Ramp	See Apron
RNAV	Area navigation (RNAV) is a method of instrument flight rules (IFR) navigation that allows an aircraft to choose any course within a network of navigation beacons, rather than navigate directly to and from the beacons.
ROFA	Runway Object Free Area
RPZ	Runway Protection Zone
RSA	Runway Safety Area
Runway End	The physical ends of the rectangular surface that constitutes a runway. The end of the runway is normally the beginning of the takeoff roll and the end of the landing roll out.
Runway Object Free Area (ROFA)	An area centered on the ground on a runway, taxiway, or taxilane centerline provided to enhance the safety of aircraft operations by remaining clear of objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.
Runway Protection Zone (RPZ)	An area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground.

TERM	DEFINITION
Runway Safety Area (RSA)	A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway.
Runway Visibility Zone (RVZ)	An area on the airport to be kept clear of permanent objects so that there is an unobstructed line-of- site from any point five feet above the runway centerline to any point five feet above an intersecting runway centerline.
Runway Visual Range (RVR)	Represents the horizontal distance a pilot can expect to see down the runway, based on visibility, background luminance, and runway light intensity.
RVR	Runway Visual Range
RVZ	Runway Visibility Zone
Shoulder	An area adjacent to the defined edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface; support for aircraft and emergency vehicles deviating from the full-strength pavement; enhanced drainage; and blast protection.
Small Aircraft	Small aircraft means aircraft of 12,500 pounds or less, maximum certificated takeoff weight.
Sponsor	See Airport Sponsor
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 airplane during an aborted takeoff, without causing structural damage to the airplane, and designated by the airport authorities for use in decelerating the airplane during an aborted takeoff. A blast pad is not a stopway.
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) to be considered substantial.
TACAN	A tactical air navigation system, commonly referred to by the acronym TACAN, is a navigation system used by military aircraft. It provides the user with bearing and distance (slant-range or hypotenuse) to a ground or ship-borne station.
TAF	Terminal Area Forecasts
Takeoff Distance Available (TODA)	TODA is the 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. See Declared Distances.
Takeoff Run Available (TORA)	TORA is the runway length declared available and suitable for the ground run of an aircraft taking off. See Declared Distances.
Taxilane	The portion of the aircraft parking area used for access between taxiways and aircraft parking positions.

TERM	DEFINITION
Taxiway	Any surface area of an airport used for taxiing airplanes to and from a runway, parking apron, terminal, etc. fruitful
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 Object Free Area (TOFA)	See Runway Object Free Area
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	A person or organization occupying space or property on an airport under a lease or other agreement.
Terminal Area Forecasts	Long range FAA forecasts for aircraft operations and based aircraft
TERPS	United States Standard for Terminal Instrument Procedures (TERPS) FAA Order 8260.3C. Used for the preparation, approval, publication and distribution of instrument procedures.
Threshold	The beginning of that portion of the runway available for landing. In some instances, the threshold may be displaced. “Threshold” always refers to landing, not the start of takeoff.
TODA	Takeoff Distance Available
TOFA	Taxiway/Taxilane Object Free Area
TORA	Takeoff Run Available
TSA	Taxiway/Taxilane Safety Area
VAS	Visual Area Surface
Vertical Guidance Surface (VGS)	An imaginary 30:1 surface, applicable to precision approach or approaches with vertical guidance, extending from the runway threshold along the runway centerline to the DA point. Impacts on the VGS may require nonstandard glide path angles or approach discontinuation.
VGS	Vertical Guidance Surface
VHF	Very high frequency (VHF) is the designation for the range of radio frequency electromagnetic waves (radio waves) from 30 to 300 megahertz (MHz), with corresponding wavelengths of ten to one meter. Frequencies immediately below VHF are denoted high frequency (HF), and the next higher frequencies are known as ultra-high frequency (UHF).
Visibility	The average forward horizontal distance from the cockpit of aircraft in flight at which objects can be identified
Visual Area OIS	The visual area OIS underlies the visual portion of the final approach segment from the DA or visual descent point (VDP) to 200 feet before the runway end on a straight-in approach and from 10,000 feet to 200 feet before the runway end for circling approaches. The purpose of the visual area OIS is to protect the

TERM	DEFINITION
	aircraft on approach as the pilot transitions from flight by reference to instruments to using visual cues to land. As the sides of the visual area trapezoid splay outward from the extended runway.
Visual Area Surface	The obstacle identification surface that covers the segment of a final approach between the approach procedure decision altitude and landing threshold point, during which a pilot visually descends to the runway touchdown point.
Visual Runway	A runway without an existing or planned instrument approach procedure.
VOR	VHF omni directional radio range (VOR) is a type of short-range radio navigation system for aircraft, enabling aircraft with a receiving unit to determine their position and stay on course by receiving radio signals transmitted by a network of fixed ground radio beacons. It uses frequencies in the very high frequency (VHF) band from 108.00 to 117.95 MHz.
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.