# Chapter 1 Background

The Columbus Regional Airport Authority (CRAA) is conducting an update to its Part 150 Noise Compatibility Study (Study) to document the noise levels from aircraft operations at the John Glenn Columbus International Airport (Airport or CMH). The purpose of conducting a Noise Compatibility Study is to identify potential measures to reduce the impacts of noise from existing aircraft operations on incompatible land uses, and to discourage the introduction of new incompatible land uses in the areas that are determined to be impacted by aircraft noise. This chapter provides the background information necessary for public and/or governmental reviewers to make an informed decision as to the adequacy of the Noise Compatibility Study to meet the requirements set forth by the Code of Federal Regulations (CFR) Title 14 Part 150 under which it was prepared.

# 1.1 14 Code of Federal Regulations (CFR) Part 150

Title 14 Part 150 is a section of the CFR that sets forth rules and guidelines for airports desiring to undertake airport noise compatibility planning. The regulations were promulgated by the Federal Aviation Administration (FAA) pursuant to the Aviation Safety and Noise Abatement Act (ASNA) of 1979, Public Law 96-193. ASNA was enacted to "...provide and carry out noise compatibility programs, to improve assistance to assure continued safety in aviation and for other purposes." The FAA was vested with the authority to implement and administer this act. This legislation required the establishment of a single system for measuring aircraft noise, determining noise exposure, and identifying land uses, which are normally compatible with various noise exposure levels. Through 14 CFR Part 150, the FAA established regulations governing the technical aspects of aircraft noise analysis and the public participation process for airports choosing to prepare airport noise compatibility plans.

# 1.1.1 Purpose of Conducting a Part 150 Noise Compatibility Study

The purpose for conducting a Noise Compatibility Study at an airport is to develop a balanced and cost-effective plan for reducing current noise impacts due to airport operations, where practical, and to minimize additional impacts in the future. By following the process, the airport operator is assured of the FAA's cooperation through the involvement of air traffic control professionals in the study and the FAA's review of the recommended Noise Compatibility Program (NCP). An airport with an FAA-approved NCP also becomes eligible for funding assistance for the implementation of approved measures in the NCP.

Among the general goals and objectives addressed by a Noise Compatibility Study are the following:

- To reduce, where feasible, existing and forecasted noise levels over existing noise-sensitive land uses;
- To reduce new noise-sensitive developments near the airport;
- To mitigate, where feasible, adverse impacts in accordance with Federal guidelines;
- To provide mitigation measures that are sensitive to the needs of the community and its stability;
- To minimize the impact of mitigation measures on local tax bases; and
- To be consistent, where feasible, with local land use planning and development policies.

The FAA recommends updating an airport Part 150 Noise Compatibility Study periodically to reflect current operating conditions. Updates are recommended when there is a notable change in operating levels or a change to the airfield that affects how aircraft operate. The previous Noise Compatibility Study for CMH was completed in 2007, and was approved by the FAA in May 2008. The FAA also conducted a concurrent Environmental Impact Statement (EIS), which assessed the proposed relocation of Runway 10R/28L at CMH. The FAA issued a Record of Decision (ROD) for the proposed runway relocation in August 2009.

The ROD stipulated that the CRAA conduct a Part 150 Noise Compatibility Study to assess operational and noise conditions after the relocated runway became operational. Construction of the relocated runway was completed in August 2013. In 2016, the CRAA reconstructed Runway 10L/28R by rehabilitating and replacing the existing runway pavement. Therefore, the Part 150 Study Update was delayed until after the rehabilitation of Runway 10L/28R was complete in order to assess conditions using actual data that included a full 12 months of operations after the airfield was fully operational. This current Part 150 Noise Compatibility Study represents the first update since Runway 10R/28L was relocated.

# 1.1.2 Part 150 Noise Compatibility Study Planning Process

The Noise Compatibility Study planning process involves the methods and procedures an airport operator must follow when developing an NCP. The decision to undertake noise compatibility planning is entirely voluntary on the part of the airport operator. If the airport operator chooses to prepare an NCP, the FAA will provide funding assistance if the operator follows the regulations of 14 CFR Part 150. As a further encouragement to undertake noise compatibility planning, an airport operator becomes eligible for Federal funding assistance for the implementation of measures in an FAA-approved NCP. See **Exhibit 1-1**, **Noise Compatibility Planning Process**, for a flowchart of the planning process.

A Noise Compatibility Study involves six major steps:

- Study initiation, including identification of airport noise and land use issues and data collection;
- Definition of current and future noise exposure patterns;
- Evaluation of alternative measures for abating noise (e.g., changing aircraft flight paths), mitigating the impact of noise (e.g., sound insulation), and managing local land uses (e.g., airport-compatible zoning);
- Development of an NCP;
- Development of an implementation and monitoring plan; and
- FAA review and approval of the recommended NCP, including the analysis of alternatives, the compatibility plan, and the implementation and monitoring plan.

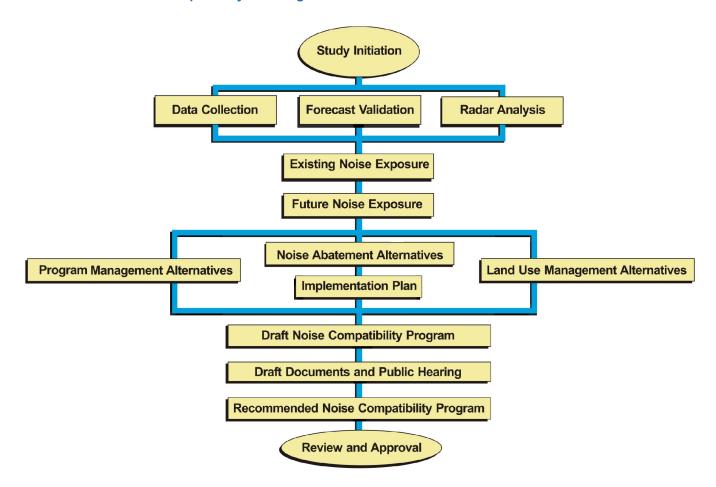
The Noise Compatibility Study process is designed to identify noise incompatibilities surrounding an airport, and to recommend measures to both correct existing incompatibilities and to prevent future incompatibilities. For Noise Compatibility Study purposes, noise incompatibilities are generally defined as residences or public use noise-sensitive facilities (libraries, churches, schools, nursing homes, and hospitals) within the 65 Day-Night Average Sound Level (DNL) noise contour. See **Appendix A**, *FAA Policies*, *Guidance*, *and Regulations*, for more information on land use and noise compatibility guidelines contained in 14 CFR Part 150.

The planning process has both technical and procedural components. The first component involves the preparation of Noise Exposure Maps (NEMs), which requires the use of specific technical criteria and methods to complete analyses of aircraft noise exposure, potential noise abatement, and land use mitigation measures. NEMs show the official noise contours for the airport. For this Study, NEMs were prepared for existing conditions (2020) and for five years in the future. The future year NEM for this Noise Compatibility Study is labeled 2025. The NEMs must be prepared according to 14 CFR Part 150 guidelines with regard to methodology, noise metrics, identification of incompatible land uses, and public participation. More detailed information regarding the NEM process is included in **Section 1.1.3** of this chapter.

The second component of the planning process involves the development of an NCP. The NCP sets forth measures intended to mitigate the impacts of significant noise exposure on residential or other noise-sensitive areas near an airport, and to limit, to the extent possible, the introduction of new incompatible land uses at locations exposed to significant noise levels. Levels of significant noise are identified in 14 CFR Part 150 (see Appendix A).

The regulations also require that potentially affected airport users, local governments, and the public be consulted during the study, with the process culminating in the opportunity for a public hearing on the recommended NCP. More detailed information regarding the NCP process is included in **Section 1.1.4** of this chapter.

**Exhibit 1-1** Noise Compatibility Planning Process



### 1.1.3 Noise Exposure Maps (NEMs)

The NEM component of a Noise Compatibility Study presents airport noise exposure contours for the existing condition and a forecast condition five years from the date of submission of the documentation for FAA review. The current year NEM is labeled 2020. The data collection and analysis for this Noise Compatibility Study Update began in 2019 and continued through 2020. The Existing (2020) Baseline Noise Exposure Contour is based on data from September 2018 through August 2019. The total of annual aircraft operations during this period was 134,999, which converts to 370 average-annual day operations.

The Future (2025) Noise Exposure Contour is based on an Aviation Activity Demand Forecast that was prepared for this Noise Compatibility Study Update. This forecast projects annual operations to be 150,140 for the year 2025 or 411 average-annual day operations. The year 2025 is used as the future year because it is five years from the date of submission of this Noise Compatibility Study for FAA review.

The Future (2025) NEM/NCP Noise Exposure Contour includes the implementation of all new recommended noise abatement procedures. The NEM noise contours are superimposed on a land use map to show areas of incompatible land use, as defined in 14 CFR Part 150 and presented in Appendix A of this document. **Appendix C, Noise Methodology**, contains detailed information on the inputs and methodology for preparing the noise exposure contours, including use of the DNL noise metric. The official NEMs are located at the front of this document with the NEM and NCP checklist.

14 CFR Part 150 requires the use of standard methodologies and metrics for analyzing and describing noise. It also establishes the guidelines for the identification of land uses that are incompatible with noise of different levels. Section 150.21(d) of 14 CFR Part 150 states that airport proprietors are required to update NEMs when changes in the operation of the airport would create any new, substantial incompatible use. This is considered to be an increase in DNL noise levels of 1.5 decibels (dB) over incompatible land uses when the aircraft noise level exceeds 65 DNL. Of course, the airport operator may update the NEMs at any time based on their own needs and concerns. As previously stated, this is the first update to the NEMs since Runway 10R/28L was relocated.

The airport proprietor can gain limited protection through preparation, submission, and publication of NEMs. ASNA provides in Section 107(a), as codified in U.S.C. Title 49 section 47506, that:

"No person who acquires property or an interest therein after the date of enactment of the Act in an area surrounding an airport with respect to which a noise exposure map has been submitted under section 47503 of the Act shall be entitled to recover damages with respect to the noise attributable to such airport if such person had actual or constructive knowledge of the existence of such noise exposure map unless, in addition to any other elements for recovery of damages, such person can show that:

- i. A significant change in the type or frequency of aircraft operations at the airport; or
- ii. A significant change in the airport layout; or
- iii. A significant change in the flight patterns; or
- iv. A significant increase in nighttime operations; occurred after the date of acquisition of such property or interest therein and that the damages for which recovery is sought have resulted from any such change or increase."

ASNA provides that "constructive knowledge" shall be imputed to any person if a copy of the NEM was provided to them at the time of property acquisition or if notice of the existence of the NEM was published three times in a newspaper of general circulation in the area.

In addition, Part 150 defines "significant increase" as an increase of 1.5 dB of DNL. For purposes of this provision, FAA officials consider the term "area surrounding an airport" to mean an area within the 65 DNL contour. (See 14 CFR Part 150, Section 150.21(d), (e), (f)(1), and (f)(2)). An acceptance of the NEMs by the FAA is required before the FAA will approve an NCP for the airport.

### 1.1.4 Noise Compatibility Program (NCP)

An NCP includes provisions for the abatement of aircraft noise through aircraft operating procedures, air traffic control procedures, or airport facility modifications. It also includes provisions for land use compatibility planning and may include actions to mitigate the impact of noise on incompatible land uses. **Chapter Four, Noise Compatibility Program**, includes detailed information for the CMH NCP recommendations. The NCP must also contain provisions for updating and periodic revision.

FAR Part 150 NCP establishes procedures and criteria for FAA evaluation of the NCP. Two criteria are of particular importance: the airport proprietor may not take any action that imposes an undue burden on interstate or foreign commerce; nor may the proprietor unjustly discriminate between different categories of airport users.

The FAA also reviews changes in flight procedures proposed for noise abatement for potential effects on flight safety, safe and efficient use of the navigable airspace, management and control of the national airspace and traffic control systems, security and national defense, and compliance with applicable laws and regulations. Because the FAA has the ultimate authority for air traffic control and flight procedures related to air traffic control requirements, any measures relating to these subjects that are recommended in an NCP must be explicitly approved by the FAA and may not be implemented unilaterally by the airport proprietor.

FAA approval of Part 150 measures, through a Record of Approval (ROA) that is supported by an environmental assessment and a finding of no significant impact, environmentally clears the agency to participate in actions over which it has primary implementation responsibility (e.g., air traffic modifications). With an approved NCP, an airport proprietor becomes eligible for Federal funding to implement the eligible items of the program. Approval by the FAA does not, however, commit the agency to either a specific schedule of implementation or guarantee the allocation of Federal funds for implementation of any measure.

### 1.2 Public Involvement

As discussed previously, a key element in the Noise Compatibility Study process is public involvement. In order to inform and gather input from the public regarding the findings of the Noise Compatibility Study, a Technical Advisory Committee (TAC) was convened and met to review Study progress and provide input as necessary. Public Information Meetings were held in the community at key points throughout the Study.

### 1.2.1 Technical Advisory Committee (TAC)

A TAC was organized early in the planning process to provide feedback and advice to the planning team on the contents and preparation of the Noise Compatibility Study. The TAC provided residents, airport users, agencies, and local officials an opportunity to be involved in developing CMH's Part 150 NCP. In refining the NCP, staff from the CRAA, as well as the consultant team wanted to benefit from the TAC members' special viewpoints and the people and resources they represented. A process was therefore designed to encourage the open exchange of creative ideas to achieve results. The members of the TAC assisted the process in several ways.

As a Sound Board – The TAC provided a forum in which the consultant team and other TAC members could present information, findings, ideas, and recommendations. All benefited from

listening to the diverse viewpoints and concerns of the wide range of interests represented on the committee.

- As a Link to the Community Each member represented a key constituent interest local neighborhoods, local governments, public agencies, or airport users. Committee members provided a link between the study team and the people they represented. They were asked to inform their constituents about the study as it progressed, and to convey the views of others at committee meetings.
- As a Critical Reviewer The consultant team wanted to have its work scrutinized closely for
  completeness of detail and clarity of thought. The committee membership was urged to review the
  consultant's work and provide any input to help improve it.
- As an Aid to Implementation Each member has a unique role to play in implementing the plan, ranging from making changes in flight procedures to changes in local land use plans and regulations.

The TAC operated informally, with no compulsory attendance, no voting, and no officers. The final decision on which measures to include in the Part 150 NCP rests with the CRAA. The meetings were conducted by the consultant team and were conducted at key points in the study when committee input was especially needed. Members were urged to attend the general public information meetings held during the study to listen firsthand to the concerns that were raised and to speak with members of the consultant team and representatives of the CRAA one-on-one. Many organizations were contacted and invited to designate a representative to serve on the TAC. The resulting membership represents a broad range of interests that includes pilots, airlines, commerce, community, environmental, air traffic controllers, government and planning, as well as interested and affected citizens. A roster of the membership of the TAC is provided in **Appendix G**, *Public Involvement*.

# 1.2.2 Public Information Meetings

During the course of the Noise Compatibility Study Update, two sets of public information meetings were held in local communities, and a third set of meetings is scheduled in conjunction with the release of a Draft Noise Compatibility Study. Meeting dates and times are noted below. The public information meetings were attended by interested citizens, elected officials, and local media representatives. Appendix G, *Public Involvement*, includes copies of meeting notices, sign-in sheets, comments received, and meeting handouts.

### Public Information Meeting #1 – April 8 & 9, 2020

The first set of Public Information Meetings were scheduled for April 8<sup>th</sup> and April 9<sup>th</sup>, 2020. However, due to the outbreak of the COVID-19 virus and recommended precautions to prevent the spread of the virus and to protect public health, the public meetings were cancelled. All meeting materials were posted on the project website and methods for submitting public questions and comments were advertised online and in local newspapers.

### **Public Information Meeting #2**

The second Public Information Meeting was held on September 2, 2020. The meeting was conducted via online webinar with question and answer session. Information was published on the project website before the meeting and the presentation and transcript were posted on the project website after the meeting.

### **Public Information Meeting #3**

The third and final Public Information Meeting is scheduled to be held on July 29, 2021 and will be conducted concurrently with a Public Hearing.

### 1.2.3 Public Hearing and Comment Period

14 CFR Part 150 requires that Draft Part 150 NCP documents be made available to the public prior to conducting a Public Hearing. The Draft Part 150 NCP document was made available to the public at local libraries, the Airport, and online at https://www.airportprojects.net/cmh-part150/. A Public Meeting/Hearing is scheduled to be held on July 29, 2021 from 5:30 p.m. to 7:00 p.m. A list of document locations, a summary of the Public Meeting/Hearing, meeting materials, comments received, and response to those comments will be included in the Final Part 150 Noise Compatibility Study Document.

#### 1.2.4 Additional Public Coordination

Additional efforts to provide information and opportunity for public involvement in this Part 150 Noise Compatibility Study Update included a project website. Information about the Study; including general information, upcoming and past meetings, and a method to contact the Study Team; is available online at the following address: https://www.airportprojects.net/cmh-part150/.

# 1.3 Status of 2007 Noise Compatibility Plan

The 2007 Part 150 Noise Compatibility Study Update included 27 recommended measures: nine noise abatement measures, 12 land use management measures, and six program management measures. Each measure is listed below, followed by its status in italics.

#### **Summary of the 2007 NCP Noise Abatement Measures**

**NA-1:** Amend the Port Columbus International Airport nighttime maintenance run-up policy to designate an additional run-up location north of the airfield for the relocation of the Executive Jet Aviation's (EJA) new facility. This measure will provide attenuation of jet engine maintenance run-ups for adjacent residential areas located along I-270.

Status: Implemented – Run-ups are performed at the EJA (now NetJets) facility.

**NA-2:** Construct a new run-up barrier at the north airfield, if the EJA building does not adequately attenuate jet engine maintenance run-up noise for adjacent residential areas located along I-270.

Status: Implemented – A run-up barrier is used at the EJA (now NetJets) facility.

**NA-3:** Increase nighttime use of Runway 10L/28R, and amend the tower order CMH ATCT 7110.1 to read as follows:

- Unless wind, weather, runway closure or loss of NAVAIDS dictate otherwise, between the hours of 10:00 p.m. and 8:00 a.m. local time, Runways 28L and 10R are assigned to jet aircraft;
- Jet aircraft with Stage 3 engines may use Runway 10L/28R for arrival operations between the hours of 10:00 p.m. and 1:00 a.m. local time; and
- Jet aircraft with Stage 3 engines may use Runway 10L or 28R after 6:00 a.m.

Status: Partially implemented – The current Tower Order (CMH 7110.1L) includes a provision that unless wind, weather, runway closures, or loss of NAVAIDS dictate otherwise, Runway 10L/28R is a noise-sensitive runway. All arriving and departing aircraft must request Runway 10L/28R with an operational need between the hours of 10:00pm and 6:00am.

- **NA-4:** Maximize east flow and amend FAA Tower Order CMH ATCT 7110.1B and the Airports Facilities Directory to reflect implementation of the "East Flow" informal preferential runway use system.
- Status: Partially implemented Complex conditions at the airport such as winds, flow control policies at destination airports, and taxi times have limited the use of this measure.
- NA-5: Amend FAA Tower Order CMH ATCT 7110.1 and FAA Notice CMH ATCT N7110.22 to read as follows:

During nighttime operations, 10:30 p.m. to 7:00 a.m. local time, the following procedures shall be used for departures off Runway 10R:

- i. Aircraft normally assigned a runway heading shall be assigned a heading of 100 degrees.
- ii. Propeller driven aircraft, conventional or turboprop, shall be turned no further than 15 degrees left or right (085 degrees to 115 degrees). These headings shall not be altered until the aircraft has reached 3,000 feet Mean Sea Level (MSL) or is three miles from the runway end.
- iii. The aircraft will begin the turn at 2.2 Distance Measuring Equipment (DME) from the Runway 10R Localizer(LOC)/DME.
- iv. The aircraft must climb to an altitude of 1,215 feet MSL before turning.
- Status: Withdrawn The measure was developed for AirNet Systems, Inc. operations during the nighttime hours. In June 2005, AirNet relocated from CMH to Rickenbacker International Airport, so its application since then has not been required and the measure was withdrawn from the 2007 NCP.
- **NA-6:** Implement a 15-degree divergent turn off of Runway 28R, after crossing the runway end to a 295-degree heading, only during peak operating periods when traffic warrants.
- Status: Implemented This measure is used when traffic conditions warrant.
- **NA-7:** Create performance-based overlay procedures for all existing and proposed arrival/departure procedures. (RNAV/RNP/GPS/CDA).
- Status: Not Implemented RNAV/RNP procedures are being developed independently by the FAA and are expected to be implemented in April 2021.
- NA-8: Construct a noise berm/wall.
- Status: Not Implemented This measure was considered for the acquisition area along East 13<sup>th</sup> Avenue as mitigation for the runway relocation. Further investigation and surveys of property owners determined that a noise berm in the location was not desirable.
- NA-9: Replacement and potential relocation of Ground Run-Up Barrier B

Status: Not Implemented – Potential replacement and relocation of the Ground Run-Up Barrier B was proposed to accommodate larger aircraft associated with potential new maintenance hangars proposed for the southeast airfield at CMH. The proposed maintenance hangars were not constructed. Therefore, an upgrade to Barrier B was not pursued.

### **Summary of the 2007 NCP Land Use Compatibility Measures**

- **LU-1:** Offer a program for noise insulation of noncompatible structures for noncompatible residences within the 65+ DNL contour of the Future (2012) Noise Compatibility Program (NCP) condition, in exchange for an avigation easement.
- Status: Implemented the boundary was updated based on the Future (2012) NEM/NCP Noise Exposure Contour from the 2007 Part 150 Noise Compatibility Program Update. To date, the CRAA has provided for sound insulation of nearly 800 residences. All homes eligible for sound insulation based on the 2007 NEM/NCP Update Study, have been sound insulated or have been offered sound insulation and the owner(s) declined or did not respond to the offer.
- **LU-2:** Offer a program for noise insulation of noncompatible structures for noncompatible churches within the 65+ DNL contour of the Future (2012) Noise Compatibility Program (NCP) condition in exchange for an avigation easement.
- Status: Implemented One church, the Wonderland Community Church, was identified within the 65 DNL of the 2002 Part 150 Noise Compatibility Study. The CRAA purchased an avigation easement on the property and it is now considered a compatible land use. One other church, the Mount Judea Church, was contacted for potential inclusion in the program and did not respond. No other churches were identified within the 65+ DNL contour of the Future (2012) NEM/NCP Noise Exposure Contour.
- **LU-3:** Seek cooperation from the City of Columbus and Franklin County to amend their Land Use Compatibility Standards to achieve the level of compatibility identified in the Recommended Land Use Compatibility Guidelines.
- Status: Partially implemented Both the City of Columbus and Franklin County have adopted land use development standards similar to what was recommended in the previous NCP. However, in some cases these standards are not as strict as was recommended. (See Chapter Four for additional details).
- **LU-4:** Seek cooperation from the City of Columbus and Franklin County to amend the AEO (Airport Environs Overlay) District boundaries to include the proposed Airport Land Use Management District (ALUMD) corresponding to the 60 DNL of the 20 year NCP contour.
- Status: Not implemented Both Columbus and Franklin County set the AEO boundary at the 65 DNL contour.
- **LU-5:** Seek cooperation from Franklin County, the City of Gahanna, and Jefferson Township to amend each jurisdiction's zoning resolution to require applicants for rezoning, change of use, or special use permit to convey an avigation easement to the appropriate airport.
- Status: Partially implemented Section 660.07 requires conveyance of avigation easements for variance or conditional use permits only.
- **LU-6:** Seek cooperation from Jefferson Township and the City of Gahanna to adopt the proposed Airport Land Use Management District (ALUMD) as part of their official zoning regulations.
- Status: Not implemented Coordination with local jurisdictions has occurred; however, zoning regulations have not been updated.

- **LU-7:** Seek cooperation from Franklin County, Jefferson Township, Mifflin Township, and the City of Gahanna to adopt subdivision codes applicable to the proposed Airport Land Use Management District (ALUMD).
- Status: Partially implemented Coordination with local jurisdictions has occurred; however, only Franklin County has updated it subdivision regulations to require a note identifying whether or not the plat is located wholly or in part in an established ALUMD (Franklin County Subdvision Regulations Section 307.03 (M)).
- **LU-8:** Seek cooperation from Franklin County, Jefferson Township, Mifflin Township, and the City of Gahanna to adopt building codes applicable to the proposed Airport Land Use Management District (ALUMD).
- Status: Not implemented Coordination with local jurisdictions has occurred; however, building codes have not been updated. Franklin, Jefferson, and Mifflin all reference Ohio Building Code. Gahanna adopted the OBC as their own. There is no reference to the ALUMD or airport compatibility in the OBC.
- **LU-9:** Seek cooperation from the Board of Realtors to participate in a voluntary fair disclosure program for property located within the proposed Airport Land Use Management District (ALUMD).
- Status: Not implemented Coordination has occurred; however, local jurisdictions elected not to amend their ordinances to include the ALUMD. The CRAA makes the noise exposure maps and other noise compatibility information available on its website.
- **LU-10:** Periodically place advertisements in real estate sections of local newspapers delineating the boundaries of the proposed Airport Land Use Management District (ALUMD).
- Status: Not implemented Coordination has occurred; however, local jurisdictions elected not to amend their ordinances to include the ALUMD. The CRAA makes the noise exposure maps and other noise compatibility information available on its website.
- LU-11: Purchase the Buckles property to prevent imminent non-compatible developments from occurring.
- Status: Not implemented The Buckles property is located to the northeast of CMH east of Hamilton Road and southwest of I-270. Much of the land area is undeveloped although since the 2007 Part 150 Noise Compatibility Study the property has been bisected by Techcenter Drive and some lots have been subdivided with new commercial development at the eastern end of Techcenter Drive. The other undeveloped parcels are zoned for commercial use.
- **LU-12:** Develop an Airport Land Use Management District (ALUMD) based on the 20-year Noise Exposure Map/Noise Compatibility Program (NCP) noise contour, natural geographic and jurisdictional boundaries.
- Status: Not implemented The intent of this measure was to eliminate changing boundaries set by the current noise exposure contours and establish a fixed boundary for consistency. The suggested fixed boundary was not implemented. The City of Columbus and Franklin County continue to apply an Airport Environs Overlay Zone, the boundaries of which correspond to the noise exposure contour from the previous Part 150 Noise Compatibility Study Update which is subject to periodic review and potential revision.

#### **Summary of the 2007 NCP Program Management Measures**

PM-1: Maintain the noise abatement elements of the FAA ATCT Tower Order

Status: Implemented – The noise abatement elements are contained in the current Tower Order.

PM-2: Maintain the Noise Management Office for noise compatibility program management.

Status: Ongoing.

PM-3: Maintain an ongoing public involvement program regarding the noise compatibility program.

Status: Ongoing.

**PM-4:** Maintain the noise and flight track monitoring system and expand and upgrade the system as necessary. Add up to eight permanent NMTs and upgrade the computer software and hardware as necessary

Status: Implemented – In 2014, four additional permanent noise monitors (NMTs) were installed, two west of the relocated Runway 10R/28L and two east of Runway 10R/28L, which expanded the system to include a total of 16 NMTs. In addition, in 2015, the other existing 12 NMTs were upgraded with newer equipment. The CRAA Airport Operations department continues to monitor the operation of the system and receives ongoing software updates.

**PM-5:** Routinely update the noise contours and periodically update the noise program.

Status: Ongoing.

**PM-6:** Establish a land use compatibility task force which meets periodically to discuss issues relevant to airport noise compatibility planning.

Status: Previously implemented but no longer active. Airport Facilities and Activity

The following sections provide a basic discussion of the history of the Airport, a description of the area surrounding the Airport, an inventory of the existing airport facilities, and an identification of the typical aircraft activity at CMH.

### 1.3.1 Airport History

CMH opened in 1929 as Port Columbus which served as a stop for transcontinental air/rail travel. That year Transcontinental & Western Air (TWA) began its New York to West Coast air/rail service through Columbus. By 1939 there were 15 daily flights leaving from CMH. At the onset of World War II, CMH was one of only 31 non-military airports in the country that could accommodate military aircraft of the time; in 1941 the Federal government took control of and expanded CMH. After the War, CMH began to grow and in 1952 the east/west runway was extended from 4,500 to 8,000 feet in length. A new passenger terminal was dedicated in 1958 as part of a \$12 million upgrade to CMH. That same year CMH was ranked as the 16<sup>th</sup> busiest airport in the nation. In 1965 the Airport gained "international" status when a U.S. Customs facility was established. In 1979, the 50<sup>th</sup> anniversary of air travel at CMH, the airport undertook a \$70 million expansion that included the addition of enclosed jetways at every gate.<sup>1</sup>

Columbus Regional Airport Authority, online at https://columbusairports.com/storage/staging/20171211172828-columbus-regional-airport-authority-history.pdf, Accessed, June 2, 2021.

In 1989, 17th Avenue was renamed as International Gateway, which leads to the front door of the Airport. The terminal was expanded in 1989 with the opening of the seven-gate South Concourse, (also known as Concourse A) and again expanded in 1996 with the four-gate North Concourse (also known as Concourse C).<sup>2</sup> Later, there was a second expansion to Concourse C adding 7 gates.

In 1991, the Columbus Municipal Airport Authority was formed. Operation of CMH was transferred from the City of Columbus to the Authority. In late 2002, the City of Columbus, Franklin County, and the Columbus Municipal Airport Authority approved the merger of the Columbus Airport Authority and the Rickenbacker Port Authority, forming the new CRAA, effective January 1, 2003.<sup>3</sup>

The North Runway (Runway 10L/28R) was extended from 6,000 to 8,000 feet in 1997. Other improvements included the realignment of International Gateway in 2008 and construction of the I-670 / Stelzer Road overpass in 2009 to provide more convenient access by eliminating the former intersection of Stelzer Road and International Gateway. In 2013, the CRAA completed construction of a replacement to the South Runway (Runway 10R/28L), which was relocated approximately 700 feet south of its original location. The relocated runway became fully operational in August 2013.<sup>4</sup> The CRAA rehabilitated Runway 10L/28R in 2016 by replacing or repairing the existing pavement. Other recent development at CMH includes the ongoing construction of a new consolidated rental car facility and redevelopment of other facilities along International Gateway to improve passenger convenience.

In 2016, CMH was renamed from Port Columbus International Airport to John Glenn Columbus International Airport to honor Ohio native and former Marine Corps aviator, astronaut, and U.S. Senator John Glenn. The name change was unanimously agreed upon by the CRAA, and Governor John Kasich signed a bill officially renaming the Airport in June 2016.<sup>5</sup>

### 1.3.2 Airport Location

CMH is located on the eastern edge of the City of Columbus, to the north of the cities of Bexley and Whitehall, southwest of the City of Gahanna and west of Jefferson Township. The area surrounding CMH includes a mixture of land uses, including single-family residential housing, multi-family residential communities and mobile home parks, commercial, and industrial areas. **Exhibit 1-2**, *Airport Location*, shows the location of CMH in relation to the Columbus Area.

### 1.3.3 Airport Runways

The airfield at CMH consists of two parallel, east/west runways spaced approximately 3,500 feet apart. Runway 10R/28L, the south runway, is the longest runway on the airfield at 10,113 feet. Runway 10L/28R, the north runway, is 8,001 feet in length.

### 1.3.4 Airport Operators and Facilities

As of October 2020, CMH was served by the following commercial airline operators:

- Alaska Airlines
- Air Canada Express (Air Georgian & Jazz)
- American Airlines
- Delta Air Lines / Delta Connection

- Frontier Airlines
- Southwest Airlines
- Spirit Airlines
- United Airlines / United Express

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

Port Columbus officially renamed after John Glenn, WBNS 10TV, June 28, 2016. Available online at: https://www.10tv.com/article/john-glenn-be-honored-today-port-columbus-renaming-ceremony.

#### 1.3.4.1 Terminal Facilities

The Passenger Terminal at CMH includes 31 total gates in three separate concourses. As of December 2019, Concourse A, the South Concourse, has five gates, Concourse B has 15 gates, and Concourse C, the North Concourse, has 11 gates.

#### 1.3.4.2 Airside Facilities

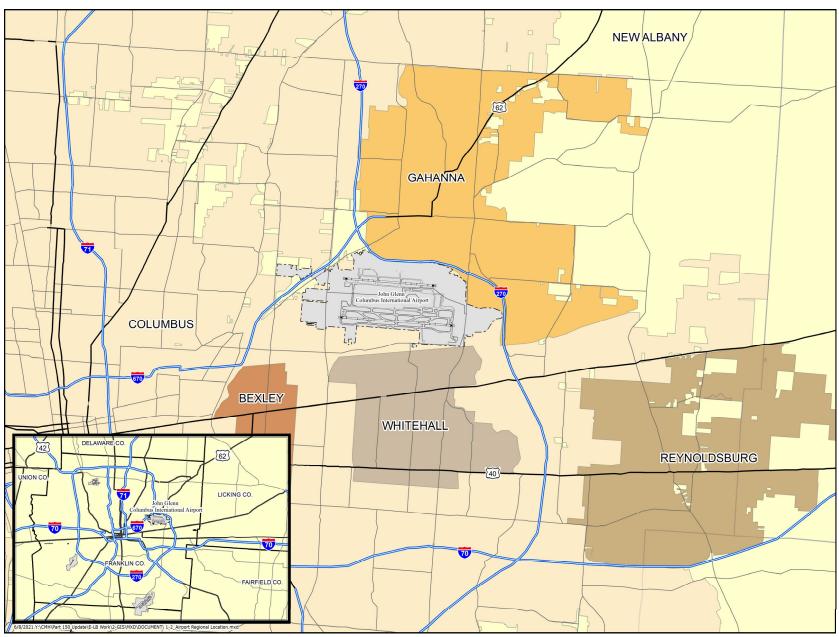
CMH property can be divided into three distinct areas – north airfield, midfield, and south airfield. The north airfield, which is north of Runway 10L/28R, consists of the airfield maintenance facilities, NetJets, MPW hangar, and Nationwide hangars, and other airport-related commercial facilities. The midfield area is situated between Runway 10L/28R and Runway 10R/28L. The midfield includes the passenger terminal and apron area and the Lane Aviation facility. A new consolidated rental car facility (CONRAC) is currently under construction within the midfield area to the west of the existing terminal. The primary access to the terminal and parking is from International Gateway, which connects the Airport to I-670 and I-270 to the west. Access from the east is available via Sawyer Road and Bridgeway Avenue. The passenger terminal and parking garage is located at the east end of International Gateway. Several hotels, surface parking lots, and the airport traffic control tower (ATCT) are located along International Gateway west of the terminal. The south airfield is located to the south of Runway 10R/28L. The original terminal building is located in the southeast corner of the airfield. The Columbus International Air Center is also located south of the airfield along 5<sup>th</sup> Avenue which accommodates maintenance operations for Republic Airways. The airport facilities at CMH are shown on **Exhibit 1-3**, *Existing Airport Layout*.

## 1.3.5 Fixed-Base Operators (FBOs)

There are two fixed-base operators (FBOs), Lane Aviation and Signature Flight Support ,at CMH, that provide aircraft services such as fueling services, ramp parking, hangar parking/storage, parts, and maintenance for general aviation (GA) aircraft.

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Exhibit 1-2 Airport Location



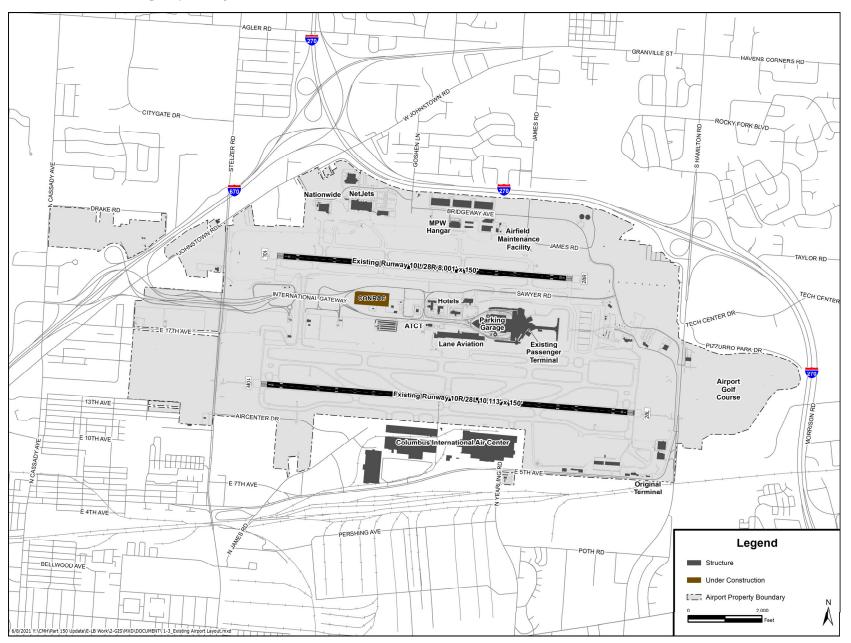
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Exhibit 1-3 **Existing Airport Layout** 



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#### 1.3.6 Based Aircraft

A total of 73 aircraft are based at CMH. **Table 1-1** provides the number of general aviation aircraft based at CMH by aircraft type.

Table 1-1 Based Aircraft

Aircraft Type	Number	
Single engine airplanes	23	
Multi engine airplanes	6	
Jet airplanes	42	
Helicopters	2	
Total aircraft based on the field	73	

Source: www.airnav.com. Airport information published as of October 15, 2020.

# 1.3.7 Annual Operations

The number of annual operations at CMH for the Existing (2020) Baseline period was 134,999, which results in 369.9 average-annual day operations. The number of annual operations at CMH was based on ATCT records, airport landing fee reports, and discussions with operations. **Table 1-2** shows a summary of the Existing (2020) average daily operations by primary user group. For a detailed breakdown of the annual operations, refer to Appendix C, *Noise Methodology*.

Table 1-2 Summary of Average-Annual Day Operations

Aircraft Type		vals Depa		rtures	Total
Ancialt Type	Daytime	Nighttime	Daytime	Nighttime	rotai
Large Jets	93.5	26.7	97.8	22.4	240.3
Regional / Air Taxi Jets	28.8	3.8	29.5	3.1	65.1
Commuter / Air Taxi Props	2.2	1.2	2.9	0.6	6.9
General Aviation Jets	16.4	1.8	16.5	1.7	36.4
General Aviation Props	9.7	0.9	10.1	0.5	21.2
Total	150.6	34.3	156.7	28.2	369.9

Notes: Sum may not equal total due to rounding.

Daytime = 7:00 am - 9:59 pm, Nighttime = 10:00 pm - 6:59 am.

Source: Federal Aviation Administration (FAA) Operations Network (OpsNet) data, CRAA Landing Fee Reports from September 2018 through August 2019, CMH ANOMS data from September 2018 through August 2019, Landrum & Brown analysis, 2020.

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