



Airport Land Use Compatibility Plan (ALUCP) Update

Public Information Meeting #2
December 1, 2015



RICONDO®
& ASSOCIATES

IN ASSOCIATION WITH:

PSM²

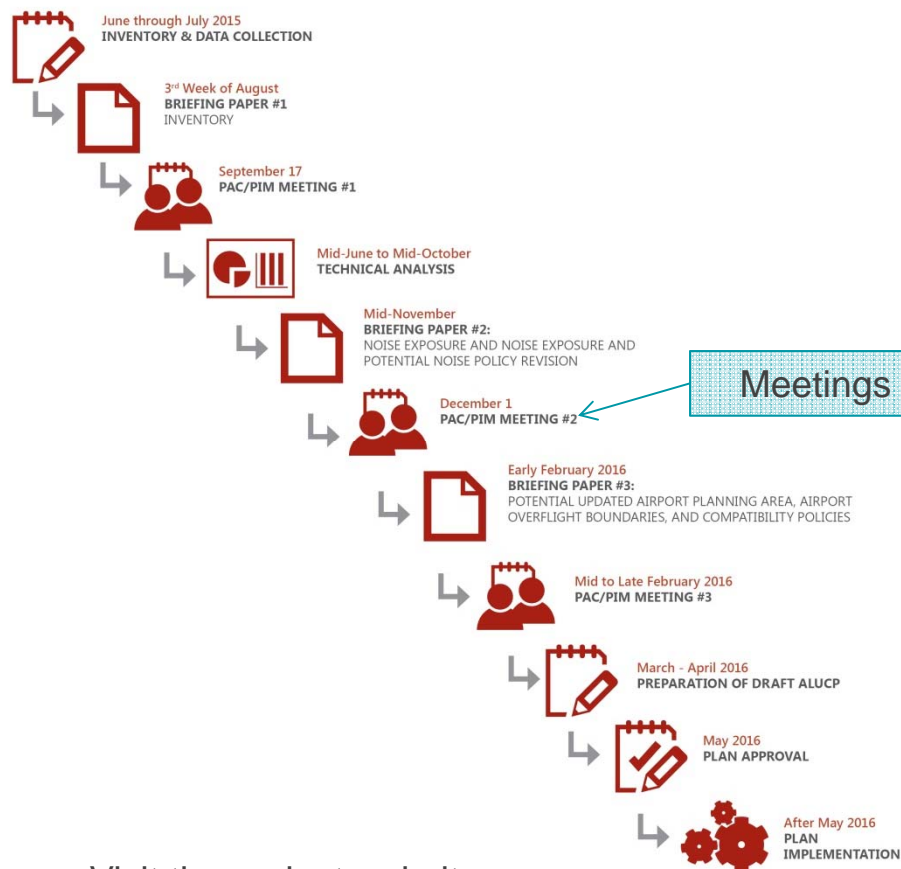


Agenda

1. Welcome and Introductions
2. Status of Study
3. Long-term Planning Activity Level – Annual Service Volume
4. Noise Modelling Input Data
5. Projected Noise Exposure
6. Noise/Land Use Compatibility Policy Considerations
7. Next Steps



ALUCP Planning Process



Visit the project website:
<http://www.phxmeseagateway.org/landusestudy.aspx>



Long-term Planning Activity Level

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



Annual Service Volume

USER CATEGORY	OPERATIONS (TAKEOFFS AND LANDINGS)		
	Itinerant	Local	Total
Air Carrier	32,123	0	32,123
Air Taxi	50,819	0	50,819
General Aviation	159,904	247,383	407,287
Military	3,755	4,017	7,772
Total	246,600	251,400	498,000

NOTE: In 2014, the Airport had 225,181 operations.

Source: Analysis by Ricondo & Associates, Inc., October 2015.

Prepared by: Ricondo & Associates, Inc., November 2015.



Noise Modeling Input Data

- Runway end coordinates and elevation
- Study area topography
- Average temperature and humidity
- Average daily operations for ASV activity level
 - By aircraft type
 - By stage length (for departures)
 - By time of day
- Average annual runway use
- Flight tracks



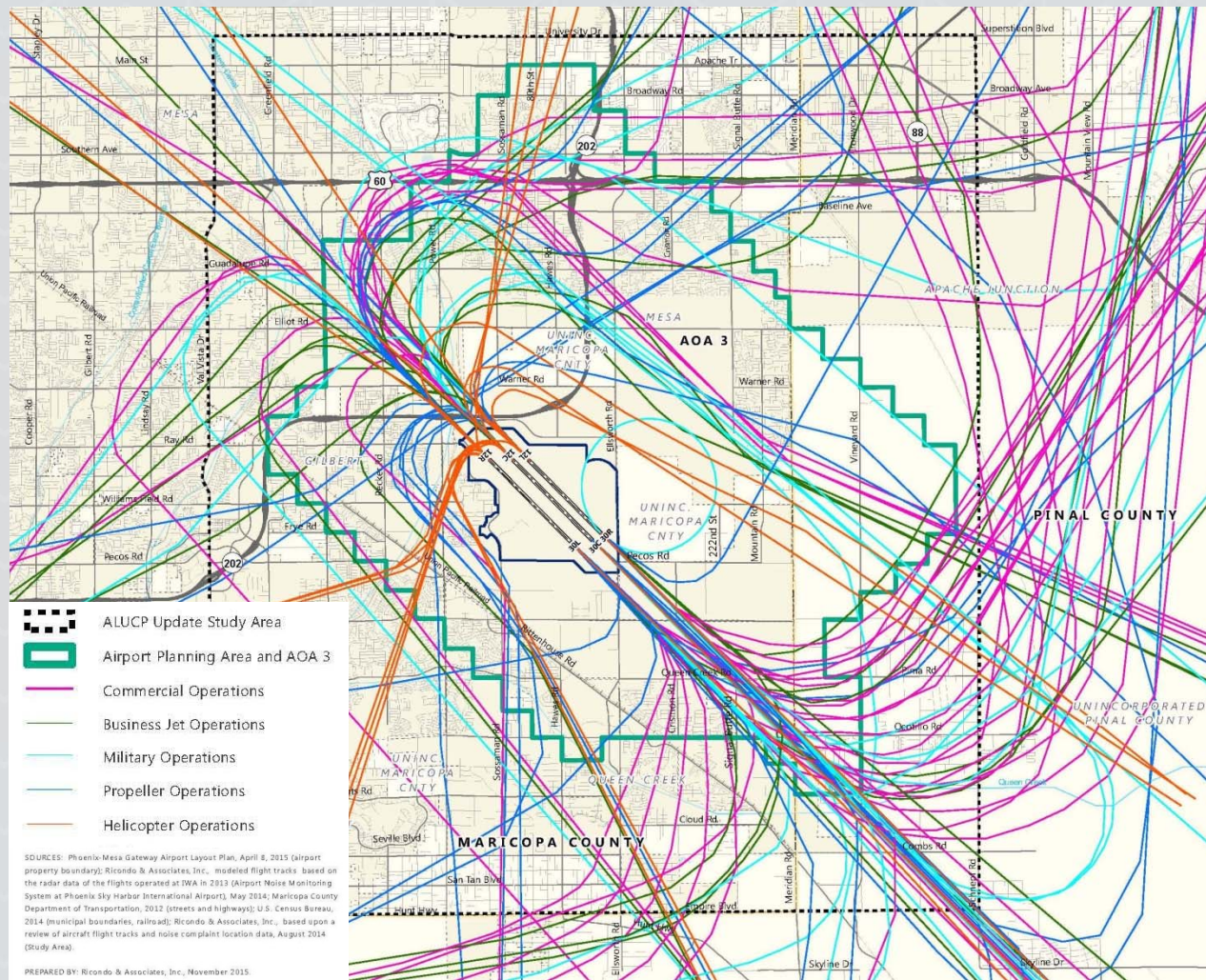
Runway Use Percentages

	West Runway		Center Runway		East Runway		Total
	12R	30L	12C	30C	12L	30R	
With Terminal on West Side							
Arrivals and Departures	19%	29%	3%	41%	1%	8%	100%
Touch-and-Go's	18%	27%	3%	46%	1%	5%	100%
With Terminal on East Side							
Arrivals and Departures	15%	23%	3%	41%	5%	14%	100%
Touch-and-Go's	14%	25%	3%	46%	5%	7%	100%

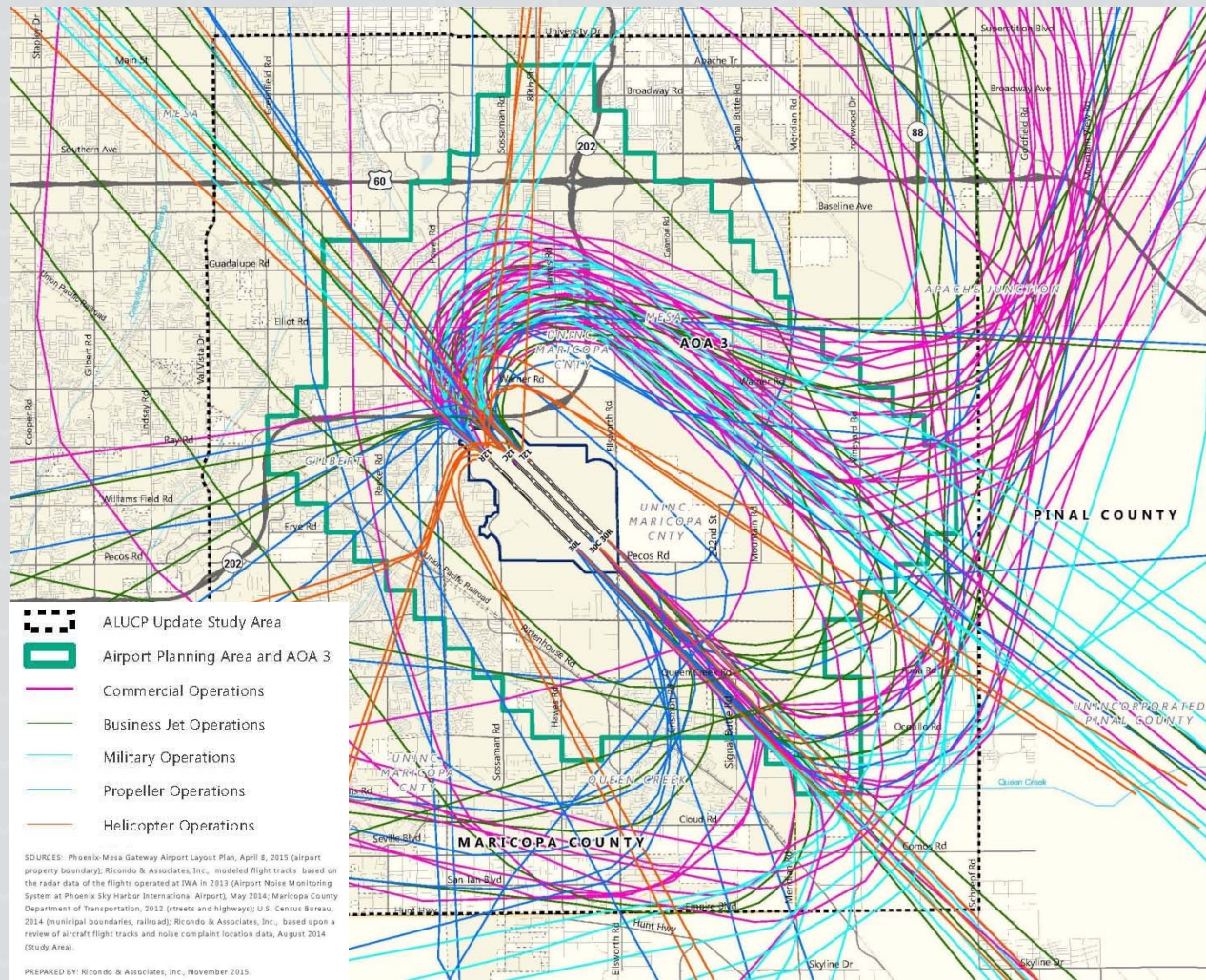
Note: Numbers may not sum as indicated due to rounding

SOURCES: Ricondo & Associates, Inc., July 2015, based on annual Phoenix-Mesa Gateway Airport operations for 2013 data derived from the radar data from the Airport Noise Monitoring System at Phoenix Sky Harbor International Airport (with terminal on west side) and discussions with Airport Traffic Control Tower personnel regarding anticipated changes associated with the relocation of the passenger terminal (with terminal on east side).
 PREPARED BY: Ricondo & Associates, Inc., November 2015.

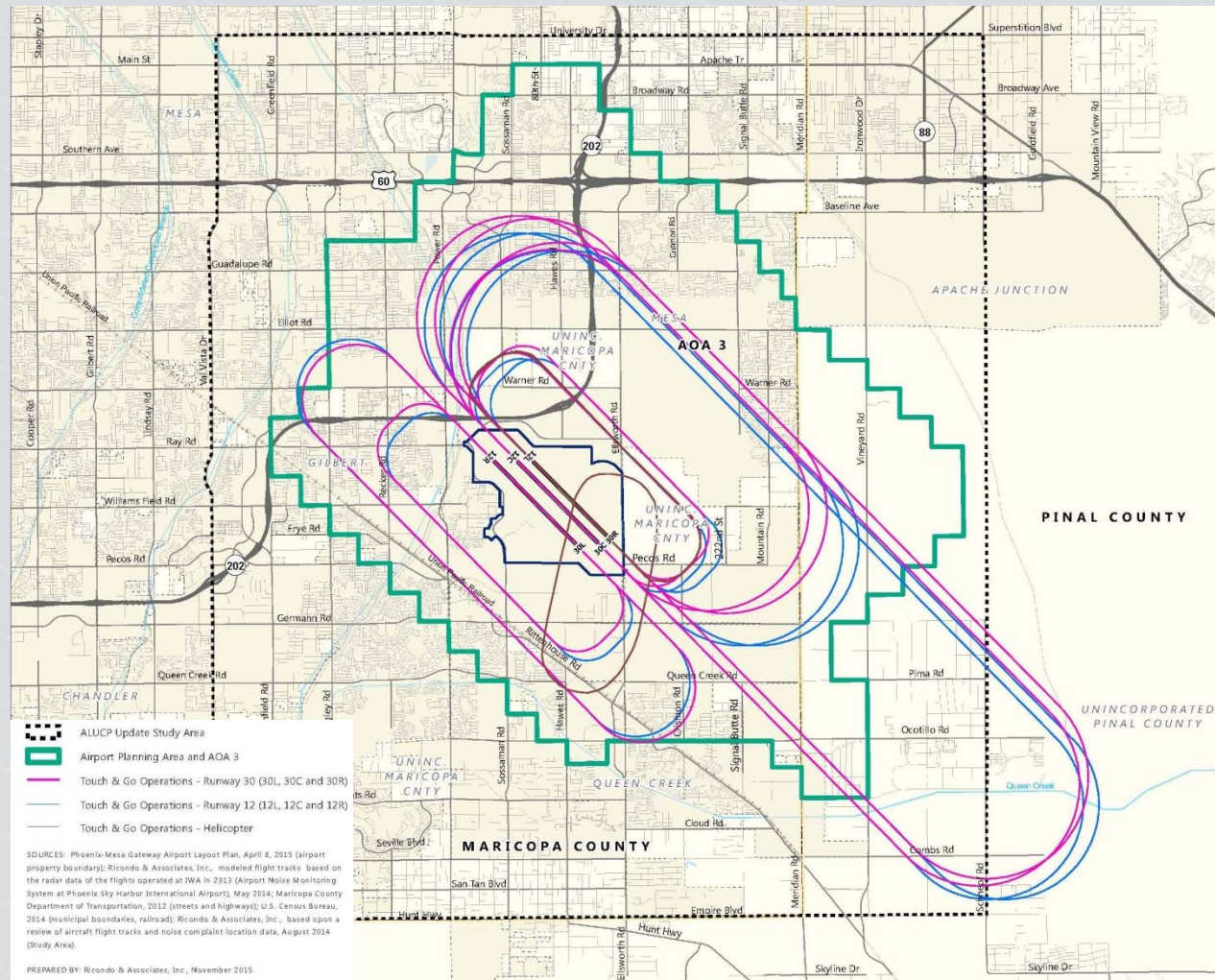
Generalized Arrival Flight Tracks



Generalized Departure Flight Tracks

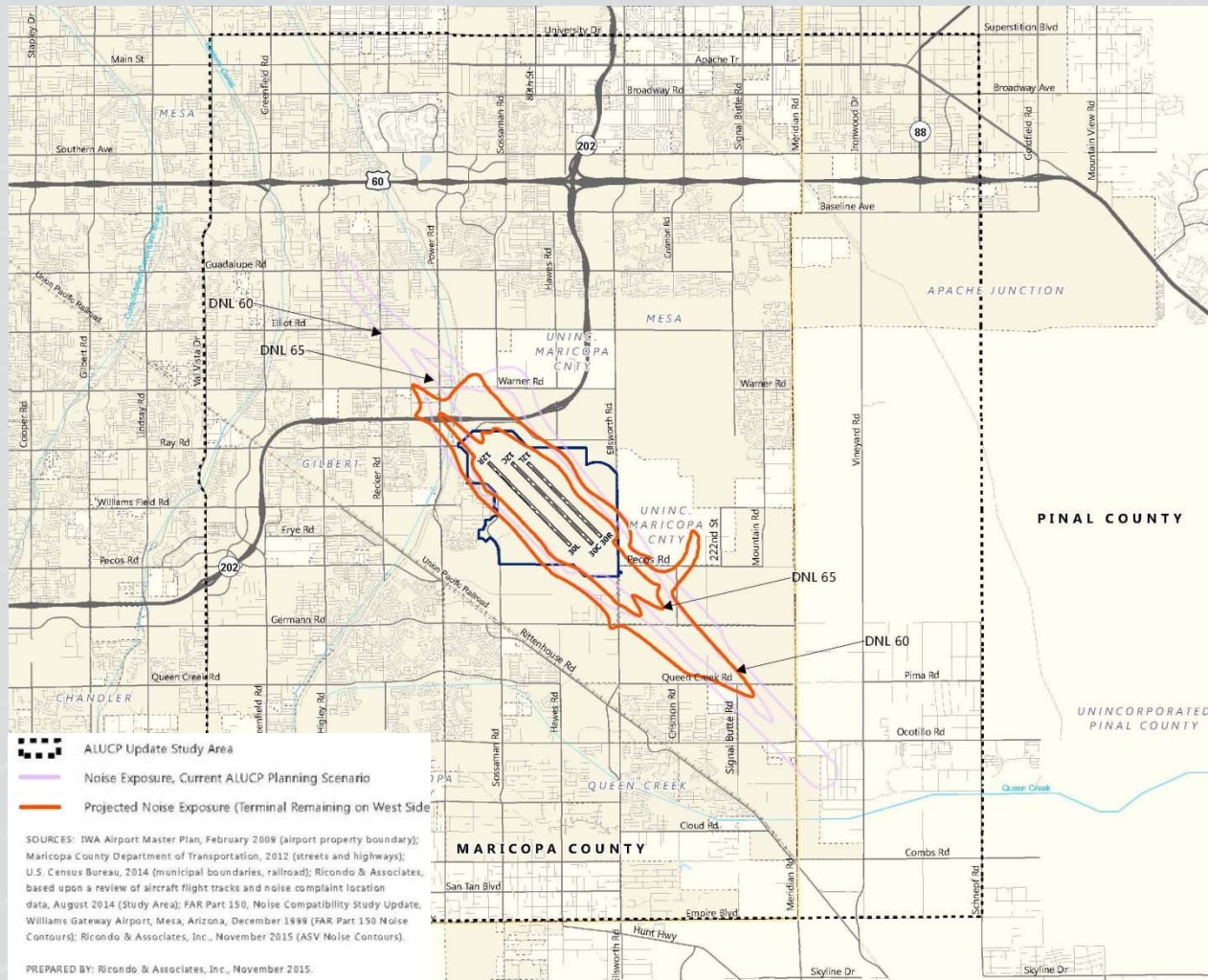


Generalized Touch-and-Go Tracks



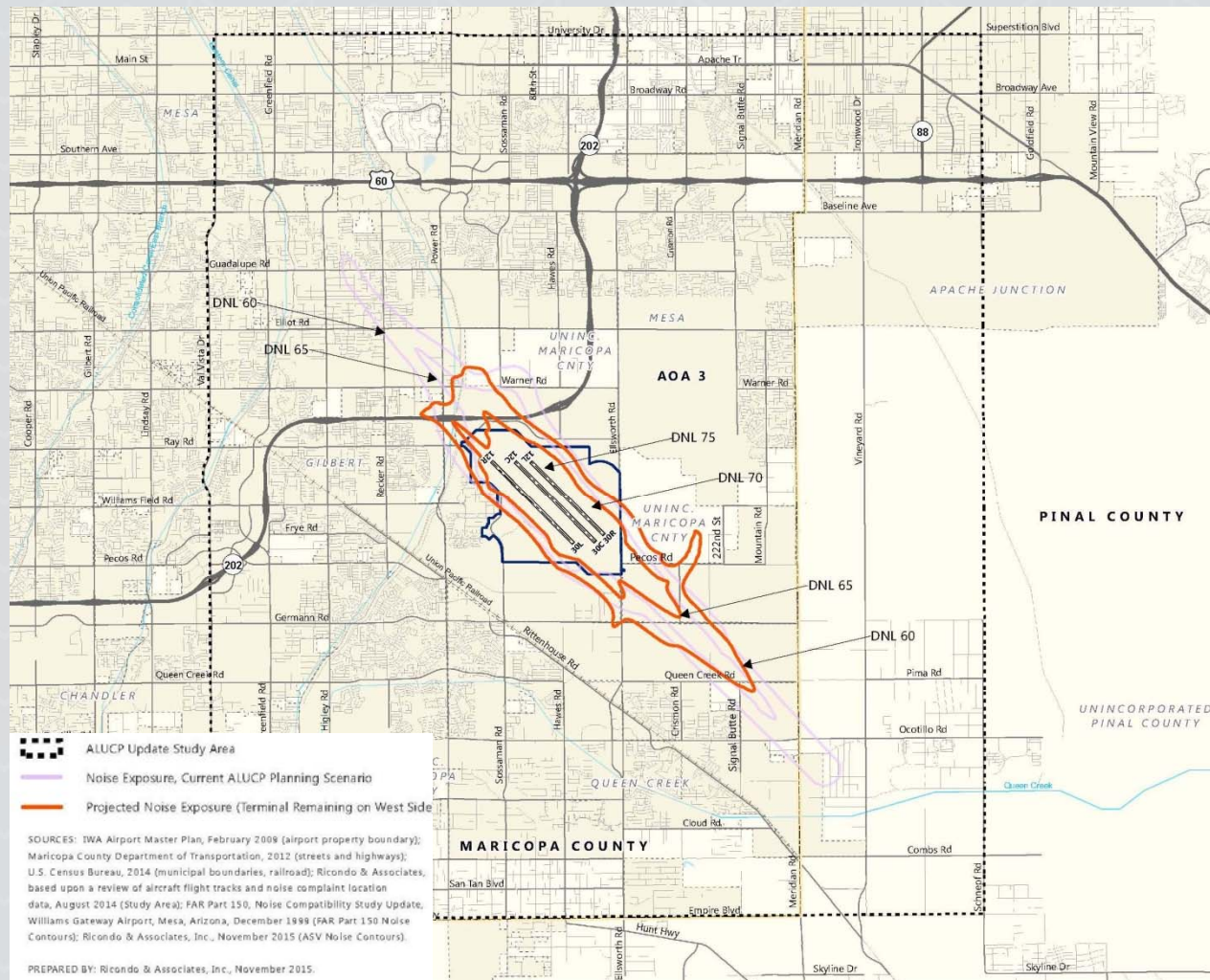


ASV Noise Exposure – Terminal Remains on West Side



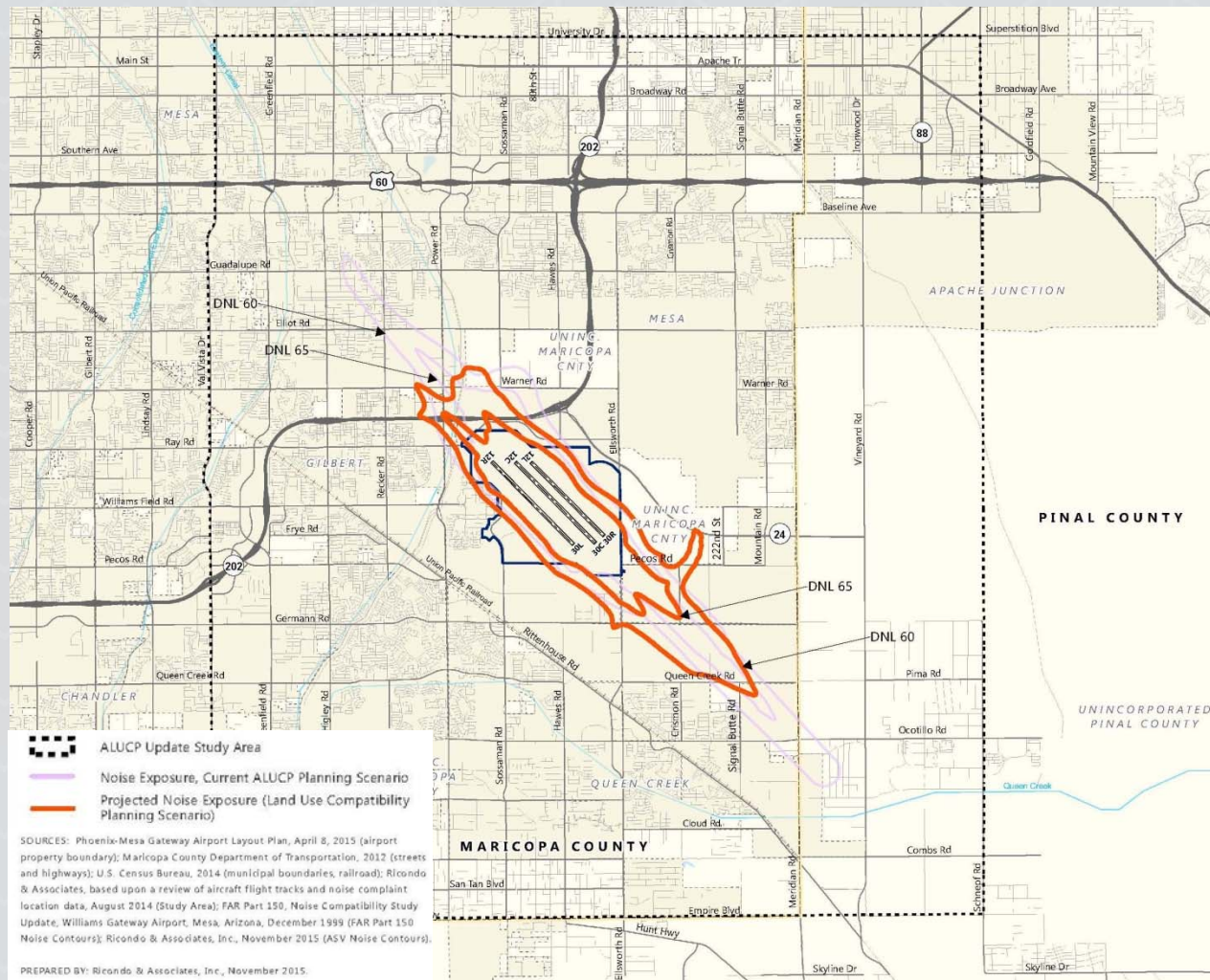


ASV Noise Exposure – Terminal Relocated to East Side





ASV Noise Exposure – Combined Terminal Scenarios







Potential Noise Compatibility Policy Considerations

- Maintain PMGAA policy against new residential in AOA 2 (DNL 60)?
- Consider prohibiting new theaters, performing arts centers, and outdoor dining in AOA 1 (DNL 65)?
- Consider prohibiting new amphitheaters in AOA 1 (DNL 65) and AOA 2 (DNL 60)?
- Consider prohibiting new noise-sensitive institutions in AOA 2 (DNL 60)?
- Is there a need for fair disclosure agreements and covenants for all land uses in AOA 3?



Potential Noise Compatibility Policy Considerations

LAND USE	Overflight Zone/Noise Exposure Range (DNL)		
	AOA 1 65+	AOA 2 60-65**	AOA 3 60-APA
Residential		25 ^{1, 2, 3}	1, 2
Commercial, Office, Service, Transient Lodging			
Hotels, motels	30 ¹	25 ¹	1
Retail; professional, personal services; office	25 ¹	1, 4	1
Auto service stations, repair services	1	1	1
Indoor recreation, amusements, athletic clubs, gyms, spectator events	30 ¹	25 ¹	
Outdoor sports, entertainment, public assembly			1
Educational, Institutional, Public Services			
Hospitals, other health care facilities			1
Education, religious facilities; libraries; museums; clubs; lodges		25 ¹	1
Cemeteries	1	1	1
Industrial	1, 5	1, 5	1
Agricultural			
Animal husbandry, plant nurseries	1	1	1
Crop farming			
Transportation, Communication, Utilities	1	1	1
Recreation, Park, Open Space	1	1	1

LEGEND

	Compatible: Use is allowed.
1, 2, 3, 4, 5	Conditionally Compatible: Use is allowed subject to stated conditions.
25, 30	Conditionally Compatible: Use is allowed subject to Noise Level Reduction.
	Incompatible: Use is not allowed.



Condition may no longer be needed.
Highly sensitive uses; consider restricting.

Outdoor-to-indoor noise level reduction of 25 or 30 decibels must be incorporated into buildings where people live, work, or are otherwise received.

Next Steps

1. Upcoming items
 - a. Considerations for Airport Planning Area (APA) boundary adjustments
 - b. Potential airspace protection and flight safety policies
 - c. Recommended Airport Overflight Area (AOA) boundaries and noise policies
2. Public Information Meeting #3, mid to late February 2016
3. Prepare draft, updated ALUCP, March-April 2016