



Welcome!

Noise Compatibility Study (Part 150) Update Piedmont Triad International Airport

Citizens Advisory Committee Meeting #3
May 20, 2020



Meeting Agenda

- Welcome and introductions
- Project status
- Noise model input
- Preliminary noise model results
- Noise measurement program results
- Overview of Noise Compatibility Program
- Next steps
- CAC member discussion



Piedmont Triad Airport Authority

- **Kevin Baker, Executive Director**
 - Part 150 Airport Sponsor
- **Alex Rosser, Chief Operating Officer**
 - Part 150 Program Manager
- **Suzanne Akkoush, Project Manager – Noise Program**
 - Part 150 Project Manager



Part 150 Consultant Team

- **Gene Reindel, HMMH Vice President**
 - Part 150 Principal
- **Bob Mentzer, HMMH Principal Consultant**
 - Part 150 Project Manager
- **Kate Larson, HMMH Senior Consultant**
 - Part 150 Assistant Project Manager
- **Ron Miller, Ron Miller & Associates**
 - Part 150 Public Outreach



CAC Members

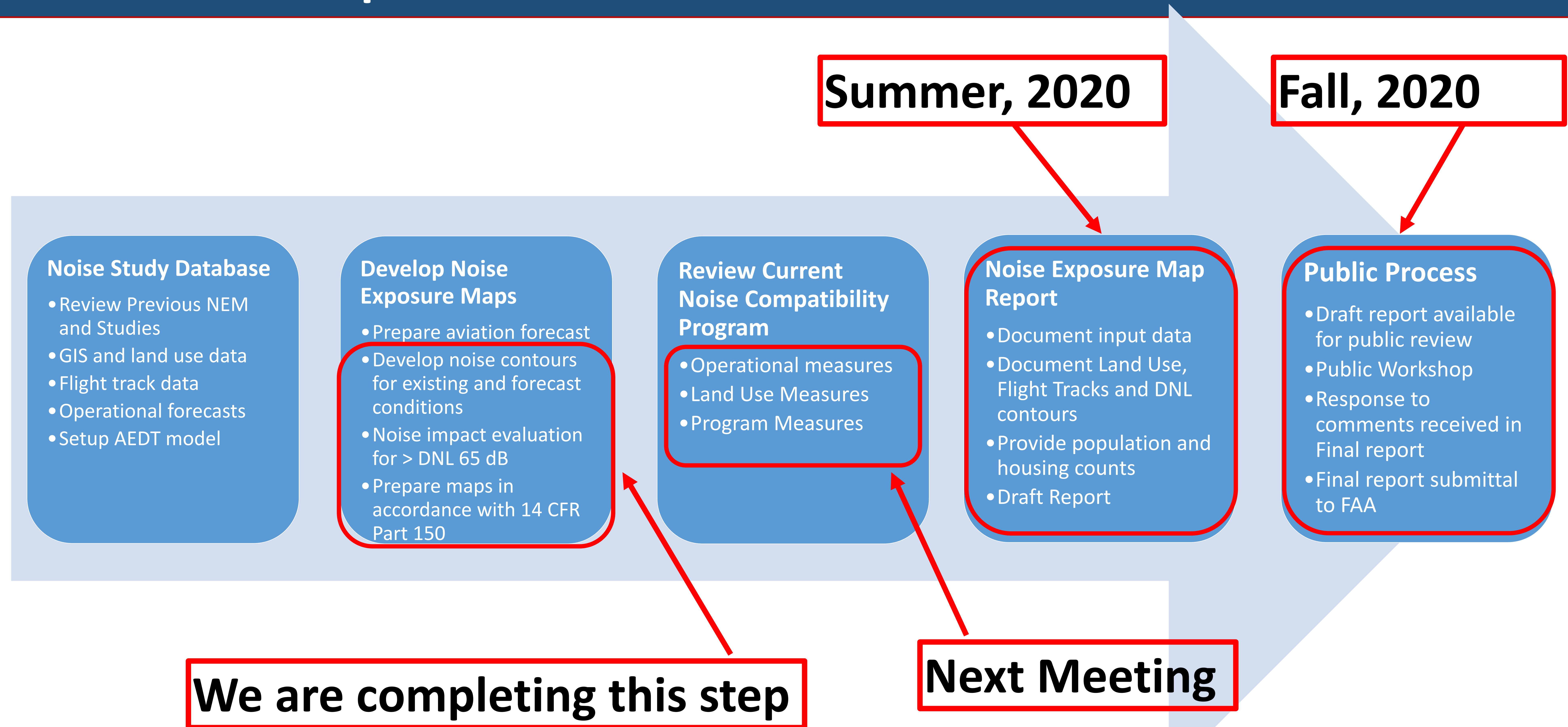
Name	Jurisdiction	Name	Jurisdiction
Joe Saldarini, Chair	Greensboro	Ed Levick	High Point
Janet Mazzurco, Co-Chair	Greensboro	Thad Juszczak	High Point
Stan Tennant	Greensboro	Keith Brown	High Point
Steve Johnson	Greensboro	Erin Randall	High Point
Alyson Best	Greensboro	Bill Nagy	High Point
Sebastian King	Guilford County	Michael Lopez	Summerfield
Sharon Kasica	Guilford County	Lawrence Straughn	Jamestown
Toneq McCullough	Winston-Salem	George McClellan	Oak Ridge
Clarence Lambe	Forsyth County	Bob Prescott	Kernersville



Project Status



Part 150 Update Status



Part 150 Update Public Process

- This is the third of four TAC/CAC meetings
 - First held in June 2019
 - Second held in October 2019
- Two Public workshops
 - First was held June 27, 2019
 - Second will present Study results in fall 2020
- Presentations for all prior meetings available at
<https://ptipart150update.com/public-outreach/>



Noise Model Input

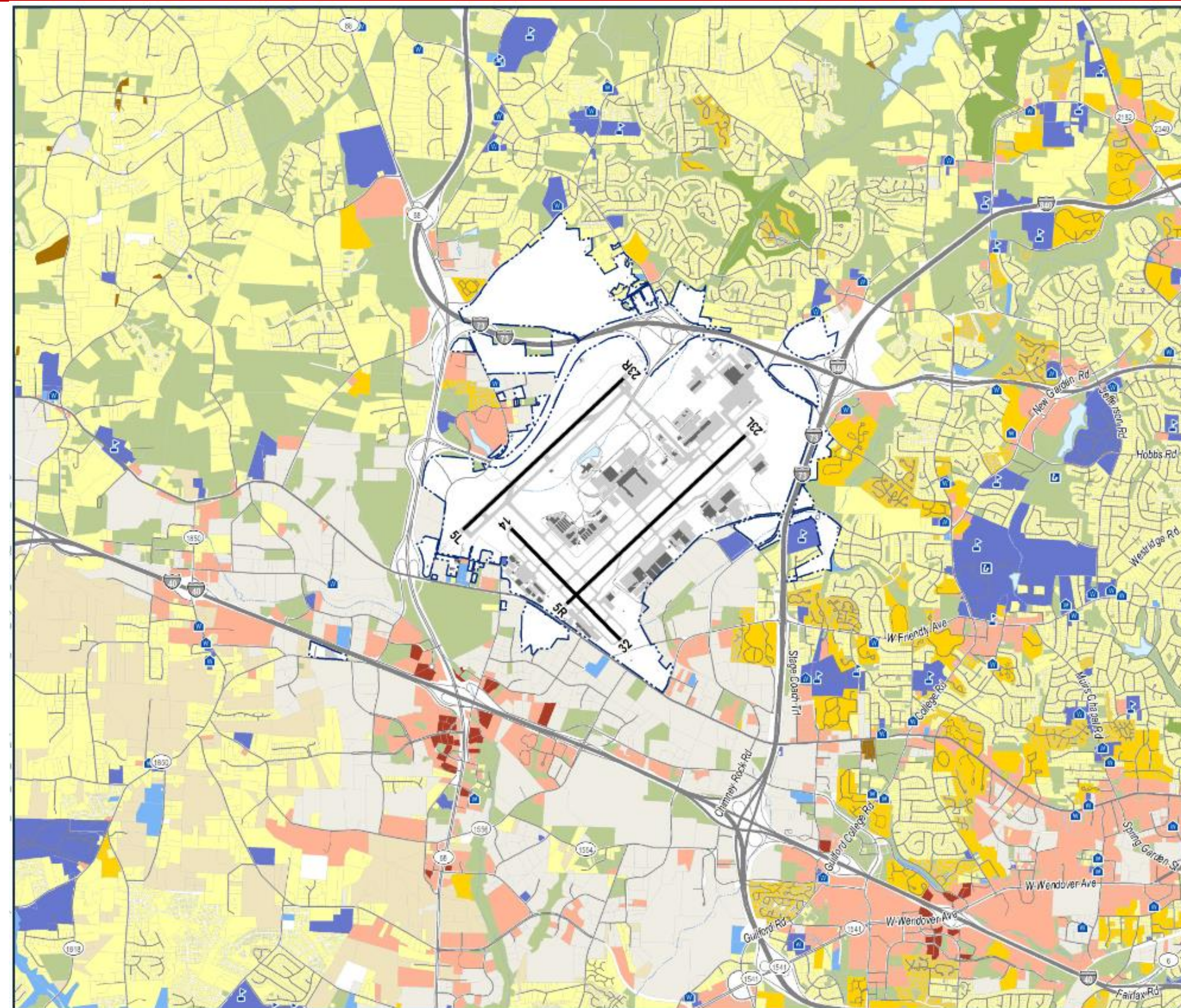


Noise Model Input

Categories of noise model input:

1. Study Area and physical description of the Airport Layout
2. Aircraft noise and performance characteristics
3. Aircraft operations
 - Flight operations (arrival/departure/touch-and-gos)
 - Runup operations (aircraft maintenance)
4. Runway utilization rates
5. Flight track geometry and utilization rates
6. Meteorological and terrain data

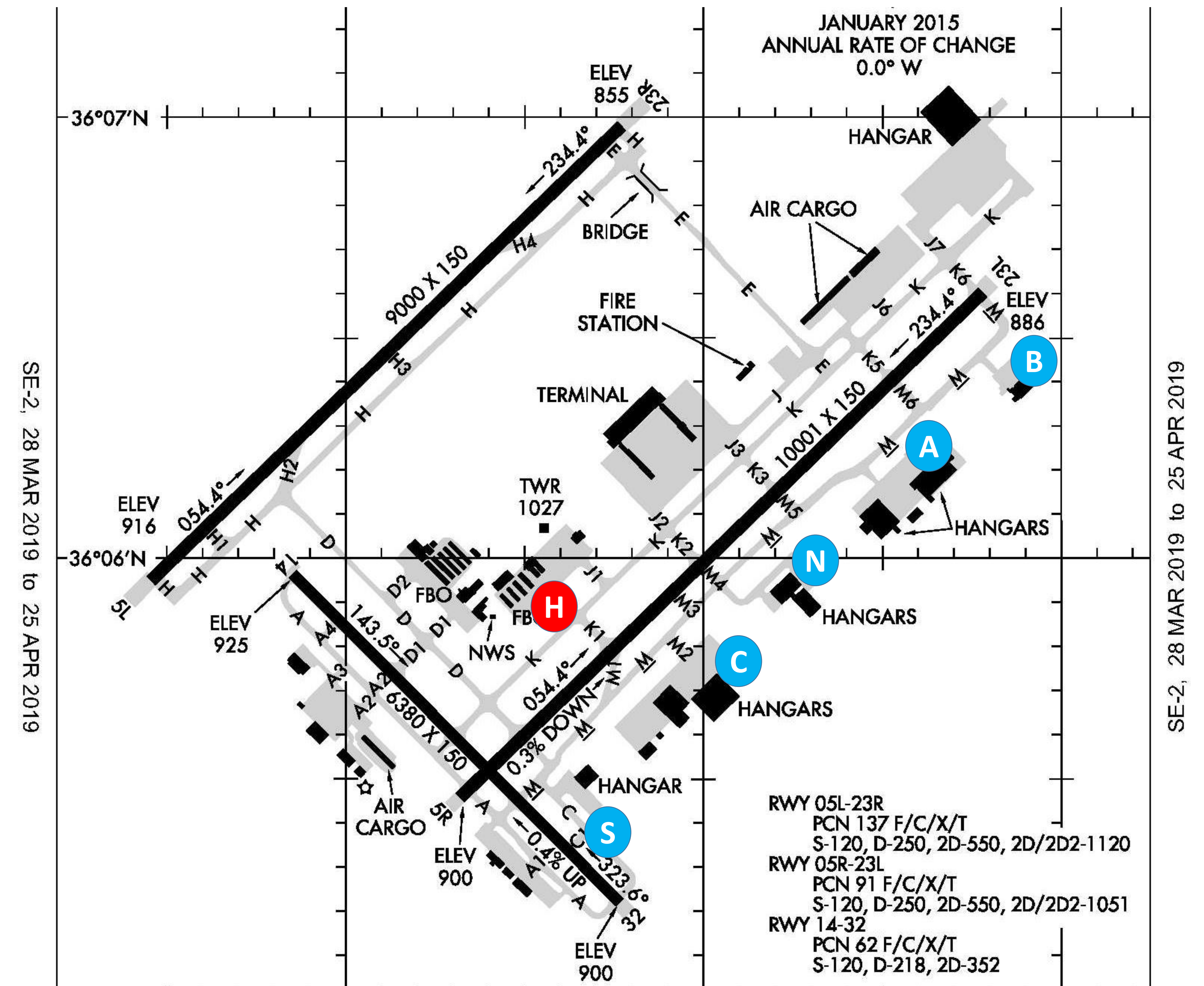
Study Area with Updated Land Use



Map has been updated based on input submitted by: PTAA, City of Greensboro, City of High Point, Guilford County, and windshield surveys conducted by HMMH in November, 2019

Airport Layout

- Modeled helipad location **H**
- Modeled Engine Runup locations
 - DC10s, A300s, 767s **C**
 - A319s, A320s, A321s, 737s **C** **N**
 - small jets and turboprops **S**
 - Honda jets **A** **B**



Modeled Aircraft Operations: Annual Forecasts

FAA-approved PTAA Aviation Forecast

Year	Commercial				General Aviation			Military			Total Operations
	Passenger Aircraft	Air Taxi	Cargo Aircraft	Total	Itinerant	Local	Total	Itinerant	Local	Total	
2018	32,774	10,034	6,458	49,267	24,596	5,816	30,412	1,453	383	1,836	81,514
2020	36,359	10,053	8,204	54,616	26,964	6,656	33,620	1,453	383	1,836	90,072
2025	37,265	10,099	10,456	57,821	27,413	6,767	34,180	1,453	383	1,836	93,836
Average Annual Day	Commercial				General Aviation			Military			Total Operations
	Passenger Aircraft	Air Taxi	Cargo Aircraft	Total	Itinerant	Local	Total	Itinerant	Local	Total	
2018	89.8	27.5	17.7	135.0	67.4	15.9	83.3	4.0	1.0	5.0	223.3
2020	99.6	27.5	22.5	149.6	73.9	18.2	92.1	4.0	1.0	5.0	246.8
2025	102.1	27.7	28.6	158.4	75.1	18.5	93.6	4.0	1.0	5.0	257.1

Modeled Aircraft Operations: Aircraft Types

Commercial Passenger

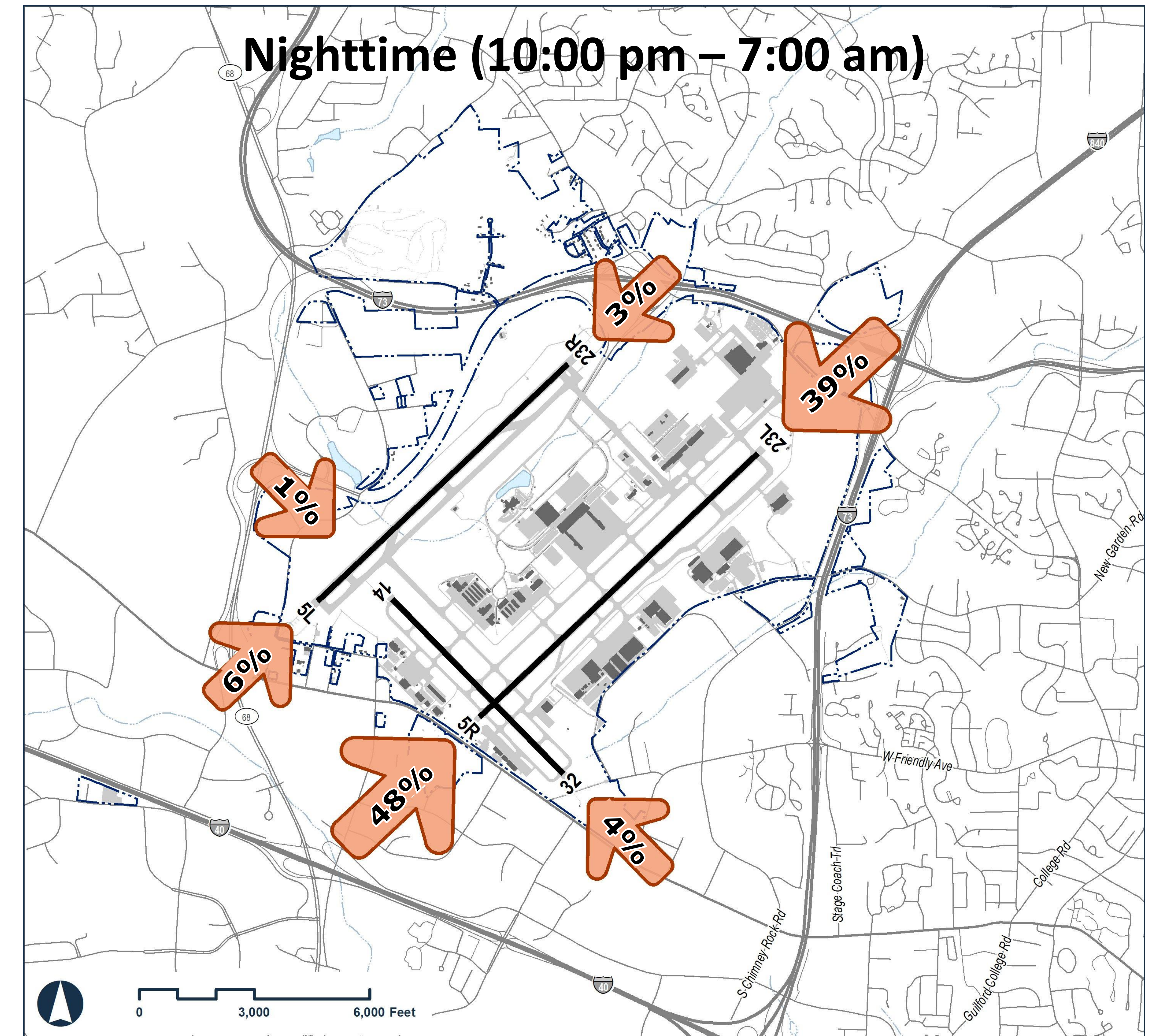
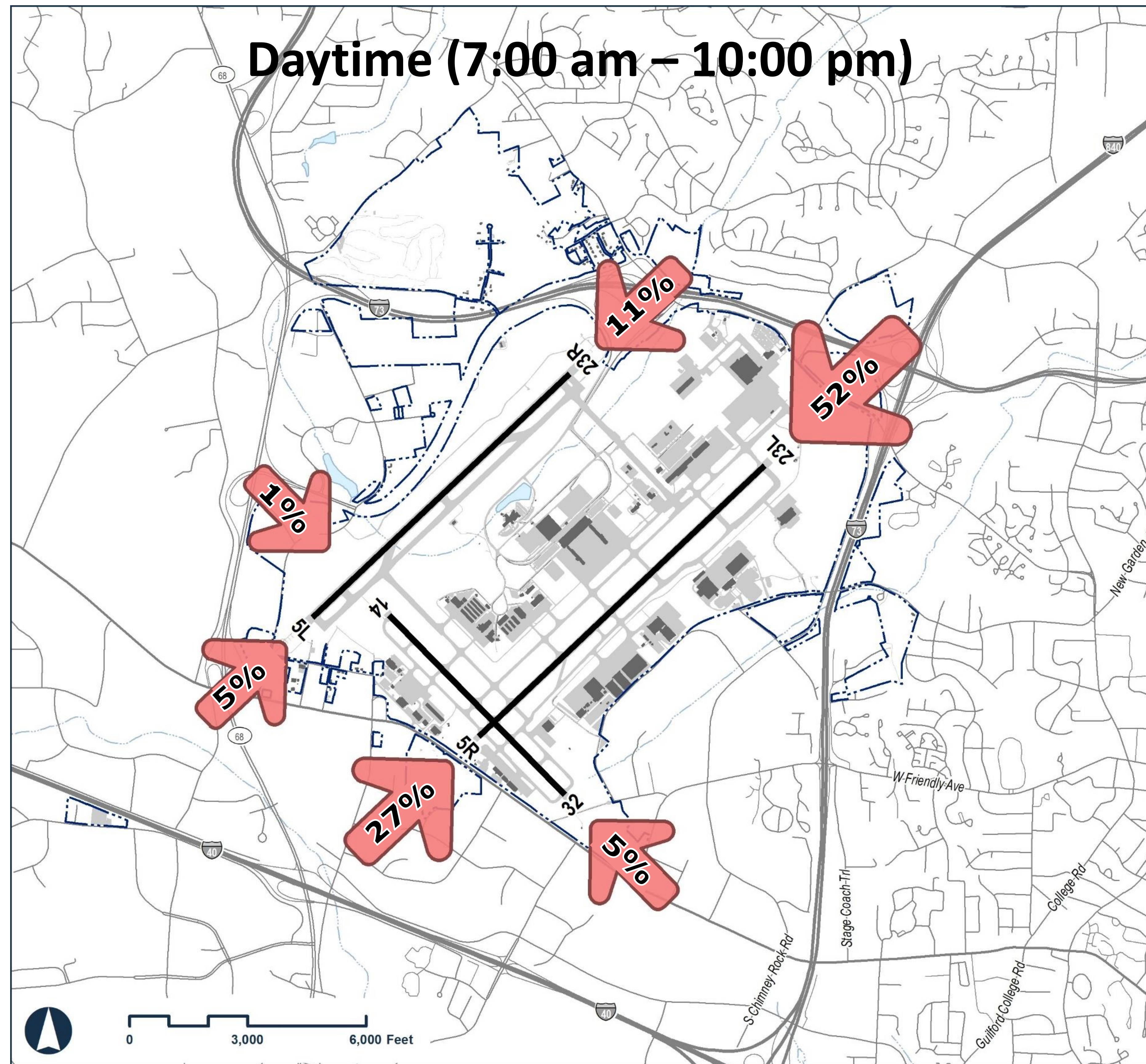
Aircraft Type	AEDT Type	2020 Total Operations	2025 Total Operations	Change from 2020
A220-300 or 737-700/LR	737700	10	1,019	1,009
A319	A319-131	439	450	11
A320-100/200	A320-232	1,531	2,073	542
A320-200N	A320-271N	42	43	1
A321	A321-232	20	20	0
B717-200	717200	2,043	2,094	51
B737-800 or B737-900	737800	1,007	1,540	533
MD-80/1/2/3/8	MD83	1,966	0	-1,966
MD-90	MD9025	3	0	-3
CRJ900 or CRJ700	CRJ9-ER	7,780	9,658	1,878
E175	EMB175	3,622	4,490	868
CRJ200ER/440	CL600	6,706	5,318	-1,388
ERJ140	EMB145	3,750	3,843	93
ERJ145	EMB14L	7,438	6,717	-721
Commercial Passenger totals		36,359	37,265	906

Cargo

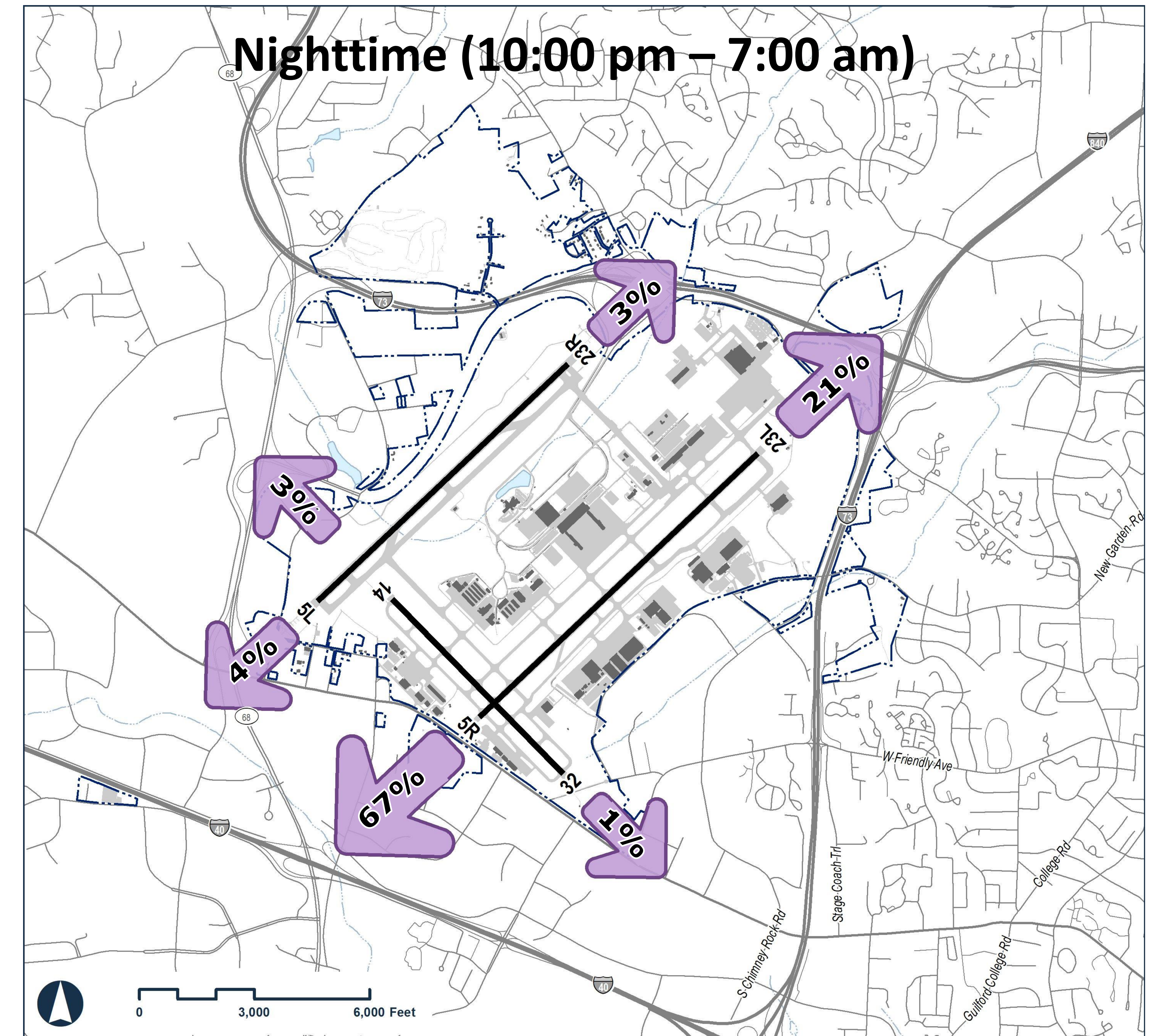
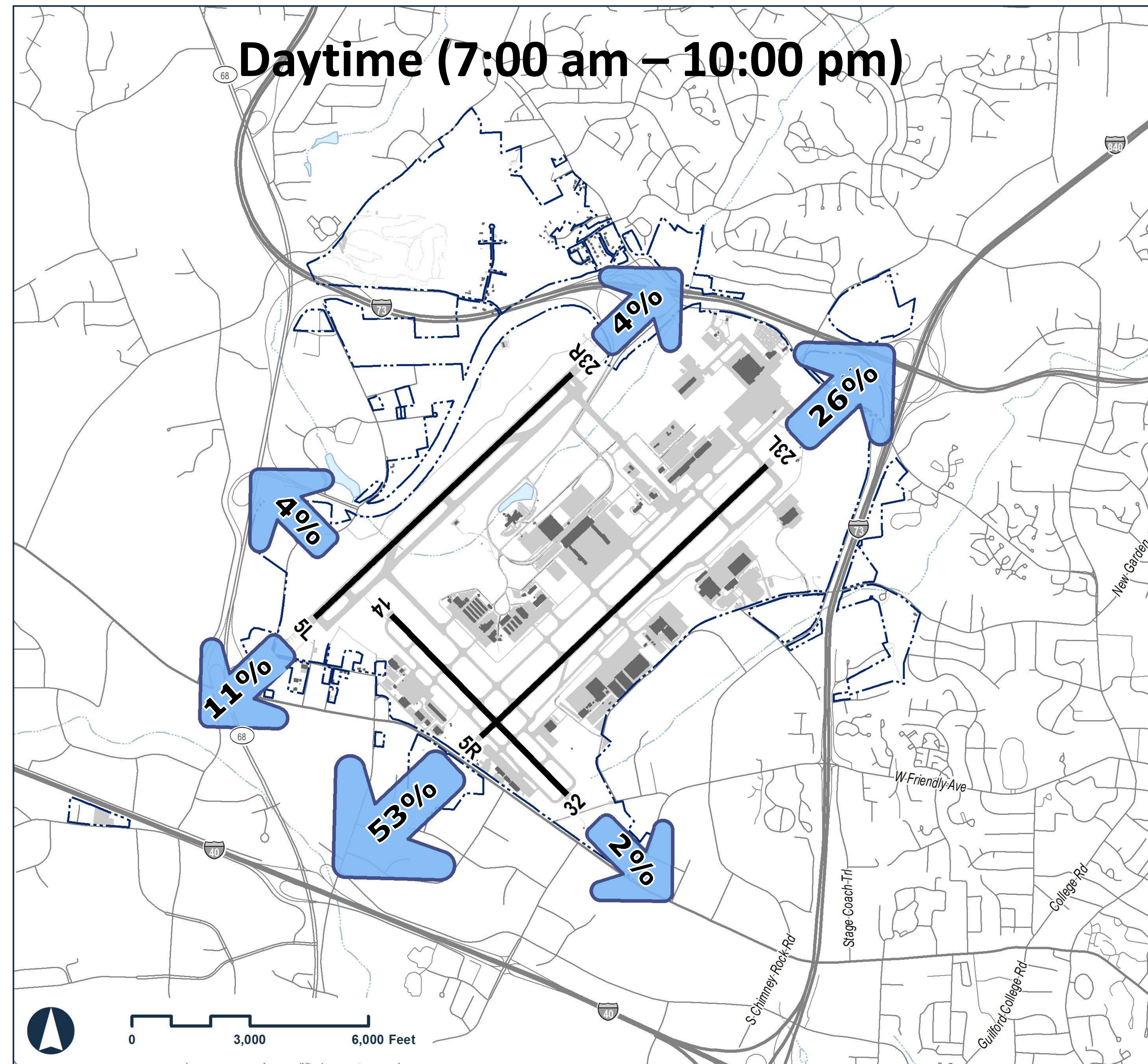
Aircraft Type	AEDT Type	2020 Total Operations	2025 Total Operations	Change from 2020
A300	A300B4-203	1,396	1,662	266
B767(200)	767CF6	948	1,041	93
B767(300)	767300	267	294	27
DC10	DC1030	1,521	0	-1,521
B757(PW)	757PW	1,332	2,609	1,277
B757(RR)	757RR	1,839	3,603	1,764
ATR42	DHC8	901	1,248	347
Cargo totals		8,204	10,456	2,252



Modeled Runway Use: Arrivals



Modeled Runway Use: Departures



Modeled Flight Tracks: Runway 5R

Jet Arrivals – Runway 5R

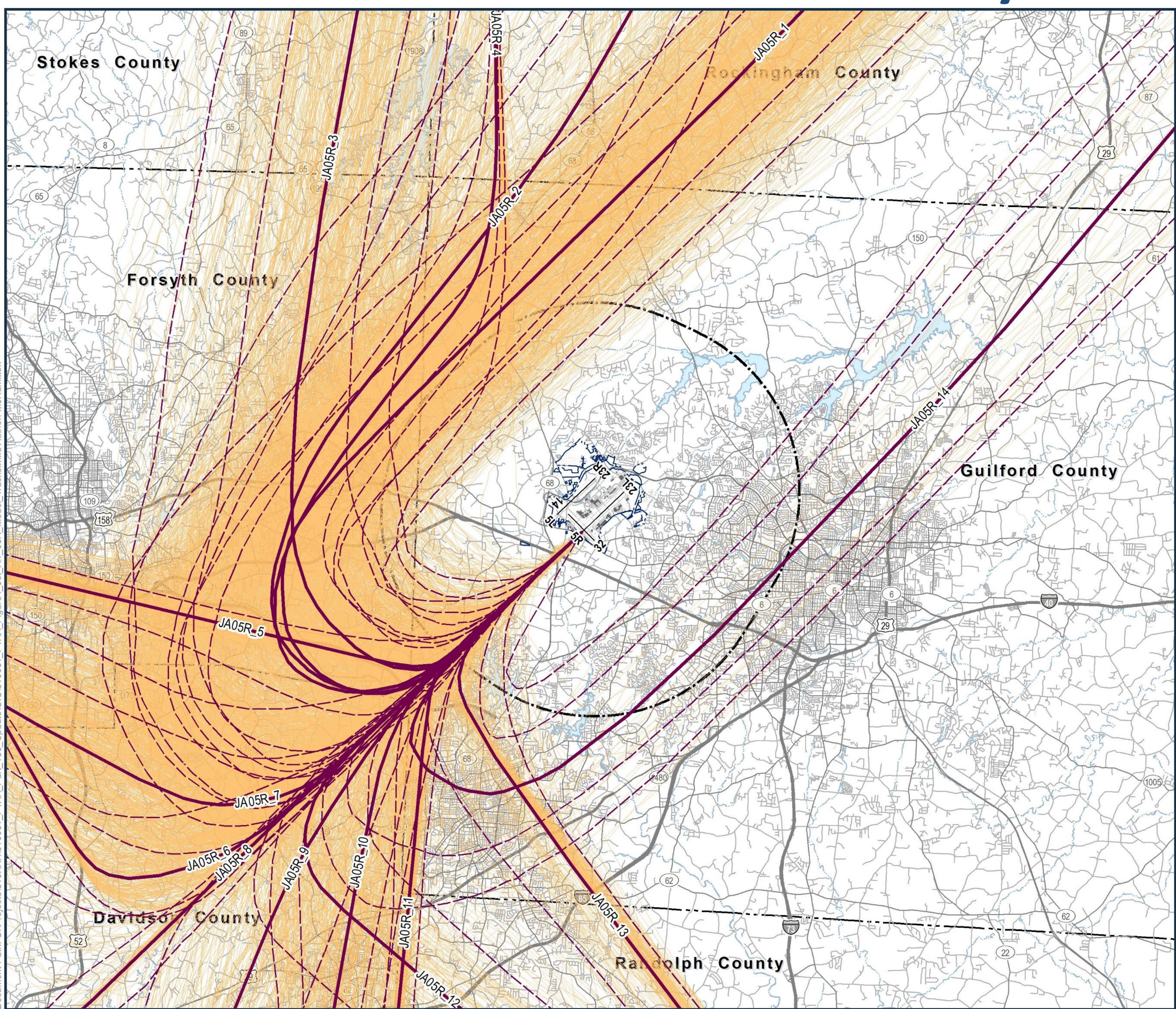


Figure: 4
Jet Arrivals to Runway 05R

- Arrival Backbone Model Track
- Arrival Model Subtrack
- Arrival Radar Tracks (5,372)
- Airport Boundary
- Runway
- 30,000 ft. Extent from Runway End
- County Boundary
- Highways
- Railroad
- Airport Buildings
- Taxiway / Apron
- Major Roads
- Local Roads
- Water / Stream / Creek

Track Bundle	# of tracks	Day Usage	Night Usage	FDX Day	FDX Night
JA05R_1	5	20.9%	17.3%	1.1%	23.8%
JA05R_2	5	3.4%	2.4%	0.0%	1.9%
JA05R_3	5	8.3%	8.0%	0.0%	2.4%
JA05R_4	5	14.7%	5.9%	0.0%	1.5%
JA05R_5	3	13.9%	23.0%	37.1%	18.4%
JA05R_6	3	3.7%	2.1%	3.4%	1.5%
JA05R_7	5	16.0%	14.4%	56.2%	21.4%
JA05R_8	3	0.4%	2.6%	0.0%	0.5%
JA05R_9	3	3.6%	7.5%	0.0%	1.0%
JA05R_10	5	5.3%	3.0%	0.0%	0.5%
JA05R_11	3	3.7%	1.7%	0.0%	0.0%
JA05R_12	3	2.6%	2.5%	1.1%	7.8%
JA05R_13	3	3.1%	6.7%	1.1%	19.4%
JA05R_14	5	0.2%	3.0%	0.0%	0.0%
Total	56	100.0%	100.0%	100.0%	100.0%

DRAFT

Data Sources: Guilford County GIS; Davidson County GIS; Forsyth County GIS; NC OneMap GeoSpatial Portal; Environmental Systems Research Institute (ESRI); AirNav.com; HMMH Inc.

0 4 8 NMi

Jet Departures - Runway 5R

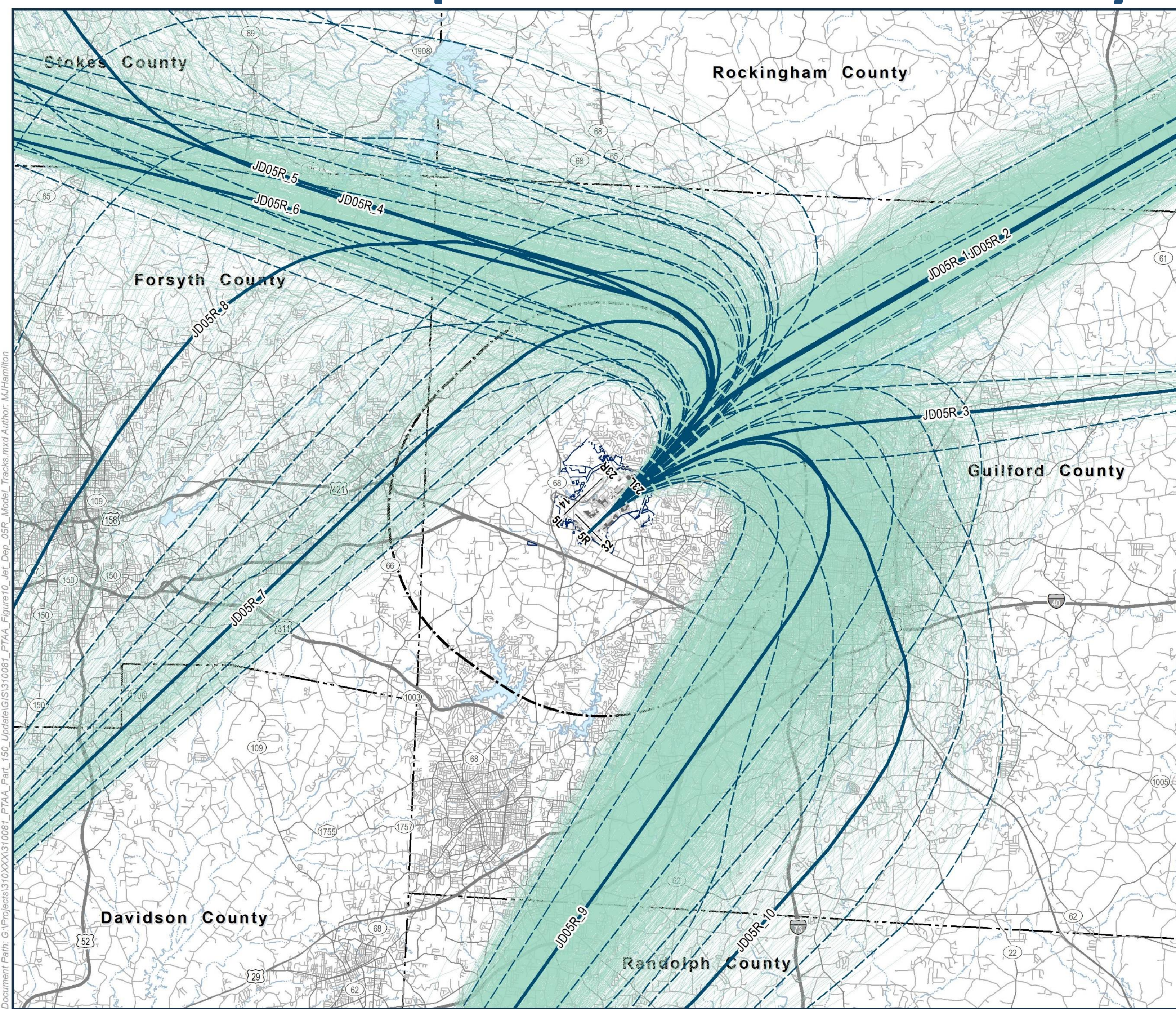


Figure: 10
Jet Departures from Runway 05R

- Departure Backbone Model Track
- Departure Model Subtrack
- Departure Radar Tracks (6,248)
- Airport Boundary
- Runway
- 30,000 ft. Extent from Runway End
- County Boundary
- Highways
- Railroad
- Airport Buildings
- Taxiway / Apron
- Major Roads
- Local Roads
- Water / Stream / Creek

Track Bundle	# of tracks	Day Usage	Night Usage	FDX Day	FDX Night
JD05R_1	5	46.7%	51.7%	2.6%	6.8%
JD05R_2	3	1.9%	0.8%	0.0%	0.0%
JD05R_3	3	1.1%	0.3%	0.0%	0.0%
JD05R_4	5	4.8%	4.1%	2.6%	6.8%
JD05R_5	5	2.1%	1.8%	9.0%	6.8%
JD05R_6	5	5.8%	6.0%	16.7%	21.9%
JD05R_7	5	3.9%	5.1%	0.0%	0.0%
JD05R_8	5	3.2%	4.5%	0.0%	0.0%
JD05R_9	5	28.6%	25.3%	67.9%	57.5%
JD05R_10	5	1.9%	0.5%	1.3%	0.0%
Total	46	100.0%	100.0%	100.0%	100.0%

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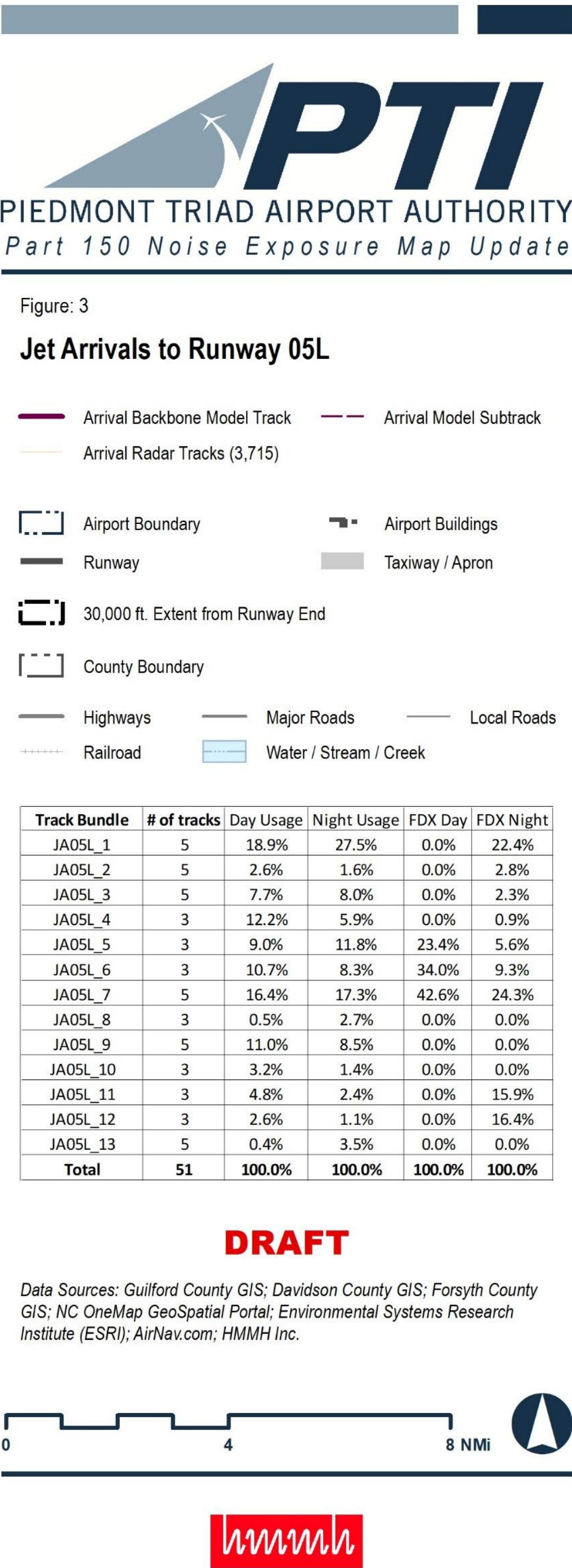
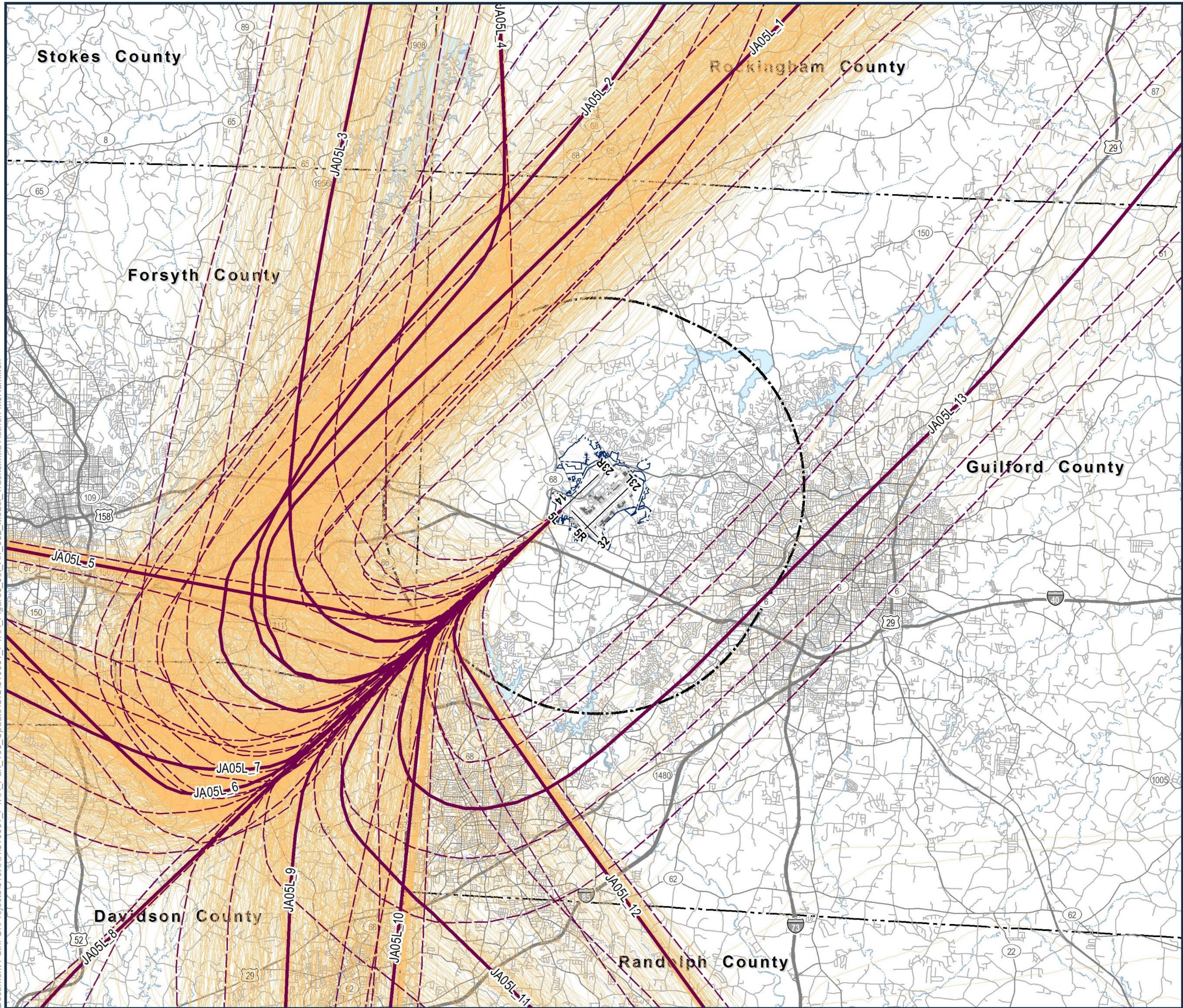
Data Sources: Guilford County GIS; Davidson County GIS; Forsyth County GIS; NC OneMap GeoSpatial Portal; Environmental Systems Research Institute (ESRI); AirNav.com; HMMH Inc.

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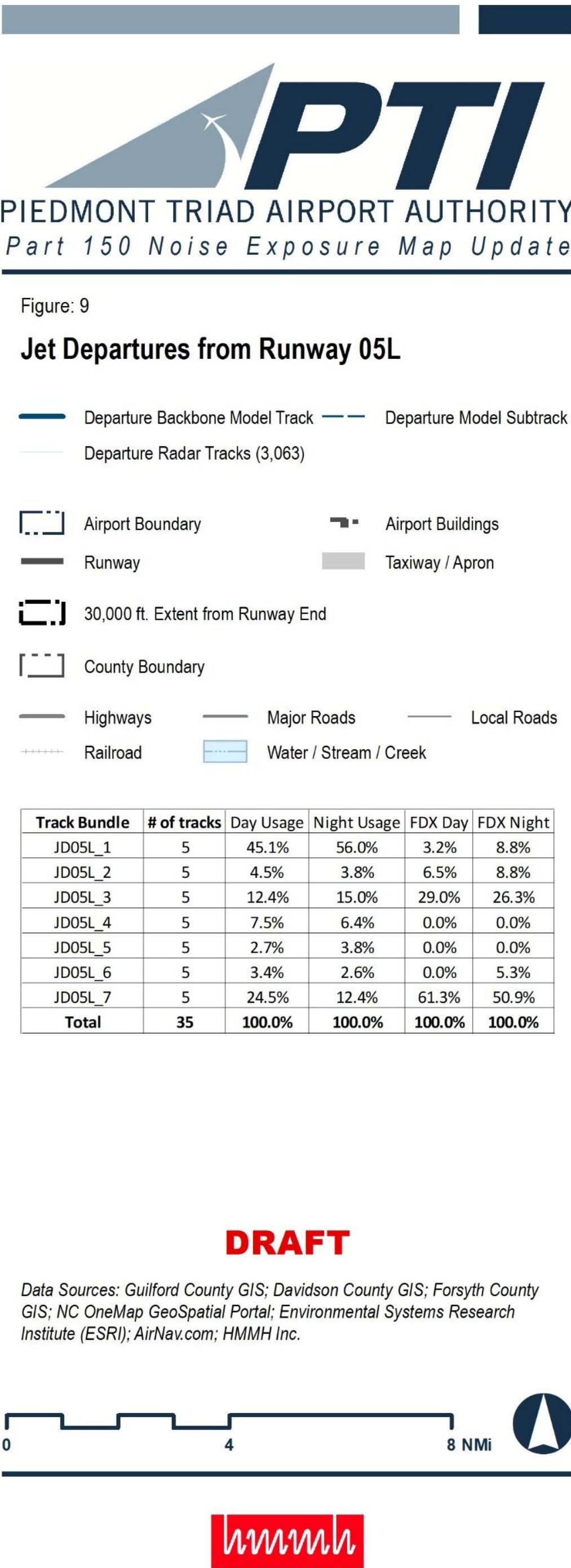
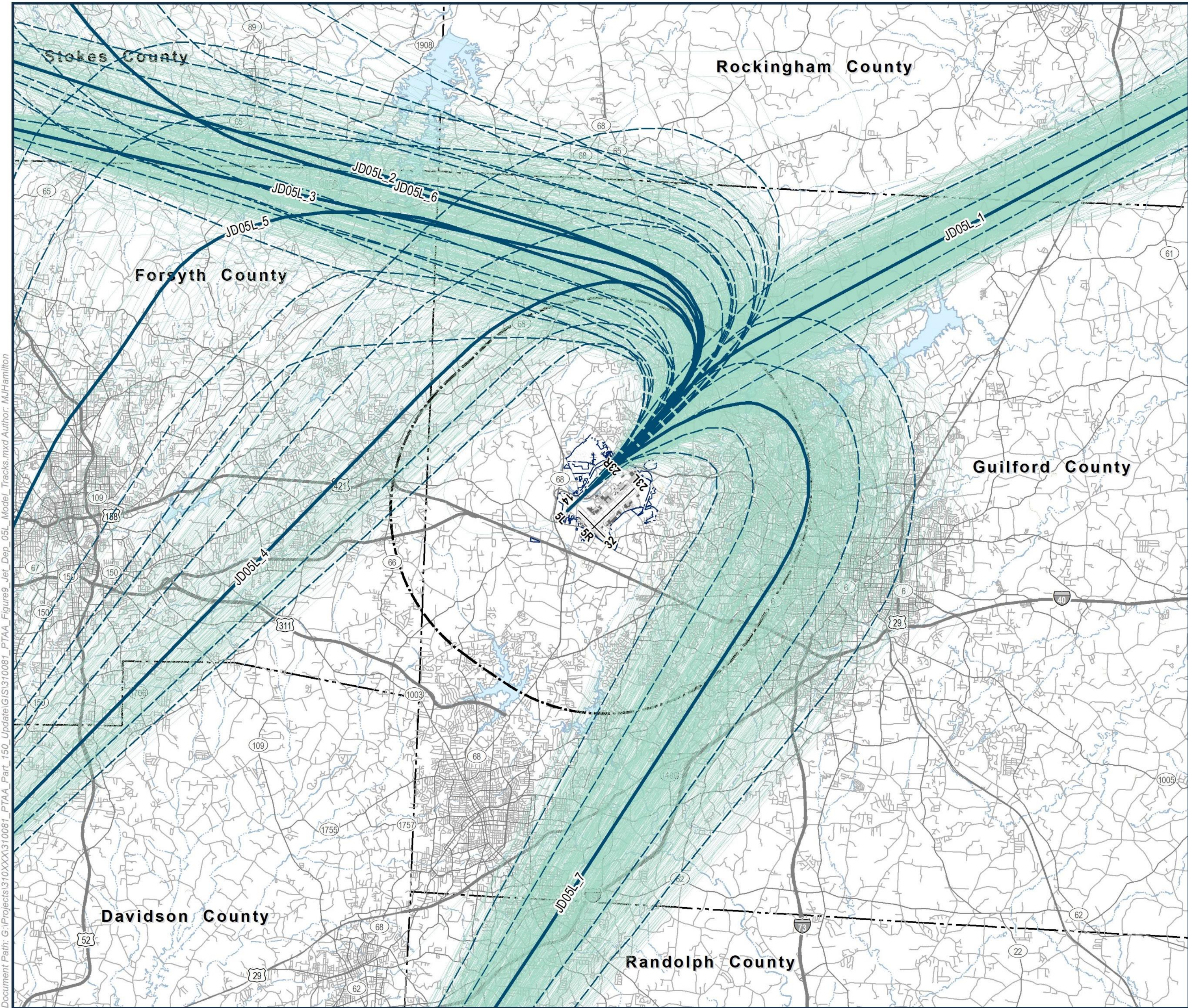


Modeled Flight Tracks: Runway 5L

Jet Arrivals – Runway 5L

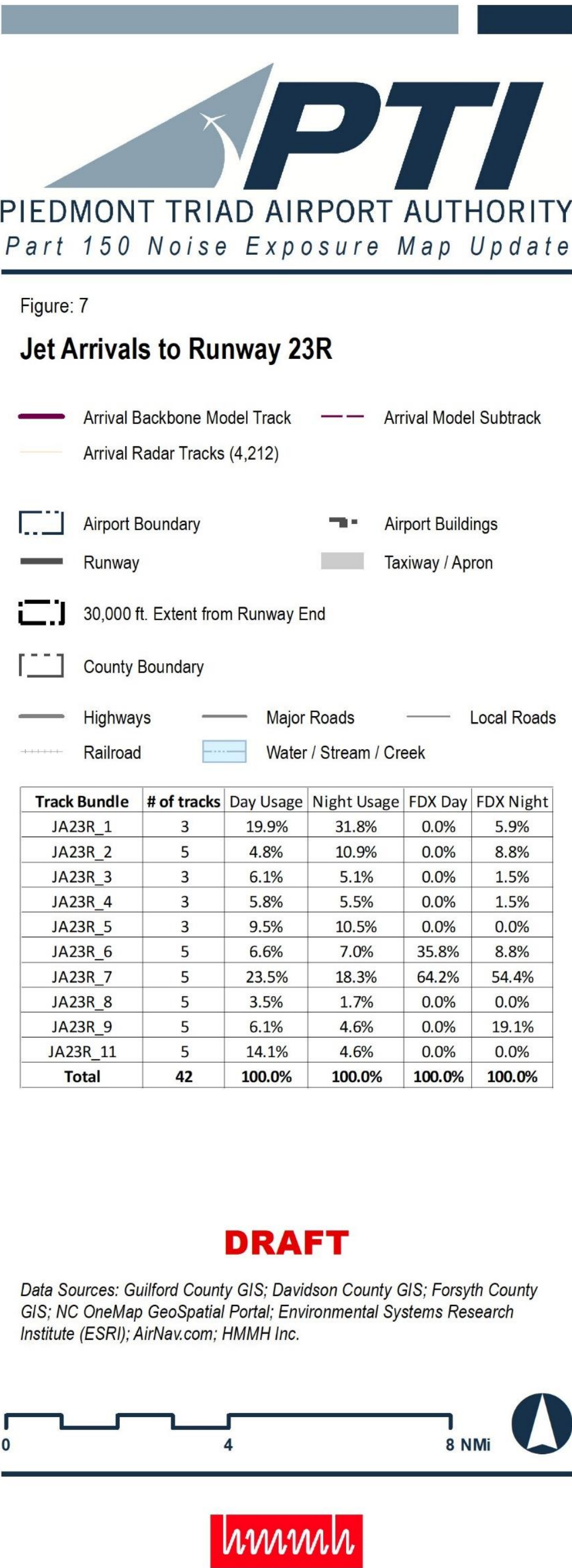
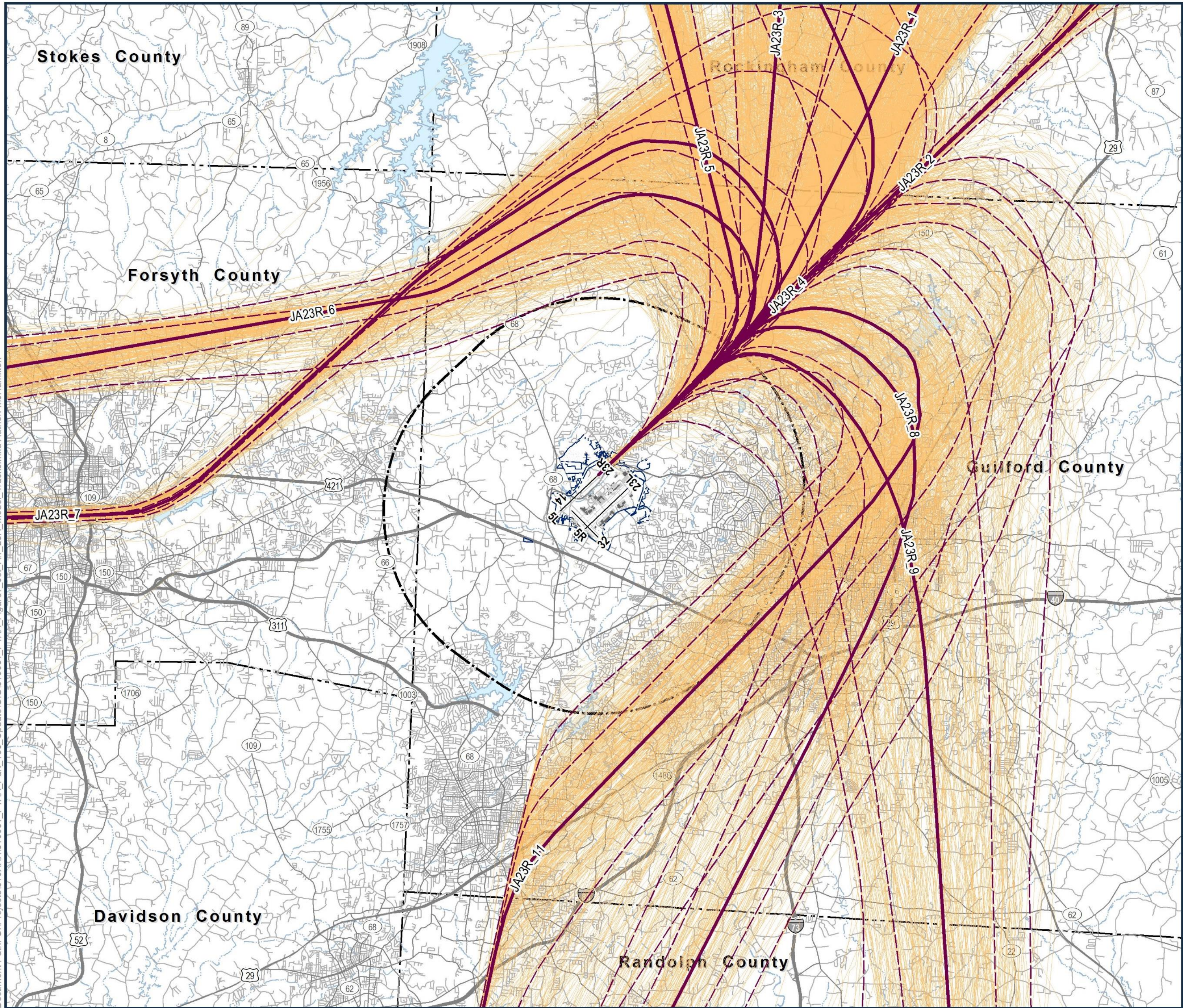


Jet Departures - Runway 5L

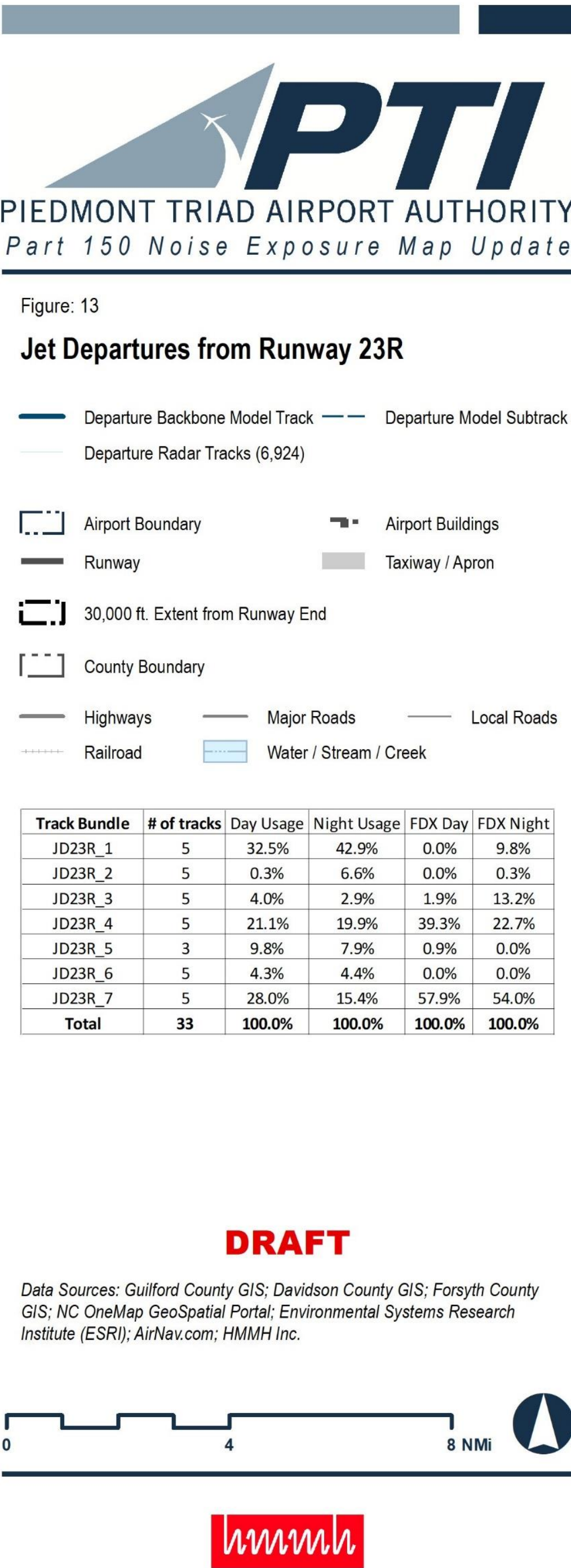
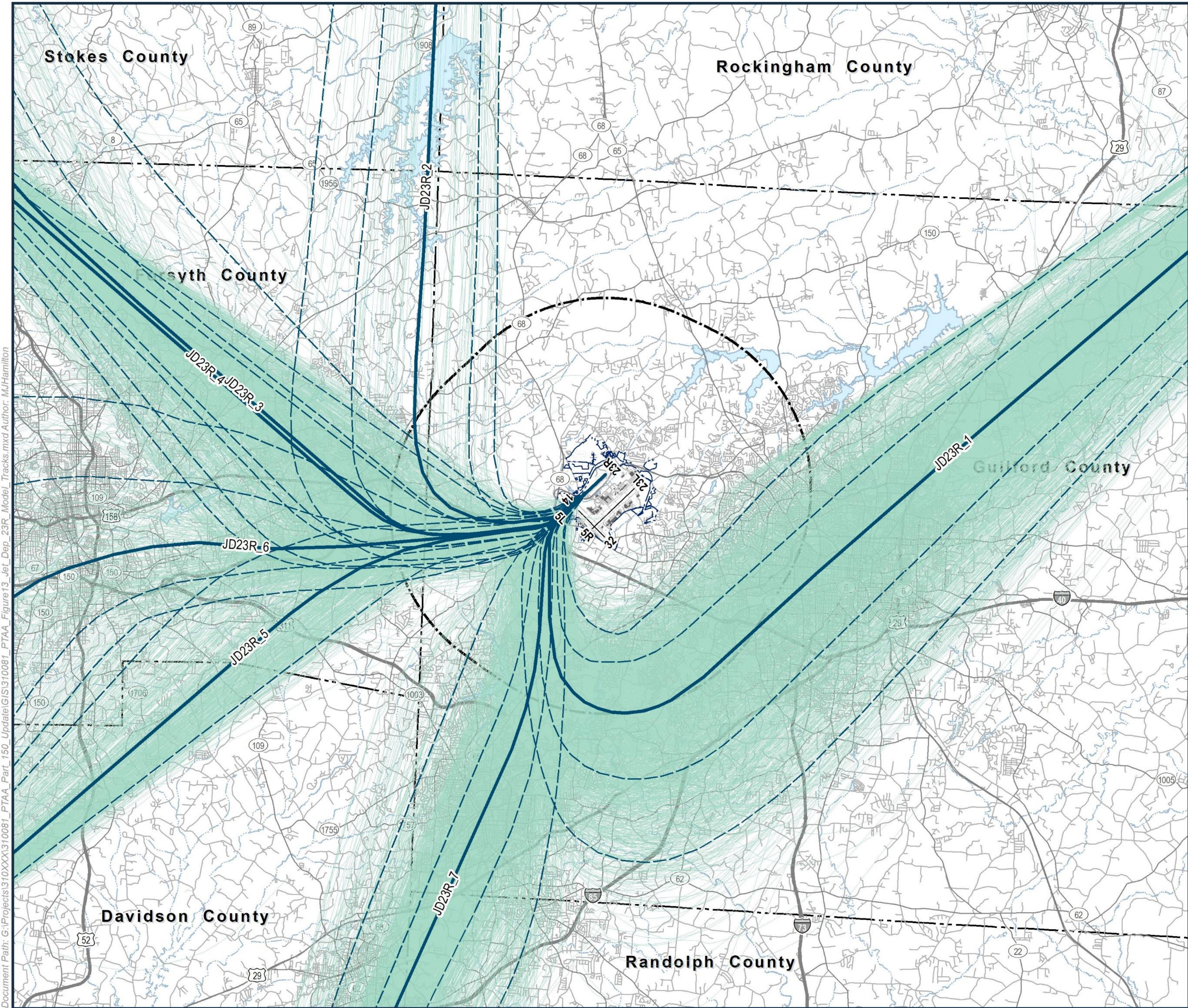


Modeled Flight Tracks: Runway 23R

Jet Arrivals – Runway 23R

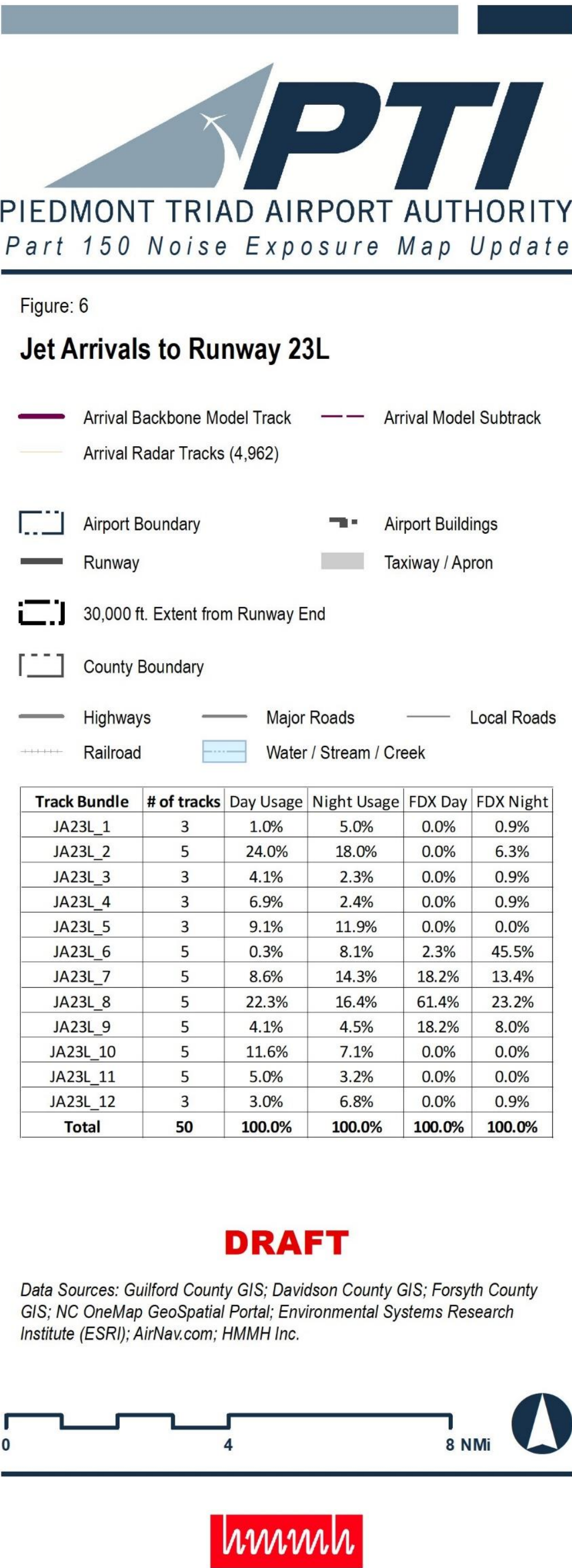
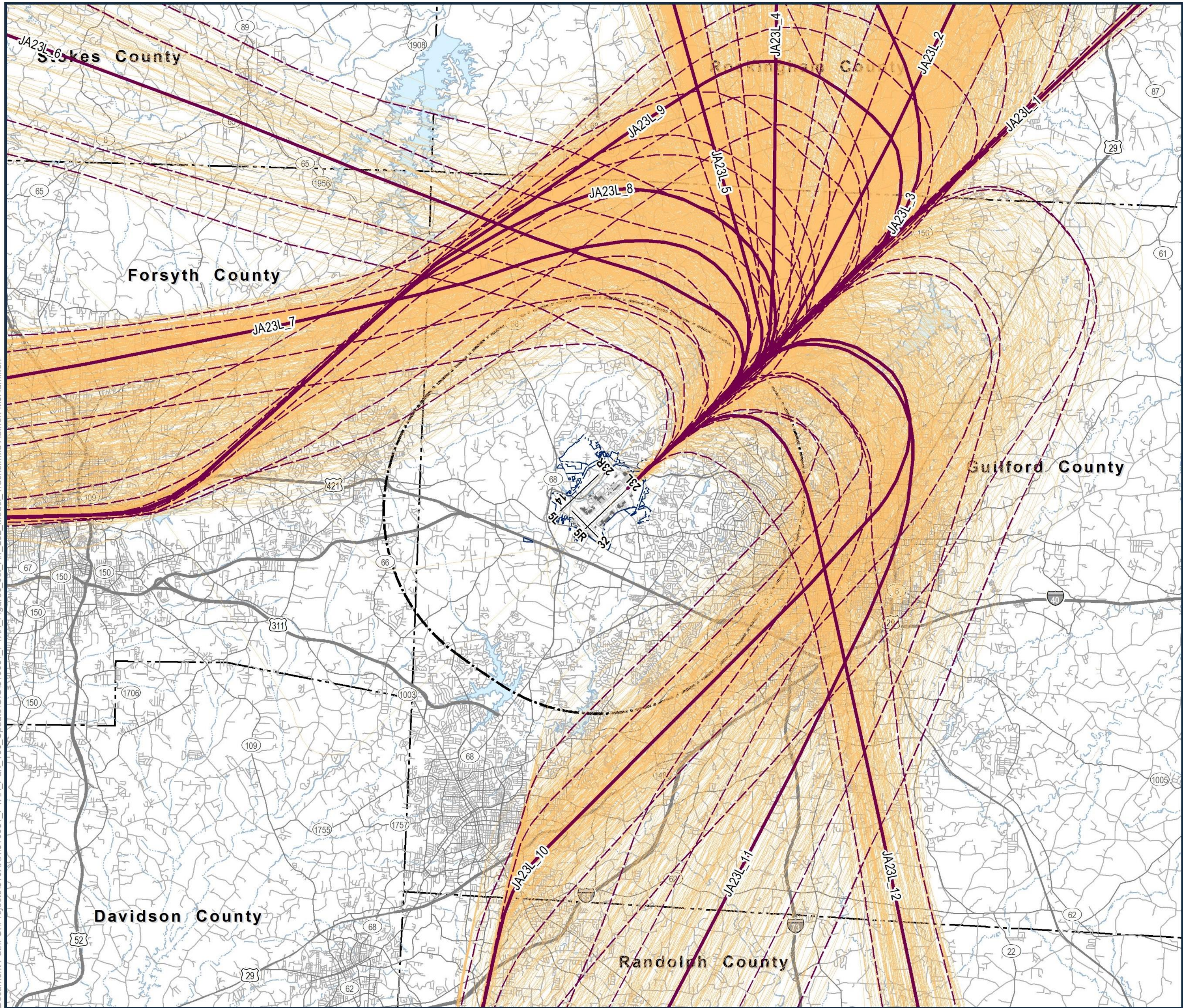


Jet Departures - Runway 23R

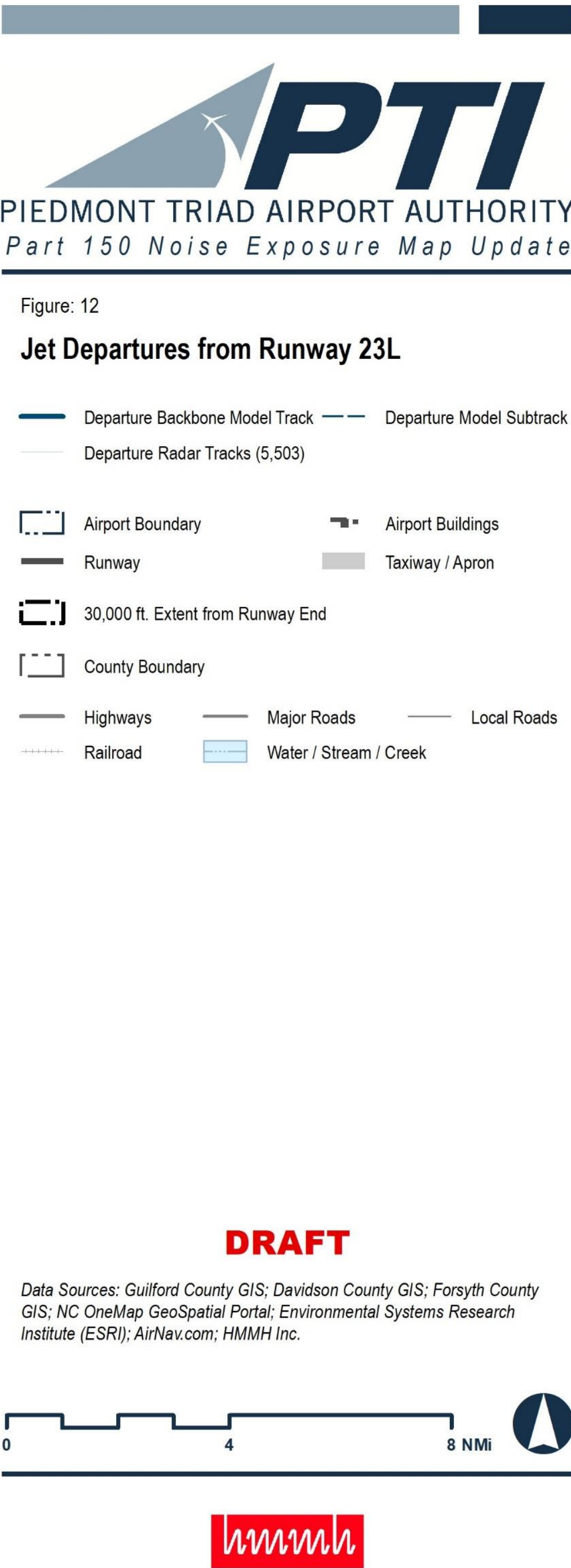
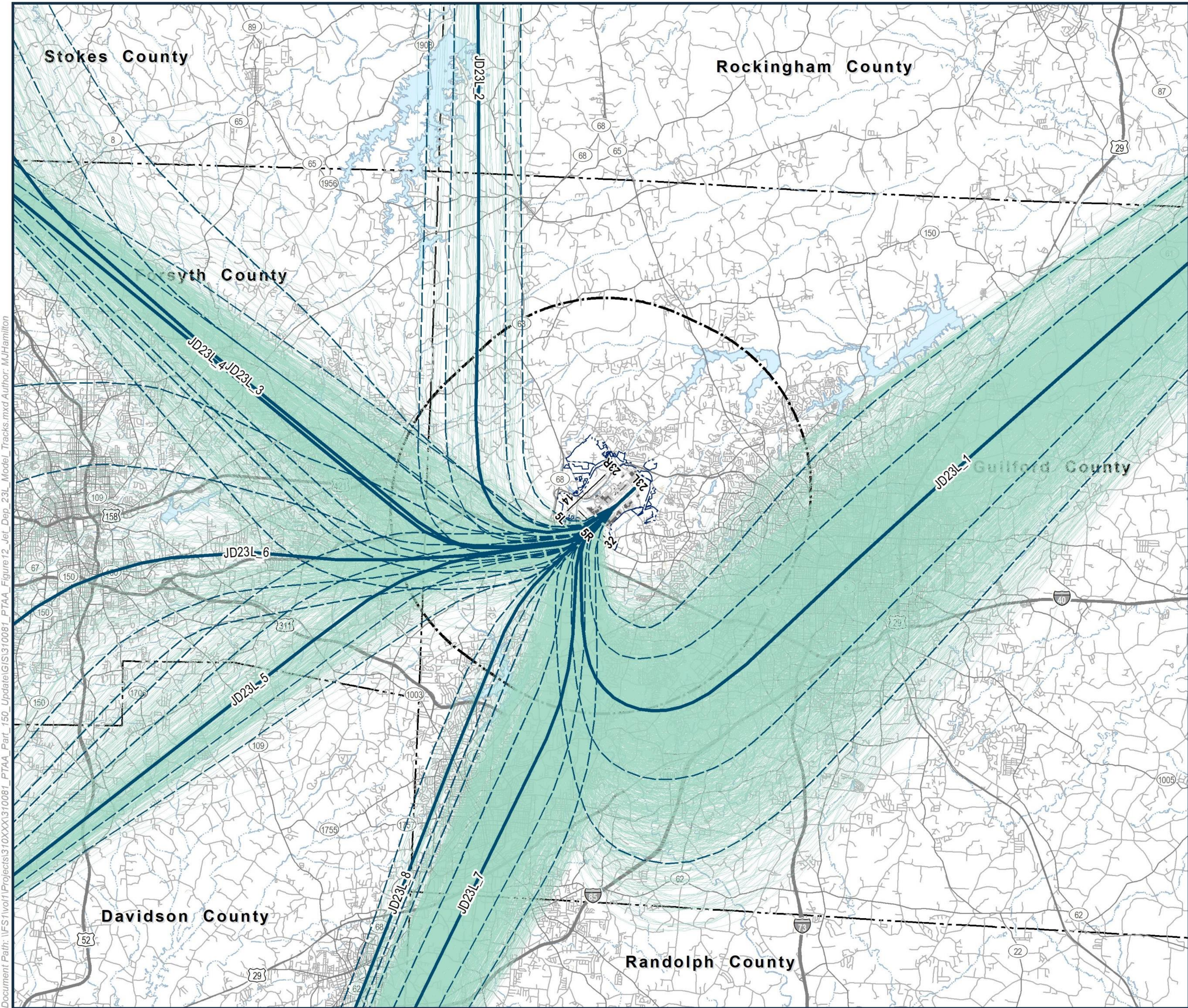


Modeled Flight Tracks: Runway 23L

Jet Arrivals - Runway 23L



Jet Departures - Runway 23L

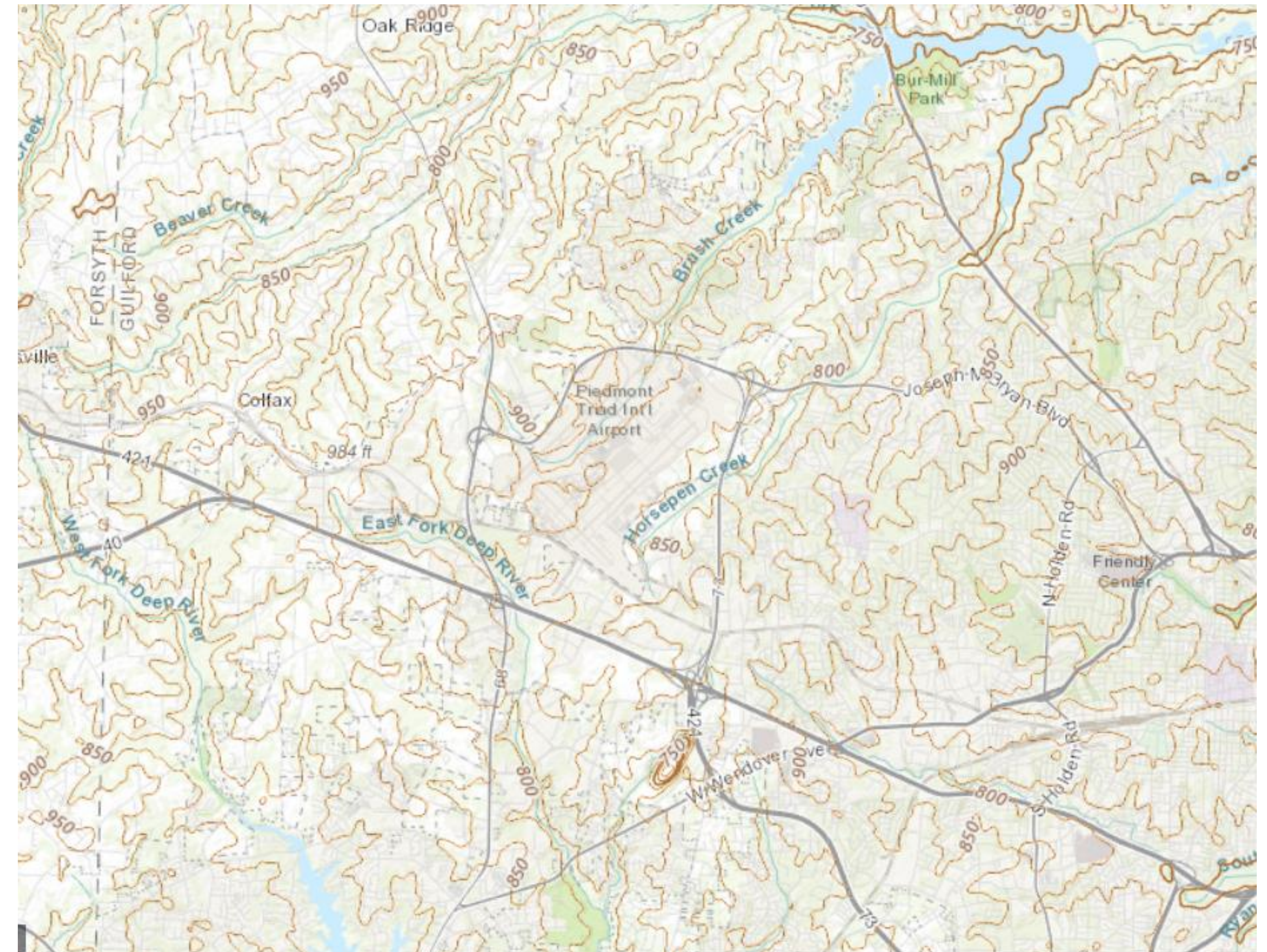


Thank you to committee member Ed Levick for careful review of flight track inputs; an additional model track was added to fill a gap.



Modeled Weather and Terrain Data

- The FAA requires the use of the provided AEDT 30-year average weather information. These data for PTI are:
 - Temperature: 58° F
 - Station Pressure: 985.75 mbar
 - Sea Level Pressure: 1018.04 mbar
 - Dew point: 46.99° F
 - Relative humidity: 67.35%
 - Wind speed 6.15 knots
- Terrain data were obtained from the United States Geological Survey National Elevation Dataset with 1/3 arc second (approximately 33 ft.) resolution covering the Study Area

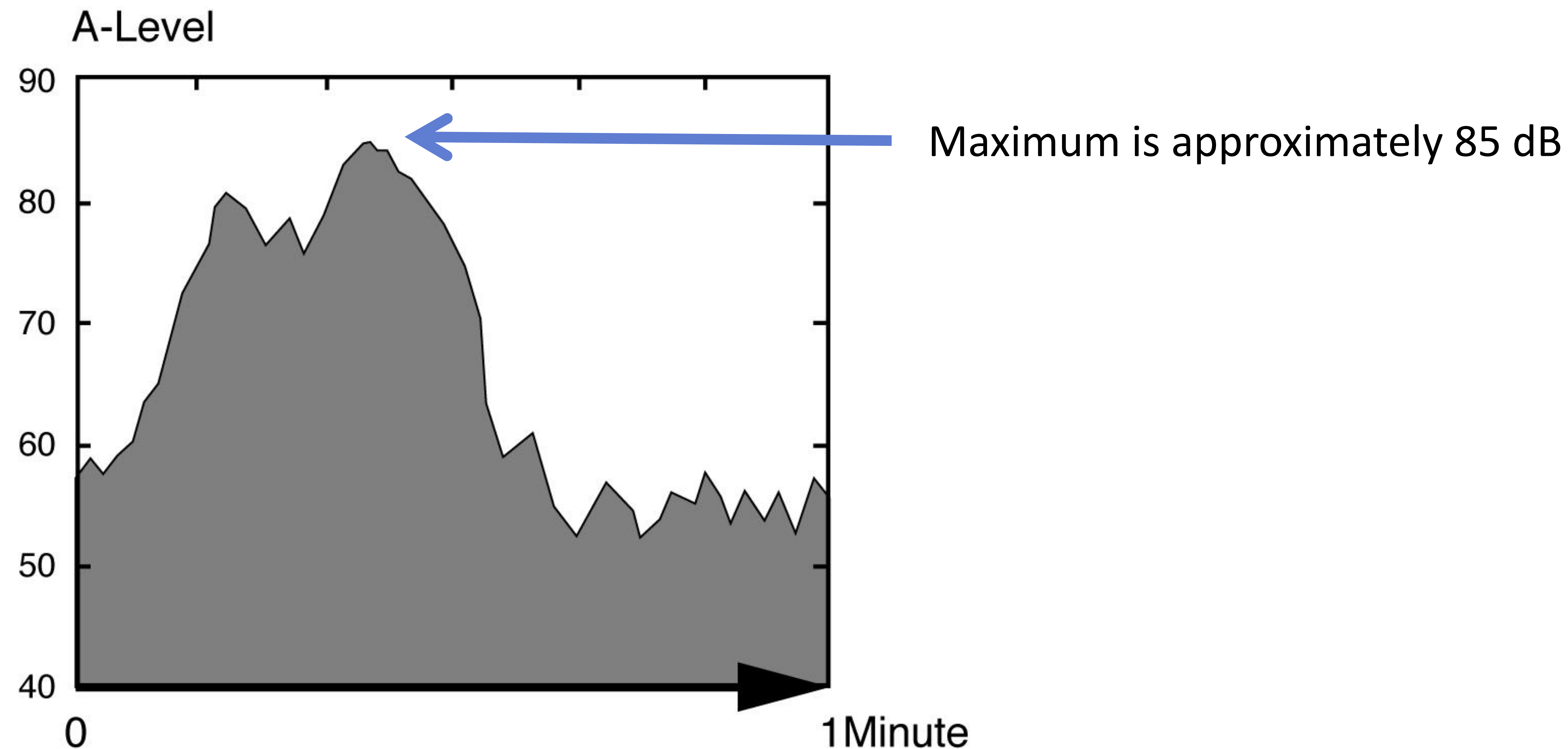


Preliminary Noise Model Results



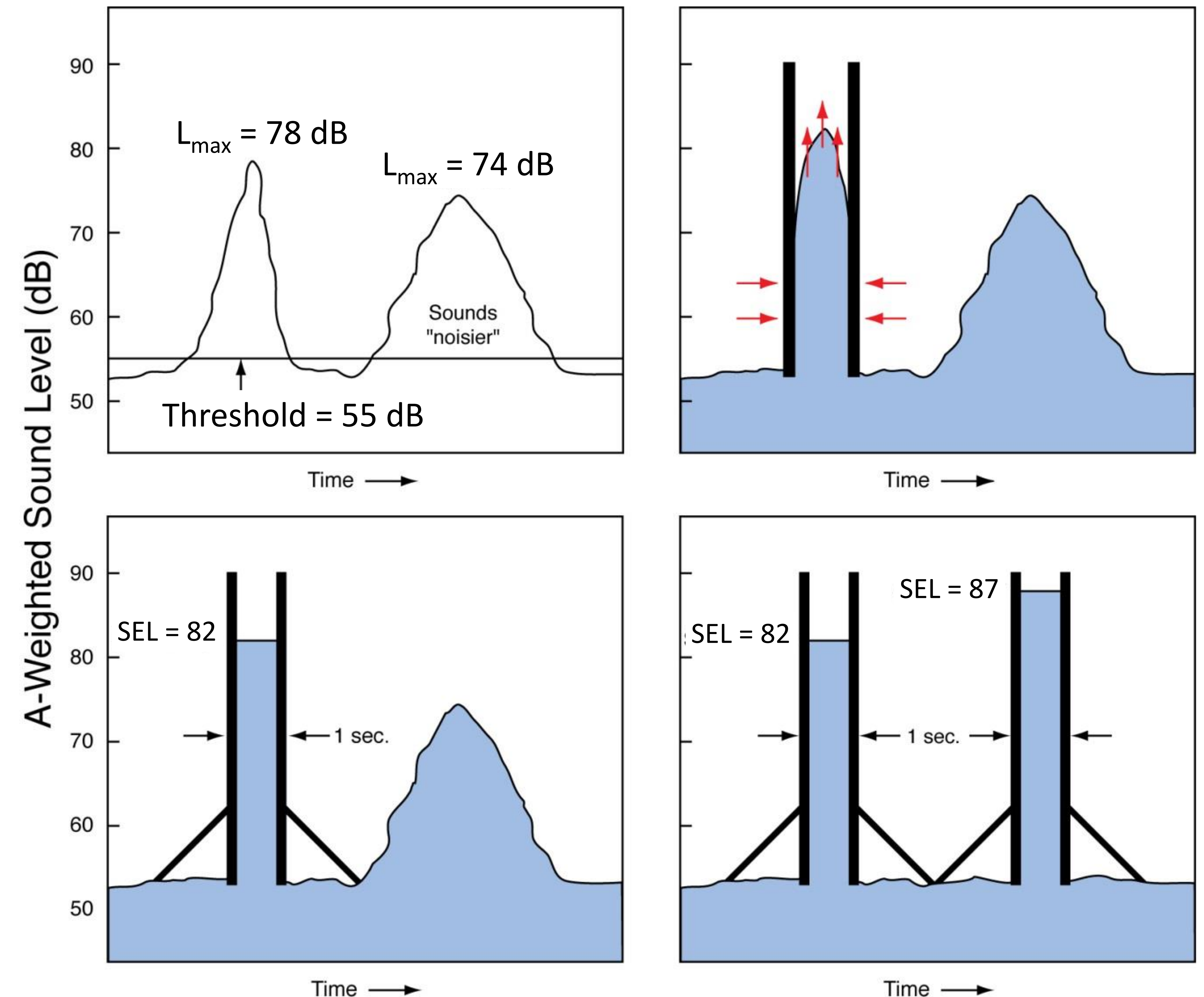
Single Event Noise Metrics: Maximum Sound Level (L_{\max})

The simplest way to describe a discrete noise “event” is its maximum sound level (L_{\max})



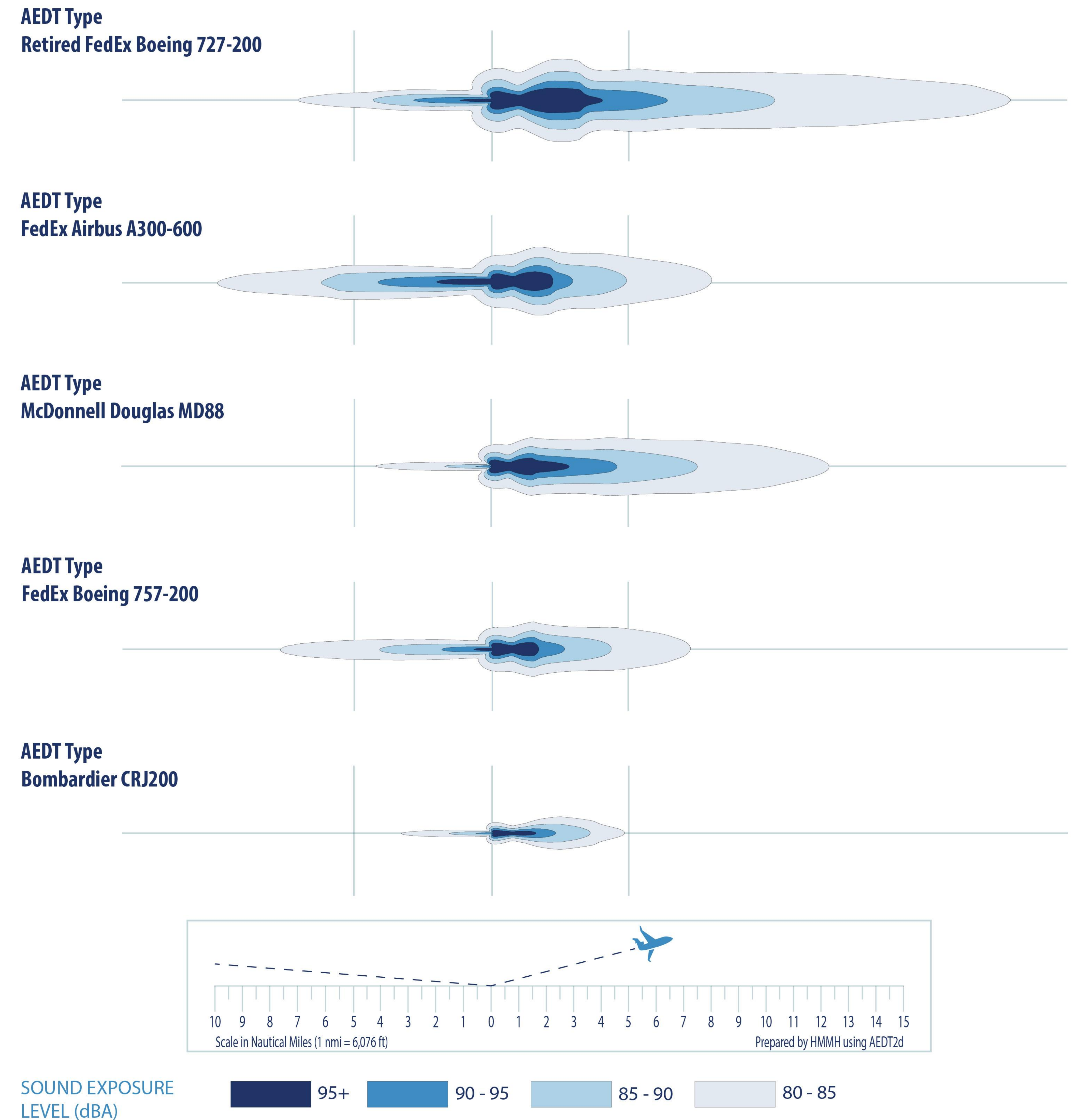
Single Event Noise Metrics: Sound Exposure Level (SEL)

- Duration matters: A longer event may seem “noisier,” even if it has a lower or equal maximum level
- SEL measures the total “noisiness” of an event by taking duration into account
- The FAA’s noise model (AEDT) uses SEL as the basis for calculating the required noise metric Day-Night Average Sound Level



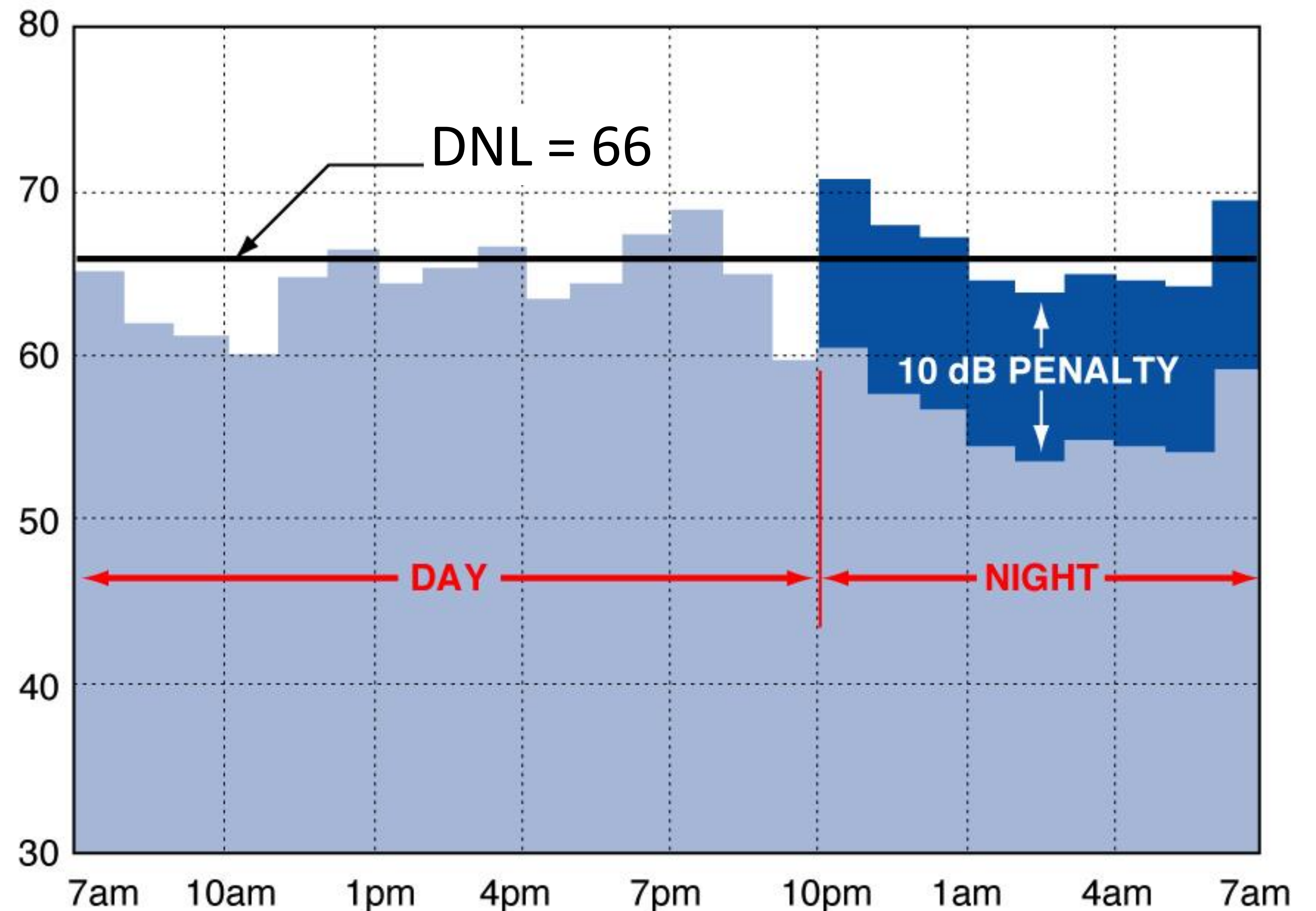
Comparative SELs

- The sound exposure levels created by an aircraft overflight depend on its
 - Engine type
 - Thrust setting profile
 - Altitude profile
 - Airspeed profile
- These graphics compare a typical landing (from left) and takeoff (to right) of different aircraft types

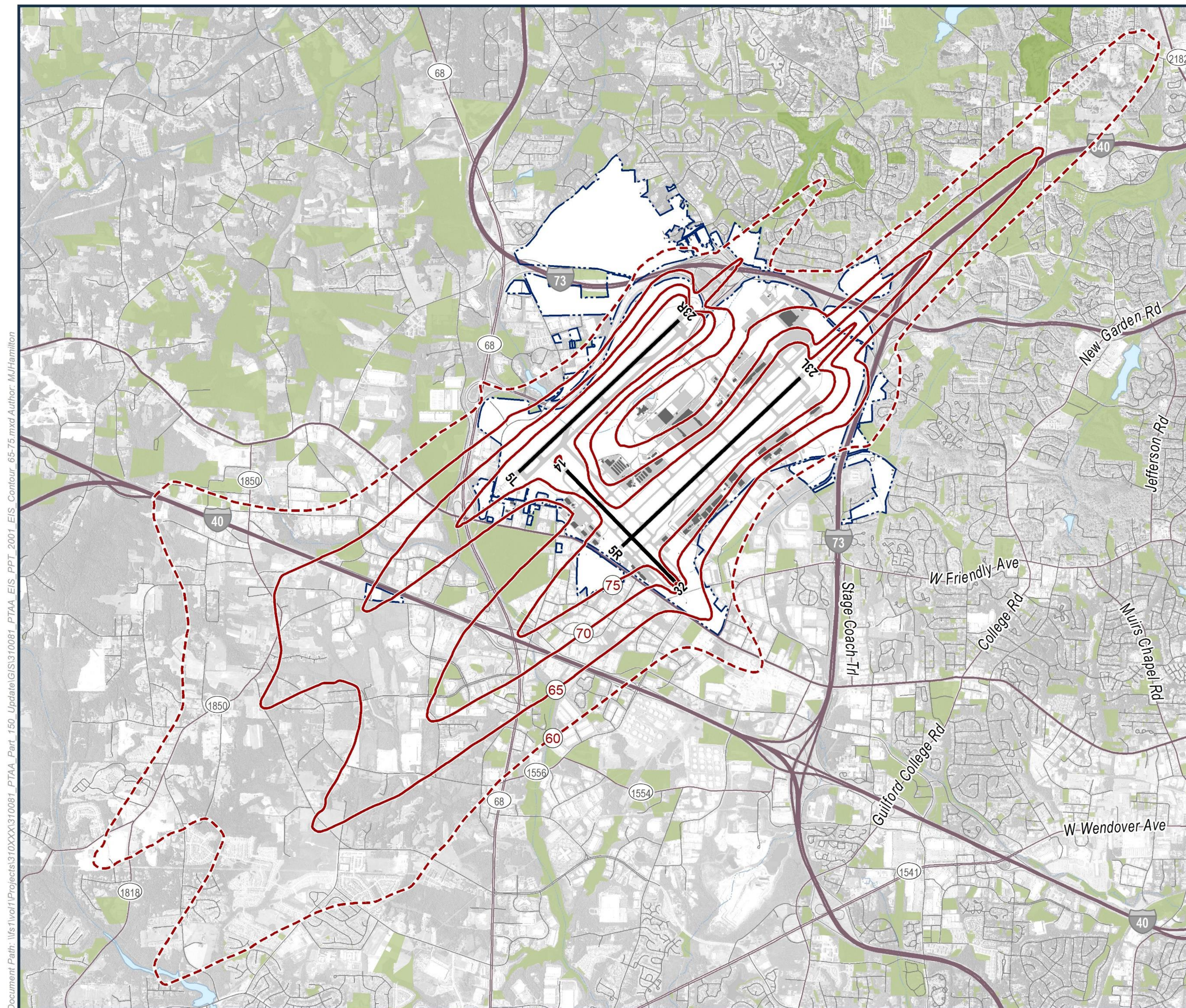


Cumulative Exposure: Day-Night Average Level (DNL)

- Describes 24-hour exposure
- Noise from 10 pm to 7 am is factored up by 10 dB
 - “Penalty” is equal to counting each night aircraft 10 times
- DNL is the only metric that Part 150 requires for land use compatibility



Previous Study Noise Contours: 2001 EIS



2001 EIS DNL Contours

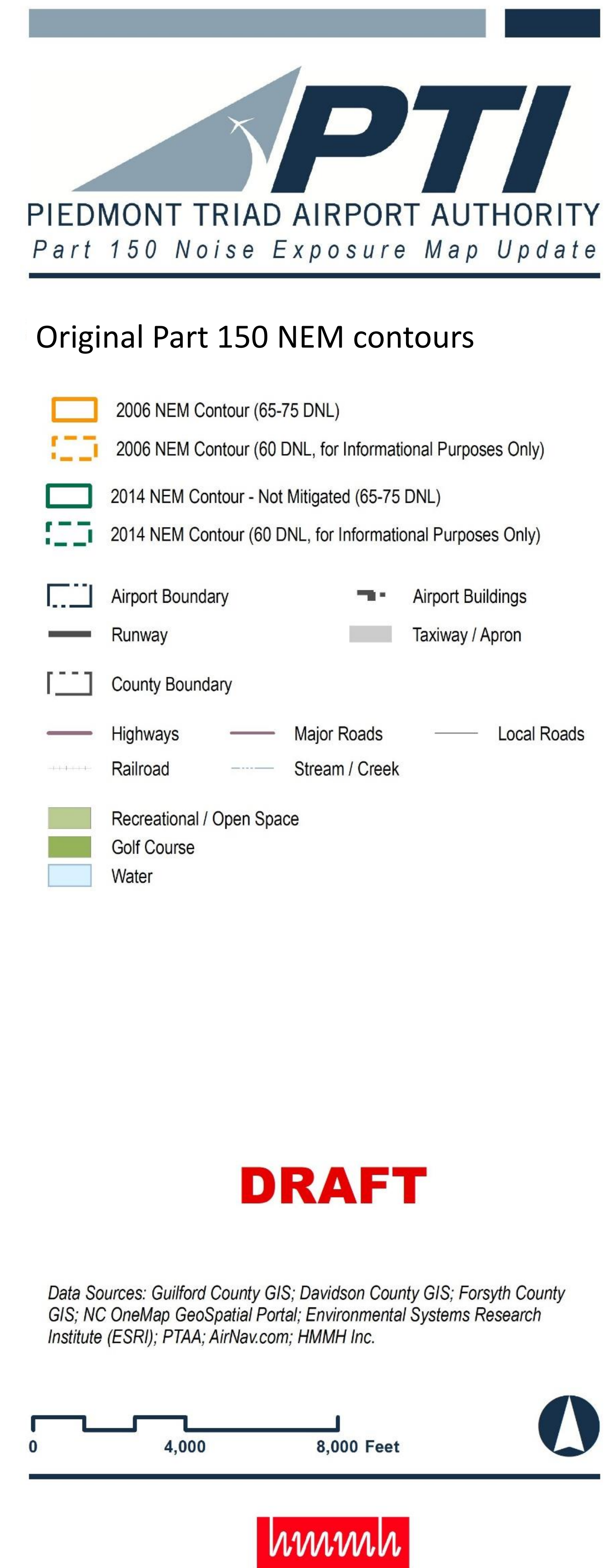
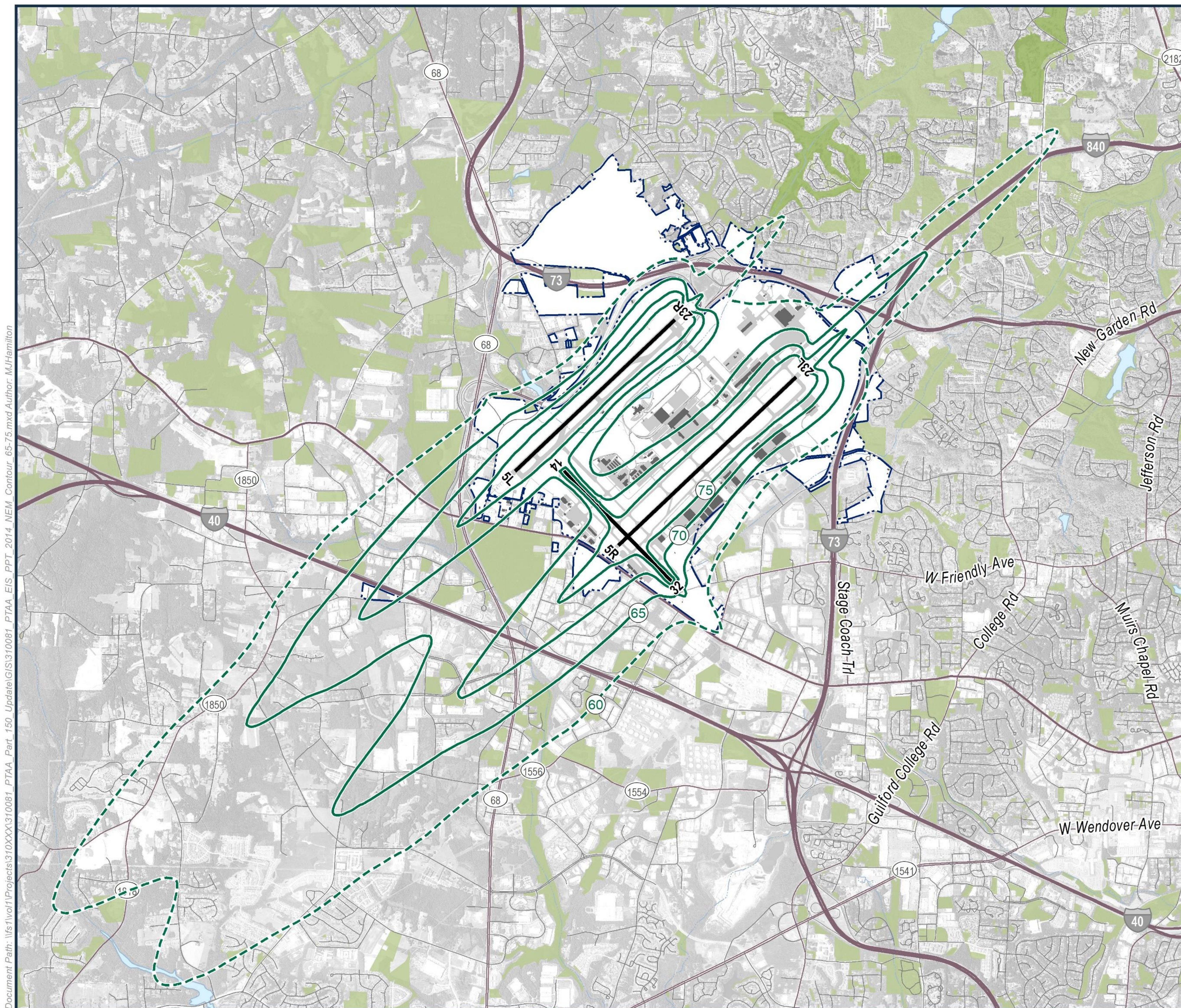
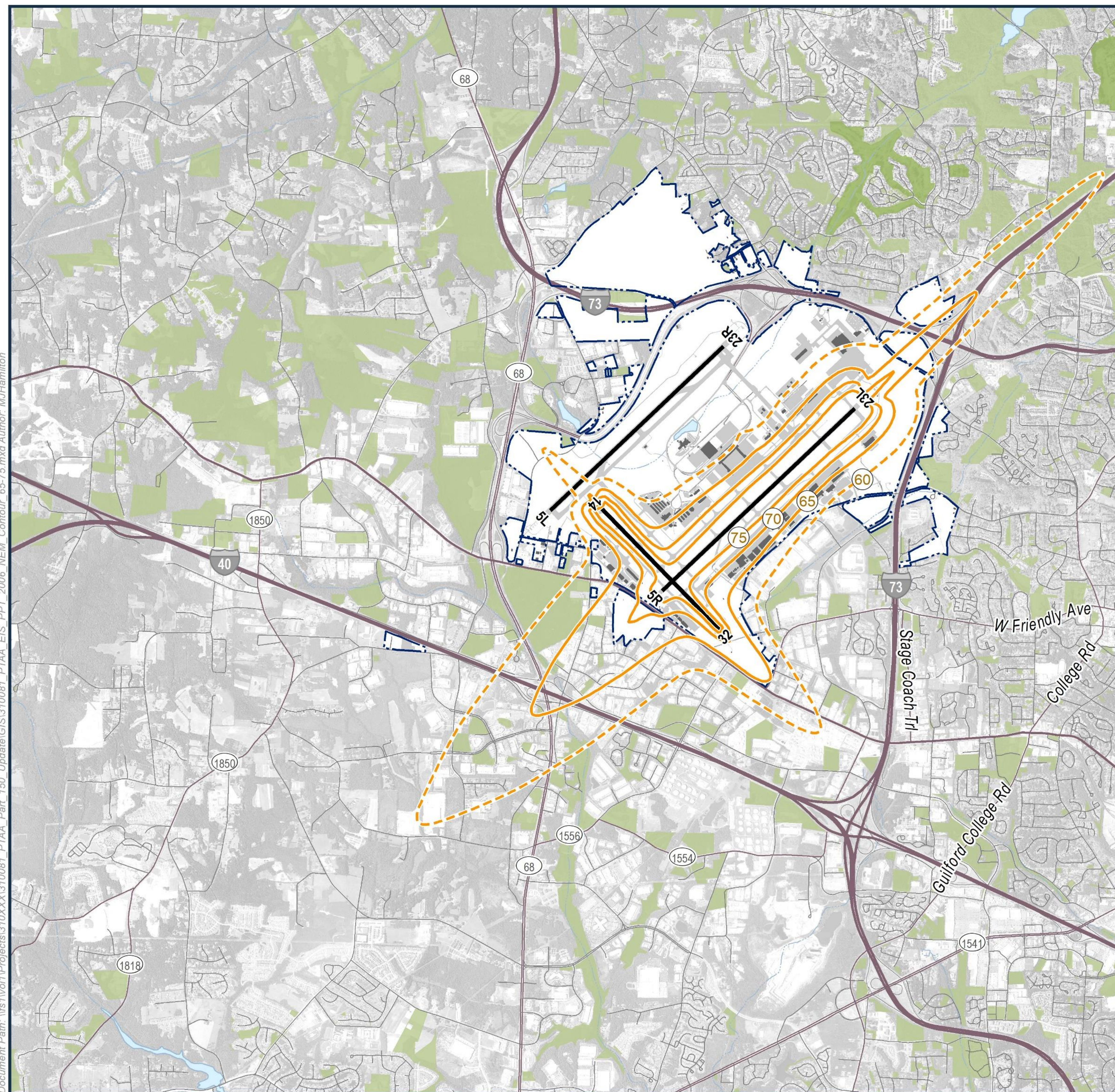
- 2001 EIS Contour (65-75 DNL)
- 2001 EIS Contour (60 DNL, for Informational Purposes Only)
- Airport Boundary
- Runway
- County Boundary
- Highways
- Railroad
- Recreational / Open Space
- Golf Course
- Water
- Airport Buildings
- Taxiway / Apron
- Major Roads
- Local Roads
- Stream / Creek

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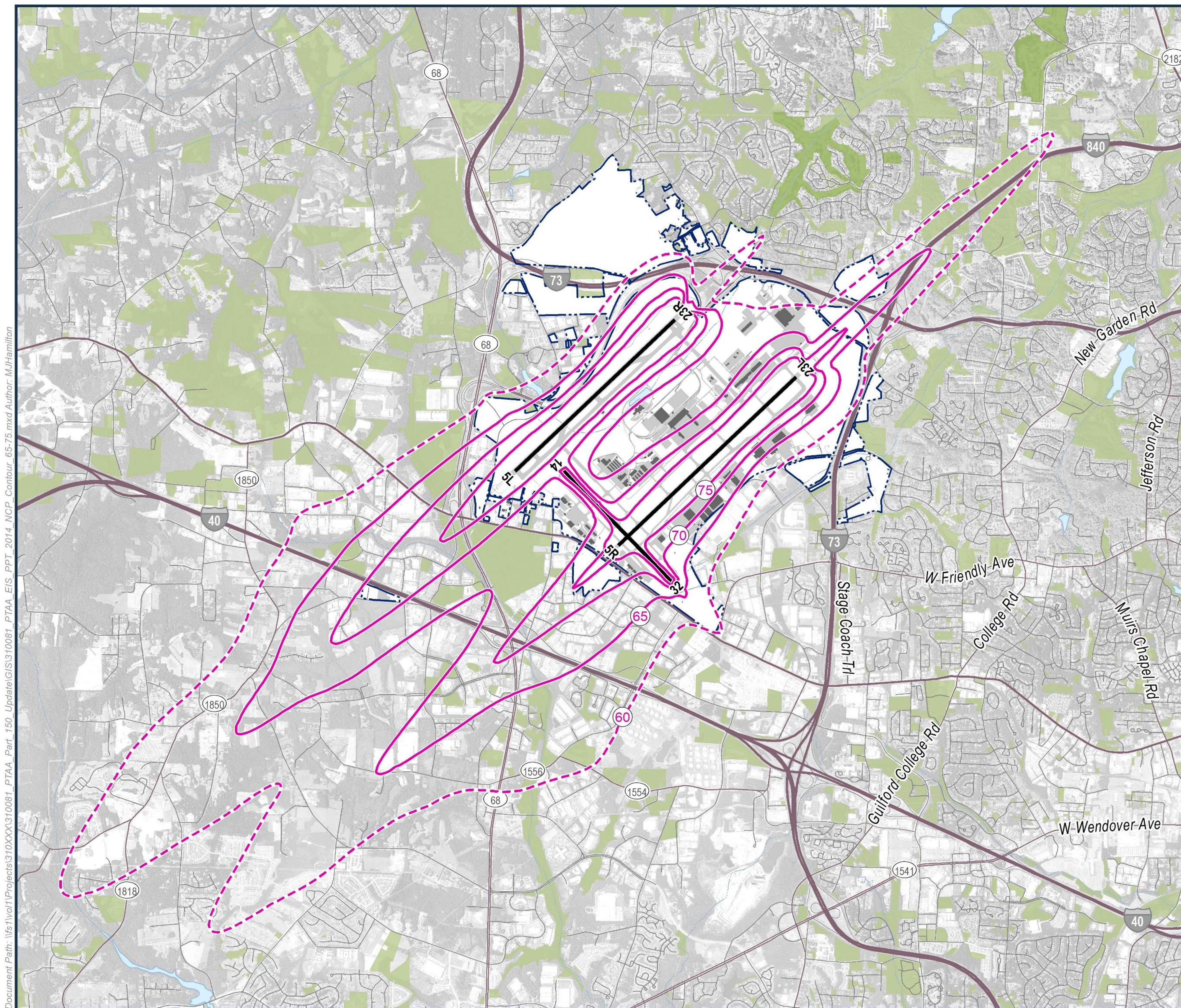
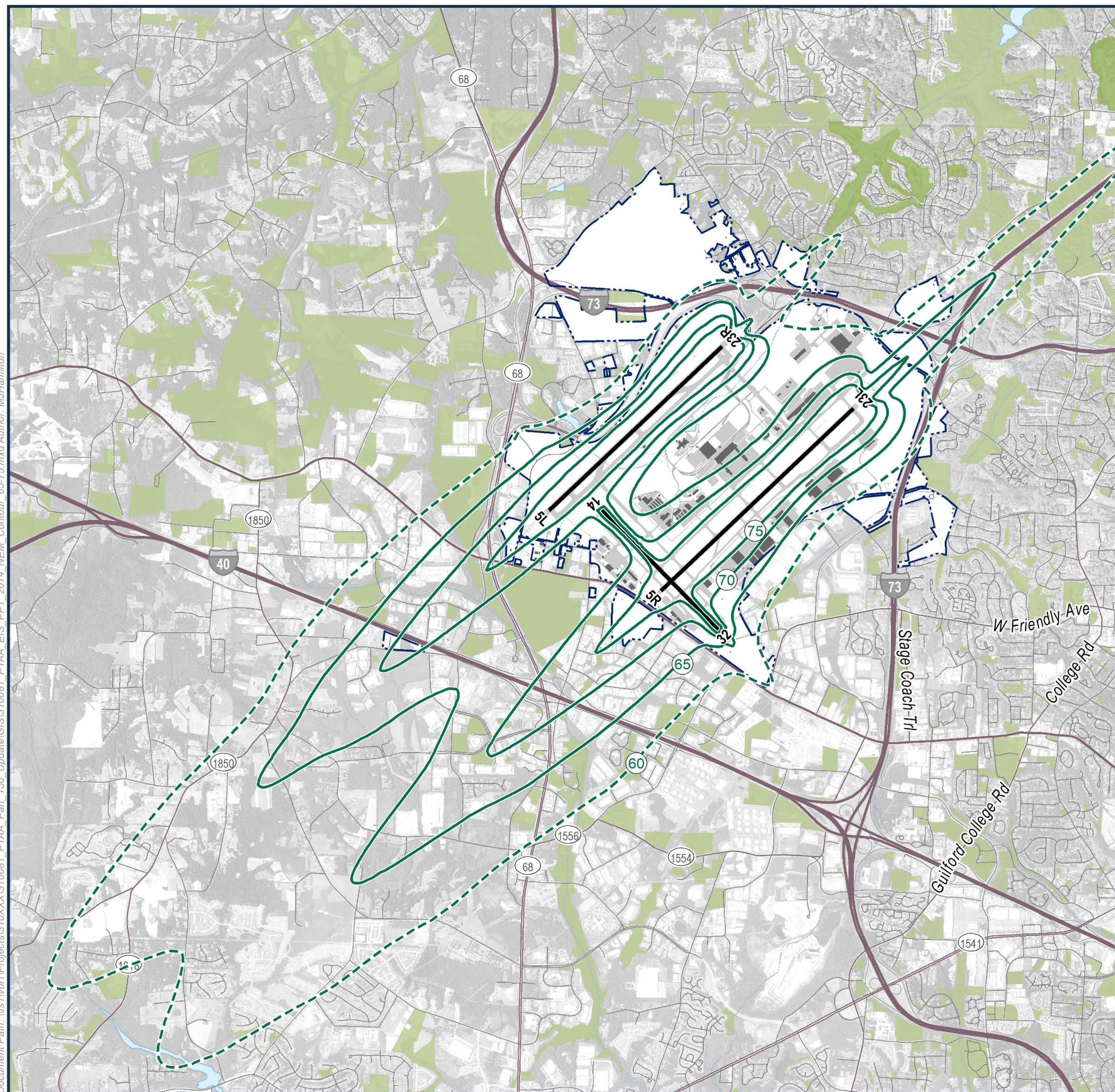
Data Sources: Guilford County GIS; Davidson County GIS; Forsyth County GIS; NC OneMap GeoSpatial Portal; Environmental Systems Research Institute (ESRI); PTAA; AirNav.com; HMMH Inc.



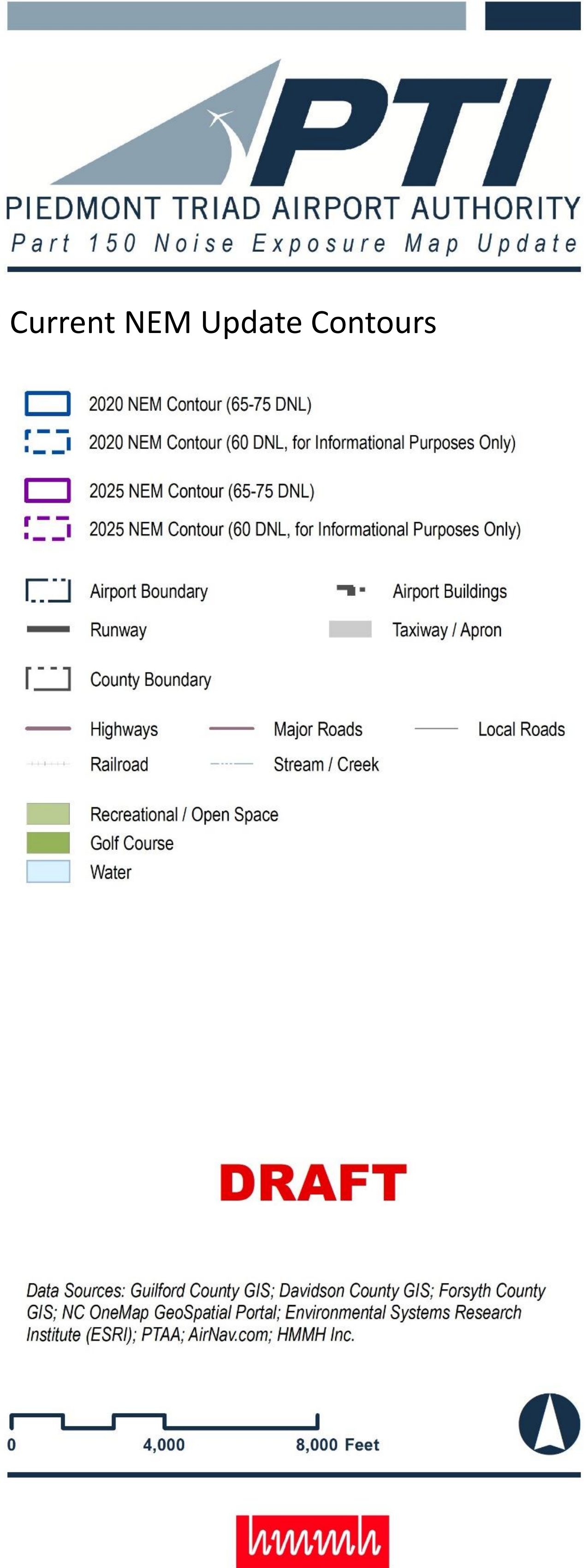
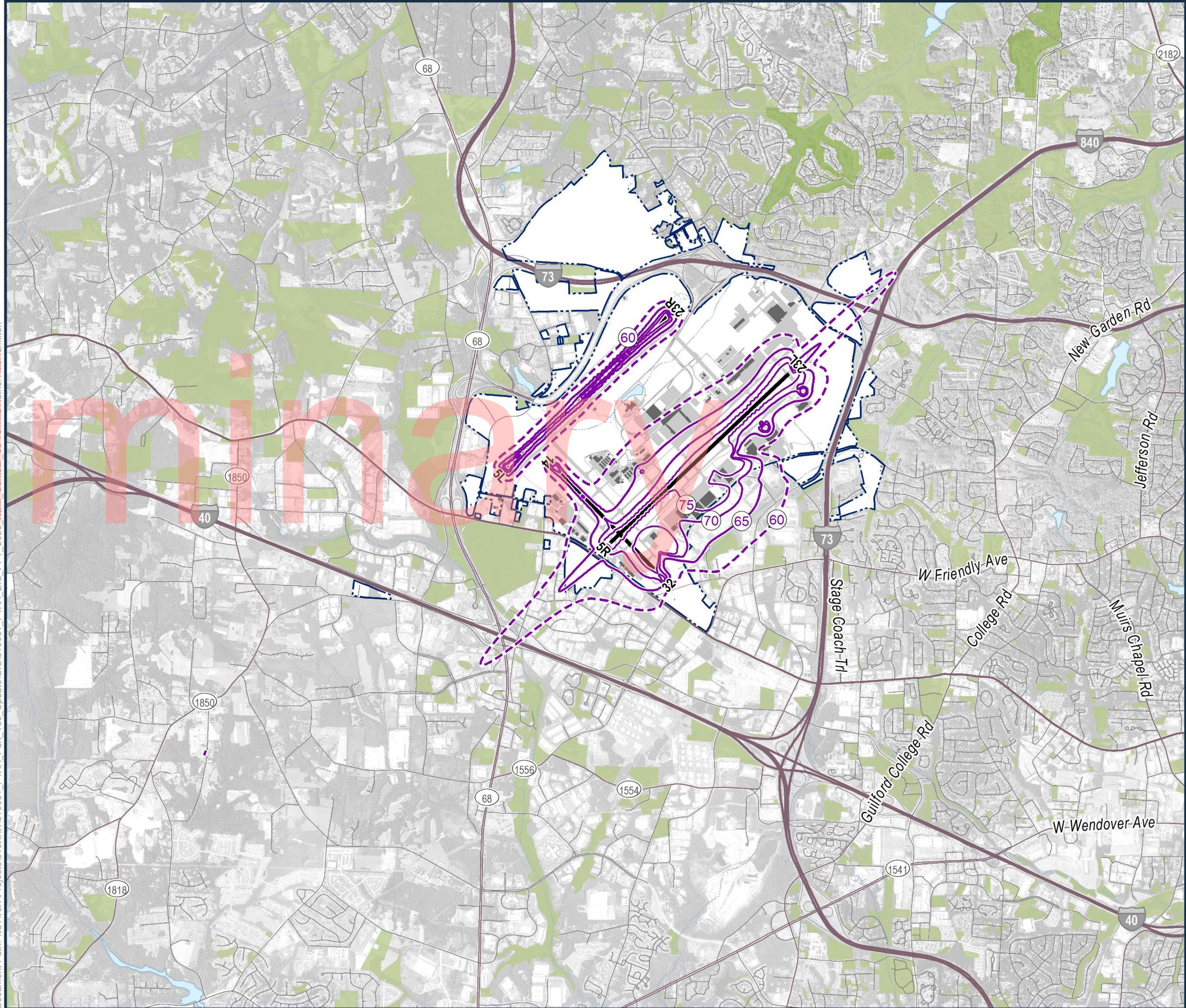
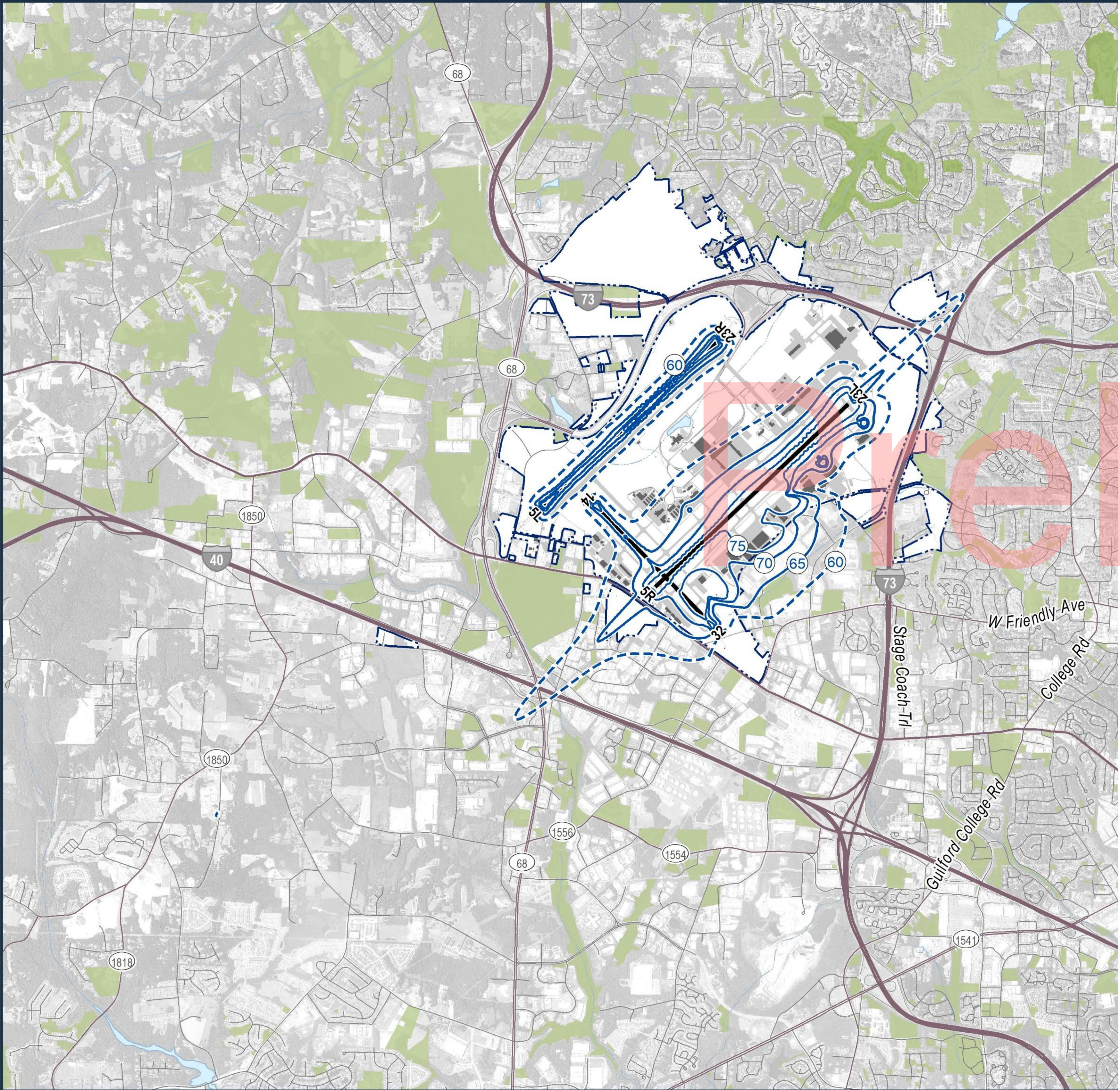
Previous Study Noise Contours: Original Part 150 NEMs



Previous Study Noise Contours: Original Part 150 forecast

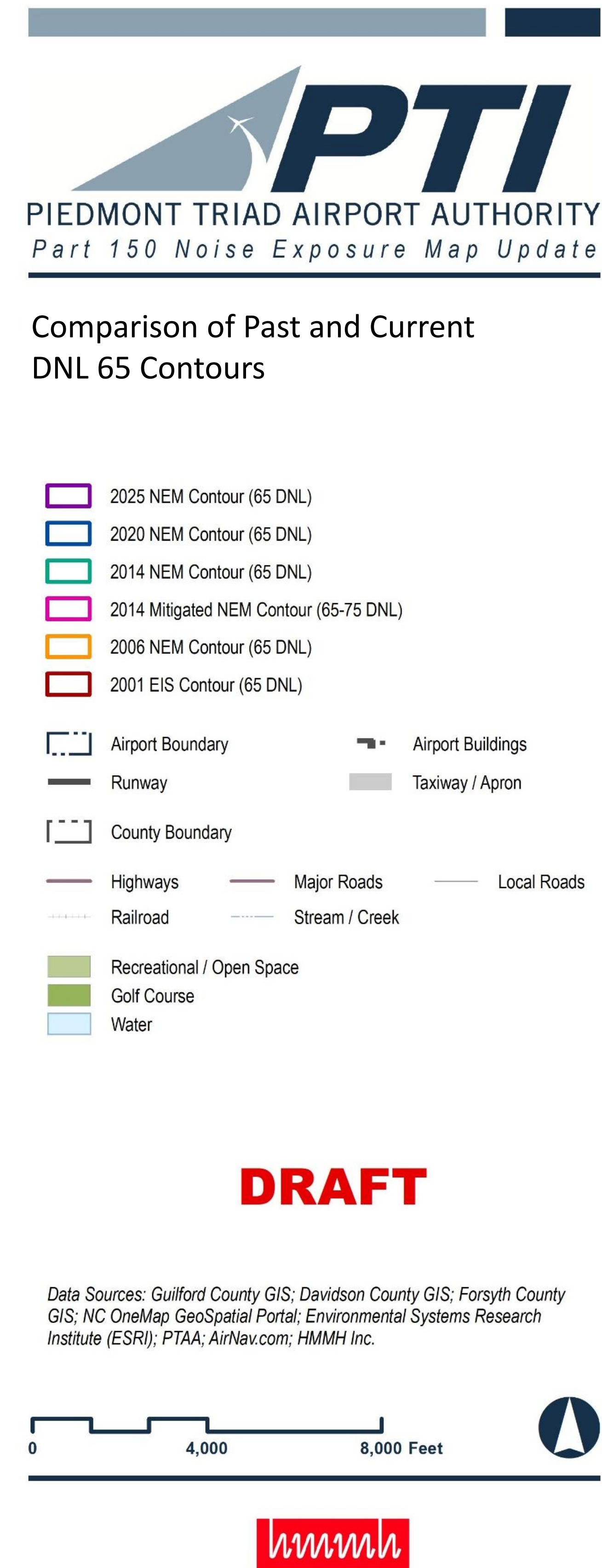


Current Study Noise Contours: Part 150 Update



Comparison of 65 DNL contours

- EIS:
 - nearly 600 daily operations
 - 30 daily B-727 or DC-8/9 (Stage 2)
- 2014 Part 150 NEM:
 - nearly 500 daily operations
 - 10 daily B-727 or DC-8/9 (Stage 2)
- 2020 NEM Update:
 - about 250 daily operations
 - no B-727 or DC8/9 (Stage 2)
- 2025 forecast NEM:
 - about 250 daily operations
 - no Stage 2/no MD80s (Stage 3)



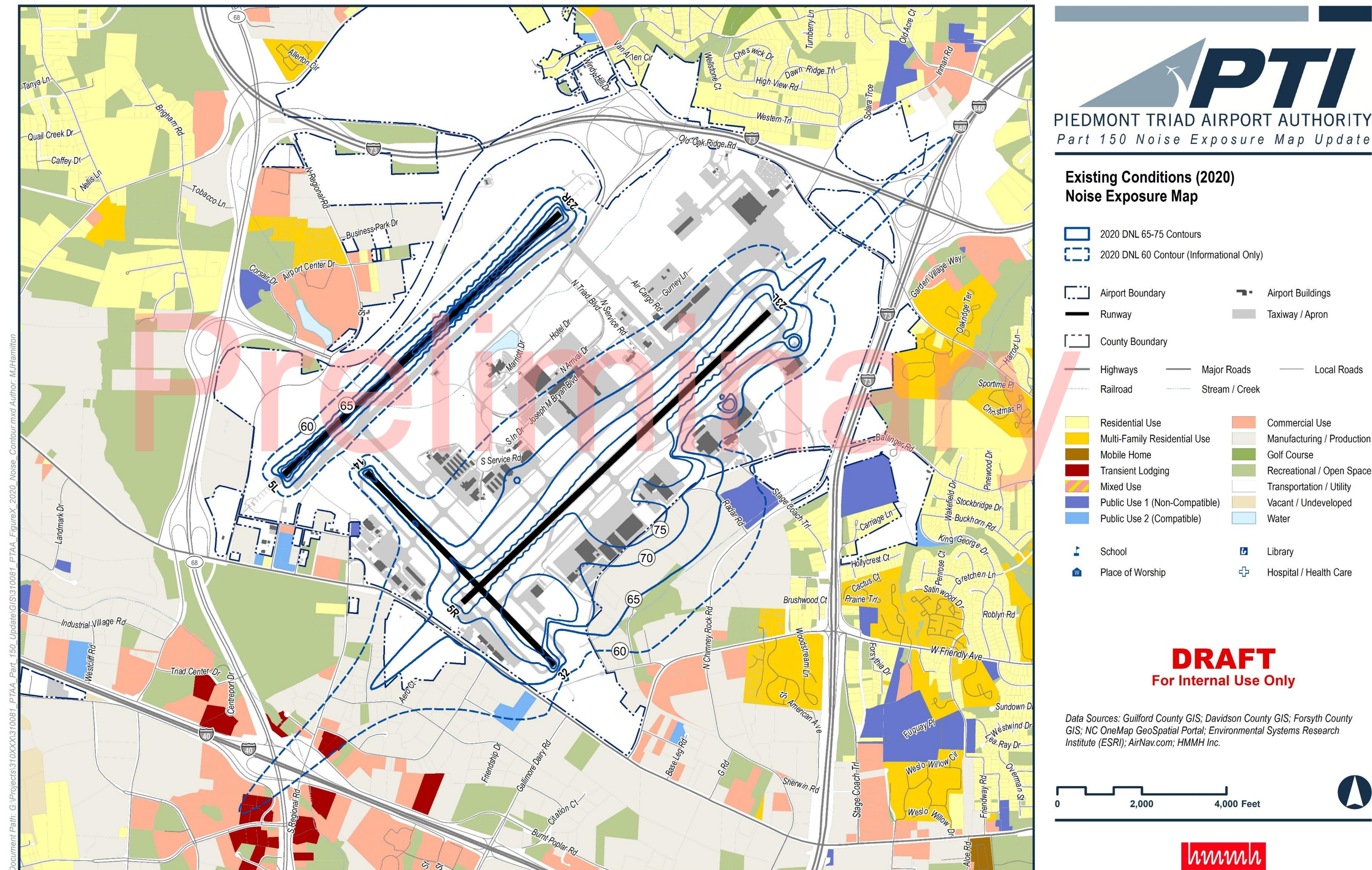
Note: EIS and Original Part 150 assumed full FedEx hub in operation by 2014. NEM update contours include current level of hub operations with small increase for 2025.

Comparison of Modeled Airport Operations

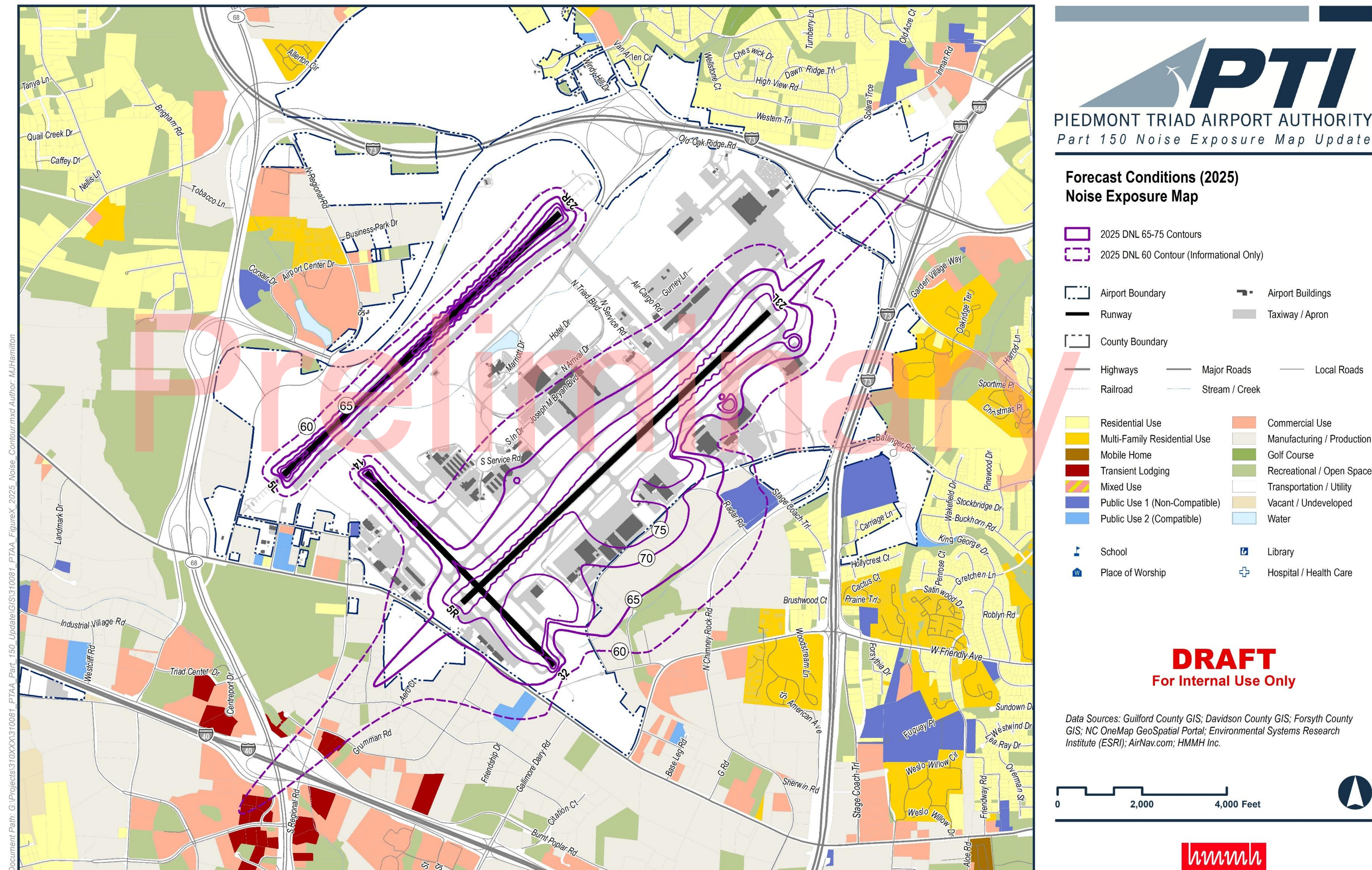
Average Annual Day	Commercial			General Aviation	Military	Total Operations
	Passenger	Air Taxi	Cargo			
2001 EIS	242.0	18.0	138.8	174.0	3.0	575.8
2006 NEM	46.0	132.2	17.3	135.6	2.8	333.8
2014 NEM	43.2	179.5	101.2	148.9	5.2	478.0
2020 NEM	99.6	27.5	22.5	92.1	5.0	246.8
2025 NEM	102.1	27.7	28.6	93.6	5.0	257.1



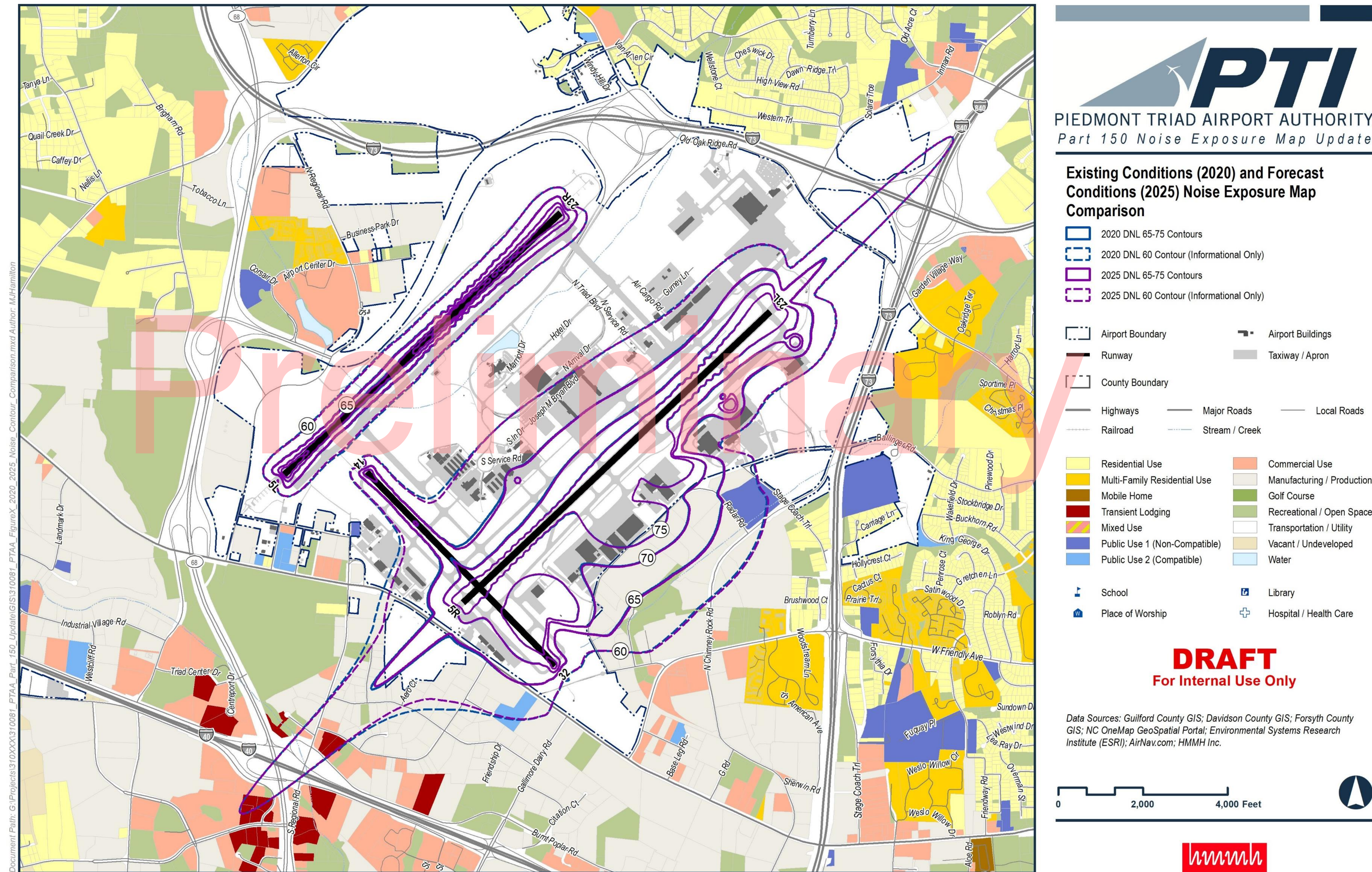
Preliminary Noise Model Results – 2020



Preliminary Noise Model Results – 2025



Preliminary Noise Model Results – 2020/2025



Preliminary Noise Model Results – Land Use

Noise Level, DNL	Existing Contours - 2020		Forecast Contours – 2025	
	Estimated Population	Estimated Number of Housing Units	Estimated Population	Estimated Number of Housing Units
65-70 dB	0	0	0	0
70-75 dB	0	0	0	0
75+ dB	0	0	0	0
Total	0	0	0	0

Noise Measurement Program Results



Noise Measurement Program

- Six temporary (portable) noise monitors collected data from November 11 through November 17, 2019
 - Measurements of individual aircraft noise events
 - Measurements of hourly and daily (DNL) noise levels
- Two HMMH staff spent time at each temporary location, observing and logging aircraft noise events

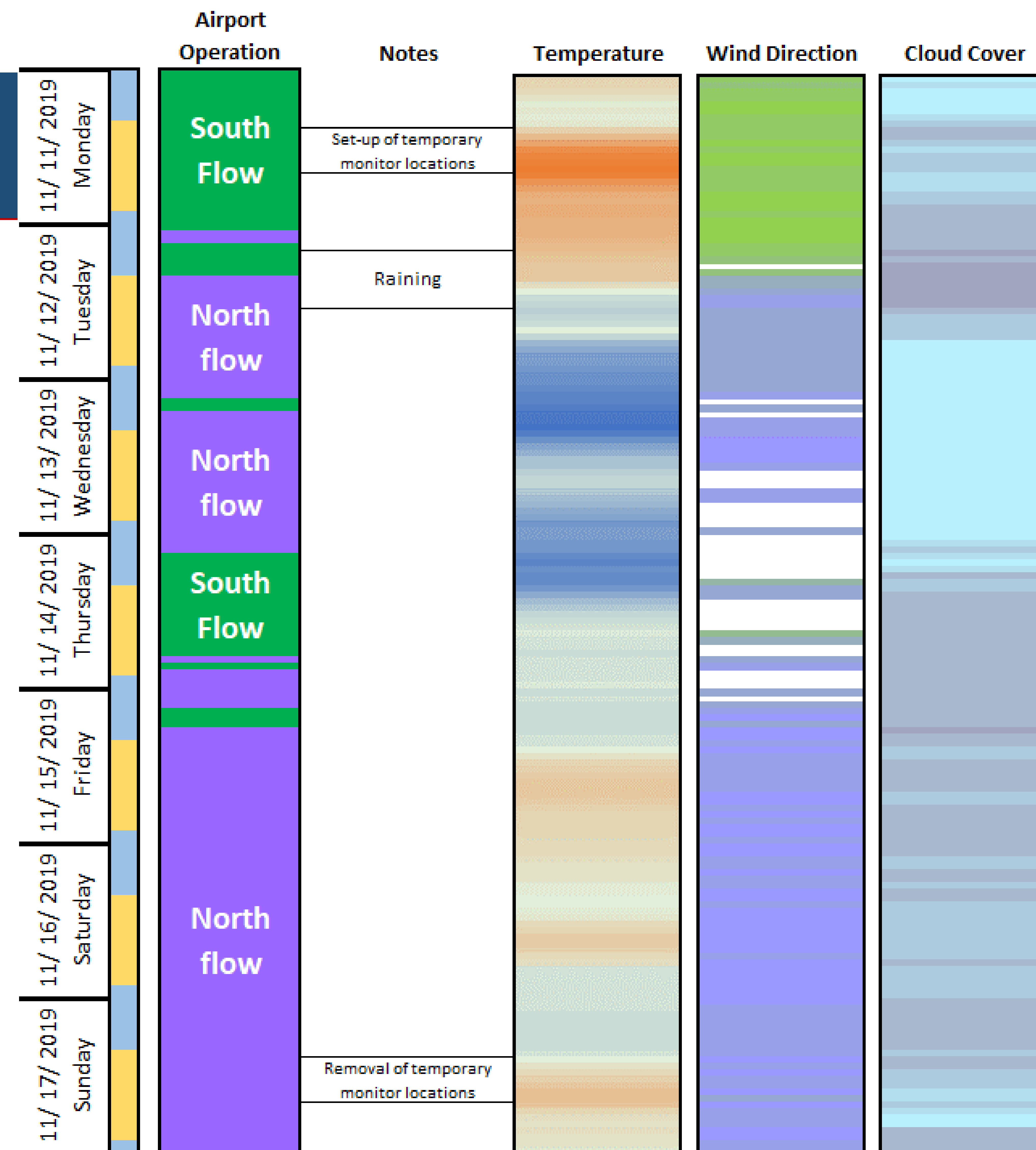
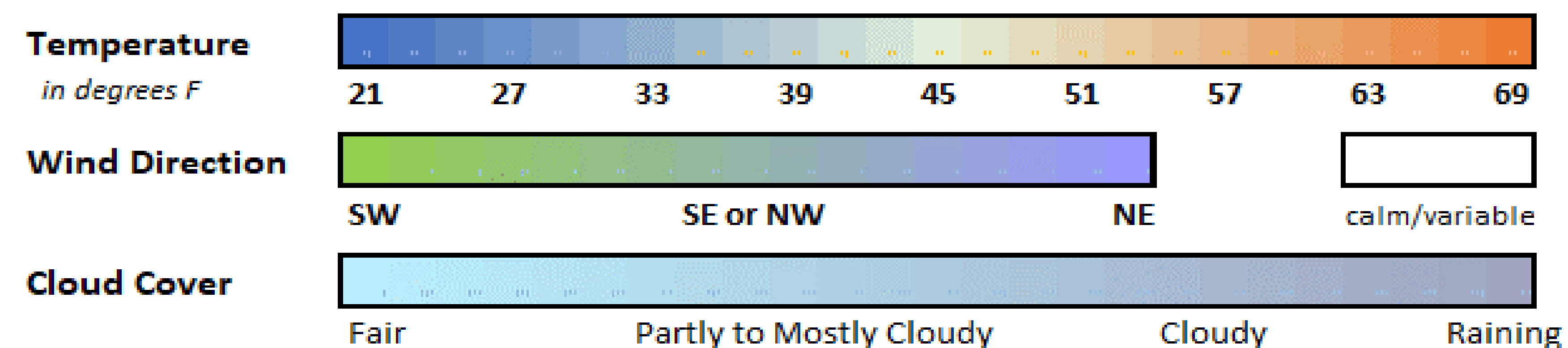
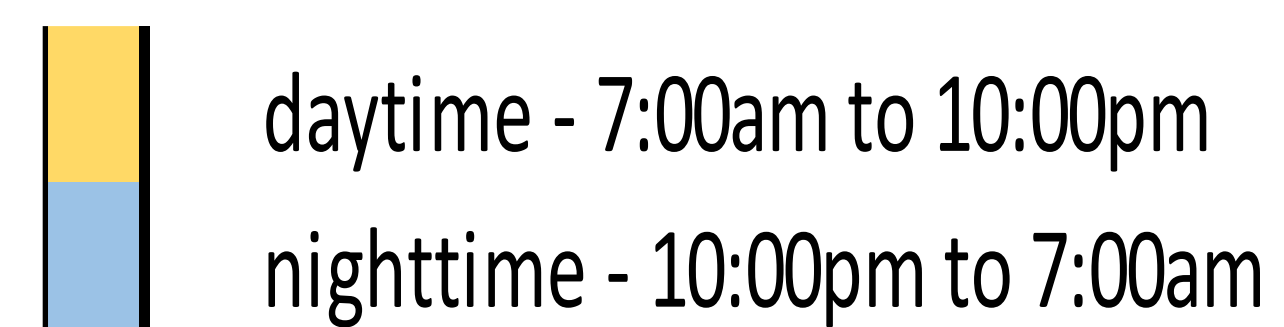


Note: Measured noise levels are NOT used to generate or modify contours

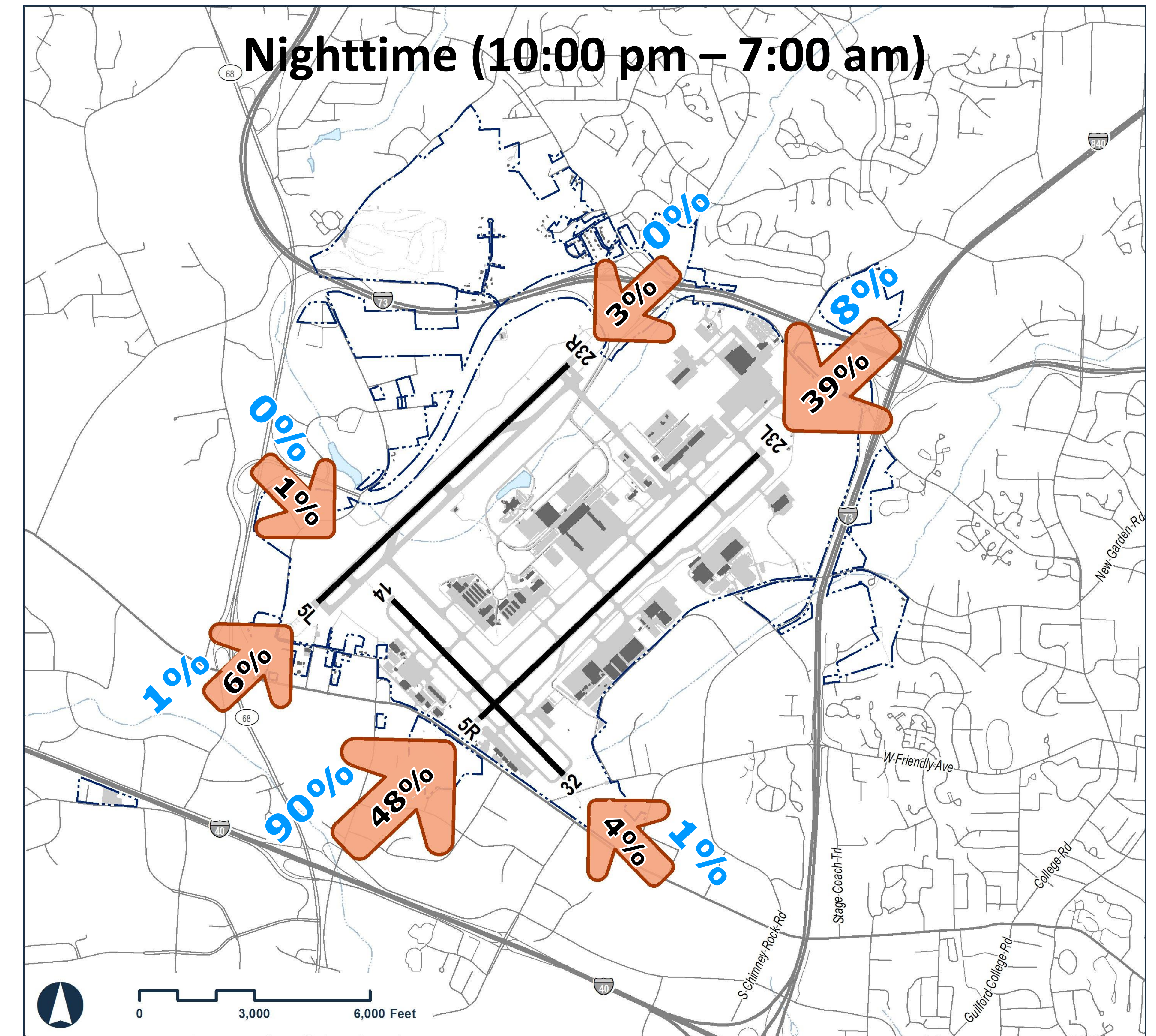
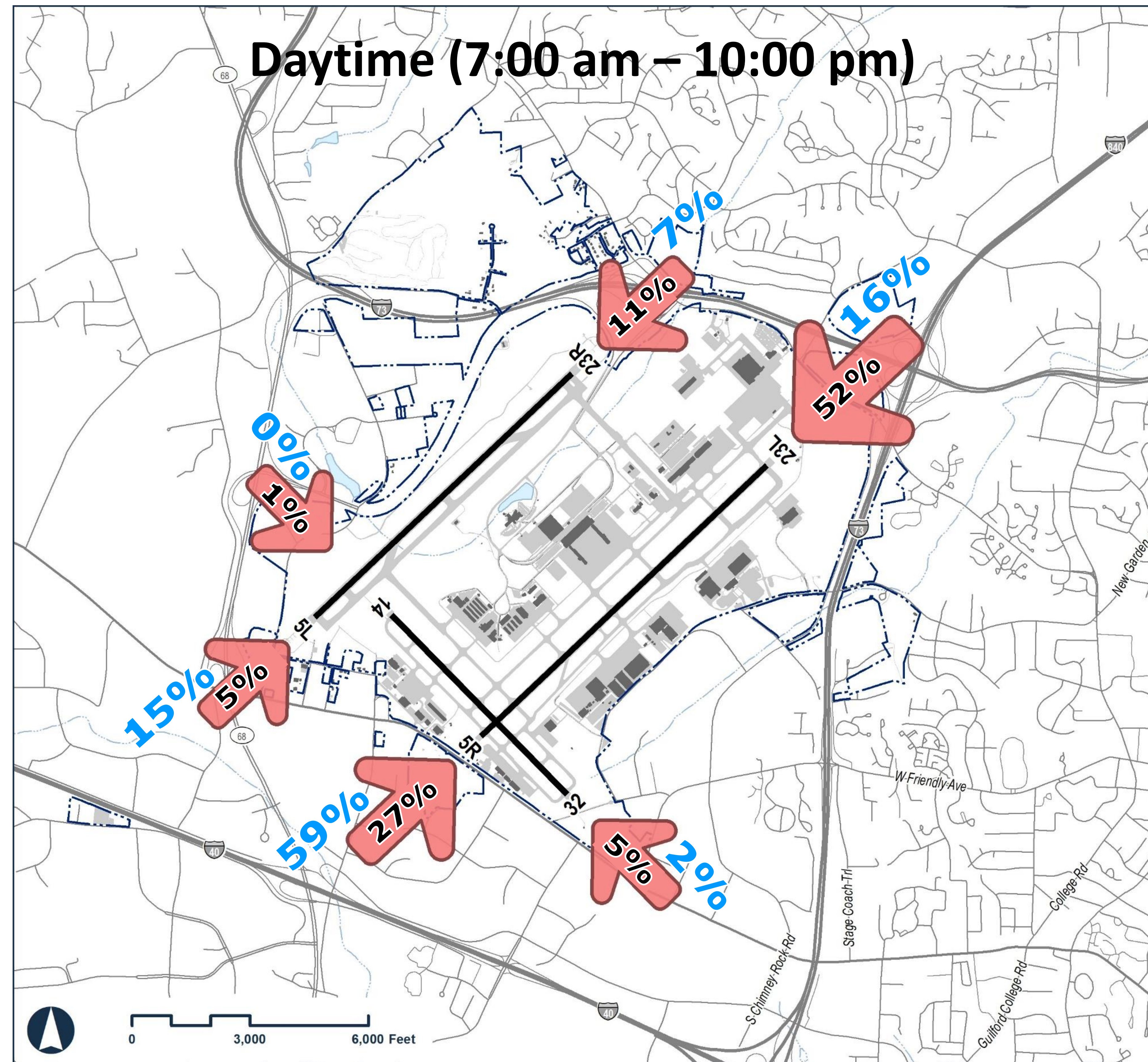
Noise Measurement Program

- Weather data for the week correlate with the airport operational direction

Legend:

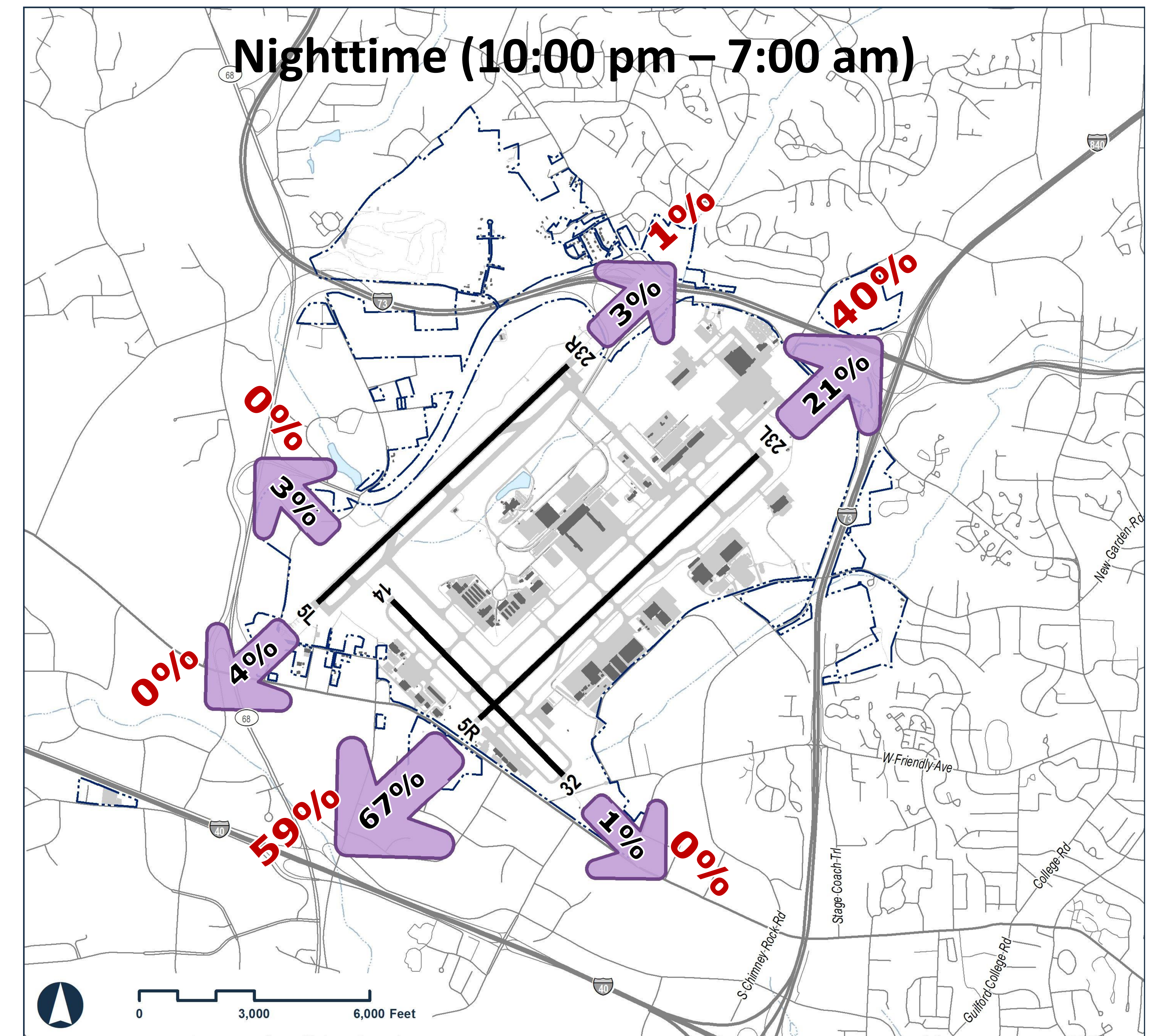
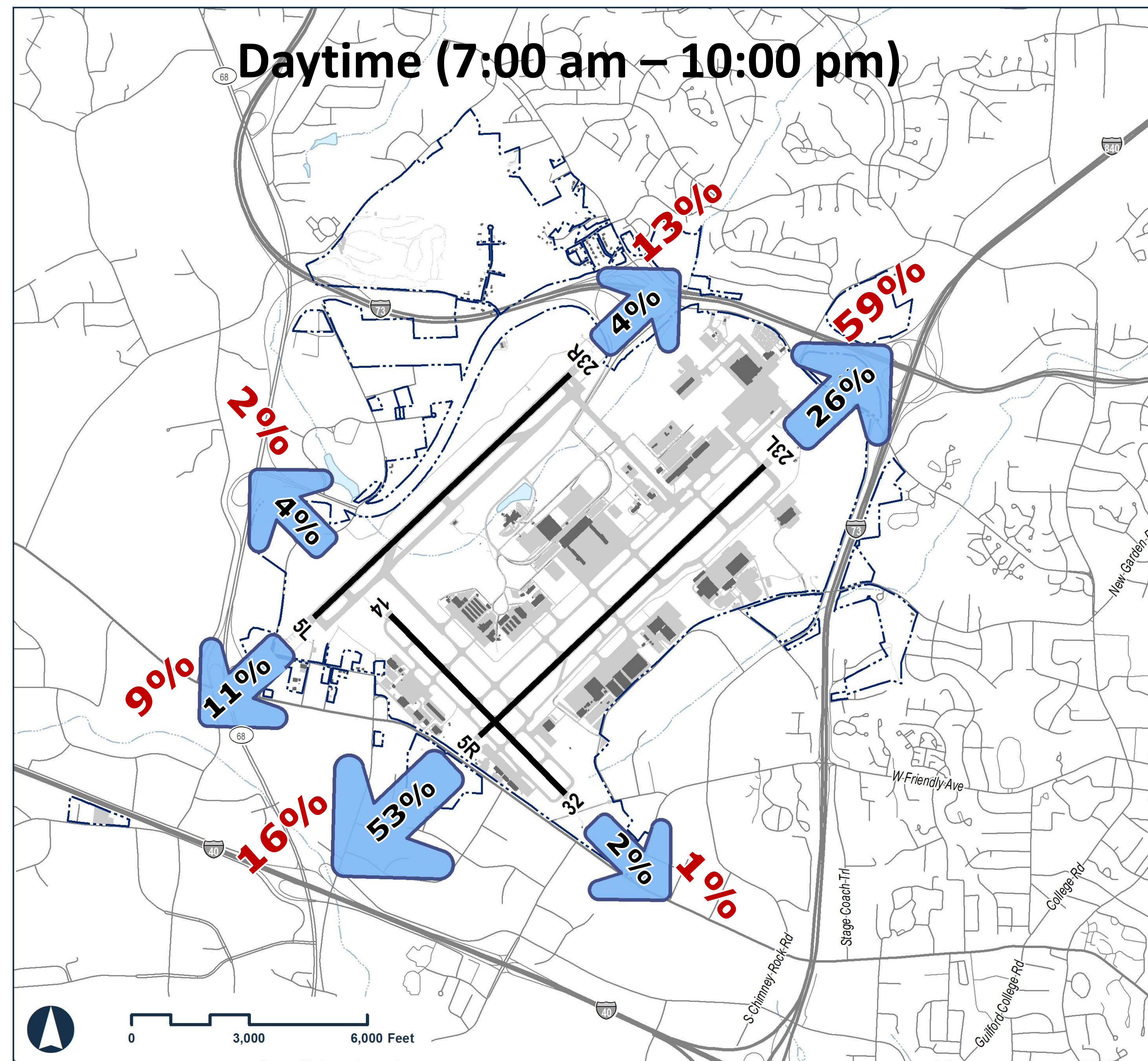


Runway Use during Measurement Program: Arrivals



Annual average modeled runway use shown within the arrows; actual use from Nov. 12-16, 2019 indicated beside each

Runway Use during Measurement Program: Departures

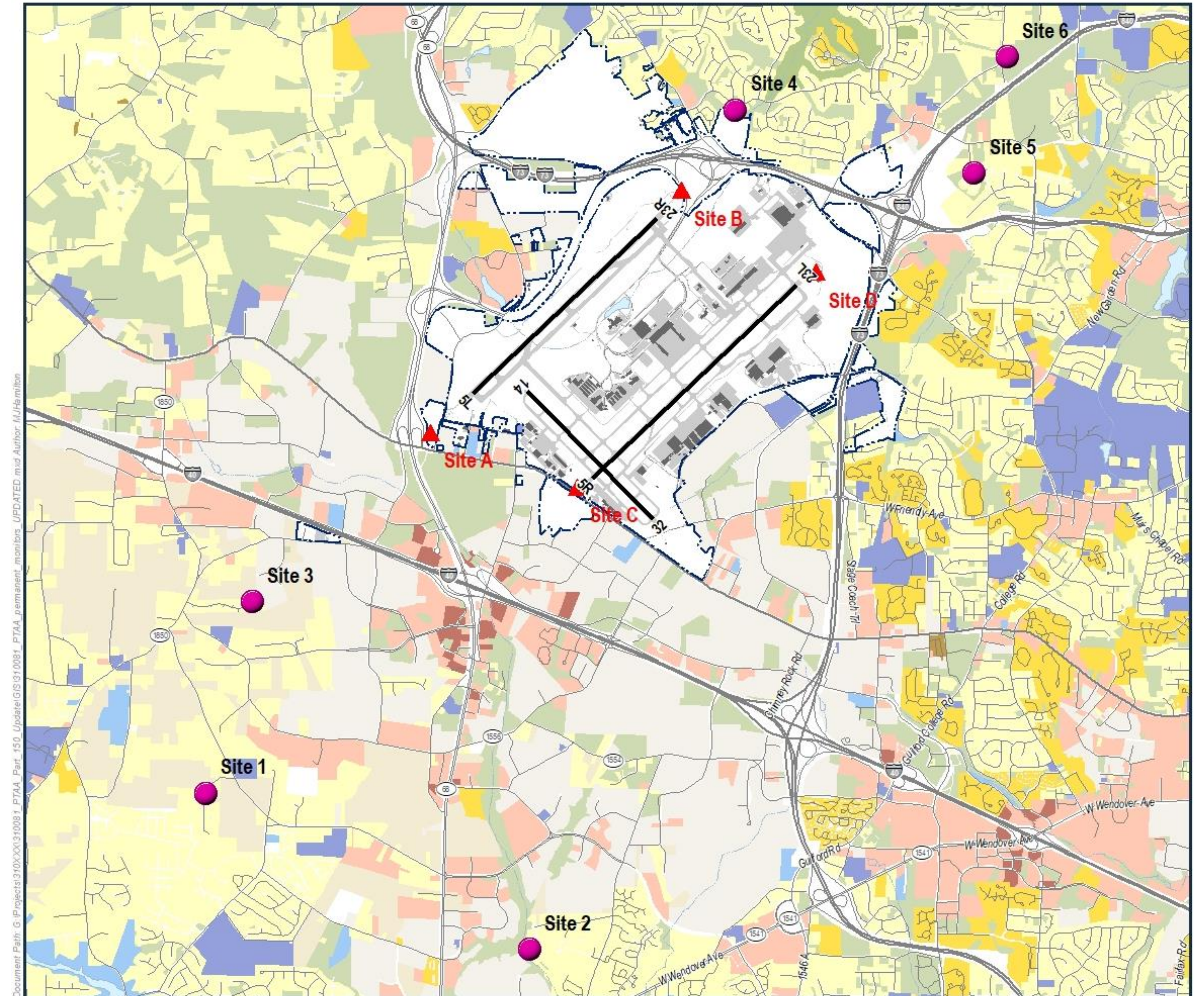


Annual average modeled runway use shown within the arrows; actual use from Nov. 12-16, 2019 indicated beside each

Noise Monitor Locations

Label	Location
Site 1	4532 Walpole Rd, High Point, NC 27265
Site 2	1701 River Knoll Ct, Greensboro, NC 27409
Site 3	3625 Dairy Point Dr, High Point, NC 27265
Site 4	6502 Lytham Ct, Greensboro, NC 27409
Site 5	4703 Clarkson Rd, Greensboro, NC 27409
Site 6	3600 Lewiston Rd, Greensboro, NC 27409
Site A	Approach end of Runway 5L
Site B	Approach end of Runway 23R
Site C	Approach end of Runway 23L
Site D	Approach end of Runway 5R

Note: Site B was not operational during the measurement program



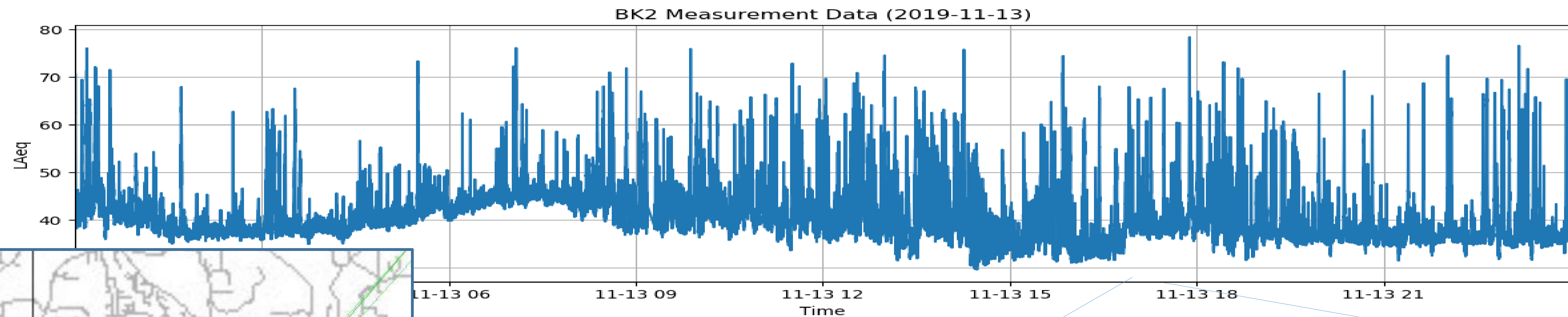
Identification of Aircraft Noise Events

- The portable noise monitors measure all noise once per second, while the permanent monitors measure all noise in half-second intervals
- Noise events are determined based on a set threshold and minimum duration
- Noise events are correlated to aircraft operations in the vicinity of the noise measurement site by time
- Noise energy from the noise events correlated to aircraft operations is combined to determine the daily noise exposure levels from aircraft operations

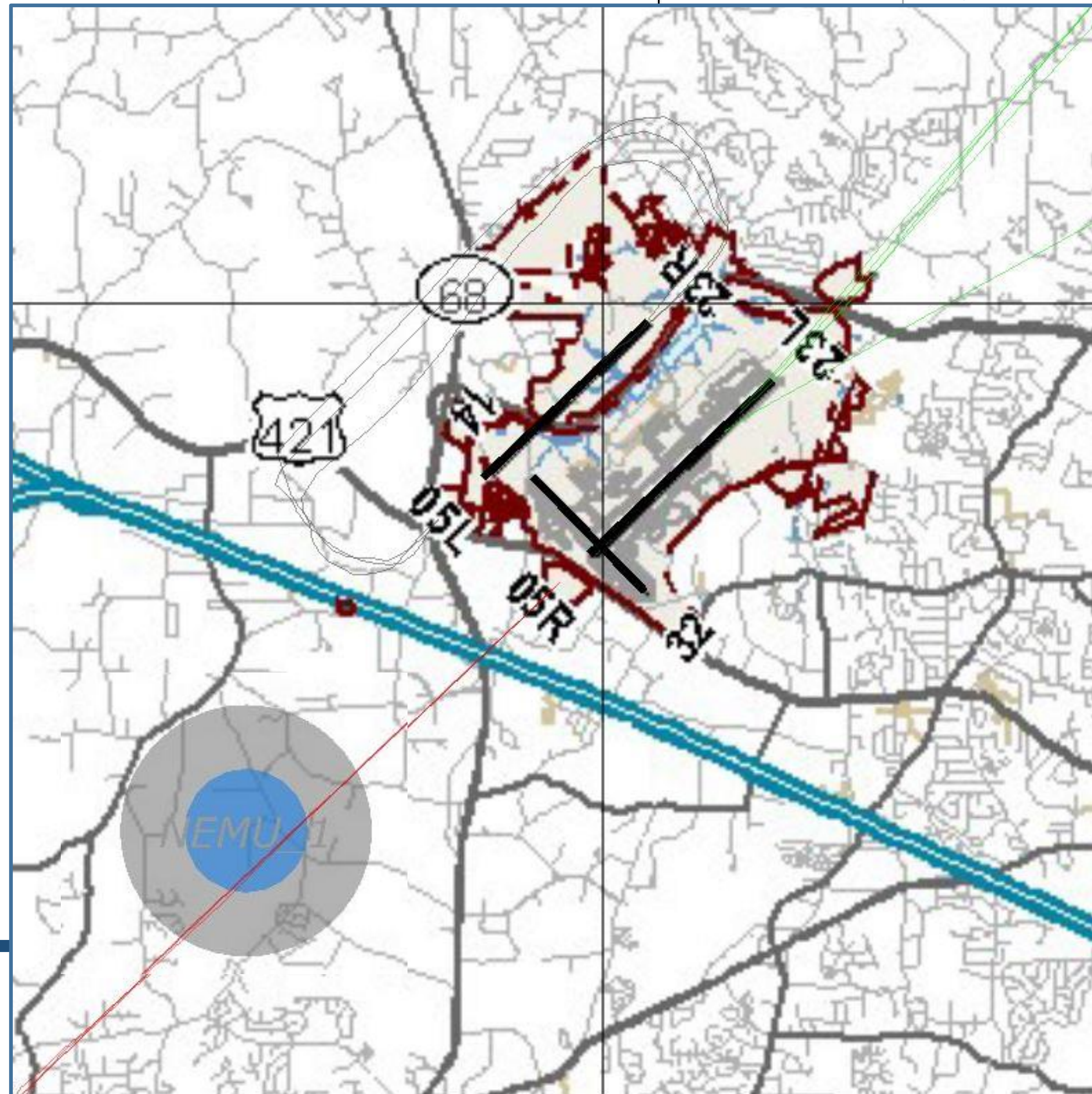


Identification of Aircraft Noise Events

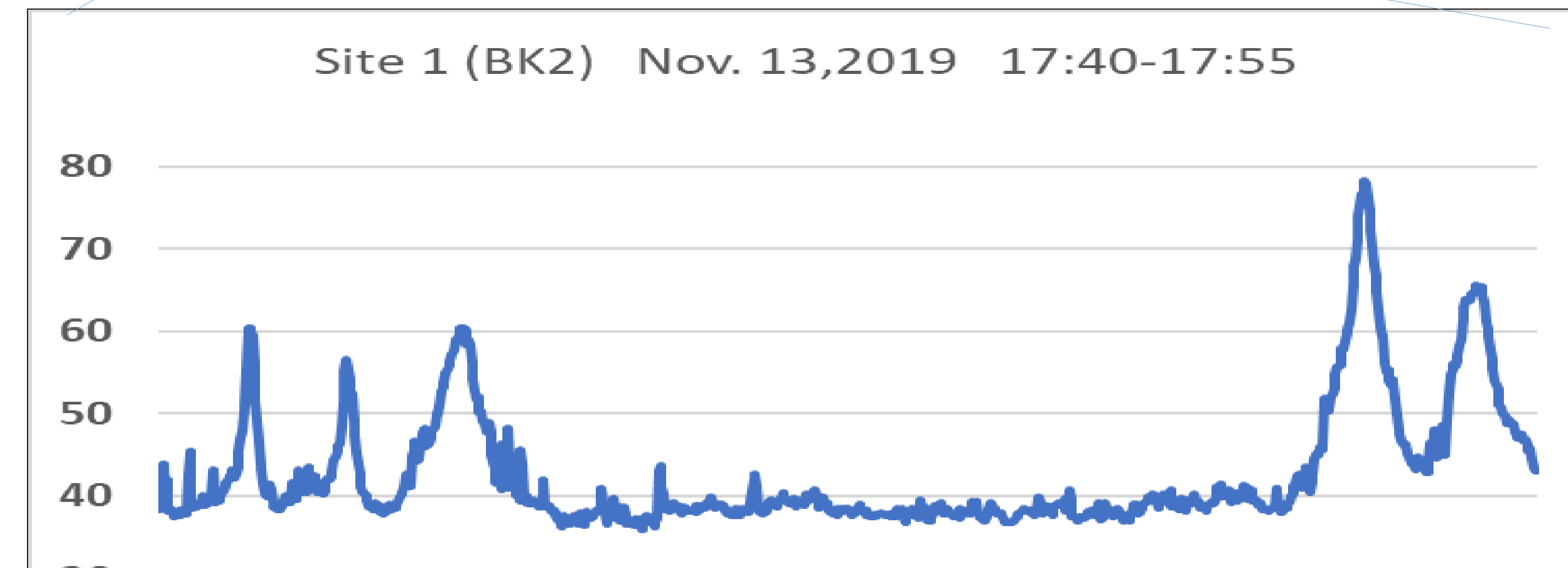
A monitor samples the noise environment every second



This graph shows the time history for a full day



If an aircraft operation is within 5,000 feet of the site at the time of the event, the event is attributed to that operation



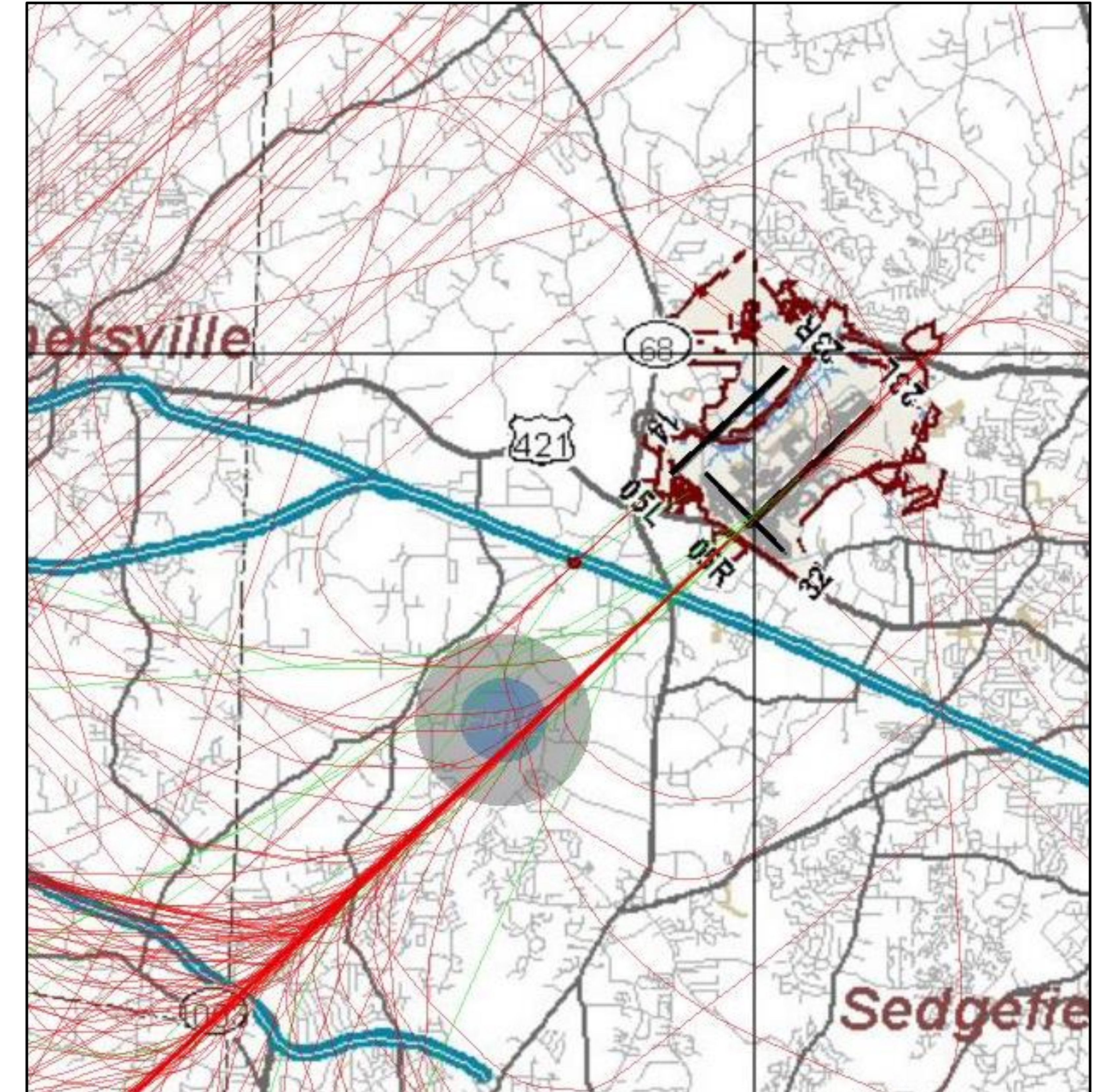
Noise events are visible in this 15-minute excerpt; sound level rises above 50 dB threshold for at least 10 seconds

STARTTIME	Aircraft	Operation	Runway	DURATION	LMAX	SEL
17:43:03	E135	A	05R	26	60.4	71.5
17:52:41	MD88	A	05R	12	78.4	86.1
17:54:02	CRJ9	A	05R	26	65.6	76.8

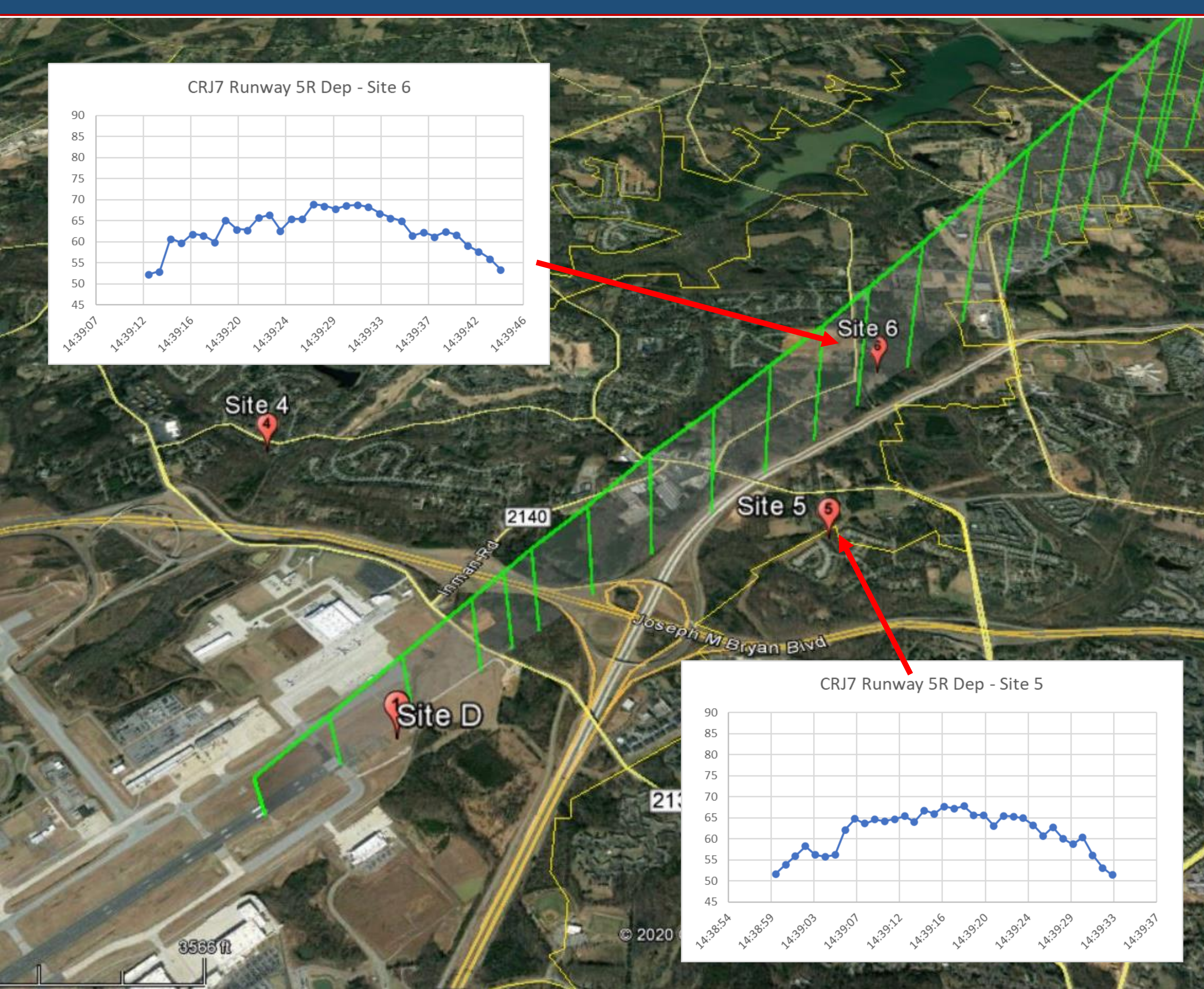
Measured Noise Levels – Single Aircraft Events

Aircraft Category	Operation	Number Events	Max SEL	Min SEL	Median SEL
MD88	Arrival	12	89.4	71.5	84.1
	Departure	2	91.8	84.4	88.1
Other Large Jet	Arrival	19	84.3	72.7	80.7
	Departure	1	81.3	81.3	81.3
Regional Jet	Arrival	52	85.4	69.2	77.6
	Departure	2	72.9	72.7	72.8
Honda Jet	Arrival	18	80	68.5	73.3
	Departure	0	0	0	0
Other Small Jet	Arrival	12	79.5	73.2	75.9
	Departure	0	0	0	0
	Other	1	69.6	69.6	69.6
Non-jet	Arrival	19	80.4	69	75.0
	Departure	4	75.8	71.2	72.1
	Other	4	84.2	69.6	76.4
Total	Arrival	132	89.4	68.5	77.6
	Departure	9	91.8	71.2	72.9
	Other	5	84.2	69.6	73.2
Total		146			

Site 1
(as an example)

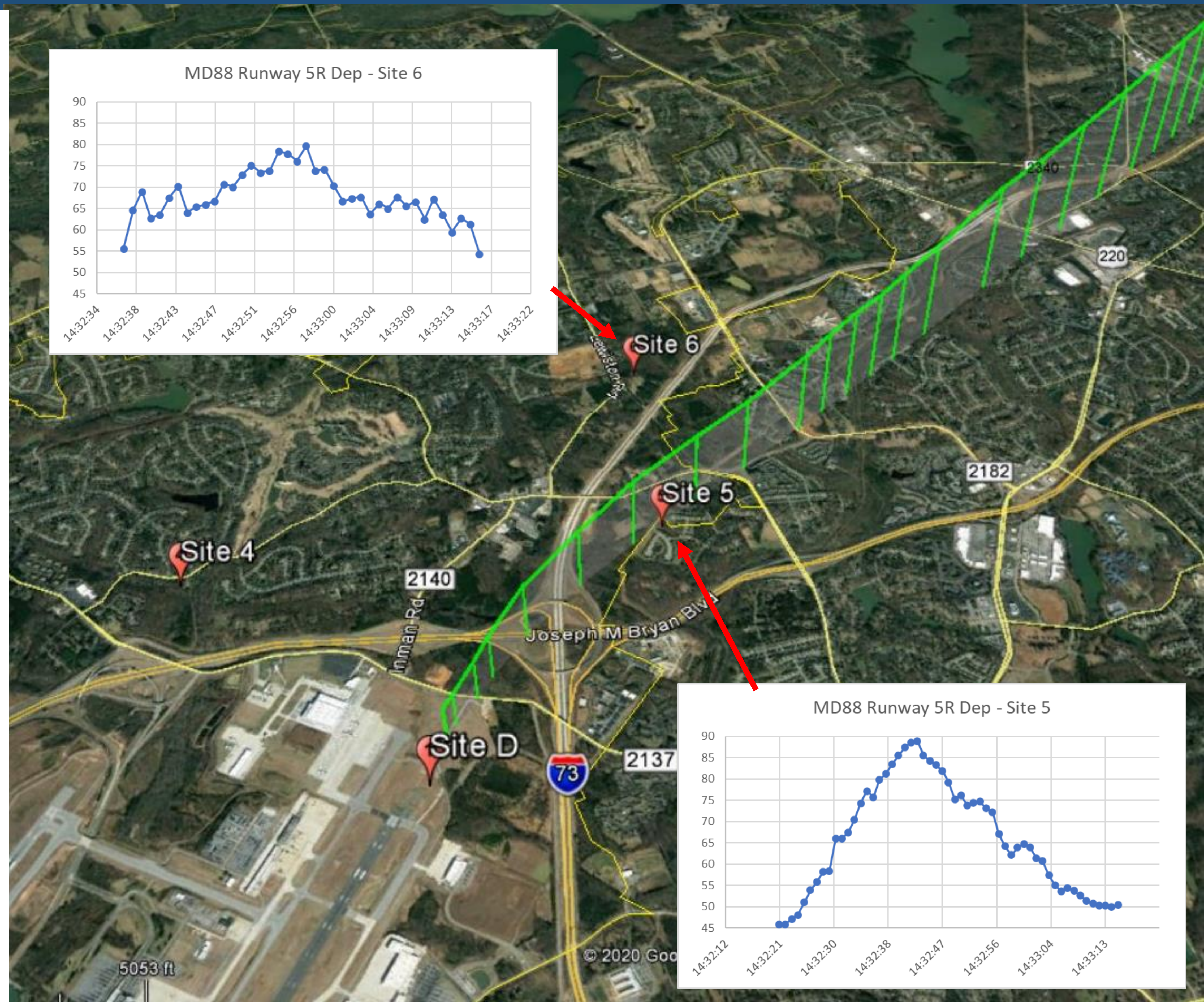


Sample Aircraft Noise Events



CRJ7

SITECODE	Event Start	LMAX	LEQ	SEL	ALT (AGL)	Range (ft)
Site_D	14:38:00	78.4	74.8	86.5	997	243
NEMU_5	14:38:58	67.73	64.5	78.7	2004	1621
NEMU_6	14:39:12	68.96	64.4	80.8	2274	295



MD88

SITECODE	Event Start	LMAX	LEQ	SEL	ALT (AGL)	Range (ft)
Site_D	14:32:21	97.3	93.5	102.3	800	40
NEMU_5	14:32:25	88.89	85.1	95.9	1692	118
NEMU_6	14:32:28	79.76	75.1	86.6	1736	3379

Measured Noise Levels – DNL

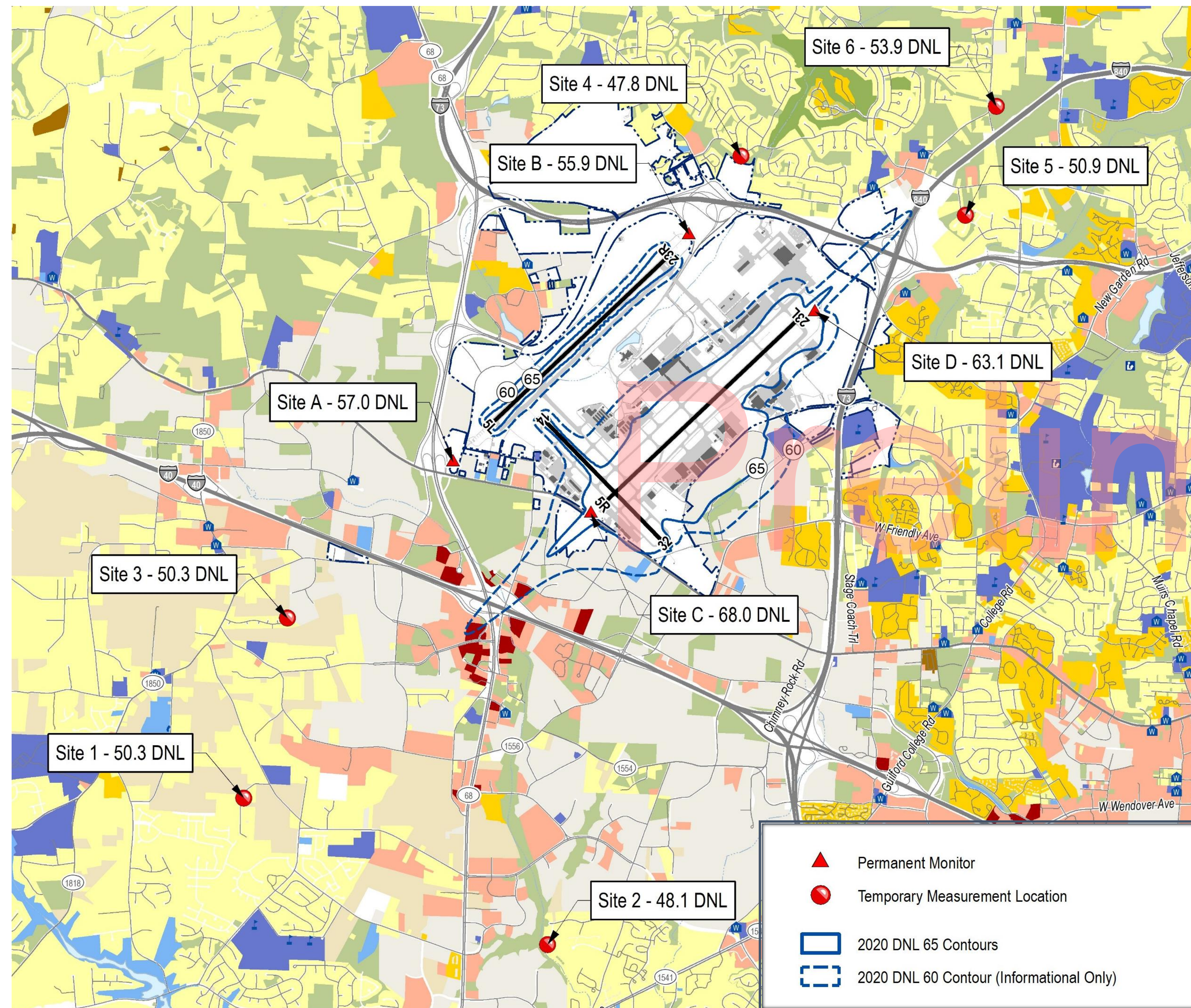
- All measured aircraft DNL are well below 65 dB, except those on Airport property aligned with Runway 5R/23L

Note: Site B was not operational during the measurement program

Site	DNL	Tuesday, 12-Nov	Wednesday, 13-Nov	Thursday, 14-Nov	Friday, 15-Nov	Saturday, 16-Nov	5-day* Average Measured DNL
1	Aircraft	49	50	54	52	52	52
	Total	56	57	56	58	61	58
2	Aircraft	57	46	54	51	31	53
	Total	58	50	55	54	52	55
3	Aircraft	53	48	51	47	54	51
	Total	57	56	56	58	60	58
4	Aircraft	38	43	N/A	46	43	44
	Total	57	53	N/A	52	57	56
5	Aircraft	57	58	51	57	57	57
	Total	68	65	61	58	67	65
6	Aircraft	52	55	55	54	52	54
	Total	61	56	58	57	57	58
A	Aircraft	59	56	56	52	54	56
	Total	66	64	65	64	64	65
C	Aircraft	75	74	76	76	69	75
	Total	77	78	78	79	74	78
D	Aircraft	69	65	70	66	62	67
	Total	76	70	74	69	66	72



Measured vs Modeled Noise Levels – DNL



AEDT calculated DNL contours and DNL values at monitor locations for 2020 Existing case

Comparison of the 5-day average measured Aircraft-only DNL to AEDT calculated DNL

Site	Average Measured DNL	AEDT-Calculated DNL	Difference (Measured – AEDT)
1	52	50 (56)	2 (-4)
2	53	48 (52)	5 (1)
3	51	50 (49)	1 (2)
4	44	48 (49)	-4 (-5)
5	57	51 (58)	6 (-1)
6	54	54 (57)	0 (-3)
A	56	57 (52)	-1 (4)
B	N/A	56 (52)	N/A
C	75	68 (68)	7 (7)
D	67	63 (67)	4 (0)

Measured vs Modeled

- 5-day measured average DNL generally higher than modeled for 2020
 - Sites A and 4 measured lower than modeled
 - Both of these sites are close to the extended centerline of Runway 5L-23R
 - Less jet use of Runway 5L-23R during the measurements than the modeled annual average
 - Sites C, D, 5 and 2 measured 4 to 7 dB higher than modeled
 - Sites C, D and 5 all near the extended centerline of Runway 5R-23L
 - Site 2 is south of the airport under the departure path that follows Route 68
 - Less use of Runway 23L and more use of Runway 5R during the measurements than the modeled annual average
 - Also much more use of MD88 aircraft during the measurements than modeled for 2020
 - In 2018 there were less than 10 average daily MD88 operations
 - 2020 forecast assumed retirement of some MD88s; reduced to around 5 daily
 - During the measurements, there were an average of 15 MD88 daily operations
- We believe runway use and higher use of MD88 aircraft resulted in the differences

Noise Compatibility Program Review



Review of Noise Compatibility Program (NCP)

The FAA approved, in whole or in part, all 20 PTAA-recommended NCP measures in the previous Part 150 Study.

Noise Abatement Measures

1. Evaluate Noise Barriers *
2. Preferred Night Runway Use **
3. Night Runway Use Assignments **
4. Night Southbound Departure Corridor from Runway 23L **
5. Night Departure Procedures from Runway 23R **
6. Night Northbound Departure Corridor from Runway 23L **
8. Departures from Runway 05L **
9. Departures from Runway 05R **
10. Restrictions on Use of APUs
11. Noise Abatement Departure Profiles **
12. Noise Abatement Approach Procedure **
13. Altitude for Downwind Legs **

Land Use Measures

1. Acquire Noise-Sensitive Properties where DNL Exceeds 70 dB
2. Sound Insulation of Noise-Sensitive Structures where DNL Exceeds 65 dB
3. Optional Acquisition of Avigation Easements for Noise-Sensitive Structures where DNL Exceeds 65 dB
4. Other Assistance for Owners of Residential Property where DNL Exceeds 65 dB *
5. Pursue Compatible Use Zoning where DNL Exceeds 65 dB

Programmatic Measures

1. Establish a Noise Monitoring Function at PTI
2. Publish DNL Contours at 60 dB and Above
3. Install and Operate an Aircraft Noise and Operations Monitoring System

Note: There is no Noise Abatement Measure number 7 since it was included in Noise Abatement Measure number 5 during the course of the original study.

** - Approved for further study.*

*** - Approved as voluntary measures subject to traffic, weather, and airspace safety and efficiency.*



Next Steps



Schedule of TAC Meetings & Public Workshops

Meeting	Date	Topic
CAC Meeting #1	June 27, 2019	Introduction to the Part 150 process
Public Information Workshop #1	June 27, 2019	Introduction to the Part 150 study
CAC Meeting #2	October 2, 2019	Noise modeling inputs
<i>CAC Meeting #3</i>	<i>May 20, 2020 (today)</i>	<i>Noise modeling results and review of NCP measures</i>
NCP Review Meeting	Early summer 2020	Review of Existing NCP
CAC Meeting #4	Fall 2020	Presentation of the Part 150 Report
Public Information Workshop #2	Fall 2020	Presentation of the study results



Next Steps

- Determine whether to amend the NCP
 - If amending NCP, then prepare the proposed amendments for the documentation
 - Note: PTAA is not updating the NCP, but only amending with this project
- Preparation of draft Part 150 Update documentation
- Schedule NCP Review Meeting
- Schedule final TAC/CAC meetings and Public Workshop to present the draft document



CAC Member Discussion



Adjournment

- NCP Review Meeting **early summer 2020** (exact date and time to be determined)
- Next CAC meeting **fall 2020** (exact date and time to be determined)
- Project contacts and websites
 - Suzanne Akkoush, Project Manager – Part 150 Study
 - Address emails to Part150@gsoair.org
 - Part 150 Website (PTIPart150Update.com) provides most relevant information
 - Will be updated regularly for public outreach purposes
 - TAC will receive direct notices
 - PTAA noise information website provides broader information
 - <https://flyfrompti.com/noise-information/>

Thanks for participating and attending!

