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## **Appendix P – Public and Agency Comments on the Draft EA**

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## Summary of Public and Agency Comments on the 2022 Draft Environmental Assessment and Airport Responses

This appendix (Appendix P) is a summary of individual comments received from the public and regulatory agencies regarding the 2022 Draft Environmental Assessment (EA) with Ann Arbor Municipal Airport (ARB or Airport) responses to those comments. During the 2022 Draft EA, comments from the public and regulatory agencies were received via mail, email, and written comments left at the Public Hearing. The following comments are grouped by topic and then summarized within those topics by theme or position. As such, verbatim comments are not provided in this appendix.

A copy of the actual comments received from the public are found in **Appendix Q Public Comments Received**. Actual letters received from local, state, and federal agencies are found in **Appendix R Agency Comments Received**.

All comments received were grouped by the following topics:

- A. Noise
- B. Wildlife
- C. Air Quality
- D. Water Resources/Water Quality
- E. Safety/Health
- F. Financial/Economic
- G. Technical
- H. General
- I. Support

Responses to public comments are categorized accordingly and are provided in the corresponding sections below.

### A. Noise

1. *There are deep concerns regarding the proposal's impact on the quality of life in neighborhoods surrounding the airport, which are already impacted by the excessive noise levels generated, especially during spring and summer months and at night during football season. The proposal will allow aircraft to pass lower over Lohr Road than they do today, which will result in even further noise levels for the community.*

**Response:** A noise analysis conducted as part of the 2022 Draft EA (summarized in Section 3.14) and discussed in greater detail in **Appendix L Noise Analysis** shows that the proposed project is not expected to increase aircraft noise levels in the neighborhoods surrounding the Airport to the extent that it becomes a significant impact.

The Federal Aviation Administration (FAA) noise analysis uses the Day Night Average Sound Level (DNL) as its primary noise metric. DNL factors in the levels of aircraft events, the number of times those events take place, and the timeframe in which they occur (day or night). Additional information about the DNL is presented in **Appendix L Noise Analysis**.

The FAA, U.S. Environmental Protection Agency (USEPA), and U.S. Department of Housing and Urban Development have established the 65-decibel (dB) DNL level as the threshold for noise impacts over noise sensitive areas. These areas typically include residential, educational, health, religious structures and sites, parks, recreational areas, wilderness areas, wildlife refuges, and cultural and historical sites. Noise levels greater than 65 DNL within noise sensitive areas are considered a potential impact.

The Aviation Environmental Design Tool (AEDT) is the FAA-approved software system to dynamically model aircraft performance in space and time to produce noise estimates. AEDT is designed to estimate the long-term effects of noise using average annual conditions as inputs. The AEDT model requires a variety of these operational-related inputs to model the noise environment around an airport. Common noise modeling inputs include aircraft forecasts, aircraft types, runway utilization, time of day, surrounding terrain, and flight tracks.

To evaluate potential noise from the proposed project, noise modeling was developed using the number of operations reported by the Airport Traffic Control Tower (ATCT) for the base year of 2019, which was the most recent calendar year in which a full 12 months of historical data was available when the current EA was initiated. The model also projected noise levels for future years 2024 and 2029 using projections and Instrument Flight Rules (IFR) fleet mix data from the Runway Justification Study in **Appendix C**.

Noise sensitive land uses exist predominantly to the west of ARB. Other land uses adjacent to the Airport (commercial, manufacturing, and agricultural facilities) are not considered noise sensitive and were not considered for noise impacts.

The noise analysis found that the 65 DNL contour remains completely within ARB-owned property from 2019 through the end of the modeling year of 2029. The model results indicated that increases in noise above the 65 DNL on noise sensitive land uses are not expected. Therefore, no noise impacts are expected in noise sensitive land use areas off airport-owned property.

The comment that the proposed project will allow aircraft to pass lower over Lohr Road than they do today is accurate. Currently, as discussed in **Section 2.5, Alternative 2 – Shift Runway 150 Feet Southwest and Extend 720 Feet at the Approach End of Runway 6 (Preferred Alternative)**, aircraft on the standard approach to Runway 6 are approximately 72 feet in height over Lohr Road. With the 720-foot extension of the runway, aircraft on the standard approach to Runway 6 will be approximately 49 feet above Lohr Road. Regarding the related concern about it representing an increase in noise levels, this condition was part of the data input for the noise modeling.

2. *The noise problem around the airport will increase under the proposal. The noise analysis conducted as part of the Draft Environmental Assessment shows that the 60-decible noise level would extend to a residential area at the southwest corner of the airport.*

**Response:** Although the 65 DNL is the standard for determining potential noise impacts on noise sensitive land uses, the noise analysis (summarized in **Chapter 3.0 Affected Environment & Environmental Consequences, Section 3.14 Noise and Noise Compatible Land Use** and presented in greater detail in **Appendix L Noise Analysis**) found that with the construction of the proposed project, the 60 DNL narrowly left Airport property in years 2024 and 2029 at the Runway 6 end (**Figure 3.5 Location of 60 DNL, Chapter 3.0**). The outer edge of the 60 DNL is in a residential area at the southwest corner of the Airport.

The Airport, in full disclosure, included this 60 DNL location in their analysis to determine potential noise impacts from the proposed project even though the 65 DNL is predominantly used for determining impacts.

To qualify as a potential noise impact between the 60 DNL and the 65 DNL, the increase due to the project implementation must be 3.0 dB or more. The model showed no increase above 3.0 dB occurs between the 60 DNL and the 65 DNL under any year with the proposed project. Noise impacts are not expected at this location.

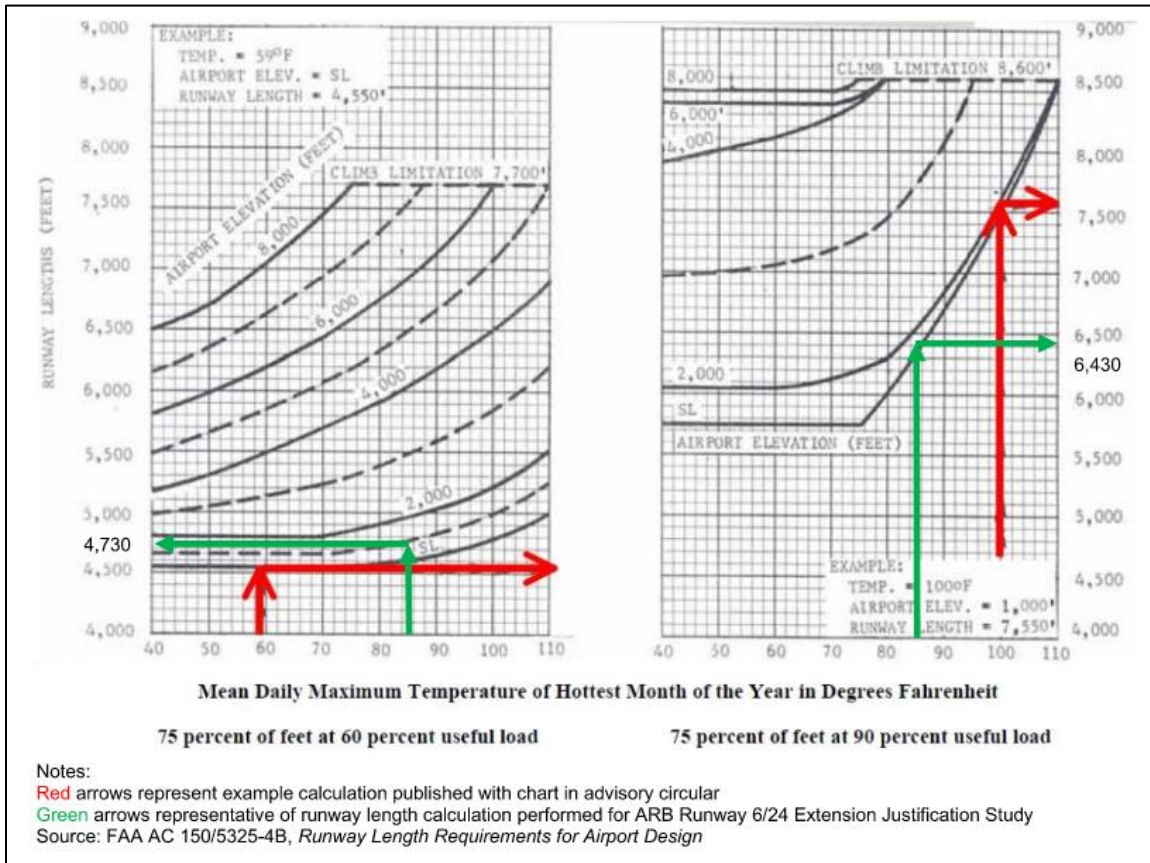
3. *A runway extension would attract more traffic, including larger and heavier jet and turboprop traffic. This would increase noise levels and potentially impact the desirability of many of the residential neighborhoods south of Ann Arbor. The noise from the larger and heavier aircraft will also damage the interiors of homes.*

**Response:** The response to Noise Comment #1 addressed the comment regarding the proposed project resulting in an increase in noise levels in detail.

Regarding the comment that the proposed project will attract larger and heavier aircraft to the Airport, the proposed extension of the runway evaluated by the 2022 Draft EA was based on the required runway length of the critical aircraft, which was found to be a family grouping of B-II turboprop types. These aircraft currently conduct greater than 500 annual operations and are forecasted to remain the critical aircraft in the future (see **Appendix C – Runway Justification Study**).

Larger aircraft require enhanced infrastructure not offered at ARB, such as precision navigational equipment and runway lengths that exceed the FAA's required length for these aircraft. Larger, heavier aircraft are not projected to conduct additional operations if the runway is extended to 4,225 feet. The forecast does assume some occasional use of larger aircraft at the airport. This is included in the noise modeling. However, for regular use by larger aircraft, a longer runway is usually needed under typical operating conditions and trip distances (**Figure 1**). Instead, these aircraft are expected to continue to operate at the Willow Run Airport (YIP) and other airports in the region that have infrastructure to support these needs.

**Figure 1: Runway Length Requirements – Aircraft More Than 12,500 Pounds Up To 60,000 Pounds**



It was noted in the response to Noise Comment #1, that, to evaluate potential noise impacts from the proposed project, noise modeling was developed applying IFR fleet mix percentages and using ATCT records of total annual operations for the base year of 2019. IFR fleet mix percentages were also applied to projections of future demand (presented in **Appendix C Runway Justification Study**) for years 2024 and 2029. **Table 1** below shows the projections of total operations by aircraft type and year used for the noise analysis.

**Table 1: Projections of Total Operations by Aircraft Type and Year**

Aircraft	Aircraft Type	2019 (Base Year)		2024		2029	
		Itinerant	Local	Itinerant	Local	Itinerant	Local
C56X - Excel XLS	Jet	134		145		155	
Cessna 680 Citation Sovereign	Jet	134		145		155	
Pilatus PC24	Jet	134		145		155	
E55P - Phenom 300	Jet	74		80		86	
Cessna CJ4	Jet	74		80		86	
TBM8 - TBM-850	Turbine	492		533		569	
TBM9	Turbine	492		533		569	
Pilatus PC12	Turbine	1,624		1,755		1,873	
Beech B350	Turbine	1,584		1,715		1,833	
Piper Meridian P46T	Turbine	1,584		1,715		1,833	
Cessna Caravan C208	Turbine	1,584		1,715		1,833	
C172 - Cessna 172/182	Piston	6,665	15,884	7,219	15,831	7,712	15,755
Piper Cherokee PA32	Piston	6,665	15,884	7,219	15,831	7,712	15,755
Cirrus SR22	Piston	6,665	15,884	7,219	15,831	7,712	15,755
EC55 - EC-155	Helicopter	813		881		941	
Dornier 328	Jet	29		29		29	
Beechjet 400	Jet	30		30		30	
<b>Total</b>		<b>28,775</b>	<b>47,653</b>	<b>31,160</b>	<b>47,494</b>	<b>33,282</b>	<b>47,264</b>
		<b>76,428</b>		<b>78,654</b>		<b>80,546</b>	

Source: Appendix L Noise Analysis of the *Environmental Assessment – Draft Report for Ann Arbor Municipal Airport*, November 2022

4. *The Environmental Assessment does not address any noise issues beyond the Airport fence. A lot of people live around the Airport who experience overflights daily. The Environmental Assessment does not address noise issues presented by aircraft overflight events.*

**Response:** The analysis performed in support of the 2022 Draft EA includes an evaluation of both on- and off-airport noise. As previously explained in the response to Noise Comment #1, the AEDT is the FAA-approved software system that models aircraft performance in space and time to produce noise estimates. This model requires many different inputs to model the noise environment around an airport, one of which is aircraft flight tracks. These flight tracks represent where aircraft

typically fly, and therefore these flight tracks also represent areas on the ground that experience overflights.

Potential noise impacts were measured in terms of DNL, which the FAA uses as its primary noise metric. The results were graphically presented on maps showing the location of the 65 DNL contour that connects locations on the ground experiencing the same noise level (found in **Appendix L Noise Analysis**). Noise levels greater than 65 DNL for noise sensitive areas (residential, educational, health, religious structures and sites, parks, recreational areas, wilderness areas, wildlife refuges, and cultural and historical sites) are considered a potential impact.

The noise analysis found that the 65 DNL contour, generated in the AEDT software using flight tracks as one of the inputs, remains completely within ARB-owned property from 2019 to 2029. Please see **Appendix L Noise Analysis** for a detailed description of the noise modeling including assumptions and results.

5. *The noise analysis in the EA only used computer modeling. This is not real data. The noise analysis should have included data over and above a computer simulation.*

**Response:** Title 14 Code of Federal Regulations (CFR) Part 150 lists the standards to document data that identifies noise impacts. As explained in the response to Noise Comment #1, the AEDT is the FAA-approved software system that models aircraft performance in space and time to produce noise estimates. The FAA requires AEDT software to be used for 14 CFR Part 150 Study aircraft noise analysis as well as National Environmental Policy Act (NEPA) noise analysis. This study used the approved software meeting the guidelines and standards for documenting the results of the noise analysis. Please see **Appendix L Noise Analysis** for a detailed description of the noise modeling including assumptions and results.

6. *A lot of the noise data used in the EA is outdated, since it is from dates prior to 2015. Where is the data for 2022?*

**Response:** As explained in the response to Noise Comment #1, noise modeling was developed for the base year (2019) and for future years 2024 and 2029 to evaluate potential noise impacts from the proposed project. Data for 2019 was used because it was the most recent calendar year in which a full 12 months of historical data was available that accurately captured typical aircraft activity trends. This was chosen because the COVID-19 pandemic impacted aircraft operations at ARB in 2020 at the time the current EA was initiated. Table 4-3 in **Appendix C Runway Justification Study** evaluated how quickly aircraft activity would rebound from the impacts of the COVID-19 pandemic. This found that operations were trending to fully recover to 2019 levels by 2021. Thus, 2019 was established as the base year, because 12 months of 2021 data was not available at the time the 2022 Draft EA was completed.

7. *Concerns that the Airport's noise abatement policy or NBAA guidelines for pilots flying over residential areas are not being followed by pilots at ARB. The Airport should maintain a community-friendly noise abatement policy to preserve the quality of life for neighboring residential areas.*

**Response:** The Airport strives to be a good neighbor, and this includes maintaining a community-friendly noise abatement policy. The Airport encourages pilots to operate their aircraft in the quietest manner without compromising flight safety. Educational materials and pilot brochures regarding the Noise Abatement Program have been distributed to the local flight schools and Airport-based pilots. Posters outlining noise abatement procedures have been installed at the terminal and Fixed Base Operators (FBOs), and airfield signage has also been installed. The Noise Abatement Program Pilot Brochure is available to itinerant pilots using the Airport at the terminal building and FBOs. This brochure identifies traffic pattern directions and altitudes and recommended traffic pattern procedures. Pilots are advised to be mindful of multiple touch-and-go landings, especially morning and evening. Ultimately, it is up to each individual pilot to abide by the Noise Abatement Program since this is voluntary. The Airport is not able to mandate or enforce any penalties for violations against its Noise Abatement Program per the Airport Noise and Capacity Act (ANCA).

8. *Concerns that Airport management won't be able to manage the noise issue if the proposed project is implemented, because they can't manage the current situation.*

**Response:** The Airport takes noise concerns very seriously. As explained in the response to Noise Comment #7, the airport strives to be a good neighbor and work with the surrounding residential areas to maintain a community friendly noise abatement policy.

Noted in the response to Noise Comment #1, the noise analysis found that the 65 DNL contour, which is the FAA's noise threshold of significance, remains completely within ARB-owned property from 2019 through 2029. Noise impacts on noise sensitive land uses within the 65 DNL are not expected from the proposed project.

9. *The incessant "touch-and-go" takeoffs and landings associated with the flight training schools are a nuisance, unsafe, and affect our quality of life. These operations occur seven days a week. They circle the Airport and fly low over homes at low altitude approximately every two to three minutes.*

**Response:** Touch-and-go operations occur at ARB, as they do at most airports. While they are used during flight training, pilots of all levels occasionally use them to maintain their license. They are safe and are conducted to specific parameters.

As the Airport strives to be a good neighbor, the response to Noise Comment #7 provides an explanation of the Airport's voluntary Noise Abatement Program. Likewise, these touch-and-go operations were included as part of the noise analysis conducted for the 2022 Draft EA summarized in **Chapter 3.0 Affected Environment & Environmental Consequences, Section 3.14 Noise and Noise Compatible Land Use**, and presented in greater detail in **Appendix L Noise Analysis**.

10. *The noise analysis in the EA uses the DNL noise metric, which conservatively models the aircraft noise environment with acceptable industry standards using current traffic levels and modest projections of future activity. SEL (single event sound pressure level) is an additional noise metric the FAA uses to measure aircraft noise levels. It is unknown how a runway extension to accommodate more heavily loaded aircraft with greater ranges would increase aircraft traffic, DNL,*



*and SEL, as well as impact and expand the hours of flight arrivals, thus changing the timing and impact of SEL nighttime sound.*

**Response:** The response to Noise Comment #1 explained how the noise analysis was conducted for the current EA. As summarized in **Chapter 3.0 Affected Environment & Environmental Consequences, Section 3.14 Noise and Noise Compatible Land Use**, and discussed in greater detail in **Appendix L Noise Analysis**, the FAA uses the DNL as its primary noise metric. DNL accounts for the levels of aircraft events, the number of times those events take place, and the timeframe in which they occur (day or night). Noise levels greater than 65 DNL on noise sensitive areas are considered a potential impact. The noise analysis found that the 65 DNL contour remains completely within ARB-owned property from 2019 through 2029. Noise impacts on noise sensitive land uses within the 65 DNL are not expected from the proposed project.

**Appendix L Noise Analysis** contains details about the noise modeling, including inputs, methodology, and noise contour maps under different modeling scenarios.

11. *Results of a study of the projected noise exposure have not been reported and I have not received a survey regarding my reaction to noise.*

**Response:** There were no surveys regarding public reaction to the noise analysis as a part of this project; however, the public was afforded an opportunity to review and comment on the proposed project. This was accomplished through the publication of a legal Public Notice (Notice) in the *Ann Arbor News* (both print and online editions) 30 days prior to a Public Hearing. The Notice explained that the 2022 Draft EA was available for public review and comment and announced the date, time, and location of the Public Hearing. A Public Hearing was then held at the Guy C. Larcom City Hall building in Ann Arbor, Michigan, on December 13, 2022.

The purpose of the Public Hearing was to present the Preferred Alternative and its associated impacts, including details on the noise analysis and results, to the public and receive written and oral comments on the proposed action. A court reporter was also present to record verbal comments from the public.

The 2022 Draft EA document was available for public review 30 days prior to the Public Hearing and 30 days after the meeting was held. The 2022 Draft EA was available on the Airport's website and hard copies were available at the following four locations:

- Ann Arbor Municipal Airport
- Ann Arbor District Library
- City Clerk's Office, Guy C. Larcom City Hall
- Pittsfield Charter Township Clerk's Office

To further increase public awareness, the project was also promoted on the City's events calendar, and advertised in their December 2022 community newsletter, with periodic posts via Facebook.

As required by NEPA, an assessment of the projected aircraft noise exposure in the areas surrounding ARB was provided in **Section 3.14 Noise and Noise Compatible Land Use** in the 2022 Draft EA, with full details of the noise analysis provided in **Appendix L Noise Analysis**. The

evaluation of the ARB noise environment and land use compatibility with airport noise was conducted using the methodologies developed by the FAA and published in FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*; FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*; and 14 CFR Part 150, *Airport Noise Compatibility Planning*. As required in these publications, the FAA's AEDT software system was used to develop noise exposure contours to assess the noise impacts associated with the proposed extension of Runway 6/24. A discussion of this noise analysis was provided in the response to Noise Comment #1.

12. *The noise analysis conducted for the Draft EA did not consider the weather's impacts on flight tracks. Variations in takeoff and landings due to weather conditions would certainly increase noise levels.*

**Response:** The noise analysis of this proposed project included accounting for the influence of weather conditions on aircraft activity at the Airport. In addition, the AEDT model required other operations-related inputs to model the noise environment around an airport. These inputs include:

- Aircraft activity levels
- Aircraft fleet mix
- Runway utilization
- Time of day
- Surrounding terrain
- Flight tracks

Flight tracks represent where aircraft fly in relation to the ground. These paths are approximations of the average path that aircraft take while operating at the Airport, as aircraft do not fly exact or precise "tracks," but rather a wider "path" that represents some dispersion due to several factors, including weather (temperature, wind speed and direction, barometric pressure), pilot proficiency, aircraft performance, other air traffic, and separation requirements.

The tracks used for the noise analysis not only included straight in, straight out, and touch-and-go tracks but also account for the various turns and headings aircraft are likely to take when departing and landing. Data regarding runway and track usage were derived from information provided by the Airport and ATCT personnel.

It should be noted that during inclement weather conditions, aircraft operations will generally be reduced due to the instrumentation and certification requirements pilots must have to operate in poor weather. However, the noise analysis represents a complete year and includes the different types of weather experienced at the Airport on an annual basis. In addition, please see **Appendix L Noise Analysis**, which provides additional details about the modeling used in this noise analysis.

13. *There is no indication that the project will comply with Pittsfield Township's noise ordinance; likewise, there is no indication that ARB and MDOT will follow the Agreement between Pittsfield and the City of Ann Arbor.*

**Response:** Noise generated by aircraft is not specifically identified in the Pittsfield Township noise ordinance. The Airport must comply with the Airport Noise and Capacity Act of 1990 and 14 CFR Part 161.

14. *The Draft EA does not analyze that night and jet operations will increase.*

**Response:** The response to Noise Comment #3 addresses the projections of jet aircraft activity associated with the project. A significant change in the fleet mix of operations at ARB is not anticipated because of the proposed runway extension. The forecasts prepared for the 2022 Draft EA as presented in Table 1-0 and Table 5-2 of the Runway Justification Study project that the fleet mix of aircraft types will remain primarily A-I and B-II types throughout the 20-year forecast period.

While increases in jet operations are projected, these are forecasted to be primarily Aircraft Approach Category (AAC) B aircraft types. This is because the length of the extended runway at ARB is not anticipated to be conducive to supporting operations by larger, higher performance aircraft. Pilots of these aircraft types prefer to operate on longer runways offering a greater margin of error to increase decision-making time when navigating to land. ARB also lacks infrastructure such as apron space and hangars to accommodate larger, higher performing jet aircraft, discouraging them from operating at the Airport. Should concessions be made for these larger aircraft types, the decreases in fuel and passenger loads may not be cost-effective to operate the aircraft at ARB, and insurance requirements associated with these jet aircraft types often require operation at airports with at least 5,000 feet of runway length.

Likewise, increased night operations by these aircraft types are not anticipated since most operations that occur at ARB are between 7 am and 10 pm. Significant operations at night by longer hauling business jets, which are larger in size and higher in performance, which are returning from trips are not anticipated.

## **B. Wildlife**

1. *We are concerned about the impacts of this proposed project on the diversity of wildlife found on and around the Airport. There are large populations of geese, ducks, and swans in the fields and nearby ponds and lakes. There are also sparrows, deer, turkeys, foxes, coyotes, sparrows, and a wide variety of other birds.*

**Response:** The 2022 Draft EA included extensive analysis of the proposed project's potential impacts on wildlife and wildlife habitat. First, coordination with the U.S. Fish and Wildlife Service (USFWS) and the Michigan Department of Environment, Great Lakes, and Energy (EGLE) occurred to identify protected species in the vicinity of the project area. Protected species near the project area are presented in **Section 3.5.1 Endangered & Threatened Species**.

USFWS coordination determined that no critical habitat under their jurisdiction is found in the project area. Field investigations in 2018 and 2019 by a qualified wildlife biologist did not identify species or habitat for most of the federally and state protected species. The only species having

suitable habitat at ARB were the Henslow's Sparrow (which is regularly sighted at the Airport), the Indiana Bat, and the Northern Long-eared Bat (NLEB).

Since the Henslow's Sparrow is known to occur at ARB, any grading or construction near State Road would be in an area currently under "restricted mowing" per a voluntary verbal agreement with the Washtenaw Audubon Society (a chapter of Michigan Audubon) and the City of Ann Arbor. ARB revises the boundaries of this mowing agreement annually, based on Audubon's most current bird count data. To avoid potentially impacting Henslow's Sparrows during project construction, ARB will not allow grading within agreed upon restricted mowing areas during the breeding season, which extends from early spring through mid-July. The Michigan Department of Natural Resources concurred that the birds are reasonably protected if ARB follows these grading restrictions.

The forested area in the southwest corner of the Airport contains large stands of buckthorn with isolated aspen and box elder trees interspersed. Vegetation within this area contains a low diversity mix of grasses and forbs. Generally, this type of habitat is not conducive to supporting either the NLEB or the Indiana bat's habitat needs. Tree removals are not expected with the project construction; however, if tree removals are deemed necessary, any cuttings will occur between October 1 – March 31 to minimize impacts to any potential bat populations.

The 2022 Draft EA concluded that impacts to threatened and endangered species are not expected from project construction or operation. Further details of the analysis of impacts to threatened and endangered species are provided in **Appendix G Biological Resources**.

The 2022 Draft EA also analyzed potential impacts to migratory birds. A migratory bird is an avian that has a seasonal and somewhat predictable pattern of movement. Generally, migratory birds are defined as all native birds in the United States that are managed by individual states, except those non-migratory species, such as quail and turkey.

The USFWS identified 10 migratory birds with the potential to exist in the vicinity of the project area. To mitigate potential impacts to migratory birds, habitat disturbance will only be allowed to occur between October 1 – March 31 of any given year. This restriction period satisfies the "breeding season" for all listed migratory birds and also meets the "probability of presence" for all listed species except for the Dunlin (*Calidris alpina*) and the Rusty Blackbird (*Euphagus carolinus*). Since the preferred habitat for the Dunlin and Rusty Blackbird is not found in the project area, it is unlikely they would experience impacts from the proposed project.

Potential impacts to migratory birds are also limited due to the developed and maintained nature of the project area. The project area is mowed regularly or in agricultural production. It is reasonable to assume that during construction and land grading activities, any migratory birds that are present will relocate out of the project area and into adjacent habitat with minimal disturbance.

As previously mentioned, to avoid direct or indirect impacts to migratory birds, habitat disturbance will only be allowed from October 1 – March 31. Disturbance restrictions include:

- No mowing of open grassy fields
- No removal of shrubs or other potential nesting structures
- No cutting of trees

These disturbance restrictions are in place to avoid unintentionally taking migratory birds, eggs, young, or active nests.

Finally, a Wildlife Site Visit (WSV) was conducted over two days in 2019 by the U.S. Department of Agriculture (USDA) to assess ARB for wildlife activity and provide recommendations for addressing wildlife and wildlife attractants at the Airport. The result of this visit is presented in **Appendix K Wildlife Site Visit** of the 2023 Final EA.

During the site visit, USDA personnel observed several species including deer, Canadian geese, red-tailed hawks, and European starlings. The WSV determined that deer and the lack of a deer-proof perimeter fence were concerns to Airport operations, and the Airport should also consider measures to address avian hazards as well. Specific recommendations from the WSV included:

- Enclose the airfield with a deer-proof fence
- Cull deer aggressively until a wildlife fence can be installed
- Consider phasing out agricultural activity on Airport property
- Develop and implement a comprehensive Wildlife Hazard Management Plan
- Report and review any wildlife strikes
- Monitor wildlife populations and abundance on the ARB property.

The proposed action will not increase wildlife attractants or introduce new wildlife that are hazardous to aircraft operations. No wetlands, open water, or habitat will be created with the project construction. With the proposed removal of approximately two acres of active farming near Runway 6/24 from the project construction, it is expected that this may result in a reduction in wildlife attractants in the project area.

More details of the WSV can be found in **Appendix K Wildlife Site Visit** in the 2023 Final EA.

2. *The Draft EA doesn't identify the wildlife found on a daily basis in the Airport area. A complete Environmental Assessment must be completed so that everyone, including Airport management, knows what wildlife is in the Airport area.*

**Response:** An on-site WSV was conducted over two days in 2019 by the USDA to identify wildlife activity at ARB. The findings from this on-site observation are presented in **Appendix K Wildlife Site Visit** of the 2022 Draft EA. The presence of wildlife observed from this effort, as well as review of the potential presence of protected species, was included as part of the wildlife evaluation for the 2022 Draft EA. See Wildlife Comment #1 that also addresses this comment.

### **C. Air Quality**

1. *Lengthening the runway will increase air pollution from larger aircraft and more takeoffs and landings, which will affect Ann Arbor's air quality. Use of leaded Avgas in piston-engine aircraft is also a concern due to the many health issues it is linked to, especially in children.*

**Response:** The 2022 Draft EA included an air quality analysis to assess the potential impacts of the proposed project on air quality. **Section 3.4 Air Quality of Chapter 3.0 Affected Environment & Environmental Consequences** summarizes this analysis while **Appendix F Air Quality Analysis** provides additional details. The air quality analysis measured the condition of the air in terms of pollutant concentrations for critical pollutants. The USEPA regulates air quality under the Clean Air Act (CAA) described in 42 U.S.C. §§ 7401- 7671q. These regulations are to hold pollutants to permissible levels via standards called National Ambient Air Quality Standards (NAAQS). These standards are designed to protect public health and welfare. Criteria pollutants included in the NAAQS are carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter 2.5 (PM<sub>2.5</sub>), particulate matter 10 (PM<sub>10</sub>), and sulfur dioxide (SO<sub>2</sub>).

Areas that have concentrations of air quality criteria pollutants below the NAAQS are designated as “attainment areas.” Areas with concentrations of these pollutants above the NAAQS are designated as “nonattainment areas.” Nonattainment areas must implement plans to lower pollutant levels below designated standards. In addition, aviation-related federal projects planned for nonattainment areas may be required to conform to these plans, known as “General Conformity.”

The Airport is in Washtenaw County, which is part of the greater Detroit Area Airshed. Washtenaw County is in the seven-county Detroit Metropolitan nonattainment area for the 2015 ozone 8-hour standard. However, the project area is in attainment for all other criteria pollutants.

FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, identifies FAA’s thresholds of significance for use in NEPA evaluations. The FAA’s air quality threshold of significance is triggered if “the action would cause pollutant concentrations to exceed one or more of the NAAQS, as established by the USEPA under the CAA, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.”

The air quality analysis (detailed in **Appendix F Air Quality Analysis** of the 2023 Final EA) was prepared using the FAA’s AEDT Version 3d. The analysis considered aircraft operations and ground support equipment operating at the Airport in 2019, because it was the most recent calendar year in which a full 12 months of historical data was available at the time when the current EA was initiated. The analysis also considered these operations for 2024 and 2029 under the proposed project.

The analysis showed that emissions are expected to slightly increase under the proposed project due to the additional 720 feet of aircraft taxiing distance and the increase in the number of operations in the future.

Analysis found that CO emissions would increase from 5.4 tons per year in 2024 to 6.1 tons per year in 2029 with implementation of the proposed project. Ozone precursors such as Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>), as well as other criteria pollutants would increase by less than 1.0 ton per year under the proposed project in 2024 and 2029.

In accordance with the CAA general conformity rule, the de minimis levels for an ozone marginal nonattainment area are 100 tons each of NO<sub>x</sub> and VOC (precursors to ozone formation). The

analysis determined that the project-related emissions from the proposed project would be below the CAA defined de minimis threshold. Thus, the planned actions do not require a conformity determination because emissions from the project are lower than the de minimis for ozone nonattainment areas. Based on this finding, no further analysis was required.

The air quality analysis determined that air quality impacts are not expected from aircraft and ground support equipment operating at the airport under the proposed project. While total operations at the Airport are projected to increase from 76,428 annual operations in 2019 (the base year for the forecasts) to 80,546 annual operations in 2029 as discussed in the response to Noise Comment #3, larger, heavier aircraft are not projected to conduct operations if the runway is extended to 4,225 feet. The response to Noise Comment #3 provides a summary on why operations by larger, heavier aircraft are not anticipated.

The 2022 Draft EA also noted that the FAA recently approved a lead-free fuel for all piston-driven aircraft. To further reduce air quality emissions, ARB intends to transition to unleaded gas as soon as the fuel is reasonably available.

- The air quality analysis conducted for the EA is missing several pieces. The emissions calculations should include all non-CO2 emissions, including nitrous dioxide emissions. Emissions from aircraft flying between ARB and other airports should also be counted. Finally, upstream methane and CO2 emissions from jet fuel extraction and supply chain leaks should be counted. The EA estimates aviation contributes 3 percent to global emissions. This should be revised to 6 percent if you count non-CO2 emissions and upstream emissions.*

**Response:** The 2022 Draft EA was prepared in accordance with all requirements as set forth in Title V of Public Law 97-248 of the *Airport and Airway Improvement Act of 1982*, NEPA, and FAA Order 5050.4B, *National Environmental Policy Act Implementing Instructions for Airport Actions* (April 2006). The 2022 Draft EA also met the requirements of FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, dated July 2015.

The response to Air Quality Comment #1 included an explanation of the air quality analysis conducted for the 2022 Draft EA, which is summarized in **Section 3.4 Air Quality of Chapter 3.0 Affected Environment & Environmental Consequences. Appendix F Air Quality Analysis** provides additional details about the air quality analysis as well. The air quality analysis found that impacts associated with aircraft activity or ground support vehicles from implementation of the proposed project are not anticipated.

- Ann Arbor declared a climate emergency in February 2020 and has goals to become carbon neutral by 2030. We are concerned that construction of a bigger runway means bigger private jets, which will affect these goals. At a time when cars are going electric and we are moving away from fossil fuels, how can this project be justified?*

**Response:** The response to Noise Comment #3 addresses the comment regarding the proposed project resulting in larger aircraft using the Airport. The project purpose and need is to provide the required runway length for B-II turboprop aircraft types projected to continue operations at the Airport in the future.

With regard to the concerns about Ann Arbor's declaration of a climate emergency and 2030 carbon neutral goals, the primary source of greenhouse gas emissions at an airport are associated with aircraft operations and the short-term emissions from construction equipment activity. Climate change is generally governed by the CAA (42 U.S.C. §§ 7408, 7521, 7571, 7661 et seq.).

For the 2022 Draft EA, the FAA's AEDT model was used to quantify aircraft CO<sub>2</sub> emissions for years 2019, 2024, and 2029. Analysis found that in 2019, aircraft emissions from operations at ARB represented 964 metric tons of CO<sub>2</sub> (as mentioned in the response to Air Quality Comment #1, 2019 was used because it was the most recent calendar year in which a full 12 months of historical data was available at the time the EA project began). In the context of total U.S. emissions (5,215.6 million metric tons), the total aircraft emissions at ARB are less than 0.001 percent of the total U.S. emissions. Thus, climate impacts are expected to be negligible from implementation of the proposed project. See **Appendix F Air Quality Analysis** for additional information on the air quality analysis associated with the project.

4. *MDOT should require a Hazardous Air Pollutants (HAP) inventory that quantifies the substantial health risks that HAP emissions resulting from the SoCal Metroplex project presents to surrounding communities.*

**Response:** FAA and MDOT do not require a Hazardous Air Pollutants inventory that quantifies the substantial health risks that HAP emissions resulting from FAA's Southern California Metroplex project present to surrounding communities. In addition, the Southern California Metroplex project is outside the geographic region of Southeast Michigan. A study of the potential impacts to air quality of the communities surrounding ARB because of the proposed project was conducted; however, as noted in the response to Air Comment #1, pollutants were within their permissible levels according to the NAAQS. The evaluation conducted using the FAA approved AEDT, Version 3d, found that increased emissions associated with aircraft operations and ground support equipment because of the proposed runway extension did not exceed CAA defined de minimis thresholds, and therefore are not anticipated to significantly change existing air quality. See **Section 3.4 Air Quality of Chapter 3.0 Affected Environment & Environmental Consequences** and **Appendix F Air Quality Analysis** for the air quality analysis associated with the Proposed Action.

5. *EPA acknowledges the recommendations to reduce temporary air quality impacts for both workers and the surrounding area found in Section 3.4 of the Draft EA. Additional applicable measures to reduce impacts outlined in the enclosed "Construction Emission Control Checklist" should become commitments in the Finding of No Significant Impact (FONSI).*

**Response:** As discussed in **Section 3.4 Air Quality of Chapter 3.0 Affected Environment & Environmental Consequences** of the 2023 Final EA, the *Construction Emission Control Checklist* (found in **Appendix R Agency Comments Received**) provided by the USEPA should be followed where feasible. Although the Airport will strongly encourage the use of the USEPA checklist, it cannot enforce or require it to be included in contracting documents. The Airport must follow applicable FAA ACs and construction guidelines.



#### D. Water Resources/Water Quality

1. *We are concerned that water quality may be affected by the proposed expansion. There are three water wells on Airport property that supply about 20 percent of Ann Arbor's drinking water. The risk of a jet fuel contamination event with larger jet aircraft would be increased. Also, with more planes flying out of the Airport and potential fuel spills, the more lead from fuel used for piston aircraft will seep into the water.*

**Response:** Maintaining the water quality at the airport is important to the City of Ann Arbor. **Section 3.17.4 Ground Water in Chapter 3.0 Affected Environment & Environmental Consequences** of the 2022 Draft EA explained that ground water quality is primarily governed under the Safe Drinking Water Act (SDWA) administered by the USEPA. According to EGLE's Open Data water wells GIS dataset for southcentral and southeastern Michigan, there are several water wells on ARB property, all of which are outside the proposed project area. While the proposed runway extension will slightly decrease groundwater infiltration within the project area due to the increase in impervious surfaces, the project is not expected to tangibly impact ground water recharge rates or impact public water supply.

Since ARB is located within a wellhead protection area, FAA AC 150/5320-15A, *Management of Airport Industrial Waste*, will be implemented to prevent surface water runoff from potentially infiltrating groundwater. Also, Best Management Practices (BMPs) identified in **Section 3.17.4 Ground Water in Chapter 3.0 Affected Environment & Environmental Consequences** of the 2023 Final EA will be implemented to prevent and minimize impacts.

The response to Noise Comment #3 addresses the comment that the proposed project will result in larger aircraft using the Airport. Fuel spills are infrequent as aircraft fueling is conducted in accordance with safe BMPs established by the National Fire Protection Association. When a spill occurs from fueling activities, cleanup and control response is immediate, preventing spilled fuel from seeping into groundwater sources. Change in activity associated with the runway extension will not alter how fueling or spill cleanup responses occur.

2. *The Draft EA does not fully address wetlands disturbances which will require permits from the appropriate agencies and a public hearing process to allow comment and review from the public.*

**Response:** The 2022 Draft EA meets all NEPA requirements concerning the evaluation of wetland impacts. **Section 3.17.1 Wetlands in Chapter 3.0 Affected Environment & Environmental Consequences** discusses the United States Army Corps of Engineers-compliant wetland delineation conducted by a qualified wetland biologist within the 82.2-acre Area of Interest (AOI) on Airport property in 2018 and 2019. **Appendix M Water Resources** of the 2023 Final EA provides full details of the wetland delineation. All wetland boundaries were reviewed and verified by qualified Michigan Department of Transportation Office of Aeronautics (MDOT AERO) biologists.

A total of three separate jurisdictional wetland complexes totaling 3.232 acres were delineated within the AOI.

As **Section 3.17.1 Wetlands in Chapter 3.0 Affected Environment & Environmental Consequences** states, regulated wetlands are unlikely to be impacted by the proposed project's

construction, since preliminary design indicates all wetland areas can be avoided resulting in no wetland impacts or permit requirements.

During final project design, any modifications that would cause impacts to regulated wetlands will require coordination with EGLE to determine appropriate permitting and mitigation activities. If impacts are identified, a Part 303, PA451 *Wetland Protection Permit* would be required prior to construction activities. All delineated wetlands will be shown on construction plans to protect them from any possible direct or indirect impacts. Construction documents will also require avoidance and erosion control measures.

The Public Hearing held on December 13, 2022, as part of the 2022 Draft EA satisfies the requirement for public involvement activities to disclose potential impacts including wetlands, during an EA project.

3. *Concerns that the proposed increase in jet-fueled aircraft using the Airport would pose a new challenge to the protection of ground water as new jet fuel chemical contaminants could cause damage to the aquifer below the Airport.*

**Response:** The response to Water Resources/Water Quality Comment #1 addressed this comment.

4. *The Draft EA does not mention whether firefighting foam was or is used at ARB that may contain per- and poly-fluoroalkyl substances (PFAS) or analyze whether disturbing the soil will cause PFAS to leach into the ground.*

**Response:** ARB does not have an on-site firefighting department, and there are no records that firefighting foam containing PFAS has been used; thus, an evaluation of PFAS from firefighting foam was not conducted.

5. *The Draft EA fails to adequately consider water issues. There is no indication in the Draft EA that MDOT consulted with EPA on the evaluation of water quality. FAA Order 1050.1F states that if there is the potential for contamination of an aquifer the FAA must consult with the EPA regional office.*

**Response:** Water issues were properly considered during this environmental evaluation. As part of this process, the USEPA was consulted on two separate occasions. The first instance was at the beginning of the project when comments and concerns were requested by the Airport on resources regulated by the USEPA (USEPA response letter is found in **Appendix E Early Agency Coordination**). Comments received assisted in the development of 2022 Draft EA.

The second instance occurred when the 2022 Draft EA was completed and provided to the USEPA for their review and comment as part of the agency review process that concluded January 18, 2023. During this second round of consultation, the USEPA had no concerns or comments regarding water quality or aquifer impacts from the proposed project. USEPA's only comment was on deicing activities at the Airport. There are no deicing activities at the Airport. The second USEPA letter can be found in **Appendix R Agency Comments Received** of the 2023 Final EA.

6. *The project will impact floodplains that surround the airport.*

**Response:** The state of Michigan threshold for determining impacts is the deposit of 300 cubic yards or more of fill material in a regulated floodplain. Any fill material above 300 cubic yards is considered an impact and requires an EGLE permit and compensating mitigation. Although earth moving quantities of the project have not been finalized, it is anticipated that the 300 cubic yard criterion may be exceeded under the Preferred Alternative.

Since minor floodplain impacts are anticipated, an EGLE Part 31, Floodplain Permit will be required. Proposed mitigation will be a compensating cut of material within the limits of the same floodplain in an area not classified as a protected resource (e.g., wetland or threatened or endangered species habit). The compensating cut of material will result in a no net loss of flood storage in the project area.

7. *The Draft EA only gives passing mention of the well field impacts associated with the “Gelman spill”.*

**Response:** The “Gelman spill” is an area of groundwater contamination in Washtenaw County that includes portions of the City of Ann Arbor and Scio Township. The groundwater has industrial solvent 1,4-dioxane in a plume that encompasses a total area of approximately 1 mile wide and 4 miles long. The plume was discovered in residential drinking water wells in 1985. The wells’ southern boundary is located approximately 3.5 miles north of ARB. Due to the distance of the plume from the proposed project location, implementation of the runway extension is not anticipated to impact this plume or increase the chances that this plume infiltrates wellheads located on ARB property.

8. *The Draft EA does not address how the project will impact the stream that is less than 1,000 linear feet from the existing runway nor the floodplain for the stream. Also, the additional volume of stormwater runoff is not evaluated as a result of the increase in impervious surfaces created as part of the project.*

**Response:** The stream, floodplain for the stream, and the increase in impervious surfaces were all considered as part of this environmental review. As described in **Section 3.17.3 Surface Water** in **Chapter 3.0 Affected Environment & Environmental Consequences**, the Runway Safety Area (RSA) and Runway Object Free Area (ROFA) of the Preferred Alternative will intersect the Wood Outlet Drain; however, the drain flows inside an existing reinforced concrete culvert at this location. Preliminary design indicates that drain impacts can be avoided. No alignment changes or construction impacts to the drain are expected. However, if drain impacts are later identified because of design modifications of the Preferred Alternative, coordination with EGLE will be required to determine appropriate permitting and mitigation activities. Other surface water resources (ponds/lakes) in the vicinity of the Airport will not be impacted by the proposed project since they are well outside of the project area.

The area southwest of the existing Runway 6 threshold is located within a 100-year floodplain. Minor floodplain impacts are expected and an EGLE Part 31 Floodplain Permit will be required.

See **Section 3.17.2 Floodplains** in **Chapter 3.0 Affected Environment & Environmental Consequences** for an analysis and maps of floodplains in the project area.

All additional stormwater runoff is expected to be easily handled by and directed into the Airport's existing storm water management system in accordance with its Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will also be updated to include BMPs to reduce erosion and discharge of pollutants from construction activities as described in **3.17.3 Surface Water** in **Chapter 3.0 Affected Environment & Environmental Consequences**.

9. *The Draft EA fails to address the standards and requirements under the Michigan Safe Drinking Water Act. The Draft EA fails to address or analyze compliance with the minimum well isolation distances under the Michigan Safe Drinking Water Act.*

**Response:** Extension of the runway is not an activity that triggers the Wellhead Protection Act. Coordination with EGLE occurred as part of the preparation of the 2022 Draft EA, and no concerns were received that the runway extension would be a major source of contamination for the wellhead protection area. Michigan's Wellhead Protection Plan requires the identification of potential sources of contamination within a wellhead protection area that have a contaminate included on a source inventory list. Examples of sources include leaking underground storage tanks, Superfund sites, sites of environmental contamination, and oil and gas contamination sites. Review of the proposed project found that it will not be a major source of contamination based on this criterion. **Section 3.17.4 Ground Water** in **Chapter 3.0 Affected Environment & Environmental Consequences** presents the evaluation of the wellhead protection area that was conducted.

## **E. Safety/Health**

1. *We are concerned regarding the proposed project's impact on safety in our community. There are usually a significant number of Canada geese in the fields near Lohr Road. The presence of these geese along with a steepened approach slope will significantly increase the potential for bird strikes with larger and heavier jet aircraft that the extended runway may attract. The Draft EA presents no plan to mitigate this risk.*

**Response:** Wildlife, including the presence of Canadian Geese, was considered during the preparation of the 2022 Draft EA. The response to Noise Comment #3 addressed the comment regarding the proposed project resulting in larger and heavier aircraft operating at ARB. No changes will occur to the angle of the approach slope as the extended runway will retain its 34:1 slope associated with the Area Navigation (RNAV) Global Positioning System (GPS) approach to Runway 6. The approach path will shift, however, with the change in the threshold of the runway associated with its extension.

The response to Wildlife Comment #1 explained that the USDA conducted a WSV in 2019 to assess ARB for wildlife activity and provide recommendations for addressing wildlife and wildlife attractants at the Airport. **Appendix K Wildlife Site Visit** in the 2023 Final EA provides details of the WSV.

Specific recommendations from the WSV pertaining to avian hazards included phasing out agricultural activity on Airport property, developing and implementing a comprehensive Wildlife Hazard Management Plan, reporting and reviewing any wildlife strikes, and monitoring wildlife populations on ARB property. After the release of the 2022 Draft EA, the Airport is actively investigating implementing the WSV recommendations.

As explained in **Section 3.12 Land Use in Chapter 3.0 Affected Environment & Environmental Consequences** of the 2023 Final EA, the proposed action will not increase wildlife attractants or introduce new wildlife that are hazardous to aircraft operations. No wetlands, open water, or habitat will be created with the project construction. With the proposed removal of approximately two acres of active farming near Runway 6/24 from project construction, it is expected that this may result in a reduction in wildlife attractants in the project area.

2. *Concerns that the proposed runway extension would move the Runway 6 approach end 870 feet closer to Lohr Road, adding to the risks to residents near the end of the runway, who are not adequately protected by Runway Protection Zones. A Cessna 152 crashed in the bean field at the end of the runway on the west side of the Airport on September 11, 2022. This aircraft could have crashed into homes.*

**Response:** An evaluation of the Runway Protection Zones (RPZs) was completed for both ends of Runway 6/24 at ARB. A RPZ is a trapezoidal-shaped area beyond a runway end with the purpose of protecting pilots, individuals, and property on the ground, as well as preventing incompatible land uses. The FAA encourages airports to control the land within an RPZ and clear the areas of incompatible objects and activities if possible. As **Figure 2.1 in Chapter 2.0 Alternatives Considered** of the 2023 Final EA shows, the extended runway's RPZ at the approach end of Runway 6 would stay entirely on Airport property with no incompatible land uses within it.

The RPZ at the approach end of Runway 6 will continue to meet all FAA and MDOT AERO safety standards under the proposed project. There was no suggestion that the development of the project will result in increased hazards to people or structures on the ground. Existing and proposed land use, primarily single-family residential, office/research, and commercial with some industrial uses adjacent to, and in the immediate vicinity of, ARB is compatible with normal Airport operations, as **Section 3.12 Land Use in Chapter 3.0 Affected Environment & Environmental Consequences** of the 2023 Final EA explains. Also see **Appendix D Runway Protection Zone Analysis** where each alternative is evaluated.

Note that according to investigators, the plane did not crash on September 11, 2022, at ARB, but rather executed an emergency landing in a bean field on Airport property after losing power moments after taking off from the runway. There was no damage to the aircraft, and no one was injured. In addition, an extended runway length could have benefitted this emergency scenario as it could have given the pilot additional decision time to either execute an aborted takeoff or provide additional stopping distance should the aircraft have had malfunctioning systems on landing.

3. *Several conditions at ARB increase the level of risk for aircraft operating at the Airport: 1) instrument approaches and landings are not permitted at the airport, 2) the control tower only operates part-time. 3) de-icing, which is necessary for larger aircraft, is not allowed in winter to protect the water wells, and 4) ARB does not provide 24-hour on-site fire and rescue services.*

**Response:** The Airport operator is always monitoring the operating environment at ARB and would make any changes necessary to maintain a safe operating environment for airport users. ARB has four instrument approach procedures with a RNAV (GPS) and VOR (VHF Omni-Directional Range) approach at each runway end that can be used during limited ceiling and visibility conditions. These allow aircraft to land at the airport with cloud heights of 300 feet and visibility down to 1 statute mile.

ARB has a staffed ATCT from 8:00 AM to 8:00 PM daily. When the tower is closed, pilots use an established procedure practiced at non-towered airports of announcing their location and intentions using a Common Traffic Advisory Frequency (CTAF). This process is used at uncontrolled facilities across the country and is a proven, safe method for operating when ATCT services are not in place.

As a precautionary measure to the drinking water wellhead protection concerns addressed in Water Resources/Water Quality Comment #1, deicing is not conducted at the Airport.

Finally, though ARB does not have Aircraft Rescue and Firefighting services, fire services are provided by Pittsfield Township with Fire Station #3 located on 705 W. Ellsworth Road at the corner of Ellsworth Road and State Street adjacent to Airport property.

4. *The Draft EA is required to identify environmental health risks to children. For example, many scientific studies have confirmed the negative impact of aircraft noise on the neuro psychological development of children. However, the document does not discuss these threats and concludes that the FAA has not established a significance threshold for impacts to children's environmental health and safety.*

**Response:** As the response to Noise Comment #1 explains, the noise analysis conducted for the 2022 Draft EA presented in **Section 3.14 Noise and Noise Compatible Land Use of Chapter 3.0 Affected Environment & Environmental Consequences** and **Appendix L Noise Analysis** found that the 65 DNL contour remains completely within ARB-owned property from 2019 through 2029. The FAA, USEPA, and U.S. Department of Housing and Urban Development have established the 65-dB DNL level as the threshold for noise impacts over noise sensitive areas. Noise impacts on noise sensitive land uses within the 65 DNL are not expected.

In addition, **Section 3.15.3 Children's Environmental Health and Safety Risks Impacts in Chapter 3.0 Affected Environment & Environmental Consequences** of the 2022 Draft EA explained that all construction for the proposed project would occur on ARB-owned property, and access to the site would be restricted. The development of the project is unlikely to include products or substances that a child would encounter. It is therefore unlikely that the project will result in any environmental health or safety risks that could disproportionately affect children.

5. *The Draft EA relies on the sufficiency of Runway Protection Zones (RPZs) in response to concerns regarding risks of potential aircraft accidents to nearby residential areas and states that the Airport's RPZs meet the FAA standard. RPZs provided no benefits when a Cessna jet crashed off the end of the runway at Spencer J. Hardy Airport in nearby Howell, Michigan in 2017. If this jet had crashed at ARB, it would have crashed into houses across Lohr Road.*

**Response:** RPZs are established to protect persons and property on the ground. A detailed RPZ analysis was prepared for this project evaluating each alternative. Details of this analysis are in **Appendix D Runway Protection Zone Analysis**. The response to Safety/Health Comment #2 discussed the RPZ at the approach end of Runway 6 under the proposed project. With regard to the RPZ at the approach end of Runway 24, the proposed 150-foot runway shift improves the existing RPZ condition by relocating the RPZ entirely onto land owned by municipal authorities (Airport, City of Ann Arbor, and Washtenaw County Road Commission), so that all land within the RPZ can be controlled by these municipal agencies. Although State Street continues to be an incompatible land use within the RPZ at the approach end of Runway 24 under the proposed project, an RPZ analysis provided in Appendix D of the 2022 Draft EA evaluated several alternatives and found this to be the best option for minimizing the impact of existing and future land uses within the RPZ.

In addition to RPZs at both ends of Runway 6/24, there is an RSA around the runway. An RSA is a two-dimensional graded area surrounding the runway surface and is constructed to enhance the safety of airplanes in the event of an unintended excursion from the runway's paved surface.

It is important to note that it should not be assumed that the specific circumstances surrounding the aircraft accident at Spencer J. Hardy Airport in 2017 are applicable to ARB. A single accident is not indicative of future probabilities. There is no indication that the project's development will result in increased hazards to people or structures on the ground. Also, RPZs are not sized to capture the probability of every aircraft accident. Existing and proposed land use adjacent to and in the immediate vicinity of ARB is compatible with normal Airport operations, as **Section 3.12 Land Use in Chapter 3.0 Affected Environment & Environmental Consequences** of the 2022 Draft EA explained.

6. *Moving Runway 6/24 870 feet to the southwest will result in larger planes and newly accommodated jets flying over houses at 93 feet or lower. This will greatly increase the potential for an accident to occur. Planes already fly too low over the neighborhoods.*

**Response:** This EA evaluated the relocation of the runway thresholds and the fleet mix operating at the airport today and forecasted to be operating at the airport in the foreseeable future. The response to Noise Comment #3 addresses the comment regarding use of the Airport by larger jet aircraft under the proposed project. The response to Noise Comment #1 addressed the comment regarding aircraft flying lower over Lohr Road on the approach to Runway 6 under the proposed project. The responses to Safety/Health Comments #2 and #5 discussed the RPZs and RSAs to

protect pilots as well as individuals and property on the ground at the approach ends of Runways 6 and 24.

7. *The Draft EA mentions that an additional benefit from the runway expansion would include a safety benefit derived from shifting the runway 150 feet thereby improving line of sight for Airport Traffic Control Tower personnel. Why can't the runway shift occur without the runway expansion? An alternative would be to relocate the existing hangars that are obstructing the line of sight for the tower.*

**Response:** Shifting Runway 6/24 150 feet to the southwest without also extending the length of the runway would not meet the proposed project's purpose and need. As **Section 1.5.2 Need for the Proposed Action** of the 2022 Draft EA explained, Runway 6/24 was designed to serve primarily B-II turboprop aircraft; however, the Airport receives occasional larger turboprop and business jet aircraft that require a longer runway to operate at a greater payload than they do today.

Analysis of current operations found that aircraft with similar operational performance characteristics routinely use ARB and have runway requirements that exceed the current 3,505-foot length of Runway 6/24 under normal operating conditions. For these users to conduct operations on the existing runway, undue concessions in reduced fuel, passengers and/or cargo loads are often needed. Diversions to other airports are also commonly needed when the runway surface is wet, or during the summer months when higher temperatures reduce aircraft performance.

Providing the required runway length for B-II turboprop aircraft (4,225 feet) would meet the operational needs of current and future users by reducing weight concessions and allowing aircraft to operate with greater payloads, thus resulting in a more efficient operating environment. Only shifting the runway 150 feet to the southwest would keep the runway length at 3,505 feet.

The 2022 Draft EA explored the possibility of removing the obstructions that block the line of sight for ATCT personnel. It was determined that eliminating the obstructions would cause the relocation and reconstruction of vital Airport infrastructure such as hangars, taxiways, and taxilanes. This would cause extended interruptions during demolition and reconstruction resulting in unacceptable impacts to Airport operations and existing users.

8. *I've heard that the Airport may take certain land at the Airport out of agricultural production, replacing soybeans and corn with grass. This is a mistake. Geese like to eat grass in addition to soybeans and corn. By growing grass instead of soybeans and corn, the geese will be there all year long, since the grass is there all year long. With soybeans and corn, the geese are only there after the crops are harvested.*

**Response:** ARB continuously evaluates and mitigates wildlife threats at and around the Airport by making adjustments as appropriate. As recommended by the USDA, Airport management is removing land from agricultural production and replacing it with ground cover, expected to be completed in 2024. In addition, ARB has been working with the USDA for the appropriate type of ground cover that deters wildlife. The USDA considers seasonal grasses less of a wildlife attractant than land that is in agricultural production. See **Section 3.12 Land Use** in **Chapter 3.0 Affected**



**Environment & Environmental Consequences** for a description of wildlife mitigation recommendations.

9. *The proposed project would likely increase the risk of an accident as new and heavier aircraft use the Airport along with inexperienced pilots from the four flight schools at ARB. This is a mix of aircraft and pilots that does not currently exist at the Airport, which would create unknown safety risks.*

**Response:** The existing aircraft fleet mix and aircraft forecast to be operating at ARB in the reasonably foreseeable future were considered as part of this analysis. The response to Noise Comment #3 addressed the comment regarding concerns that the proposed project will attract heavier aircraft. The responses to Safety/Health Comments #2 and #5 discussed the Airport's RPZs and RSA for Runway 6/24, the purposes of which are to protect pilots as well as individuals and property on the ground.

Finally, the ATCT at ARB is responsible for controlling aircraft operations to ensure the safe and efficient movement of aircraft. In the event the ATCT is closed, pilots use a CTAF to communicate their positions with each other. In addition, ARB complies with all aviation safety regulations and standards of the FAA and MDOT AERO.

10. *Has a Design Failure Mode and Effects Analysis (DFMEA) been completed for the runway expansion? A DFMEA would analyze the risks of ground water contamination, crashes, bird strikes, breakdowns, and airplanes taking off and landing closer to homes.*

**Response:** The 2022 Draft EA was prepared under the requirements of Title V of Public Law 97-248 of the *Airport and Airway Improvement Act of 1982*, NEPA, and FAA Order 5050.4B, *National Environmental Policy Act Implementing Instructions for Airport Actions* (April 2006). The 2022 Draft EA also met the requirements of FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, dated July 2015. While these requirements do not include the preparation of a DFMEA, the environmental analysis included evaluations of many of the components of what would be in a DFMEA. Specifically, the EA evaluated air quality, biological resources (including migratory birds), land use, natural resources and water resources including ground water and wetlands. Details regarding the categories included can be found in **Chapter 3.0 Affected Environment & Environmental Consequences**.

11. *Larger aircraft and small jets pose a threat to the health of area residents. The noise level generated by small jet engines (120-140 decibels) is double that of small airplanes (60-80 decibels). Noise in the 120-140 decibel range is equivalent to the sound of chain saws, auto racing, firecrackers, and gunshots, which can rupture eardrums. Prolonged effects of noise can result in respiratory agitation, racing pulse, high blood pressure, headaches, gastritis, colitis, and heart attacks.*

**Response:** This EA included a comprehensive evaluation of the types of aircraft forecast to operate at ARB as well as the noise impacts of those aircraft. The response to Noise Comment #3 addressed concerns regarding the use of the Airport by larger aircraft under the proposed project. The response to Noise Comment #1 addressed concerns regarding the impacts of aircraft noise

from the proposed project. In addition, please see **Appendix L Noise Analysis** for additional details.

12. *There are concerns that more and larger aircraft at the Airport that would result from the proposed project would cause disruption in our ability to sleep.*

**Response:** The response to Noise Comment #3 addressed the comment that larger aircraft will use the Airport under the proposed project. The response to Noise Comment #1 addressed the concerns regarding the impacts of aircraft noise from the proposed project.

13. *A comprehensive hazardous materials management plan is missing from the Draft EA. There is aircraft fuel and other kind of hazardous materials located at the airport. Such a plan would include periodic inspections, emergency mitigation training, and associated equipment.*

**Response:** As part of the 2022 Draft EA, a Phase I Environmental Site Assessment (see **Appendix I Hazardous Materials - Abridged Version**) was prepared under the requirements of American Society for Testing and Materials (ASTM) Designation: E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The Draft EA was prepared under Title V of Public Law 97-248 of the *Airport and Airway Improvement Act of 1982*, NEPA, and FAA Order 5050.4B, *National Environmental Policy Act Implementing Instructions for Airport Actions* (April 2006). The 2022 Draft EA also met the requirements of FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, dated July 2015. While the preparation of a comprehensive hazardous materials management plan, was not part of this effort, **Appendix I** contains a Hazardous Materials evaluation. Specifically, a Phase I Environmental Site Assessment was conducted for the proposed project, and this analysis revealed no evidence of recognized environmental conditions in connection with the subject property.

14. *Aircraft approach and land very low above the Speedway Gas Station on State St. and Ellsworth and take off very low above homes on Lohr Road. The situation is already unsafe. Extending or expanding the airport or allowing larger aircraft to operate there would make the situation even worse.*

**Response:** As part of the process to develop the Airport Layout Plan, airport property and property in the surrounding area is evaluated. The locations of facilities near airport property are evaluated, and any future construction near the airport would also have to be evaluated to prevent any unsafe conditions from developing. The approach path to Runway 24 is approximately 200 feet south of the Speedway gas station, giving it the perspective that aircraft are flying directly over this location. The proposed 720-foot extension and 150-foot shift of the runway at the approach end of Runway 6 will slightly increase the approach and departure path heights of aircraft at the approach end of Runway 24.

The ATCT at ARB is responsible for controlling aircraft operations to ensure the safe and efficient movement of aircraft. The proposed runway extension will comply with FAA and MDOT AERO safety standards.

The response to Noise Comment #3 addressed the comment that larger aircraft will use the Airport under the proposed project.

15. *Chronic noise causes a host of health problems, such as hearing loss, tinnitus, sleep issues, stress, cardiovascular and cerebrovascular disease, metabolic disturbances, worsening of psychological disorders and early death. Noise impairs children’s learning and work productivity. Children are among the most vulnerable and environmental justice communities are affected disproportionately from this proposal.*

**Response:** Noise, and the potential impact of noise, was considered and evaluated as part of this process. The response to Noise Comment #1 addressed the concerns regarding the impacts of aircraft noise from the proposed project. **Section 3.15.2 Environmental Justice in Chapter 3.0 Affected Environment & Environmental Consequences** of the 2022 Draft EA explained that a review of Census information and USEPA data showed that areas directly surrounding the Airport and project area do not have high proportions of minority or low-income populations. Given that the project will be constructed entirely within existing Airport property, environmental justice impacts are not expected.

In addition, there would be no significant noise impacts or residential displacements. No property acquisition would occur as a result of the Preferred Alternative. While there are not any environmental justice issues associated with the proposed improvements identified at this time, a continuing effort would be made to identify disproportionately high and adverse impacts to minority and low-income populations as this project advances. If such impacts are identified, every effort would be made to involve impacted groups in the project development process and to avoid or mitigate these impacts.

16. *All incidents at the Airport have been caused by pilot error or equipment failure. None have been caused by runway length.*

**Response:** Correct; however, aircraft operators can be impacted if required runway length is not available given the presence of local weather conditions. Two weather conditions evaluated as part of the Runway Justification Study presented in **Appendix C** that can affect the demand for runway length are precipitation and temperature.

When a runway surface has ice, snow, or rain on it, braking action distances increase, potentially requiring airport operators to make concessions (e.g., decreasing fuel, passenger, and/or cargo loads) in order to operate on its surface. At ARB, precipitation contaminates the runway an average of 192 days per year.

Likewise, freezing temperatures (below 32 degrees Fahrenheit) are present on average 147 days each year at ARB; this results in any water contamination turning into snow and/or ice, which increases braking and accelerating distances. With the frequency at which ARB experiences freezing temperatures, the need for additional runway length when aircraft brake during landing or accelerate during takeoff would be an operational enhancement.

Likewise, when temperatures are warm, increased runway length is needed for aircraft to takeoff due to the air being less dense. On average, ARB experiences 81 days per year when the temperature is 80 degrees or greater. Additional runway length would benefit the users of ARB given the frequency of these warmer temperatures.

An extension of Runway 6/24 would enhance ARB to be better able to accommodate existing aircraft types using the facility in all weather conditions.

17. *NEPA requires that a Health Risk Assessment be drafted for the project. A 2-mile radius is expected for the study area to include a broader range of sensitive receptors such as schools, hospitals, and parks that could be impacted by aircraft exhaust, noise, and construction vehicle impacts.*

**Response:** FAA is not obligated under statute, rule, or regulation to prepare a Health Risk Assessment (HRA) in this Environmental Assessment. In accordance with the FAA Orders 1050.1F and 5050.4B and the 2015 FAA Air Emissions and Air Quality Handbook (Handbook), a HRA is not required during the development of the 2022 Draft EA. The Handbook states,

“it is also important to note that other than an emissions inventory, a hazardous air pollutants (HAPs) assessment prepared for the FAA must not include any other type of analysis including, but not limited to, atmospheric dispersion modeling, toxicity weighting, or human health risk analyses. These types of assessments require a more complete understanding of the reactions of HAPs in the atmosphere and downstream plume evolution as well as human exposure patterns. Because the science of these relationships with respect to aviation-related HAPs is still evolving, the corresponding level of understanding is also currently limited.”

Therefore, in accordance with FAA guidance, the Draft EA did not include an HRA. See **Section 3.4 Air Quality** in **Chapter 3.0 Affected Environment & Environmental Consequences** and **Appendix F Air Quality Analysis** for the air quality analysis associated with the Proposed Action. Additionally, see **Section 3.10 Hazardous Materials, Solid Waste, and Pollution Prevention** for human health considerations.

## **F. Financial/Economic**

1. *The Draft EA states that major employers in the region often require air transportation to bring workers, clients, suppliers, customers, and time sensitive parts/supplies to and from the region. There was no specific connection made between the needs of these employers and ARB in the document, however.*

**Response:** Businesses, local residents, and special events all draw users to the Ann Arbor Airport. Section 3 of the Runway Justification Study in Appendix C discusses the reliance of the region's major employers on air transportation for their business needs. These major employers include manufacturing, health care, automotive, information technology, and biomedical research companies. These companies, which are in technology-driven industries, often have a need for air transportation to bring workers, clients, suppliers, customers, and time-sensitive parts/suppliers to and from the region. See also updated **Section 3.15 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks** in **Chapter 3.0 Affected Environment & Environmental Consequences** of the Final EA.

2. *The Draft EA has not given proper consideration to the impact of the proposed project on property values. Local governments and schools will likely lose millions of dollars in annual tax revenue because of reduced real estate values.*

**Response:** Section 3.15 Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety Risks in Chapter 3.0 Affected Environment & Environmental Consequences of the 2022 Draft EA has been updated in response to this comment. Additional information has been provided in the 2023 Final EA that describes the affected environment and further describes the potential socioeconomic impacts affected by the proposed action and alternative(s).

3. *The construction cost of the proposed runway extension seems high.*

**Response:** Aviation engineers familiar with the design and construction of similar projects developed the cost estimates. The engineering estimates take into account current material and labor costs as they develop their estimates. Estimates are also prepared by the companies that bid on the project. Note that the cost (in 2021 dollars) of the proposed project, estimated at \$3.1 million, is significantly less than the cost of the other build alternatives evaluated in **Chapter 2.0 Alternatives Considered** of the 2022 Draft EA. Other build alternatives were estimated to be \$9.9 million (Alternative 3 – Extend 360 feet at both ends of Runway 6/24) and \$10.9 million (Alternative 1 – Extend 720 feet at the approach end of Runway 24). Ultimately, actual bids may be higher or lower than the engineering estimates and then it is up to the Airport Sponsor if they want to move forward with the project.

4. *The Draft EA does not quantify the economic benefits of the proposed project to Ann Arbor and Pittsfield Township.*

**Response:** Pursuant to FAA Airport Benefit Cost Analysis Guidance dated September 2020, airport sponsors should apply a Benefit Cost Analysis (BCA) for a capacity project that is anticipated to need \$10 million or more Airport Improvement Program (AIP) grants. The FAA policy does not require a BCA for “projects undertaken solely, or principally, for the objectives of safety, security, conformance with FAA standards, or environmental mitigation.” Since the project is less than \$10 million, the FAA does not require the economic benefits to be quantified. **Section 3.15.1 Socioeconomic Impacts** summarizes the socioeconomic evaluation of the proposed project to Ann Arbor and the surrounding community.

5. *The cost of the project is currently estimated to be \$3.5 million. If the cost increases, what is the return on investment?*

**Response:** According to **Section 2.5 Alternative 2 – Shift Runway 150 Feet Southwest and Extend 720 Feet at the Approach End of Runway 6 (Preferred Alternative)** of the 2022 Draft EA, the estimated cost of the proposed project is \$3.1 million in 2021 dollars. See also response to Financial/Economic Comment #3. A return-on-investment analysis is not required as part of the NEPA analysis by the FAA. Ultimately, the Ann Arbor City Council is responsible for approving

project construction. ARB notes that construction project costs have increased due to increases in the cost of materials and labor.

6. *Expansion of the Airport to accommodate larger private jets will not grow the Ann Arbor economy or improve local business efficiency.*

**Response:** As the response to Noise Comment #3 explains, larger and heavier aircraft are not projected to conduct operations at ARB if the runway is extended to 4,225 feet. Also, the response to Financial/Economic Comment #1 explained ARB's geographic location provides major employers in technology-driven industries in the Ann Arbor region with efficient access to the air transportation system.

7. *The housing and support amenities found in southwest Ann Arbor and Saline are critical for the recruitment of employees to our area. We need to protect this important asset to our city, not damage it.*

**Response:** As the response to Financial/Economic Comment #2 explains, the proposed project minimizes impacts to the environment, resources, and surrounding area to the greatest extent possible while still complying with local, state, and federal standards and regulations. The environmental findings show that the proposed project will have little to no impact on the local environment. **Section 3.15 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks** in **Chapter 3.0 Affected Environment & Environmental Consequences** of the 2022 Draft EA has been updated in response to this comment. Additional information has been provided in the 2023 Final that describes the affected environment and further describes the potential socioeconomic impacts affected by the proposed action and alternative(s).

8. *The proposed project is a waste of taxpayer dollars and has little value.*

**Response:** The responses to Safety/Health Comment #16 and Financial/Economic Comment #1 discussed the value of the proposed project. In addition, no taxpayer dollars are planned for the construction of the runway extension should the proposed project receive environmental approval. This is because funding sources planned for the project are funded through user fees from people who use our air transportation system (including people shipping packages, private pilots, airline passengers, and employees flying on corporate aircraft). This is collected through airline ticket fees, fuel taxes, and other similar revenue sources.

The project is planned to be funded by the FAA AIP, which, if awarded, will pay 90 percent (90%) of the total project cost. The State of Michigan is anticipated to contribute additional funding covering 5 percent (5%) of the total cost with ARB responsible for the remaining 5 percent (5%) of the total project cost.

9. *Has a financial impact study been completed that justifies the increased risk of this project?*

**Response:** The 2022 Draft EA was prepared under the requirements of Title V of Public Law 97-248 of the *Airport and Airway Improvement Act of 1982*, NEPA, and FAA Order 5050.4B, *National Environmental Policy Act Implementing Instructions for Airport Actions* (April 2006). The 2022 Draft

EA also meets the requirements of FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, dated July 2015. These requirements do not include conducting a financial impact study for the proposed project. Such a study was outside the scope of the 2022 Draft EA.

Several previous comments, such as Safety/Health Comments #1, 2, 3, 6, and 9 and Water Resources/Water Quality Comments #1 and 3 addressed the concerns regarding the perceived risks associated with the proposed project.

10. *If there are more aircraft operations and additional passengers at the Airport in the future, this could require investment in additional infrastructure and additional costs to support the increased activity, such as snow removal, emergency services, ATCT support, and additional hours for operational support.*

**Response:** The Airport is continuously monitoring existing as well as future forecasts of aircraft activity as they evaluate the need and timing for future facilities. If the demand for future facilities is identified, it will have to be justified and go through a separate environmental review before construction. No changes in existing services or infrastructure are needed to accommodate aircraft activity levels projected with the proposed runway extension.

11. *Recently, regional leadership formed the Detroit Region Aerotropolis uniting Wayne and Washtenaw Counties, two cities, two townships that surround Detroit Metro and Willow Run Airports, and the Michigan Economic Development Corporation with the stated purpose of using the two airports as the prime economic development tool for our region and our state. Clearly the expansion of an airport 20 minutes away from the Aerotropolis will adversely affect its economic development plans. Should we be working to support the efforts of the Detroit Region Aerotropolis to bring economic development to our region and our state or should we be working against the regional effort by encouraging this costly, and unsafe, duplication?*

**Response:** As the response to Noise Comment #3 explains, the proposed runway extension at ARB evaluated by the 2022 Draft EA was based on the required runway length of the critical aircraft, which was found to be a family grouping of B-II turboprop types. These aircraft currently conduct greater than 500 annual operations and are forecasted to remain the critical aircraft in the future at ARB. In addition, the response to Safety/Health Comment #3 addresses safety at ARB.

The users of YIP/DTW and ARB are very different. Larger, heavier aircraft associated with operations at YIP and DTW are operated differently than B-II turboprop aircraft. Some of these differences are due to federal regulations, insurance requirements, and operator-imposed flight rules. As a result, an airport needs to have enhanced infrastructure that ARB does not offer to accommodate these aircraft, such as precision navigational equipment and longer runway lengths for these aircraft, typically, at least 5,000 feet, to be able to conduct operations. Since these facilities are not available at ARB, larger, heavier aircraft are not projected to conduct operations if the runway is extended to 4,225 feet. Instead, these aircraft are expected to continue to operate at the Willow Run Airport and other airports in the region that have infrastructure to support these needs. As a result, the proposed project does not represent a threat to the regional effort for economic development.

12. *There is no cost-benefit analysis. What is the cost of the project versus the revenue generated?*

**Response:** Pursuant to FAA Airport Benefit Cost Analysis Guidance dated September 2020, airport sponsors should apply a BCA for a capacity project that is anticipated to need \$10 million or more AIP grants. The FAA policy does not require a BCA for “projects undertaken solely, or principally, for the objectives of safety, security, conformance with FAA standards, or environmental mitigation.”

13. *The agreement between MDOT and the FAA to administer the State Block Grant Program has expired and no amendments to the agreement or a new agreement have been executed. Thus, MDOT does not have the ability to fund the project.*

**Response:** Over the past three years (Fiscal Year 2020 through Fiscal Year 2022), Michigan has received over \$251 million in FAA AIP funding (entitlement and discretionary) for an average of \$83.9 million per year.

The State of Michigan has been a participant in the State Block Grant Program (SBGP) since 1993 and has no plans to exit the Program. Their most recent Memorandum of Agreement (MOA) with the FAA was signed in March 2010. While it has been over 13 years since the last agreement was signed, the State of Michigan is still a participating member of the SBGP. As part of their continued participation in the Program, the State of Michigan must adhere to all aspects and requirements of 49 US Code 47128 – State Block Grant Program. They have continued to do so, and they have fulfilled their required responsibilities as part of the Program. The FAA and State of Michigan (as well as all nine other participants in the SBGP) have mutually agreed to continue to adhere to all SBGP requirements as they work towards an updated and revised version of the MOA, which should be signed by the State of Michigan (and all SBGP States) in FY23.

## **G. Technical**

1. *The Draft EA has removed prior claims that the runway extension is needed for safety and instead is focused on the operational utility of existing aircraft types that are projected to steadily increase over time.*

**Response:** The 2022 Draft EA was developed as an independent effort to meet the project’s current purpose and need, which is providing required runway length for the airport’s critical aircraft (B-II turboprops) as well as enhancing the line-of-sight from the ATCT and providing a right-angled intersection for Taxiway D at the approach end of Runway 24. The line-of-sight and right-angled intersection improvements will enhance safety.

2. *Three of the four critical aircraft types identified by this Draft EA could operate 100 percent of the time on the existing 3,505-foot runway while the Cessna Citation Excel XLS could still operate at full weight 90 percent of the time. Operations with reduced payloads by a single plane (Cessna Citation Excel XLS) to benefit one user is hardly sufficient to justify the proposed runway extension.*

**Response:** The critical design aircraft for the runway extension at ARB is a family grouping of B-II turboprop aircraft types as determined through the Runway Justification Study presented in



**Appendix C** and is not based on the runway length needs of any individual type of aircraft. For a family grouping of B-II turboprop aircraft types, the FAA directs use of performance curves in FAA AC 150/5325-4B, *Runway Length Requirements for Airport Design*, to determine the required length needed. The Cessna Citation Excel XLS, by itself, does not conduct 500 annual operations and is not projected to conduct 500 operations during the forecast period; therefore, this aircraft type alone cannot be used to justify the runway length needs at ARB.

3. *An earlier draft of the EA suggested University of Michigan home football weekends and Michigan International Speedway's NASCAR events bring increased aircraft activity to the area and that additional activity associated with these events could occur with an extension of the runway. The current Draft EA has no forecasts of such activity for these events.*

**Response:** Aircraft operations associated with these events are included in the overall forecasts prepared for the 2022 Draft EA as part of the projections presented in the Runway Justification Study in **Appendix C**. These special event aircraft operations have insufficient operations alone to meet FAA criteria for justification of runway length. The aircraft operations associated with these events are noted in the EA to give the reader an understanding of days at ARB where increases in aircraft activity may occur.

4. *An earlier draft of the EA projected a tripling of jet operations if the runway were extended and that operations from Willow Run Airport could shift to ARB.*

**Response:** While the 2017 Draft EA did not specifically forecast jet operations, the 2022 Draft EA was conducted as an independent effort that reevaluated future demand. Accordingly, new forecasts were prepared as presented in the Runway Justification Study in **Appendix C**. Forecasts from this effort predict that jet aircraft operations increase at an annual compound growth rate of 1.25 percent from 360 operations in 2019 to 462 operations in 2039.

The justification for this proposed project was based on these newly prepared forecasts for aircraft operations at ARB and did not assume operations from Willow Run Airport would shift to ARB. Ultimately the use of any airport is decided by the aircraft operator and/or pilot based on many factors including the specific performance characteristics of the aircraft. Neither ARB, nor the FAA, prescribes what airports are used. The FAA and Airport Sponsor's role is to provide a safe and efficient facility for all users. Additional information may be found in **Chapter 1.0 Purpose and Need Section 1.5.2 Need for the Proposed Action** and **Appendix C Runway Justification Study**.

5. *The Draft EA stated an excess number of hot days at ARB. Aircraft performance charts included in the Draft EA suggest the industry standard for a hot day is 85 degrees, not 80 degrees.*

**Response:** There is no exact aviation industry standard for a "hot day." The term "hot day" is subjective with each aircraft manufacturer's performance chart. The selected threshold in the 2022 Draft EA, 80 degrees Fahrenheit (°F), was chosen to measure the days when temperatures are at their warmest. Data on the number of days above 80°F was obtained from Midwestern Regional Climate Center records presented in **Appendix C Runway Justification Study**.

6. *The Draft EA projects 84,336 operations by 2039; however, the current 3,505-foot runway supported more operations in 1999 (134,554) suggesting the current runway is more than sufficient for the projected future.*

**Response:** The total number of takeoffs and landings at ARB cannot be directly correlated to the length of runway needed for aircraft operating at the Airport. The type of aircraft operating at ARB directly impacts the runway length needed. The FAA's definition for the critical aircraft type to determine the required length of the runway is the most demanding type or family grouping that currently conducts at least 500 annual operations. This was found to be a family grouping of B-II turboprop aircraft types.

7. *The Purpose and Need of the Draft EA does not support the need for a runway extension because there is no indication that the critical aircraft types presented in the Draft EA are significantly impacted in their operations by the length of the existing runway. It is disingenuous to claim that aircraft suffer concessions in reduced fuel, passengers, and/or cargo loads or needing to divert to another airport when a wet runway is present without data to support these claims.*

**Response:** For the critical aircraft operating at ARB, the FAA directs the use of performance curves in FAA AC 150/5325-4B, *Runway Length Requirements for Airport Design*, to determine the required length of runway needed. While it is understood that some pilots are needing to make concessions to operate critical aircraft types at ARB or divert to another airport when a wet runway is present, this is a secondary reason presented for the need of additional runway length. The presence of contaminants on a runway surface or concessions needed by these aircraft cannot be used solely by themselves to justify the required length of a runway. Since concessions and negative economic impacts cannot be used as the primary reason to extend a runway, a user survey effort to determine the frequency of concessions was not conducted. It is understood, however, from comments received by pilots that there is a need for aircraft to make concessions when operating at ARB. Ultimately, the decision to operate with concessions at ARB or use another airport is at the determination of each individual pilot.

8. *Appendix A of the Runway Justification Study indicates that only four B-II aircraft types accounted for more than 100 operations each. It appears that only a limited number of aircraft types are being used to justify the need for the runway extension.*

**Response:** The FAA directs that the critical aircraft for runway length planning purposes is the most demanding type or family grouping of aircraft types conducting at least 500 annual operations. This was found to be a family grouping of B-II turboprop aircraft types and not a single individual type of B-II aircraft. The response to Technical Comment #2 and **Appendix C Runway Justification Study** provide additional information on the critical aircraft determination driving the runway length need.

9. *The Draft EA states the runway extension is necessary for pilots to have a longer stopping distances when water, snow, or ice is present on the runway. The increased braking distance needed when water, snow, or ice is present on a runway is not a reason allowed by the FAA for a runway extension. The safety argument for expansion is discredited as reports have shown that every incident/accident over the past 20 years was caused by pilot error and not the 3,500-foot*

*length of the runway. The runway extension is advocated as a hidden business issue to support the addition of more aeronautical development.*

**Response:** The response to Safety/Health Comment #16 addressed concerns regarding presence of contaminants in determining required runway length needs and safety of ARB operations. FAA AC 150/5325-4B, *Runway Length Requirements for Airport Design*, was correctly applied in determining the required length of the runway for the critical design aircraft (B-II Turboprops). The commenter is correct that the AC does not allow the increased braking action distances of aircraft when water, snow, or ice is present on a runway to determine the required length. As a result, the braking action distances of aircraft when these contaminants are present on the runway were not used to determine the required length of Runway 6/24. This statement was included to illustrate how other aircraft operating at ARB with less than 500 annual operations or lesser demanding needs for runway length would also benefit operationally from a runway extension. The runway extension is to meet the existing and reasonably foreseeable forecast aircraft operating at ARB.

10. *FAA AC 150/5000-17, Critical Aircraft and Regular Use Determination, states that the critical aircraft is based on the most recent 12-month period of activity. This would have been from February 1, 2020 until January 31, 2021. Instead, 2019 is used with no justification for use of the data. This is not allowed using FAA's criteria in its Advisory Circular.*

**Response:** At the time the Runway Justification Study was completed, the aviation industry was impacted significantly by the COVID-19 pandemic. The most significant impact to operations and resulting rebound occurred during the February 1, 2020, to January 31, 2021, timeframe. Understanding that this 12-month period would not have accurately captured typical levels of operations occurring at ARB each year, 2019 was the last full year of calendar data available before the impacts of the COVID-19 pandemic. During this time, 679 IFR operations were recorded by B-II aircraft. Also, aircraft operations were rebounding back to typical levels quickly from February 1, 2020, to January 31, 2021. The Runway Justification Section included a section (Section 4.1) that evaluated the impacts of the COVID-19 pandemic on existing and forecasted aircraft operations at ARB. This found that operations were to have fully rebounded to 2019 levels in 2021; thus, the 2019 calendar year was chosen as the base year for the evaluation.

11. *The Draft EA uses false numbers in determining the critical aircraft. When compared with the chart in Appendix C, the annual operations in Table 1-0 are wrong.*

<b>Representative Aircraft</b>	<b>Annual Ops 2019 in Table 1-0 of SRDEA</b>	<b>Actual Annual Ops from FAA TFSCMC Database</b>
TBM8 (Socata TBM 850)	150	90
BE20 and B350 (Beechcraft King Air)	966	264
C56X (Cessna Excel XLS)	263	161
E55P (Embraer Phenom 300)	97	77
C172 (Cessna 172)	2,876	709
EC55 (EC-155)	84	82

**Response:** **Table 1-0** in **Chapter 1.0 Purpose and Need** of the 2022 Draft EA presents the existing and future projected operations by family groupings of aircraft types, not individual aircraft. The representative aircraft column was included to provide the reader an example of the sizes of aircraft within each Airport Reference Code (ARC) classification. The presentation of operations by B-II jets was further subdivided by small (example – Phenom 300) and mid-sized (Excel XLS) types. The number of operations presented in both **Table 1-0** and the table referenced in **Appendix C Runway Justification Study** is for family groupings of aircraft types by ARC classification and not individual aircraft types.

#### H. General

1. *The Draft EA does not provide information on how the runway extension benefits the community. Understanding there will be benefits, these seem moderate with very little positive value to the community of Ann Arbor.*

**Response:** The required length of a runway is justified based on the performance requirements of different classifications of aircraft types presented in FAA AC 150/5325-4B, *Runway Length Requirements for Airport Design*. Ultimately, the proposed runway extension will benefit the community by allowing ARB to continue to meet the air transportation demands of local businesses, residents, and visitors that have a need for aviation.

2. *Has anyone suggesting the runway extension spent time with concerned residents to learn how it could affect their lives?*

**Response:** As part of the NEPA process, a Public Hearing on the 2022 Draft EA was conducted on December 13, 2022. This was an opportunity for the public to discuss the proposed project (and submit comments) with representatives of the State of Michigan, the Airport, Airport’s consultant,

and the FAA. In addition, throughout the environmental review, the Airport Manager has been available and has answered questions received about the Airport.

3. *The proposed runway extension is unnecessary. This is a poor use of taxpayer money.*

**Response:** The purpose of the proposed action as presented in **Section 1.5.1 Purpose of the Proposed Action of Chapter 1.0 Purpose and Need** is to improve operational utility of the Airport by meeting the takeoff and landing runway length requirements of aircraft that currently operate at the Airport and are projected to gradually increase operations over time. The proposed action is needed because Runway 6/24 was designed to serve primarily small, piston-driven aircraft; however, the Airport receives regular use by small turboprop aircraft and occasional business jet aircraft that require a longer runway to operate at a greater payload than they do today. As the Sponsor of the Airport, the City of Ann Arbor is responsible for evaluating the cost associated with airport projects and ultimately is the decision-maker in moving forward with the project. The response to Financial/Economic #8 addresses how the project will be funded.

4. *The Draft EA makes no mention of prior community opposition by Pittsfield Township towards the proposed project nor is it complete as there is additional work needed. Comprehensive compliance with local ordinances and citizen involvement that include public comment periods are needed. The airport is obligated to develop and implement a citizens public participation program, completed with appropriate processes and relevant information.*

**Response:** The 2022 Draft EA recognized that there were previous efforts completed including past public comments. To recognize those previous efforts, public comments from the 2017 EA on the proposed runway extension are included in **Appendix N Past Public Comments and Responses**. In addition, a Public Hearing was held on December 13, 2022, to collect present day public feedback about the project and to learn how public opinion towards the project has evolved since the last 2017 EA effort.

The Public Hearing held on December 13, 2022, concerning the 2022 Draft EA presented relevant findings from this effort and described the EA process. Public and agency comments collected as part of the current project are summarized with responses presented in this **Appendix P Public and Agency Comments** on the Draft EA. Only comments on the 2022 Draft EA were considered.

5. *The Draft EA did not consider Willow Run Airport or creation of a new airport as an alternative. It should have been included alongside the preferred alternative and no action alternative. If the airport wants to expand, a new airport could be created south of Saline and existing airport land turned into a park.*

**Response:** The purpose of the 2022 Draft EA is to evaluate, through the NEPA process, a proposed project to provide the necessary runway length for the critical aircraft type (B-II turboprops) operating at ARB. Use of YIP as an alternative was not considered because this would require the relocation of based B-II turboprop aircraft at ARB, which is not feasible. Likewise, construction of a new airport was also not considered because this was not a cost-effective alternative with likely substantial environmental impacts. Since each of these alternatives were not feasible and were outside the scope of the 2022 Draft EA, they were not considered. In addition,

ARB is a federally obligated airport with federal grant assurances that require the Airport to remain open and fully operational.

6. *The water table at ARB is high, causing land underneath to be unstable. This was a problem when ARB's runway was resurfaced in the 1970's resulting in the need for offsite gravel before pavement could be reinstalled. Extension of the runway and other land uses at ARB should be negated as a result.*

**Response:** Water and soil resources as well as potential impacts to them with implementation of the Preferred Alternative were reviewed as part of the 2022 Draft EA effort and are discussed in **Section 3.9 Farmlands** and **Section 3.17 Water Resources** in **Chapter 3.0 Affected Environment & Environmental Consequences** of the 2022 Draft EA. The depth of the water table and soil type were not found to preclude implementation of the preferred alternative nor were significant environmental impacts to these resources found with the extension of the runway. At the time of project design, an engineering geotechnical effort would be conducted to determine the appropriate gravel base needed to accommodate the proposed runway extension.

7. *While ARB was in existence long before surrounding residential and commercial areas were developed, they are now part of the community and need to be factored in.*

**Response:** ARB offers many opportunities for the public to be engaged with infrastructure development and operations at the Airport. ARB has an Airport Advisory Committee that meets every two months with representatives from the City of Ann Arbor, Pittsfield Township, and Lodi Township. These Airport Advisory Committee meetings are also open to the public. Approval of all formal decisions are made at Ann Arbor City Council meetings that are also available to the public. This is in addition to the opportunity that the public has for comment on Airport development and operations through ARB's webpage. In addition, the public hearing held in December 2022 as part of the NEPA process offered an additional opportunity for the community to learn more about the proposed developments and provide comment.

8. *It would be valuable for the Draft EA to include why the airport is valuable and the value of the activities that occur there for the local community.*

**Response:** **Section 1.1 Introduction** in **Chapter 1.0 Purpose and Need** of the 2022 Draft EA included a statement that there was a need for air transportation in Ann Arbor due to the many technological-driven industries and attractions in the area. Often, aviation at ARB is used to transport workers, clients, suppliers, customers, and time sensitive parts/supplies to and from the region. Section 3.2 of the Runway Justification Study presented in **Appendix C** also demonstrates the value of ARB by providing a summary of the types of users that rely on ARB, regardless of their runway length need.

9. *An idea to provide the recommended runway length is to extend to the east instead of the west. This would require moving State Street farther east and/or tunneling the road to create a safety zone for the runway. Realizing this would involve land acquisition of the Speedway Station and maybe Ellsworth as well as WCRC and likely drainage and environmental studies, the airport could*

*get a longer runway and WCRC could improve State. It may be more cost effective for the township to contribute some of the costs instead of use of legal domain or court annexation.*

**Response:** This alternative (Alternative 1) and the environmental impacts associated with it were evaluated as part of the 2022 Draft EA. Details regarding this alternative can be found in Section **2.4 Alternative 1** in **Chapter 2.0 Alternatives Considered**. **Section 2.8 Selection of the Preferred Alternative** discusses why the Preferred Alternative was chosen over Alternative 1. In summary, Alternative 1 was not the most feasible and had the most construction challenges due to relocation of existing off-airport infrastructure that was needed like State Road. In addition, Alternative 1 was the costliest alternative of those considered. For these reasons, it was eliminated from further consideration.

- 10. Willow Run is close by for many businesses that might need on occasion to fly in or out on heavier business jets. Easy access to the Detroit Airport is sufficient for businesses considering whether to locate in Ann Arbor.*

**Response:** The response to Financial/Economic comment #11 addresses use of YIP and DTW for larger, heavier aircraft for businesses located in, or traveling to, Ann Arbor. Research conducted on aircraft operations for the Runway Justification Study included as **Appendix C** of the 2022 Draft EA found that larger business jet types are not conducting operations at ARB. Businesses that use these larger business jet types are projected to continue to use other airports like YIP due to the length of runway extension being proposed. According to FAA AC 150/5325-4B, *Runway Length Requirements for Airport Design*, the required length for runways supporting larger business jet types is at least 4,730 feet ranging up to 6,430 feet, which exceeds the proposed extension to a 4,225-foot length that the 2022 Draft EA evaluated.

- 11. The Ann Arbor Airport is not in Ann Arbor city limits. This is an issue because they don't have skin in the game because any noise, altitude issues, or safety issues are not felt because of the remoteness of the airport to Ann Arbor city limits.*

**Response:** The land of the Airport is owned by the City of Ann Arbor, and it is the designated FAA Sponsor responsible for all aspects of its operation including noise and its safety to users. To provide a facility for the surrounding community to access the air transportation system safely and efficiently, the runway extension is being pursued by the City of Ann Arbor to provide the required runway length needed as defined by FAA design standards for the existing critical aircraft (B-II turboprops).

- 12. Matt Kulhanek is polite, will take my calls, and explain things to me but zero action has resulted. FAA websites provided by him don't work. I've alerted Mr. Kulhanek that the websites don't work and after successfully working through this with the FAA, I plan to share with him.*

**Response:** Comment noted.

- 13. A lot of information presented in the Draft EA is presented in terms of how it affects businesses and not the people who live close to the airport. The airport expansion will have a negative impact on Pittsfield Township residents. Very few people will benefit from the expansion, and many will be*

*harmful by it. The proposed action is clearly in opposition to the quality of life in the surrounding area.*

**Response:** NEPA is a comprehensive process that evaluates the potential impact on the Airport and surrounding community to identify potential impacts if the project were to be constructed. The 2022 Draft EA disclosed the results of that analysis and includes potential impacts on residents and businesses in the area. The comprehensive analysis found there are no significant impacts that would change existing conditions for those residents and businesses located around the Airport. Reference to the benefit of the project for those that use the Airport, which includes businesses that rely on aviation, has been included in the 2022 Draft EA to provide supplemental information defining the purpose for the project, which is to provide the required runway length for B-II turboprop aircraft operating at ARB.

14. *The only reason for this project is so private jet passengers are not inconvenienced. I do not believe anyone seeking to visit Ann Arbor for business or leisure is deterred by the current length of the runway. The idea that aircraft are already operating at ARB exceeding its capacity is ludicrous. The airport can continue its operations as it has in the past.*

**Response:** The purpose and need for the project, described in more detail in **Chapter 1.0 Purpose and Need**, is to provide the required length of runway per FAA design criteria for the existing critical design aircraft, which is a family grouping of B-II turboprop types. The runway is being extended to enhance the operational capability of this family of aircraft types, not to accommodate larger jet aircraft types or avoid inconveniences to existing users. B-II turboprop aircraft are forecasted to continue to be the critical design aircraft type in the future.

Smaller jet aircraft types currently operating at ARB are not projected to become the critical design type during the 20-year planning period. According to FAA design criteria, at least 4,730 feet of runway length is recommended for jet aircraft types, which exceeds the 4,225-foot length of the runway being evaluated by the 2022 Draft EA. In addition, jet aircraft are not projected to conduct 500 annual operations through the forecast period, preventing them from becoming the critical design aircraft for the length of Runway 6/24. **Appendix C Runway Justification Study** provides additional information about the critical aircraft and future activity projections.

15. *The proposal to expand the Ann Arbor Airport runway is not consistent with Ann Arbor's Comprehensive Plan.*

**Response:** Development of ARB was not included in Ann Arbor's Comprehensive Plan since the transportation element of this planning document is focused on surface transportation. The development of airports in Michigan and how they accommodate the air transportation demands of the communities they serve is an element that was covered by MDOT AERO in their most recent *2017 Michigan Aviation System Plan (MASP)*. In the MASP, ARB has been assigned B-II Development Goals, which include providing a runway with a length of approximately 4,300 feet. Implementation of the proposed runway extension would allow ARB to meet the long-term strategic development goals of the MASP.



16. *Why would I leave comments for the airport manager who has a vested interest in this project? The current plan calls for public comments on the EA to be sent to Airport Manager Matthew Kulhanek; however, for perception of objectivity and fairness, citizens are requested to copy MDOT AERO when submitting public comments. Also, how are Ann Arbor City Council representatives involved?*

**Response:** The City of Ann Arbor is the public agency responsible for this environmental review; the Airport manager has been selected as the contact for questions and collection of comments. All submitted comments and responses have been distributed to the agencies involved with this environmental review, such as the City of Ann Arbor, MDOT AERO, and the FAA. A summary of comments received are included in **Appendix Q Public Comments Received** and **Appendix R Agency Comments Received** of the Final EA. The Airport manager, as a part of his duties, has continually updated the Ann Arbor City Council throughout the environmental review process.

17. *I am interested in learning more about the requests made for FAA/State Block Grant Programs to fund capital improvements at the Ann Arbor Airport. Information regarding the request and prioritization of funding was not provided at the public hearing.*

**Response:** Information about FAA/SBGP funding requests can be obtained by contacting the MDOT AERO. Information about potential funding mechanisms for the project was not presented at the Public Hearing since approval of an EA is needed first before any federal/state funding requests can be made.

18. *The airport is funded by federal dollars; therefore, any pilot can land at the airport regardless of the size of their airplane. Thus, Ann Arbor will not be able to regulate the size of planes that can use the airport.*

**Response:** As a federally obligated airport, ARB cannot unjustly discriminate against types, kinds, and classes of aeronautical activities that occur. This is bound by grant assurances in accepting AIP funding. Aeronautical activities that occur at ARB are at the discretion of its users based on available infrastructure such as runways and types of navigational equipment as well as available support services such as fuel and aircraft maintenance. Forecasts prepared as part of the 2022 Draft EA found that with the extension of the runway, existing aircraft types currently operating at ARB will continue to be the fleet mix in the future with B-II turboprop types remaining the critical design aircraft.

19. *This project will result in increased ground traffic on roads serving the airport.*

**Response:** Socioeconomic impacts to local surface transportation patterns were reviewed as part of the evaluation of the NEPA environmental categories in preparing the 2022 Draft EA with findings presented in **Section 3.15 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks** and **Section 3.18 Cumulative Impacts** in **Chapter 3.0 Affected Environment & Environmental Consequences**. No significant impacts are anticipated to existing surface transportation patterns surrounding ARB.

20. *Section III of the Legislation and Federal Regulations Relating to Compatible Land Use Planning Guidelines states that an airport has an obligation to utilize reasonable alternatives to avoid or minimize adverse impacts to enhance the quality of the human environment. This guideline is not being followed.*

**Response:** The 2022 Draft EA evaluated reasonable alternatives for the proposed project. The appropriate level of review for these alternatives is presented in Chapter 2.0. Section III (Legislation and Federal Regulations Relating to Compatible Land Use Planning) of FAA guidance titled *Land Use Compatibility and Airports* focused on the impacts of aircraft noise to off-airport properties. As a part of the 2022 Draft EA process, an evaluation of aircraft noise (presented in **Section 3.14 Noise and Noise Compatible Land Use** of **Chapter 3.0 Affected Environment & Environmental Consequences** and **Appendix L Noise Analysis**) was conducted in accordance with criteria defined in 14 CFR 150, *Airport Noise Compatibility Planning*, due to the proposed project and its potential impact to land uses adjacent to an airport. This analysis found that the 65 DNL noise contour remained entirely on ARB property under all noise scenarios with the proposed project. Noise impacts on noise sensitive land uses within the 65 DNL are not expected.

21. *ARB has not elicited a meaningful response from the general public regarding the status of land use planning around the airport.*

**Response:** This is the responsibility of the Planning Commission of Pittsfield Township and Planning Services of the City of Ann Arbor. The Public Hearing held on December 13, 2022, as part of the 2022 Draft EA satisfied and informed the public of the proposed runway extension project (and solicited comments and feedback on the proposed project) as well as other connected actions occurring on Airport property in which ARB has jurisdiction. Comments were received during the Public Hearing and during the public commenting period.

22. *There is an argument made that ARB serves a valuable need for University of Michigan Health System medical flights. This is not true because there is a helipad at the hospital and currently flights supporting the large transplant program operate out of Willow Run.*

**Response:** Aircraft for organ transplant flights conducted by the University of Michigan Health System are based at YIP; however, medical and organ transplant operations by fixed-wing aircraft, and not rotary-winged aircraft (helicopters), from other hospitals and health systems seeking to collect harvested organs from the University of Michigan Health System are occasionally conducted at ARB. Use of either YIP or ARB for organ harvest and medical flights are dependent upon the type of aircraft used and the need for infrastructure/services offered at YIP that may not be available at ARB such as navigational equipment offering greater precision for landing.

23. *This airport expansion will have a significant unexpected impact on the University of Michigan because expanding the airport would be a terrible step in destroying Ann Arbor.*

**Response:** The purpose of this EA is to evaluate and disclose the potential environmental impacts of the proposed project following all NEPA requirements. The results of this analysis show that there are no significant impacts if the project were to be constructed. **Section 3.15.1 Socioeconomic Impacts** in **Chapter 3.0 Affected Environment & Environmental**

**Consequences** summarizes the socioeconomic evaluation of the proposed project on the surrounding community, which did not find any significant impacts. Ultimately, upon completion of the Final Environmental Assessment, it is up to the Sponsor to decide if they want to move forward with construction of the project.

24. *The project is incompatible with the surrounding area. The area around the airport is residential, not commercial. Residential areas have been established around the airport and it can no longer expand. The project is not an exclusive FAA undertaking and does not comply with the Pittsfield Township Master Plan and zoning ordinances.*

**Response:** The decision to undertake any potential development project is up to the Sponsor of the airport. The Sponsor's proposal has been evaluated and this EA documents that analysis and discloses potential impacts of the project, if constructed. The proposed runway extension is planned to occur entirely on ARB property without any land acquisition or changes to existing zoning surrounding the Airport. Currently, property encompassing the boundary of ARB has its own zoning designation and is not located on land zoned as commercial. Although recognized as a key community feature in the Pittsfield Township Master Plan, development of the Airport is not discussed since it is owned by the City of Ann Arbor. Long-term strategic development goals of ARB and the ability to meet the air transportation needs of the surrounding community are established through the MASP by MDOT AERO. The MASP identified that ARB has a B-II Development Goal of providing a runway with a 4,300-foot length.

25. *The Draft EA does not present an alternative moving the control tower to address line-of-sight concerns. If tower visibility is the issue, why not move the runway 150 feet to the southwest at its existing length?*

**Response:** The primary purpose of the 2022 Draft EA was to evaluate the proposed project that will provide the required runway length for the existing critical design aircraft types (B-II Turboprops) currently operating at ARB. Moving the ATCT would not meet the purpose and need of the project. A secondary purpose of the 2022 Draft EA was to also review any environmental or socioeconomic impacts associated with improving the line-of-sight issues associated with the ATCT and the intersection of Taxiway A with Runway 6/24. Since shifting the runway 150 feet southwest at its existing length does not provide the required runway length for the existing critical design aircraft type, it was not evaluated as a feasible alternative to meet the purpose and need of the project.

26. *The Draft EA claims the FAA has no control, responsibility, or discretion for the use of funds once MDOT AERO receives the FAA's block grant funds.*

**Response:** States that participate in the SBGP assume responsibility for administering AIP grants at airports classified as "other than primary" airports, that is: nonprimary commercial service, reliever, and general aviation airports. Each State is responsible for determining which locations will receive funds for ongoing project administration. (See [https://www.faa.gov/airports/aip/state\\_block](https://www.faa.gov/airports/aip/state_block)). The SBGP is set up so that MDOT AERO assumes responsibility for administering AIP grants once block grant funds have been awarded. MDOT AERO coordinates with the FAA during the planning, environmental review, design, and construction process for eligible projects. While MDOT acts as the FAA during this process, all

projects must comply with applicable FAA rules and regulations. This coordination is typical on airport construction projects and helps maintain a focus on safety.

27. *Early Agency Coordination letters are not included as part of Appendix N – Past Public Comments and Responses nor are questions and comments raised from responses received from those letters addressed.*

**Response:** Given that the 2022 Draft EA was an independent effort intended to meet the project's current purpose and need; previous agency coordination was not addressed nor was it applicable. New early agency coordination was conducted at the beginning of the current project in order to implement the latest agency regulations and recommendations.

The response to past public comments on earlier documents was completed as a courtesy by the Airport and was not intended to be comprehensive. The Airport desired to demonstrate that it was aware of past public comments and to acknowledge their concerns.

28. *The draft EA does not comply with the Michigan Environmental Protection Act (MEPA). There is no indication that the draft EA follows Michigan environmental laws, regulations, and standards. If MDOT approves this project that allows it to harm air, water, increase noise pollution, and invades public trust it does not comply with MEPA.*

**Response:** The EA was prepared in accordance with applicable state laws, including the Natural Resources and Environmental Protection Act, Michigan Act 451 of 1994 (NREPA). An early agency coordination effort, which included EGLE, the USEPA, and 13 other Federal, State, and Local agencies was undertaken in 2019 prior to EA development to identify key issues to be addressed during the NEPA process. A subsequent agency scoping meeting was held at the airport (Summer 2019) to provide project background, tour the project area, and to solicit and discuss agency comments/concerns, to assist in development of a comprehensive EA. Following development of the 2022 Draft EA, it was submitted to the same agencies included in the early coordination effort, for their review, and opportunity to provide any additional comment/input. No concerns that the project did not follow applicable environmental laws, regulations, and standards were received.

29. *The runway extension violates the 2009 Agreement between Pittsfield Township and the City of Ann Arbor intended to resolve issues at ARB.*

**Response:** The Agreement between the two municipalities in 1978 was primarily to resolve annexation issues between the two communities. Other issues addressed in that document included the Airport, landfill, and sewer/water services. No reference could be located in the agreement that discusses changes or expansion of Airport infrastructure. Paragraph II C. states that, "The Township agrees to establish a land use plan for the environs of the Airport which recognizes only land uses which are compatible to Airport operations from a safety and environmental point of view. The City will review and comment on the plan before adoption by the Township."

The 2009 amendment was an effort to clarify the jurisdictional relationship related to construction at the Airport, which municipality had jurisdiction over various codes, and to separate processes for aeronautical versus non-aeronautical development. At the time of the amendment and its

agreement by all parties, the City of Ann Arbor presented the future development plans of the Airport, which included a proposed runway extension. Language in the amendment as agreed upon by Pittsfield Township and the City of Ann Arbor states, "Under the Michigan Aeronautics Code, MCL 259.1 et seq., Ann Arbor has jurisdictional control for the management, governance and use of the Airport, including application of its police powers, rules, regulations and ordinances, and including the zoning and planning of aeronautical facilities on the Airport property." The construction of the proposed runway extension does not violate this agreement.

30. *Removing pavement presents opportunities for reuse and recycling of materials, which benefits the environment and preserves valuable landfill capacity. The Draft EA is silent regarding the potential for reuse and/or recycling of pavement materials.*

**Response:** If this project is approved and moves into the next phase of the project, and whenever possible, construction materials will be recycled and or reused to limit waste rather than discarded in local landfills in accordance with FAA AC 150/5320-15A, *Management of Airport Industrial Waste* and AC 150/5300-13B, *Airport Design*. Consideration will also be given to the USEPA's *Sustainable Management of Construction and Demolition Materials and Large-Scale Residential Demolition* recommended practices and will be implemented where feasible.

31. *The Draft EA includes best management practices (BMPs) that should be considered to prevent and minimize impacts (Table 3-7). However, the Draft EA does not indicate whether these best management practices will be included in project design/implementation if a FONSI is signed.*

**Response:** The mitigation measures in this table are at the discretion of MDOT AERO and the FAA considering their individual rules, recommendations, and ACs. While some mitigation measures are required by state or federal regulatory agencies, others are a recommendation, such as BMPs. Implementation of **Table 3-8 Mitigation Summary of the Preferred Alternative** (previously Table 3-7) in **Chapter 3.0 Affected Environment & Environmental Consequences** will be encouraged but not mandatory unless required by law.

32. *Pittsfield responded on May 30, 2019, to Mead & Hunt's April 15, 2019, requesting comments on specific issues. That letter is not included in the Appendix N of the SRDEA that purports to letters received in response to ARB's "Early Agency Coordination." Nor does the SRDEA address any of the questions and comments raised by Pittsfield's letter. A revised SRDEA should be issued that includes Pittsfield's letter and addresses the comments, concerns, and questions raised in that letter.*

**Response:** The Pittsfield Township letter dated May 30, 2019, was added to **Appendix E Early Agency Coordination**. Comments received from the early agency coordination letter have been addressed as part of the summary of public and agency comments and responses presented in this appendix. It is the opinion of the project team that applicable comments have been addressed during the development of the project.

33. *Pittsfield and Lodi Townships oppose expanding the Ann Arbor Airport runway. This puts the proposed expansion at odds with 40 C.F.R. § 1508.27(2), (4), (5) and (10).*

**Response:** The reference to 40 C.F.R. § 1508.27(2), (4), (5) and (10) in describing township opposition is not an accurate interpretation of the Council on Environmental Quality Part 1508.27 guidance. [40 CFR 1508.27](#) sets forth factors for considering whether an effect is significant. Based on the evaluation of the Final EA, there are no significant impacts associated with the Airport's Proposed Project. (See FONSI).

## I. Support

1. *It is important to invest in infrastructure that supports Ann Arbor as a destination for commerce and sustainability. Things such as highways, airports, rail, and talent all contribute to that.*

**Response:** Comment noted.

2. *Runways need to be long enough. The longer the runway, the safer it is. This is especially important at an airport such as ARB where students are learning to fly.*

**Response:** Comment noted. Responses to Technical Comments #3, 7, and 8 address the reason for the proposed runway extension.

3. *This extension proposal solves a couple of safety issues. One issue is that with the current runway configuration, the control tower does not have a clear view of the approach end of Runway 24. Aircraft often stack up in this area, which creates a hazard. Also, aircraft often are unable to depart with a full payload aircraft. That also is a safety issue, especially on longer flights and longer legs.*

**Response:** Comment noted.

4. *Aircraft that would be operating at the Airport are quieter and faster than jets were 20 years ago. Although there may be more jet operations, the noise impact will not be significant. It appears the studies show that.*

**Response:** Comment noted.

5. *A longer runway means more fuel sales and revenue for the Airport.*

**Response:** Comment noted. The purpose and need for the project, as presented in **Chapter 1.0 Purpose and Need**, is to improve operational utility of the Airport by meeting the takeoff and landing runway length requirements of aircraft that currently operate at the Airport and are projected to gradually increase operations over time. The proposed project is needed because Runway 6/24 was designed to serve primarily small piston-driven aircraft; however, the Airport receives regular use by small turboprop aircraft and occasional business jet aircraft that require a longer runway to operate at a greater payload than they do today.

6. *Business users want to be near the point of business. Providing a longer runway markets ARB as a business-friendly airport.*

**Response:** Comment noted.

7. *We agree with the proposed project's purpose and need.*

**Response:** Comment noted.

8. *We support the Airport's commitment to transitioning to unleaded 100-octane aviation gasoline when it is available on the market.*

**Response:** Comment noted.

9. *The noise analysis conducted for the draft EA that shows the 65 DNL contour did not extend beyond the airport property boundary, and the 10-year forecasted 60 DNL contour was measured on a very small portion of the property to the west of Lohr Rd.*

**Response:** Comment noted.

10. *Please expand the runway for the betterment of the community.*

**Response:** Comment noted.

11. *Residents of the surrounding community have been misinformed about this project. They are being told there will be louder and lower flying aircraft and bird strikes are more likely to cause an accident. Larger and heavier planes needing more runway are generally better maintained than older recreational aircraft using the Airport currently. The larger planes are also generally quieter than the older recreational planes using the Airport today and can reach a higher altitude more quickly on departure.*

**Response:** Comment noted. In addition, the response to Noise Comment #3 explains that larger and heavier aircraft are not projected to conduct operations at the Airport if the runway is extended to 4,225 feet. Evaluation of noise and the types of aircraft projected to use the Airport in the future are respectively presented in **Section 3.14 Noise and Noise Compatible Land Use** of **Chapter 3.0 Affected Environment & Environmental Consequences** and **Appendix C Runway Justification Study**.

12. *Opponents of the project claim property values will decrease following the expansion of the Airport, which is not true.*

**Response:** Comment noted. **Section 3.15 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks** in **Chapter 3.0 Affected Environment & Environmental Consequences** of the Draft EA dated December 2022 identified that the proposed action and alternative(s) are not anticipated to result in relocations or impacts to the community, transportation system, planned development, or employment. The 2022 Draft EA has been updated to include information pertaining to the temporary impacts associated with the construction of the proposed action and alternative(s).

13. *Larger and louder jets will not use the airport. Larger jets have been and will continue to use the Willow Run Airport.*

**Response:** Comment noted. As stated in the response to Noise Comment #3, larger and heavier aircraft are not projected to conduct operations at the Airport if the runway is extended to 4,225 feet. Ultimately, it is up to the pilot to decide if a runway suits the takeoff and landing distance requirements of his or her aircraft.

14. *Aircraft will be slightly lower when landing on Runway 06, but the difference will be unnoticeable. Because of prevailing southwesterly winds (82 percent of the time), Runway 06 is used less than 20 percent of the time. The difference in the climb profile for most aircraft taking off over Stonebridge on the proposed shift of Runway 24 is around 10 feet lower according to those who did the calculations. Conversely, for airplanes departing to the northeast on Runway 06, there will be an increase in height over City residences because aircraft will be departing about 950 feet further southwest of the City.*

**Response:** Comment noted. The response to Noise Comment #1 addresses the change in height of the approach slope over Lohr Road with the runway extension.

15. *Opponents of the project argue that fully loaded aircraft might impact residences. What is the difference between a partially loaded and a fully loaded aircraft in terms of accident intensity? Whether the runway is 3,500 feet or 4,225 feet, such events could happen.*

**Response:** Comment noted. Aircraft accidents are rare, but there are many factors that go into determining how severe an accident is that makes it difficult to determine the exact extent of damage from any aircraft incident. The responses to Safety/Health Comments #2 and #5 discuss the RPZs at the ends of Runway 6/24 and the RSA surrounding it to protect pilots as well as individuals and property on the ground. Implementation of the proposed runway extension, pending approval of this EA and award of AIP funding, will be in accordance with FAA airfield design standards.

16. *The argument that Canada geese do not interact with jets is true. However, bird strikes are a hazard at many airports and a bird strike is always a possibility for all aircraft regardless of the means of propulsion.*

**Response:** Comment noted. Responses to Safety/Health Comments #1 and 8 address the evaluation of bird strikes and mitigation efforts being undertaken by ARB.

17. *The Stonebridge Community has suggested that noise levels will increase from the project as a result of lower altitude and larger aircraft. That does not appear to be the case, based on the noise analysis that was conducted for the EA. It appears the Airport will continue to remain a relatively quiet neighbor. Based on anecdotal evidence, vehicle noise from the major roads neighboring Stonebridge far exceeds what is generated by all but a small number of aircraft operating from the Airport, now or with the proposed expansion.*

**Response:** Comment noted. The response to Noise Comment #1 as well as **Appendix L Noise Analysis** from the 2022 Draft EA provided the findings of the noise analysis.



18. *Goose strikes do occur in aviation, but they are an exceedingly rare occurrence. The fact that geese are already found around the Airport and the fact that any past instances of a goose strike involving traffic from the Airport cannot be readily identified suggests that the true risk is being wildly exaggerated by opponents of the expansion.*

**Response:** Comment noted. Responses to Safety/Health Comments #1 and 8 address the evaluation of bird strikes and mitigation efforts being undertaken by ARB.

19. *The Stonebridge Community's arguments opposing the expansion of the Airport have little actual basis in fact and are grounded in what is commonly referred to as the concept of "NIMBY" (not in my back yard). There have been no arguments disputing the critical role of general aviation in the United States, the potential economic benefits of the expansion, or even the increased safety offered to aircraft pilots and passengers by an expanded runway. These considerations are being ignored by those who have always found some reason (real or imagined) to object to the Airport's operation.*

**Response:** Comment noted.

20. *Support for extending the runway, especially in the area at the approach end of Runway 24.*

**Response:** Comment noted.

21. *Support for the portion of the project that improves visibility.*

**Response:** Comment noted.

22. *The Draft EA factually and satisfactorily addressed the comments and questions from the public in Appendix N.*

**Response:** Comment noted.

23. *Residents in the area, as well as the media, have mistakenly stated the FAA has not approved of the runway extension. The FAA has always been a proponent of any plans to provide a better, safer airport, including a runway extension.*

**Response:** Comment noted. Please see **Section 1.4 Airport Sponsor's Proposed Project Action in Chapter 1.0 Purpose and Need**, which identifies the FAA's Federal Actions.

24. *There is a need to improve our airport in order to continue to provide better safety and the airport services the community needs.*

**Response:** Comment noted.