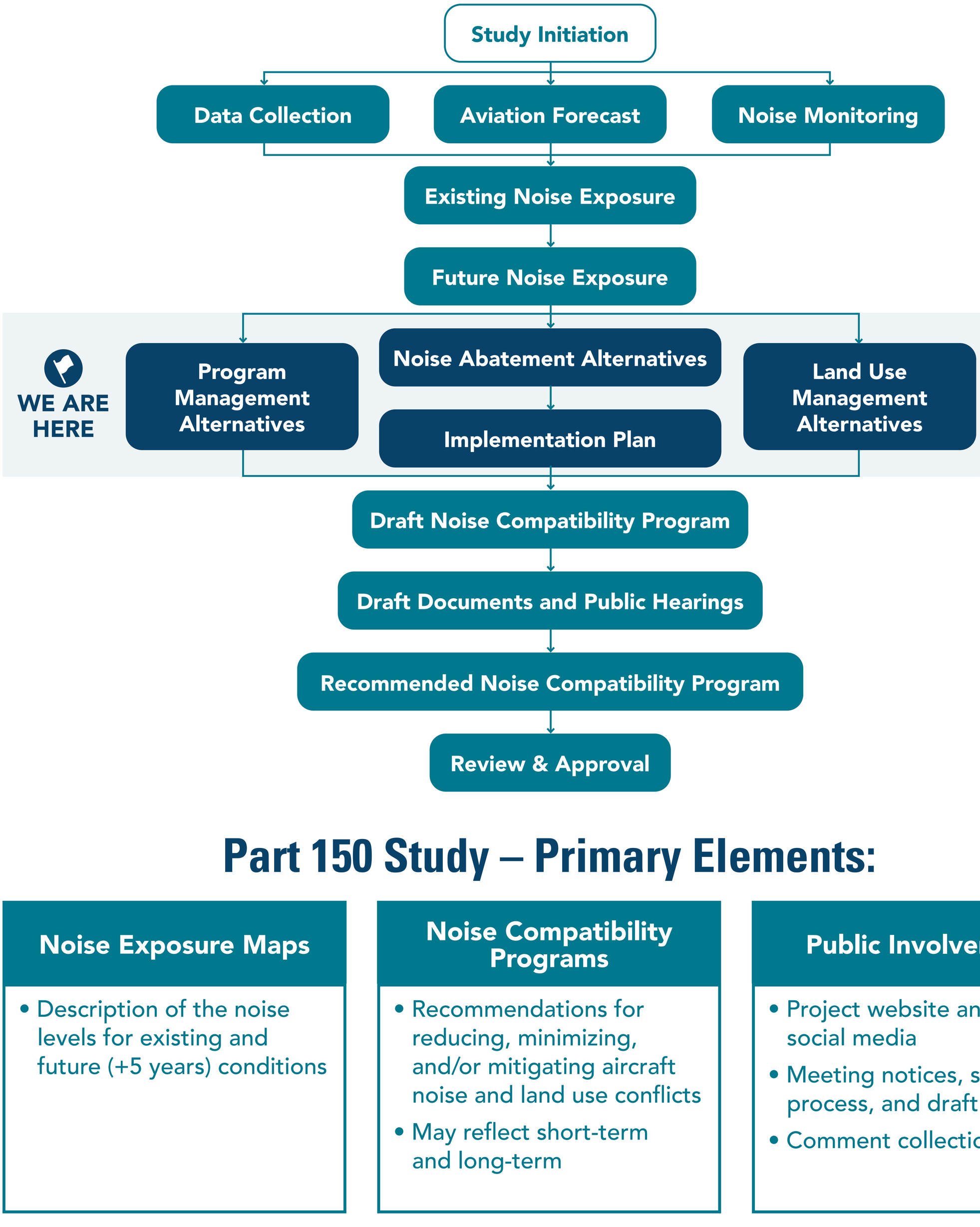
CHARLOTTE DOUGLAS®
INTERNATIONAL AIRPORT

Welcome to the

Public Information Meeting

Part 150 Process



Part 150 Study – Primary Elements:

Noise Exposure Maps

- Description of the noise levels for existing and future (+5 years) conditions

Noise Compatibility Programs

- Recommendations for reducing, minimizing, and/or mitigating aircraft noise and land use conflicts
- May reflect short-term and long-term

Public Involvement

- Project website and social media
- Meeting notices, study process, and draft findings
- Comment collection

CHARLOTTE DOUGLAS®
INTERNATIONAL AIRPORT

Charlotte Douglas International Airport
PART 150 STUDY UPDATE

How Noise Contours are Generated

AVIATION ENVIRONMENTAL DESIGN TOOL (AEDT)

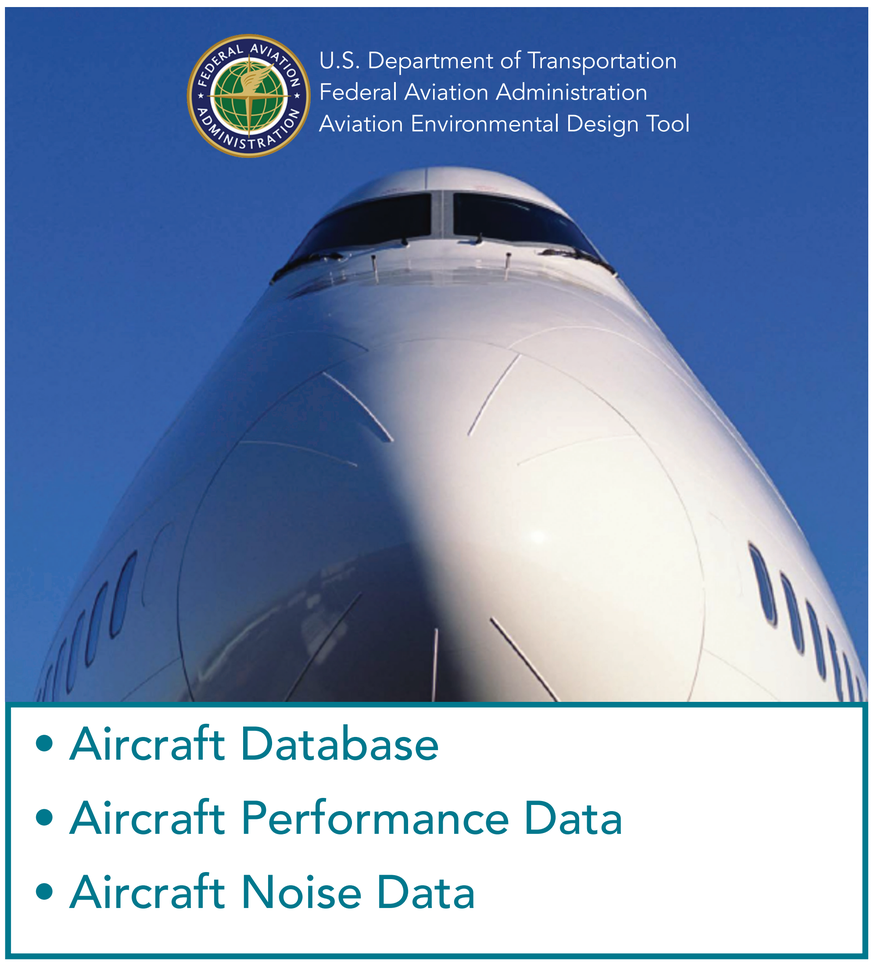
Data Sources

- Airport Layout Plan
- Radar Data
- Air Traffic Control Tower Counts
- Forecasted Operations

+

Input Data

- Runway Layout
- Operating Levels
- Fleet Mix
- Runway Use
- Flight Tracks
- Flight Profiles



- Aircraft Database
- Aircraft Performance Data
- Aircraft Noise Data

Noise Contours

Tabular Reports

Grid Point Analysis

Comparison of Noise Levels

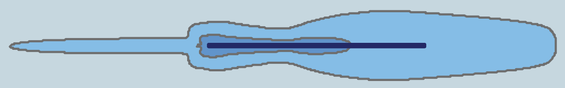
COMMON OUTDOOR SOUND LEVELS	NOISE LEVEL dB (A)	COMMON INDOOR SOUND LEVELS
	110	Rock Band Inside Subway Train
B747-400 Takeoff*		
Gas Lawn Mower at 3 ft.	100	
Diesel Truck at 150 ft.	90	Food Blender
B737-700 Takeoff*		Garbage Disposal at 3 ft.
A319 / A320 Takeoff*	80	Shouting at 3 ft.
Noisy Urban Daytime		
Commercial Area	70	Vacuum Cleaner at 10 ft. Normal Speech at 3 ft.
	60	Large Business Office
Quiet Urban Daytime		Dishwasher Next Room
Quiet Urban Nighttime	50	Small Theater
	40	Large Conference Room (Background)
Quiet Rural Nighttime		Library
	30	Bedroom at Night Concert Hall (Background)
	20	Broadcast and Recording Studio
Threshold of Hearing	10	
	0	

* As measured along the takeoff path 2 miles from the overflight end of the runway.

Aircraft Noise Footprints

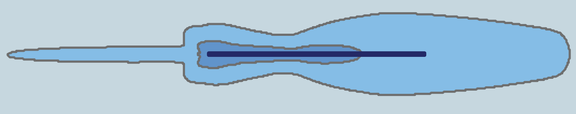
Airbus A319-100 Series

Airbus A321-200 Series

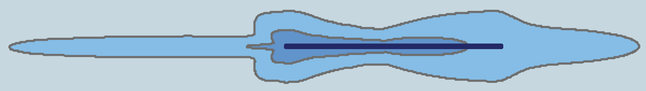


Airbus A320 neo

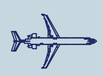
Boeing 737-800 Series



Boeing 777-200 Series

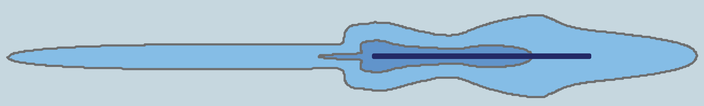


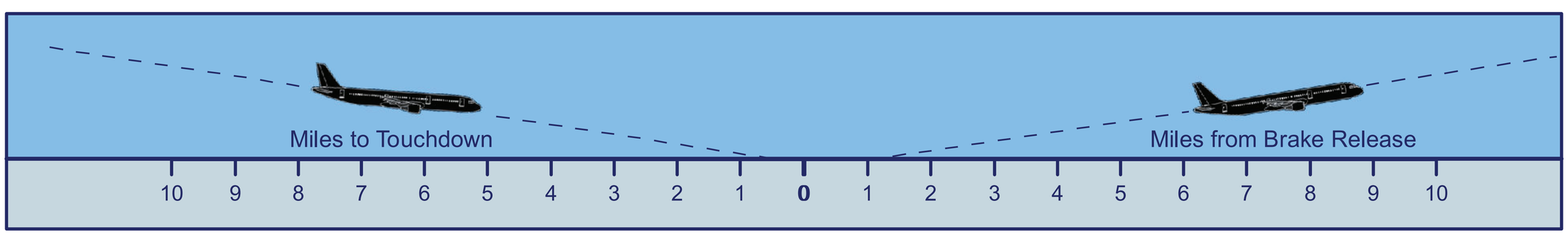
Bombardier CRJ900-ER



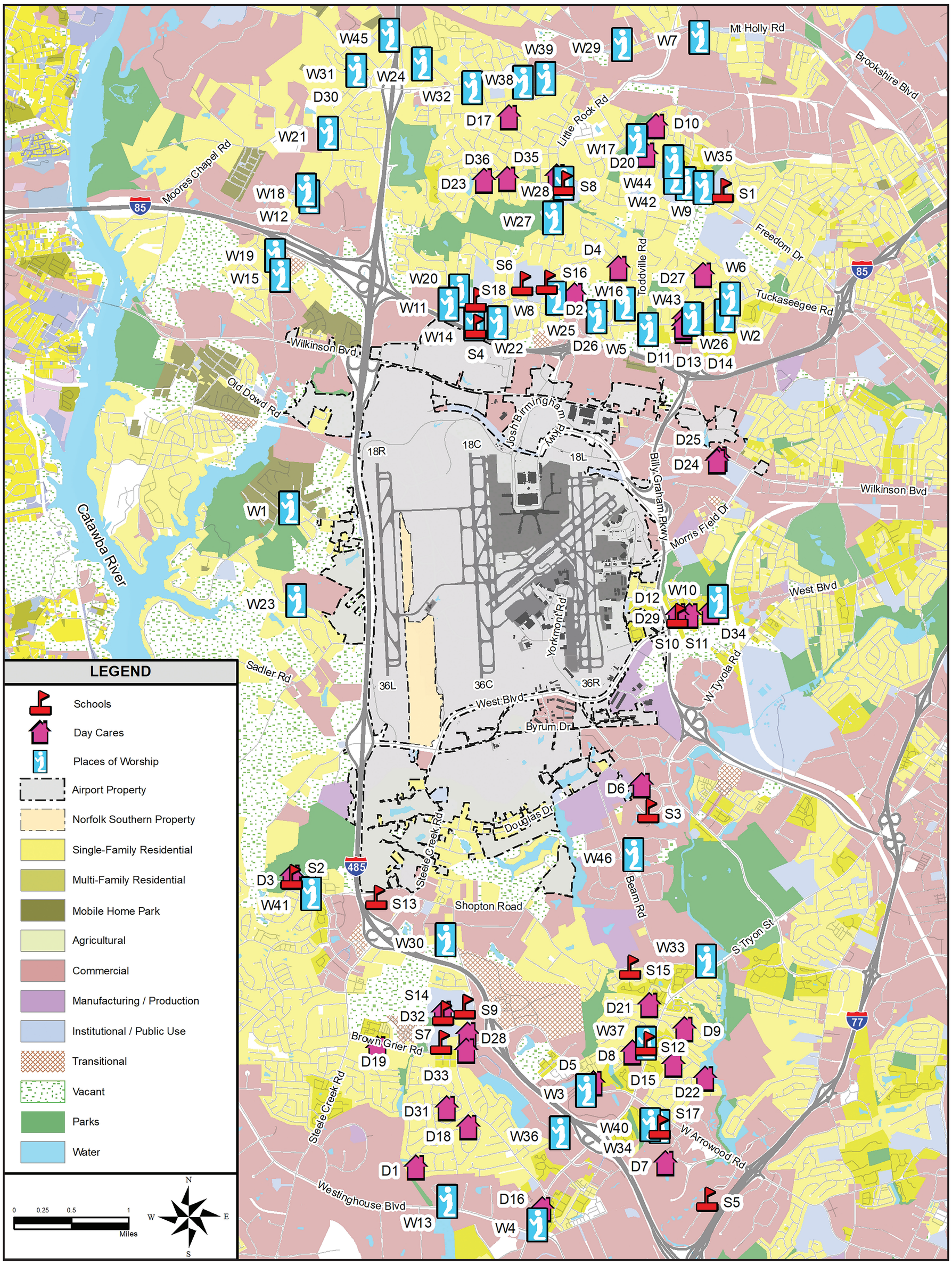
Embraer EMB-175

Boeing 767-300ER Freighter





Airport Environs



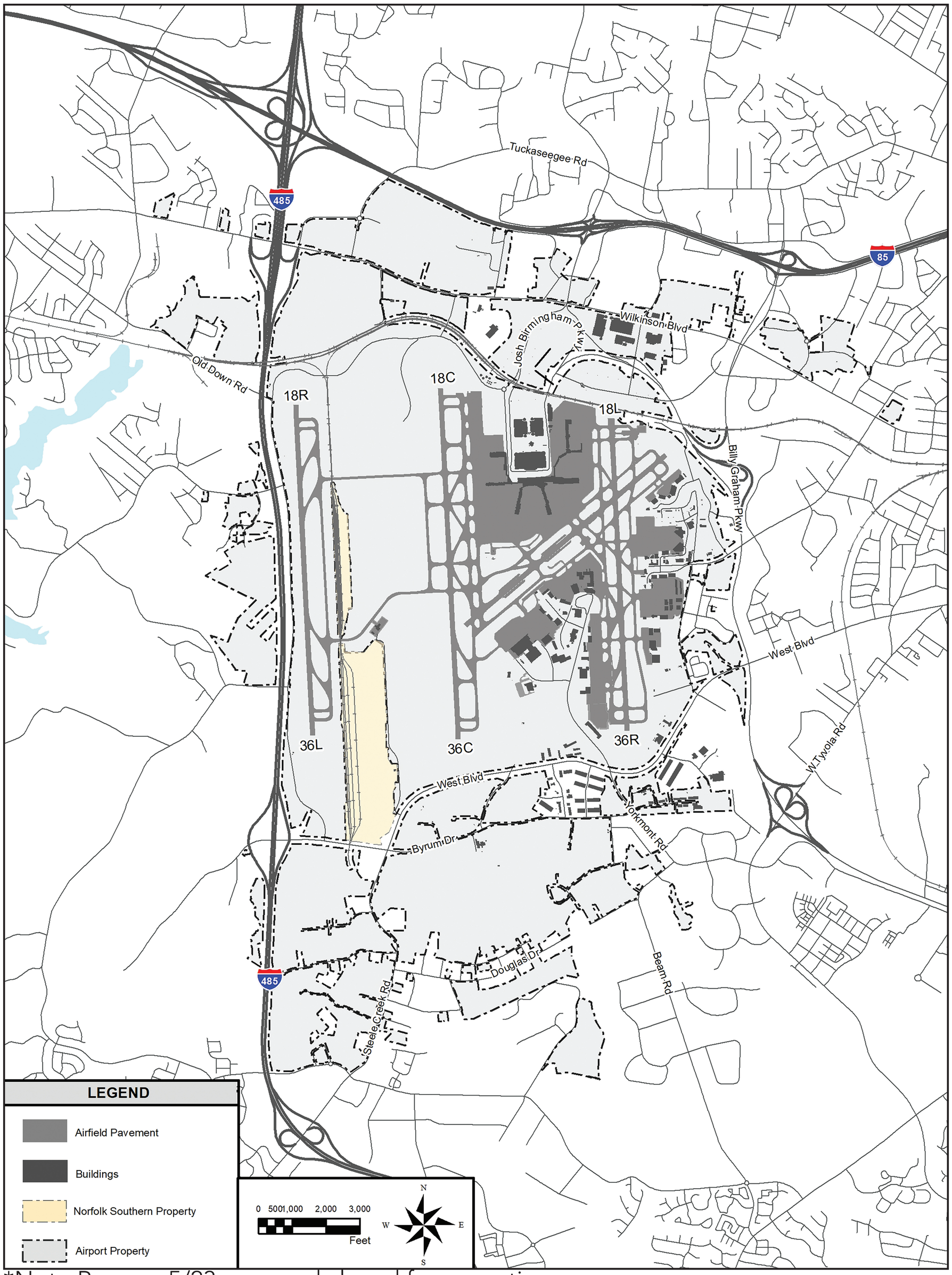
Airport Environs

Schools	
ID	Name
S1	Allenbrook Elementary School
S2	Berewick Elementary School
S3	Central Piedmont Community College
S4	East Voyager Academy of Charlotte
S5	Gordon-Conwell Theology
S6	J.W. Wilson Middle School
S7	Kennedy Middle School
S8	Mountain Island Day School
S9	Olympic High School
S10	Renaissance West Elementary School
S11	Renaissance Middle Elementary School
S12	Rod of God Christian Academy
S13	Southwest Charlotte STEM Academy
S14	Steele Creek Elementary School
S15	Steele Creek Preparatory Academy
S16	Tuckaseegee Elementary School
S17	Unity Classical Charter School
S18	West Mecklenburg High School

Day Cares	
ID	Name
D1	Anthony's Day Care Home
D2	Beginning Years Day Care
D3	Berewick Elementary A.S.E.P.
D4	Busy Beez Child Care
D5	Cadence Academy Preschool, Whitehall
D6	Children's Academy At Lakepointe
D7	Dogwood Lane Children's Academy
D8	Ebenezer Child Care Home Sylvia Pauling
D9	Gallmon Family Small Day Care Home
D10	Gina's Learn-N-Play Home Day Care
D11	Gleaton's Learning Immersion Academic Center
D12	Howard Levine Child Development Center
D13	Humpty Dumpty Academy I
D14	Humpty Dumpty Academy II
D15	Jaznee's Wonderland
D16	La Petite Academy
D17	Lachriston Large Day Care Home
D18	Lacy's Little Ones
D19	Lil' Bundles Of Joy
D20	Little Dove's In Home Day Care
D21	Little Miracles Home Day Care
D22	Miss Ethel's Day Care Home
D23	Miss Miss C's Child Care
D24	Mrs. Chris Play And Learn #2
D25	Mrs. Chris Play And Learn Preschool
D26	Mulberry Head Start
D27	Precious Little Angels
D28	Primrose School Of Lake Wylie
D29	Renaissance West A.S.E.P.
D30	Shady Brook Baptist Child Care Center
D31	Spectrum Kids
D32	Steele Creek A.S.E.P.
D33	The Learning Experience
D34	The Learning Tree Child Care Center
D35	Tiny Treasures Child Development Center
D36	Vantoinette J. Savage Small Day Care Home

Places of Worship	
ID	Name
W1	Berryhill Baptist Church
W2	Blessed Assurance Community Church
W3	BOLD Church
W4	Central Steele Creek Presbyterian Church
W5	Charlotte Chin Baptist Church
W6	Charlotte Immanuel Church of All Nations
W7	Connections - An Assurance Faith Community
W8	Covenant United Methodist Church
W9	Durham Memorial Baptist Church
W10	EPIC Church Charlotte/ Hedges and Highways Church
W11	Every Nation Church
W12	Garden Memorial
W13	Greater Newbirth Fellowship
W14	Harvest Church
W15	Hope Community Church of Metrolina
W16	Iglesia Catolica Nuestra Senora de Guadalupe
W17	Kingdom Christian Church
W18	Kingdom Embassy International
W19	Liberty Baptist Church
W20	Montagnard Alliance Church
W21	Moores Chapel
W22	Mt Carmel Baptist Church
W23	Mt Olive Presbyterian Church
W24	Mt Zion Missionary Baptist Church
W25	Mulberry Baptist Church
W26	Mulberry Presbyterian Church
W27	New Bethel Church of God in Christ
W28	Paw Creek
W29	Paw Creek Presbyterian Church
W30	Saint Joseph Catholic Church
W31	Shadybrook Baptist Church
W32	St Johns Chapel Baptist Church
W33	Steele Creek AME Zion Church
W34	Steele Creek Church
W35	The Church of Pentecost Charlotte Central
W36	The Restoration Place Church
W37	The Rod of God Ministries
W38	Thrift Baptist Church
W39	Thrift United Methodist Church
W40	Trinity Baptist Church
W41	Trinity Worship Center
W42	West Charlotte Church at Freedom
W43	West Charlotte Spanish SDA Church
W44	Westview Christian Church
W45	Woodland Presbyterian Church
W46	World Worship Church

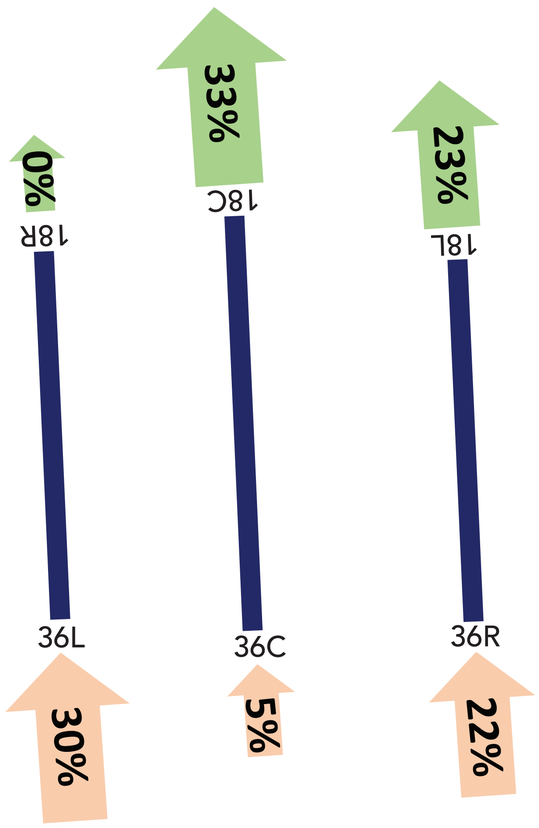
Existing Airfield



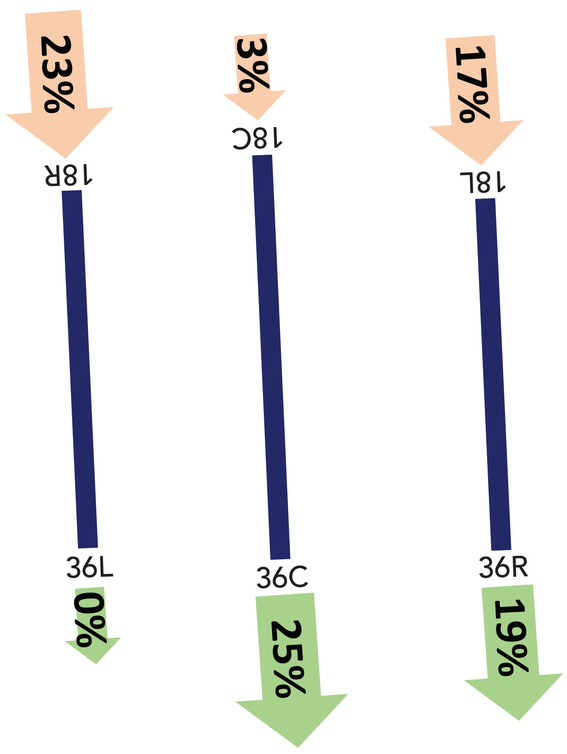
*Note Runway 5/23 assumed closed for operation

Existing (2023) Baseline Runway Use Average Annual Conditions*

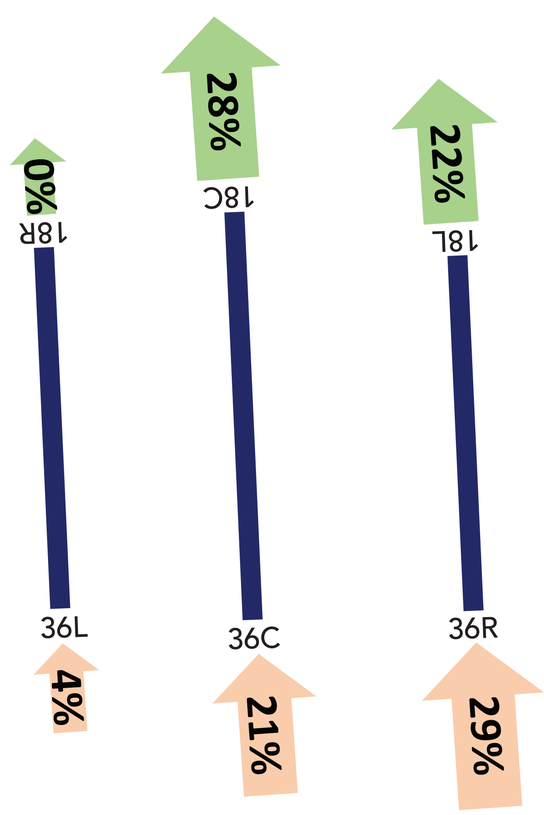
DAYTIME – NORTH FLOW



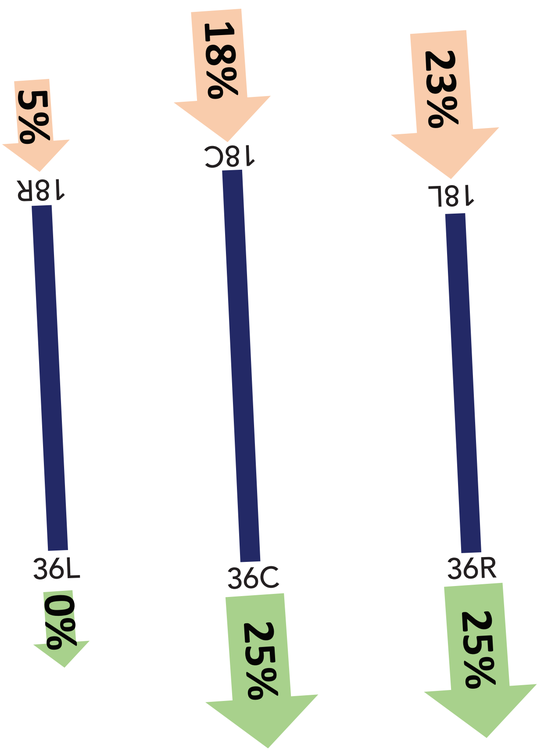
DAYTIME – SOUTH FLOW



NIGHTTIME – NORTH FLOW



NIGHTTIME – SOUTH FLOW

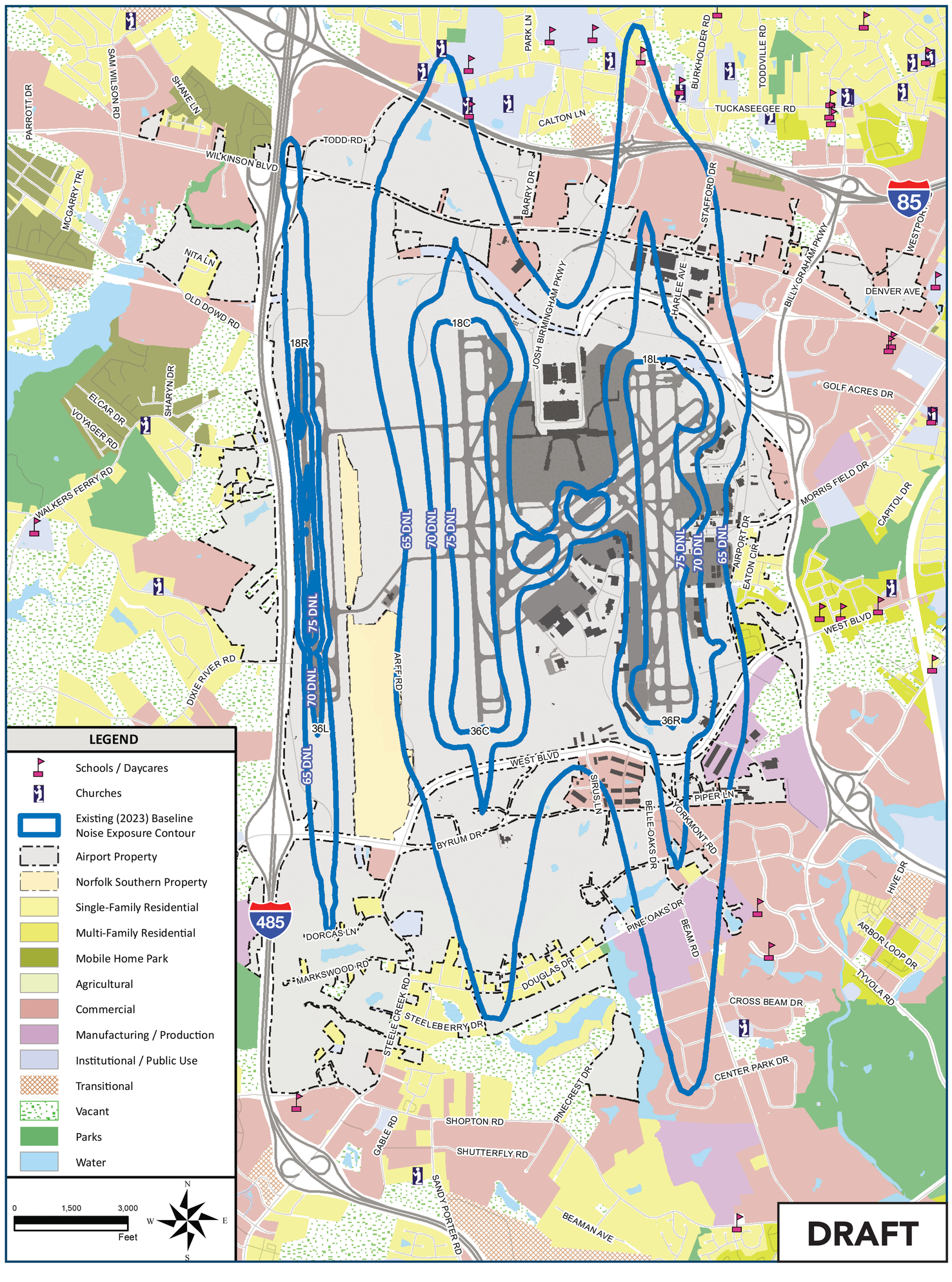


*Totals may not equal 100% due to rounding.

Arrivals

Departures

Existing (2023) Baseline Noise Exposure Contour



Housing Units within the 65 DNL	
Single-Family Residential	**51**
Mitigated	15
Not Mitigated	36
Multi-Family Residential	**88**
Not Mitigated	88
Manufactured Home	**1**
Not Mitigated	1
Total Housing Units	**140**

Noise Sensitive Facilities within the 65 DNL	
Churches / Places of Worship	4
Schools / Education	3
Libraries	0
Hospitals	0
Nursing Homes	0
Total Noise Sensitive Facilities	**7**

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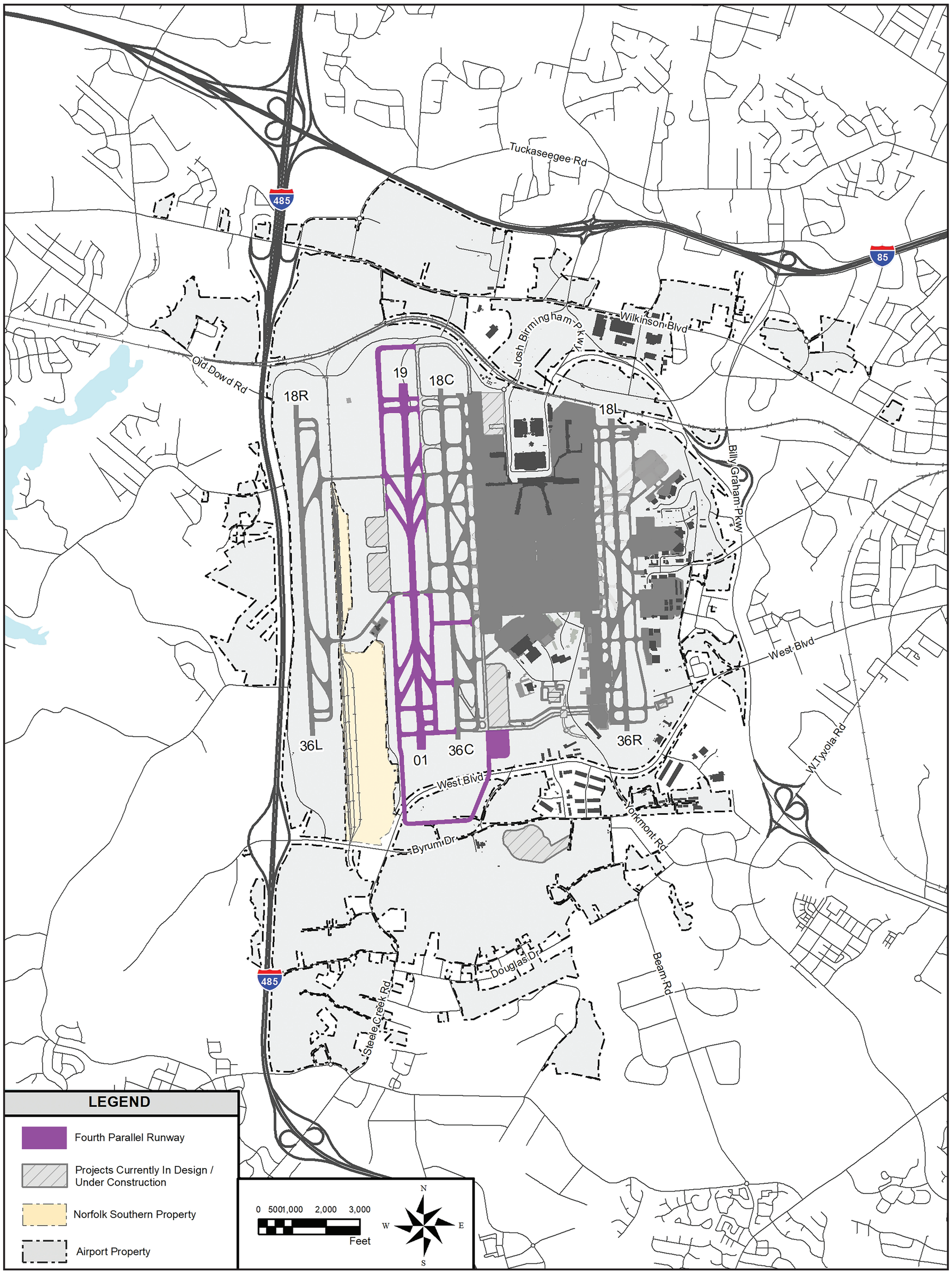
Future Airfield



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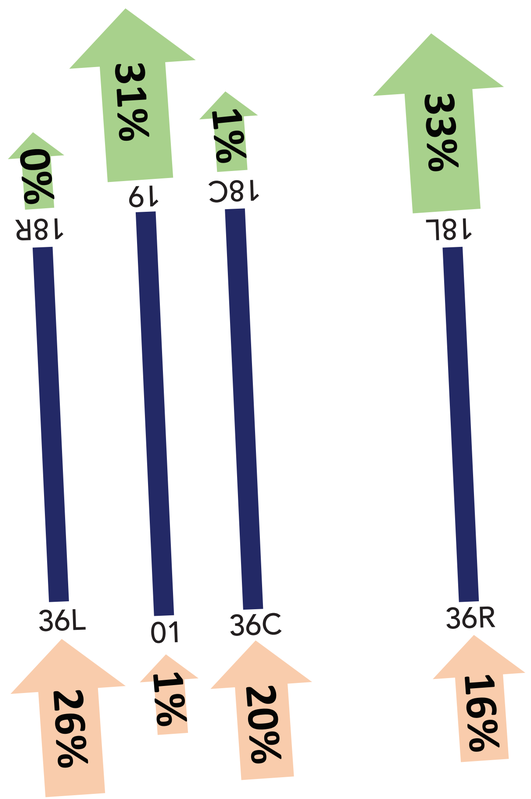
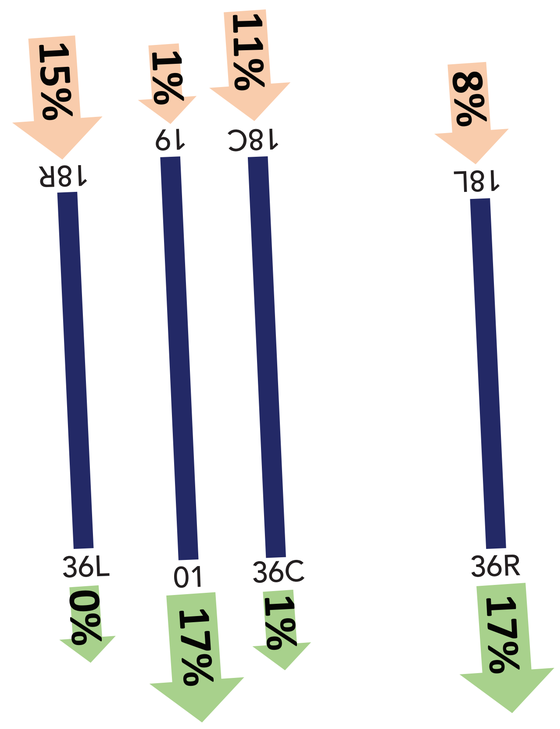
Charlotte Douglas International Airport
PART 150 STUDY UPDATE

Future (2028) Baseline Runway Use Average Annual Conditions*

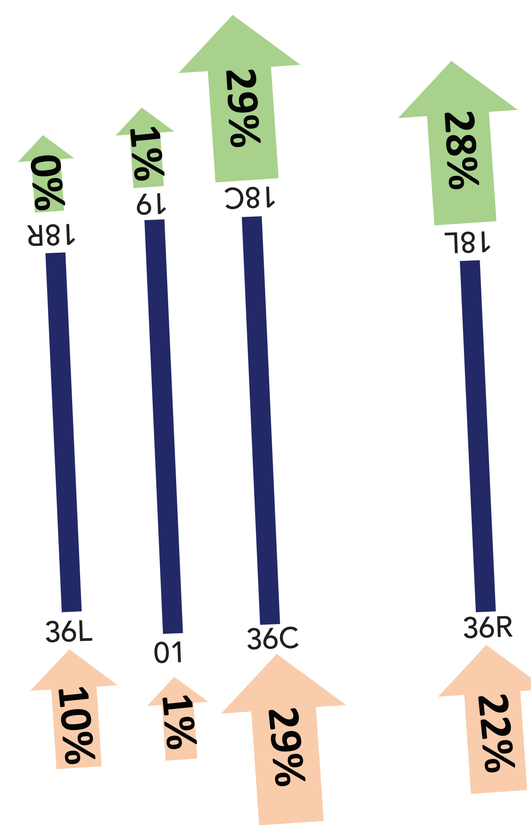
DAYTIME – NORTH FLOW



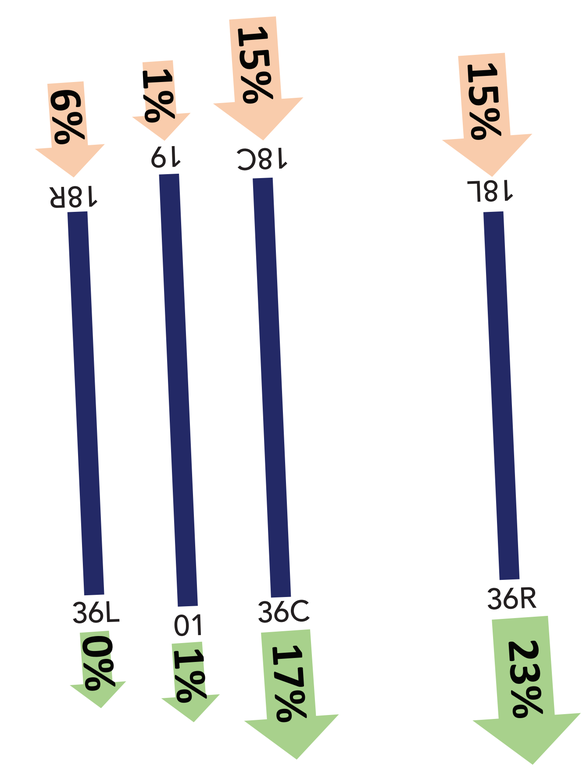
DAYTIME – SOUTH FLOW



NIGHTTIME – NORTH FLOW



NIGHTTIME – SOUTH FLOW

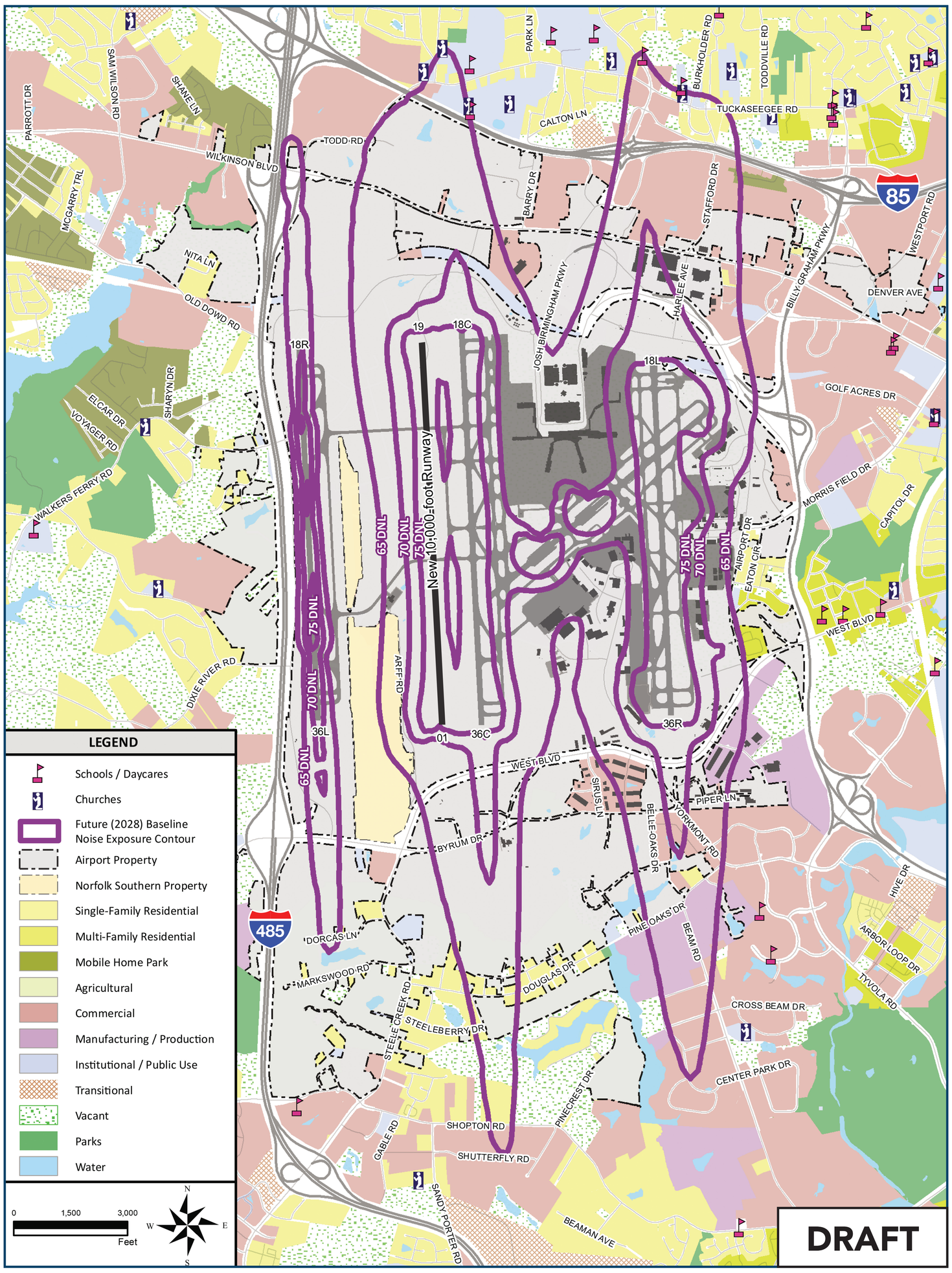


*Totals may not equal 100% due to rounding.

Arrivals

Departures

Future (2028) Baseline Noise Exposure Contour



Housing Units within the 65 DNL	
Single-Family Residential	**85**
Mitigated	47
Not Mitigated	38
Multi-Family Residential	**94**
Mitigated	2
Not Mitigated	92
Manufactured Home	**63**
Not Mitigated	63
Total Housing Units	**242**

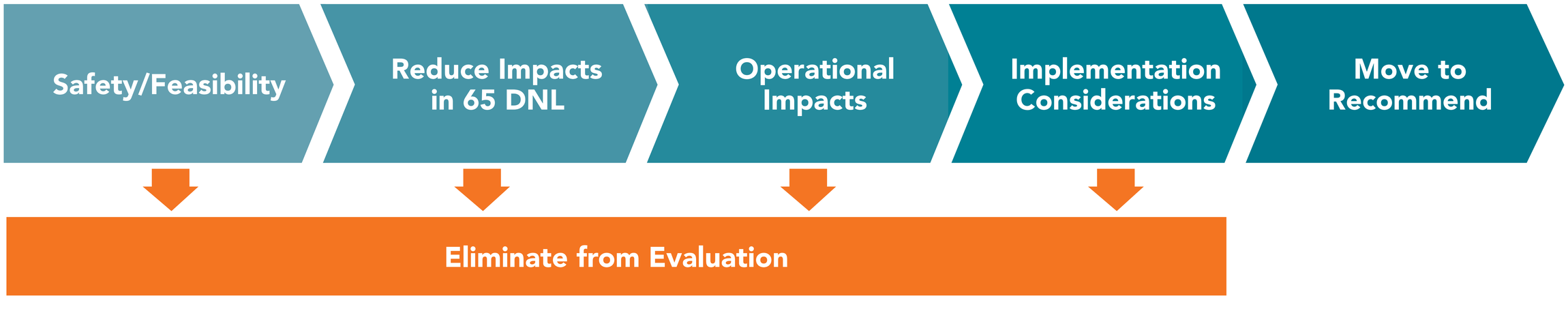
Noise Sensitive Facilities within the 65 DNL	
Churches / Places of Worship	4
Schools / Education	4
Libraries	0
Hospitals	0
Nursing Homes	0
Total Noise Sensitive Facilities	**8**

History of Noise Compatibility Planning

CURRENTLY APPROVED NOISE ABATEMENT MEASURES

Measure ID	DESCRIPTION	STATUS
NA-1	Continue periodic monitoring procedures, initiated as a result of the 1990 Part 150 Noise Compatibility Program (NCP), within the Airport Environs. (Continuation of implemented Measure NA-1 of adopted 1990 NCP.) (Phase I) Approved in 1996	Inactive
NA-4	Provide monthly reports on late night (11:00 p.m. to 7:00 a.m.) runway utilization and variances from NCP assumptions to Air Traffic Control Tower management and frequent nighttime operators. Conduct follow-up with FAA and carriers to enhance voluntary adherence to existing program. (Phase I) Approved in 1996	Active
NA-5	Designate Runway 18C or 18L as preferred for takeoffs by turbojet and large four-engine prop aircraft between 11:00 p.m. and 7:00 a.m. when, under the current preferential runway use program, Runway 23 or Runway 5 cannot be used for reasons of wind, weather, operational necessity, or required runway length. (Phase I) Approved in 1996	Active
NA-6	Reaffirm Airport user policy which designates locations and procedures for aircraft engine runups. Establish a runup position on the USAir ramp parallel to Runway 5/23. (Phase I) Approved in 1996	Active
NA-7	Departing Runways 36R and 36C, turbojet and large four-engine prop aircraft initiate turns at the 2.6 and 2.5 DME north of the CLT VOR/DME, respectively. (Phase I) Approved in 1996	Active
NA-8	After construction of Runway 18R/36L, 3,700 feet west of Runway 18C/36C, establish an initial departure turn for Runway 18R, to be made as soon as practicable by turbojets and large four-engine prop aircraft, to a heading of 195 degrees. (Phase II) Approved in 1996	Active
NA-9	After commissioning of a third parallel runway west of Runway 18C/36C, establish an initial departure turn, as soon as practicable, by turbojets and large four-engine prop aircraft to a heading of 315 degrees from Runway 36L. (Phase II) Approved in 1996	Active

Noise Abatement Alternative Screening Process



Safety / Feasibility

- Our team of experts will evaluate each alternative for safety/feasibility issues
- If no safety or feasibility issues identified, move to the next step

Reduces Impacts in 65 DNL

- Would the alternative result in a net reduction in non-compatible land uses within the 65 DNL?
- If there is a net reduction in impacts within the 65 DNL, move to the next step

Operational Impacts

- Does the alternative negatively impact operational efficiency (increased delays, reduced capacity, increased flight time, etc.)?
- If there are no operational impacts identified, move to the next step

Implementation Considerations

- Who is responsible to implement or support the implementation of the alternative?
- Consideration of the process, timeline, and cost of implementation
- If no implementation issues are identified, move to the next step

Move to Recommend

- Include the alternative as a recommended measure for further evaluation with other recommended measures
- Various scenarios of recommended measures will be evaluated

ID	CATEGORY	DESCRIPTION	ASSESSMENT METHOD	SAFETY / FEASIBILITY	REDUCES IMPACTS IN 65DNL?	OPERATIONAL IMPACTS?
			RUN-UP LOCATIONS			
NA-A-1	Facility Modification	Maximize the use of midfield run-up locations (ID 2, 3) over those located on the east side of the Airport (ID 4, 5, 6). (Short-Term)	Qualitative	No safety/feasibility issues identified	Has potential	No operational impacts identified.
NA-A-2	Facility Modification	Conduct an assessment of ground run-up procedures after construction of the new fourth parallel runway to identify run-up locations in the midfield of the Airport. (Long-Term)	Qualitative	No safety/feasibility issues identified	Has potential	No operational impacts identified.
			DISPLACED ARRIVAL THRESHOLD			
NA-B-1	Facility Modification	Implement a 1,235-foot displaced arrival threshold on Runway 36C	Quantitative	No safety/feasibility issues identified	No. Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL.	
NA-B-2	Facility Modification	Implement a 1,376-foot displaced arrival threshold on Runway 36R	Quantitative	No safety/feasibility issues identified	No. Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL.	
NA-B-3	Facility Modification	Implement a 1,376-foot displaced arrival threshold on Runway 18L	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 6 housing units within the 65+ DNL.	Yes. Negative operational impacts would occur due to the existing high-speed taxiways not being positioned for a displaced threshold. The results would be greater runway occupancy times, longer taxi distance, and potentially increased congestion due to where aircraft would exit the runway. These operational impacts could be resolved by redesigning and reconstructing all of the taxiways along the runway. However, the cost of that would far exceed any benefits.
NA-B-4	Facility Modification & Preferential Runway Use	*Evaluate the new runway as an arrival runway:* Evaluate the new runway as an arrival runway and implement an 1,100-foot arrival displaced threshold on Runway 01	Quantitative	No safety/feasibility issues identified	No. Increases impacts compared to the Future (2028) Baseline by 15 housing units within the 65+ DNL.	
			AIRPORT FLOW			
NA-C-1	Preferential Runway Use	*Balanced Mix of North v. South Flow:* Increase the amount of time the Airport operates in south flow to achieve a 50/50 balance of north v. south flow	Qualitative	Safety/Feasibility concerns. Direction of flow is primarily determined by wind direction and wind speed on the surface and aloft (above the ground). It is also determined by the location of severe weather for a hundred miles from the Airport. Based on these factors, it is not feasible for the ATCT to maintain an annual runway flow and to try and force it would likely reduce safety. As such, the implementation of such policy would limit the air traffic controller's ability to choose the safest direction of flow for the operation of the Airport.		
NA-C-2	Preferential Runway Use	*Limit One Direction Flow to a Maximum # Days:* Prevent continuous flow in one direction over more than [two consecutive days] to bring relief to people who have been getting noise/flow from one type of operation continuously for multiple days. After [two consecutive days] of flow in the same direction, flow should be reversed at the first reasonable opportunity and maintained in the reverse direction for a reasonable period.	Qualitative	Safety/Feasibility concerns. Direction of flow is primarily determined by wind direction and wind speed on the surface and aloft (above the ground). It is also determined by the location of severe weather for a hundred miles from the Airport. Based on these factors, it is not feasible for the ATCT to maintain an annual runway flow and to try and force it would likely reduce safety. As such, the implementation of such policy would limit the air traffic controller's ability to choose the safest direction of flow for the operation of the Airport.		

ID	CATEGORY	DESCRIPTION	ASSESSMENT METHOD	SAFETY / FEASIBILITY	REDUCES IMPACTS IN 65DNL?	OPERATIONAL IMPACTS?
DAYTIME RUNWAY USE						
NA-D-1	Preferential Runway Use	*Evaluate the new runway as an arrival runway* Designate Runways 18R/36L and 01/19 as preferred for arrivals and Runway 18C/36C and 18L/36R as preferred for departures by turbojet aircraft between 7:00 a.m. and 10:00 p.m.	Quantitative	No safety/feasibility issues identified	No. Increases in impacts compared to the Future (2028) Baseline by 18 housing units within the 65+ DNL.	
NA-D-2	Preferential Runway Use	*Spread Operations:* At low periods, spread operations to avoid concentration of a particular mode of operation (e.g., most/all departures or most/all arrivals) to a single runway, leaving others underutilized for the same mode of operation. For example: Avoid sending all arrivals to Runway 18R while Runways 18L and 18C are held open for occasional departures.	Qualitative	No safety/feasibility issues identified. In general, this is how the Airport currently operates.	No. This recommendation is already accounted for in the Future (2028) Baseline scenario. There would be no reductions in impacts compared to the Future (2028) Baseline within the 65+ DNL.	
NA-D-3	Preferential Runway Use	*Cap Arrival/Departure Mix by Runway:* Ensure that the new fourth parallel runway (Runway 01/19), Runway 18R/36L (for arrivals), and Runway 18C/36C (for departures) will never have more, in the aggregate, than [50%] of arrivals/departures over any single daily period.	Qualitative	Safety/Feasibility concerns. The suggestion of caps on runways inherently creates barriers to implementation from a feasibility perspective because the airport is a dynamic environment that may require the use of runways that would exceed the limits of this alternative. To force caps and percentages into a complex system like the one at CLT would reduce operational capability and potentially reduce safety. As such, this alternative is not feasible for implementation.		
NA-D-4	Preferential Runway Use	*Require Departures on 18R/36L:* Set guidelines that require a minimum allocation of departures for Runway 18R/36L for a given timeframe (e.g., over the course of a quarter or year), with the goal of achieving at least ten percent of daily departures on that runway.	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 12 housing units within the 65+ DNL.	Yes. Runway 18R/36L was planned (location) and designed (length) to primarily be used as an arrival runway. It has the capability to be used for departures, but due to its location in relationship to the terminal area it is used for departures only under extenuating circumstances. Implementation of this alternative would require aircraft to routinely taxi across two active runways (Runway 18C/36C and Runway 01/19), which reduces the operational efficiency of those active runways due to the need to create safe gaps. This would result in significantly increased delay to insure no runway incursions occur. Therefore, this alternative is not considered feasible due to operational and safety concerns.
NA-D-5	Preferential Runway Use	*Avoid Dual Stream Arrivals during Non-peak Daytime Operations:* Between 7a-10p, do not use the new fourth parallel runway (Runway 01/19) and Runway 18R/36L to receive arrivals in "dual stream" mode during non-peak periods.	Qualitative	No safety/feasibility issues identified. In general, this is how the Airport currently operates.	No. This recommendation is already accounted for in the Future (2028) Baseline scenario. There would be no reductions in impacts compared to the Future (2028) Baseline within the 65+ DNL.	
NA-D-6	Preferential Runway Use	*Alternate Primary Operation for Adjacent Runways:* Alternate use of runways so that no two adjacent runways will be used primarily for the same mode of operation (arrival or departure) over a daily period.	Qualitative	No safety/feasibility issues identified. In general, this is how the Airport currently operates.	No. This recommendation is already accounted for in the Future (2028) Baseline scenario. There would be no reductions in impacts compared to the Future (2028) Baseline within the 65+ DNL.	
NA-D-7	Preferential Runway Use	Utilize Runway 01/19 and Runway 18C/36C primarily for departures and Runway 18R/36L and Runway 18L/36R primarily for arrivals	Quantitative	Currently under review		
NA-D-8	Preferential Runway Use	Utilize Runway 01/19 and Runway 18C/36C for both arrivals and departures	Quantitative	Currently under review		

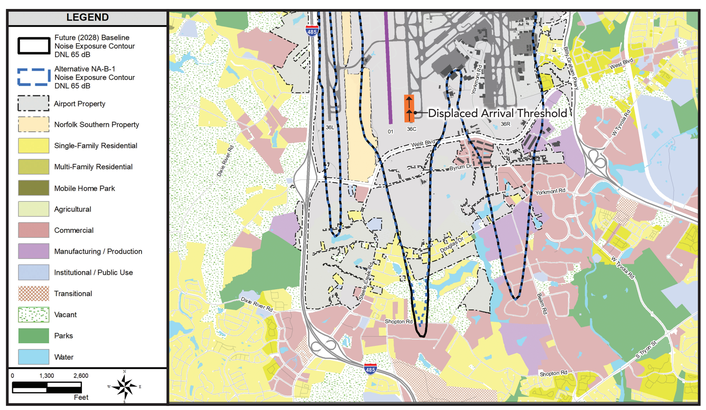
ID	CATEGORY	DESCRIPTION	ASSESSMENT METHOD	SAFETY / FEASIBILITY	REDUCES IMPACTS IN 65DNL?	OPERATIONAL IMPACTS?
PREFERENTIAL NIGHTTIME RUNWAY USE						
NA-E-1	Preferential Runway Use	Designate Runway 36L and 36R as preferred for north flow arrivals by turbojet aircraft between 10:00 p.m. and 7:00 a.m.	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 13 housing units within the 65+ DNL.	No operational impacts identified.
NA-E-2	Preferential Runway Use	Designate Runways 18L, 18C, and 18R for south flow arrivals by turbojet aircraft between 10:00 p.m. and 7:00 a.m.	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 7 housing units and 1 day care within the 65+ DNL.	No operational impacts identified.
NA-E-3	Preferential Runway Use	Focus nighttime north-flow arrivals on the runway that typically receives fewer arrivals during the full 24-hour period (Runway 36R). Due to their close proximity, consider Runways 1/19 and 18C/36C as one runway by aggregating their volumes when determining which runway receives fewest arrivals.	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 19 housing units within the 65+ DNL.	Currently under review
NA-E-4	Preferential Runway Use	Focus nighttime south-flow arrivals on the runway that typically receives fewer arrivals during the full 24-hour period (Runway 18L). Due to their close proximity, consider Runways 1/19 and 18C/36C as one runway by aggregating their volumes when determining which runway receives fewest arrivals.	Quantitative	No safety/feasibility issues identified	No. Increases impacts compared to the Future (2028) Baseline by 28 housing units within the 65+ DNL.	
DIVERGENT HEADINGS - NORTH FLOW						
NA-F-1	Flight Procedure	Increase the number of departure headings for north flow operations while maintaining existing approved headings and maximizing departure corridors. > Keep existing headings as follows: Runway 36R: 25° Runway 36L: 315° > Add additional divergent headings as follows: Runway 36R: - 85° to follow the Wilkinson Boulevard corridor - 55° and 70° to follow the Interstate 85 corridor Runway 01: - Implement the existing Runway 36C's approved 330° heading - 345° to overfly the Interstate 85/485 Interchange and follow the Interstate 485 corridor - 305° to follow the Wilkinson Blvd corridor	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 5 housing units and 1 day care within the 65+ DNL.	No operational impacts identified.
NA-F-2	Flight Procedure	Maximize the number of divergent headings for north flow operations while maintaining a 15° separation between headings. > Add additional divergent headings as follows: Runway 36R: RWH, 20°, 35°, 50°, 65°, 80° Runway 01: RWH, 345°, 330°, 315°, 300°, 285° While a straight-out heading is identified for Runways 36R and 01, these headings cannot be used simultaneously because a 15-degree separation is required per 7110.65Z.	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 2 housing units within the 65+ DNL.	No operational impacts identified.
DIVERGENT HEADINGS - SOUTH FLOW						
NA-G-1	Flight Procedure	Increase the number of departure headings for south flow operations while keeping the 2-mile restriction on the new Runway 19. > Keep existing headings as follows: Runway 18R: 200° Runway 18L: RWH > Add additional divergent headings as follows: Runway 18R (remove 2-mile restriction): - 220° to follow the Garrison Road corridor Runway 19 (keep 2-mile restriction): - Implement the existing RWH Runway 18L (remove 2-mile restriction): - 120° to follow the Billy Graham Parkway corridor - 150° and 165° to follow the W Tyvola Road corridor	Quantitative	No safety/feasibility issues identified	No. Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL.	
NA-G-2	Flight Procedure	Increase the number of departure headings for south flow operations while keeping the 2-mile restriction on Runway 18L. > Keep existing headings as follows: Runway 18R: 200° Runway 18L: RWH (keep 2-mile restriction) > Add additional divergent headings as follows: Runway 18R (remove 2-mile restriction): - 220° to follow the Garrison Road corridor Runway 19 (remove 2-mile restriction): - Implement the existing RWH - 200° and 215° to follow the Steele Creek Road corridor	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 1 housing unit within the 65+ DNL.	No operational impacts identified.

ID	CATEGORY	DESCRIPTION	ASSESSMENT METHOD	SAFETY / FEASIBILITY	REDUCES IMPACTS IN 65DNL?	OPERATIONAL IMPACTS?
DIVERGENT HEADINGS - SOUTH FLOW (continued)						
NA-G-3	Flight Procedure	Increase the number of departure headings for south flow operations while maintaining existing approved headings and maximizing departure corridors. This requires eliminating the 2-mile restriction for all runways. > Keep existing headings as follows: Runway 18L: RWH Runway 18R: 200° > Eliminate the 2-mile restriction and add divergent headings as follows: Runway 18L: - 120° to follow the Billy Graham Parkway corridor - 150° and 165° to follow the W Tyvola Road corridor Runway 18R: - 220° to follow the Garrison Rd corridor Runway 19: - Implement the existing RWH - 200° and 215° to follow the Steele Creek Road corridor	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 1 housing unit within the 65+ DNL.	No operational impacts identified.
NA-G-4	Flight Procedure	Maximize the number of divergent headings for south flow departures while maintaining a 15° separation between headings. This would require the elimination of the 2-mile restriction. > Eliminate the 2-mile restriction and add additional divergent headings as follows: Runway 18L: RWH, 165°, 150°, 135°, 120°, 105° Runway 19: RWH, 200°, 215°, 230°, 245°, 260°	Quantitative	No safety/feasibility issues identified	Yes. Reduces impacts compared to the Future (2028) Baseline by 8 housing units within the 65+ DNL.	No operational impacts identified.
DEPARTURE FLIGHT CORRIDORS						
NA-H-1	Flight Procedure	Evaluate helicopter operations in the south general aviation apron to takeoff towards the south (stay between Yorkmont and Billy Graham Parkway before turning on course)	Quantitative	No safety/feasibility issues identified	No. Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL.	
NA-H-2	Flight Procedure	*Change Headings of First Turns off Runways 18L and 18C* Reduce the effect of noise on more densely populated areas and foster the desire by the ACR to return to pre-Metroplex flight paths.	Quantitative	No safety/feasibility issues identified	No. Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL.	
NA-H-3	Flight Procedure	For south flow departures, revert to 2016 procedures where aircraft depart from the Runway 18C at a 183° heading and fly between 2 to 4 nautical miles before turning to a 270° heading.	Qualitative	No safety/feasibility issues identified	Because this alternative targets procedures outside of the 65 DNL, no change would occur when compared to the Future (2028) Baseline 65+ DNL.	
ARRIVAL FLIGHT CORRIDORS						
NA-I-1	Flight Procedure	For south flow arrivals along the CHSLY procedure, maintain the published altitude of 6,000 feet at the HEELZ procedure so flights will not cut the corner	Qualitative	No safety/feasibility issues identified	Because this alternative targets procedures outside of the 65 DNL, no change would occur when compared to the Future (2028) Baseline 65+ DNL.	
NA-I-2	Flight Procedure	For south flow arrivals, extend the eastern downwind so that flights intercept the final approach over the main channel of Mountain Island Lake keeping an altitude of 6,000 feet until turning final approach course.	Qualitative	No safety/feasibility issues identified	Because this alternative targets procedures outside of the 65 DNL, no change would occur when compared to the Future (2028) Baseline 65+ DNL.	
NA-I-3	Flight Procedure	For north flow arrivals, utilize Interstate 77 as a flight corridor	Qualitative	No safety/feasibility issues identified	Because this alternative targets procedures outside of the 65 DNL, no change would occur when compared to the Future (2028) Baseline 65+ DNL.	

Displaced Arrival Threshold

ALTERNATIVE NA-B-1

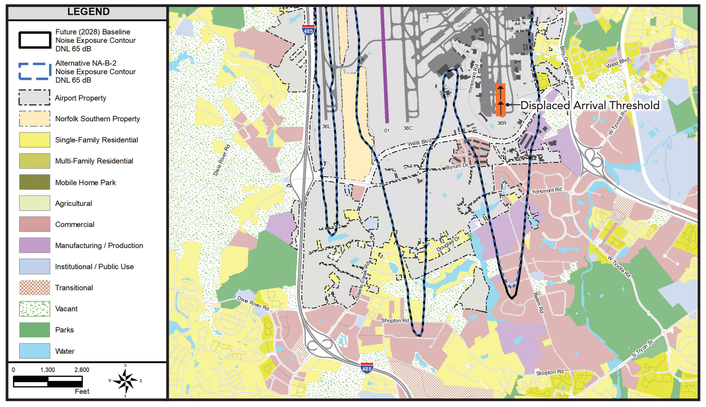
Implement a 1,235-foot displaced arrival threshold on Runway 36C



Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL

ALTERNATIVE NA-B-2

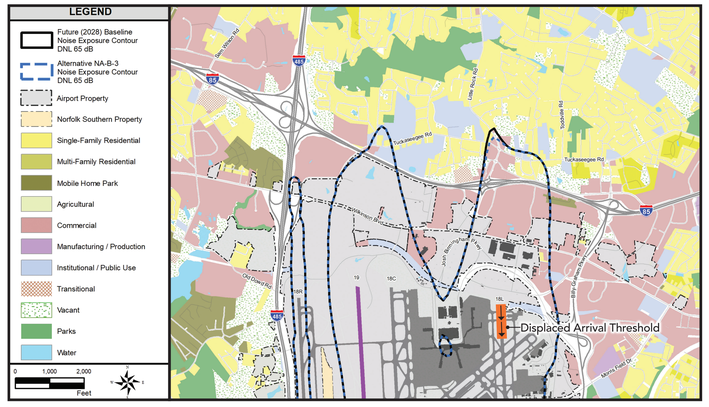
Implement a 1,376-foot displaced arrival threshold on Runway 36R



Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL

ALTERNATIVE NA-B-3

Implement a 1,376-foot displaced arrival threshold on Runway 18L



Reduces impacts compared to the Future (2028) Baseline by 6 housing units and 1 day care within the 65+ DNL

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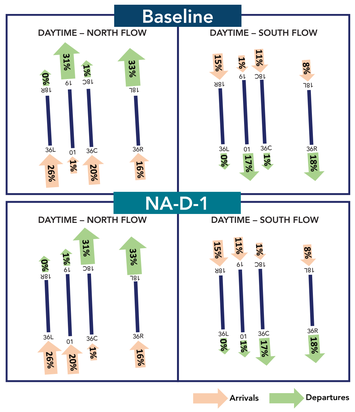
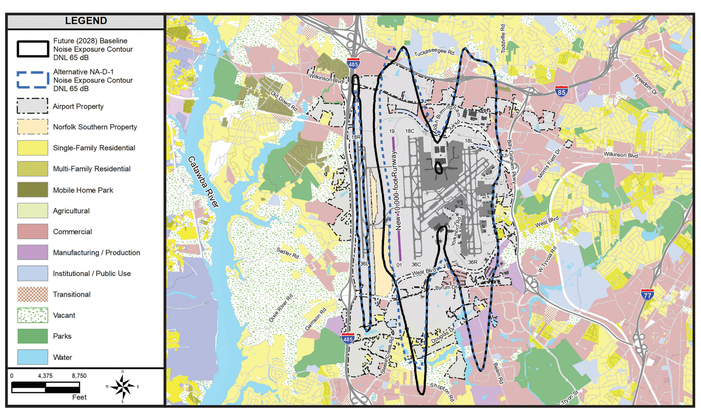
Preferential Daytime Runway Use

ALTERNATIVE NA-D-1

Designate Runways 18R/36L and 01/19 as preferred for arrivals and Runway 18C/36C and 18L/36R as preferred for departures by turbojet aircraft between 7:00 a.m. and 10:00 p.m.

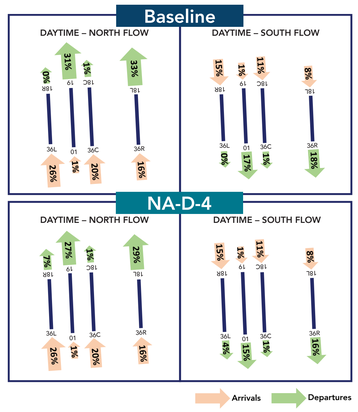


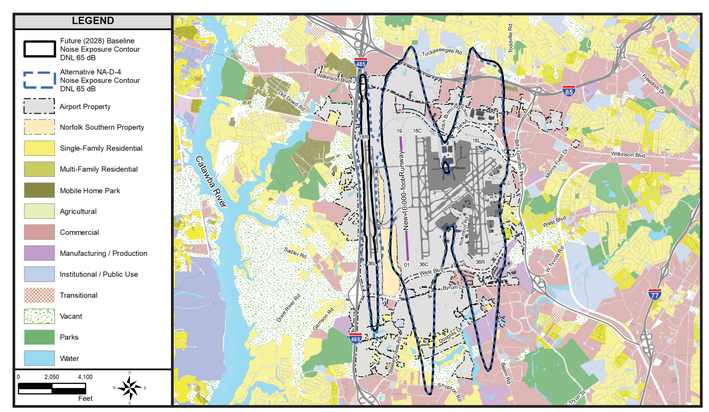


Increases *impacts compared to the Future (2028) Baseline by 18 housing units within the 65+ DNL*

ALTERNATIVE NA-D-4

Set guidelines that require a minimum allocation of departures for Runway 18R/36L for a given timeframe (e.g., over the course of a quarter or year), with the goal of achieving at least ten percent of daily departures on that runway.





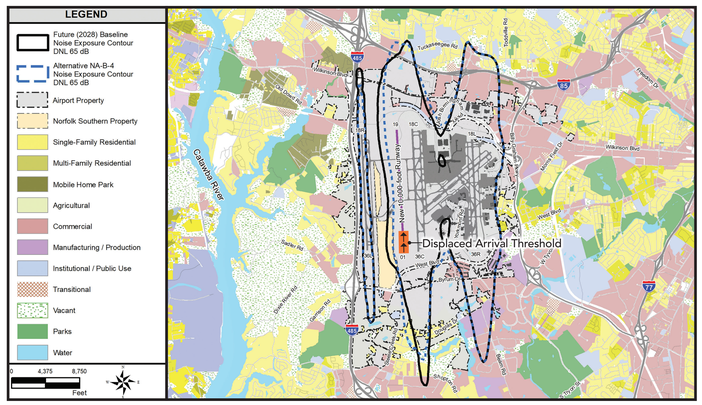
Reduces *impacts compared to the Future (2028) Baseline by 12 housing units within the 65+ DNL*

Preferential Daytime Runway Use & Displaced Arrival Threshold

ALTERNATIVE NA-B-4

Implement a 1,100-foot displaced arrival threshold on Runway 01 when the runway is evaluated as preferred for arrivals.

Increases *impacts compared to the Future (2028) Baseline by 15 housing units within the 65+ DNL*



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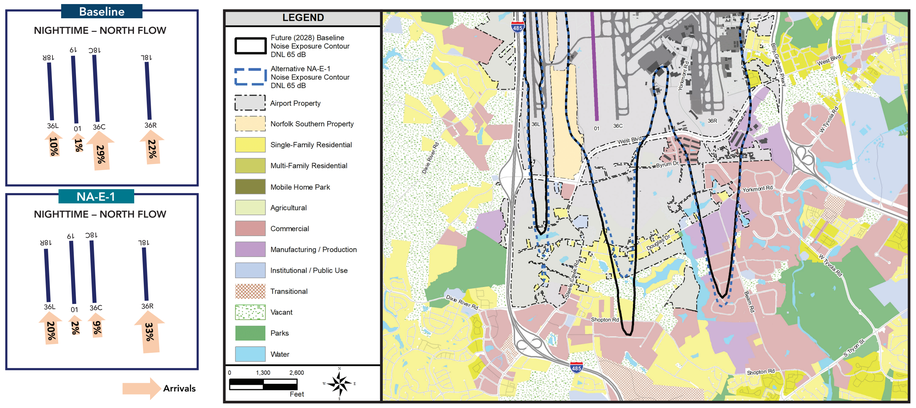
Preferential Nighttime Runway Use

ALTERNATIVE NA-E-1

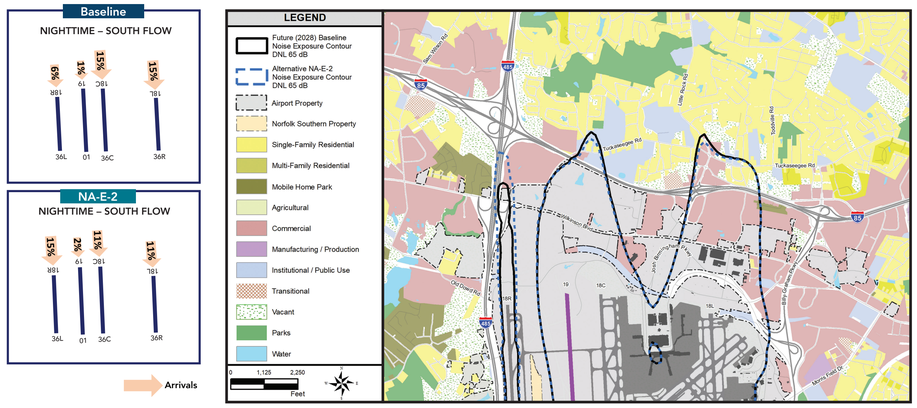
Designate Runway 36L and 36R as preferred for north flow arrivals by turbojet aircraft between 10:00 p.m. and 7:00 a.m.



Reduces impacts compared to the Future (2028) Baseline by 13 housing units within the 65+ DNL

ALTERNATIVE NA-E-2

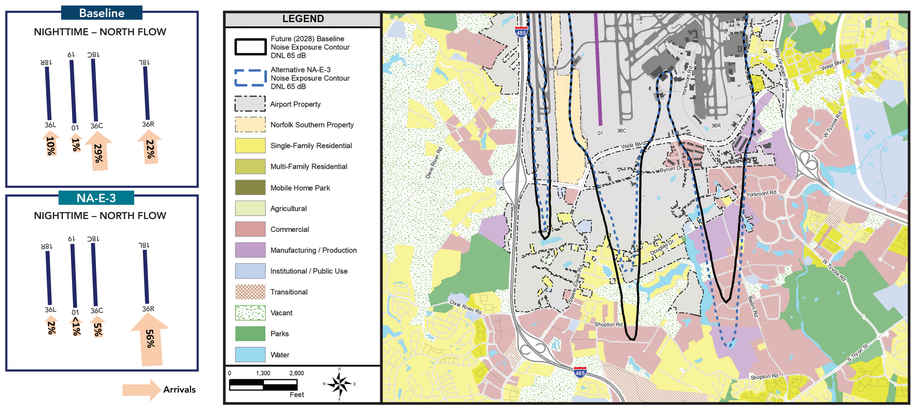
Designate Runways 18L, 18C, and 18R for south flow arrivals by turbojet aircraft between 10:00 p.m. and 7:00 a.m.



Reduces impacts compared to the Future (2028) Baseline by 7 housing units and 1 daycare within the 65+ DNL

ALTERNATIVE NA-E-3

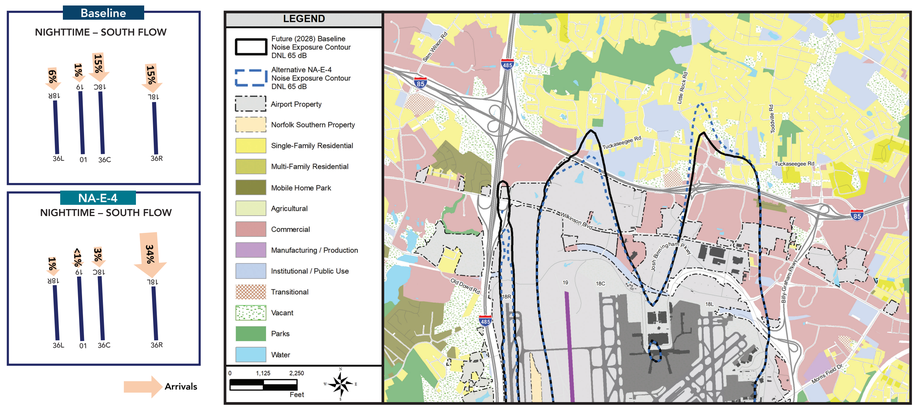
Focus nighttime north-flow arrivals on the runway that typically receives fewer arrivals during the full 24-hour period (Runway 36R).



Reduces impacts compared to the Future (2028) Baseline by 19 housing units within the 65+ DNL

ALTERNATIVE NA-E-4

Focus nighttime south-flow arrivals on the runway that typically receives fewer arrivals during the full 24-hour period (Runway 18L).

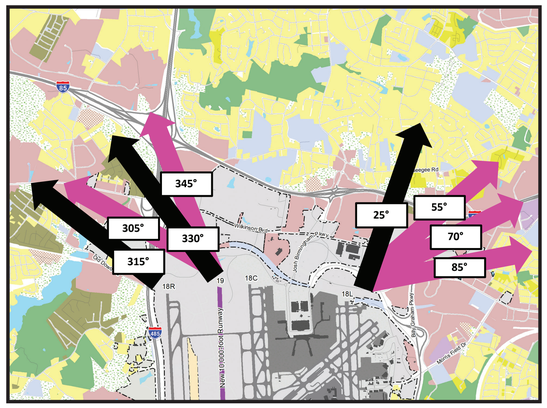


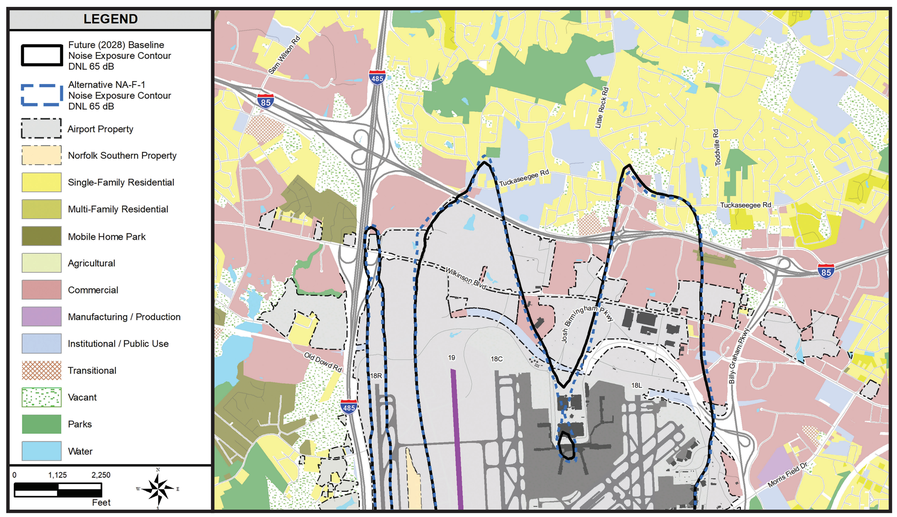
Increases impacts compared to the Future (2028) Baseline by 28 housing units within the 65+ DNL

Divergent Headings – North Flow

ALTERNATIVE NA-F-1

Increase the number of departure headings for north flow operations while maintaining existing approved headings and maximizing departure corridors.

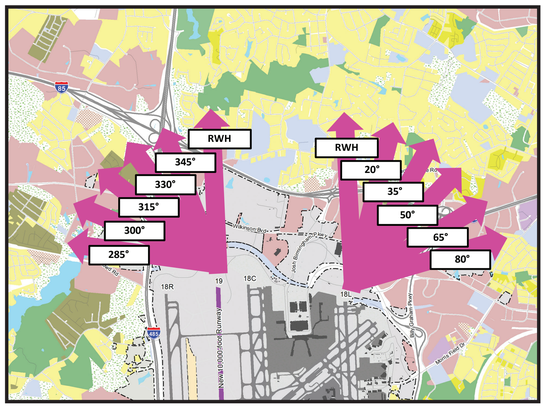


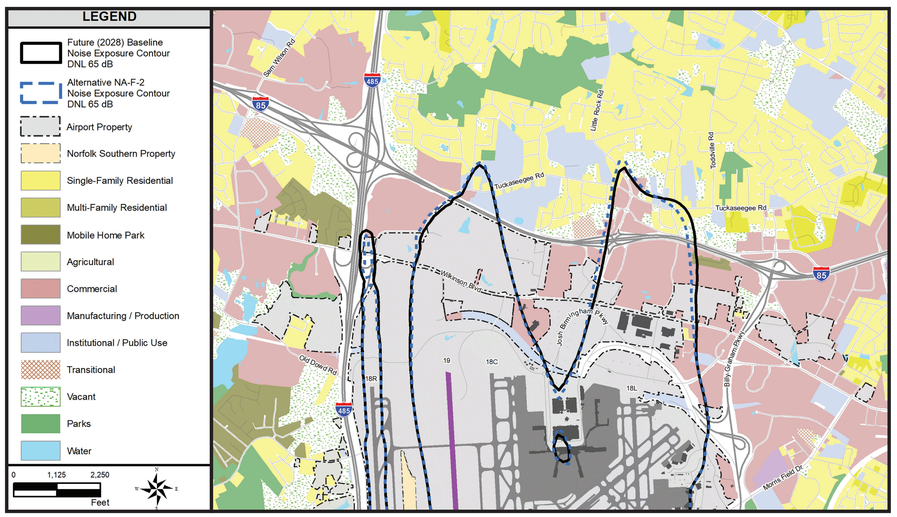


Reduces impacts compared to the Future (2028) Baseline by 5 housing units and 1 daycare within the 65+ DNL

ALTERNATIVE NA-F-2

Maximize the number of divergent headings for north flow operations while maintaining a 15° separation between headings.





Reduces impacts compared to the Future (2028) Baseline by 2 housing units within the 65+ DNL

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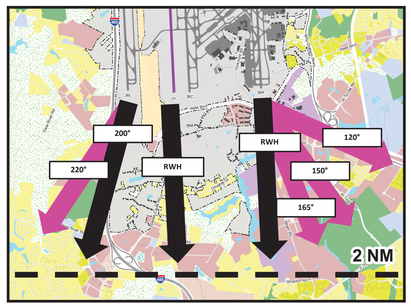
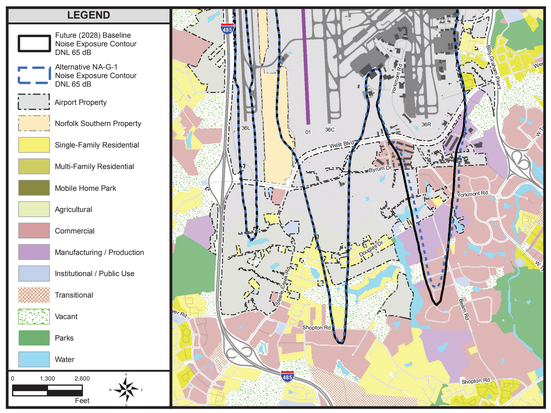
Divergent Headings – South Flow

ALTERNATIVE NA-G-1

Increase the number of departure headings for south flow operations while keeping the 2-mile restriction on the new Runway 19.

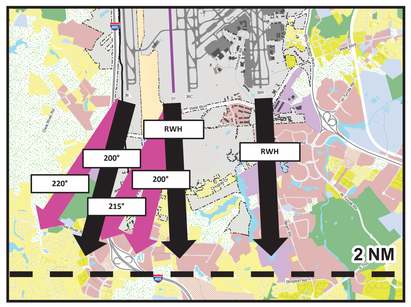


Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL

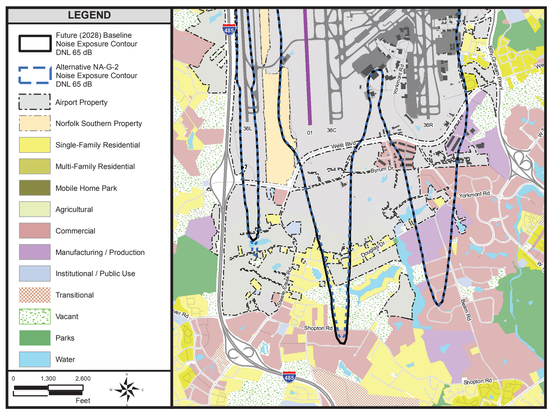


ALTERNATIVE NA-G-2

Increase the number of departure headings for south flow operations while keeping the 2-mile restriction on Runway 18L.

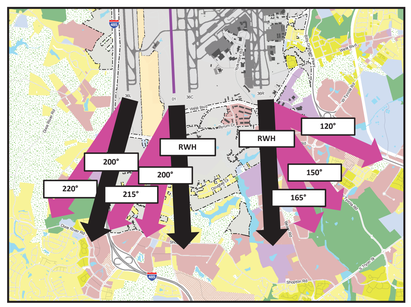


Reduces impacts compared to the Future (2028) Baseline by 1 housing unit within the 65+ DNL

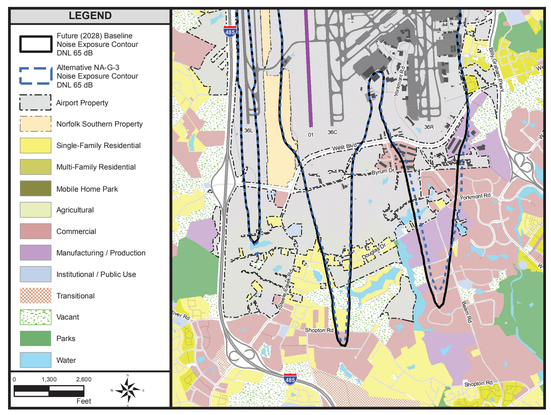


ALTERNATIVE NA-G-3

Increase the number of departure headings for south flow operations while maintaining existing approved headings and maximizing departure corridors. This requires eliminating the 2-mile restriction for all runways.

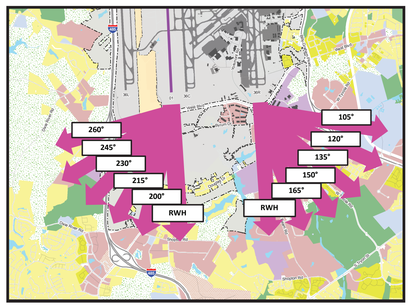


Reduces impacts compared to the Future (2028) Baseline by 1 housing unit within the 65+ DNL

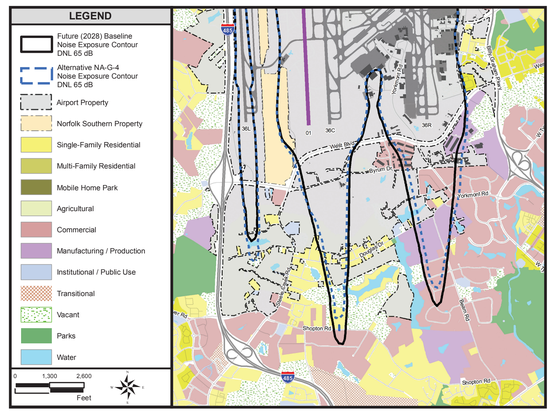


ALTERNATIVE NA-G-4

Maximize the number of divergent headings for south flow departures while maintaining a 15° separation between headings. This requires eliminating the 2-mile restriction for all runways.



Reduces impacts compared to the Future (2028) Baseline by 8 housing units within the 65+ DNL



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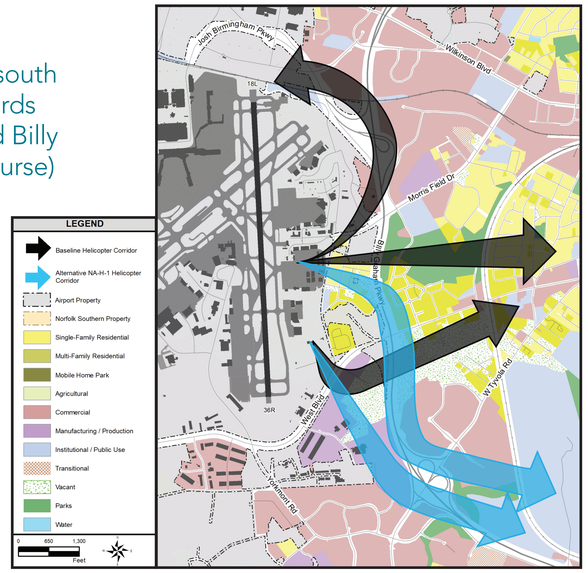
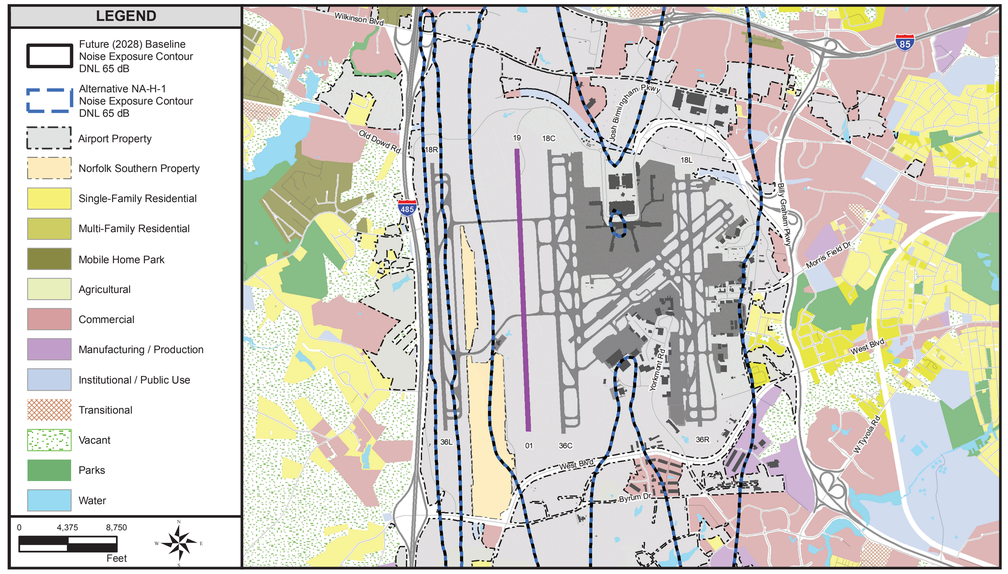
Departure Flight Corridors

ALTERNATIVE NA-H-1

Evaluate helicopter operations in the south general aviation apron to takeoff towards the south (stay between Yorkmont and Billy Graham Parkway before turning on course)

Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL



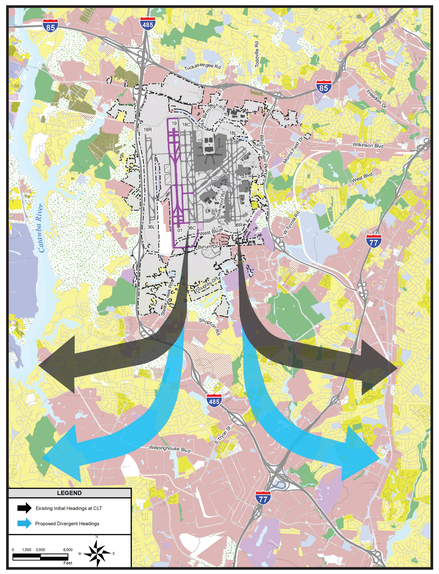


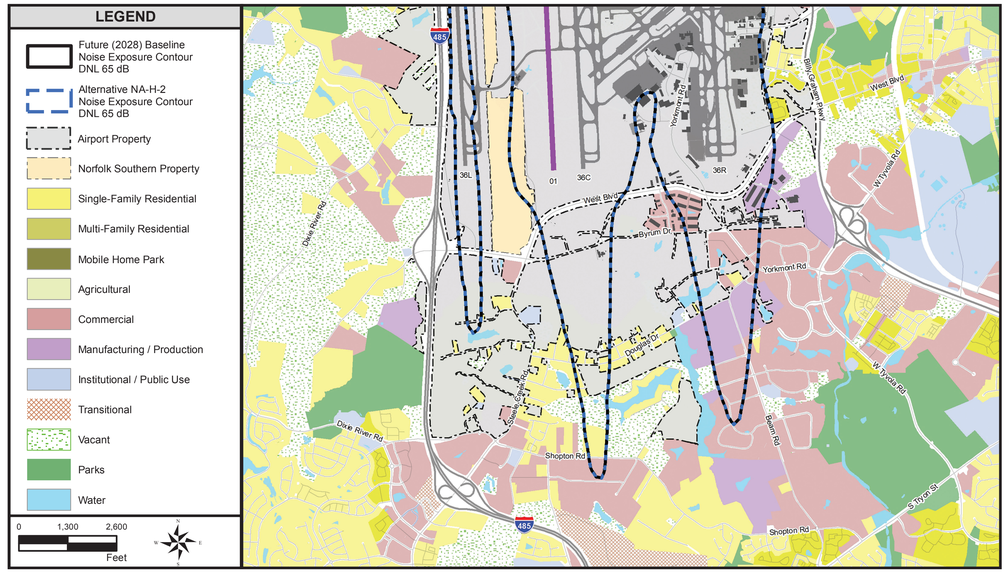
ALTERNATIVE NA-H-2

Change Headings of First Turns off Runways 18L and 18C

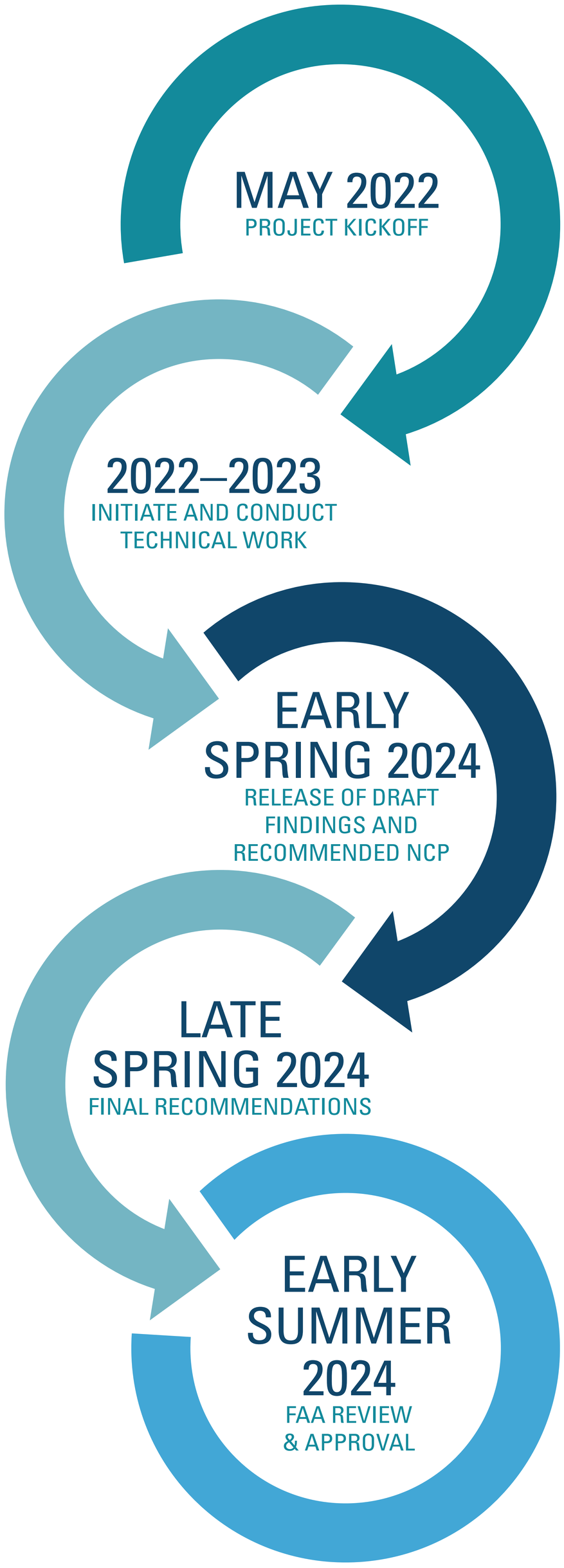
Reduce the effect of noise on more densely populated areas and foster the desire by the ACR to return to pre-Metroplex flight paths.

Does not reduce impacts compared to the Future (2028) Baseline within the 65+ DNL





Next Steps / Schedule



How to Comment

Please submit your comments by November 30, 2023 using one of these methods:

IN PERSON
Members of the public may fill out and submit their comment forms today

MAIL
Gaby Elizondo
4445 Lake Forest Dr. Suite 700
Cincinnati, OH 45242

EMAIL
CLTPart150@landrumbrown.com

PROJECT WEBSITE
Visit the project website and submit a comment on the "Contact" page

CLTPart150.com

All comments must be submitted or postmarked by

November 30, 2023