Airport Land Use Compatibility Plan Update

Public Information Meeting #1
September 17, 2015

PhxMesa Gateway Airport

RICONDO® & ASSOCIATES

IN ASSOCIATION WITH:

PSM²

Agenda

1. Welcome and Open House
2. Purpose of Study
3. Current Airport Land Use Compatibility Plan
4. Phoenix Mesa Gateway Airport – Facilities, Flight Tracks, and Noise Complaints
5. Study Area -- Existing and Planned Land Use, Population, and Employment
6. Approach to Determining Long-term Airport Planning Activity Level
7. Next Steps
8. Questions, Informal Discussion

Purpose of Study

To review and update the Airport Land Use Compatibility Plan (ALUCP) for Phoenix-Mesa Gateway Airport

Related Studies

- Williams Regional Planning Study (1996)
- F.A.R Part 150 Noise Compatibility Study (2000)

Current ALUCP

GOAL: Guide and control orderly growth to ensure high quality of life and compatible new development and maximize economic development while preserving the integrity of the Airport.

OBJECTIVE: Guide urban growth in a planned and orderly manner promoting a compatible land use pattern and preserving the future of the Airport.

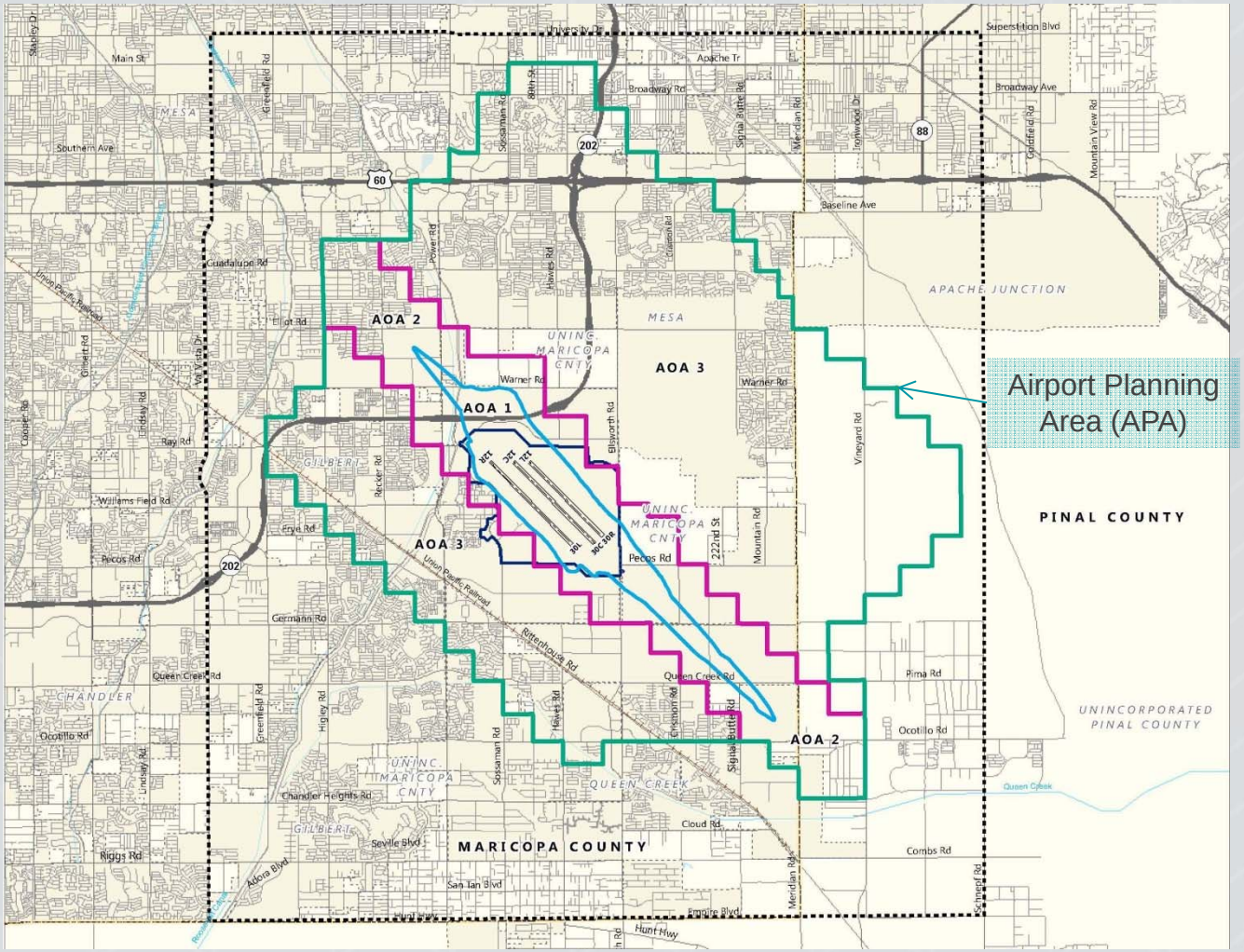
Source: Williams Regional Planning Study, Chapter 7, Section 7.1, March 1996.

Current ALUCP Policies

POLICIES	
1	Update General Plans to reflect the “Land Use Planning scenario” noise contours and Airport Planning Area as basis for noise compatibility planning.
2	Retain compatible land use designations for undeveloped land within the APA.
3	Develop a new Mixed Use Category that does not allow residential inside the 60 DNL Planning Scenario Contour and immediately north of the Airport.
4	Establish guidelines specifying noise compatibility criteria for the review of development projects within the Planning Scenario 60 DNL boundary.
5	Encourage rezoning areas within the Planning Scenario Contours and APA to match the compatible land use designations in the General Plans.
6	Amend Overflight Zoning Ordinance: Prohibit housing and noise-sensitive institutions within DNL 65, schools and places of assembly within DNL 60; require fair disclosure covenants; and amend sound insulation standards.
7	Amend subdivision regulations to require recording of fair disclosure covenants, avigation noise and overflight easements in APA
8	Amend building code to add sound insulation standards supporting AOA zoning requirements.

Source: Williams Gateway Airport Part 150 Noise Compatibility Study Update, Chapter 6, Section 6-9, Table 6D, 1999.

Current ALUCP – AOA Boundaries



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Airport Overlay Zoning Requirements

MUNICIPALITY	NOISE-SENSITIVE LAND USES PROHIBITED	AVIGATION EASEMENTS	REAL ESTATE DISCLOSURE/1	OUTDOOR-TO-INDOOR NOISE LEVEL REDUCTION REQUIREMENTS/2
Airport Overlay Area 1				
City of Mesa	Yes/2	Yes	Yes	For conditionally permitted noise-sensitive uses, reduce interior level to DNL 45
Town of Gilbert	Yes	N/A	N/A	N/A
Town of Queen Creek	Yes	N/A	N/A	N/A
Airport Overlay Area 2				
City of Mesa	Yes/2	Yes	Yes	For conditionally permitted noise-sensitive uses, reduce interior level to DNL 45
Town of Gilbert	No	Yes	Yes	25 dB
Town of Queen Creek	No	Yes	Yes	25 dB
Airport Overlay Area 3				
City of Mesa	No	Yes	Yes	Reduce interior level to DNL 45
Town of Gilbert	No	Yes	Yes	20 dB
Town of Queen Creek	No	Yes	Yes	20 dB

1/ This includes notices to buyers disclosing the location of the Airport and potential aircraft overflights. This includes state report filing requirements to the Arizona Department of Real Estate for subdivisions and, in Mesa only, the pre-sale "Notification of Buyers." Final subdivision plats also must note the potential for aircraft overflights and noise. N/A indicates that disclosures are not needed since noise-sensitive uses are prohibited.

2/ Within AOA 1 and AOA 2 the City of Mesa conditionally allows certain noise-sensitive land uses. These uses are defined in the City of Mesa Zoning Ordinance, Land Use Regulation Tables 11-4-2, 11-5-2, 11-6-2, 11-7-2, and 11-10-2.

ALUCP Comments

Comments/Themes from Planning Official Interviews:

1. Noise exposure contours and AOA boundaries need to be reviewed/confirmed.
2. Metes and bounds descriptions or geocoded mapping is needed for AOA boundaries.
3. A more complete list of noise-sensitive uses may be needed.
4. Real estate agents have requested standardized maps of the APA for display in sales offices.
5. Interest in amending/rezoning from industrial/commercial to residential within areas of the AOA boundaries
6. The pre-application process is effective in informing developers of the AOA zoning standards early in the planning and design work.
7. Standard construction achieves the noise level reduction targets of AOA zoning.

ALUCP Considerations

ALUCP could be improved by adding standards for protecting airspace and flight safety:

- Limit structure heights where needed to protect navigable airspace

- Restrict development features compromising flight safety:
  1. Bird attractants
  2. Reflective building surfaces interfering with pilot or air traffic controller vision
  3. Lighting that can be confused with airport navigational lighting
  4. Sources of thermal plumes that can interfere with aircraft control
  5. Sources of smoke, dust, or water vapor interfering with pilot or air traffic controller vision

Planned Airport Development

- Northeast Area Development & Passenger Terminal Complex (700± Acres)
- South Industrial Area (300± Acres)
- Airfield Improvements
  - Per Airport Layout Plan, 2008 Airport Master Plan & Gateway 2030 Plan

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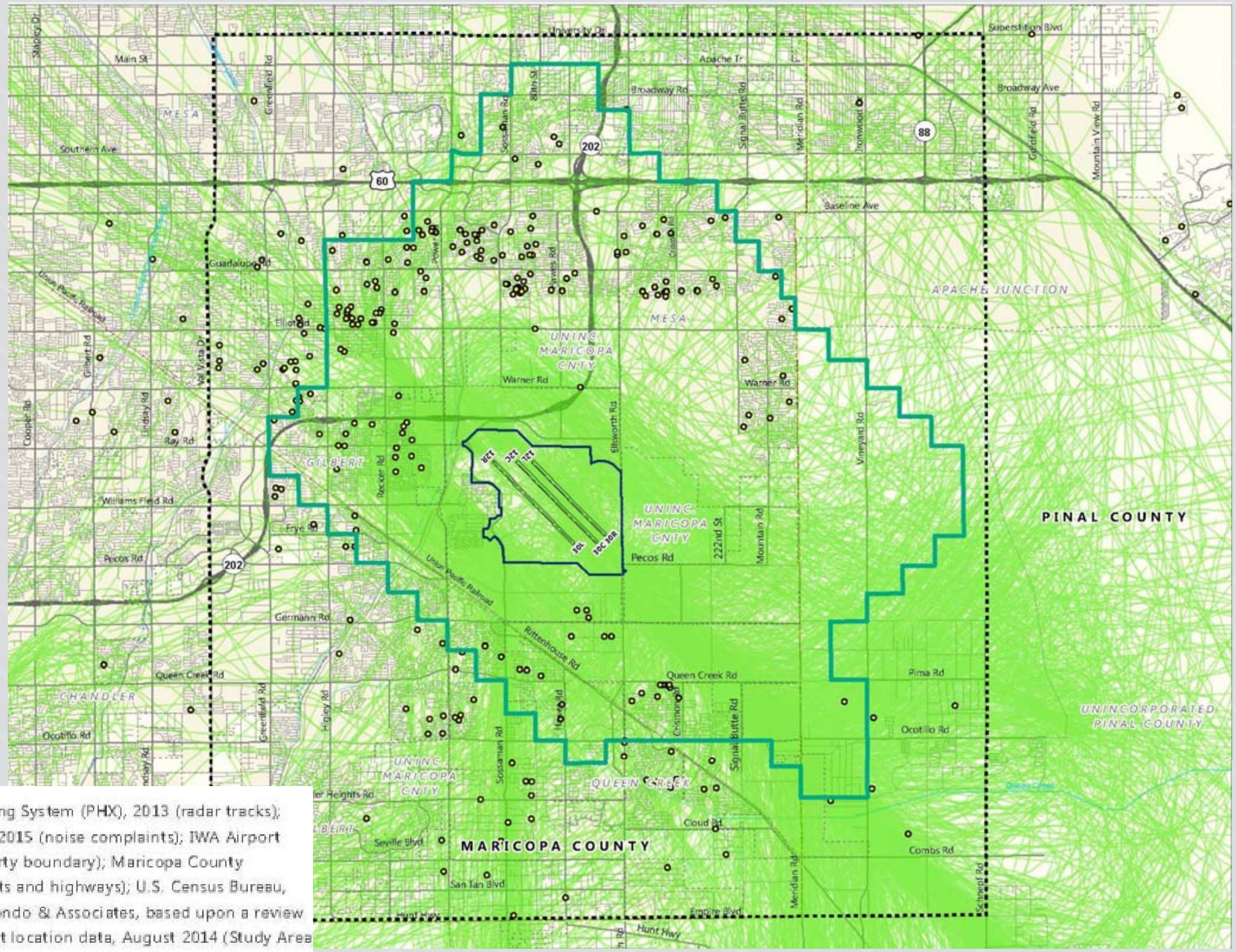
Arrival Tracks & Noise Complaints



SOURCES: Noise and Flight Track Monitoring System (PHX), 2013 (radar tracks); Phoenix-Mesa Gateway Airport Authority, 2015 (noise complaints); IWA Airport Master Plan, February 2009 (airport property boundary); 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

PREPARED BY: Ricondo & Associates, Inc., July 2015.

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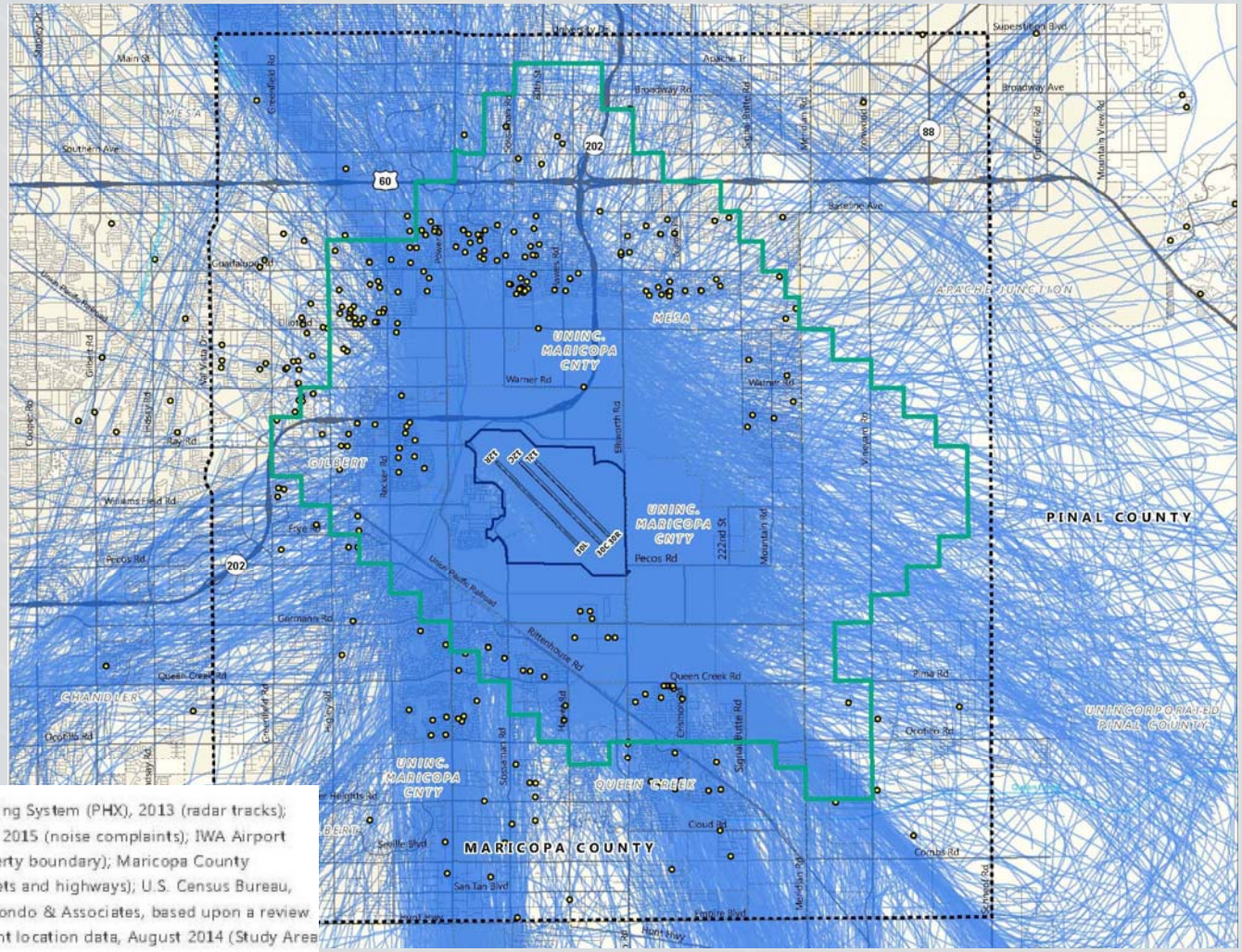
Departure Tracks & Noise Complaints



SOURCES: Noise and Flight Track Monitoring System (PHX), 2013 (radar tracks); Phoenix-Mesa Gateway Airport Authority, 2015 (noise complaints); IWA Airport Master Plan, February 2009 (airport property boundary); 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

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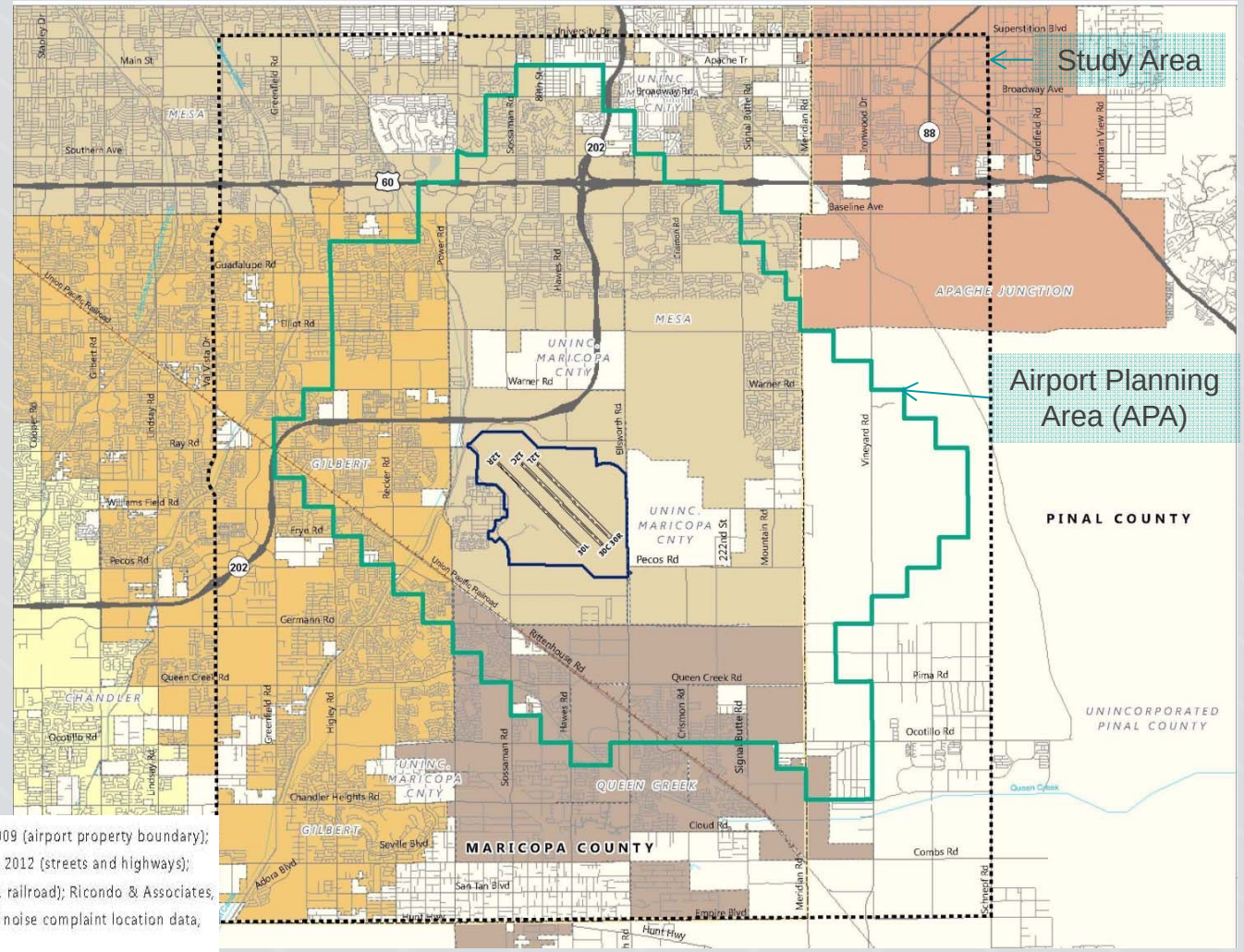
ALUCP Study Area



SOURCES: IWA Airport Master Plan, February 2009 (airport property boundary); 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).

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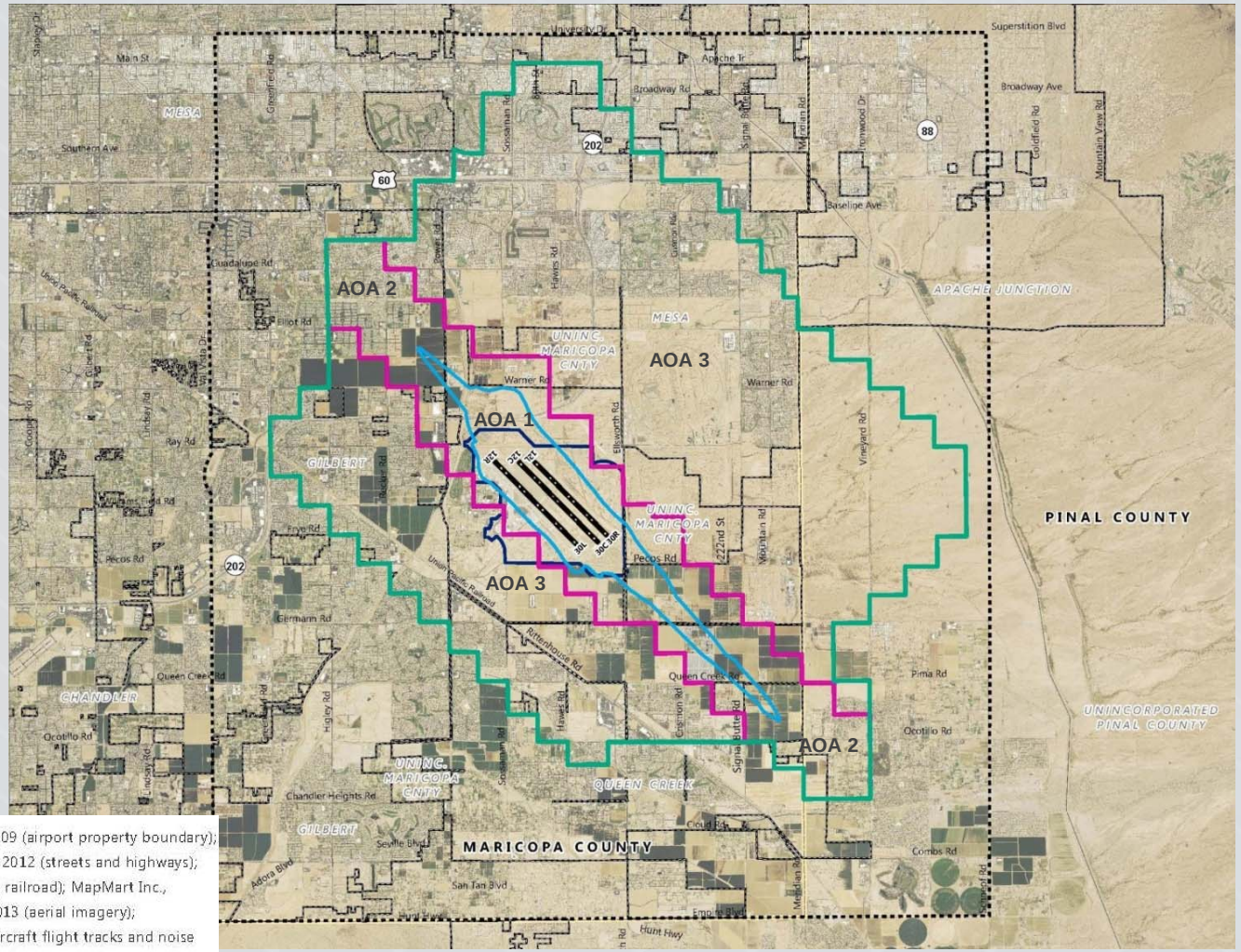
Aerial Image of Study Area



SOURCES: IWA Airport Master Plan, February 2009 (airport property boundary); Maricopa County Department of Transportation, 2012 (streets and highways); U.S. Census Bureau, 2014 (municipal boundaries, railroad); MapMart Inc., National Agriculture Imagery Program (NAIP), 2013 (aerial imagery); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, August 2014 (Study Area).

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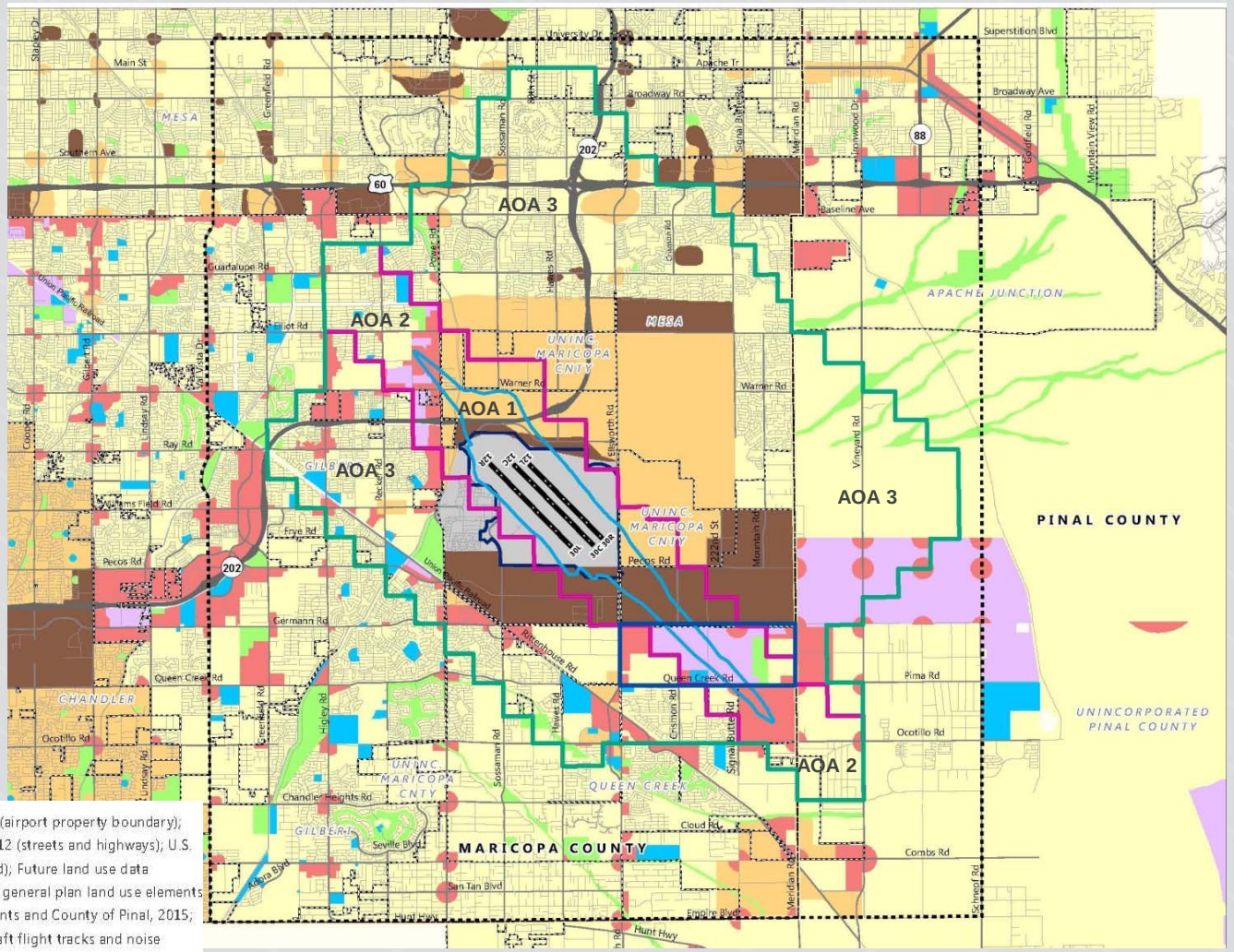
Future Land Use per General Plans



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
- North Area Specific Plan*

SOURCES: IWA Airport Master Plan, February 2009 (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, August 2014 (Study Area).

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Population and Employment

AREA	POPULATION		EMPLOYMENT	
	Number	As Percentage of MSA	Number	As Percentage of MSA
Existing 2010				
Phoenix MSA	4,200,426	--	1,771,208	--
Study Area[1/]	360,686	8.6%	84,626	4.8%
Forecast 2030				
Phoenix MSA	6,041,240	--	2,901,633	--
Study Area[1/]	570,397	9.4%	199,147	6.9%
Forecast 2040				
Phoenix MSA	7,109,881	--	3,411,594	--
Study Area[1/]	641,938	9.0%	254,268	7.5%

NOTE:
1/ Population and employment estimates for the study area were derived by summing the population and employment numbers for all Traffic Analysis Zones within the study area.

SOURCE: Maricopa Association of Governments, Socioeconomic Projections (Population and Employment) by Traffic Analysis Zone for the 2035 Regional Transportation Plan, obtained June 2015.
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Airport Activity Level for Planning

Need

- An airport activity level that allows the definition of an Airport Planning Area within which planning and development can occur through the long-term future
  - To provide local governments and developers with updated review and guidance for long-term land use compatibility in the area
  - To protect the long-term development and operation of the Airport

Approach

- Reanalyze the practical operational capacity of the Airport

Practical Capacity of the Airport

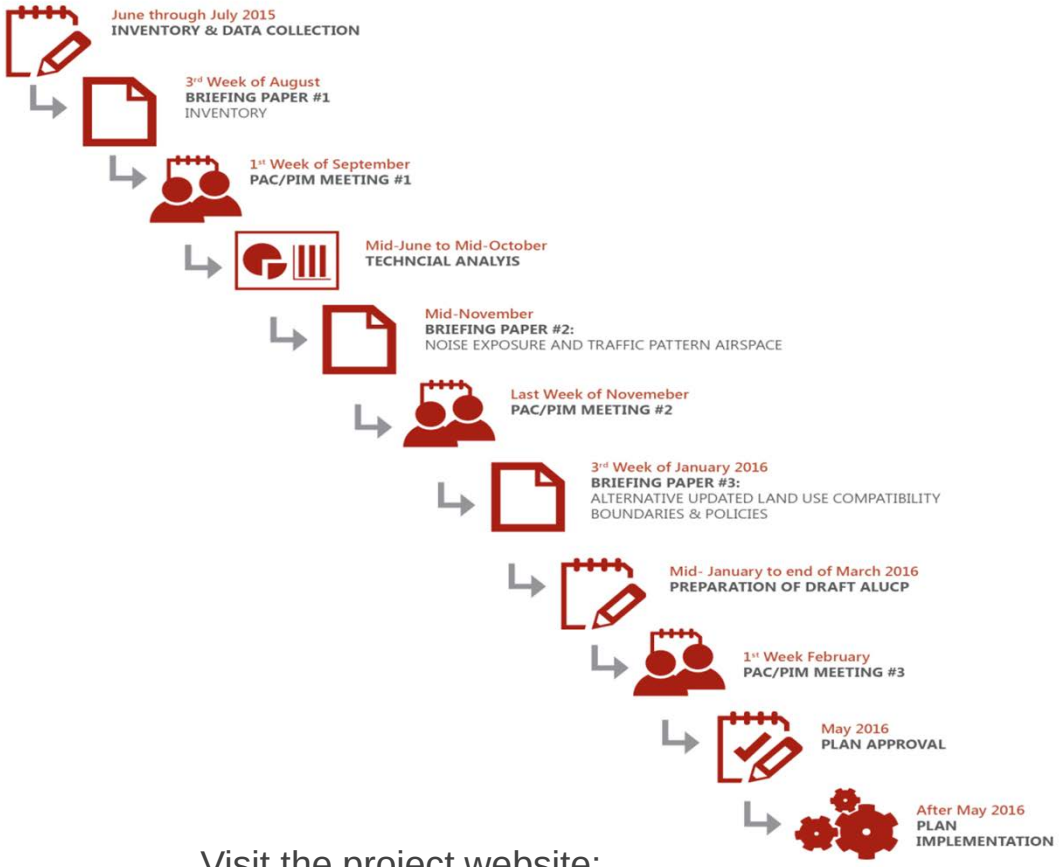
Annual Service Volume (ASV): The annual number of takeoffs and landings that can be accommodated without unacceptable delay (4 to 6 minutes/operation).

- Calculate ASV using assumptions derived from existing conditions, Airport Layout Plan, and official forecasts
  - Future runway/taxiway system – from ALP
  - Runway use – existing condition, adjusted based on relocated terminal
  - Aircraft fleet mix proportion – existing condition
  - Arrival/departure proportions – existing conditions
  - Itinerant/local proportions – FAA 2040 forecast
  - Touch-and-go/local operation ratio – existing condition
  - Number of operations per peak hour – calculated
  - Weather conditions – historical records

Next Steps

1. Determine planning activity levels
2. Prepare noise exposure analysis
3. Identify potential APA and AOA boundary adjustments
4. Identify land use compatibility issues and potential policy options

ALUCP Planning Process



Visit the project website:
http://www.phxmesagateway.org/landusestudy.aspx