

Airport Noise Zone Update Stakeholder Advisory Committee

Meeting #3

Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall)

September 24, 2025
6:00 PM – 8:00 PM

Welcome to BWI Marshall

Safety Briefing

- Follow emergency exits
- Call 911
- Assist those who need assistance
- Be sure to take a head count during the emergency event
- Nearest AED – Hallway by restrooms
- Nearest fire extinguisher – Hallway by restrooms
- Accountability Site: Parking lot outside of front door of Building 991
- Always report any hazards in the meeting room



Source: MDOT MAA, Office of Planning, 2019

Agenda

- » Welcome and Introductions
- » SAC Meeting #2 Recap
- » ANZ Contours and Land Use
- » Supplemental Noise Contours
- » Noise Abatement Plan (NAP)
- » ANZ Certification
- » Schedule and Resources

Meeting Facilitation

The meeting facilitator is responsible for ensuring SAC meetings:

- Run efficiently, respectfully, and effectively;
- Focus on the published agenda;
- Provide appropriate opportunities for all members to participate;
- Result in consensus conclusions to the maximum extent feasible;
- Are documented through preparation of accurate meeting notes.

Introductions

- Maryland Aviation Administration (MAA) representatives
- Stakeholder Advisory Committee (SAC) members
- Consultant team

SAC Meeting #2 Recap

ANZ Update Scope and Process

- Form and engage with Stakeholder Advisory Committee (SAC)
- Prepare base year, 5-year, 10-year forecast noise contours
- Compile ANZ (composite of the three contour sets)
- Conduct land use inventory within ANZ
- Review existing Noise Abatement Plan (NAP)
- Conduct public hearing/workshop
- Update Code of Maryland Regulations (COMAR)

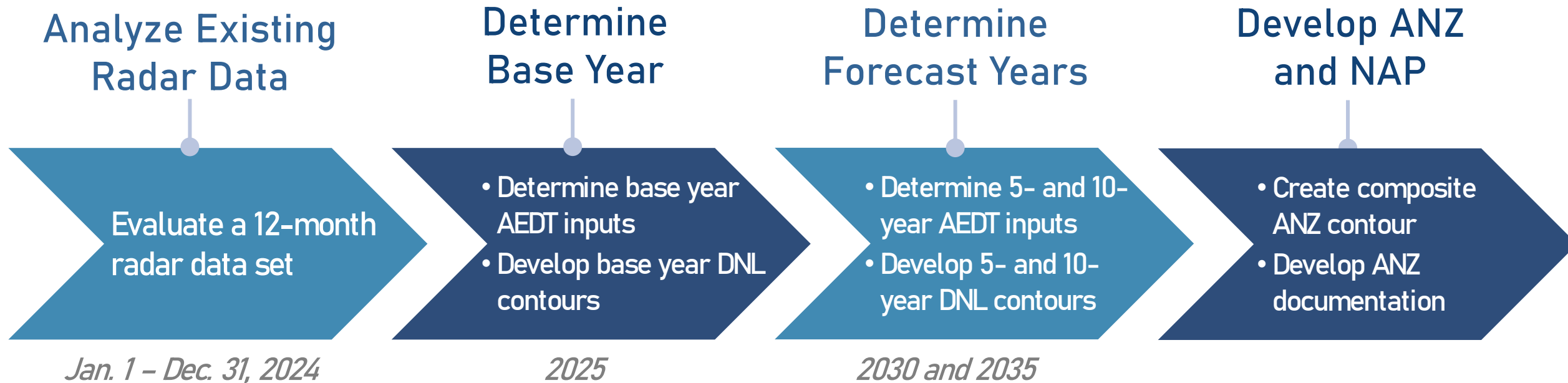


ANZ Study Update

The ANZ update process includes status review of the NAP.

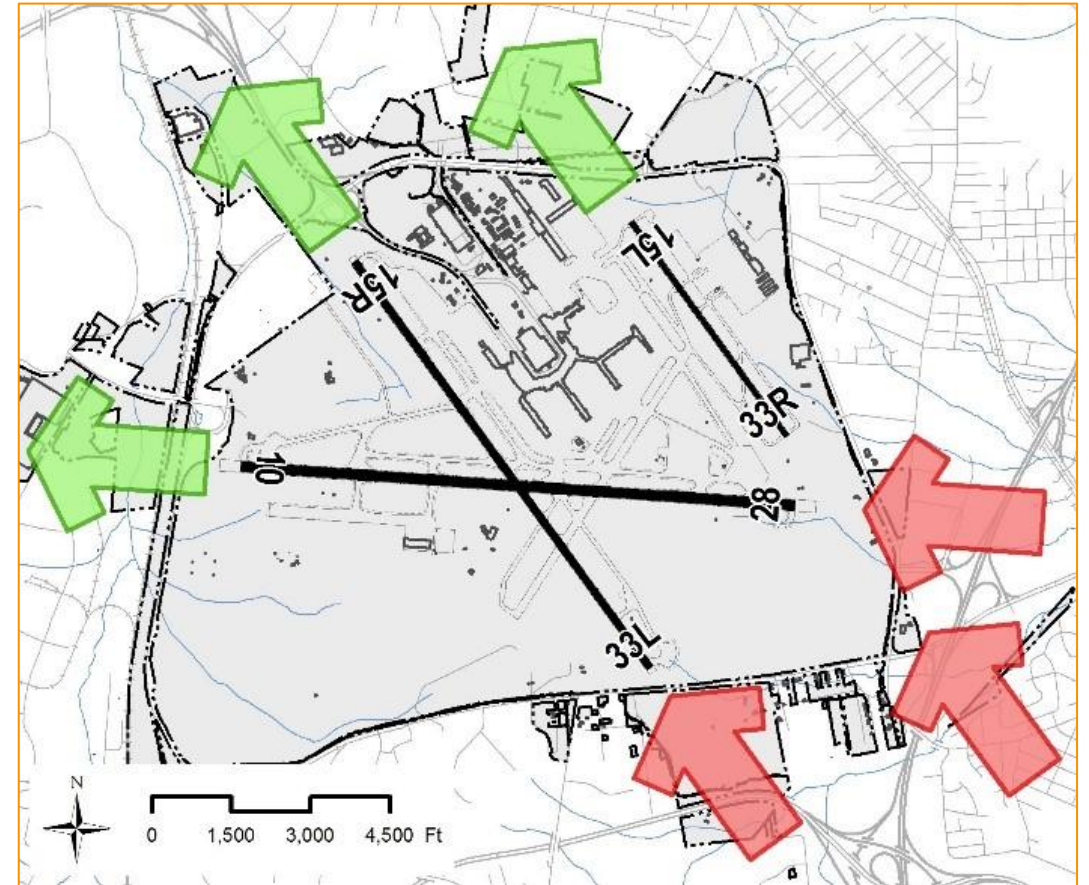
Airport Noise Zone (ANZ)	Noise Abatement Plan (NAP)
Provides the means to identify and control incompatible land development around BW Marshall Is a composite of the farthest extents of the annual Day-Night Average (DNL or Ldn) contours for each of the study years (2025 base, 2030 and 2035 forecast)	Prescribes measures to monitor, reduce, and/or eliminate incompatible land use areas within the ANZ to the extent possible while maintaining efficient airport operations

ANZ Noise Modeling Process



Noise Model Inputs Summary

- Airport Layouts
 - 2025 (base year), 2030 (five-year), 2035 No Build, 2035 Full Build
- Operations
 - Counts, fleet mix, runway use, flight tracks, runups
- Weather and Terrain



SAC Responsibilities

- **Contribute to study inputs**
 - Discussion and feedback at SAC meetings
 - Provide input, advice, and guidance related to Noise Abatement Plan
 - Understand the ANZ effects on stakeholders.
- **Review modeling assumptions**
 - Base year and forecasts
- **Review analysis results**
 - Base, 5-year, and 10-year contours
- **Review documentation**
 - NAP and Draft ANZ document
- **Provide two-way communication**
 - Share information with your constituents, neighbors and organizations
 - Spread the word about future opportunities for public feedback

MAA will respect and consider SAC input but retains overall responsibility for the BWI Marshall ANZ update.

ANZ Contours and Land Use

Land Use Inventory and Compatibility

- Assemble and review land use, zoning, and population data.
- Identify local land use policies referring to compatibility with airport operations.
- Create existing land-use maps.
- Identify noise-sensitive sites (churches, schools, etc.)
- Following contour development, survey and confirm use within the 65 DNL contour.

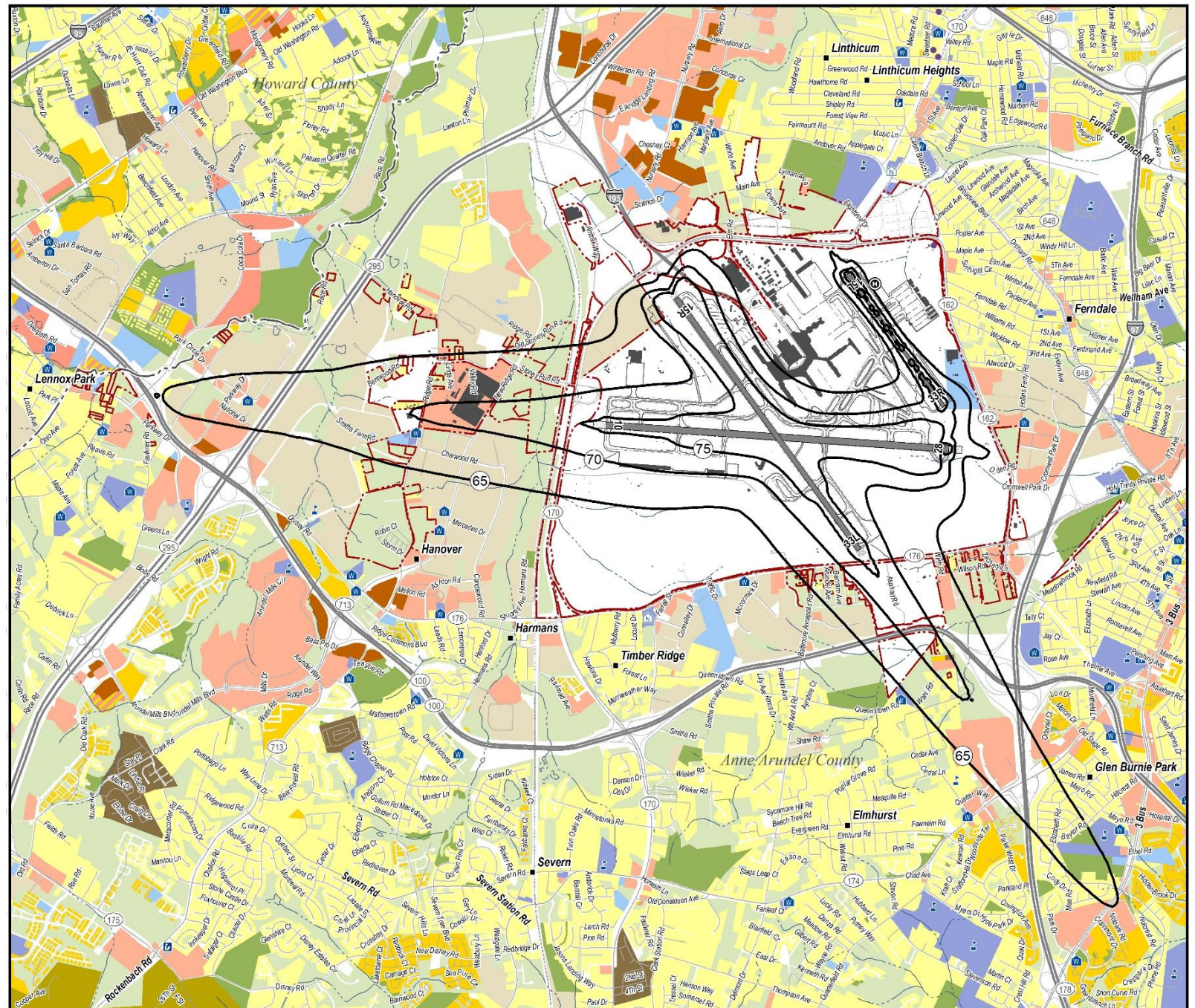
Per 11.03.03.03 in COMAR, all land uses are compatible with aircraft noise exposure for DNL less than 65 dB.

Noise Contours

- Base Year Noise Contour
- Forecast Contours
 - 2030 Forecast Noise Contour
 - 2035 Full Build Forecast Noise Contour
- 2025 ANZ Noise Contour
- Supplemental Noise Contours

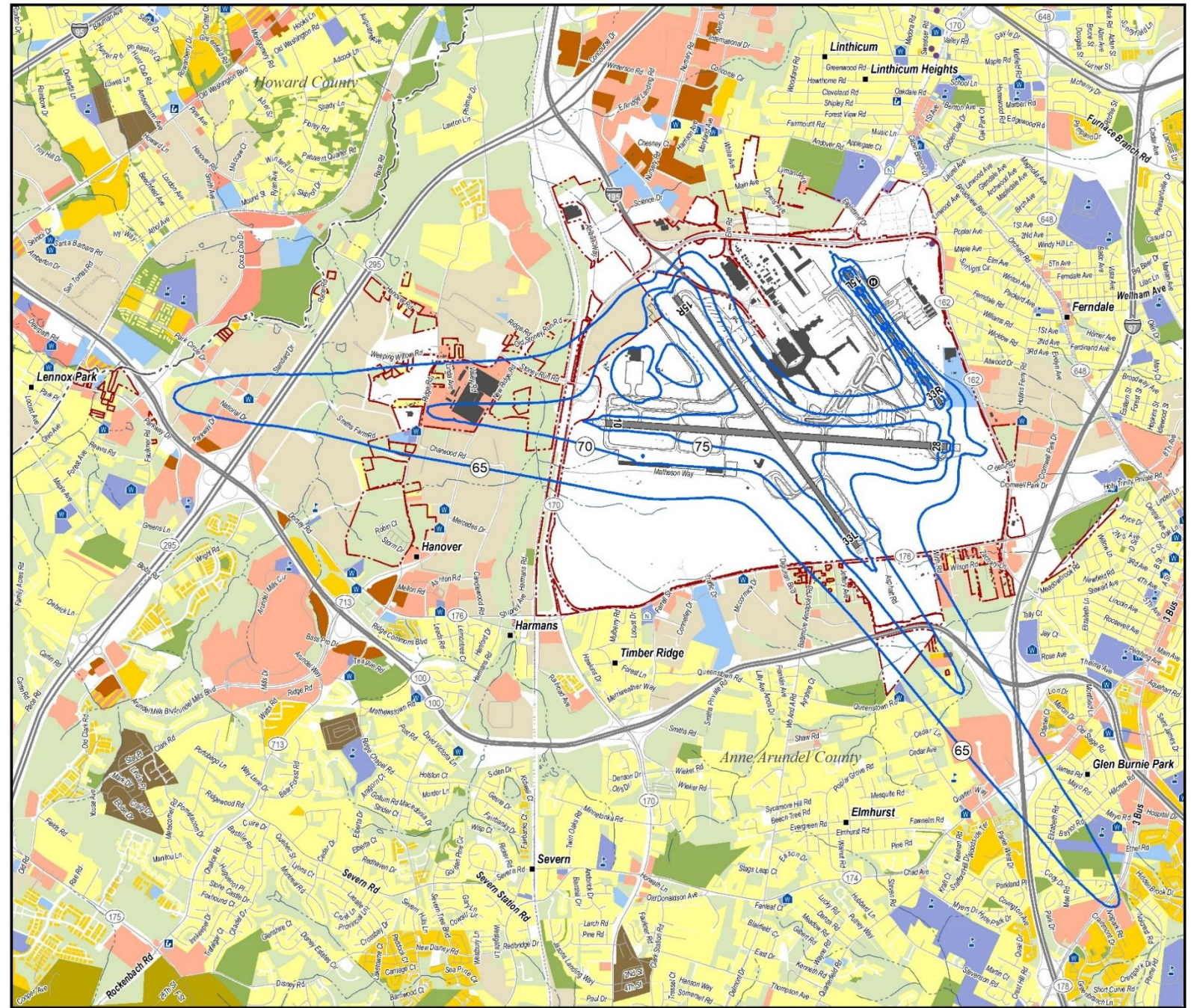
Base Year (2025) Contours

- Total Annual Operations: 238,155
- Total Area: 3,178 acres
 - 2,056 acres (65%) on airport
 - 1,122 acres (35%) off airport
 - 1,031 acres in 65 dB contour
 - 89 acres in 70 dB contour
 - 2 acres in 75 dB contour
- Estimated population: 1,035
 - 1,017 people in 65 dB contour
 - 18 people in 70 dB contour
- Estimated housing units: 361
 - 354 units in 65 dB contour
 - 7 units in 70 dB contour



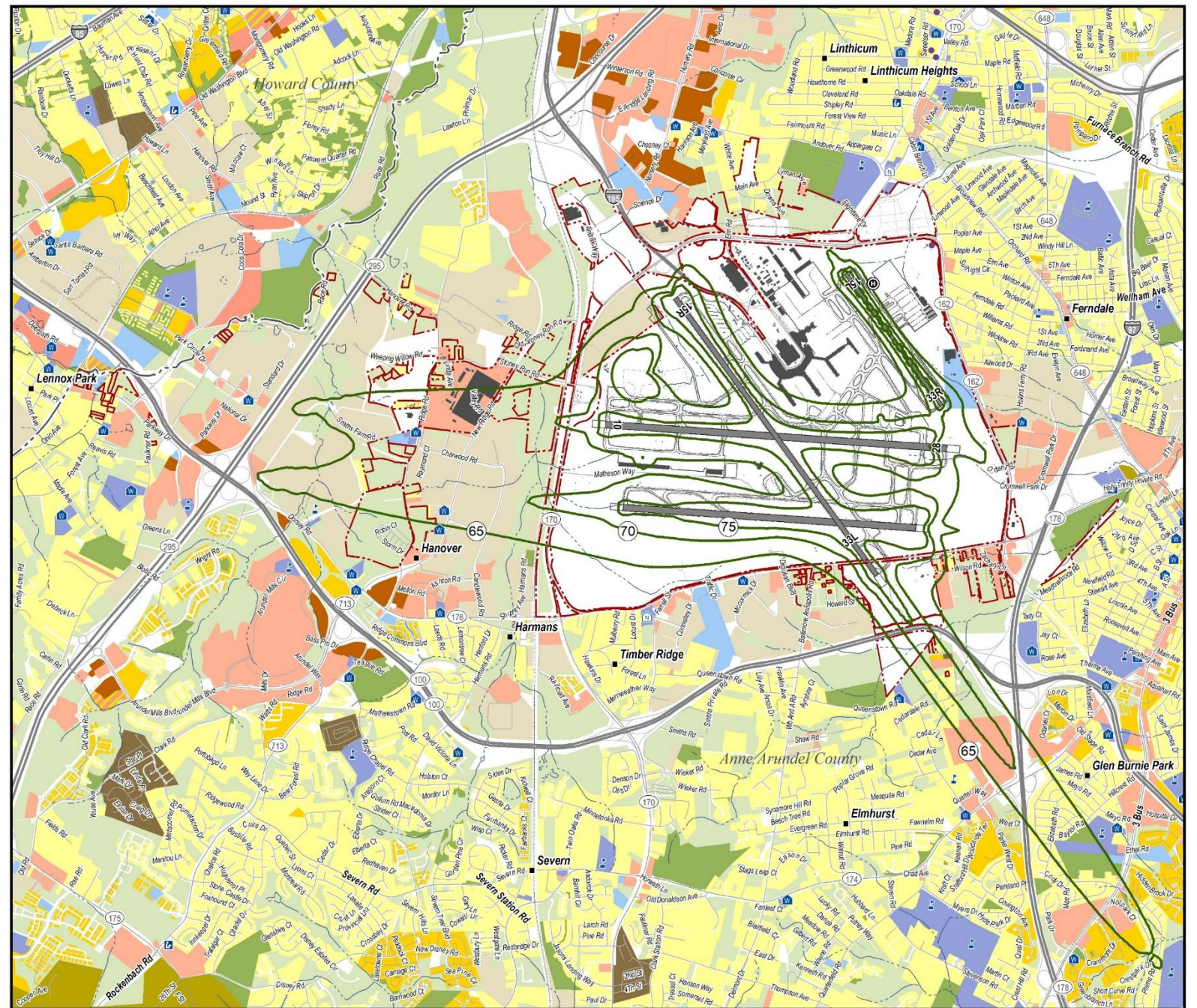
Five-Year (2030) Contours

- Total Annual Operations: 267,257
- Total Area: 2,866 acres
 - 1,904 acres (67%) on airport
 - 962 acres (33%) off airport
 - 878 acres in 65 dB contour
 - 83 acres in 70 dB contour
 - 1 acre in 75 dB contour
- Estimated population: 1,011
 - 995 people in 65 dB contour
 - 16 people in 70 dB contour
- Estimated housing units: 347
 - 340 units in 65 dB contour
 - 7 units in 70 dB contour



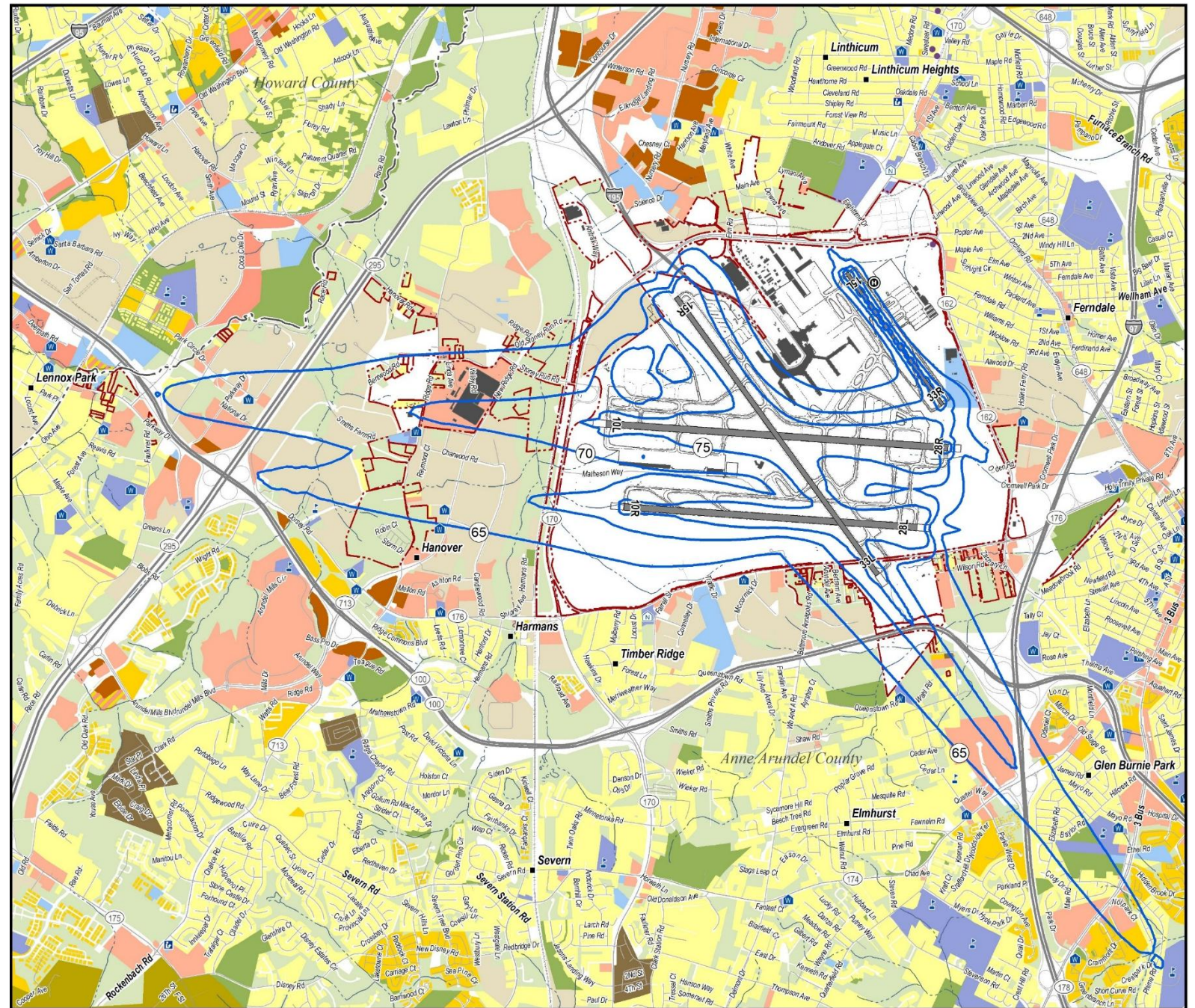
Ten-Year (2035) Full Build Contours

- Total Annual Operations: 290,550
- Total Area: 3,100 acres
 - 2,121 acres (68%) on airport
 - 979 acres (32%) off airport
 - 891 acres in 65 dB contour
 - 87 acres in 70 dB contour
 - 1 acre in 75 dB contour
- Estimated population: 1,616
 - 1,598 people in 65 dB contour
 - 18 people in 70 dB contour
- Estimated housing units: 597
 - 589 units in 65 dB contour
 - 8 units in 70 dB contour



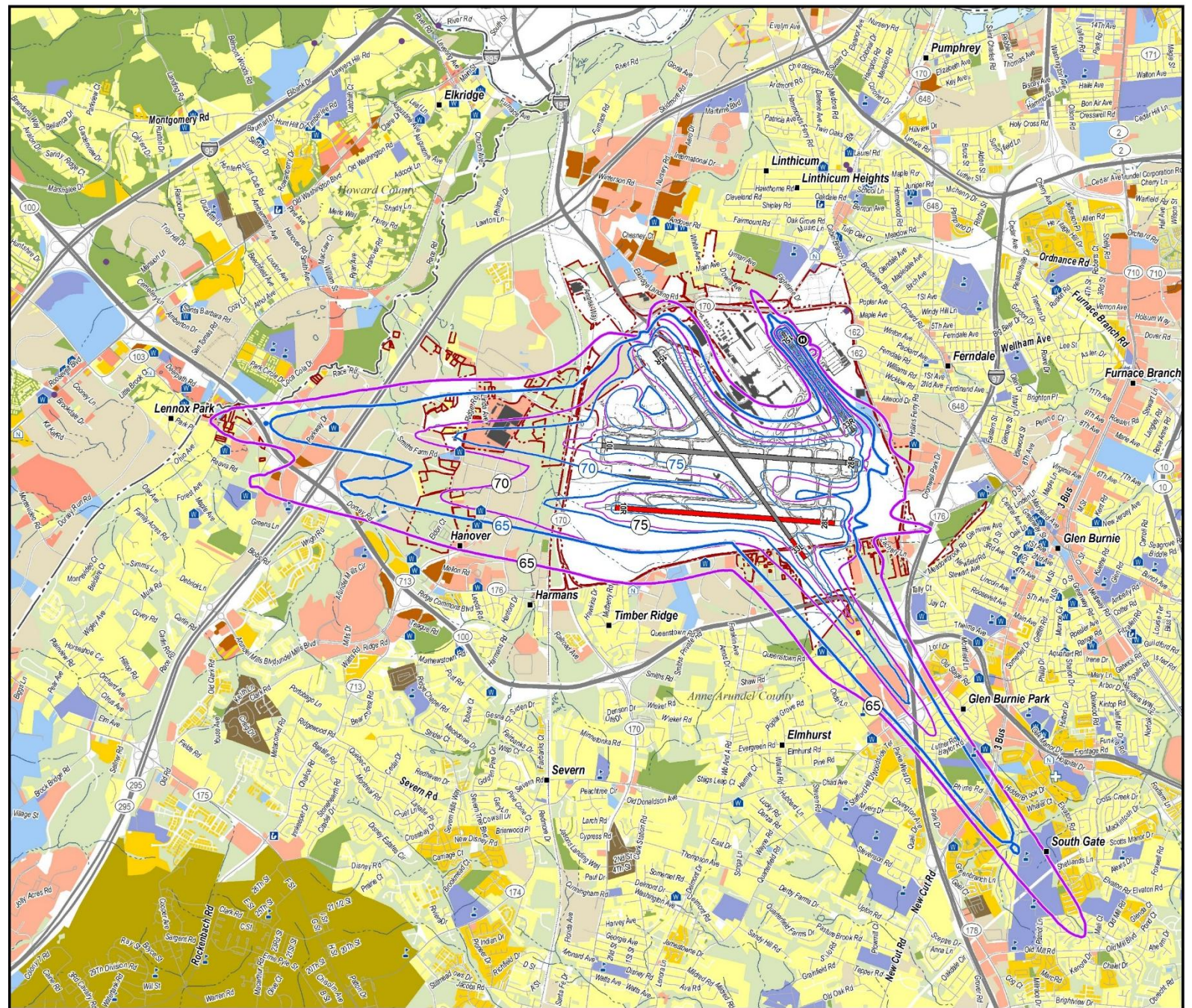
2025 ANZ Contours

- Total Area: 3,802 acres
 - 2,381 acres (63%) on airport
 - 1,420 acres (37%) off airport
 - 1,277 acres in 65 dB contour
 - 140 acres in 70 dB contour
 - 3 acres in 75 dB contour
- Estimated population: 1,704
 - 1,685 in 65 dB contour
 - 19 in 70 dB contour
- Estimated housing units: 636
 - 628 in 65 dB contour
 - 8 in 70 dB contour



2025 ANZ and 2020 ANZ Contours Comparison

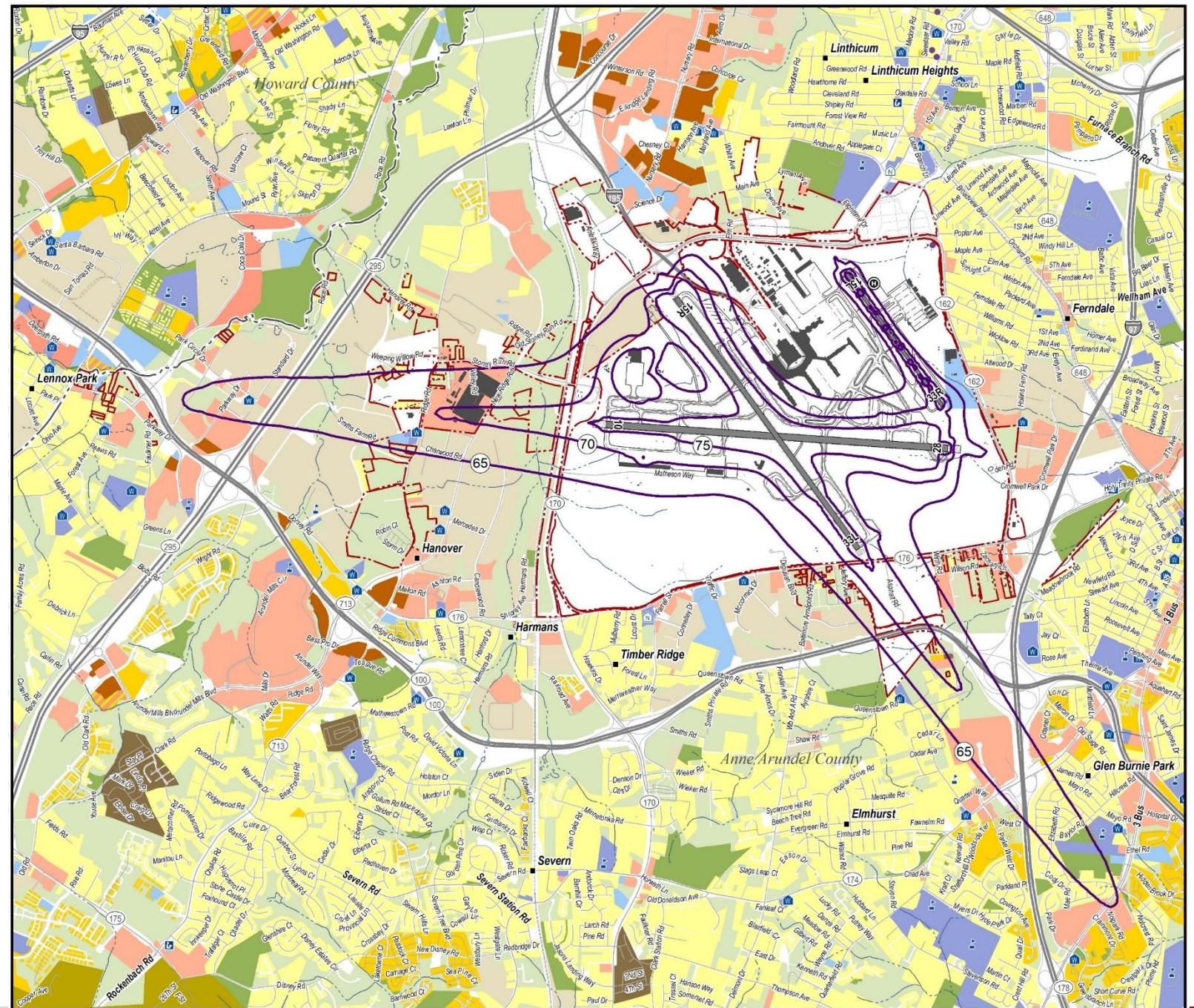
- Total Area: Decrease of 1,742 acres
 - 896 fewer acres in 65 dB contour
 - 411 fewer acres in 70 dB contour
 - 434 fewer acres in 75 dB contour
- Estimated population: Decrease of 2,267
 - 2,171 fewer people in 65 dB contour
 - 94 fewer people in 70 dB contour
 - 2 fewer people in 75 dB contour
- Estimated housing units: Decrease of 927 units
 - 890 fewer units in 65 dB contour
 - 36 fewer units in 70 dB contour
 - 1 fewer unit in 75 dB contour



Supplemental Contours and Land Use

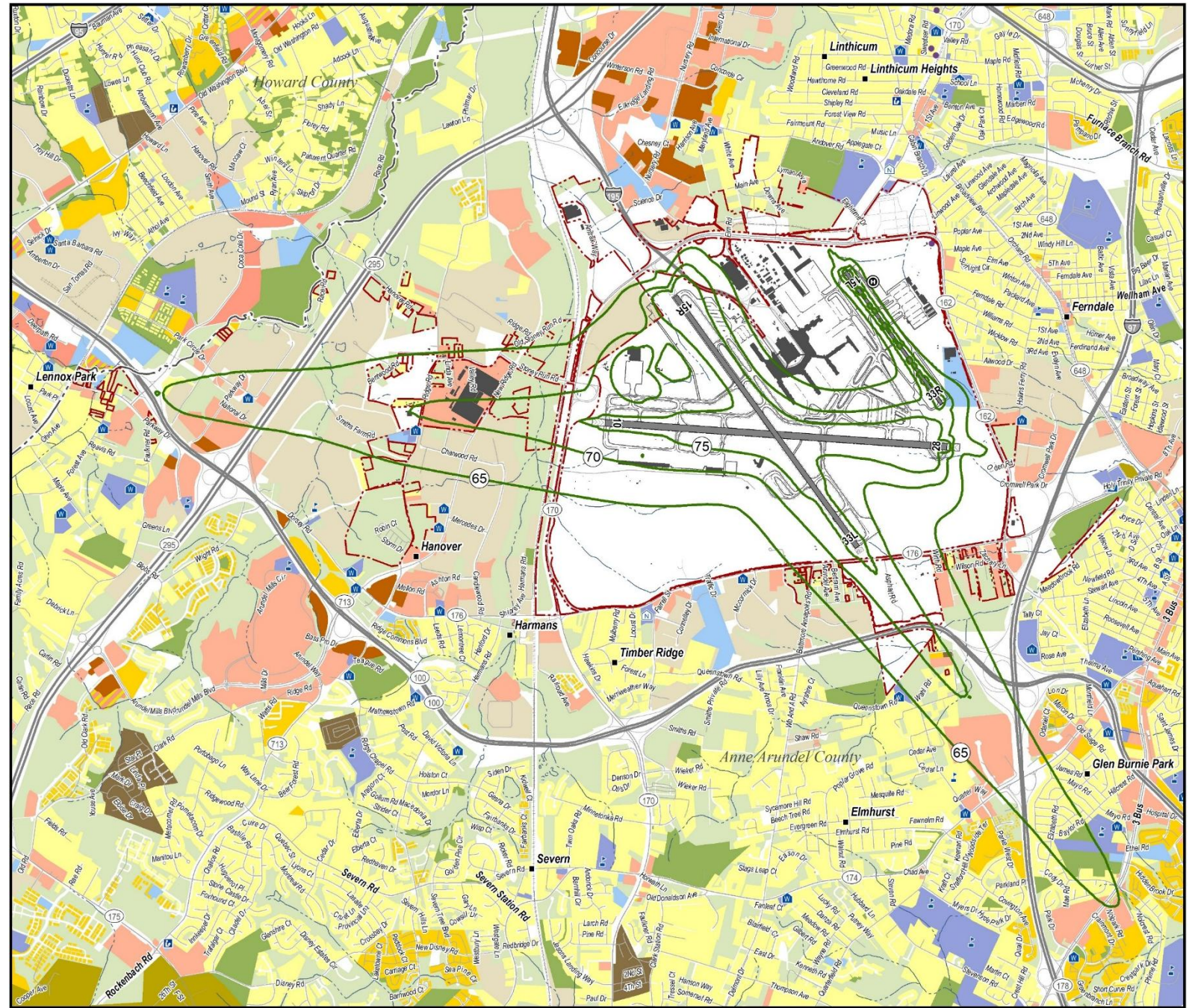
Ten-Year (2035) No Build Contours

- Total Annual Operations: 290,550
- Total Area: 2,690 acres
 - 1,815 acres (67%) on airport
 - 876 acres (33%) off airport
 - 805 acres in 65 dB contour
 - 70 acres in 70 dB contour
 - 1 acre in 75 dB contour
- Estimated population: 962
 - 949 people in 65 dB contour
 - 13 people in 70 dB contour
- Estimated housing units: 332
 - 326 units in 65 dB contour
 - 6 units in 70 dB contour



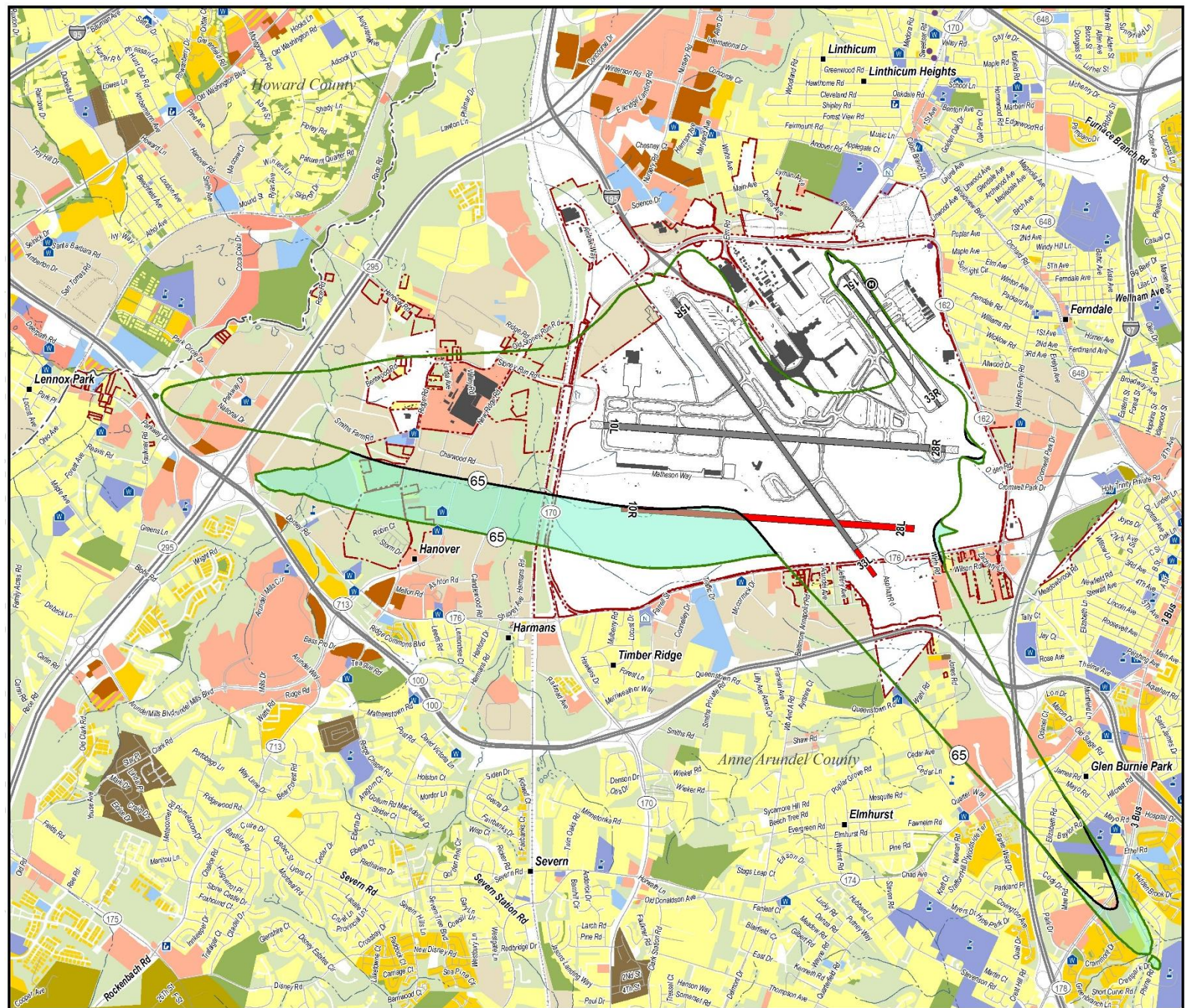
2025 No Build Composite Contours

- Total Area: 3,198 acres
 - 2,056 acres (64%) on airport
 - 1,142 acres (36%) off airport
 - 1,041 acres in 65 dB contour
 - 99 acres in 70 dB contour
 - 2 acres in 75 dB contour
- Estimated population: 1,704
 - 1,036 people in 65 dB contour
 - 18 people in 70 dB contour
- Estimated housing units: 367
 - 360 units in 65 dB contour
 - 7 units in 70 dB contour



2025 ANZ and 2025 No Build Composite Contours Comparison

- Total Area: 603 more acres in ANZ
 - 325 more acres on airport
 - 278 more acres off airport
 - 237 more acres in 65 dB contour
 - 41 acres in 70 dB contour
- Estimated population: 650 more people in ANZ
 - 649 more people in 65 dB contour
 - 1 more person in 70 dB contour
- Estimated housing units: 269 more units in ANZ
 - 268 more units in 65 dB contour
 - 1 more unit in 70 dB contour



Noise Abatement Plan (NAP)

Noise Abatement Plan

- NAP Goal: To the extent possible, reduce incompatible land use within ANZ while maintaining efficient airport operations.
- General categories of NAP measures:
 - Noise abatement elements
 - Land use elements
- NAP status review only at this time.
 - Measures may be updated later as part of the 14 CFR Part 150 process.

Existing Noise Abatement Plan Measures

Noise Abatement Measures

Departure Procedures:

Jet aircraft fly specific distances before commencing turns to maximize flights over compatible land uses

Arrival Procedures:

Attempt to keep arriving aircraft as high as possible and to take advantage of compatible land uses

Preferential Runway Use System:

Identifies preferred runways to minimize noise exposure

Control of Ground Based Noise Sources:

Efforts to minimize ground-based noise propagation

Programmatic Measures

Continued Monitoring and Annual Review:
Efforts to monitor the overall noise abatement program

Land Use Measures

Control of Incompatible Development:
Includes the ANZ program, BAZA, and Noise Zone Notification in Real Estate transactions

Noise Assistance Programs:
For residents and schools in the ANZ, to reduce number of affected properties and noise impacts

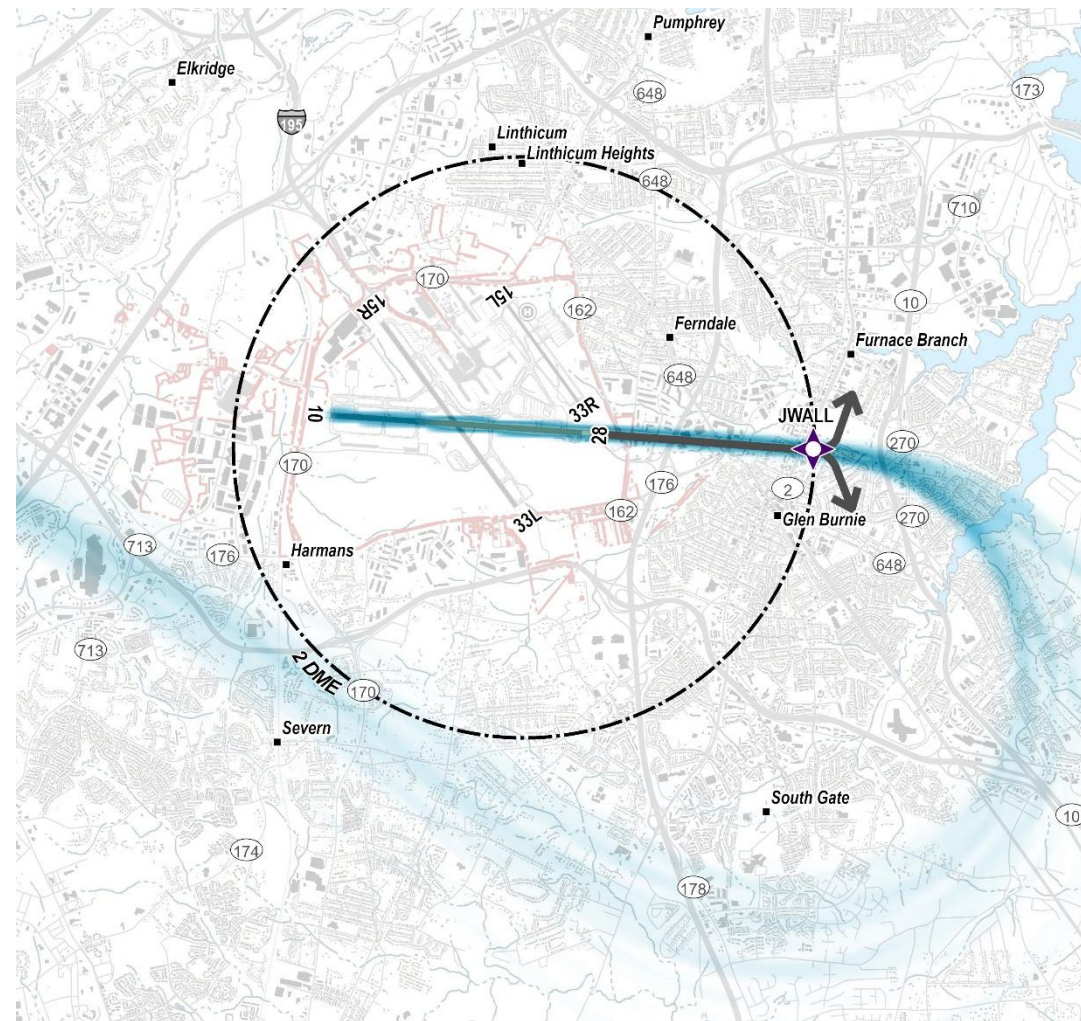
Noise Abatement Plan Caveats

- Noise abatement procedures are voluntary.
 - The FAA has primary responsibility for implementation of flight procedures and the preferential runway use system at BWI Marshall.
 - Aircraft may not follow noise abatement procedures if deemed necessary by air traffic control (ATC) or flight crews to maintain operational safety.
- Changes to local land use policies are under the purview of local governments.
 - The MAA cannot force local jurisdictions to change land use policies.
- The FAA has introduced new navigation technology and procedures that in some cases deviate from historic noise abatement procedures.

Noise Abatement Elements

Runway 10 Jet Departures

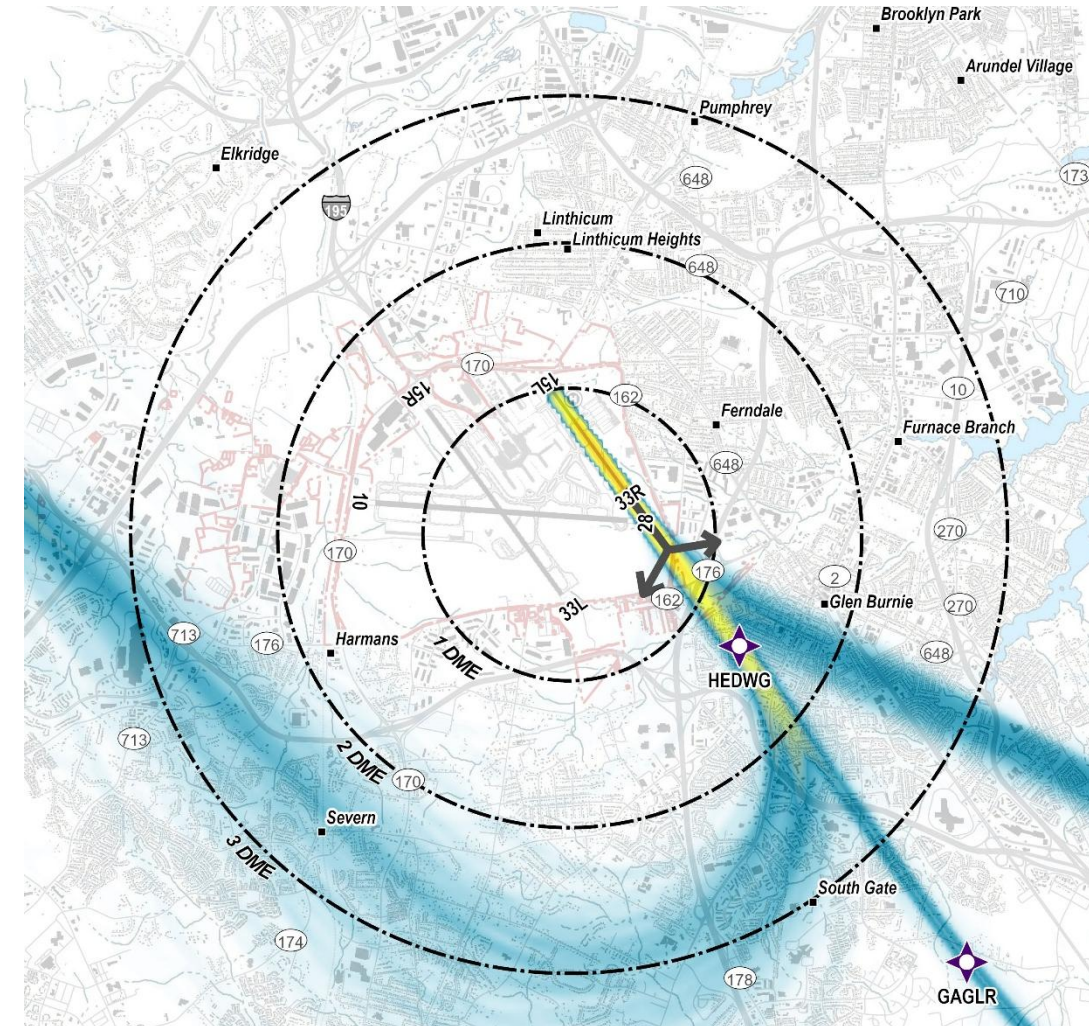
Criteria	Description
Current Procedure	Jet aircraft should commence departure turns two (2) DME from BWI VORTAC or 1.6 Nm from the departure end of the runway for all turns.
Applicability	- All departure procedures - Vectored Jet departures
Intent	Minimize departure overflights over densely populated portions of Ferndale and Glen Burnie
Recommended Modifications to Measure	None
Status	Waypoint JWALL added to formalize NAPs as part of departure procedure implementation in 2024



Noise Abatement Elements

Runway 15L Jet Departures

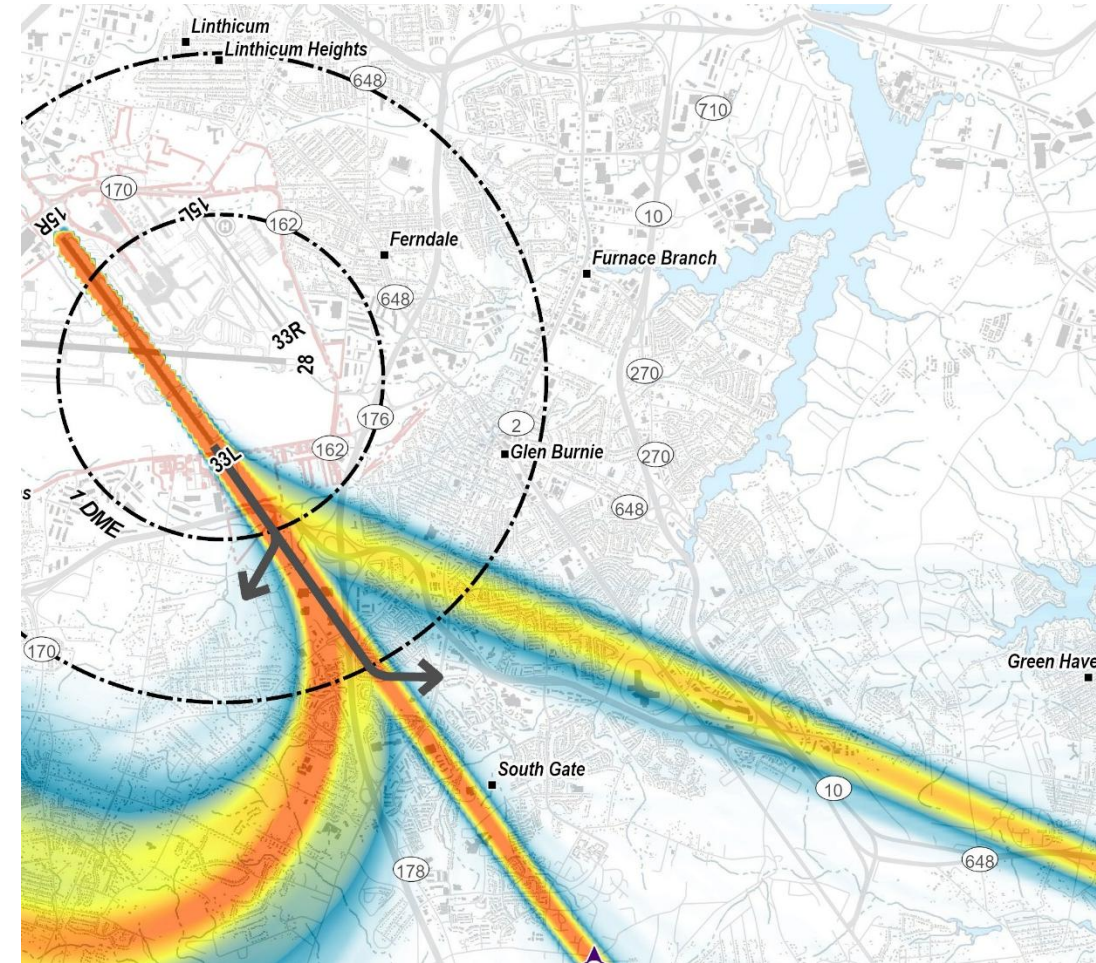
Criteria	Description
Current Procedure	Multi-engine aircraft departing Runway 15L will maintain runway heading until 0.5 Nm from the departure end of the runway before turning
Applicability	- FOXHL, LINSE, TERPZ, DUKPN - Vectored departures
Intent	Minimize departure overflights over densely populated portions of Glen Burnie
Recommended Modifications to Measure	None
Status	No change



Noise Abatement Elements

Runway 15R Jet Departures

Criteria	Description
Current Procedure	- Right turns: one (1) DME from BWI VORTAC or 0.7 Nm from the departure end of the runway - Left turns: two (2) DME or 1.7 nautical miles (Nm) from the departure end of the runway
Applicability	- FOXHL, LINSE, TERPZ (left turn) - DUKPN (right turn) - Vectored departures
Intent	Minimize departure overflights over densely populated portions of Glen Burnie
Recommended Modifications to Measure	None
Status	- DUKPN departure procedure does not comply with this noise abatement procedure - Waypoint WARYN added to formalize NAPs as part of departure procedure implementation in 2024



Runway 28 Jet Departures

Noise Abatement Elements

Runway 33L Jet Departures

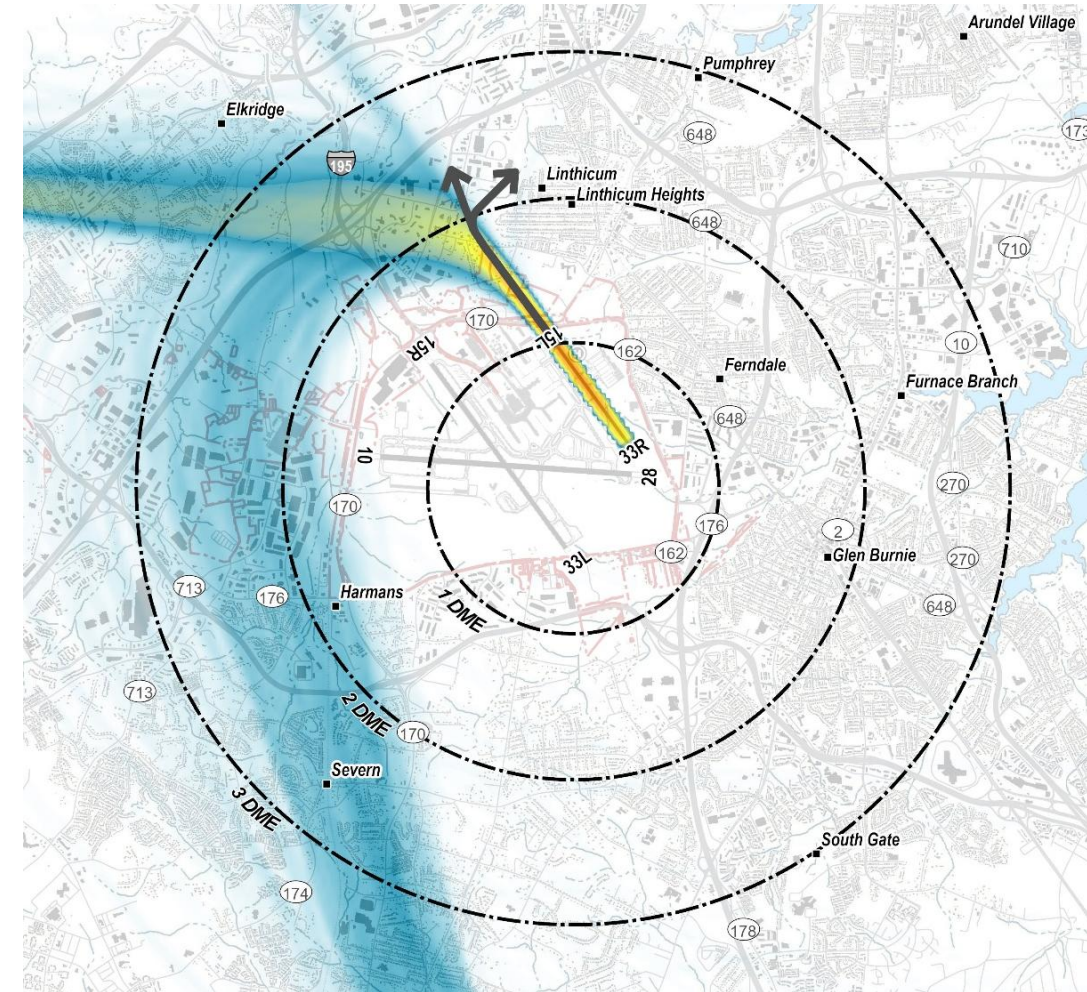
Criteria	Description
Current Procedure	Jets turn as soon as safe once airborne but not below 300 feet during Visual Flight Rules (VFR) conditions and not below 400 feet during Instrument Flight Rules (IFR) conditions
Applicability	- TERPZ, LINSE, FOXHL, FIXET, CONLE, DUKPN - Vectored Jet departures
Intent	Minimize departure overflights over densely populated portions of Patapsco and Hanover
Recommended Modifications to Measure	None
Status	No change



Noise Abatement Elements

Runway 33R Jet Departures

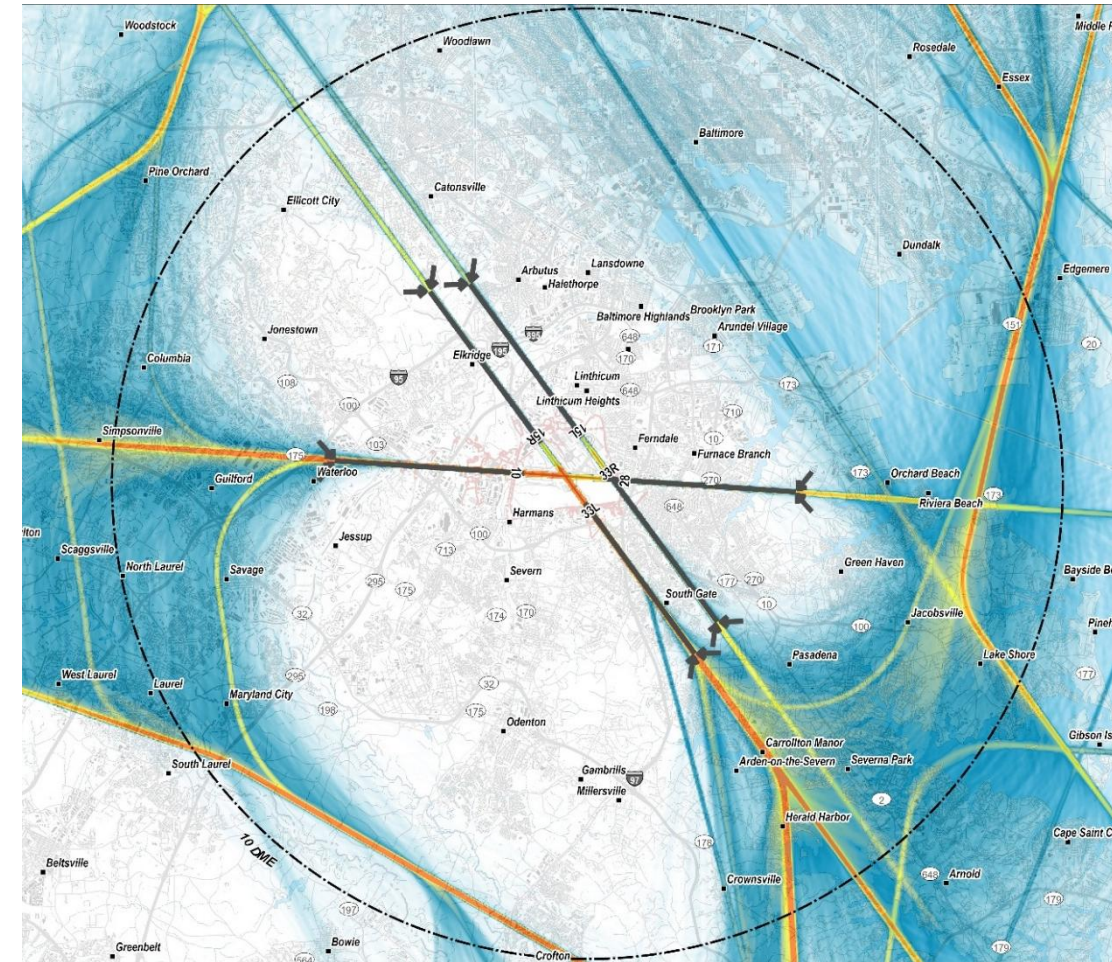
Criteria	Description
Current Procedure	All aircraft departing Runway 33R to the north or east will maintain runway heading until one (1) Nm from the departure end of the runway before turning.
Applicability	Vectoring by ATC
Intent	Minimize departure overflights over densely populated portions of Patapsco and Hanover
Recommended Modifications to Measure	None
Status	No change



Noise Abatement Elements

Jet Arrivals

Criteria	Description
Current Procedure	- Jet aircraft conducting visual approaches will turn onto final approach a minimum of four (4) Nm from the approach end of the runway. - All jet aircraft conducting visual approaches are expected to maintain 3,000 feet or above until 10 DME from the BWI VORTAC and, to the maximum extent possible, should remain at or above the Instrument Landing System (ILS) or Visual Approach Slope Indicator (VASI) for the landing runway, consistent with safe flight procedures. - When authorized by ATC, the Interstate Visual Runway 33L procedure is to be used by jet aircraft arriving on visual approaches from the south/southwest to Runway 33L
Applicability	All VFR and visual approach Jet arrivals
Intent	Encourage Jet aircraft to maintain the highest possible altitude as long as possible
Recommended Modifications to Measure	Remove Interstate Visual procedure
Status	Will be updated in 2025 ANZ



Control of Ground-Based Noise Sources

- Current measures
 - Engine maintenance runup restrictions
 - Require prior permission from Airport Operations
 - Will be denied unless failure to conduct runup will delay scheduled passenger flight departure
 - Limited to Runway 33L hold blocks and midfield cargo facility
 - Midfield facility limited to Amazon contract carriers
 - Limited to a total of 5 minutes in intervals of 60 s or less
 - Not authorized between 11 p.m. and 7 a.m. local
 - Reverse thrust power-back operations
 - Limited to military aircraft at remote parking spots
 - Requires case-by-case approval by Airport Operations per Tenant Directive 203.121

Changes to the Noise Abatement Plan

- Noise Abatement Procedures
 - Removed Interstate Visual 33L procedure
- Ground-Based Noise
 - Removed runup area at Runway 10
 - Added runup authorization at midfield cargo ramp for Amazon contract carriers only
- Programmatic Measures
 - Added Annual Report
 - Added Residential Sound Insulation Program

ANZ Certification Process

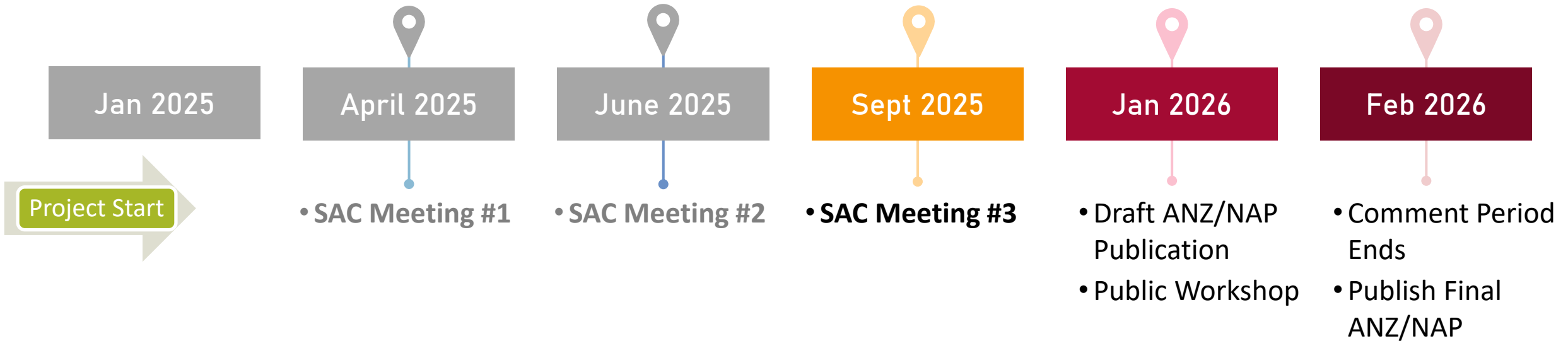
Certifying the ANZ

- Current BWI Marshall ANZ
 - Certified in 2021
 - Referenced in COMAR Section 11.03.02.10
 - Incorporated by reference in COMAR Section 11.03.01.01-1(B)(5)
- Final 2025 BWI Marshall ANZ will be updated in COMAR
- Updating COMAR requires a regulatory process governed by the Maryland Administrative Procedure Act (APA)
- The Maryland Aviation Commission (MAC) is required to approve regulations prior to their adoption by the Executive Director of MAA.



Schedule and Resources

Project Schedule



Project Contacts

Project Primary Contact

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ANZ Project Managers

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Additional Resources

2020 BWI Marshall ANZ

- <https://marylandaviation.com/environmental/airport-noise/bwi-marshall-airport-noise-zone/>

BWI Marshall Roundtable

- <https://marylandaviation.com/environmental/airport-noise/dc-metroplex-bwi-community-roundtable/>

Noise Reports

- <https://marylandaviation.com/environmental/airport-noise/quarterly-noise-reports/>

WebTrak

- <https://webtrak.emsbk.com/bwi3>

Wrap Up

- SAC member questions, comments, and discussion
- Public workshop
 - January 2026

Thank You.

Baltimore/Washington International
Thurgood Marshall Airport

