



THE OHIO STATE UNIVERSITY

AIRPORT

PUBLIC MEETING 2

Airport Master Plan Update

March 2019





WELCOME





Meeting Purpose/Agenda



- Overview & update
- Activity forecast
- Facility requirements & alternatives
 - Runways & taxiways
 - Terminal area
- Environmental considerations
- Next steps
- Comments, questions





- One of the nation's premier university-owned & operated general aviation facilities
 - Less than 30 university airports nationwide
 - Only 3 owned by tier-1 institutions
- A learning laboratory supporting interdisciplinary learning, discovery, engagement
- Contributes to economic vitality of central Ohio





MASTER PLAN MISSION:

How do we modernize the airport to enhance the student experience, aerospace research & the central Ohio region?





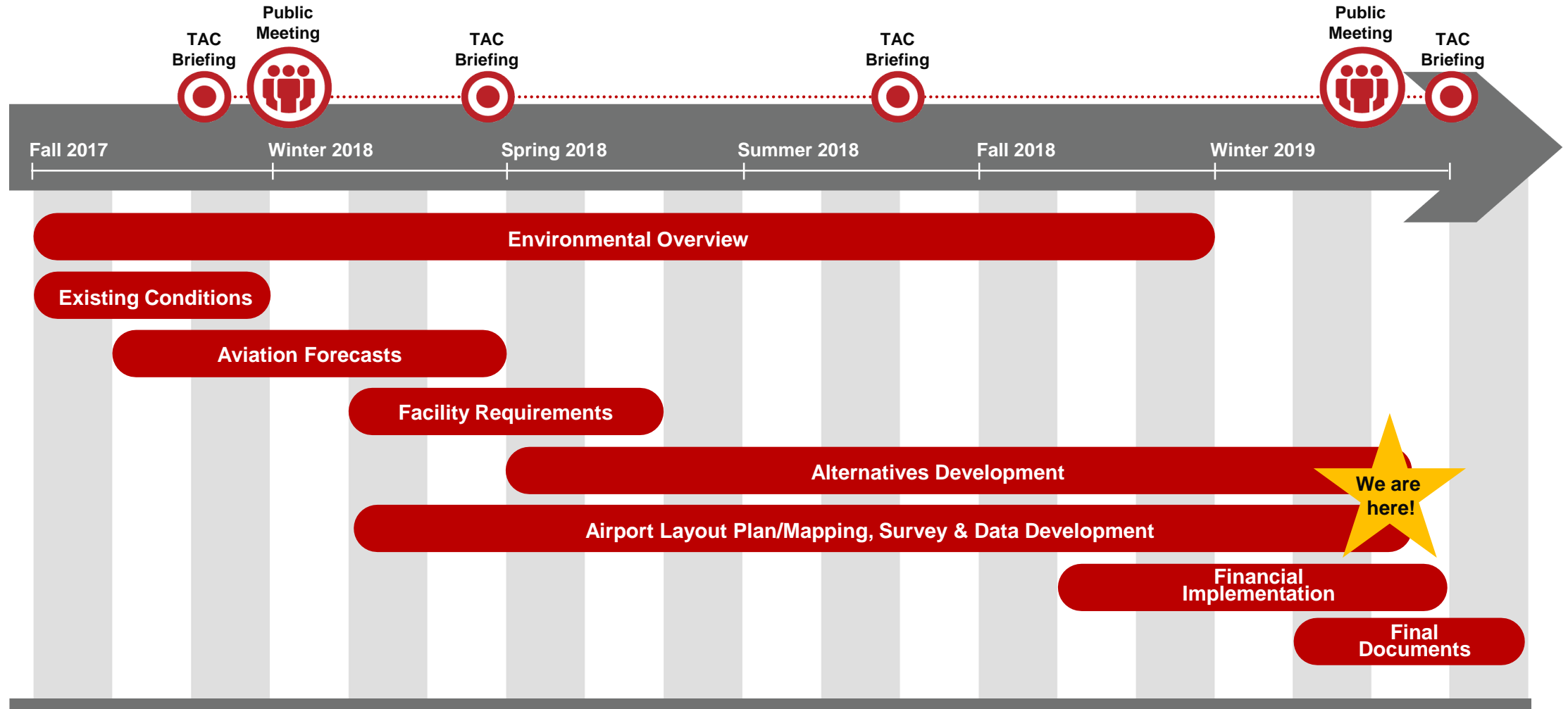
Airport Overview





Airport Study Area





TAC = Technical Advisory Committee



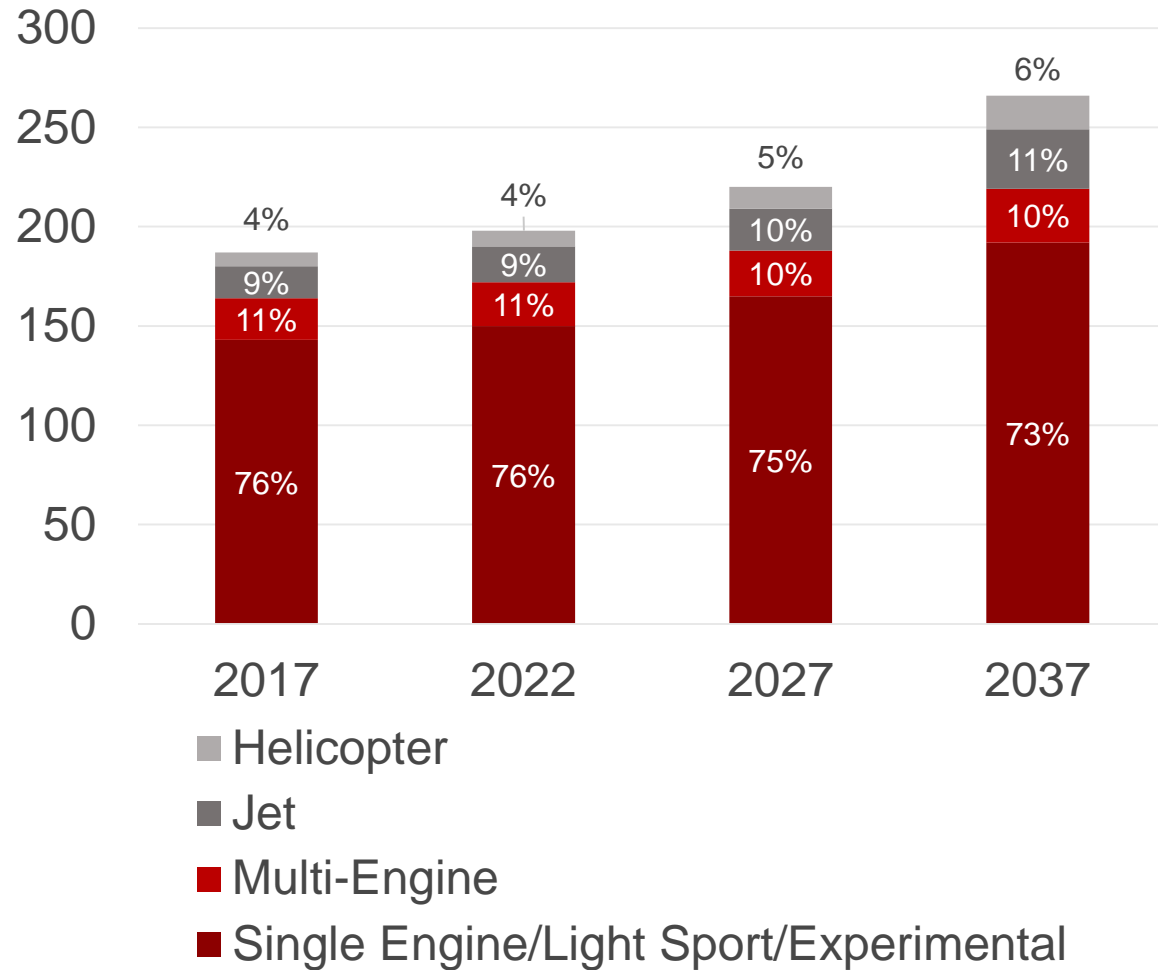


ACTIVITY FORECAST



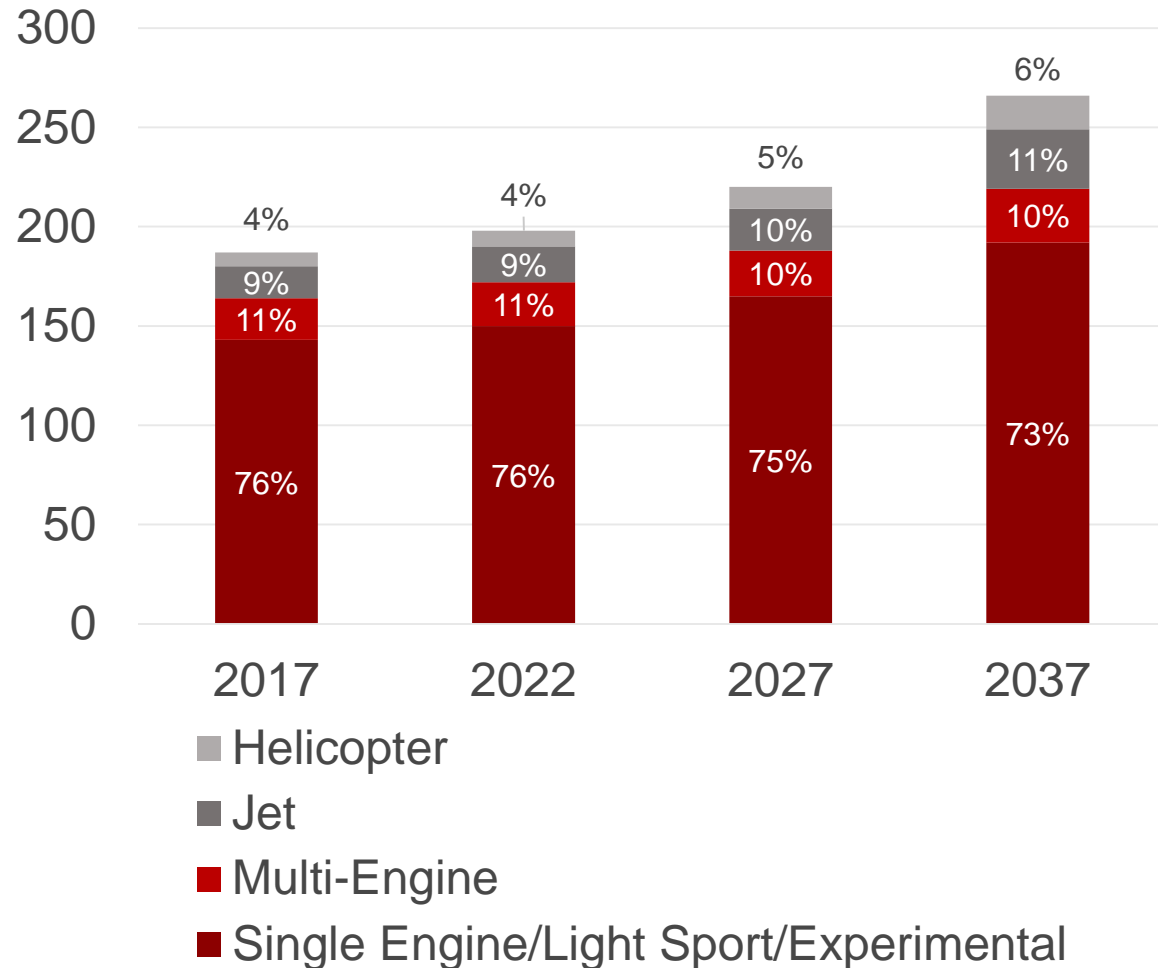


Based Aircraft

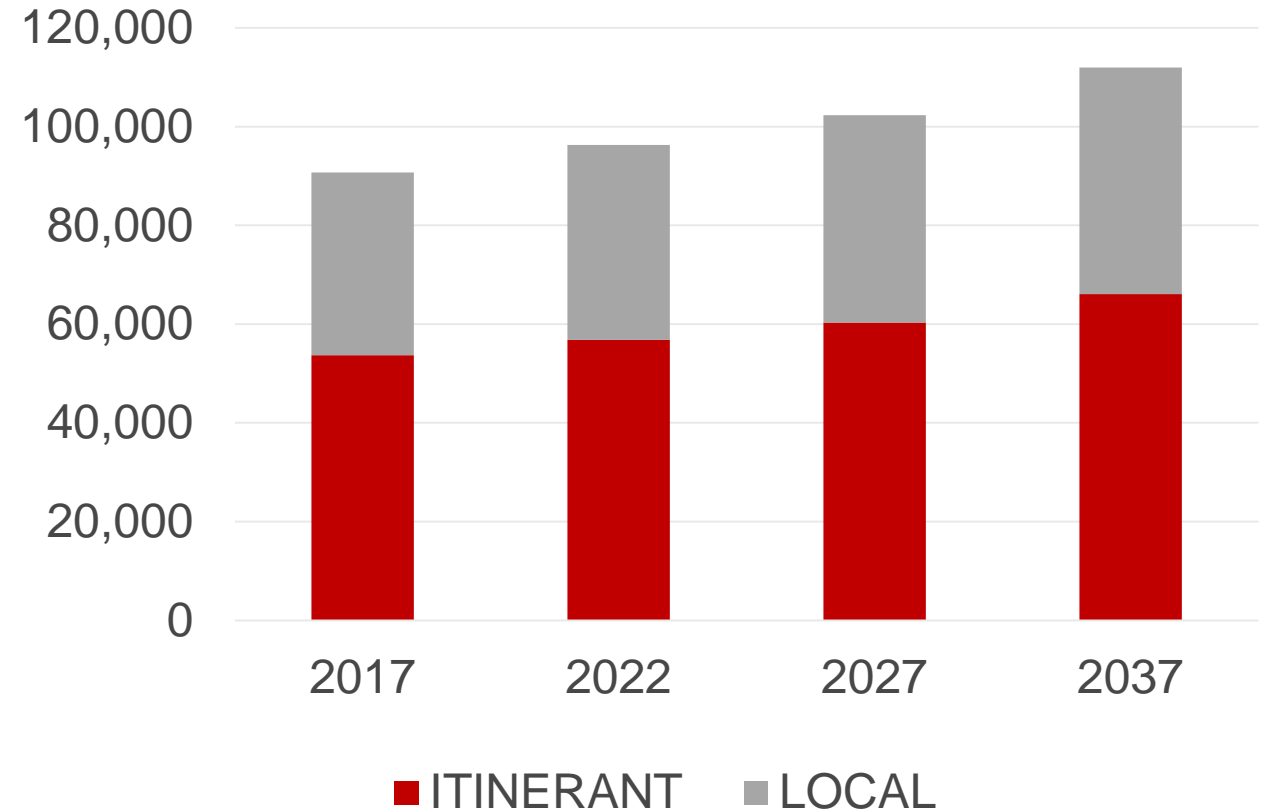




Based Aircraft



Operations





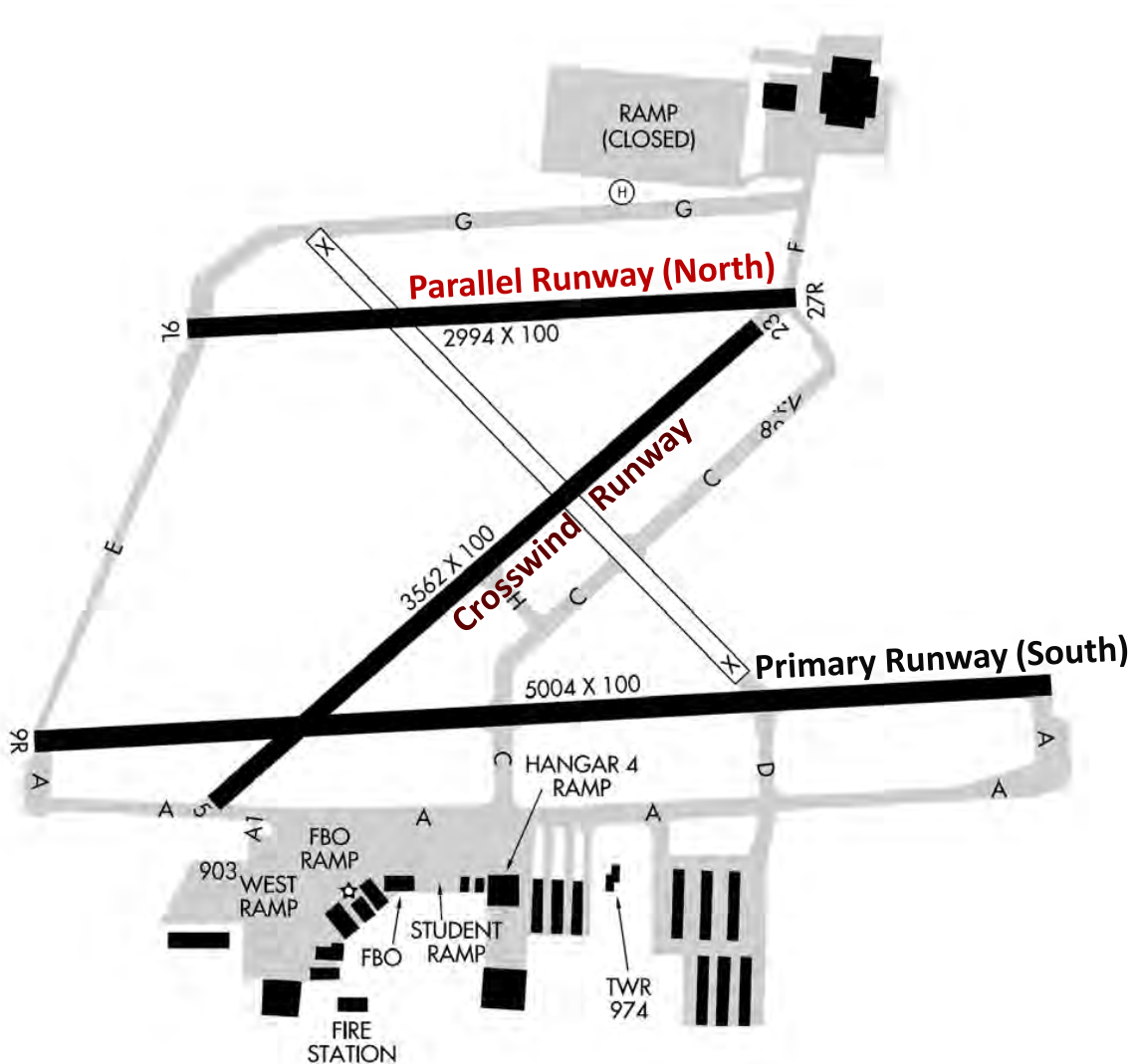
FACILITY REQUIREMENTS & ALTERNATIVES





- **Ensure safety and security**
- **Meet customer needs with quality service**
- Focus on all general aviation needs with emphasis on students
- Be mindful of airport impact on neighborhoods
- Maintain FAA Part 139 standards & all airport design requirements
- Be cost effective





Parallel Runway (North)

(Runway 9L-27R)

A-II (e.g. Pilatus PC-12)

2,994 x 100 feet



Crosswind Runway

(Runway 5-23)

B-I (small) (e.g. Cessna CJ1)

3,562 x 100 feet



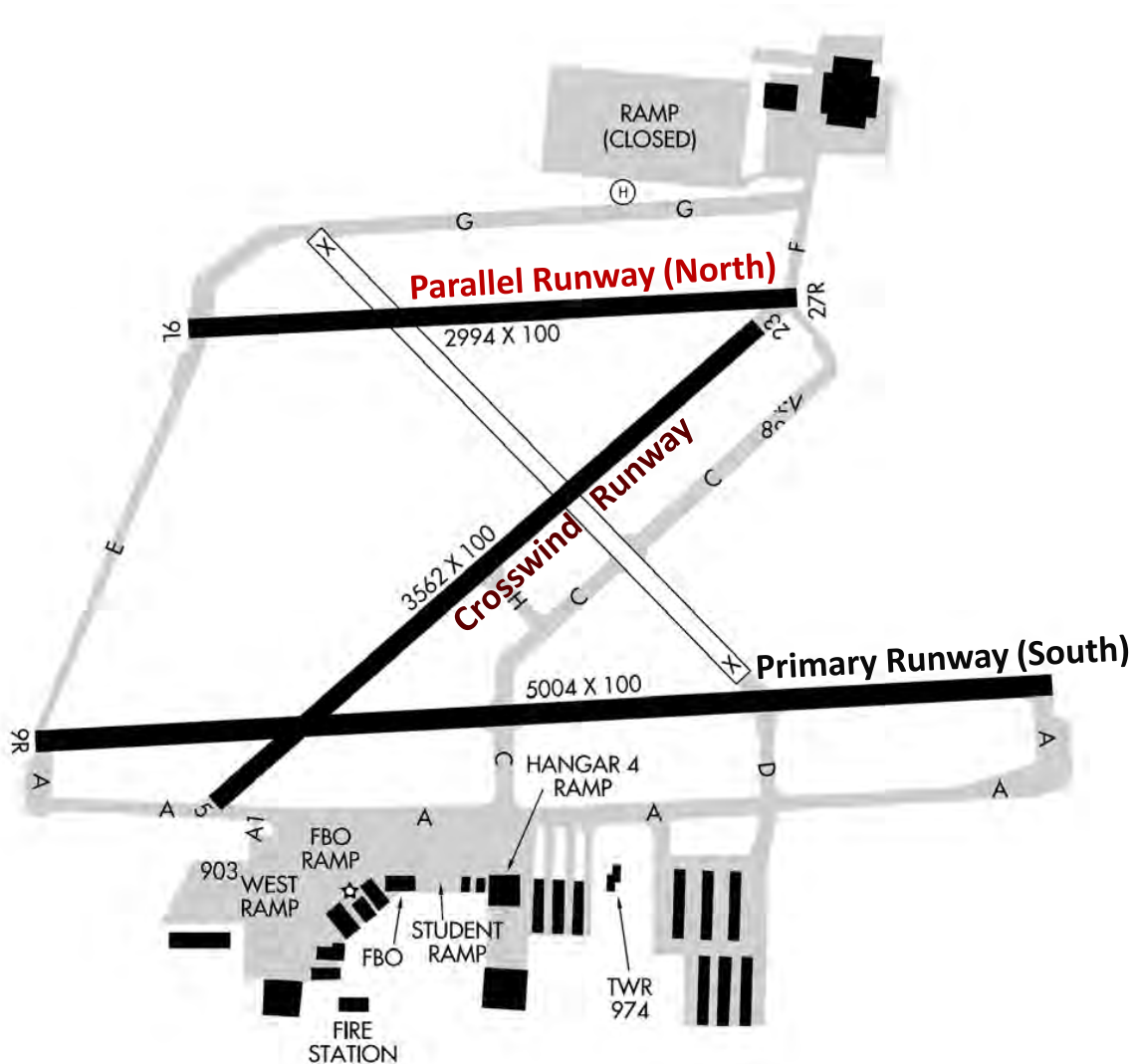
Primary Runway (South)

(Runway 9R-27L)

C/D-II (e.g. Gulfstream 450)

5,004 x 100 feet





RUNWAY LENGTH REQUIREMENTS

Small aircraft - 12,500 lbs. or less

100% Less than 10 passengers	4,000
100% 10 or more passengers	4,250

Large Aircraft - 60,000 pounds or less

75% at 60% useful load	5,405
75% at 90% useful load	7,000
100% at 60% useful load	5,620
100% at 90% useful load	8,320

Source: AC 150/5325-4B, Runway Length Requirements for Airport Design

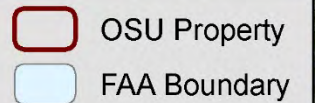


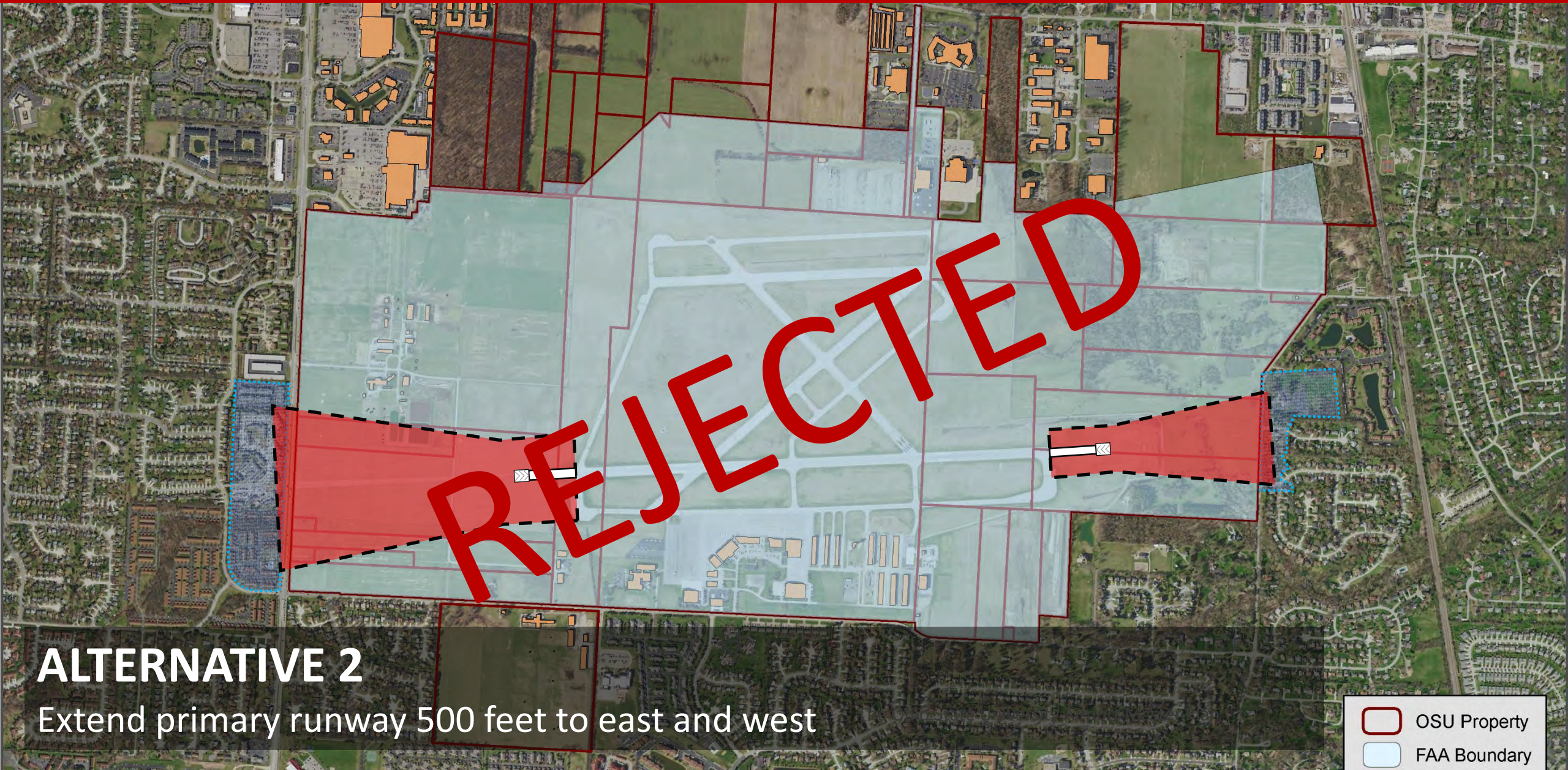


REJECTED

ALTERNATIVE 1

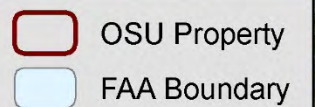
Extend primary runway 1000 feet to the east

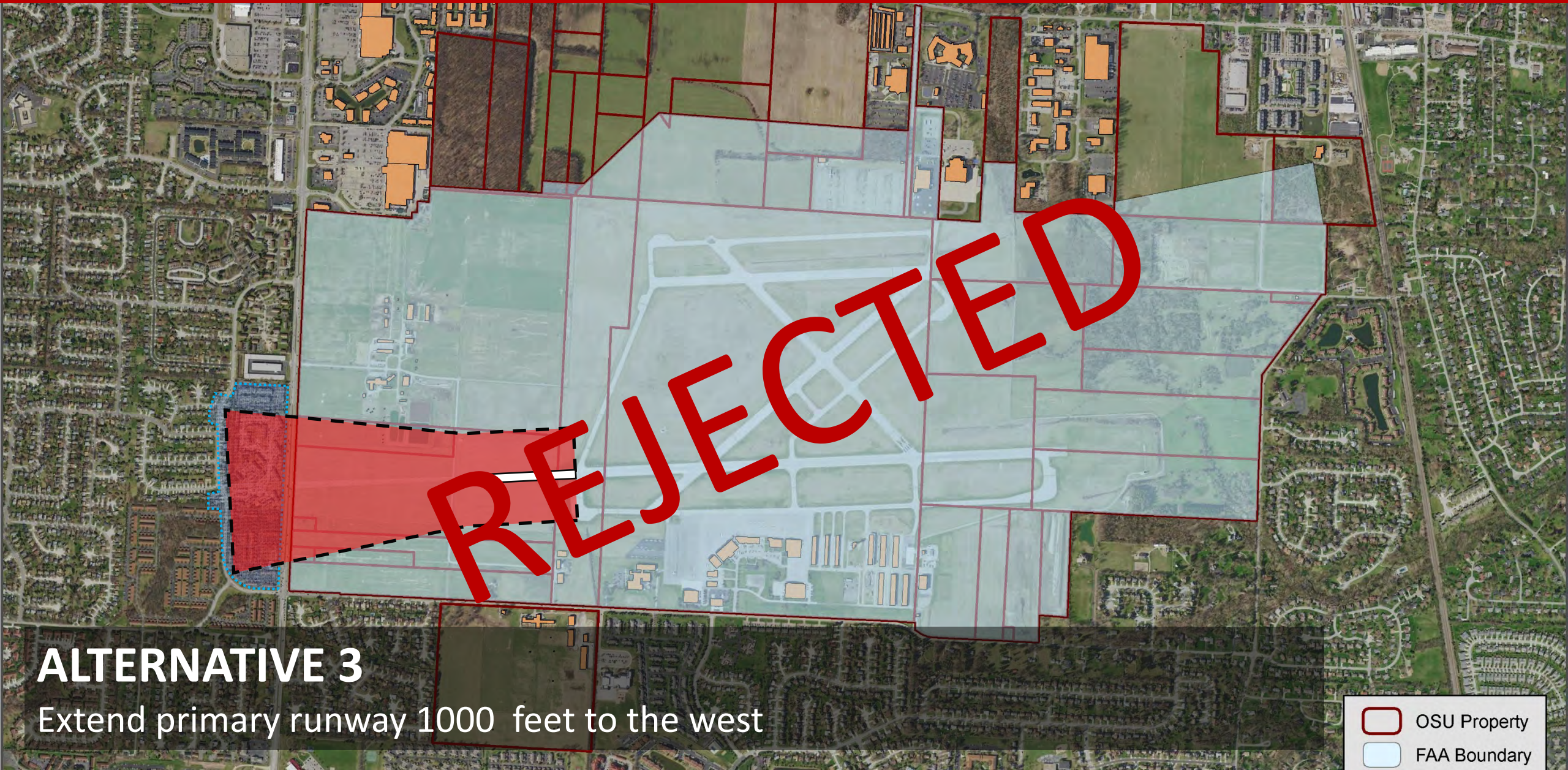




ALTERNATIVE 2

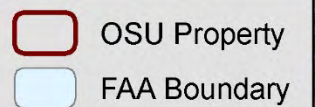
Extend primary runway 500 feet to east and west





ALTERNATIVE 3

Extend primary runway 1000 feet to the west



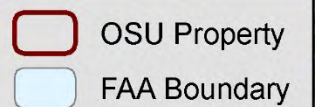


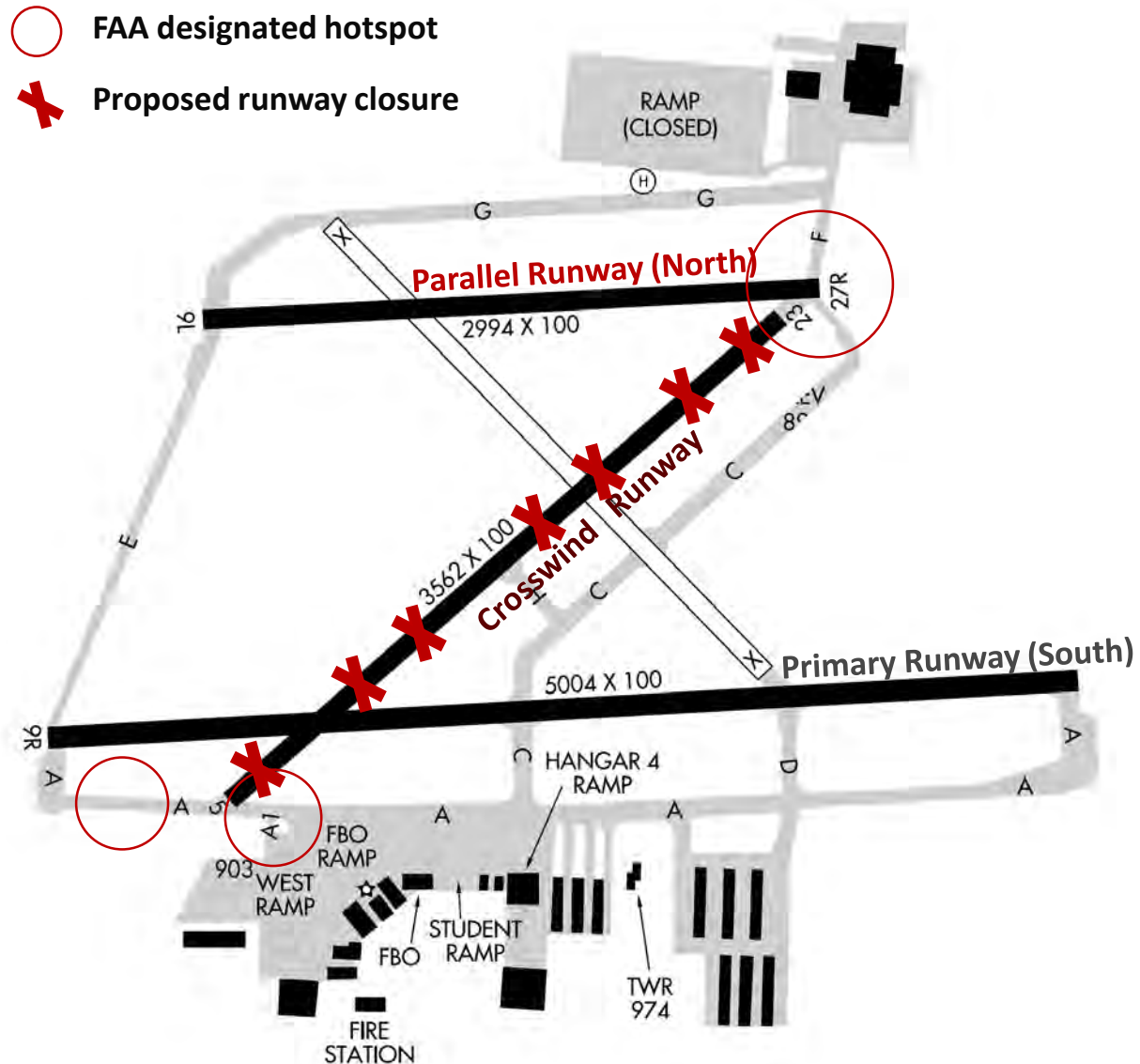
Preferred Runway Alternative



ALTERNATIVE 4

Extend North Runway 1,306 feet east and 1,700 feet west

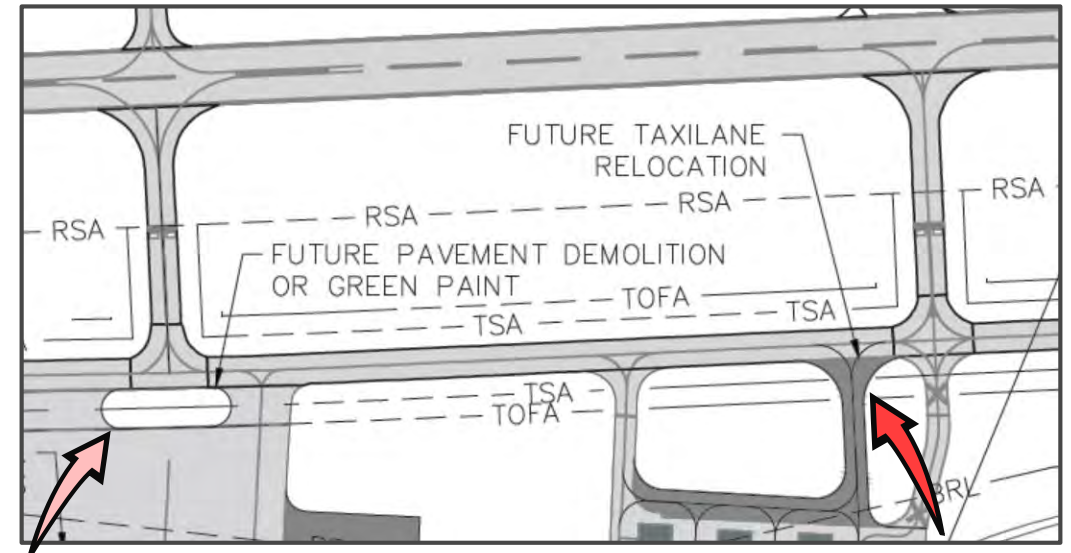
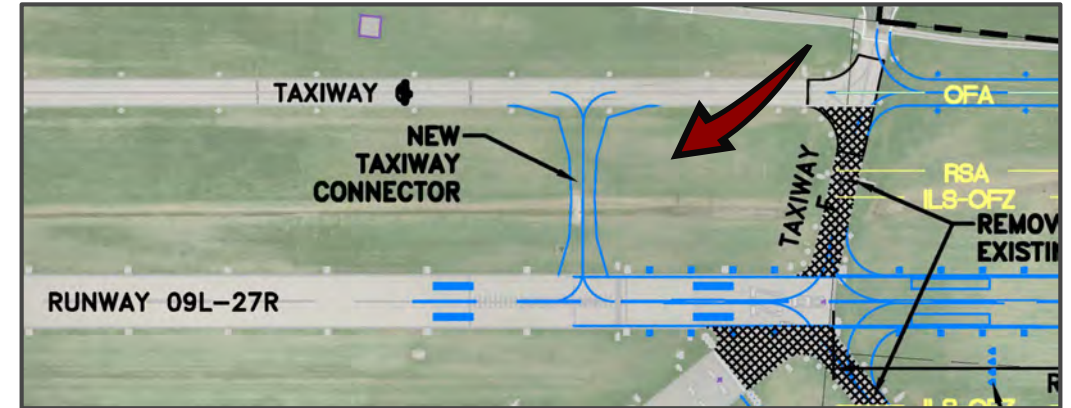
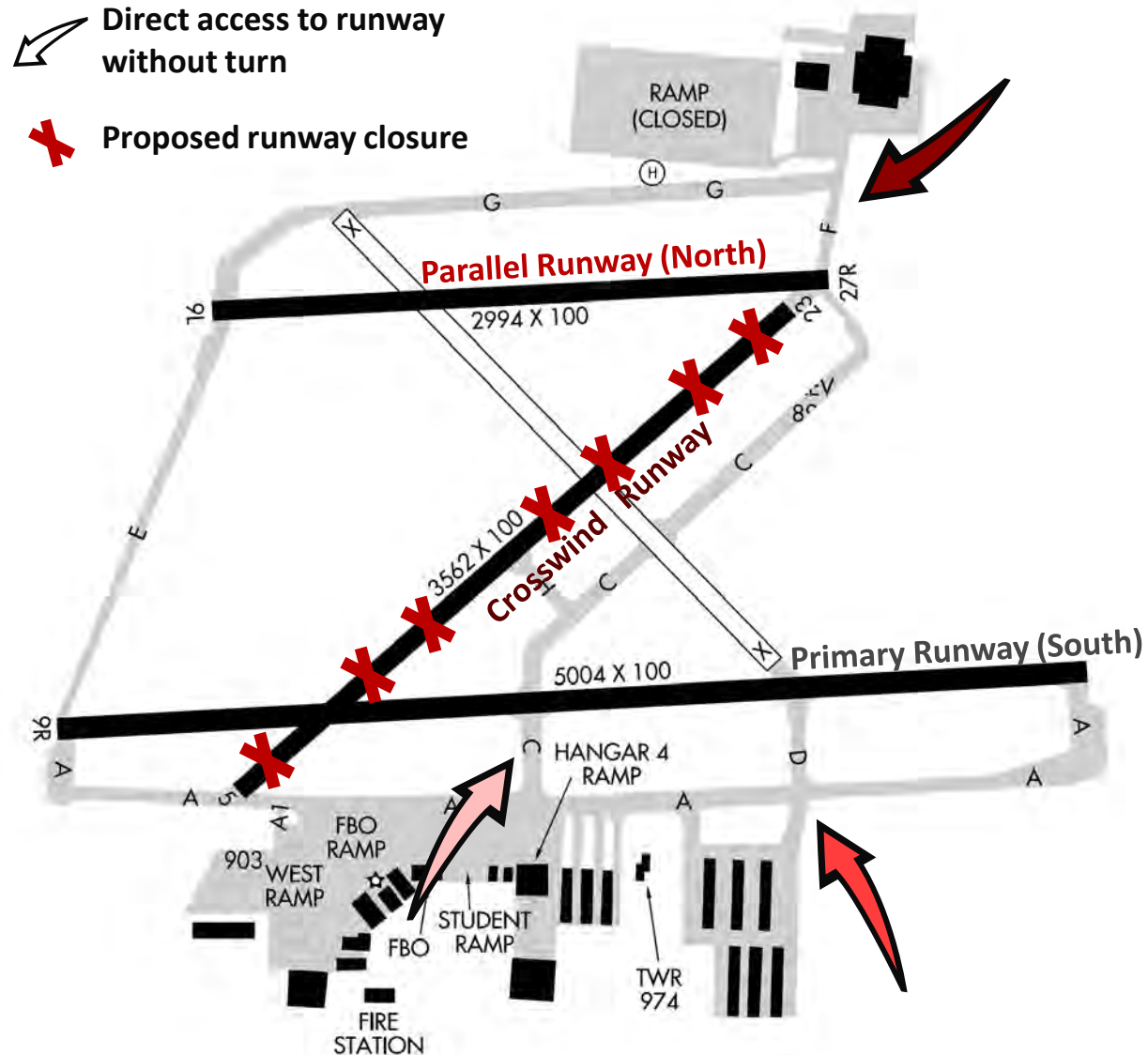




Runway	Current Usage
Primary Runway (South)	
09R	24%
27L	50%
Parallel Runway (North)	
09L	7%
27R	14%
Crosswind Runway	
5	1%
23	3%
Source: CMH radar sample of 40% of operations	



Preferred Taxiway Alternatives

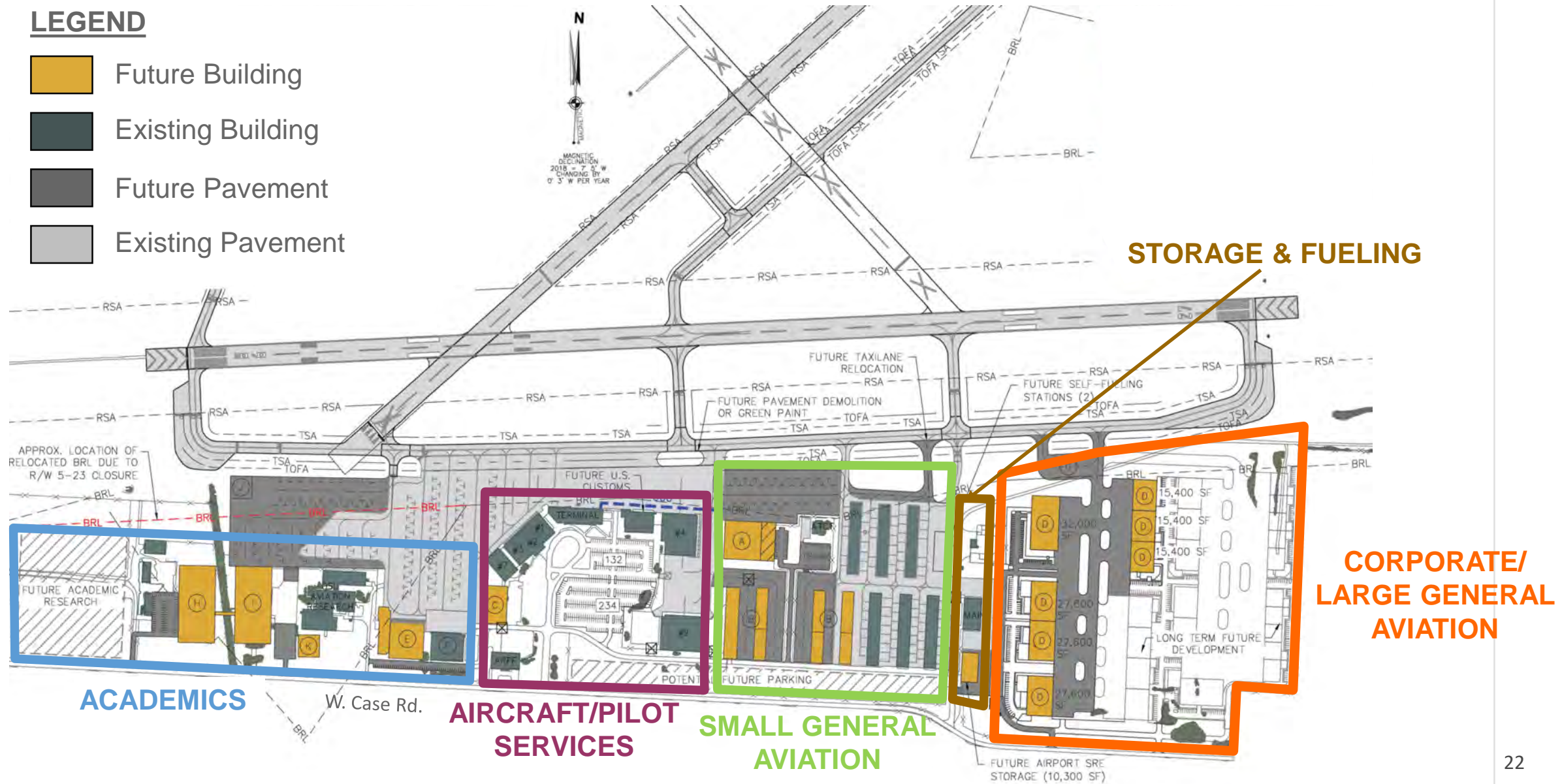




Preferred Terminal Area Alternative

LEGEND

-  Future Building
-  Existing Building
-  Future Pavement
-  Existing Pavement





Additional Facility Improvements

- Upgrade airfield marking & lighting
- Compass calibration pad
- Completed perimeter road within fence
- Security/wildlife fencing





ENVIRONMENTAL OVERVIEW





Potential environmental considerations associated with airport improvements*

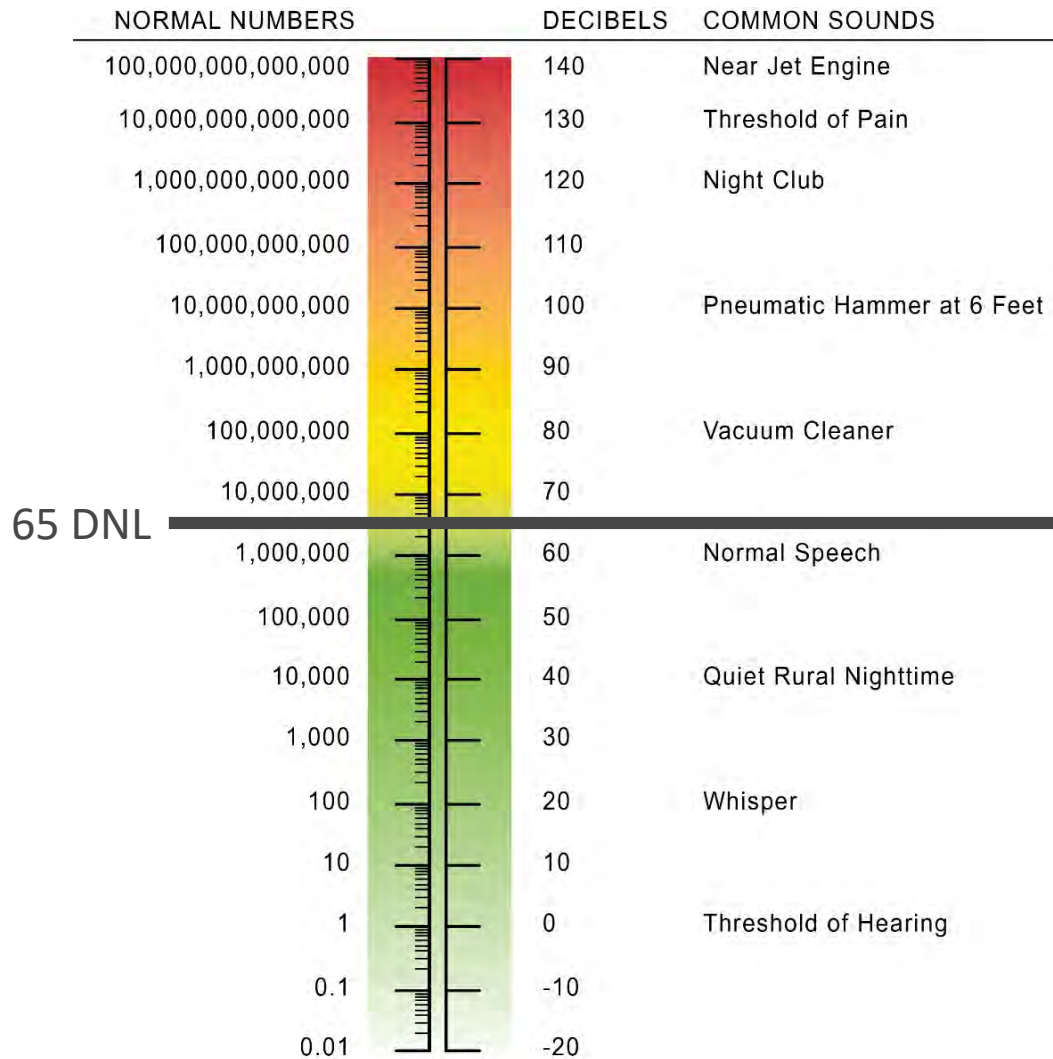
- Water resources
- Historical structures/archaeology
- Noise/social impacts

*Detailed environmental studies will be completed for individual projects as needed, should they move forward





Decibel Scale



- Noise is unwanted sound
- By its very nature it is subjective
- Music to my ears may be noise to yours
- Sound levels are measured, modeled and related to social surveys to assess potential for annoyance
- 65 DNL is the FAA significance threshold for aircraft noise exposure





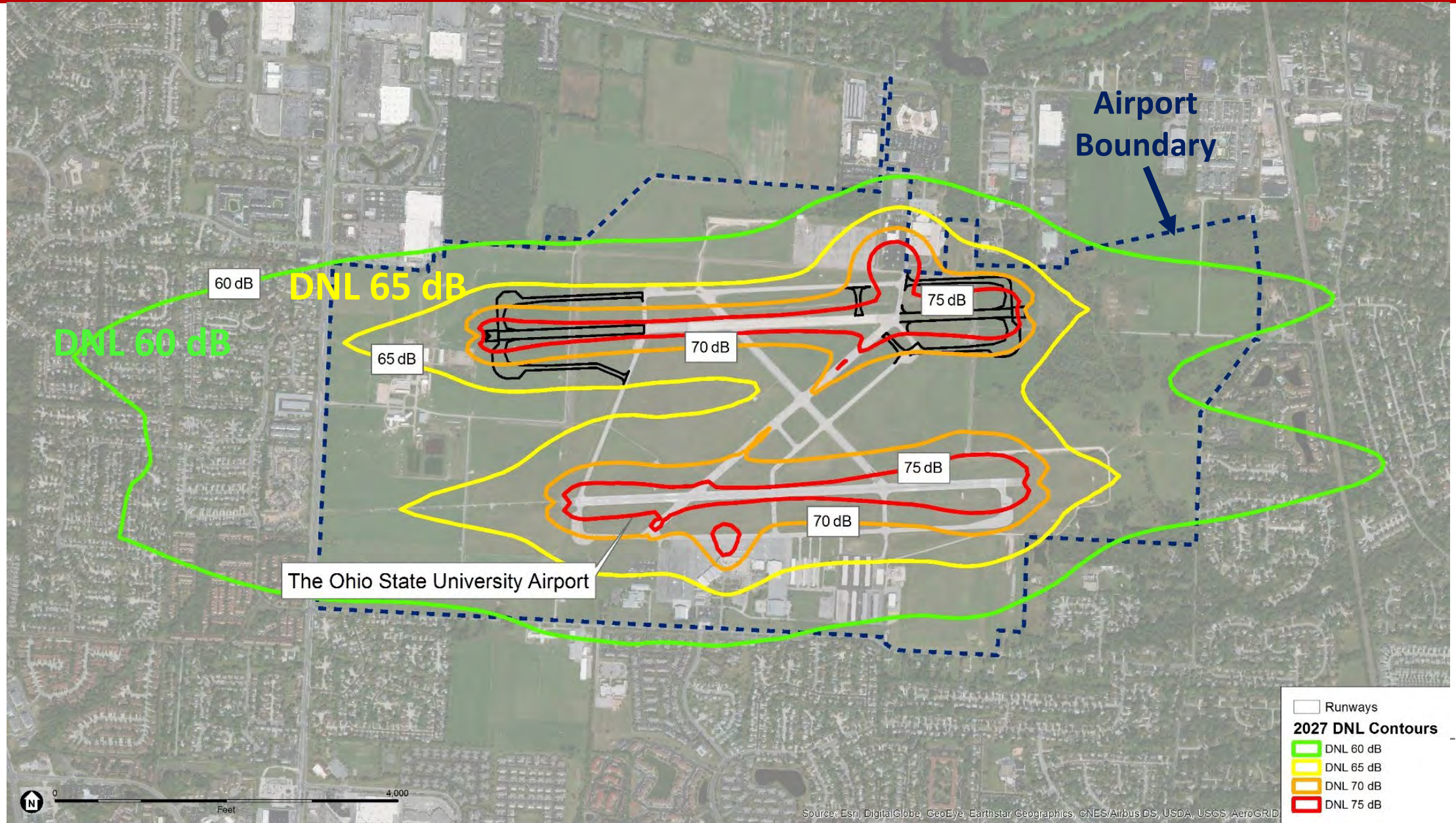
Day-Night Average Sound Level (DNL)

- 24-hour time weighted energy average noise level based on A-weighted decibels (dBA)
- Noise occurring 10 p.m. to 7 a.m. is penalized by 10 dB to account for higher noise sensitivity and expected decrease in background levels at night
- FAA requires the use of DNL for airport noise assessments
- Average annual day aircraft noise exposure is calculated over a broad area then depicted using contour lines of equal noise levels



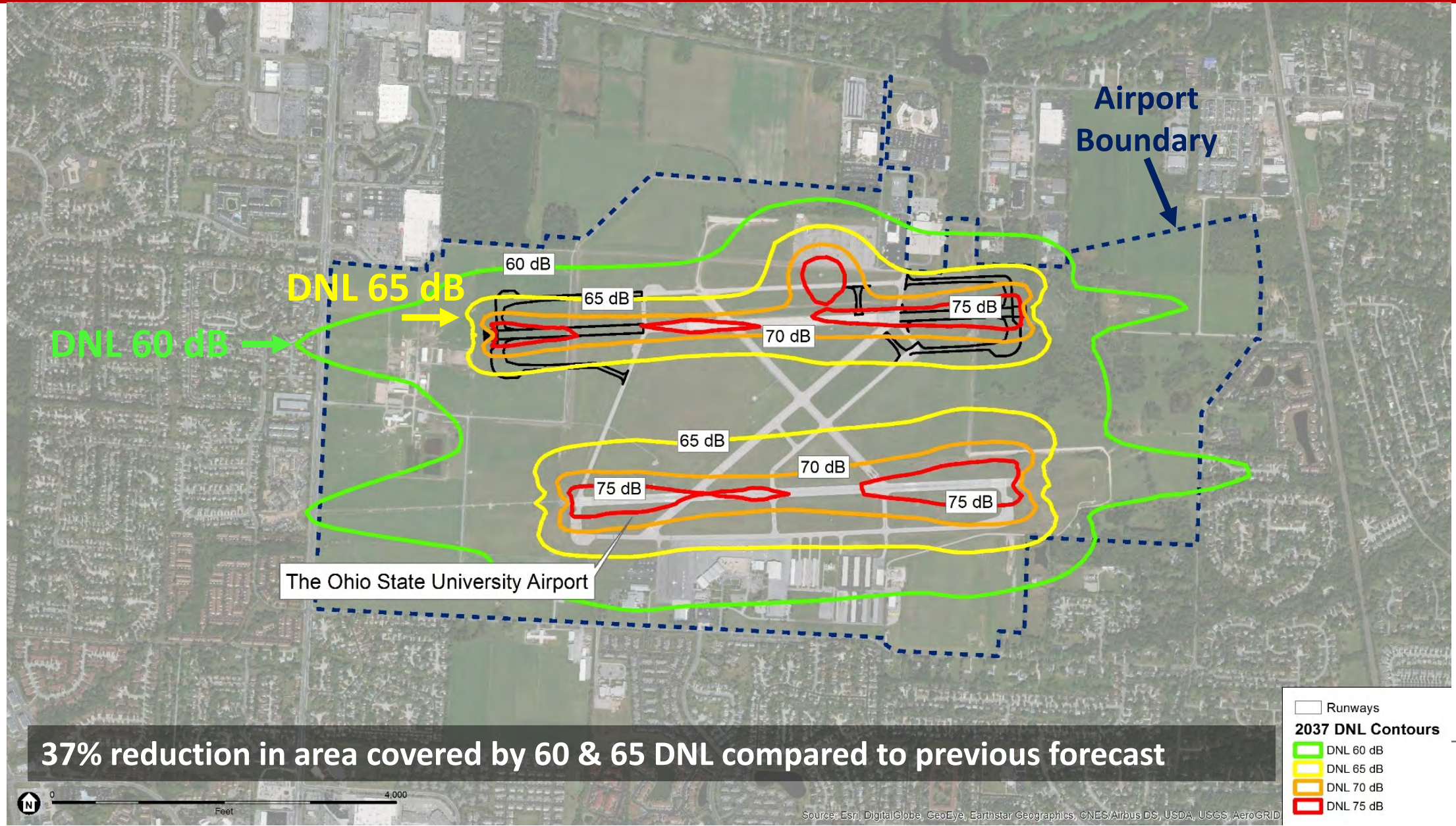


Forecasted 2027 Noise Contours from 2009





Current Forecast Noise Contours (2037)





SUMMARY & NEXT STEPS





- Airport is a learning laboratory
- Corporate aircraft usage makes state-of-the-art airfield facilities possible
- Reduction in runways will improve safety
- Proposed airport improvements are similar to previous
- Aircraft have gotten quieter historically
- Future aircraft DNL noise remains predominantly within airport boundary





1. Review your comments
(due March 26th)
2. Finalize master plan chapters and circulate
(2 week comment period)
3. Submit to FAA for review; respond to comments
4. University Board of Trustees review & adoption
5. FAA acceptance





QUESTIONS, DISCUSSION

Marie Keister, Engage Public Affairs





- Raise hands to indicate you have a question or comment
- Be brief so we can get to as many people as possible
- Please be respectful and polite





THE OHIO STATE UNIVERSITY

AIRPORT

THANK YOU

For more information visit: osuairport.org/airport-facilities/master-plan

