# Airport Land Use Compatibility Plan Update

January 2017

Phoenix-Mesa Gateway Airport

RICONDO® & ASSOCIATES

IN ASSOCIATION WITH:

PSM²

Phoenix-Mesa Gateway Airport

# Airport Land Use Compatibility Plan Update

PREPARED FOR:

Phoenix-Mesa Gateway Airport Authority

PREPARED BY:

RICONDO & ASSOCIATES, INC.

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# 1. Executive Summary

This document is an update of the 1996 Airport Land Use Compatibility Plan (ALUCP) for Phoenix-Mesa Gateway Airport (PMGA or the Airport) and the land use compatibility element of the 1999-2000 Part 150 Study, which supplemented the 1996 ALUCP (together, referred to as the "2000 ALUCP"). This updated ALUCP represents the land use compatibility policy of the Phoenix-Mesa Gateway Airport Authority. Because the Airport Authority lacks land use regulatory power, it will be requesting that local governments that have land under their jurisdiction within the updated airport influence area to adopt the ALUCP and implement its recommendations through their zoning regulations. The Airport Authority has prepared the updated ALUCP in consultation with the local governments and is prepared to cooperate with them in the implementation and administration of the ALUCP.

The updated ALUCP includes revised boundaries for the three Airport Overflight Area (AOA) zones.

- AOA 1 – corresponding to the area exposed to long-term future noise of DNL 65 and higher.
- AOA 2 – corresponding to the area exposed to long-term future noise of DNL 60 to DNL 65.
- AOA 3 – generally corresponding to the area covered by dense, low-altitude flight tracks, the outer edges of the traffic pattern area, a majority of noise complaint locations, and the FAA-defined wildlife attractant separation area. (The boundaries are squared off to follow established geographic boundaries, such as road centerlines and section and quarter-section lines.)

The outer boundary of AOA 3 defines the updated Airport Planning Area. This area is considered the "airport influence area" for purposes of compliance with State law.[1]

The updated ALUCP includes recommended land use policies and standards relating to airport noise compatibility and safety, airspace protection, and flight safety. The updated noise and safety compatibility policies are similar to those in the 2000 ALUCP, although refinements have been made to reflect recent development trends and local government development objectives. Clarifications have been made in some policies and standards to facilitate effective administration. For example, the updated ALUCP includes a more complete list of potentially hazardous materials that should be avoided in AOA 1 and provides a clear definition of those uses. The updated ALUCP also explains the limited application of the policies and standards to existing development.

[1] Arizona Revised Statutes §28-8485, Airport influence area.

The airspace protection policies of the updated ALUCP are intended to ensure compliance with federal law, as described in Title 14, Code of Federal Regulations (14 CFR) Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*. In addition, maximum height limits are established to ensure long-term protection of Airport-vicinity airspace.

The flight safety policies define potential hazards to flight and provide guidance to aid local planners and developers in understanding when certain types of land development may pose hazards to aircraft in flight. These potential hazards include:

- Glint and glare causing flash blindness or persistent after-image
- Lights interfering with pilot vision or mimicking airport identification and navigational lighting
- Dust, smoke, and water vapor obstructing pilot vision
- Thermal plumes interfering with aircraft control
- Electromagnetic interference with communications and navigational signals
- Bird attractants

Where these features are determined to be potentially hazardous, adherence to the ALUCP guidance would ensure that they are not constructed or that they are modified to eliminate the hazard.

The updated ALUCP has been designed to strike a balance among the interests of property owners, local governments, and the Airport Authority. Long-term protection of the Airport from encroachment by incompatible land uses is necessary for the Airport Authority to maintain compliance with FAA grant assurances and is essential to ensure that the Airport can be developed to fulfill its role as a key economic asset to the region. At the same time, clear guidance is needed for property owners and local governments to enable them to develop property in a manner that capitalizes on the economic advantages provided by the Airport.

# 2. Airport Land Use Compatibility Plan

## 2.1 Introduction

This document is the updated Airport Land Use Compatibility Plan (ALUCP) for Phoenix-Mesa Gateway Airport (PMGA or the Airport). The updated airport land use compatibility boundaries and policies are based on information presented in Briefing Papers 1 through 4, discussions at four Planning Advisory Committee meetings, and feedback from five scheduled public information meetings.

## 2.2 Updated Airport Overflight Area Overlay Zones

**Exhibit 1** depicts the updated Airport Overflight Area (AOA) zones.

- AOA 1 – corresponding to the area exposed to noise of DNL 65 and higher.
- AOA 2 – corresponding to the area exposed to noise of DNL 60 to DNL 65.
- AOA 3 – generally corresponding to the area covered by dense low-altitude flight tracks, the outer edges of the traffic pattern area, a majority of noise complaint locations, and the FAA-defined wildlife attractant separation area. (The boundaries are squared off to follow established geographic boundaries, such as road centerlines and section and quarter-section lines.)

The noise exposure analysis was updated after release of the Draft ALUCP document in July 2016 using the latest FAA-approved noise model – the Aviation Environmental Design Tool (AEDT), Version 2c. The noise exposure contours resulting from that analysis are presented in Exhibit 1. The updated AEDT analysis relied on the same input data and modeling assumptions as the original analysis using the Integrated Noise Model (INM), documented in Appendix C, Briefing Paper 2. A comparison of Exhibit 1 with Exhibit 2-6 in Briefing Paper 2 reveals that the updated noise contours are slightly smaller along the extended runway centerlines south of the Airport due to the algorithms of the updated noise model.

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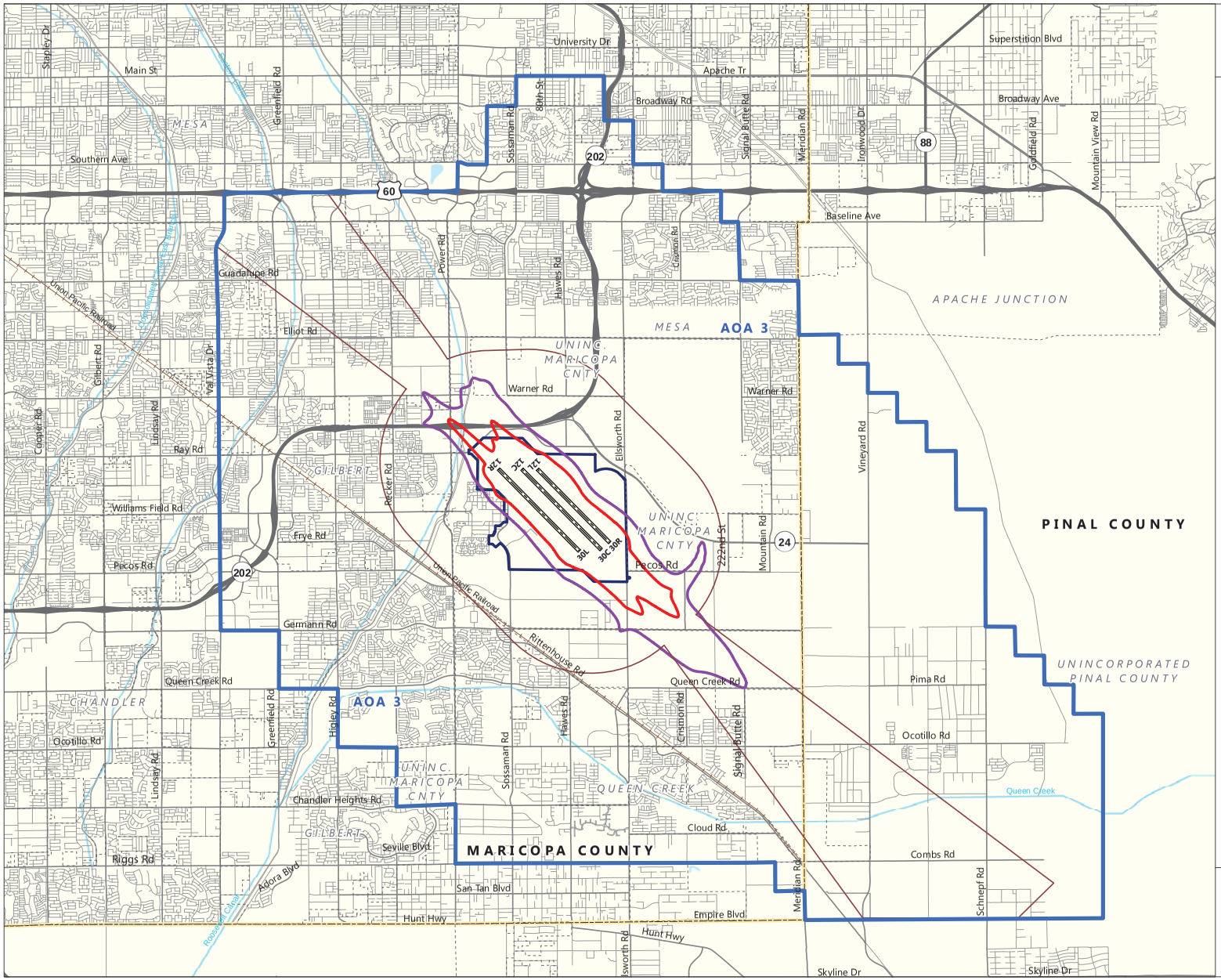


**LEGEND**

- Existing Airport Boundary
- Municipal Boundary
- County Boundary
- Updated AOA 1
- Updated AOA 2
- Updated AOA 3
- 14 CFR Part 77 Horizontal and Outer Approach Surfaces
- Highway
- Arterial Street
- Local Street
- Railroad
- Waterways

NORTH 0 8,800 ft.

SOURCES: Phoenix-Mesa Gateway Airport Layout Plan, April 8, 2015 (airport property boundary); Airport Airspace Drawing, April 2015 (14 Part 77); Maricopa County Department of Transportation, 2012 (streets and highways); U.S. Census Bureau, 2014 (municipal boundaries, railroad); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, August 2014 (Study Area); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, October 2016 (Potential New AOA)

PREPARED BY: Ricondo & Associates, Inc., January 20167

**Exhibit 1**

## Updated Airport Planning Area and Overlay Zones



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The AOA 3 boundary defines the updated Airport Planning Area, which is considered the "airport influence area" for purposes of compliance with State law.[1] After approval of the updated ALUCP by the Airport Authority Board, Airport management would file a record of the updated airport influence area with the Maricopa County and Pinal County recorders offices.

**Exhibit 2** depicts the updated AOA boundaries on an aerial image. **Exhibit 3** depicts the updated AOA boundaries with the land use designations of the local general plans at the time of this update.

## 2.3 Noise Compatibility and Public Safety Policies

**Table 1** describes the updated noise compatibility policies. The policies also address a set of land uses in AOA 1 that could result in dangers to public safety in case of accidents. Land uses are classified into four categories:

- Compatible – use can be allowed.
- Conditionally compatible – use should be allowed subject to stated conditions.
- Marginally compatible – use should be allowed subject to the stated outdoor-to-indoor noise level reduction and other conditions.
- Incompatible – use should be avoided.

Uses classified as incompatible include:

- In the AOA 1 Zone – Residential; theaters, playhouses, concert halls, performing arts centers; outdoor sport events, entertainment and public assembly, amphitheaters; hospitals and other health care services; elementary and secondary schools and children's day care centers; religious facilities, libraries, museums, galleries, clubs, and lodges; and manufacturing/processing and warehousing/storage of hazardous materials.[2]
- In the AOA 2 Zone -- Residential; hospitals and other health care services; and elementary and secondary schools and children's day care centers.

Uses classified as marginally compatible, which should provide a noise level reduction of 25 decibels, the recording of fair disclosure agreements and covenants, and the dedication of avigation easements, include:

- In the AOA 1 Zone – Hotels and motels; colleges, universities, and trade schools.
- In the AOA 2 Zone – Hotels and motels; theaters, playhouses, concert halls, performing arts centers; colleges, universities, and trade schools; and religious facilities, libraries, museums, galleries, clubs, and lodges.

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1 Arizona Revised Statutes §28-8485, Airport influence area.

2 The manufacturing, processing, warehousing, and storage of hazardous materials are not noise-sensitive activities, but they are recommended for prohibition in AOA 1 because of the potential dangers they could pose to the population in case of aircraft accidents. For purposes of this ALUCP, the term, "hazardous materials," is defined in Section 2.3.1.

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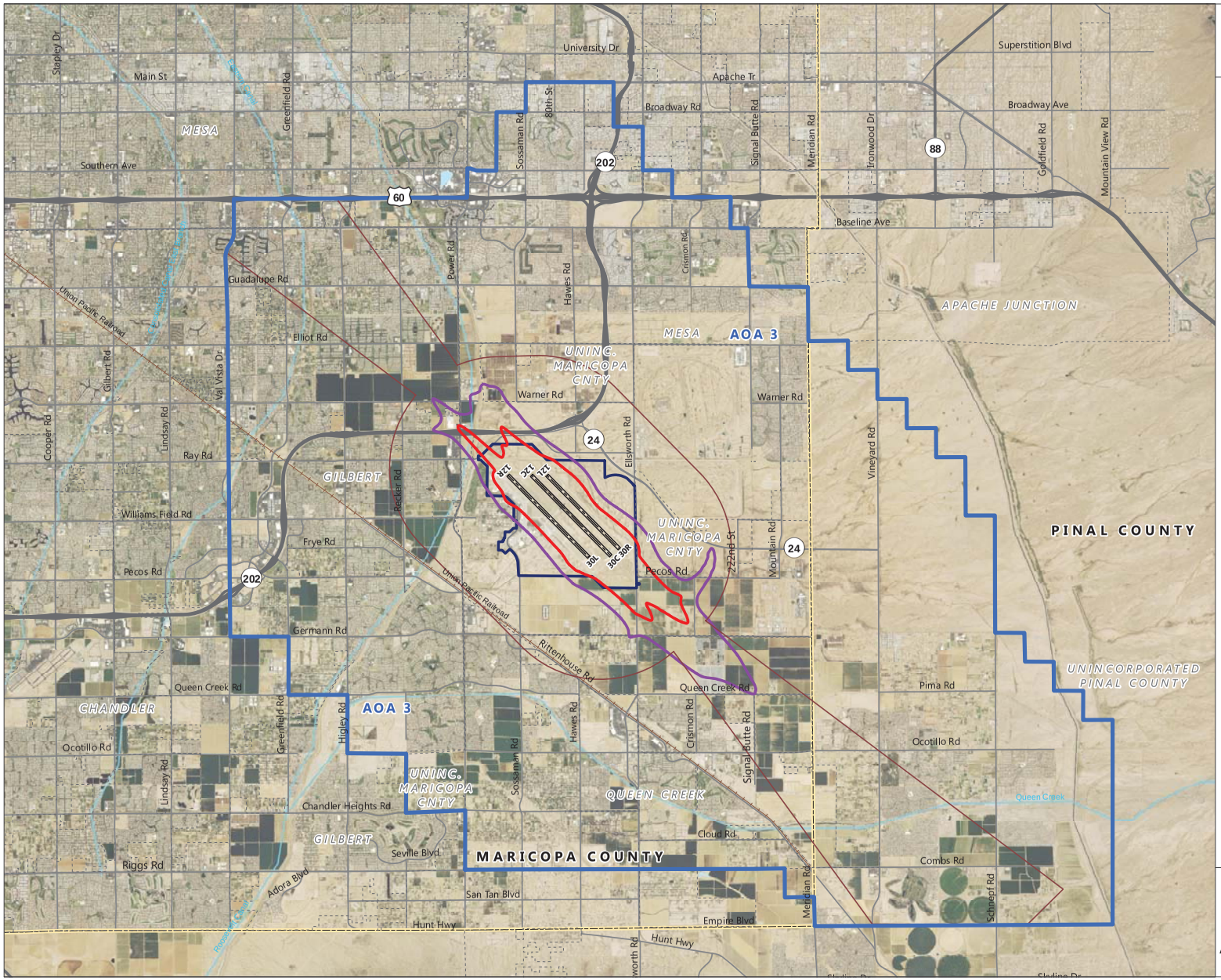


LEGEND

- Existing Airport Boundary
- Municipal Boundary
- County Boundary
- Updated AOA 1
- Updated AOA 2
- Updated AOA 3
- 14 CFR Part 77 Horizontal and Outer Approach Surfaces
- Highway
- Arterial Street
- Railroad
- Waterways

NORTH 0 8,800 ft.

SOURCES: Phoenix-Mesa Gateway Airport Layout Plan, April 8, 2015 (airport property boundary); Airport Airspace Drawing, April 2015 (14 Part 77); Maricopa County Department of Transportation, 2012 (streets and highways); U.S. Census Bureau, 2014 (municipal boundaries, railroad); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, August 2014 (Study Area); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, October 2016 (Potential New AOA); MapMart Inc., National Agriculture Imagery Program (NAIP), 2013 (aerial image).

PREPARED BY: Ricondo & Associates, Inc., January 2017.

**Exhibit 2**

## Updated Airport Planning Area and Overlay Zones on Aerial Image



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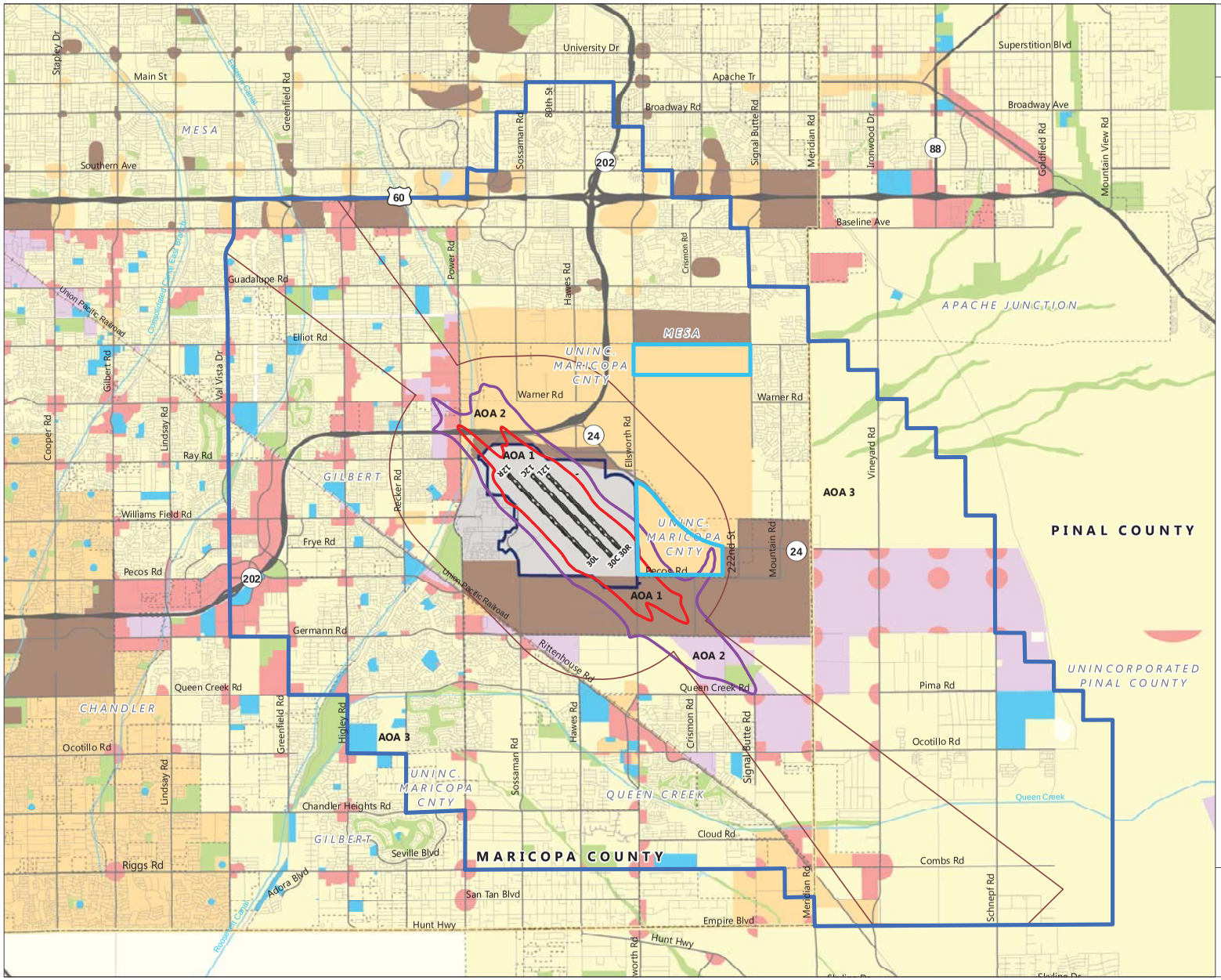


**LEGEND**

- Existing Airport Boundary
- Municipal Boundary
- County Boundary
- Updated AOA 1
- Updated AOA 2
- Updated AOA 3
- 14 CFR Part 77 Horizontal and Outer Approach Surfaces
- Highway
- Arterial Street
- Local Street
- Railroad
- Waterways

**Generalized Future Land Use**

- Residential
- Commercial Focus - Business Park/Office/Tourism
- Industrial Focus
- Public Facility/Civic/Institutional
- Parks and Open Space
- Mixed Use - Non-Residential (Maricopa)
- Mixed Use - Residential Allowed*
- Airport Specialty District
- Generalized Flight Corridor Agreements for Land Use Compatibility

Note:
*The City of Mesa prohibits single-family housing in the AOA 1 and AOA 2 overlay zones. Multi-family housing is allowed subject to the issuance of a Council Use Permit.

NORTH 0 8,800 ft.

SOURCES: Phoenix-Mesa Gateway Airport Layout Plan, April 8, 2015 (airport property boundary); Airport Airspace Drawing, April 2015 (14 Part 77); Maricopa County Department of Transportation, 2012 (streets and highways); U.S. Census Bureau, 2014 (municipal boundaries, railroad); Future land use data generalized by Ricondo & Associates, Inc. based on general plan land use elements compiled by the Maricopa Association of Governments and County of Pinal, 2015; Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, August 2014 (Study Area); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, October 2016 (Potential New AOA)

PREPARED BY: Ricondo & Associates, Inc., January 2017.

**Exhibit 3**

## Updated Airport Planning Area and Overlay Zones with Generalized Future Land Use



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## Table 1 (1 of 2): Noise Compatibility and Public Safety Standards

| LAND USE CATEGORY | AOA OVERLAY ZONE/NOISE EXPOSURE RANGE (DNL) | | |
|---|---|---|---|
| | AOA-1 | AOA-2 | AOA-3 |
| | 65+ | 60-65 | |
| **Residential** | | | |
| Single-family, multi-family | | | 1/,2/,3/ |
| Mobile home parks, recreational vehicle parks | | | 1/,2/,3/ |
| Other residential | | | 1/,2/,3/ |
| **Commercial, Office, Service, Transient Lodging** | | | |
| Hotel, motel | 25 1/,4/ | 25 1/,4/ | 1/ |
| Services: finance, real estate, insurance, professional and government offices | 5/ | | |
| Retail sales: building materials, farm equipment, automotive, marine, mobile homes, recreational vehicles and accessories | 5/ | | |
| Restaurants, eating and drinking establishments | 5/ | | |
| Retail sales: general merchandise, food, drugs, apparel, etc. | 5/ | | |
| Personal Services: barber and beauty shops, laundry and dry cleaning, etc. | 5/ | | |
| Automobile service station; repair services | 5/ | | |
| Indoor recreation, amusements, athletic clubs, gyms, and spectator events | 5/ | | |
| Theaters, playhouses, concert halls, performing arts centers | | 25 1/,4/ | 1/ |
| Outdoor sport events, entertainment and public assembly, amphitheaters | | 1/,4/ | 1/ |
| **Educational, Institutional, Public Services** | | | |
| Hospitals, nursing and convalescent homes, outpatient surgery centers | | | 1/ |
| Elementary and secondary schools, preschools, children's day care centers | | | 1/ |
| Colleges, universities, and trade schools | 25 1/,4/ | 25 1/,4/ | 1/ |
| Religious facilities, libraries, museums, galleries, clubs, and lodges | | 25 1/,4/ | 1/ |
| Cemeteries | 5/ | | |
| **Industrial** | | | |
| Processing of food, wood, and paper products; printing and publishing, warehouses, wholesale and storage activities | 5/ | | |
| Manufacturing/processing and warehousing/storage of hazardous materials 6/ | | | |
| Manufacturing and assembly of electronic components, etc. | 5/ | | |
| Manufacturing of stone, clay, glass, leather, gravel, and metal products; construction and salvage yards; natural resource extraction and processing, agricultural, mills and gins | 5/ | | |
| **Agricultural** | | | |
| Animal husbandry; livestock farming, breeding and feeding; plant nurseries (excluding retail sales) | | | |
| Farming (except livestock) | | | |

**Table 1 (2 of 2): Noise Compatibility and Public Safety Standards**

| LAND USE CATEGORY | AOA OVERLAY ZONE/NOISE EXPOSURE RANGE (DNL) AOA-1 65+ | AOA-2 60-65 | AOA-3 |
|---|---|---|---|
| **Transportation, Communication, Utilities** | | | |
| Transportation terminals, utility and communication facilities | 5/ | | |
| Vehicle Parking | | | |
| **Recreation, Park, Open Space** | | | |
| Neighborhood Parks | 5/ | | |
| Community and Regional Parks | 5/ | | |
| Outdoor recreation: tennis, golf courses, riding trails, etc. | 5/ | | |

LEGEND:

| | |
|---|---|
| | Compatible: Use can be allowed. |
| 1, 2, 3, 4, 5 | Conditionally Compatible: Use should be allowed subject to stated conditions. |
| 25 | Marginally Compatible: Use should be allowed subject to an outdoor-to-indoor noise level reduction of 25 decibels in buildings where people reside, sleep, or gather. |
| | Incompatible: Use should be avoided. |

NOTES:

1/ A fair disclosure agreement and covenant, which would include the following disclosure, should be recorded as a condition of development approval: "This property, due to its proximity to Phoenix-Mesa Gateway Airport, will experience aircraft overflights, which are expected to generate noise levels that may be of concern to some individuals. The mix of aviation activities and types of aircraft expected to be located and operate at the Airport now and in the future include: scheduled and unscheduled commercial charters, commercial air carriers and commercial air cargo operations, all of which are expected to use large commercial aircraft; general aviation activity using corporate and executive jets, helicopters, and propeller aircraft; aviation flight training schools using training aircraft; and military activity using high performance military jets. The size of aircraft and frequency of use of such aircraft may change over time depending on market and technology changes."

2/ All final subdivision plats and public reports filed with the Arizona Department of Real Estate should include the notice described in footnote 1.

3/ Sales and leasing offices established for new subdivisions and residential development projects should provide notice to all prospective buyers and lessees stating that the project is located within an Aircraft Overflight Area. Such notice should consist of a sign at least 4-foot by 4-foot installed at the entrance to the sales office or leasing office at each project. The sign should be installed prior to commencement of sales or leases and should not be removed until the sales office is permanently closed or leasing office no longer leases units in the project. The sign should state the disclosure in footnote 1 with letters of at least one (1) inch in height.

4/ An avigation easement should be recorded concurrently with or prior to the recordation of a subdivision plat or issuance of a building permit holding the Town, City or County, the public and the Phoenix-Mesa Gateway Airport Authority harmless from any damages caused by noise, vibration, fumes, dust, fuel, fuel particles, or any other effects that may be caused by aircraft landing, departing or operating at or near a designated Airport, not including the physical impact of aircraft or parts thereof.

5/ The developer should be encouraged to incorporate features into the design and construction of buildings where people live, work, or are otherwise received to achieve an outdoor-to indoor noise level reduction of 25 decibels.

6/ For purposes of this ALUCP, hazardous materials are defined in Section 2.3.1.

SOURCE: Ricondo & Associates, Inc., December 2016.

PREPARED BY: Ricondo & Associates, Inc., December 2016.

Uses classified as conditionally compatible include:

- In the AOA 1 Zone – Commercial, institutional and industrial uses involving buildings where people work, are received, or sleep (such as night watchman quarters). Developers should be encouraged to consider applying noise level reduction measures as indicated in Table 1. Work areas with typically high ambient

sound levels, such as auto maintenance shops or industrial plant assembly floors, do not require noise level reduction measures.

- In the AOA 2 Zone – Outdoor sporting event venues, entertainment and public assembly facilities and amphitheaters. Developers should record fair disclosure agreements and covenants and dedicate avigation easements.
- In the AOA 3 Zone – All uses considered incompatible or marginally compatible in AOA 1 and AOA 2. Developers should record fair disclosure agreements and covenants. In addition, developers of residential uses should be required to implement disclosure measures in sales and leasing offices.

**Exhibit 4** presents an enlarged view of the AOA 1 and AOA 2 zones in the immediate Airport vicinity with respect to generalized future land use, as proposed in the general plans of local governments at the time of this update. Additional policies clarifying the application of the Noise Compatibility and Public Safety Standards in Table 1 are described in the following sections.

### 2.3.1 DEFINITION – HAZARDOUS MATERIALS

Hazardous materials are defined by the U.S. Environmental Protection Agency (EPA) as "substances that are considered severely harmful to human health and the environment."[1] In this ALUCP, facilities involving hazardous materials include:

1. Facilities with aboveground storage tanks containing any of the following materials:
    a. Flammable or combustible liquids, including fuels or other substances containing at least 5 percent petroleum, with individual tanks having a capacity greater than 6,000 gallons or total tank capacities greater than 12,000 gallons.[2]
    b. Liquefied petroleum, hydrogen and natural gases and cryogenic liquids with an individual tank capacity equivalent to 2,000 gallons of water or total tank capacities greater than the equivalent of 30,000 gallons of water.[3]
    c. Compressed gases in excess of 50,000 cubic feet on the premises.[4]
2. Facilities involving the manufacturing, processing, warehousing, or storage of toxic substances exceeding the threshold planning quantities for hazardous and extremely hazardous substances specified by the EPA.[5]

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1 U.S. Environmental Protection Agency, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) http://www.epa.gov/osweroe1/content/hazsubs/cercsubs.htm (accessed January 12, 2012).

2 Based on building separation criteria from the National Fire Protection Association, NFPA 1, *Fire Code*, 2012 Edition, Chapter 42, Table 42.3.3.2.4.

3 Based on building separation criteria from the National Fire Protection Association, NFPA 1, *Fire Code*, 2012 Edition, Chapter 69, Table 69.3.3.1.

4 Based on building separation criteria from the National Fire Protection Association, NFPA 1, *Fire Code*, 2012 Edition, Chapter 63, Tables 63.3.6.2, 63.3.7.2.

5 Title 40, Code of Federal Regulations, Part 355, *Emergency Planning and Preparation*, Appendices A and B.

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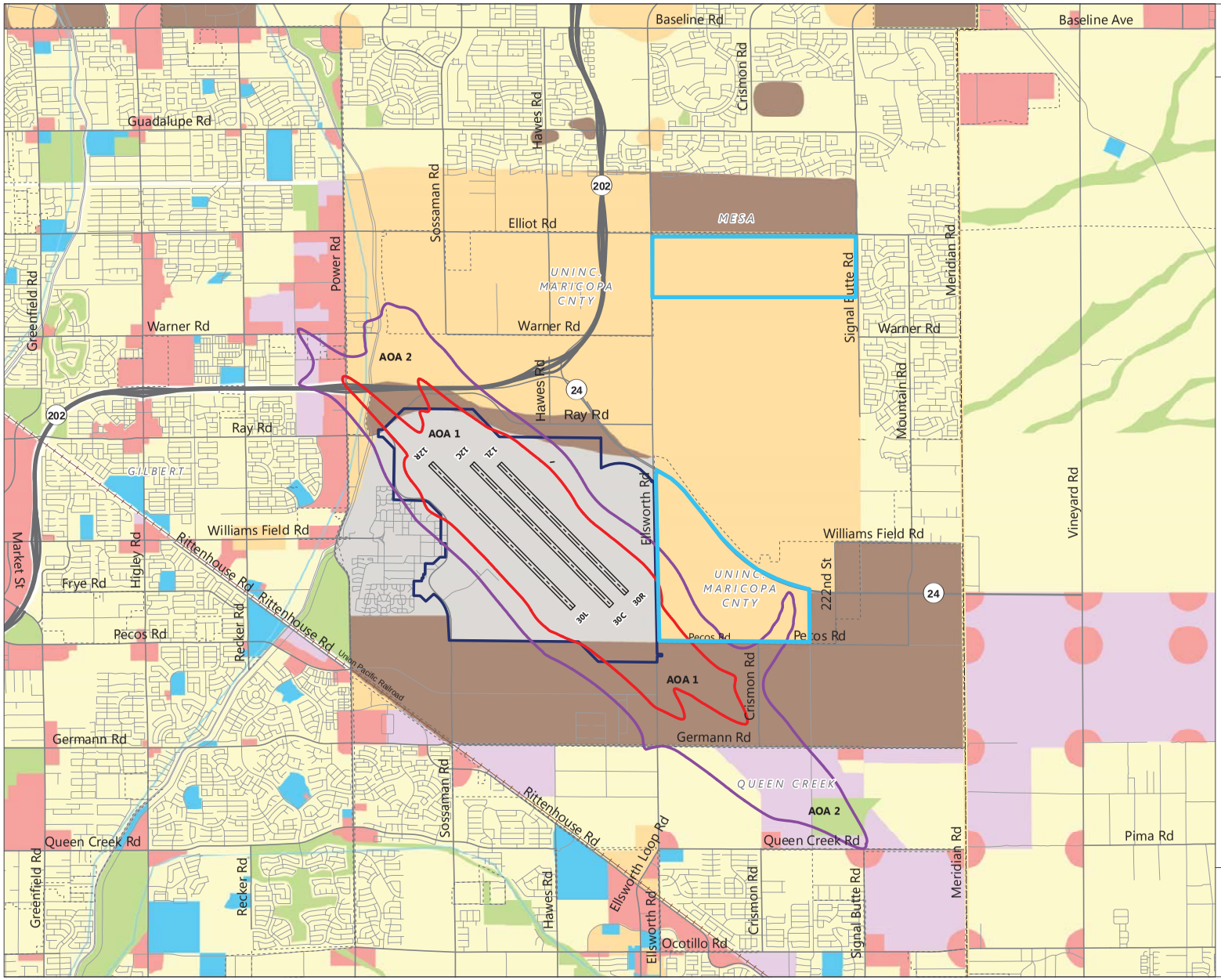


**LEGEND**

- Existing Airport Boundary
- Municipal Boundary
- County Boundary
- Projected Noise Exposure at DNL 65
- Projected Noise Exposure at DNL 60
- Highway
- Arterial Street
- Local Street
- Railroad
- Waterways

**Generalized Future Land Use**

- Residential
- Commercial Focus - Business Park/Office/Tourism
- Industrial Focus
- Public Facility/Civic/Institutional
- Parks and Open Space
- Mixed Use - Non-Residential (Maricopa)
- Mixed Use - Residential Allowed*
- Airport Specialty District
- Generalized Flight Corridor Agreements for Land Use Compatibility

Note:
*The City of Mesa prohibits single-family housing in the AOA 1 and AOA 2 overlay zones. Multi-family housing is allowed subject to the issuance of a Council Use Permit.

NORTH 0 5,000 ft.

SOURCES: Phoenix-Mesa Gateway Airport Layout Plan, April 8, 2015 (airport property boundary); Maricopa County Department of Transportation, 2012 (streets and highways); U.S. Census Bureau, 2014 (municipal boundaries, railroad); Future land use data generalized by Ricondo & Associates, Inc. based on general plan land use elements compiled by the Maricopa Association of Governments and County of Pinal, 2015; Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, October 2016 (Potential New AOA).

PREPARED BY: Ricondo & Associates, Inc., January 2017.

**Exhibit 4**

## Updated AOA 1 and AOA 2 Overlay Zones and Generalized Future Land Use



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3. Facilities involving the manufacturing, processing, warehousing, or storage of explosive materials, including fireworks, in quantities exceeding 50 pounds of net explosive weight[1]
4. Medical and biological research facilities manufacturing, processing, warehousing, or storing toxic or infectious agents that are classified as Biosafety Level 2, 3, and 4 facilities[2]

### 2.3.2 NOISE COMPATIBILITY POLICIES APPLY TO NEW DEVELOPMENT

The noise compatibility policies should apply only to new development.

Existing uses that would be classified as incompatible, marginally compatible, or conditionally compatible under the noise compatibility policies should be subject to the policies only as described below:

#### 2.3.2.1 Repair, Maintenance, Remodeling, and Enlargement

The repair, maintenance, remodeling or enlargement of existing uses classified as incompatible, marginally compatible, or conditionally compatible should not be subject to the Noise Compatibility and Public Safety Standards in Table 1.

Where remodeling or enlargement of an existing building is undertaken to support the establishment of a new use classified as marginally compatible or conditionally compatible, the new use should be subject to the Noise Compatibility and Public Safety Standards in Table 1. New uses classified as incompatible should not be allowed in existing buildings.

#### 2.3.2.2 Reconstruction

Existing uses that are classified as marginally compatible or conditionally compatible and that are proposed for complete reconstruction should be subject to the Noise Compatibility and Public Safety Standards in Table 1 in the same way as a new use.

Existing uses that are classified as incompatible and that are proposed for complete reconstruction should be reconstructed subject to the following conditions:

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1 Based on maximum recommended quantities stored in magazines where the minimum recommended separation from operating buildings cannot be achieved. See National Fire Protection Association, NFPA 495, *Explosive Materials Code*, 2013 Edition, paragraphs 5.3.4.1, 5.4.3.2, and 5.3.4.4, page 495-15. Net explosive weight is defined as "the aggregate amount of explosive materials, expressed in pounds, contained in a manufactured article or within buildings, magazines, structures, or portions thereof." (NFPA 495, paragraph 3.3.33, page 495-9.)

2 Biosafety Level 2 facilities handle agents that pose moderate hazards to personnel and the environment. Biosafety Level 3 facilities handle agents that cause serious or potentially lethal disease through inhalation. Biosafety Level 4 facilities handle agents that cause life-threatening disease and for which there are no vaccines or treatments. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, and National institutes of Health, *Biosafety in Microbiological and Biomedical Laboratories*, December 2009. (Biosafety Level 1 does not involve hazardous materials.)

*Noise Level Reduction*

The developer should be required to incorporate features into the design and construction of buildings where people live, work, or are otherwise received to achieve an outdoor-to indoor noise level reduction of 25 decibels.

*Avigation Easement*

An avigation easement should be recorded concurrently with or prior to issuance of a building permit holding the Town, City or County, the public and the Phoenix-Mesa Gateway Airport Authority harmless from any damages caused by noise, vibration, fumes, dust, fuel, fuel particles, or any other effects that may be caused by aircraft landing, departing or operating at or near a designated Airport, not including the physical impact of aircraft or parts thereof.

*Real Estate Disclosure*

A fair disclosure agreement and covenant should be recorded as a condition of development approval which should include the following disclosure:

> *This property, due to its proximity to Phoenix-Mesa Gateway Airport, will experience aircraft overflights that are expected to generate noise levels that may be of concern to some individuals. The mix of aviation activities and types of aircraft expected to be located and to operate at the Airport now and in the future include: scheduled and unscheduled commercial charters, commercial air carriers and commercial air cargo operations, all of which are expected to use large commercial aircraft, general aviation activity using corporate and executive jets, helicopters, and propeller aircraft, aviation flight training schools using training aircraft and high performance military jets. The size of aircraft and frequency of use of such aircraft may change over time depending on market and technology changes.*

#### 2.3.2.3 Discontinuance

Existing uses that are classified as incompatible, marginally compatible, or conditionally compatible and that are discontinued for a continuous period of 12 months or more should be reused only in compliance with the Noise Compatibility and Public Safety Standards in Table 1.[3]

### 2.3.3 PROTECTION OF BOEING HELICOPTER CORRIDORS

DMB and Harvard Investments, developers of the former GM Proving Grounds immediately east of the Airport in the City of Mesa, entered into an agreement with the Boeing Company to promote the development of compatible uses in two areas subject to overflights by Boeing helicopters, depicted on Exhibits 3 and 4.[4] One area extends from Elliot Road south one-half mile from Ellsworth Road east to Signal Butte Road. The other area generally extends from Williams Field Road south to Pecos Road from Ellsworth Road east towards Signal

[3] The 12-month period of discontinuous use is consistent with the nonconforming use policies of local zoning ordinances.

[4] The Boeing Company has a helicopter manufacturing plant at Falcon Field in Mesa. The company routinely makes practice flights at Phoenix Mesa Gateway Airport with the CH-47 Chinook and the AH-64 Apache with the expectation of V-22 Osprey tiltrotor aircraft in the future.

Butte Road. Although this development agreement is not part of this updated ALUCP, the compatible development proposed in the agreement is consistent with the policies and guidance of this ALUCP.

## 2.4 Airspace Protection Policies

Protection of the navigable airspace in the Airport vicinity is crucial to protect the public investment in the Airport. An absence of obstacles near the Airport and off the extended runway centerlines ensures that instrument flight procedures can remain in use throughout the future.

### 2.4.1 OBJECTS NOT TO PENETRATE CRITICAL AIRSPACE SURFACES

The Phoenix-Mesa Gateway Airport Authority (Airport Authority) is preparing a map combining the lowest 14 CFR Part 77, TERPS[5], and one-engine inoperative (OEI) surfaces to identify the Airport's critical airspace surfaces. Protection of the airspace defined by those surfaces would preserve the full utility of the Airport through the long-term future. It is recommended that local governments coordinate with Airport staff when they receive applications for development that may penetrate the critical airspace surfaces. The Airport Authority has the capability to review development proposals for their relationship to the critical airspace. Thus, the Airport and local government staffs can provide guidance on airspace compliance to developers early in the project review process. This preliminary review, however, does not take the place of the FAA obstruction evaluation/airport airspace analysis (OE/AAA) process, discussed in Section 2.4.2.

Until the Airport Authority completes the critical airspace surfaces map and reviews it with the affected local governments, it is recommended that the 14 CFR Part 77 surfaces define the maximum allowable height of objects in the Airport Planning Area. **Exhibit 5** depicts the 14 CFR Part 77 airspace surfaces for the Airport, indicating the height of the surfaces above the elevation of the Airport. No structures, including appurtenances on top of roofs, towers, and antennas, should be allowed to penetrate those airspace surfaces.

### 2.4.2 COMPLIANCE WITH 14 CFR PART 77

Federal law requires project developers to notify the FAA of any proposal to build or alter a structure or object that is:

- Taller than 200 feet above ground level (AGL)
    - Taller than the height of an imaginary surface extending outward and upward from the runway at a slope of 100 to 1 within 20,000 feet of any runway at an airport with at least one runway longer than 3,200 feet (such as the runways at the Airport)[6]

[5] U.S. Department of Transportation, Federal Aviation Administration, Order 8260.3C, *United States Standard for Terminal Instrument Procedures (TERPS)*, March 14, 2016. The FAA defines TERPS surfaces to ensure safe clearance of obstacles for aircraft observing instrument flight procedures.

[6] 14 CFR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace,* §77.9.

Project developers may also be required to notify the FAA for other reasons, such as the potential for interference of the proposed structure with electronic systems or radar.[7] These requirements apply to all proposed objects, including structures, antennas, trees, and mobile and temporary objects, such as construction cranes. While developers are required to comply with this regulation under federal law, adherence to this law can be enhanced by acknowledging the requirement in the updated ALUCP. Compliance could also be enhanced if the requirement was reflected in local zoning ordinances.

#### 2.4.2.1 Compliance with FAA Notification Requirements

For proposed projects within the Airport Planning Area (AOA-1, AOA-2, and AOA-3), project developers should be required to comply with FAA notice requirements for proposed construction or alteration of objects by filing Form 7460-1, "Notice of Proposed Construction or Alteration," with the FAA, when the need for filing is indicated by the FAA's on-line notice criteria tool.[8] Project developers should be required to include a copy of the FAA notice of determination letter with their development permit application or provide evidence that filing of Form 7460-1 with the FAA is not required.[9]

#### 2.4.2.2 Compliance with FAA Determinations and Findings

Developers of proposed structures or objects should be required to comply with the findings and determinations of FAA aeronautical studies undertaken through the OE/AAA process. These findings, which would be included in an official Notice of Presumed Hazard (NPH) or a Determination of No Hazard (DNH), may involve any of the following: reduction of the height of the structure, installation of obstruction lighting, or painting and marking of structures.

#### 2.4.2.3 Objects Determined to be a Hazard Should Not be Permitted

The erection of objects determined by the FAA to be a hazard to air navigation, that is, proposed construction or alteration for which the FAA has issued a Determination of Hazard (DOH), should not be permitted, regardless of whether they penetrate a critical airspace surface depicted on Exhibit 5. The erection of such an object would necessitate modifications in airspace design or flight procedures by increasing visibility minimums or otherwise compromising the use of the Airport and the surrounding airspace.

**Table 2** summarizes the applicability of the airspace protection policies in AOA 1, AOA 2, and AOA 3.

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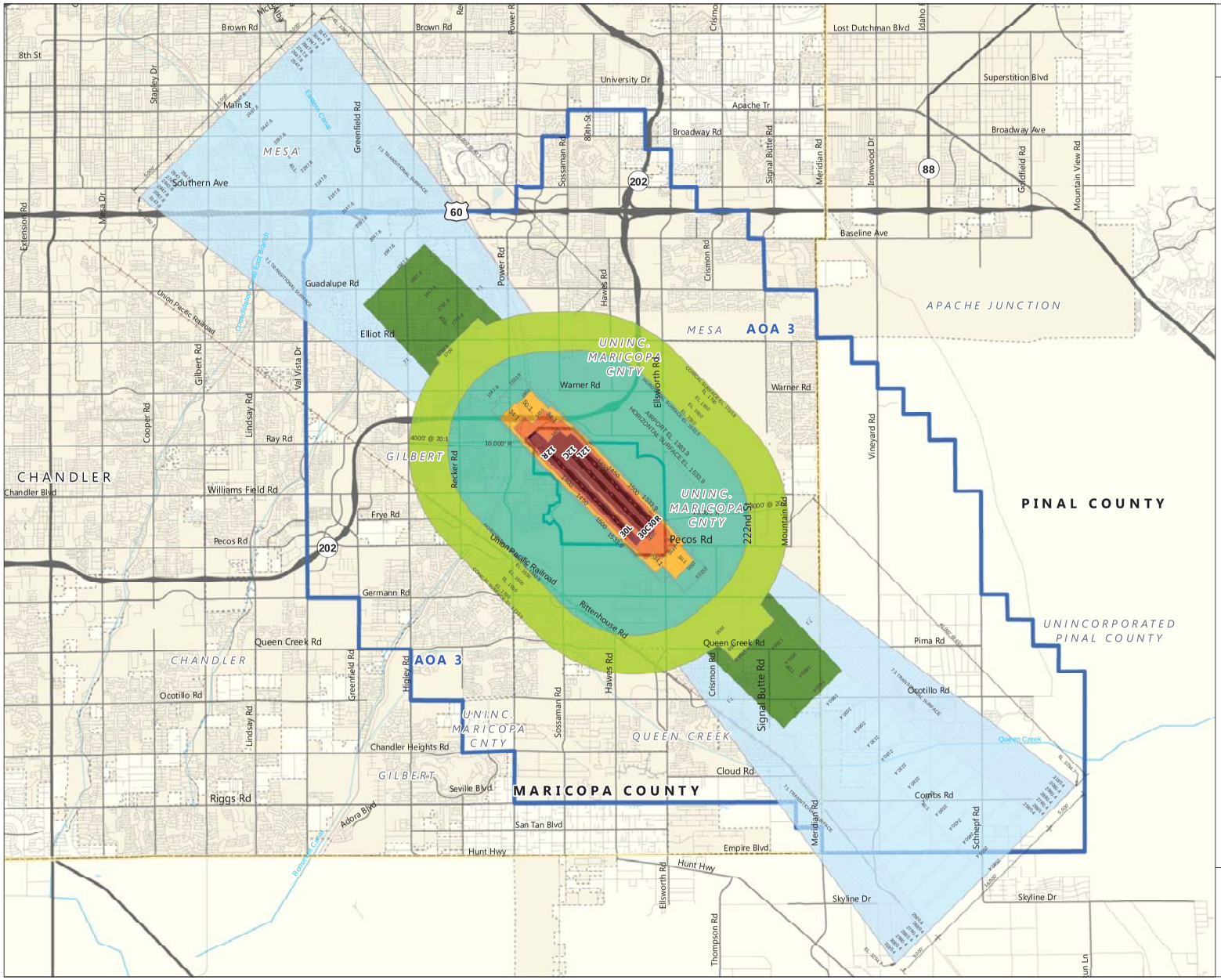
7 14 CFR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace,* §§77.9, 77.11.

8 Federal Aviation Administration, Department of Obstruction Evaluation/Airport Airspace Analysis (OE/AAA), Notice Criteria Tool, https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm.

9 Upon filing Form 7460-1, the FAA undertakes an aeronautical study of the proposed project in compliance with 14 CFR Part 77, Subpart D. This is known as the obstruction evaluation/airport airspace analysis (OE/AAA) process.




[DRAFT]

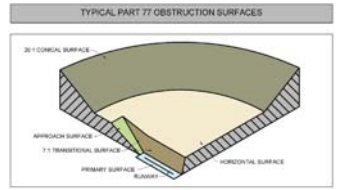
**LEGEND**

- Existing Airport Boundary
- Municipal Boundary
- County Boundary
- Updated Airport Planning Area and AOA 3
- 14 CFR Part 77 Surface
- Highway
- Arterial Street
- Local Street
- Railroad
- Waterways

**Height of Critical Aeronautical Surfaces Above Airfield Elevation***

- 16 feet or less
- 16 to 66 feet
- 66 to 116 feet
- 116 to 150 feet
- 150 to 350 feet
- 350 to 564 feet
- Above 564 feet

Note:
* Airfield elevation is 1,384 feet above mean sea level.




NORTH 0 10,000 ft.

SOURCES: Phoenix-Mesa Gateway Airport Layout Plan, April 8, 2015 (airport property boundary); Airport Airspace Drawing, April 2015 (14 Part 77); Maricopa County Department of Transportation, 2012 (streets and highways); U.S. Census Bureau, 2014 (municipal boundaries, railroad); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, August 2014 (Study Area). Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, May 2016 (Potential New AOA).

PREPARED BY: Ricondo & Associates, Inc., Janaury 2017.

**Exhibit 5**

## Height of 14 CFR Part 77 Surfaces Above Airport Elevation



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**Table 2: Airspace Protection Policies**

| OBJECT CATEGORY | AOA OVERLAY ZONE | | | |
|---|---|---|---|---|
| | AOA-1 | AOA-2 | AOA-3 INSIDE PT. 77[1/] | AOA-3 OUTSIDE PT. 77[1/] |
| Objects not penetrating a critical airspace surface but subject to FAA DNH conditions | 2/ | 2/ | 2/ | 2/ |
| Objects penetrating a critical airspace surface | | | | |
| Objects determined by FAA to be hazards (DOH) | | | | |

NOTES:

1/, 2/ Conditionally Compatible: Use should be allowed subject to stated conditions.

Incompatible: Use should be avoided.

NOTES:

1/ These columns apply to the portions of AOA-3 that are inside (and outside) the boundaries of the 14 CFR Part 77 horizontal and outer approach surfaces depicted on Exhibit 1.

2/ The project developer should be required to comply with conditions cited in the FAA's Determination of No Hazard (DNH).

SOURCE: Ricondo & Associates, Inc., December 2016.

PREPARED BY: Ricondo & Associates, Inc., December 2016.

## 2.5 Flight Safety Policies

In addition to the physical hazards to flight posed by tall objects, other land use characteristics can interfere with the safety of flight. Certain land uses or development features may interfere with the vision of pilots and air traffic controllers, interfere with safe control of aircraft, cause electronic interference, or create wildlife hazards, particularly bird strike hazards.

### 2.5.1 SOURCES OF GLINT AND GLARE

Highly reflective materials may produce glint and glare causing visual after-images or flash blindness in pilots and air traffic controllers, thus compromising flight safety. Materials creating the potential for persistent after-image or flash blindness in pilots should be considered incompatible in AOA 1, AOA 2, and the portion of the AOA 3 within the boundaries of the Part 77 horizontal and outer approach surfaces. In the portion of AOA-3 outside the boundaries of the Part 77 horizontal and outer approach surfaces, reflective materials are acceptable unless the FAA has issued a Determination of Hazard (DOH) related to the use of the proposed reflective materials.

Where an applicant proposes a project featuring highly reflective surfaces in AOA 1, AOA 2 or the portion of AOA 3 within the boundaries of the Part 77 horizontal and outer approach surfaces, the permitting agency should consult with the PMGAA staff to ascertain the potential for persistent after-image or flash blindness in pilots and air traffic controllers. If the PMGAA staff and the permitting agency determine that the potential for

persistent after-image or flash blindness exists, the burden of proof should be on the applicant to demonstrate that the proposed project would not create glint or glare problems. Adequate proof can be provided in either of two ways:

- A technical study demonstrating that the proposed building materials would not create reflections severe enough to cause after-images or flash blindness in pilots on approach to any runway at any time of day during any time of the year.[1]
- If the FAA has reviewed the proposed project through the 14 CFR Part 77 OE/AAA process, the FAA's final Notice of Determination indicates no objections to the potential glint and glare effects of the proposed project.

### 2.5.2 LIGHTING SYSTEMS

Some lighting systems may contain features that pilots may confuse with airport identification and navigational lighting or that may compromise the vision of pilots on approach to a runway. The following lighting systems should be considered incompatible in AOA 1, AOA 2, and the portion of the AOA 3 within the boundaries of the Part 77 horizontal and outer approach surfaces if they are directed toward the final approach paths of aircraft:.

- Search lights (including temporary searchlights for special events, etc.)
- Stroboscopic lights
- Laser lights
- A linear array of sequenced flashing lights

Any lighting systems that produce effects mimicking airport identification lighting, runway end identification lighting, or runway approach lighting should also be considered incompatible in AOA 1, AOA 2, and the portion of AOA 3 within the boundaries of the Part 77 horizontal and outer approach surfaces.

In the portion of AOA-3 outside the boundaries of the Part 77 horizontal and outer approach surfaces, these potentially problematic lighting systems are acceptable unless the FAA has issued a Determination of Hazard (DOH) related to the proposed lighting system.

### 2.5.3 SOURCES OF DUST, SMOKE, AND WATER VAPOR

Land uses that would create columns of dust, steam, water vapor, or smoke dense enough to impair pilot or air traffic controller vision and compromise flight safety should be considered incompatible in AOA 1, AOA 2,

[1] The FAA, in cooperation with the U.S. Department of Energy, sponsored the development of a Solar Glare Hazard Analysis Tool (SGHAT) by Sandia Labs that can be used to determine the potential for solar energy projects to cause glint and glare severe enough to interfere with the vision of pilots and controllers in airport traffic control towers. Information about the tool and licensing requirements can be obtained at https://ip.sandia.gov/technology.do/techID=168. Licenses for this and other related tools can be obtained through ForgeSolar at https://www.forgesolar.com/.

and in the portion of AOA 3 within the boundaries of the Part 77 horizontal and outer approach surfaces. If the PMGAA staff and the permitting agency determine that a proposed project has the potential to create dust, steam, water vapor, or smoke severe enough to impair pilot or air traffic controller vision, the burden of proof should be on the applicant to demonstrate that the proposed project would not create problems severe enough to impair pilot vision or air traffic controller vision.

If the FAA has reviewed the proposed project through the 14 CFR Part 77 OE/AAA process and issued a determination indicating no objections to the proposed project on account of dust, steam, water vapor, or smoke, that determination should be considered adequate evidence that the project can proceed without creating this hazard.

In the portion of AOA-3 outside the boundaries of the Part 77 horizontal and outer approach surfaces, these potentially problematic sources of dust, smoke, and water vapor are acceptable unless the FAA has issued a Determination of Hazard (DOH) related to the proposed sources.

### 2.5.4 THERMAL HAZARDS

Land uses that produce thermal plumes (such as power plants or other land uses that employ smoke stacks, cooling towers, or that create thermal exhaust), even when not a visual hazard, may interfere with aircraft control by causing air turbulence. Land uses that produce thermal plumes with the potential to interfere with the safe control of aircraft should be considered incompatible in AOA 1, AOA 2 and the portion of AOA 3 within the boundaries of the Part 77 horizontal and outer approach areas.

If the PMGAA staff and the permitting agency determine that a proposed project has the potential to cause hazardous thermal plumes, the burden of proof should be on the applicant to demonstrate that the proposed project would not create hazardous thermal plumes. Adequate proof could be provided in either of two ways:

- A technical study demonstrating that the proposed project would not create thermal plumes severe enough to compromise the safe control of the smallest aircraft expected to fly over the proposed facility.[2]
- If the FAA has reviewed the proposed project through the 14 CFR Part 77 OE/AAA process, the FAA's final Notice of Determination indicates no objections to the potential thermal plume effects of the proposed project.

In the portion of AOA-3 outside the boundaries of the Part 77 horizontal and outer approach surfaces, these potentially problematic sources of thermal plumes are acceptable unless the FAA has issued a Determination of Hazard (DOH) related to the proposed sources.

[2] FAA has developed an "Exhaust-Plume-Analyzer" to evaluate impacts from plumes. This tool is available to the public at: https://www.mitre.org/research/technology-transfer/technology-licensing/exhaust-plume-analyzer.

### 2.5.5 SOURCES OF ELECTROMAGNETIC INTERFERENCE

Sources of electromagnetic interference with aircraft instrumentation and ground-based radar and navigational aids should be considered incompatible within the Airport Planning Area (AOA-1, AOA-2, and AOA-3). Examples or potentially problematic sources may include radio transmission facilities, microwave transmission towers, and wind turbines. If the permitting agency suspects that a proposed project may create the potential for electromagnetic interference with aviation navigational or communication equipment, it should consult with the PMGAA staff and bring the matter to the attention of the FAA for study.

Typically, the potential for electromagnetic interference would be considered by the FAA through the 14 CFR Part 77 OE/AAA process. If the FAA has reviewed the proposed project, the project sponsor should be required to comply with any conditions or recommendations relating to the mitigation of electromagnetic interference.

### 2.5.6 BIRD ATTRACTANTS

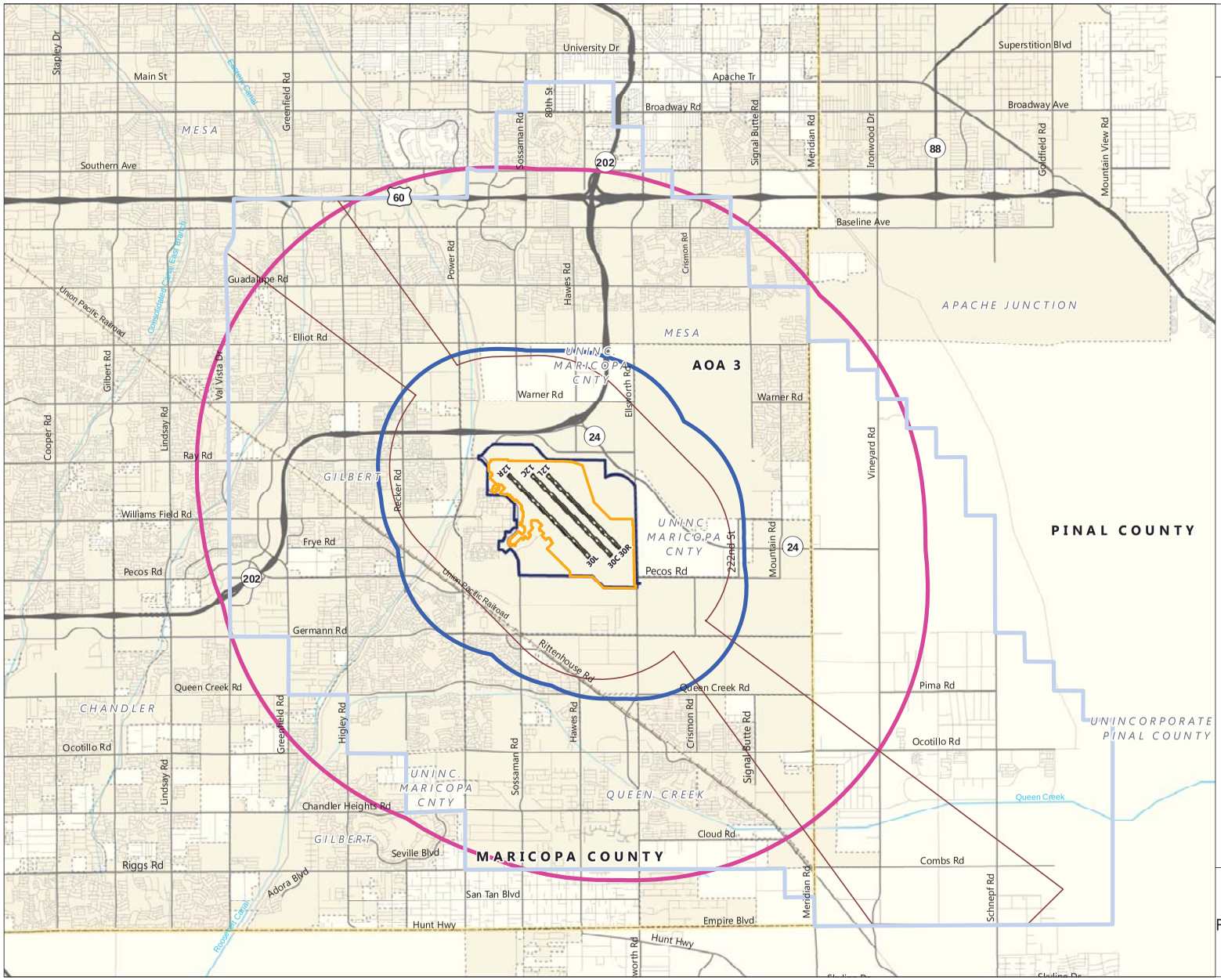
The following land uses, which have the potential to attract birds, should be considered incompatible within 10,000 feet of the Airport's Air Operations Area[3] and conditionally compatible between 10,000 feet and 5 statute miles of the Air Operations Area.[4] Where these uses are considered to be conditionally compatible, measures should be taken to reduce the risk of attracting birds. For guidance, refer to Federal Aviation Administration, Advisory Circular AC 150/5200-33B, *Hazardous Wildlife Attractants on or Near Airports*, paragraph 2-3.

**Exhibit 6** depicts these bird attractant separation areas.

- Waste Disposal Operations, including:
  - Municipal and commercial solid waste landfills
  - Trash transfer stations that handle waste that are not fully enclosed or lack ventilation and air filtration systems adequate to control odors escaping to the outdoors (odor-masking is not acceptable)
  - Commercial or institutional composting operations that accept food waste

[3] The Air Operations Area, depicted on Exhibit 6, is defined by the FAA as "any area of an airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiways, or apron." See Federal Aviation Administration, Advisory Circular AC 150/5200-33B, *Hazardous Wildlife Attractants on or Near Airports,* Appendix 1, page 19.

[4] Federal Aviation Administration, Advisory Circular AC 150/5200-33B, *Hazardous Wildlife Attractants on or Near Airports,* paragraphs 1-2 and 1-4, Figure 1.




**LEGEND**

- Existing Airport Boundary
- Municipal Boundary
- County Boundary
- 14 CFR Part 77 Horizontal and Outer Approach Surfaces
- Updated AOA 3
- Air Operations Area
- 10,000-foot Separation Distance
- 5-mile Separation Distance
- Highway
- Arterial Street
- Local Street
- Railroad
- Waterways

NORTH 0 8,800 ft.

SOURCES: Phoenix-Mesa Gateway Airport Layout Plan, April 8, 2015 (airport property boundary, Air Operations Area); Maricopa County Department of Transportation, 2012 (streets and highways); U.S. Census Bureau, 2014 (municipal boundaries, railroad); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, October 2016 (Potential New AOA); Airport Airspace Drawing, April 2015 (14 Part 77); Ricondo & Associates, November 2015 (separation distance area).

PREPARED BY: Ricondo & Associates, Inc., January 2017.

**Exhibit 6**

## FAA-Recommended Separation Distances from Hazardous Bird Attractants



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- Water Management Facilities
  - Stormwater management facilities and artificial ponds, including water detention, retention, or recharge ponds, that create above-ground standing water should be considered incompatible within 10,000 feet of the Air Operations Area unless required by other provisions of municipal, county, or state law. Where these facilities are necessary and must be allowed, measures should be taken to minimize the risks of attracting birds.[1] In the portion of AOA-3 within the boundaries of the Part 77 horizontal and outer approach surfaces, these uses should be considered compatible only if coordination measures are taken to minimize the risk of attracting birds. In the portion of AOA-3 outside the boundaries of the Part 77 horizontal and outer approach surfaces, waterscapes, including those intended to support aquatic vegetation and animal life, are acceptable; however projects within 5 statute miles of the Air Operations Area are subject to FAA review in accordance with AC 150/5200-33B, *Hazardous Wildlife Attractants on or Near Airports*.[2] Plans for such proposed developments should be circulated to the Phoenix-Mesa Gateway Airport Authority for coordination with the FAA, and for review and comment prior to development.
  - Wastewater treatment facilities and associated settling ponds, including any devices or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes and artificial marshes designed for wastewater treatment.[3]
  - Wetlands mitigation projects, unless they provide unique functions that must remain onsite or are otherwise directed by state or federal law, state or federal regulatory decision, or court order.

### 2.5.7 RESPONSIBILITIES IN CASE A HAZARD TO FLIGHT IS BUILT

If a structure or facility is built and is later determined by the Airport Authority to constitute a hazard to flight, the Airport Authority shall confer with the owner and operator of the facility and the local government responsible for development permitting to determine if mitigation measures reducing the degree of hazard are practicable and feasible. To the extent that any hazard to flight exists, the Airport Authority shall coordinate with the FAA in issuing a NOTAM to inform pilots of the feature and impact. The NOTAM would subsequently be incorporated into the notes for the Airport in the FAA's Chart Supplements publication.[4]

## 2.6 Airport Authority Coordination with Local Governments

After the Airport Authority approves the updated ALUCP, it would be desirable for the affected local governments (the City Mesa, the Towns of Gilbert and Queen Creek, Maricopa County and Pinal County) to incorporate the updated ALUCP into their planning and zoning documents. An effective implementation

1 Federal Aviation Administration, Advisory Circular AC 150/5200-33B, *Hazardous Wildlife Attractants on or Near Airports*, paragraph 2-3.

2 Federal Aviation Administration, Advisory Circular AC 150/5200-33B, *Hazardous Wildlife Attractants on or Near Airports*, paragraphs 4-1 and 4-3.

3 Retention ponds of treated wastewater should be considered the same as stormwater management facilities.

4 http://aeronav.faa.gov/afd/10nov2016/sw_60_10NOV2016.pdf (accessed December 20, 2016).

method would be to incorporate the provisions of the updated ALUCP into the local zoning codes. The updated ALUCP is designed so that it could be implemented through overlay zoning, the approach that Gilbert, Mesa, and Queen Creek used in implementing the original ALUCP. The updated ALUCP and its supporting documentation would include all the background information needed to provide the required basis and rationale for the updated airport land use compatibility zoning.

To ensure long-term compliance with the updated ALUCP, it would be helpful for the local planning staffs to continue coordinating with the Airport Authority planning staff in the review of proposed development projects, general plan amendments, and rezoning applications. To facilitate this coordination, it is recommended that the local governments routinely route rezoning applications, proposed general plan amendments, and proposed development projects requiring FAA review through the Part 77 OE/AAA process within the Airport Planning Area to the Airport Authority staff early in the process to enable Airport Authority staff to offer comments during the project review process.

## 2.7 Monitoring and Update of the ALUCP

This ALUCP is an update of the 1996 ALUCP and the land use compatibility element of the 1999-2000 Part 150 Study. This is a capacity driven plan. If the ALUCP is to remain an effective tool for promoting land use compatibility in the Airport environs, it must be monitored and, if conditions change markedly, updated. The Airport Authority and local governments should remain attentive to changes that may require future updates to the ALUCP.

The primary responsibility for monitoring the ALUCP rests with the Airport Authority staff. The chief conditions that must be monitored include:

- Major changes in land development trends revealing gaps or shortcomings in the land use compatibility policies of this ALUCP.
- A significant redesign of airspace and flight procedures that could change the long-term noise exposure indicated in this ALUCP.
- A significant change in operations or aircraft fleet that could change noise exposure compared with the long-term noise exposure indicated in this ALUCP.

If an update of the ALUCP is needed, the Airport Authority shall coordinate with the affected local governments to undertake the studies required to ensure that the ALUCP is revised as warranted.

# 3. Implementation Program

## 3.1 Introduction

Airport Authority approval of the updated ALUCP is just the first of several steps required to implement the land use compatibility policies and standards. The local governments with jurisdiction in the updated Airport Planning Area (APA), which have the ultimate authority to regulate land use and development in the area, are responsible for actually implementing the policies and standards of the updated ALUCP. This chapter explains the roles and responsibilities of the Airport Authority and the local governments and outlines the process required by local ordinances to implement the updated ALUCP. The Airport Authority staff has copies of model ordinances, easements, and residential sound insulation standards that are available for review by local officials as they consider appropriate ways to implement the recommendations of the ALUCP.

## 3.2 Airport Authority Responsibilities

The ALUCP was prepared under the direction of the Phoenix-Mesa Gateway Airport Authority, which is responsible for approval of the final document. After approval, the Airport Authority is empowered by state law to record with the Maricopa and Pinal County Recorders' offices a map of the updated APA to serve as the airport influence area described in the law.[1]

Most of the ALUCP, including the recommended land use compatibility policies and standards, however, can be implemented only by the local governments with land use regulatory and permitting authority within the updated APA:

- City of Mesa
- Maricopa County
- Pinal County
- Town of Gilbert
- Town of Queen Creek

[1] Arizona Revised Statutes, §28-8485(B).

## 3.3 Local Government Role and Authority

In Arizona, municipal and county governments are empowered to undertake land use planning and regulate land use and development through zoning ordinances, subdivision regulations, and building codes.

The land use policies and standards of the ALUCP would be most effective if adopted as parts of the zoning codes of each affected local government. Probably the simplest way to accomplish this is through the adoption of airport compatibility overlay and airspace protection overlay zoning ordinance amendments. The airport compatibility overlay zoning ordinance would establish three overlay zones, corresponding with AOA 1, AOA 2, and AOA 3 and would include the policies and standards described in Sections 2.3, 2.4, and 2.5 of the ALUCP.

The amendment of zoning ordinances is subject to specific requirements for public notice, review, and hearing. It is recommended that the Airport Authority coordinate with each affected local government to provide technical assistance and support as each deems appropriate. While the zoning amendment processes vary somewhat between the towns, the counties, and the City of Mesa, they all include the following steps:[2]

1. Prepare the proposed zoning amendments.
2. Local government planning staff determines if the proposed amendments are consistent with the General Plan. If so, proceed with consideration of zoning amendments. If not, prepare an amendment to the General Plan for consideration with the proposed zoning amendments.
3. Provide notice of proposed amendments. For zoning ordinance or map amendments, this would involve neighborhood meetings in the towns and City of Mesa.
4. Hold public hearing before Planning Commission to consider proposed amendments. Planning Commission prepares recommendation to governing body (Town Council, City Council, County Board).
5. Hold public hearing before governing body. Governing body approves or disapproves proposed amendments.

The Airport Authority could provide helpful support to each local government by coordinating with them in drafting zoning and general plan amendments. It would be beneficial if the affected local governments would coordinate and establish a consistent approach to their required zoning amendments. As suburban communities, the affected local jurisdictions are similar in character and serve many of the same builders and developers. Common airport land use compatibility standards would enable local planners to share their experience in administering the regulations and would make it easier for builders and developers to understand the requirements across municipal and county boundaries.

[2] City of Mesa, Zoning Ordinance, Chapters 67, 75, and 76; Town of Gilbert, Land Development Code, revised April 5, 2015, Articles 5.2 and 5.7; Town of Queen Creek, Zoning Ordinance, June 2015, Sections 3.1 and 3.4; Maricopa County Zoning Ordinance, October 2014, Chapter 3, Sections 304 and 305; Pinal County Zoning Ordinance, Chapters 2.165 and 2.166.

The Airport Authority could also provide assistance in fulfilling the public notice requirements. This is typically the responsibility of an applicant for a zoning amendment or map change. In this case, the zoning amendments would be initiated by the local governments themselves, but the Airport Authority is a vitally interested party.

## 3.4 Potential Schedule

While the zoning amendment process is under the control of each local jurisdiction, this section provides general guidance on the sequence and possible duration of the steps in the implementation process. This is offered for planning purposes only.

**Table 3: Potential ALUCP Implementation Schedule**

| MONTH, YEAR | ACTION | RESPONSIBLE PARTY |
|---|---|---|
| February 2017 | Adoption of updated ALUCP | Airport Authority |
| March 2017 | Recording of updated Airport Planning Area boundary with Maricopa and Pinal County Recorders' offices | Airport Authority |
| February - May 2017 | Prepare zoning and, if necessary, general plan amendments | Town, City, County planning departments |
| May – June 2017 | Prepare, distribute, publish notices of proposed zoning amendments | Local governments with support from Airport Authority |
| July – November 2017 | Public outreach process, neighborhood meetings | Town, City, County planning departments |
| September 2017 – January 2018 | Planning Commission public hearings | Town, City, County Planning Commissions |
| October 2017 – February 2018 | Planning Commission recommendations | Town, City, County Planning Commissions |
| November 2017 – March 2018 | Governing body public hearings | Town/City Councils, County Boards |
| December 2017 – April 2018 | Governing body approval of zoning amendments | Town/City Councils, County Boards |

SOURCE: Ricondo & Associates, Inc., December 2016.
PREPARED BY: Ricondo & Associates, Inc., December 2016.

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