

To	Part 150 Advisory Committee
From	Aaron Lofurno and Kevin Clarke, CHA Consulting
Project Name	Akron-Canton Airport (CAK) Part 150 Study
Project Number	20121010-000
Regarding	Background for Fifth Advisory Committee Meeting – May 29, 2014
Date	May 15, 2014

1. INTRODUCTION

This memorandum summarizes the compatible land use strategies for the Akron-Canton Airport (CAK) Part 150 Update Study. A companion memo has been developed by Harris Miller Miller & Hanson, Inc. (HMMH) that discusses the noise abatement alternatives. The material covered in these two memos will serve as the basis for discussion at the fifth Advisory Committee meeting, scheduled for May 29, 2014.

The following topics will be discussed in this memorandum:

- The Role of Land Use Measures in Part 150 Plans
 - Land Use Compatibility Guidelines
 - Typical Land Use Compatibility Measures
- Review of Previous Noise Studies at CAK
 - 1989 Study
 - 1997 Study
- Evaluation of Compatible Land Use Alternatives
 - 65 dB DNL Evaluation
 - 60 dB DNL Evaluation
 - Other Preventive Land Use Measures for Consideration

2. THE ROLE OF LAND USE MEASURES IN PART 150 PLANS

The Noise Compatibility Program (NCP) developed as a result of this study will set forth the noise abatement measures that will be proposed for the reduction of existing incompatible land uses and the prevention of additional incompatible land uses within the area covered by the Noise Exposure Maps (presented in the companion memo).

Typically noise abatement measures fall into three categories:

Operational Measures – measures applied to aircraft operations and include changes in runway use or changes in flight track location. (*The recommended noise abatement procedures are discussed in the companion memo prepared by HMMH.*)

Preventive measures – land use control measures to prevent new noise-sensitive land uses from occurring in the existing and future airport noise exposure contours.

Corrective (Remedial) measures – mitigation measures applied to existing incompatible land uses.

Section Four and **Five** of this memorandum will discuss the anticipated noise impacts on the communities surrounding CAK and the recommended preventive and corrective measures for mitigating existing and future noise concerns.

2.1 Land Use Compatibility Guidelines

The FAA has adopted land use compatibility guidelines that are summarized in **Table 1**. These criteria are used to examine the compatibility of existing and projected land uses within and outside airport boundaries for both existing and projected noise levels. It specifies the compatibility parameters for residential, public (schools, churches, nursing homes, hospitals, libraries), commercial, manufacturing and production, and recreational land uses.

The FAA has established the day-night sound level expressed decibels (DNL) as the official cumulative noise exposure measurement for use in airport noise community impact analysis. The criteria for identifying incompatibility based on airport noise is at the DNL level for 65 decibels (dB) and higher. Although incompatibility between land uses and airport noise levels may be perceived by the surrounding community at lower levels, FAA guidelines indicate that 65 dB DNL is the minimum recognized level of noise requiring action by the governmental bodies with authority to take remedial and preventive steps to eliminate or minimize incompatibilities.

The Akron-Canton Airport Authority and local governmental jurisdictions adopted the FAA guidelines in both preceding CAK Part 150 studies. Under those guidelines, all land uses are compatible outside of the 65 dB DNL contour. As discussed at the last committee meeting, there are no potentially incompatible land uses within that contour line for either 2014 or 2019 operations at CAK. There also are no discrete “sensitive receptors” within those contours (e.g., schools, health care places of worship, facilities, etc.).

However, the committee has requested that the consulting team consider abating potential impacts on land uses within the 60 dB DNL contours, and to approach local jurisdictions to determine if they would reciprocate by considering adoption of some sort of “overlay district” to prevent introduction of new incompatible or sensitive land uses within the same area. Later sections of this memorandum address that request.

Table 1 – Land Use Compatibility Guidelines

Land use	Yearly day-night average sound level (L _{dn}) in decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Residential						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public Use						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
Manufacturing and Production						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

(1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.

(2) Measures to achieve NLR 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

(3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

(4) Measures to achieve NLR 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal level is low.

(5) Land use compatible provided special sound reinforcement systems are installed.

(6) Residential buildings require an NLR of 25.

(7) Residential buildings require an NLR of 30.

(8) Residential buildings not permitted.

2.2 Typical Land Use Compatibility Measures

Typical land use compatibility measures include *preventive* and *corrective* techniques. Preventive land use management techniques seek to prevent the introduction of additional noise-sensitive land uses within existing and future airport noise contours. These measures must be implemented by the local governmental jurisdictions. Corrective land use management techniques seek to remedy existing and projected future unavoidable noise impacts in existing areas of incompatible land use.

Preventive Measures

- **Compatible Use Zoning** - commercial, industrial, or farmland zoning.
- **Zoning Changes, Residential Density** - large-lot zoning, planned development, multi-family zoning.
- **Noise Overlay Zoning** - special regulations within high-noise areas.
- **Transfer of Development Rights** - zoning framework to authorize private sale of development rights to encourage sparse development in high-noise areas.
- **Environmental Zoning** - environmental protection zoning to support airport land use compatibility (such as, floodplains).
- **Subdivision Regulation Changes** - requires dedication of noise/avagation easements, plat notes.
- **Building Code Changes** - requires sound insulation materials in new construction.
- **Dedicated Noise/Avigation Easements** - requires development permits.
- Fair Disclosure Regulations - requires seller to notify buyer of aircraft noise.
- **Comprehensive Planning** - policies supporting land use compatibility; can involve specific land use plans and policies to guide rezoning, variances, conditional uses, and public projects.
- **Capital Improvement Programming** - public investments which support airport land use compatibility.

Corrective Measures

- **Guaranteed Purchase (Fee Simple)** - outright purchase of property with the intent of removing incompatible use by demolition of structure.
- **Development Rights Purchase** - purchase of rights to develop property.
- **Land Banking** - acquisition of vacant land for long-term airport facility needs.
- **Redevelopment** - acquisition and redevelopment of property.
- **Purchase Assurance** - airport acts as buyer of last resort, sound-insulates house, sells property, retains easement.
- **Sales Assistance** - airport sound-insulates house, guarantees that the property owner will receive the appraised value (or some increment thereof, regardless of final sales value that is negotiated with a buyer), retains easement.
- **Sound Attenuation** - sound insulation of homes, noise-sensitive institutions, retains easement.
- **Noise/Avigation Easement Purchase** - purchase of easement only.

3. REVIEW OF PREVIOUS NOISE STUDIES

To date, CAK has completed two noise studies – one in 1989 and one in 1997. Since the completion of these studies, the Airport and the local jurisdictions have taken numerous steps to promote compatible land use around the Airport, including property acquisition, rezoning, and the establishment of the “Airport Commerce” zoning district (City of Green). Many of the measures presented in these two studies were re-examined in the context of this Part 150 Update.

3.1 1989 Part 150 Study

The first NCP was approved by the FAA in September 1989. The study identified ten land use measures, which are summarized in **Table 2**. All these measures were approved by the FAA. Many of these measures were readdressed in the 1997 study.

Table 2 – Summary of Land Use Compatibility Measures (1989 Study)

Measure	Description
LU-1	Industrial Rezoning at Boston Avenue and Greensburg Road
LU-2	Adopt Overlay Zoning
LU-3	Endorse Part 150 Study as Comprehensive Plan Element or Planning Guideline
LU-4	Adopt Guidelines for Discretionary Review of Development Projects
LU-5	Industrial Rezoning of Frank Avenue, North of Stark Technical College
LU-6	Develop Parks South of Runway 1/19
LU-7	Acquire Homes and Land South of Runway 1/19
LU-8	Amend Subdivision Regulations
LU-9	Planned Unit Development in Selected Areas
LU-10	Acquire Homes and Land North of Airport on Greensburg Road

3.2 1997 Part 150 Study

The latest study was approved by the FAA in April 1998. The study identified nine land use measures that were all approved by the FAA. The first three were corrective measures, while the other six were preventive measures. These measures are presented in **Table 3**. A graphical depiction of the properties involved with the recommendations from this study are depicted in **Figure 1** and described below.

Area "A"

Area "A" was a single residential parcel located north of the Airport on Greensburg Road, and just west of Interstate 77. The residence was situated between the approaches to Runway 19 and Runway 23. The area was recommended for acquisition in the 1997 Noise Compatibility Program. This property was purchased by the Airport in April of 1999 and the residence has since been demolished.

Area "B"

Area "B" encompassed three parcels and is located northeast of the Airport, north of Greensburg Road, east of Mayfair Road, and on the approach to Runway 23. While no residences were located within the 1999 65 dB DNL contour, much of this land was zoned residential, and was being used for agricultural purposes. Some of the properties contained within Area "B" have been rezoned to agricultural use, while others still remain residential use. It was recommended in the 1997 study that an overlay be implemented to prevent future residential properties from being constructed. As discussed in previous memos, this area is no longer within the existing and future 65 dB DNL contours, as evaluated in this current study.

Area "C"

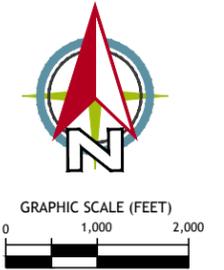
Area "C" is a single residential parcel located south of the Airport along the west side of Frank Avenue. The residence is situated on the approach to Runway 01 and is located between two parcels of Airport property. Like with Area "B", this property is no longer within the existing and future 65 dB DNL contours.

Area "D"

Area "D" is another single residentially-zoned parcel located south of the Airport west of Frank Avenue. The residence is situated on the approach to Runway 01 and is located between two parcels of airport property. Like with Area "B", the property contained a residence but the residence was not located within the 65 dB DNL contour. This parcel is no longer within the 65 dB DNL contour.

Table 3 – Summary of Land Use Compatibility Measures (1997 Study)

	Measure	Description
Corrective Measures	LU-1	Acquire two residential properties
	LU-2	If purchase of two properties is unsuccessful, undertake sound insulation program
	LU-3	If purchase of two properties is unsuccessful, undertake avigation easement acquisition
Preventive Measures	LU-4	Evaluate overlay zoning of residentially-zoned property
	LU-5	If overlay zoning is unsuccessful, explore feasibility of acquiring vacant residentially-zoned property
	LU-6	Explore feasibility of developing noise review criteria and building code provisions for new subdivisions in the City of Green and Stark County within the 60 dB DNL contour.
	LU-7	Disseminate informational packages, conduct orientation sessions, and prepare ongoing updates for Realtors, planning and building officials for real estate sales within the 60 dB DNL contour.
	LU-8	Update comprehensive plans to show existing noise levels and noise compatibility planning is considered in community growth for all areas within the 60 dB DNL contour.
	LU-9	Explore feasibility of planning of capital improvements for all vacant developable land within the 60 dB DNL contour.



- Airport Property Line
- County Border
- Township Border

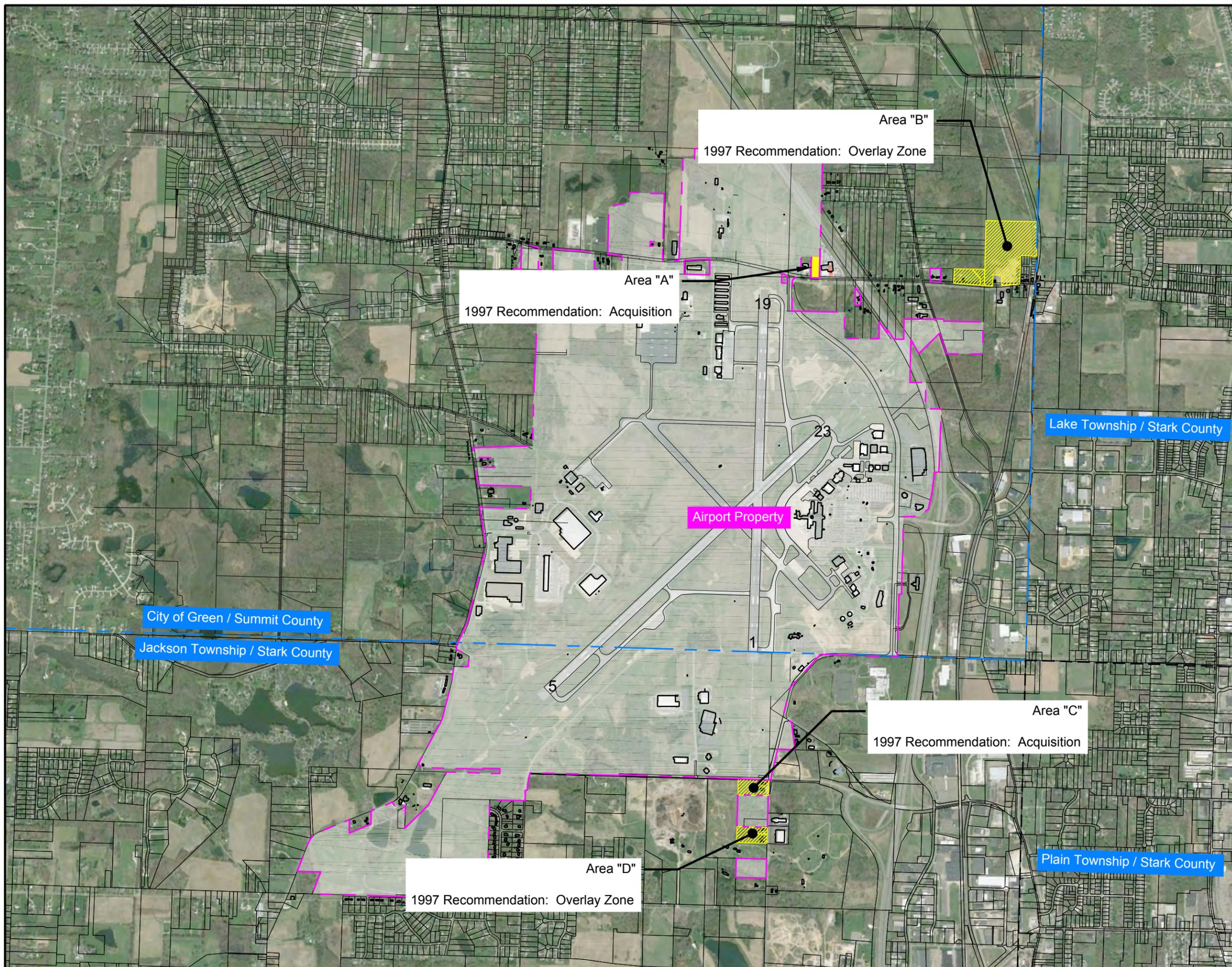


Figure 1
1997 Part 150 Study
Recommendations

4. EVALUATION OF COMPATIBLE LAND USE ALTERNATIVES

As discussed at the last committee meeting, the 65 dB DNL contour is mostly on airport property with the exception of three parcels. The evaluation began with a review of these parcels to ensure there would be no future incompatibility concerns. At the request of the committee, the consulting team also evaluated the potential impacts on land uses within the 60 dB DNL contours.

4.1 65 dB DNL Evaluation

As previously stated, there are three parcels off airport property that are fully or partially encompassed by the 2014 and 2019 65 dB DNL contours. Two of these parcels are located in the City of Green / Summit County and one is located in Jackson Township / Stark County. These three parcels are summarized in **Table 4** and depicted in **Figure 2**. While the land use and zoning for each of these parcels is generally considered compatible with airports, each zoning district has its own set of allowed uses (permitted) and allowed-by-approval uses (conditional). After review of the city code, the zoning designations for these parcels could potentially allow incompatible permitted or conditional uses.

As a means of preventing future incompatibility, noise exposure contours were also developed for the 20-year time frame, based on the forecasts of aviation demand proposed in the ongoing Master Plan. While the 20-year contours were slightly larger than the 2014 and 2019 in some areas, the 65 dB DNL was still mostly located on airport property and only extends over the same three parcels.

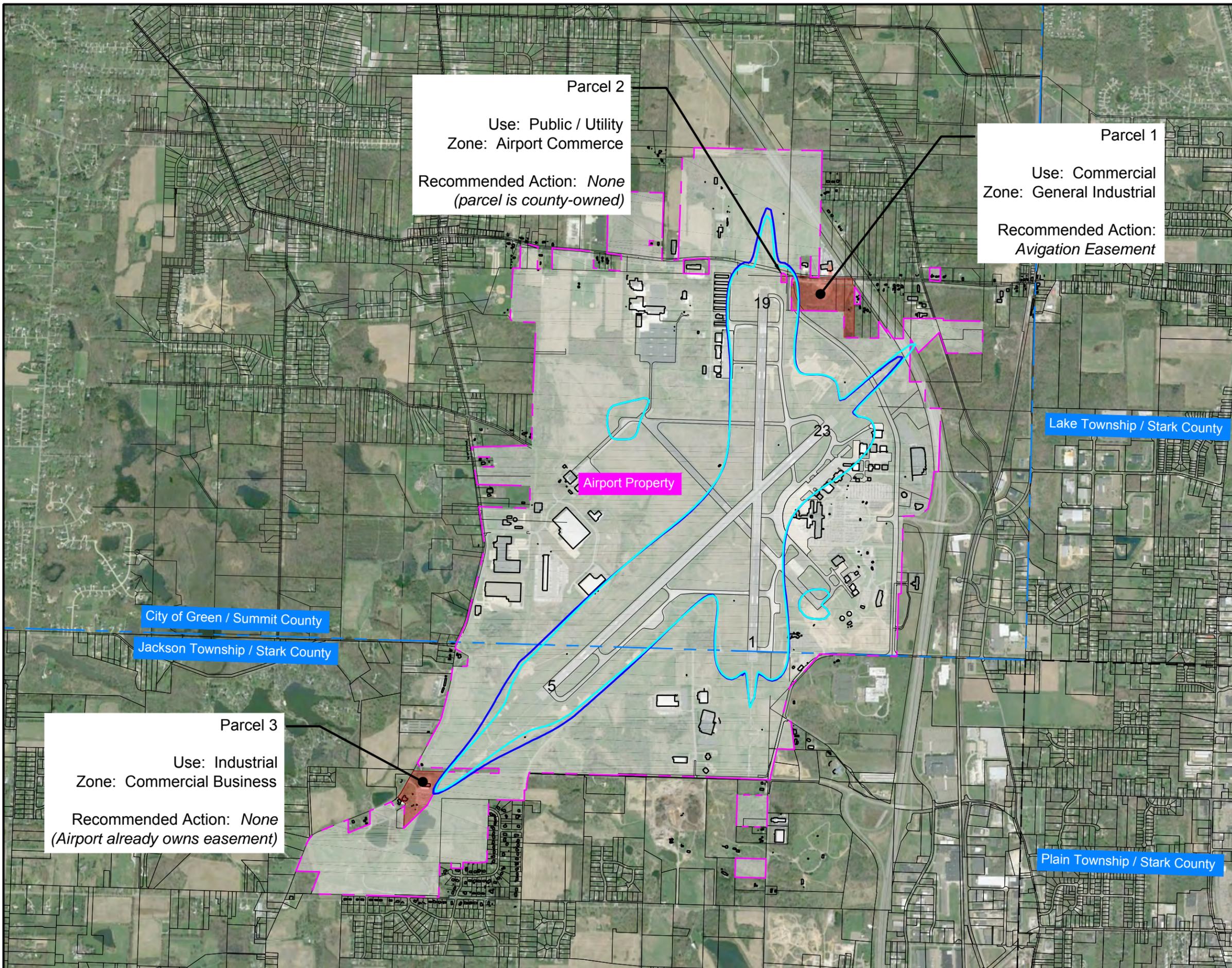
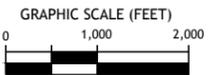
The recommendation from this evaluation is for the Airport to obtain an aviation easement on Parcel 1. The eastern portion of this property has been leveled and contains a maintenance facility and additional storage for the RV dealer located across the street. The western portion of this parcel remains vacant. This measure would prevent any future incompatibility issues while providing additional community “buffer” area for the Airport. As determined in on the ongoing Master Plan, this parcel may also contain obstructions to the Airport’s airspace. An easement on this property would provide the opportunity for the Airport to clear this parcel of obstructions, further protecting the approach to Runway 19.

Parcel 2 is currently owned by Summit County and contains a utility pump station. The parcel is small (approximately 0.5 acres) and it is safe to assume that no incompatible development will occur on this site.

Parcel 3 currently contains a sand and gravel business. The Airport currently owns an easement on Parcel 3.

Table 4 – Property Summary (within 65 dB DNL)

Parcel	Location / Information	Current Land Use	Current Zoning	Incompatible Permitted or Conditional Uses	Recommended Action
1	City of Green, Summit County 3066 Greensburg Road Parcel Number: 2815991 Owner: Canton Air, LLC	Commercial	General Industrial (I-1)	funeral homes, schools, hospitals, day care centers, cemeteries, churches	Acquire Avigation Easement
2	City of Green, Summit County Greensburg Road Parcel number: 2809041 Owner: County of Summit	Public / Utility	Airport Commerce (B-5)	funeral homes, hotels/motels, theaters, schools, hospitals, libraries, day care centers, cemeteries, churches	None (Parcel is county-owned)
3	Jackson Township, Stark County 8182 Wales Avenue NW Parcel Number: 1615530 Owner: Kenmore Construction Company, Inc.	Industrial / Manufacturing	Commercial Business (B-3)	libraries, museums	None (Airport already owns Avigation Easement)



-  Airport Property Line
-  County Border
-  Township Border
-  65 dB DNL (2014)
-  65 dB DNL (2019)

Figure 2
Properties within 65 dB DNL

4.2 60 dB DNL Evaluation

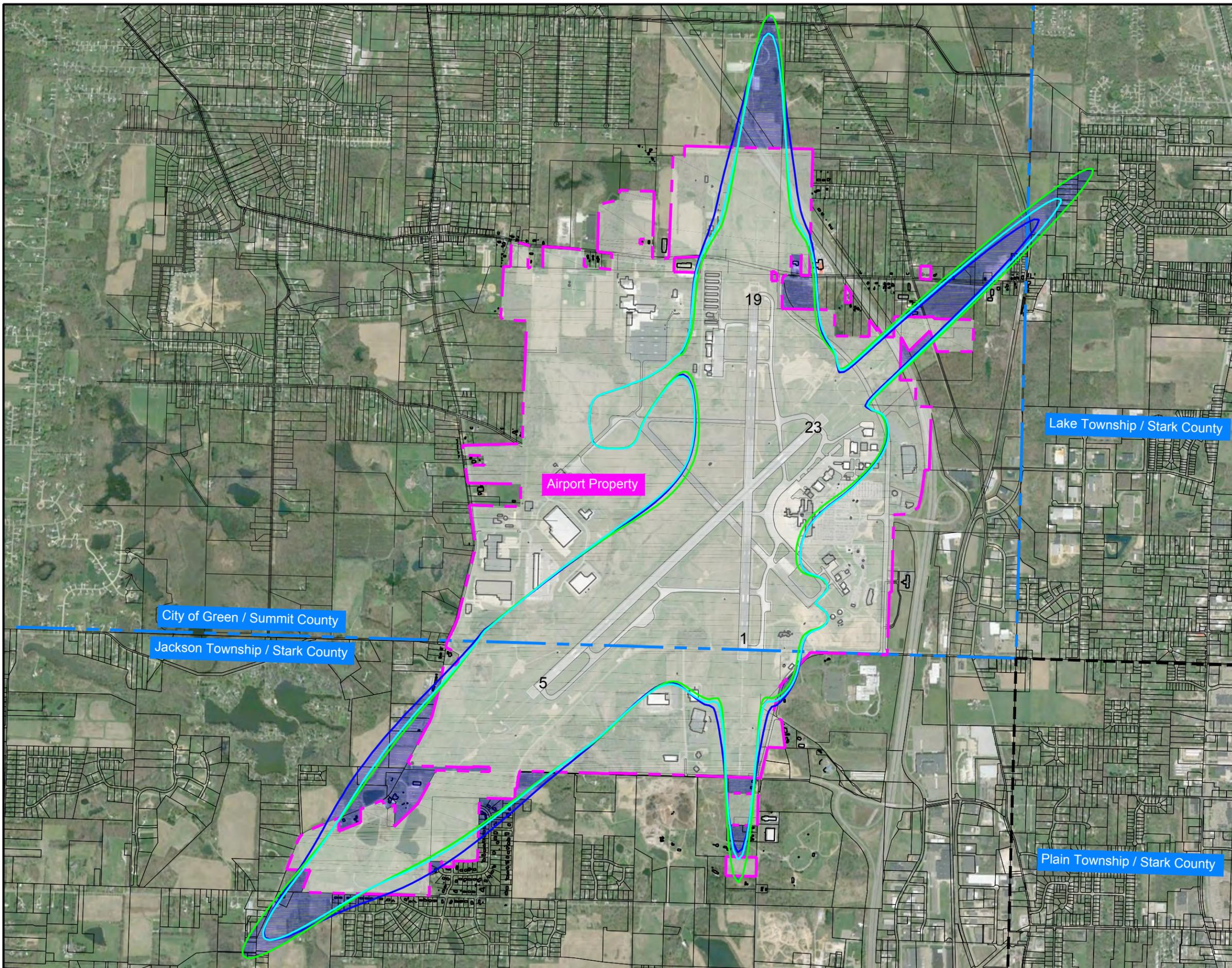
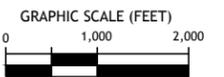
Although the FAA recommends protecting out to the 65 dB DNL, some airports across the nation have adopted the 60 dB DNL as their limit for implementing land use compatibility strategies. **Figure 3** depicts the extents of 60 dB DNL contours at CAK for 2014, 2019, and 2034.

As described in HMMH's companion memo, the dwelling unit and population estimates within the 60 dB DNL contours were estimated (and are displayed in **Table 5**). It is estimated that 62 residents are located within the 2014 contour, and 38 residents are located within the 2019 contour – mostly located off the Runway 5 Approach / Runway 23 Departure end.

Table 5 – Residential Land Uses within 2014 and 2019 60 dB DNL Contour

Year	Metric	North of airport – off Runway 19 end	Northeast of airport – off Runway 23 end	South of airport – off Runway 1 end	Southwest of airport – off Runway 5 end
2014	Residents	0	2	4	56
	Dwelling Units	0	1	2	24
2019	Residents	0	3	4	31
	Dwelling Units	0	1	2	15

Two alternatives were developed to address the potential impacts on land uses within the 60 dB DNL contours.



-  Airport Property Line
-  County Border
-  Township Border
-  60 dB DNL (2014)
-  60 dB DNL (2019)
-  60 dB DNL (2034)
-  Airport Overlay Zone - Option 1

Figure 3
Extents of 60 dB DNL /
Airport Overlay Zone - Option 1

Alternative 1: Officially Adopt 60 dB DNL as Compatibility Threshold

This alternative would involve adjusting the land use compatibility guidelines (presented in **Table 1**) by applying the “65-70” criteria to the 60 dB DNL contours. Essentially, the Airport and the local governmental jurisdictions would be embarking on an effort to reduce or mitigate residential and other incompatible land uses within the 60 dB DNL contour. This could involve a variety of measures, including acquisition and redevelopment, rezoning vacant lands, sound insulation, acquisition of easements, etc. While this option would provide a very high level of control to mitigate existing noise concerns and to prevent future incompatibility issues, it could be very costly, time consuming, and disruptive to the community. Furthermore, the FAA will approve only remedial noise mitigation measures for existing incompatible development and only preventive noise mitigation measures in areas of potential new incompatible development. Lowering the compatibility guideline to the 60 dB DNL does not make things retroactively eligible for approval and funding.

Due to the high level of investment and potential community disruption, adoption of the 60 dB DNL is not a recommended action at this time.

Alternative 2: Overlay Zoning

The second alternative is to create an airport overlay zone (AOZ). AOZs are typically supplemental to the local zoning ordinance, with the objective of promoting compatible land uses within the zone and providing noise-attenuating distances around airports. The implementation of a multi-jurisdictional AOZ would acknowledge the unique land use impacts of the Airport and the siting of future noise-sensitive uses. The purpose of the zone is to notify Airport and local officials and allow them to review proposed development for compatibility. In addition, programs could be implemented to notify existing and potentially new property owners on noise and airspace conditions around the Airport, and inform them of the noise abatement efforts the Airport is undertaking. While Alternative 1 would be more of an absolute condition, Alternative 2 would give the Airport and the local jurisdictions the flexibility to review incompatibility concerns on a case-by-case basis. It would also provide the Airport and the local jurisdictions with the opportunity to include additional provisions to protect the Airport’s airspace. It would ensure that the heights of structures within the AOZ are compatible with airport operations and complies with FAA regulations regarding height and noise.

It is recommended that the Airport and the local jurisdictions adopt an airport overlay zone (AOZ). The planning team has evaluated four options for the size and extents of a potential AOZ.

Option 1 – 60 dB DNL Contours

Jurisdictions Involved: Summit County, Stark County, City of Green, Jackson Township, Lake Township

The option represents the minimum recommended extents of AOZ and encompasses the 2014, 2019, and 2034 noise contours. This option represents the smallest area of implementation, however, there still may be noise concerns outside of this zone, and it does not address airspace concerns. Refer to **Figure 3** for a graphical depiction of this option.

Option 2 – Part 77 Airspace Protection: Horizontal Surface

Jurisdictions Involved: Summit County, Stark County, City of Green, Jackson Township, Lake Township, Plain Township

The FAA, through Federal Aviation Regulation (FAR) Part 77, established a method of identifying surfaces that should be free from penetration by obstructions in order to maintain sufficient protection of the airspace around airports. FAR Part 77, in effect, identifies the maximum height at which a structure would be considered an obstacle at any given point around the Airport. The three-dimensional surfaces outlined in FAR Part 77 were evaluated at CAK for the potential inclusion of height restrictions in the provisions of the AOZ.

This option includes the maximum extent of the Part 77 surfaces (essentially 10,000 feet from each runway end). The primary benefit of this option is that it offers the most protection for the Airport. It would acknowledge the unique land use impacts of the Airport, regulate the siting of noise-sensitive uses, ensure that the heights of structures are compatible with airport operations, and comply with FAA regulations regarding noise and height. This proposed AOZ goes well beyond the extents of noise exposure contours. In addition, having to review development proposals within such an expansive area would not be efficient or practical.

This option is depicted in **Figure 4**.

Option 3 – Part 77 Airspace Protection: Transitional and Approach Surfaces

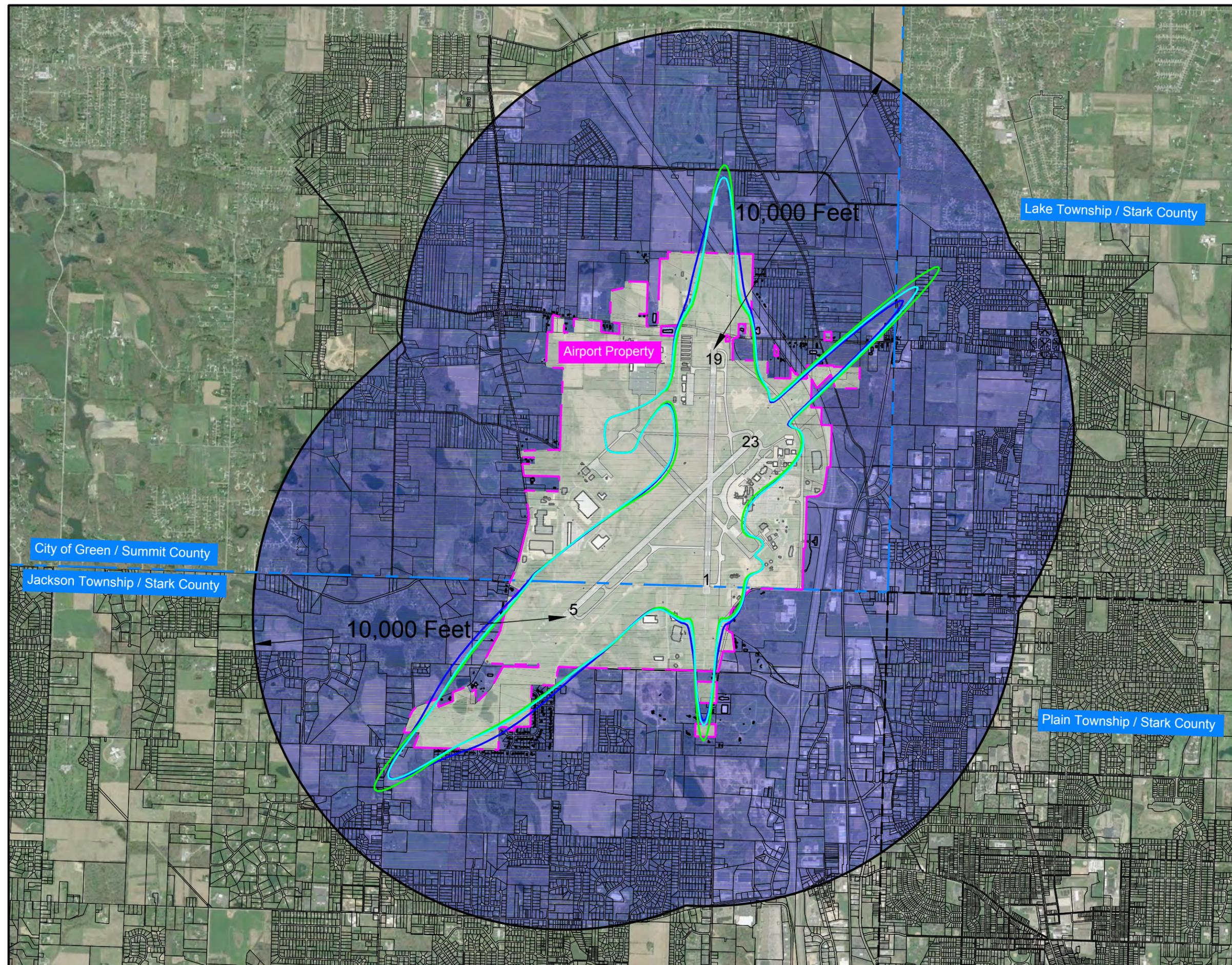
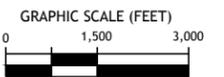
Jurisdictions Involved: Summit County, Stark County, City of Green, Jackson Township, Lake Township

This option uses the most critical elements of the Part 77 airspace surfaces to form the boundaries of the AOZ. This is the area that has the highest potential to affect airport operations and is defined by the transitional and approach surfaces intersections with the horizontal surface (up to 150 feet above the highest airport elevation). As shown in **Figure 5**, the AOZ in this option fully contains the 2014, 2019, and projected 2034 60 dB DNL contours.

Option 4 – Part 77 Airspace Protection: Transitional and Approach Surfaces with Block Rounding

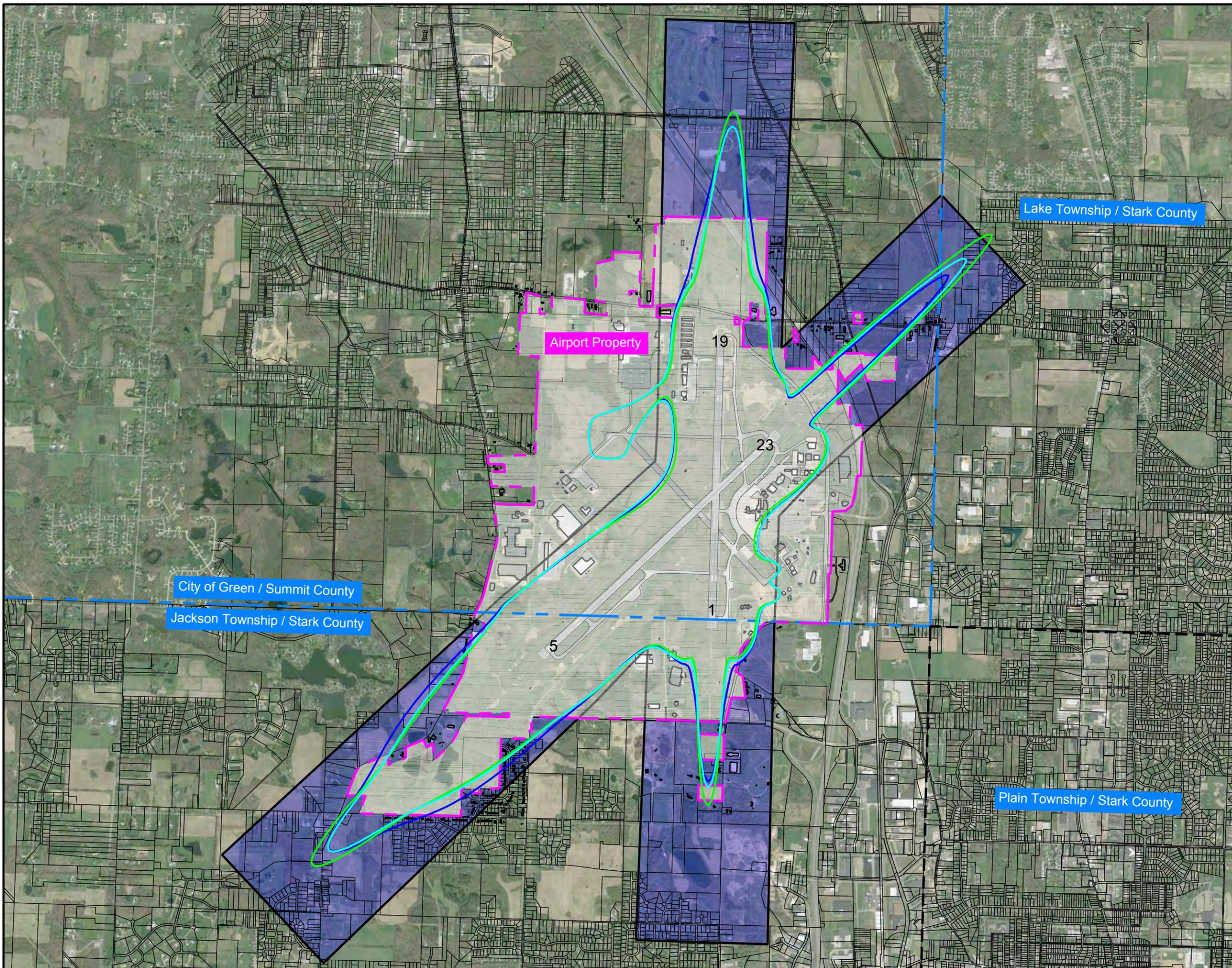
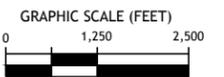
Jurisdictions Involved: Summit County, Stark County, City of Green, Jackson Township, Lake Township

This option is essentially the same as Option 3, but includes all contiguous residential neighborhoods (block rounding) and residentially-zoned areas. It recognizes natural community borders and reduces community disruption. This option is depicted in **Figure 6** and is the recommended option.



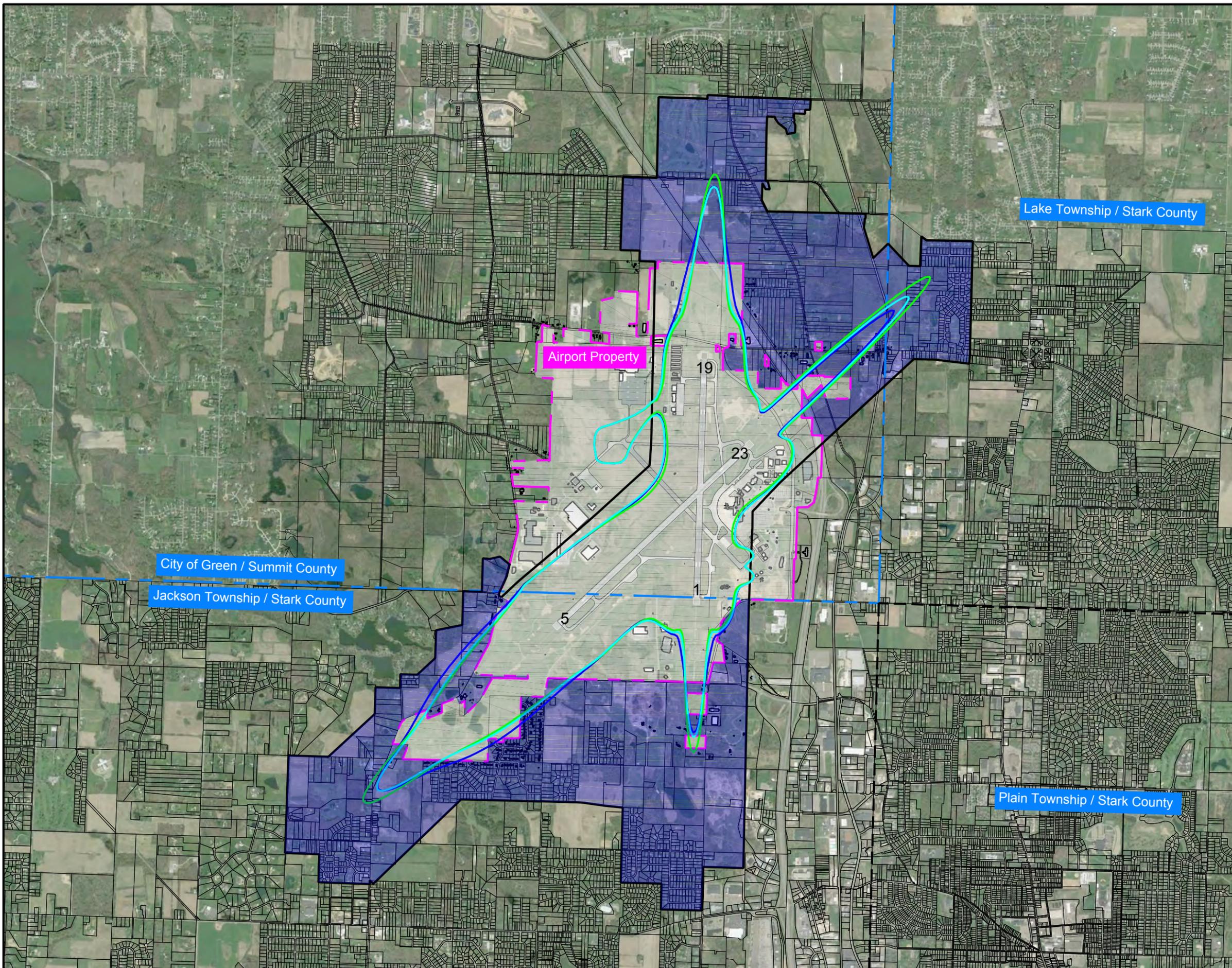
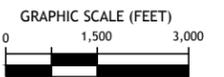
-  Airport Property Line
-  County Border
-  Township Border
-  60 dB DNL (2014)
-  60 dB DNL (2019)
-  60 dB DNL (2034)
-  Airport Overlay Zone - Option 2

Figure 4
Airport Overlay Zone
Option 2



-  Airport Property Line
-  County Border
-  Township Border
-  60 dB DNL (2014)
-  60 dB DNL (2019)
-  60 dB DNL (2034)
-  Airport Overlay Zone - Option 3

Figure 5
Airport Overlay Zone
Option 3



-  Airport Property Line
-  County Border
-  Township Border
-  60 dB DNL (2014)
-  60 dB DNL (2019)
-  60 dB DNL (2034)
-  Airport Overlay Zone - Option 4

Figure 6
Airport Overlay Zone
Option 4

4.3 Other Preventive Land Use Measures for Consideration

In addition to the AOZ and easements recommended in the previous sections, other preventive measures could be taken by the Airport and the local jurisdictions to complement the AOZ. Many of these measures were recommended as a result of the 1997 noise study.

Measure 1: Subdivision Regulations

This measure would involve a collaborative effort between CAK staff and City and County planning, building, zoning and legal staff to explore the feasibility of enacting site plan and building code regulations within the adopted AOZ that minimize the potential for noise impacts. If pursued, these regulations could be modified to include minimum sound insulation requirements for new residential developments within the AOZ.

Measure 2: Fair Disclosure Regulations

Dissemination and explanation of the Airport Master Plan and noise exposure maps (NEMs) to realtors and local government staff would ensure potential residents are aware of CAK, its operations, the potential noise levels within the adopted AOZ, and the efforts the Airport is undertaking to mitigate noise concerns. Subdivision regulations could also require informational notices upon the sale or transfer of existing property.

Measure 3: Comprehensive Planning Revisions

The five local jurisdictions – Summit County, Stark County, City of Green, Lake Township, and Jackson Township – may consider updating their comprehensive plans to reflect the findings of this Part 150 study. Should an AOZ be implemented, the updated comprehensive plans would discourage incompatible growth within the overlay zone.

Measure 4: Capital Improvement Planning

This measure would involve collaboration between CAK staff and City and County planning, building, zoning, and legal staff to explore the feasibility of planning for capital improvements that encourage industrial/commercial uses and discourage residential use within the AOZ. This would not affect existing development, but only vacant tracts of land with the potential for noise-sensitive development.

5. SUMMARY

The Airport is generally in compliance with the land use and compatibility standards outlined by the FAA. However, land use decisions that could conflict with aviation activity and airport facilities in the future result in undue constraints being placed on an airport. The land use recommendations summarized in this memo are generally preventive in nature, with the primary objective of ensuring that the Airport continues to be a good neighbor to the surrounding community, while protecting the Airport's ability to provide safe air navigation and preventing future incompatible land uses within the noise-sensitive areas around the Airport.

Many of the recommendations would involve cooperative efforts amongst the multiple jurisdictions – Summit County, Stark County, City of Green, Jackson Township, and Lake Township. With each jurisdiction having their own comprehensive planning processes, this can be a challenging task. In many cases, the ability to establish such land use planning coordination is hampered with the greater number of jurisdictions involved. However, the local jurisdictions surrounding CAK have been generally supportive of the Airport and have maintained cooperative relationships. These preventive measures give the Airport and the jurisdictions the flexibility to evaluate land use concerns and proposed development around the airport on a case-by-case basis. The recommendations of this memo are summarized in **Table 6**.

Table 6 – Summary of Recommended Compatible Land Use Measures

	Measure	Description
Corrective Measure	LU-1	Acquire Avigation Easement on 3066 Greensburg Road
Preventive Measures	LU-2	Implement Overlay Zone (Option 4)
	LU-3	Subdivision Regulations
	LU-4	Fair Disclosure Regulations
	LU-5	Comprehensive Planning
	LU-6	Capital Improvement Planning