

Aircraft Operations and Noise Exposure

Monthly Report

For DCA South of Airport Committee



next generation software for the airport of the future.

March 2025

Introduction

Residential communities within the City of Alexandria, Fairfax, and Prince Georges counties frequently overflow by aircraft landing and departing from Reagan National Airport (DCA). These communities are located south of DCA.

Initially, Vianair was hired to work with the Community Noise Working Group (CWG) and the North of Airport Committee (NOA) to identify strategies to reduce aircraft noise impacts for communities north of DCA. Following completion of this work, the City of Alexandria, in collaboration with Fairfax and Prince Georges Counties, hired Vianair to complete a similar effort for communities south of DCA.

This project started with an analysis of existing (and historical) conditions for communities south of DCA and will include identification of strategies (i.e., airspace changes and arrival/departure flight procedures) intended to reduce aircraft noise impacts for communities south of the airport, while meeting all federal aviation regulations and air traffic control requirements.

Monthly analyses of flight operations and noise exposure will be conducted to assess existing conditions and to provide a baseline for comparison against strategies identified to reduce noise impacts.

These reports will be published monthly, beginning with an October 2023 report.

Noise Exposure Calculation and Analysis

To calculate aircraft noise exposure in communities surrounding Reagan National Airport, Vianair is using **noise modelling** technology that calculates aircraft noise based on aircraft operations and flight track data obtained through the Federal Aviation Administration. This data is processed by Vianair's software platform to calculate the aircraft noise exposure along the flight path. Noise calculations incorporate factors including aircraft type, altitude, airspeed, etc. The noise modelling and analysis technology used by Vianair is consistent with that used by the Federal Aviation Administration and aviation regulators worldwide. The Vianair software platform uses the same algorithms used by the FAA's Aviation Environmental Design Tool (AEDT) which is a global standard for aircraft noise modelling and analyses.

Virtual noise monitoring offers more flexibility and the selection of locations for which to analyze aircraft noise. For DCA, a grid was established with a total of 324 monitors covering the study area which includes the City of Alexandria, Fairfax and Prince Georges Counties. An additional 22 locations were selected, representing specific areas of interest or “landmark” locations. This results in a total of 346 locations for which aircraft noise data is collected and analyzed. These locations are referred to as “virtual noise monitor locations” (VNMs) in this report.



Measuring Aircraft Noise

Noise is defined as “unwanted sound.” There are many ways to measure noise. Two common metrics will be used in these reports: Day-Night Level (DNL) and Number-of-Events-Above (NA).

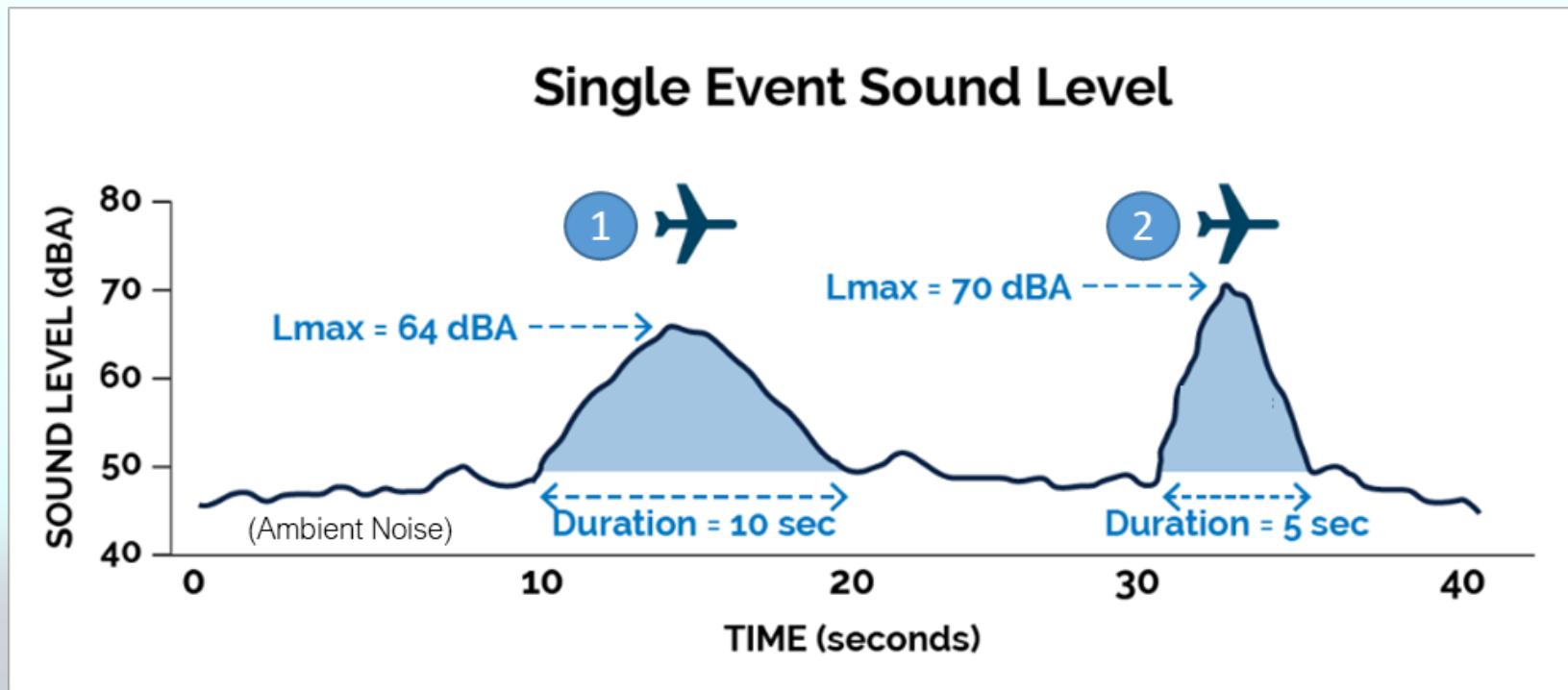
DNL is the primary metric used by the Federal Aviation Administration as required by federal regulations. The problem with DNL is it is difficult to understand and doesn’t seem to reflect what residents in impacted communities actually experience.

Other metrics, often referred to as “supplemental” metrics since they supplement the information provided by DNL are used to help better understand the noise exposure/noise conditions attributed to aircraft operations. In this report, the Number-of-Events-Above metric (NA_#) is used.

The NA metric calculates the number of times an aircraft overflight exceeds a specific maximum noise level. For this report, events above 55 decibels, 65 decibels, and 75 decibels were selected. This will indicate how many times aircraft noise exceeded 55, 65, or 75 decibels. These are calculated for the reporting month and daily average.

Measuring Aircraft Noise (Cont'd)

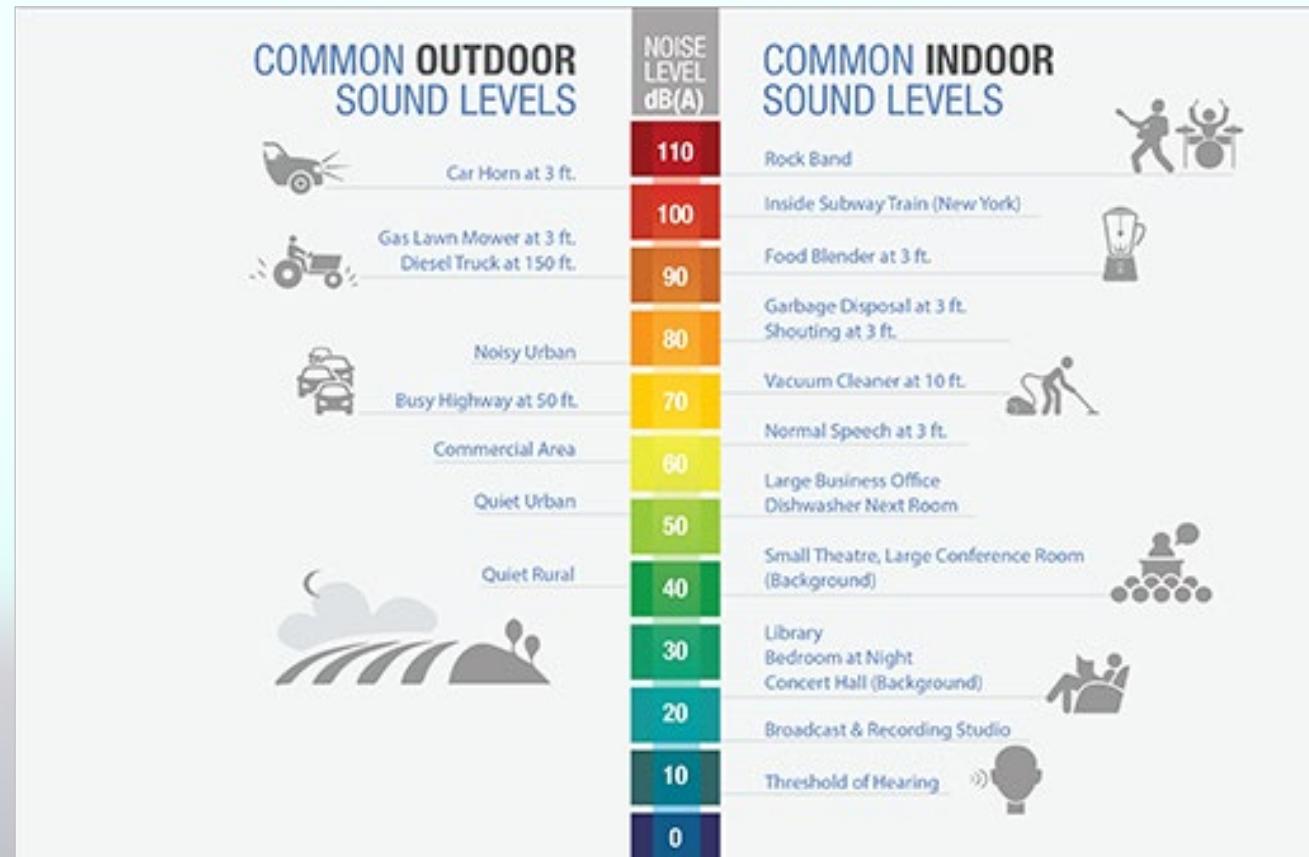
The graphic below represents two aircraft overflights/noise events. The maximum noise level of the first overflight was 64 decibels (shown as 64 dBA). The maximum noise level of the second event was 70 decibels (shown as 70 dBA).



Graphic adapted from *Aircraft Noise Overview*. Boston Logan RNAV (GPS) RWY 4L Environmental Assessment. March 2021. <https://faabostonworkshops.com/project-information/aircraft-noise-overview/>

Measuring Aircraft Noise (Cont'd)

The scale below is intended to provide a basic understand of noise levels which are expressed in decibels (dB or dBA). As indicated, the typical sound level for people speaking (3 ft apart) is 64-65 decibels. Other common noise sources are also listed.



Source: Fundamentals of Noise and Sound. (n.d.). Retrieved July 2022, from https://www.faa.gov/regulations_policies/policy_guidance/noise/basics

Runway Use



Traffic Flow

Prevailing wind speed, direction and weather factors determine the direction of air traffic flow from DCA-Reagan National airport. Aircraft usually take off and land into the wind to meet safety and operational requirements.

During **SOUTH FLOW** conditions (winds from the south or east), aircraft arrive and depart toward the south and southeast. This includes runways 15, 22, AND 19.

During **NORTH FLOW** conditions (winds from the north or west), aircraft arrive and depart toward the north and northwest. This includes runways 01, 04, AND 33. The following slides illustrate arrival and departure flight paths across the region during typical NORTH and SOUTH flows days.

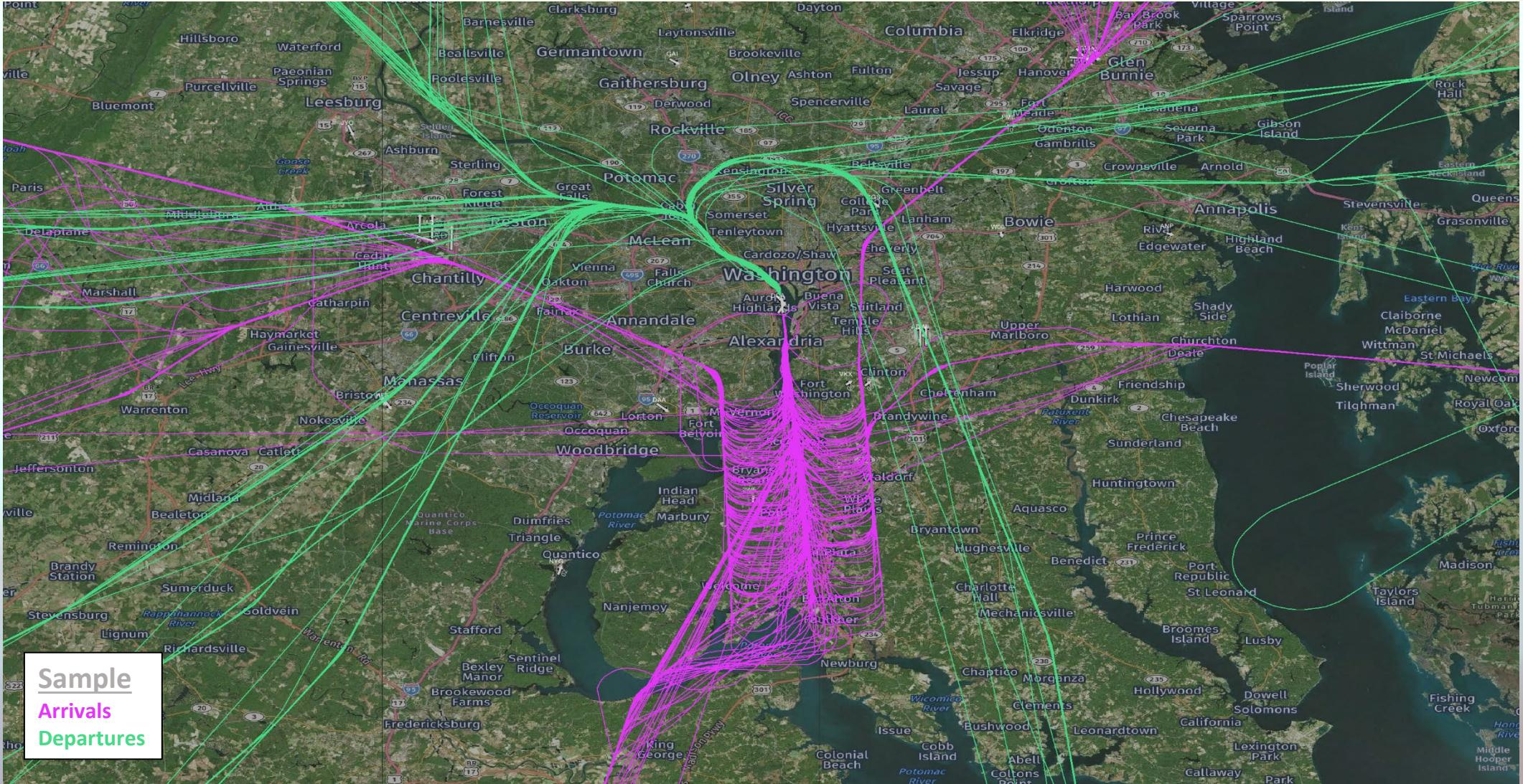
The following pages illustrate a typical North Flow day and a typical South Flow day at the airport. Sample days were analyzed by Vianair and then depicted as all arrivals and departures consistent with a specific flow on a given day. While these flight patterns are typical, they may vary based on operational conditions.

According to MWAA aircraft operations data*, DCA is in NORTH FLOW approximately 60% time of the year.

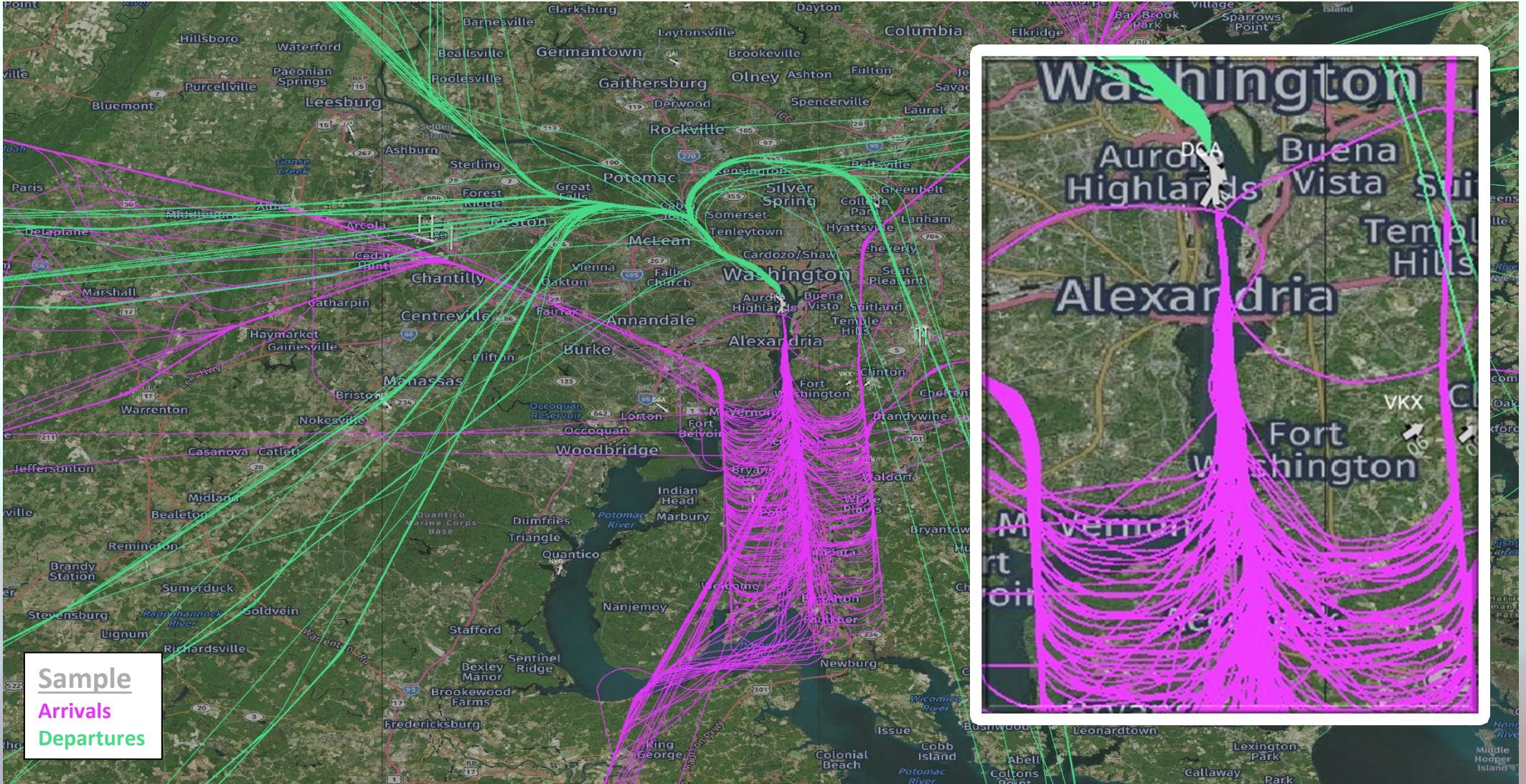
*Source: MWAA Annual Aircraft Noise Reports, 2000-2022.

<https://www.flyreagan.com/about-airport/aircraft-noise-information/dca-reagan-national-annual-aircraft-noise-reports>

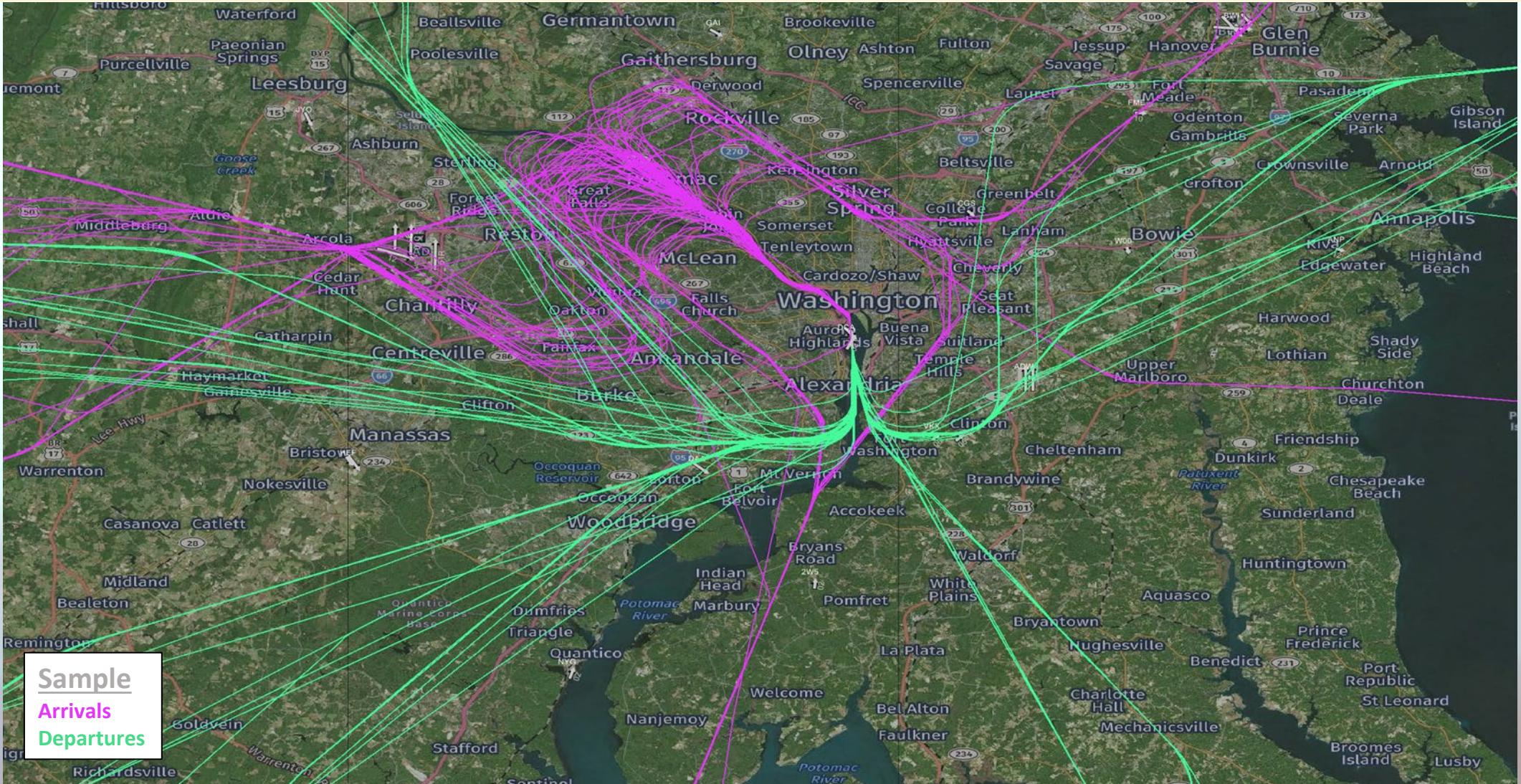
Typical Day of North Flow Operations



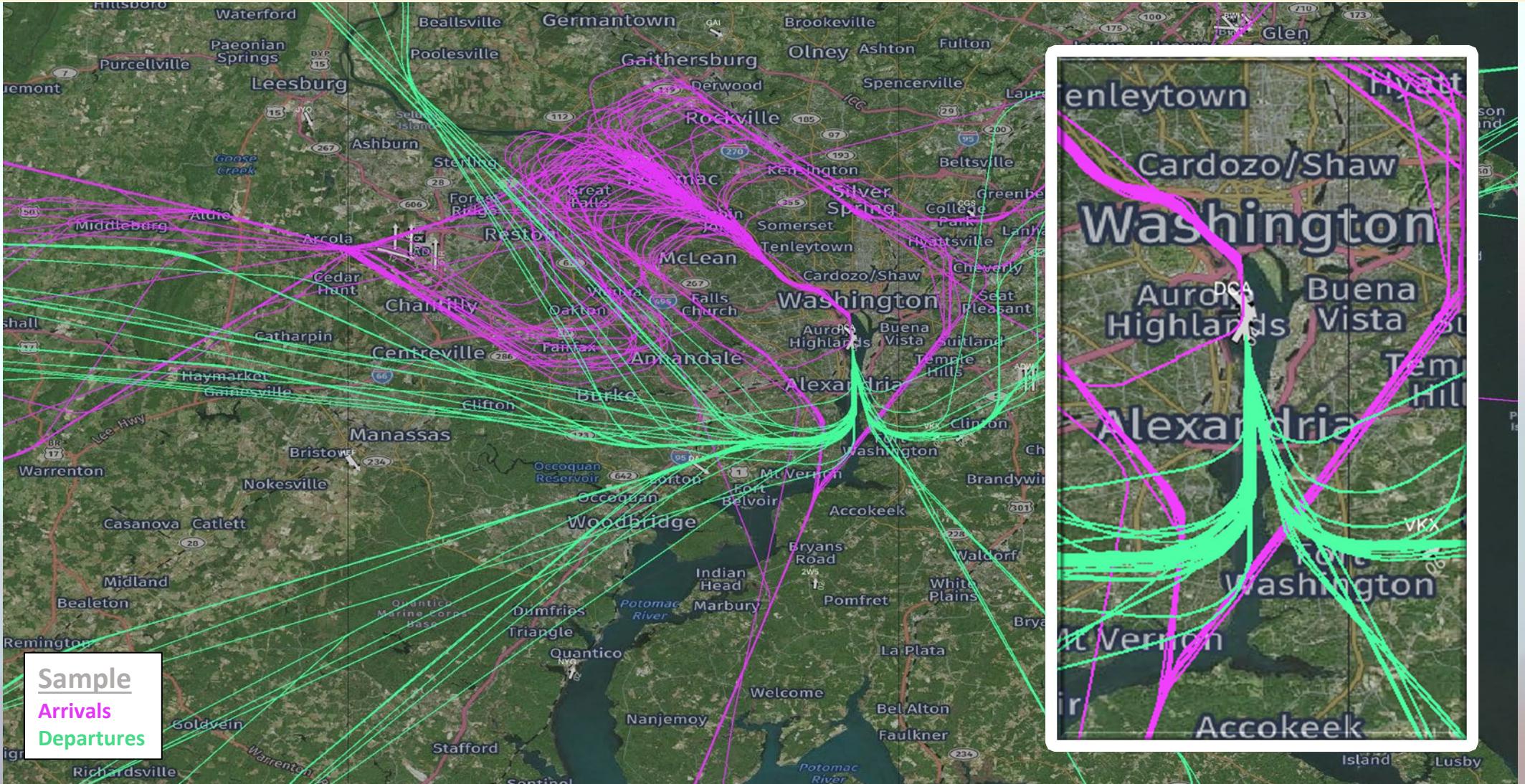
Typical Day of North Flow Operations



Typical Day of South Flow Operations



Typical Day of South Flow Operations



Monthly Runway Operations

KDCA - March 2025	
	Current
Arrivals	12,954
Departures	12,964
Total Operations	25,918

KDCA: Runway Operations March 2025 Runway Usage		
Runway	Arrivals	Departures
01	46.33%	32.06%
04	0.00%	2.09%
15	0.18%	11.52%
19	49.93%	38.28%
22	0.00%	0.04%
33	3.08%	14.00%
UND	0.49%	2.01%

"UND" for runway indicates the runway assignment is undetermined.

Monthly Runway 15/19 SID/STAR Usage

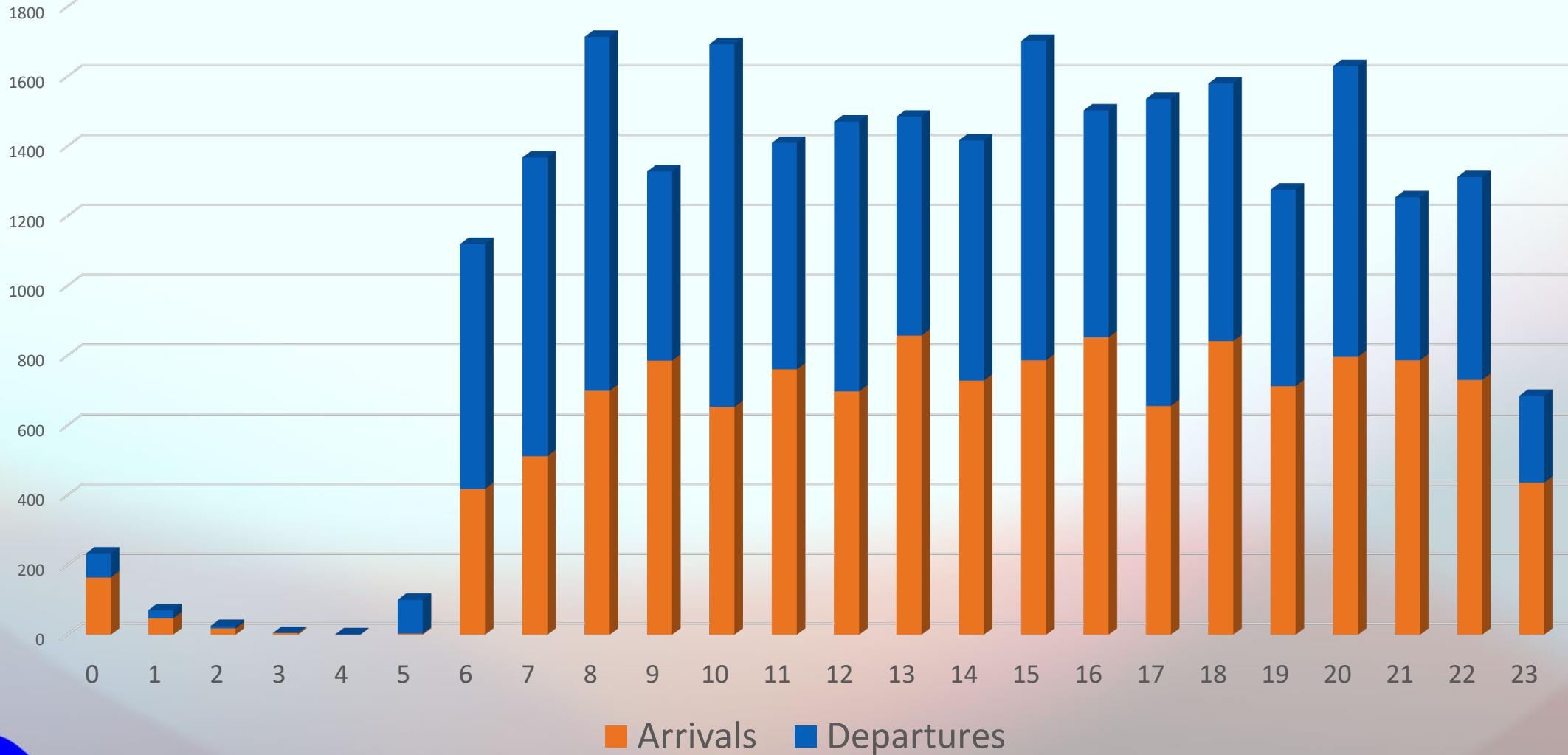
Standard Instrument Departures

South and East		
	RWY 15	RWY 19
AMEEE SID	23	269
DOCTR SID	47	124
SOOKI SID	125	348
Southwest		
	RWY 15	RWY 19
CLTCH SID	35	374
JDUBB SID	25	240
SCRAM SID	20	127
Northwest and West		
	RWY 15	RWY 19
HORTO SID	57	302
REBLL SID	24	372
WYNGS SID	34	312

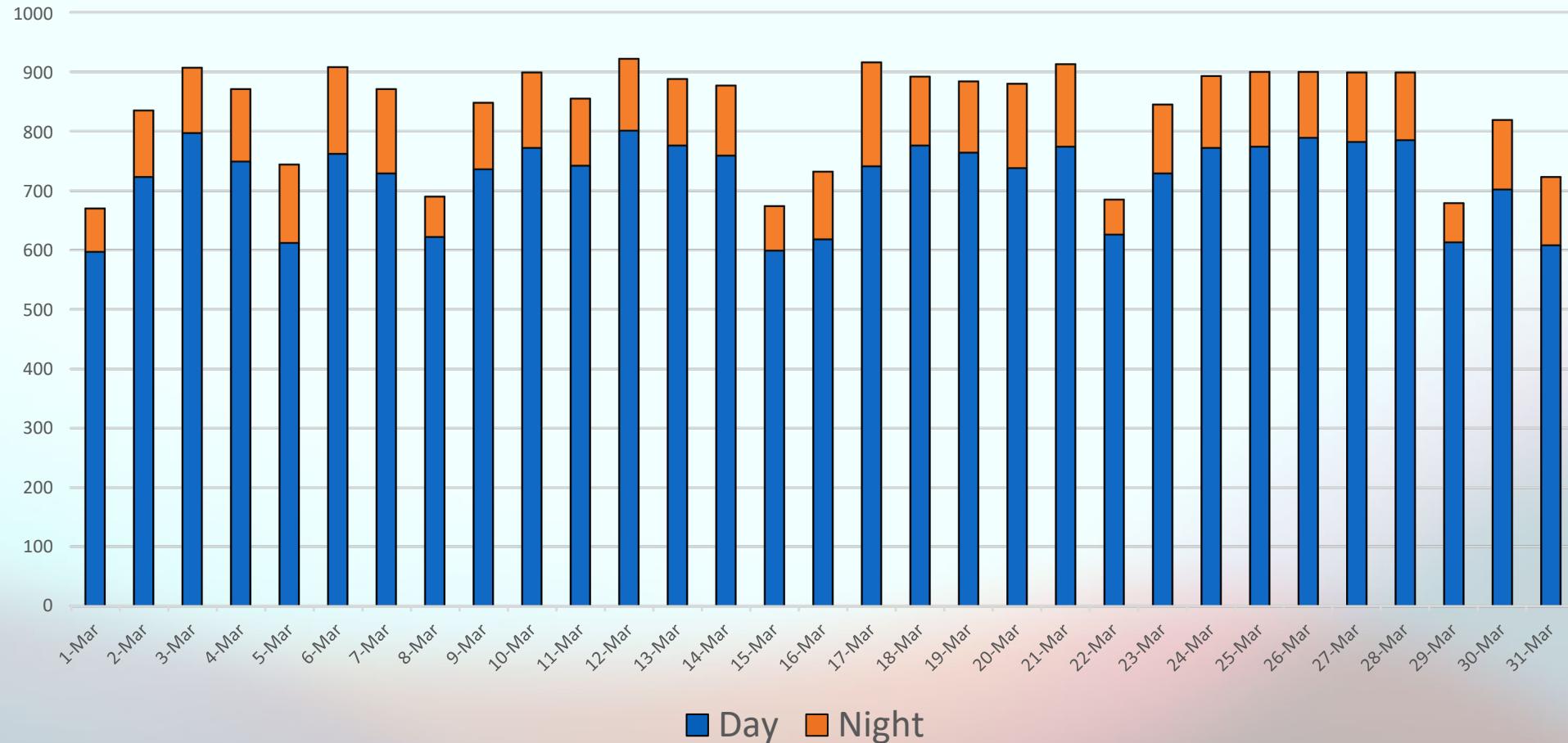
Standard Terminal Arrival Routes

Arrivals Vis CAPP STAR	
Over KATRN Landing RWY 1	993
Over SMOOT and BAAAM Landing RWY 19	752

Monthly Operations by Hour



Daily Operations (Day vs. Night)



■ Day ■ Night

Note: For this calculation "Nighttime" hours reference the period between 10PM and 7AM

Total Operations	25,918
Average Daily Operations	836

Monthly Operations – Fleet Mix

Top 10 aircraft types



Monthly Operations – Runway Usage



Noise Exposure

Noise Exposure – Virtual Noise Monitor Reports

A grid of “virtual noise monitors” (VNM) was established to enable analysis of noise exposure within the study area. At each location (or grid point) noise exposure is calculated based on the flight operations conducted for the reporting period.

The data is presented in both graphic (maps) and tabular formats.



Graphic Format

Name	Number of Events Above Total - (Daily Average)			
	55dBa	65dBa	75dBa	DNL
M1	0 - (0)	0 - (0)	0 - (0)	9.4
M2	0 - (0)	0 - (0)	0 - (0)	10.7
M3	1 - (0)	0 - (0)	0 - (0)	14.6
M4	1 - (0)	0 - (0)	0 - (0)	15.57
M5	3 - (0)	0 - (0)	0 - (0)	19.56
M6	16 - (1)	0 - (0)	0 - (0)	25.58
M7	345 - (11)	0 - (0)	0 - (0)	34.25
M8	137 - (4)	0 - (0)	0 - (0)	32.44
M9	166 - (5)	1 - (0)	0 - (0)	32.72
M10	445 - (14)	2 - (0)	0 - (0)	36.34
M11	229 - (7)	3 - (0)	0 - (0)	34.58
M12	92 - (3)	0 - (0)	0 - (0)	30.66
M13	245 - (8)	0 - (0)	0 - (0)	32.61
M14	27 - (1)	0 - (0)	0 - (0)	26.87
M15	0 - (0)	0 - (0)	0 - (0)	18.76
M16	2 - (0)	0 - (0)	0 - (0)	14.85
M17	1 - (0)	0 - (0)	0 - (0)	11.3
M18	0 - (0)	0 - (0)	0 - (0)	8.15
M19	0 - (0)	0 - (0)	0 - (0)	10.37
M20	0 - (0)	0 - (0)	0 - (0)	12.06
M21	1 - (0)	0 - (0)	0 - (0)	14.63
M22	1 - (0)	0 - (0)	0 - (0)	16.6
M23	5 - (0)	0 - (0)	0 - (0)	20.72
M24	18 - (1)	0 - (0)	0 - (0)	26.76
M25	481 - (16)	0 - (0)	0 - (0)	35.85
M26	128 - (4)	0 - (0)	0 - (0)	33.1
M27	161 - (5)	1 - (0)	0 - (0)	33.35
M28	715 - (23)	3 - (0)	0 - (0)	38.23
M29	243 - (8)	1 - (0)	0 - (0)	35.54
M30	103 - (3)	1 - (0)	0 - (0)	31.78
M31	324 - (10)	1 - (0)	0 - (0)	34.11
M32	29 - (1)	0 - (0)	0 - (0)	27.56

Tabular Format

Noise Exposure – Graphic (Map) Data

Both the tables and noise maps (graphic) provide the same data; however, the map-based depiction enables an alternate way to review the data and an easier approach to identifying clusters and trends in the data.

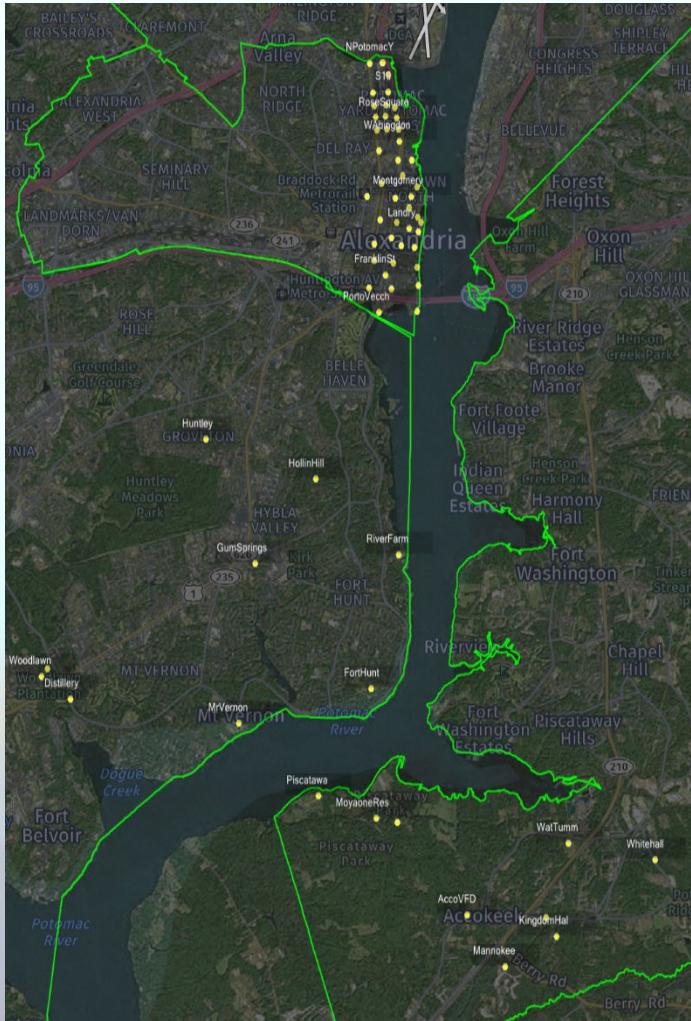
The Number-Of-Events-Above (NA_#) data is provided for each Virtual Noise Monitor (grid point). A legend included on each map will include the virtual noise monitor number and the noise exposure value. In the example below, the grid points depict the NA_# value using both color and size of the grid point. The color coding is included in the legend and for added clarity, the size of the grid point increases based on the value represented.



Virtual Noise Monitor Grid / Study Area



Virtual Noise Monitor POI / Study Area

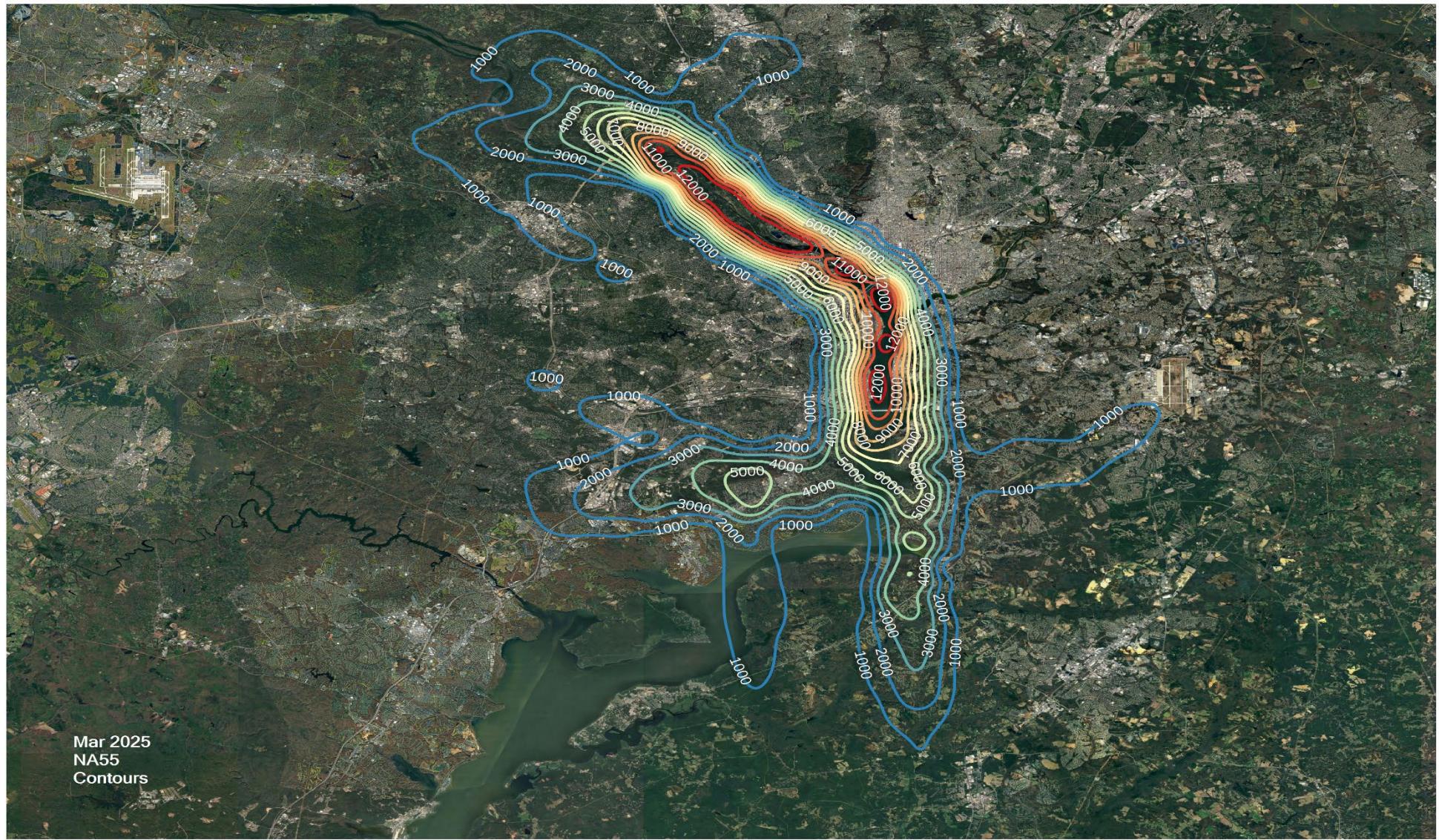


VNM	Location
Whitehall	Whitehall Baptist Church
WatTumm	Wat Tummapreteip Buddhist Temple
Mannokee	Mannokek Village Center
KingdomHal	Kingdom Hall of Jehovah's Witnesses
FaithUnite	Faith United Methodist Church
AccoVFD	Accokeek Volunteer Fire Department
MoyaoneRes	Moyaone Reserve Community
AliceFergu	Alice Ferguson Foundation
Piscatawa	Piscataway National Park/U.S. Park
Landry	300 Wythe St
NUnionSt	312 Montgomery St
Montgomery	500 North Union St
BraddockW	Braddock West
EAbingdon	205-207 S. Patrick St
SPatrickSt	1201 E. Abingdon Dr
NPotomacY	North Potomac Yard
Tidelock	1033 N Fairfax St
KingStreet	615 King St
FranklinSt	600 Franklin Street
OldTown	Old Town Alexandria Waterfront
RoseSquare	701 Rose Square
Carpen1714	1714 Carpenter Rd
WAbingdon	1718 W Abingdon Dr
BasilicaSc	The Basilica School of Saint Mary
JonesPT	Jones Point Park
PortoVecch	Porto Vecchio Condominiums
FoundersPK	Founders Park

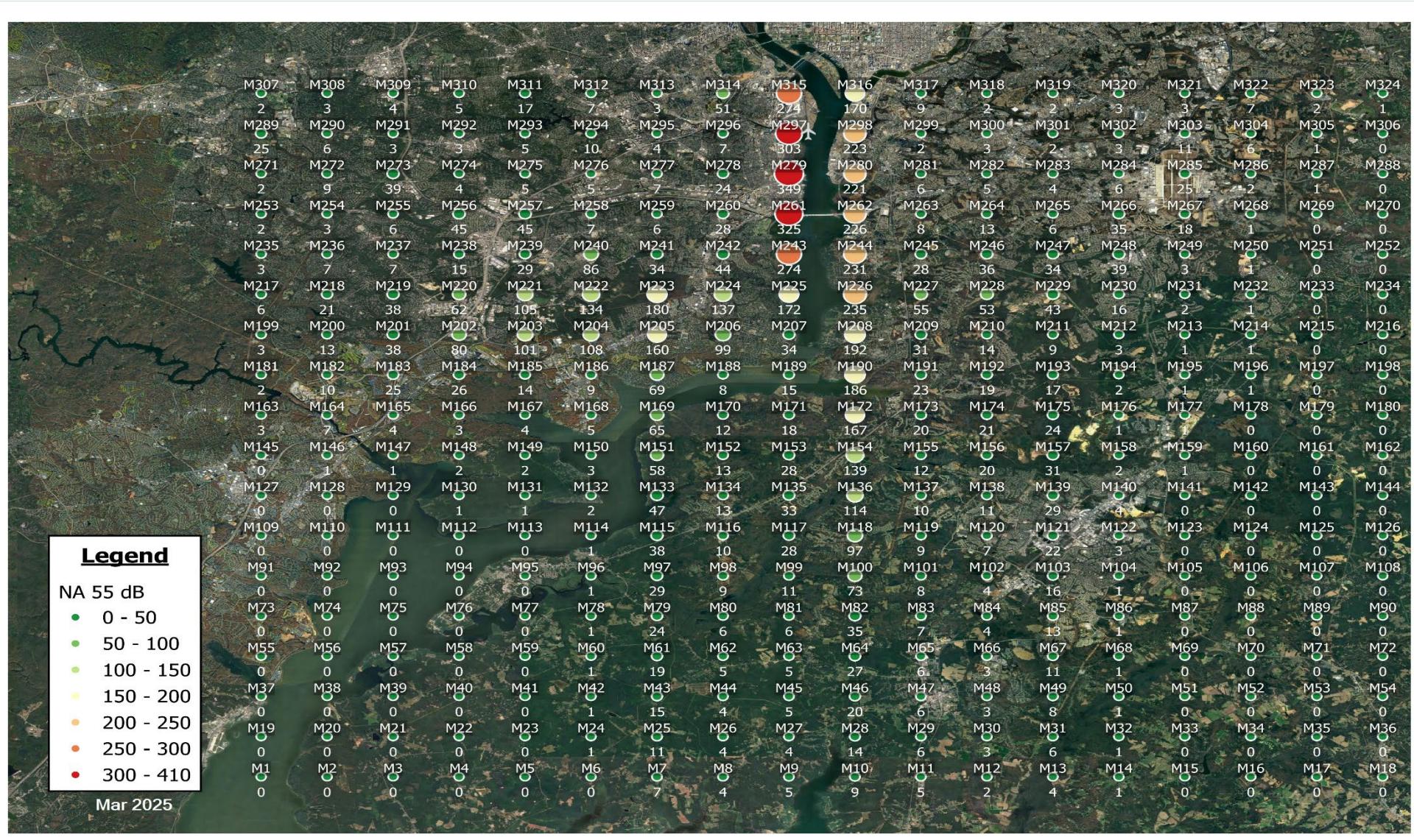
VNM
HollinHill
S2
S3
S6
S16
Distillery
RiverFarm
Huntley
GumSprings
FortHunt
S22
S23
S24
S25
S26
S27
S28
S29
S30
S31
S32
S33
S34
S35
S36
S37
S38
S39
S40
S41

This map depicts the location of specific “Points of Interest (POI)” virtual noise monitor locations. These were selected by the Project Committee as specific locations of interest, in addition to those locations included in the general grid.

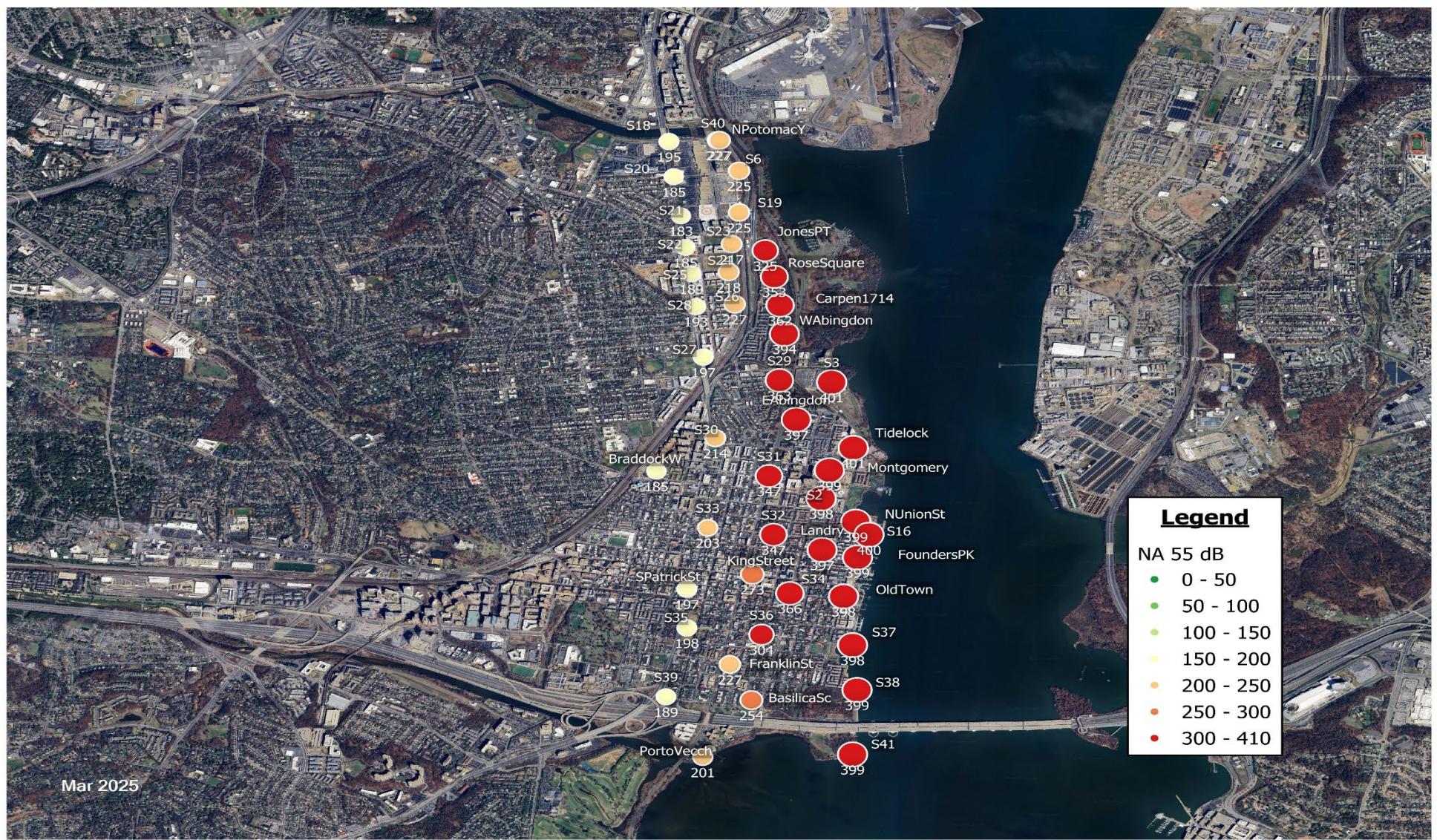
Noise Exposure: NA55 Contours



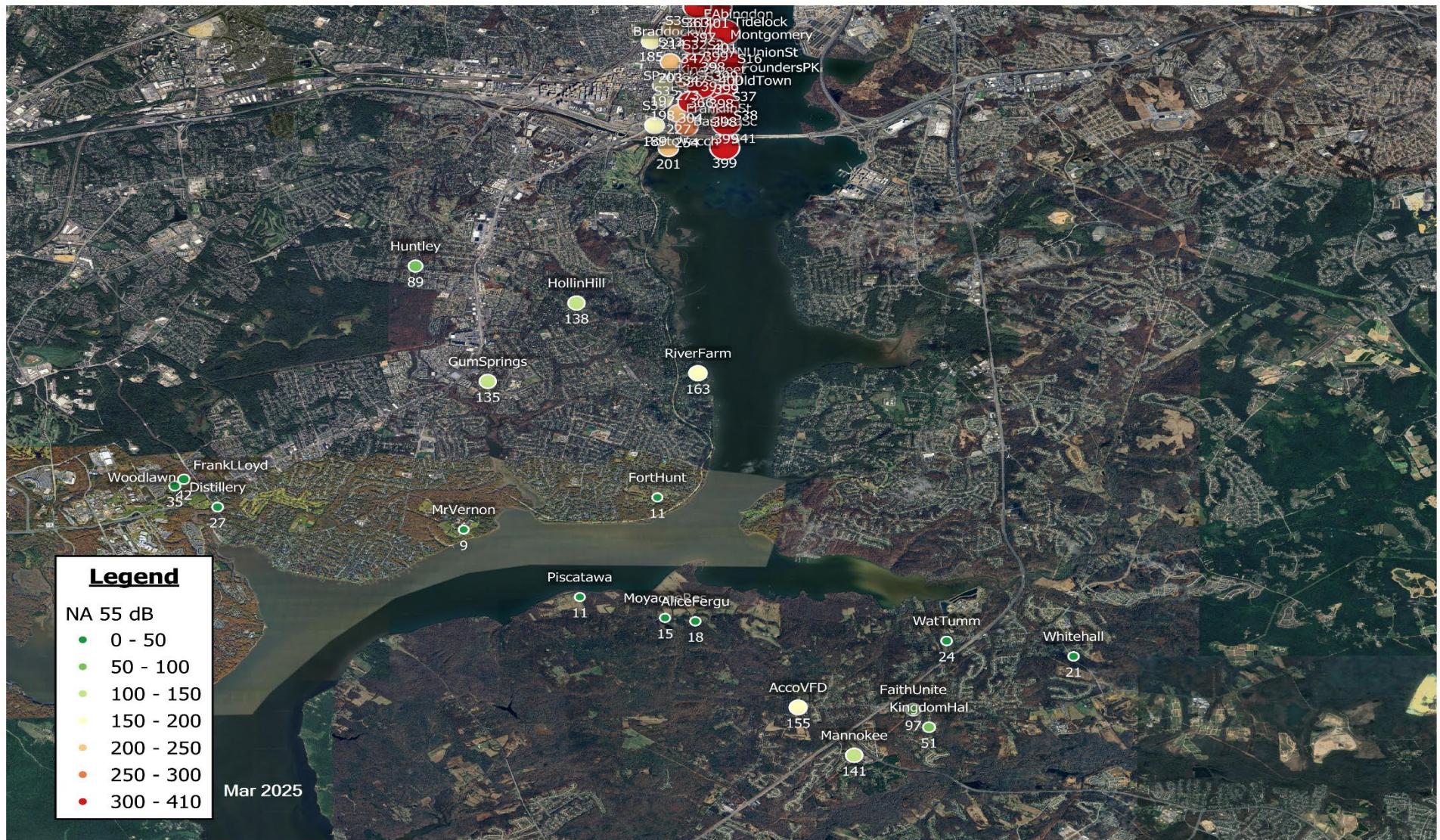
Noise Exposure: NA55



Noise Exposure: NA55-Northern POIs



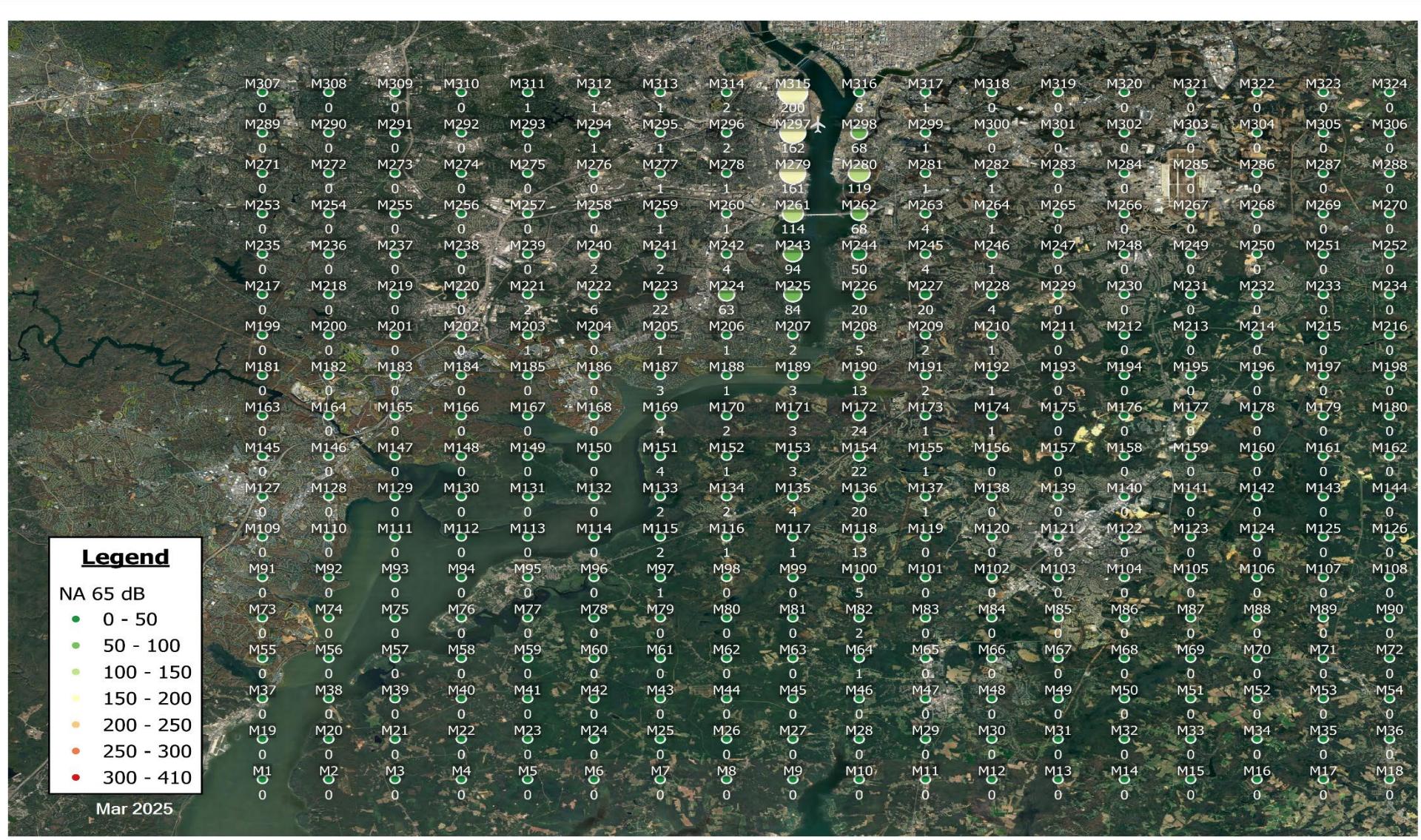
Noise Exposure: NA55-Southern POIs



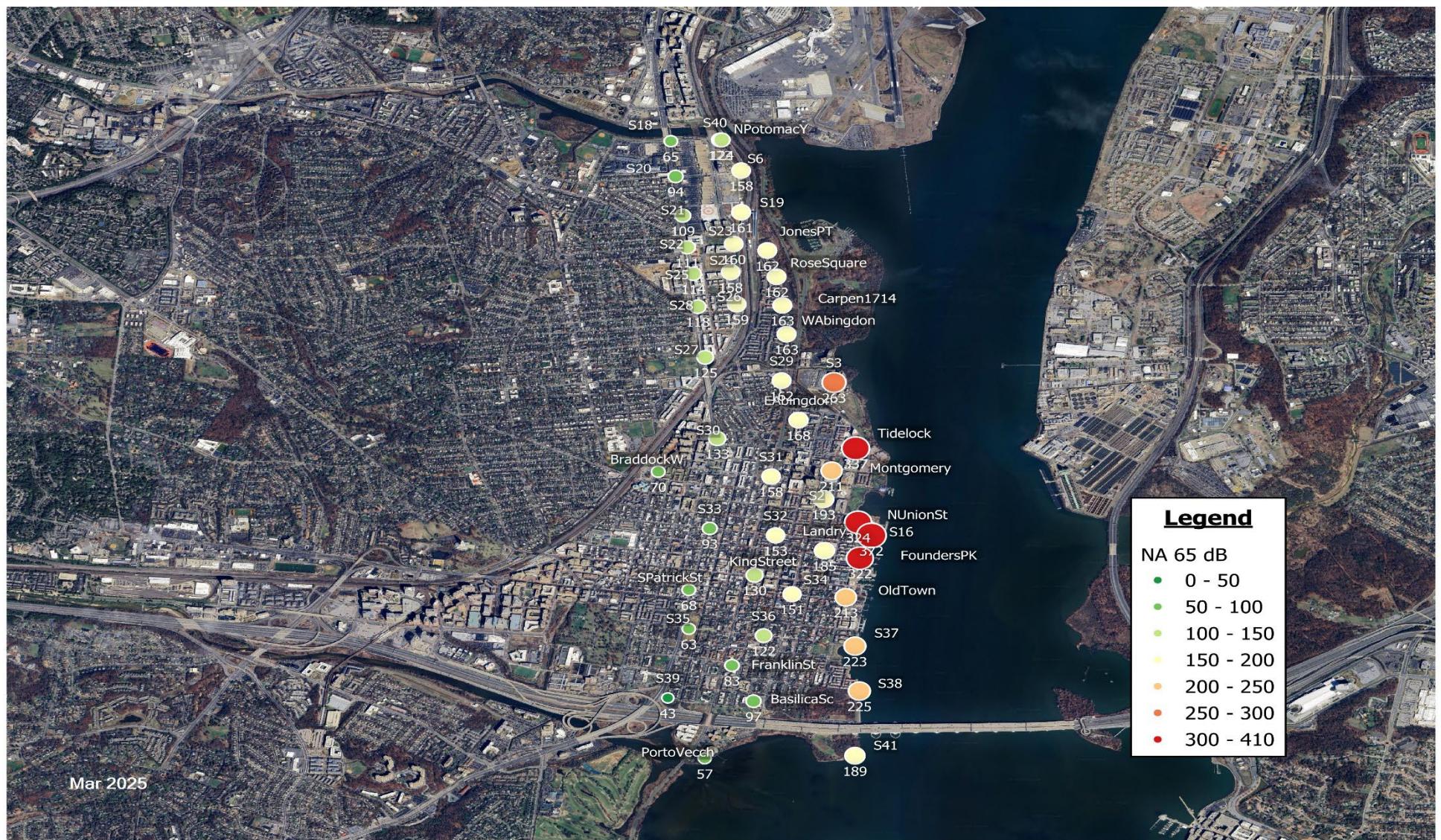
Noise Exposure: NA65 Contours



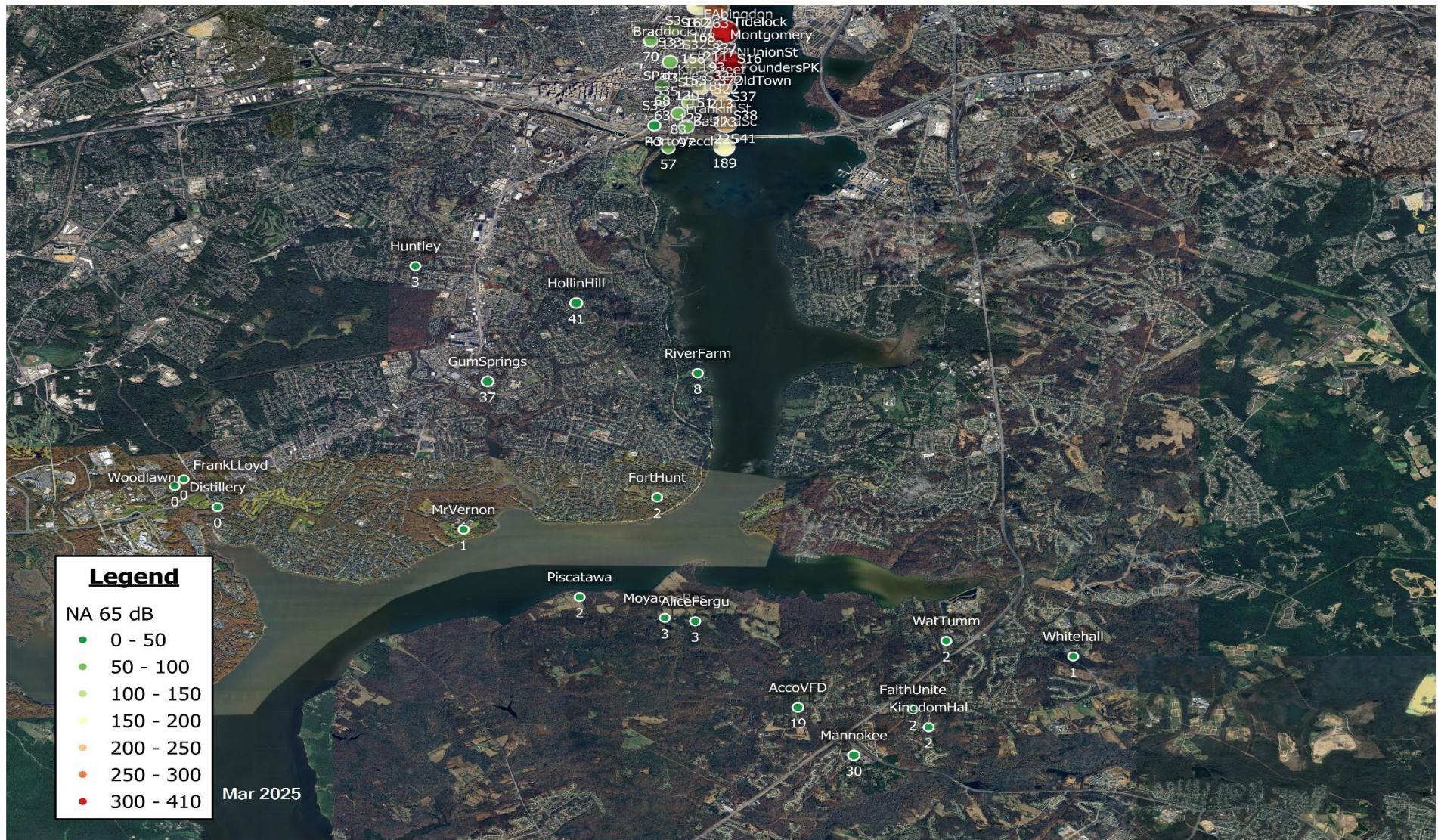
Noise Exposure: NA65



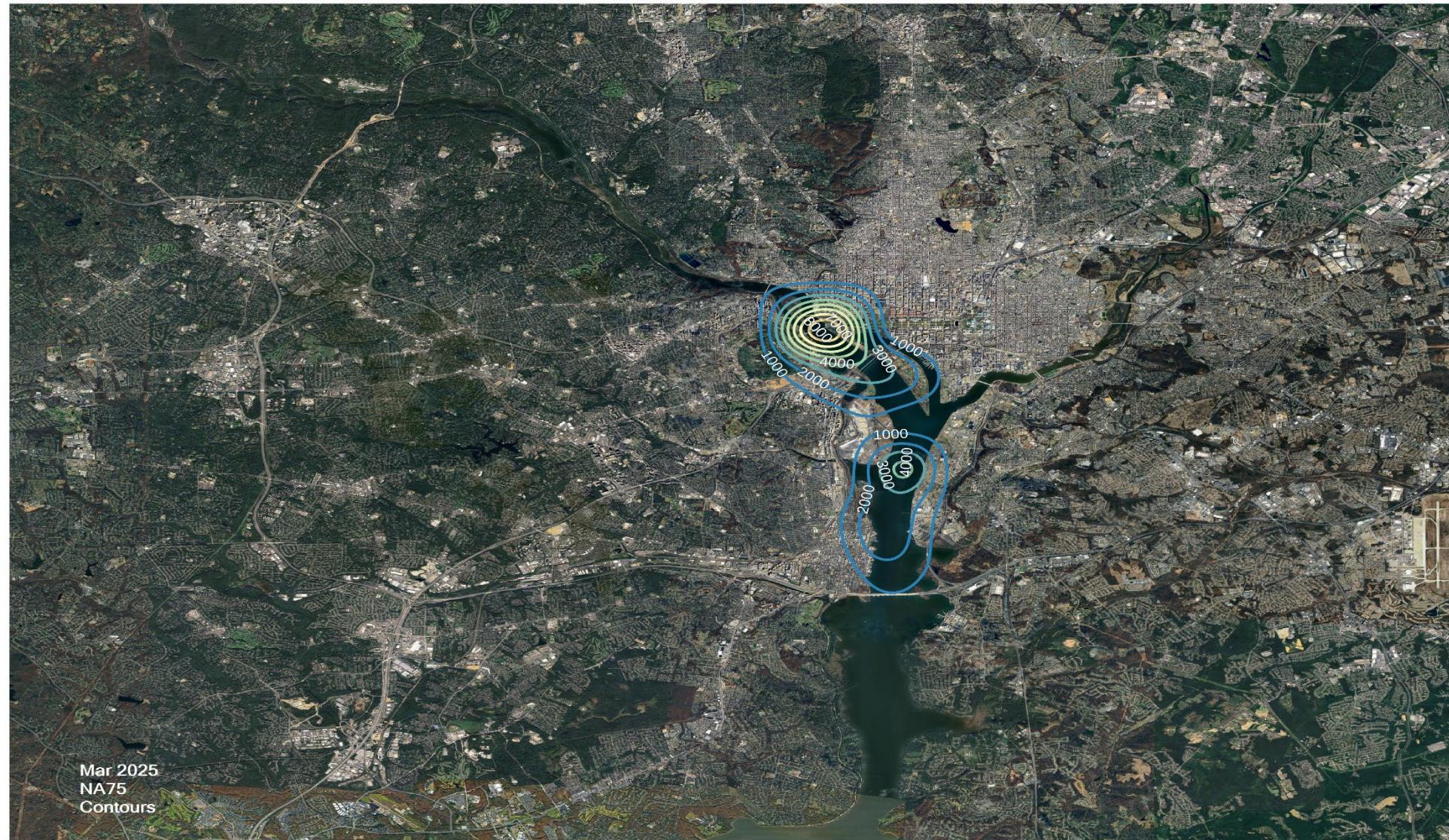
Noise Exposure: NA65-Northern POIs



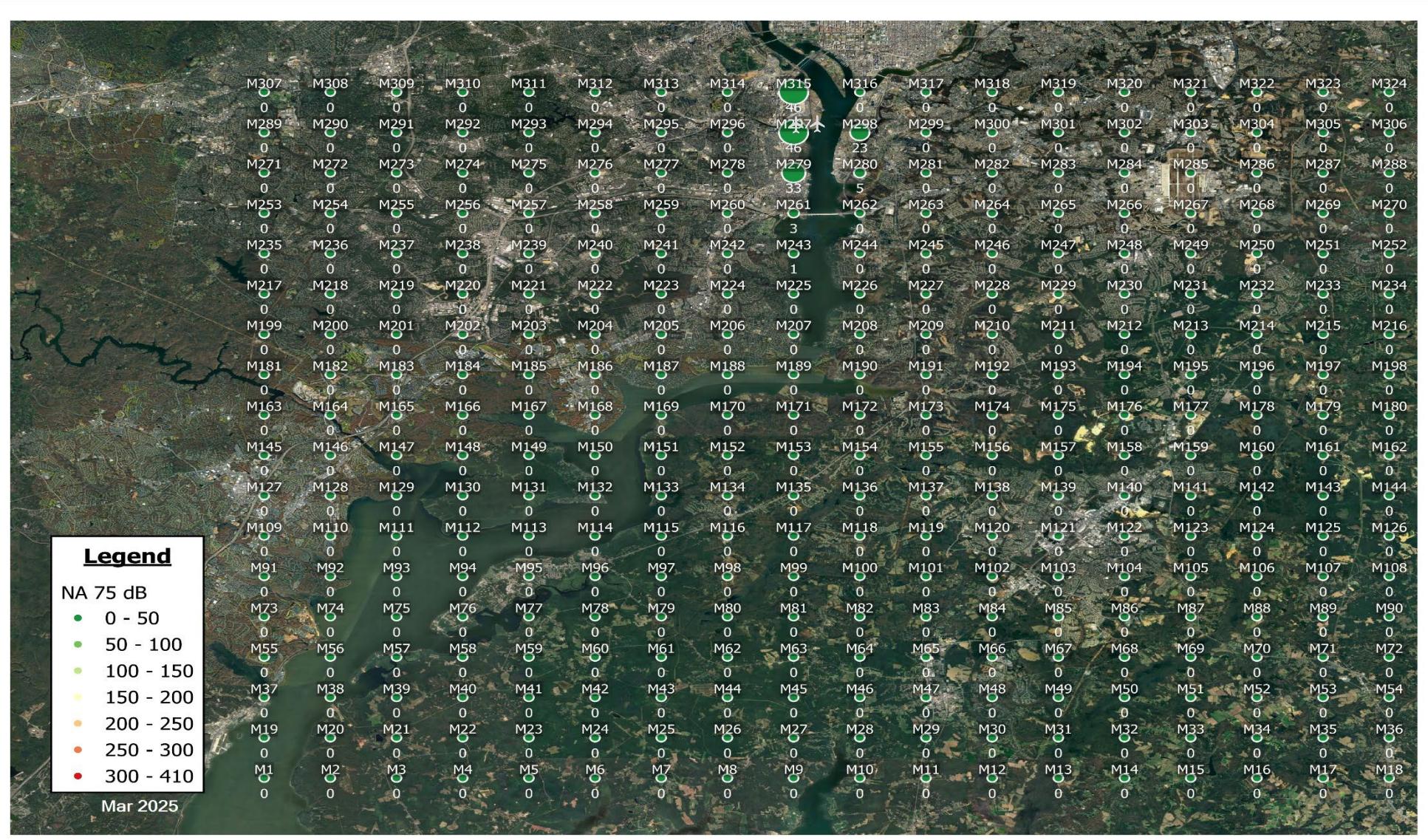
Noise Exposure: NA65-Southern POIs



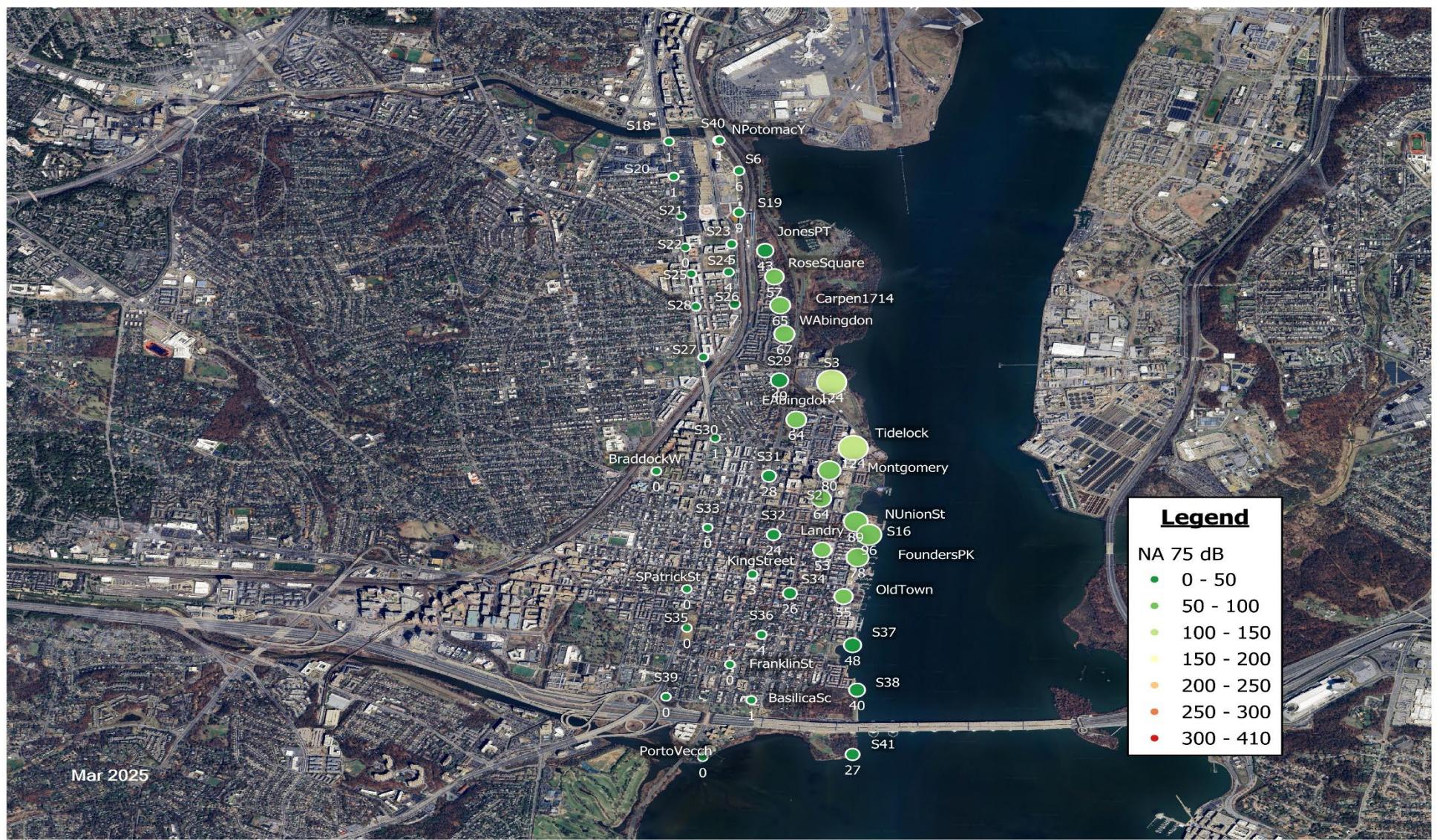
Noise Exposure: NA75 Contours



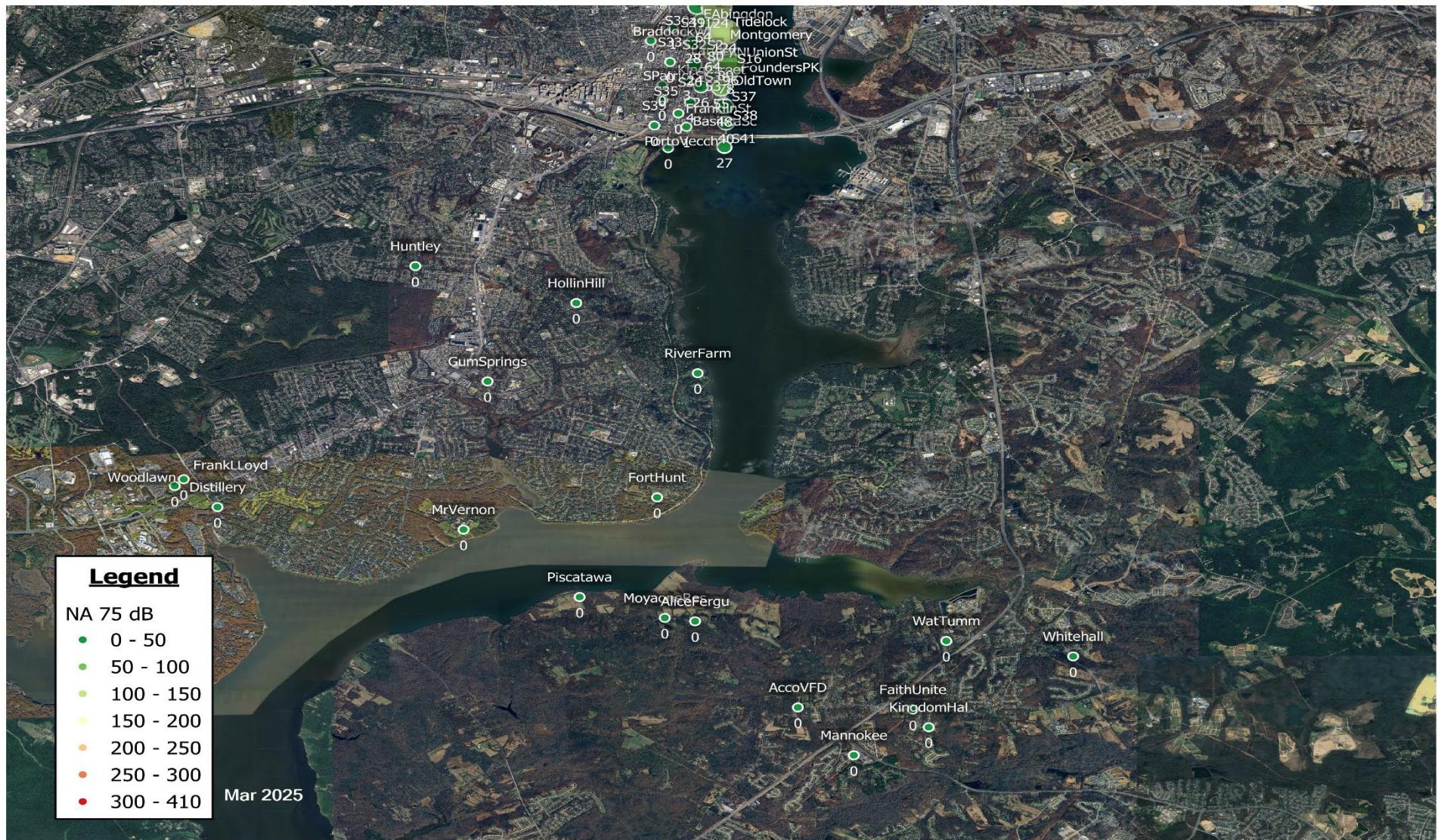
Noise Exposure: NA75



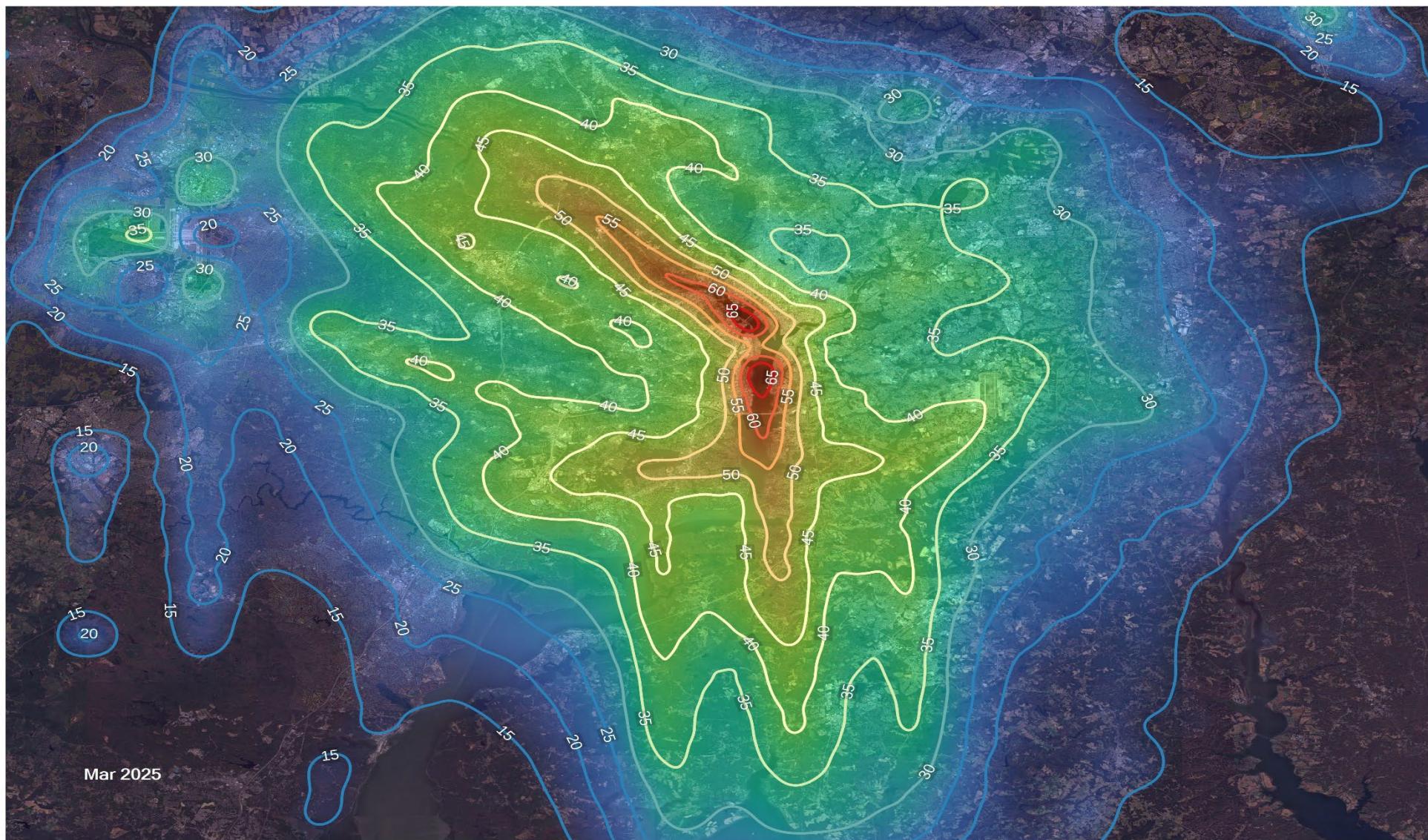
Noise Exposure: NA75-Northern POIs



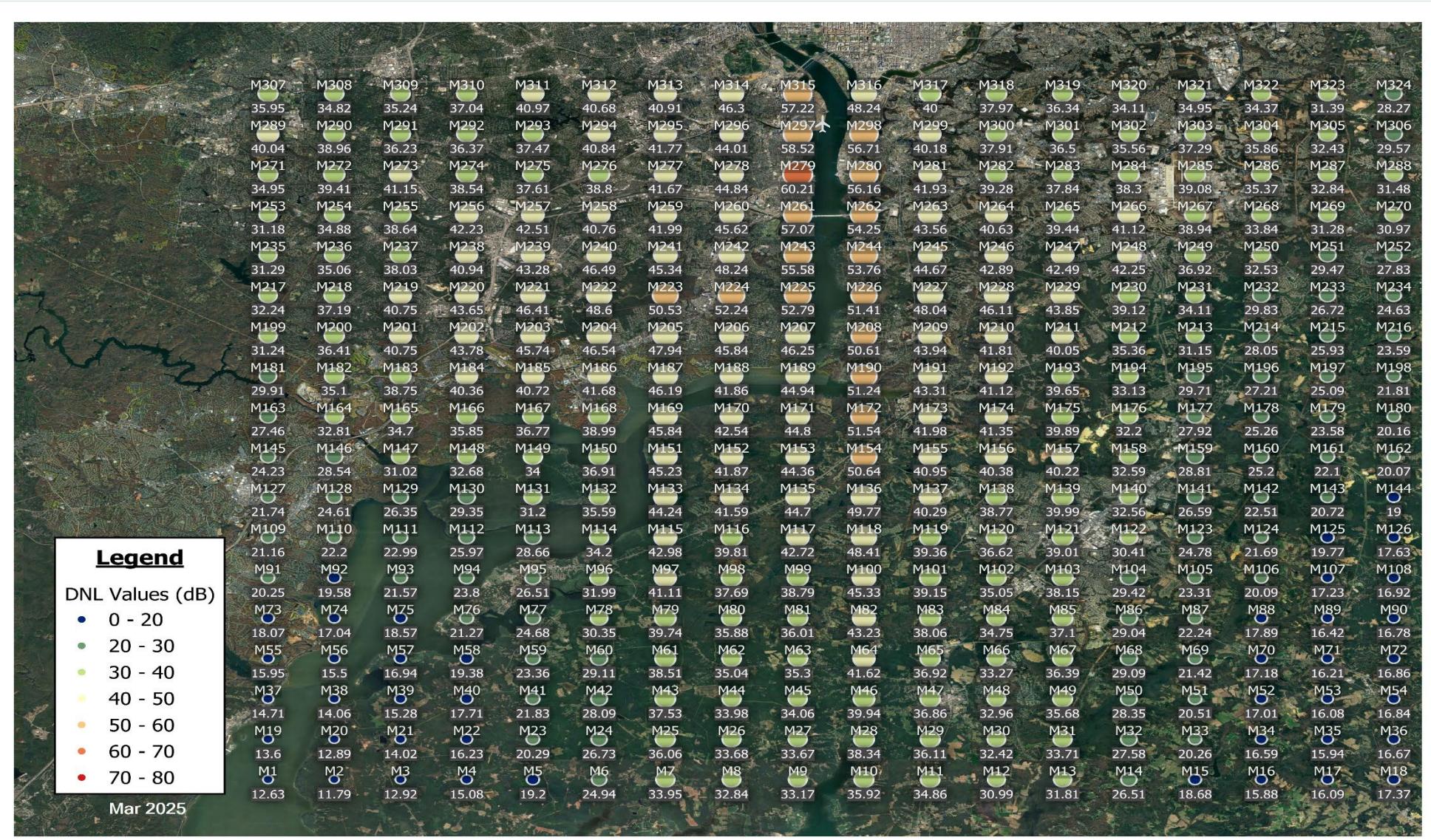
Noise Exposure: NA75-Southern POIs



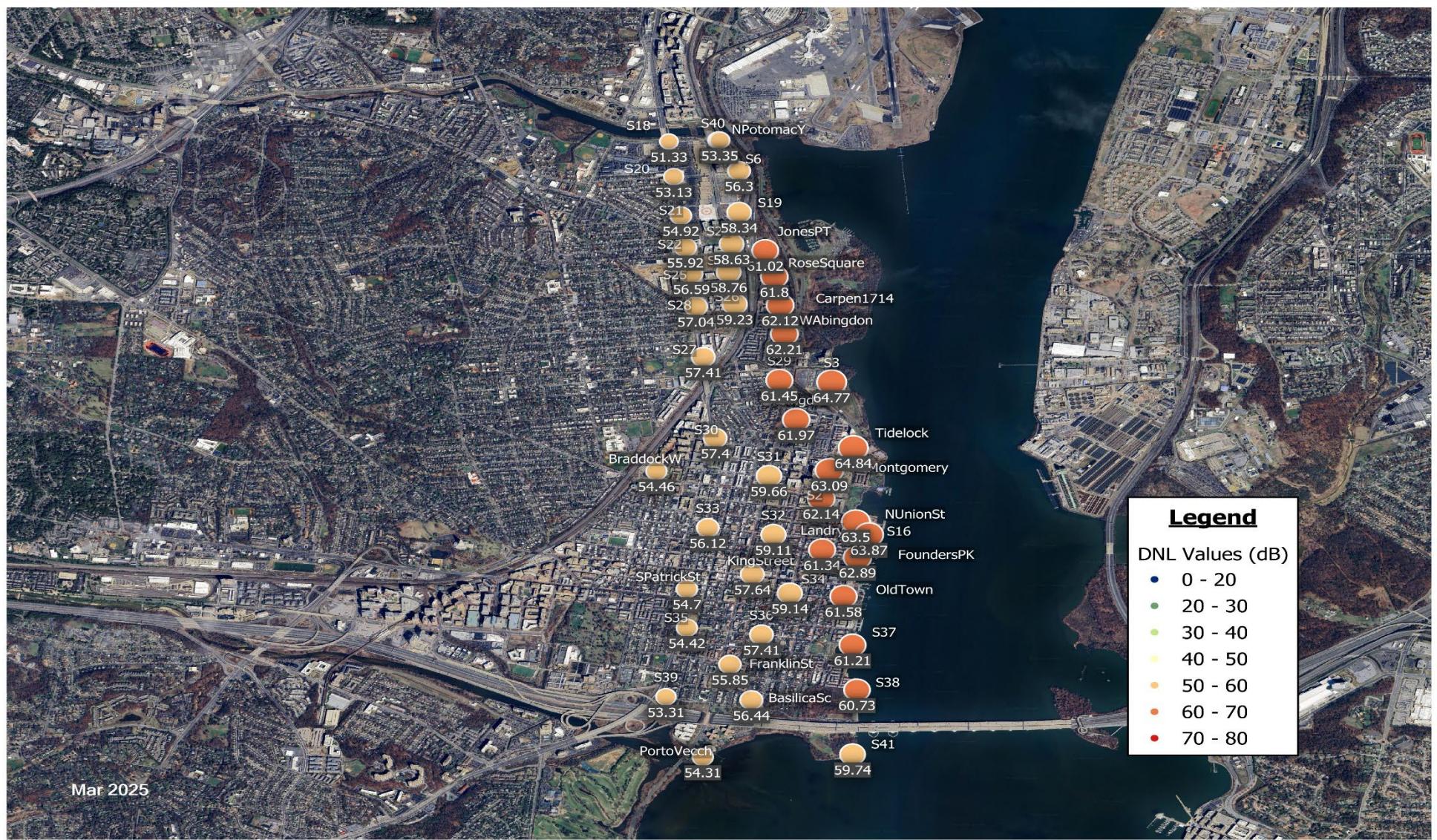
DNL Noise Exposure Contour Map



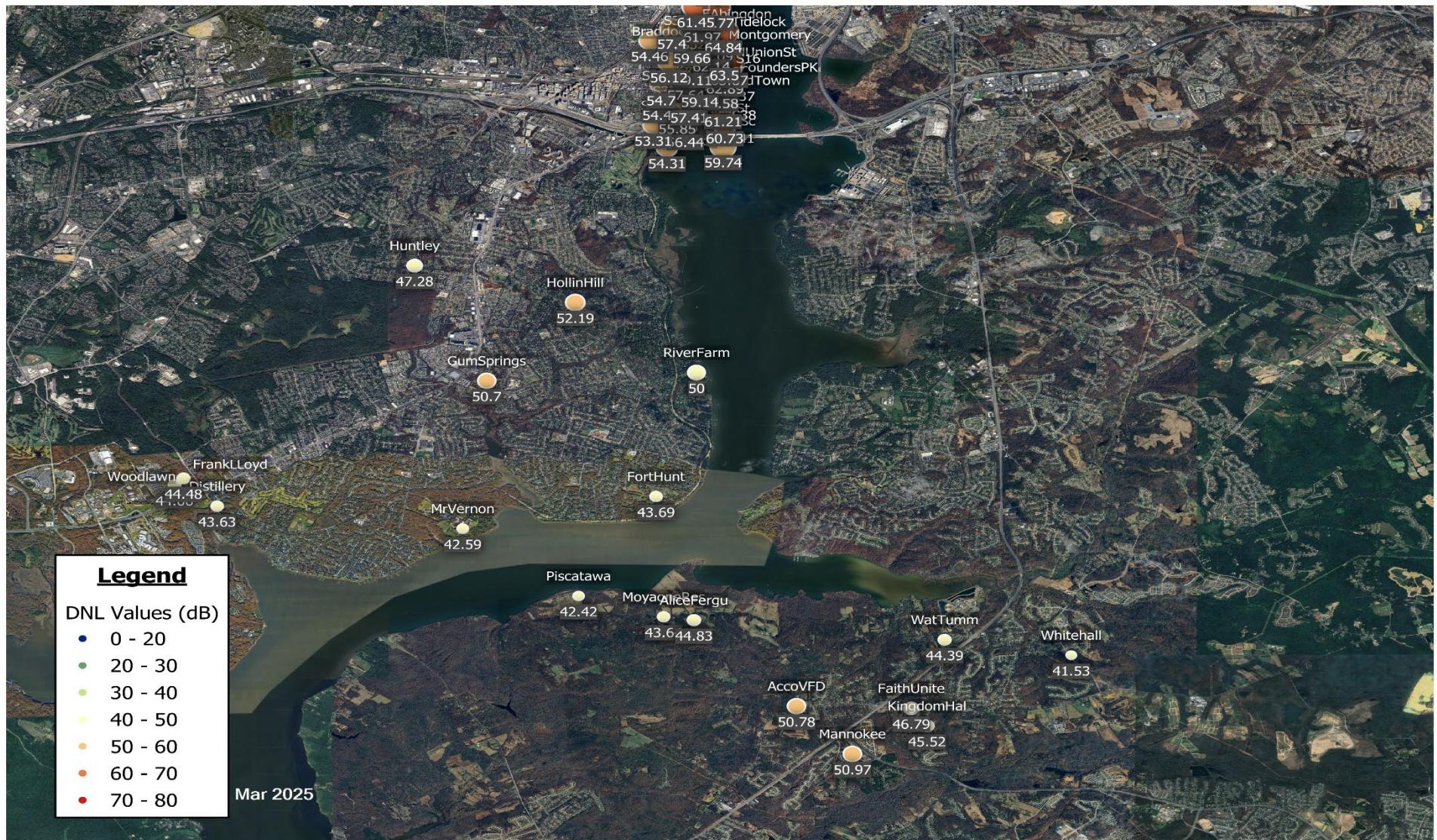
Noise Exposure: DNL



Noise Exposure: DNL-Northern POIs



Noise Exposure: DNL-Southern POIs



Noise Exposure – Tabular Data

The tables on the following pages describe the number of aircraft noise events exceeding 55, 65, and 75 decibels. Each of the NA columns shows the **total events** that exceeded the specified threshold (55/65/75) and the **daily average** number of exceedances for the month. In the table, the first number in the cell represents the total events for the month and the value in parenthesis is the daily average. Values below “1” are rounded down to “0”. For example, a daily average of 0.3 per days will be shown as “0”.

Name	55dBA	65dBA	75dBA	DNL
VNM1	33 - (1)	9 - (0)	2 - (0)	32.73
VNM2	43 - (1)	8 - (0)	3 - (0)	32.24

Total
Events

Daily
Average

Noise Exposure: NA55, NA65, NA75 & DNL

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M1	1 - (0)	0 - (0)	0 - (0)	12.63
M2	0 - (0)	0 - (0)	0 - (0)	11.79
M3	0 - (0)	0 - (0)	0 - (0)	12.92
M4	0 - (0)	0 - (0)	0 - (0)	15.08
M5	1 - (0)	0 - (0)	0 - (0)	19.2
M6	11 - (0)	0 - (0)	0 - (0)	24.94
M7	228 - (7)	2 - (0)	0 - (0)	33.95
M8	121 - (4)	1 - (0)	0 - (0)	32.84
M9	140 - (5)	2 - (0)	0 - (0)	33.17
M10	267 - (9)	7 - (0)	0 - (0)	35.92
M11	168 - (5)	1 - (0)	0 - (0)	34.86
M12	68 - (2)	1 - (0)	0 - (0)	30.99
M13	125 - (4)	0 - (0)	0 - (0)	31.81
M14	17 - (1)	0 - (0)	0 - (0)	26.51
M15	0 - (0)	0 - (0)	0 - (0)	18.68
M16	0 - (0)	0 - (0)	0 - (0)	15.88
M17	0 - (0)	0 - (0)	0 - (0)	16.09
M18	0 - (0)	0 - (0)	0 - (0)	17.37
M19	1 - (0)	0 - (0)	0 - (0)	13.6
M20	0 - (0)	0 - (0)	0 - (0)	12.89
M21	0 - (0)	0 - (0)	0 - (0)	14.02
M22	0 - (0)	0 - (0)	0 - (0)	16.23
M23	1 - (0)	0 - (0)	0 - (0)	20.29
M24	16 - (1)	0 - (0)	0 - (0)	26.73
M25	340 - (11)	4 - (0)	0 - (0)	36.06
M26	123 - (4)	1 - (0)	0 - (0)	33.68
M27	138 - (4)	3 - (0)	0 - (0)	33.67
M28	428 - (14)	7 - (0)	0 - (0)	38.34
M29	190 - (6)	1 - (0)	0 - (0)	36.11
M30	80 - (3)	0 - (0)	0 - (0)	32.42
M31	177 - (6)	1 - (0)	0 - (0)	33.71
M32	21 - (1)	0 - (0)	0 - (0)	27.58

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M33	0 - (0)	0 - (0)	0 - (0)	20.26
M34	0 - (0)	0 - (0)	0 - (0)	16.59
M35	0 - (0)	0 - (0)	0 - (0)	15.94
M36	1 - (0)	0 - (0)	0 - (0)	16.67
M37	1 - (0)	0 - (0)	0 - (0)	14.71
M38	0 - (0)	0 - (0)	0 - (0)	14.06
M39	0 - (0)	0 - (0)	0 - (0)	15.28
M40	1 - (0)	0 - (0)	0 - (0)	17.71
M41	2 - (0)	0 - (0)	0 - (0)	21.83
M42	19 - (1)	1 - (0)	0 - (0)	28.09
M43	458 - (15)	7 - (0)	0 - (0)	37.53
M44	138 - (4)	1 - (0)	0 - (0)	33.98
M45	148 - (5)	6 - (0)	0 - (0)	34.06
M46	612 - (20)	15 - (0)	0 - (0)	39.94
M47	197 - (6)	2 - (0)	0 - (0)	36.86
M48	80 - (3)	1 - (0)	0 - (0)	32.96
M49	251 - (8)	2 - (0)	0 - (0)	35.68
M50	22 - (1)	0 - (0)	0 - (0)	28.35
M51	0 - (0)	0 - (0)	0 - (0)	20.51
M52	0 - (0)	0 - (0)	0 - (0)	17.01
M53	0 - (0)	0 - (0)	0 - (0)	16.08
M54	1 - (0)	0 - (0)	0 - (0)	16.84
M55	0 - (0)	0 - (0)	0 - (0)	15.95
M56	0 - (0)	0 - (0)	0 - (0)	15.5
M57	1 - (0)	0 - (0)	0 - (0)	16.94
M58	2 - (0)	0 - (0)	0 - (0)	19.38
M59	2 - (0)	0 - (0)	0 - (0)	23.36
M60	16 - (1)	0 - (0)	0 - (0)	29.11
M61	578 - (19)	8 - (0)	0 - (0)	38.51
M62	162 - (5)	2 - (0)	0 - (0)	35.04
M63	166 - (5)	3 - (0)	0 - (0)	35.3
M64	843 - (27)	32 - (1)	0 - (0)	41.62

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M65	183 - (6)	5 - (0)	0 - (0)	36.92
M66	93 - (3)	2 - (0)	0 - (0)	33.27
M67	339 - (11)	2 - (0)	0 - (0)	36.39
M68	19 - (1)	0 - (0)	0 - (0)	29.09
M69	1 - (0)	0 - (0)	0 - (0)	21.42
M70	0 - (0)	0 - (0)	0 - (0)	17.18
M71	0 - (0)	0 - (0)	0 - (0)	16.21
M72	1 - (0)	0 - (0)	0 - (0)	16.86
M73	0 - (0)	0 - (0)	0 - (0)	18.07
M74	1 - (0)	0 - (0)	0 - (0)	17.04
M75	1 - (0)	0 - (0)	0 - (0)	18.57
M76	0 - (0)	0 - (0)	0 - (0)	21.27
M77	3 - (0)	0 - (0)	0 - (0)	24.68
M78	16 - (1)	1 - (0)	0 - (0)	30.35
M79	734 - (24)	11 - (0)	0 - (0)	39.74
M80	178 - (6)	13 - (0)	0 - (0)	35.88
M81	184 - (6)	8 - (0)	0 - (0)	36.01
M82	1082 - (35)	52 - (2)	0 - (0)	43.23
M83	212 - (7)	7 - (0)	0 - (0)	38.06
M84	110 - (4)	1 - (0)	0 - (0)	34.75
M85	409 - (13)	1 - (0)	0 - (0)	37.1
M86	17 - (1)	0 - (0)	0 - (0)	29.04
M87	2 - (0)	0 - (0)	0 - (0)	22.24
M88	0 - (0)	0 - (0)	0 - (0)	17.89
M89	0 - (0)	0 - (0)	0 - (0)	16.42
M90	0 - (0)	0 - (0)	0 - (0)	16.78
M91	2 - (0)	0 - (0)	0 - (0)	20.25
M92	1 - (0)	0 - (0)	0 - (0)	19.58
M93	2 - (0)	0 - (0)	0 - (0)	21.57
M94	2 - (0)	0 - (0)	0 - (0)	23.8
M95	7 - (0)	0 - (0)	0 - (0)	26.51
M96	18 - (1)	0 - (0)	0 - (0)	31.99

Noise Exposure: NA55, NA65, NA75 & DNL Cont'd

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M97	912 - (29)	21 - (1)	0 - (0)	41.11
M98	272 - (9)	12 - (0)	0 - (0)	37.69
M99	328 - (11)	11 - (0)	0 - (0)	38.79
M100	2264 - (73)	142 - (5)	0 - (0)	45.33
M101	259 - (8)	10 - (0)	0 - (0)	39.15
M102	113 - (4)	1 - (0)	0 - (0)	35.05
M103	486 - (16)	4 - (0)	0 - (0)	38.15
M104	17 - (1)	0 - (0)	0 - (0)	29.42
M105	1 - (0)	0 - (0)	0 - (0)	23.31
M106	2 - (0)	0 - (0)	0 - (0)	20.09
M107	1 - (0)	0 - (0)	0 - (0)	17.23
M108	0 - (0)	0 - (0)	0 - (0)	16.92
M109	3 - (0)	0 - (0)	0 - (0)	21.16
M110	3 - (0)	0 - (0)	0 - (0)	22.2
M111	2 - (0)	0 - (0)	0 - (0)	22.99
M112	5 - (0)	0 - (0)	0 - (0)	25.97
M113	11 - (0)	0 - (0)	0 - (0)	28.66
M114	39 - (1)	0 - (0)	0 - (0)	34.2
M115	1174 - (38)	63 - (2)	0 - (0)	42.98
M116	323 - (10)	20 - (1)	0 - (0)	39.81
M117	861 - (28)	44 - (1)	0 - (0)	42.72
M118	3006 - (97)	400 - (13)	0 - (0)	48.41
M119	294 - (9)	14 - (0)	0 - (0)	39.36
M120	211 - (7)	6 - (0)	0 - (0)	36.62
M121	681 - (22)	2 - (0)	0 - (0)	39.01
M122	84 - (3)	0 - (0)	0 - (0)	30.41
M123	2 - (0)	0 - (0)	0 - (0)	24.78
M124	2 - (0)	0 - (0)	0 - (0)	21.69
M125	2 - (0)	0 - (0)	0 - (0)	19.77
M126	1 - (0)	0 - (0)	0 - (0)	17.63
M127	2 - (0)	0 - (0)	0 - (0)	21.74
M128	4 - (0)	0 - (0)	0 - (0)	24.61

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M129	8 - (0)	0 - (0)	0 - (0)	26.35
M130	23 - (1)	0 - (0)	0 - (0)	29.35
M131	32 - (1)	0 - (0)	0 - (0)	31.2
M132	53 - (2)	0 - (0)	0 - (0)	35.59
M133	1472 - (47)	76 - (2)	0 - (0)	44.24
M134	389 - (13)	47 - (2)	0 - (0)	41.59
M135	1019 - (33)	116 - (4)	0 - (0)	44.7
M136	3536 - (114)	628 - (20)	0 - (0)	49.77
M137	302 - (10)	24 - (1)	0 - (0)	40.29
M138	344 - (11)	6 - (0)	0 - (0)	38.77
M139	905 - (29)	4 - (0)	0 - (0)	39.99
M140	114 - (4)	1 - (0)	0 - (0)	32.56
M141	12 - (0)	0 - (0)	0 - (0)	26.59
M142	3 - (0)	0 - (0)	0 - (0)	22.51
M143	1 - (0)	0 - (0)	0 - (0)	20.72
M144	2 - (0)	0 - (0)	0 - (0)	19
M145	11 - (0)	0 - (0)	0 - (0)	24.23
M146	32 - (1)	1 - (0)	0 - (0)	28.54
M147	35 - (1)	0 - (0)	0 - (0)	31.02
M148	53 - (2)	1 - (0)	0 - (0)	32.68
M149	65 - (2)	1 - (0)	0 - (0)	34
M150	81 - (3)	0 - (0)	0 - (0)	36.91
M151	1788 - (58)	112 - (4)	0 - (0)	45.23
M152	406 - (13)	46 - (1)	0 - (0)	41.87
M153	861 - (28)	81 - (3)	0 - (0)	44.36
M154	4299 - (139)	694 - (22)	0 - (0)	50.64
M155	375 - (12)	27 - (1)	0 - (0)	40.95
M156	619 - (20)	10 - (0)	0 - (0)	40.38
M157	964 - (31)	2 - (0)	0 - (0)	40.22
M158	50 - (2)	1 - (0)	0 - (0)	32.59
M159	23 - (1)	0 - (0)	0 - (0)	28.81
M160	12 - (0)	0 - (0)	0 - (0)	25.2

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M161	7 - (0)	0 - (0)	0 - (0)	22.1
M162	1 - (0)	1 - (0)	0 - (0)	20.07
M163	93 - (3)	0 - (0)	0 - (0)	27.46
M164	215 - (7)	1 - (0)	0 - (0)	32.81
M165	137 - (4)	0 - (0)	0 - (0)	34.7
M166	84 - (3)	0 - (0)	0 - (0)	35.85
M167	118 - (4)	1 - (0)	0 - (0)	36.77
M168	143 - (5)	5 - (0)	0 - (0)	38.99
M169	2001 - (65)	109 - (4)	0 - (0)	45.84
M170	383 - (12)	66 - (2)	0 - (0)	42.54
M171	546 - (18)	101 - (3)	0 - (0)	44.8
M172	5192 - (167)	755 - (24)	1 - (0)	51.54
M173	607 - (20)	23 - (1)	0 - (0)	41.98
M174	659 - (21)	18 - (1)	0 - (0)	41.35
M175	729 - (24)	0 - (0)	0 - (0)	39.89
M176	42 - (1)	1 - (0)	0 - (0)	32.2
M177	21 - (1)	0 - (0)	0 - (0)	27.92
M178	13 - (0)	0 - (0)	0 - (0)	25.26
M179	11 - (0)	0 - (0)	0 - (0)	23.58
M180	2 - (0)	0 - (0)	0 - (0)	20.16
M181	75 - (2)	0 - (0)	0 - (0)	29.91
M182	321 - (10)	1 - (0)	0 - (0)	35.1
M183	788 - (25)	2 - (0)	0 - (0)	38.75
M184	795 - (26)	2 - (0)	0 - (0)	40.36
M185	419 - (14)	2 - (0)	0 - (0)	40.72
M186	264 - (9)	7 - (0)	0 - (0)	41.68
M187	2153 - (69)	92 - (3)	0 - (0)	46.19
M188	258 - (8)	35 - (1)	0 - (0)	41.86
M189	480 - (15)	104 - (3)	0 - (0)	44.94
M190	5780 - (186)	391 - (13)	0 - (0)	51.24
M191	703 - (23)	54 - (2)	0 - (0)	43.31
M192	595 - (19)	24 - (1)	0 - (0)	41.12

Noise Exposure: NA55, NA65, NA75 & DNL Cont'd

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M193	512 - (17)	5 - (0)	0 - (0)	39.65
M194	47 - (2)	0 - (0)	0 - (0)	33.13
M195	26 - (1)	0 - (0)	0 - (0)	29.71
M196	22 - (1)	0 - (0)	0 - (0)	27.21
M197	10 - (0)	0 - (0)	0 - (0)	25.09
M198	2 - (0)	0 - (0)	0 - (0)	21.81
M199	98 - (3)	0 - (0)	0 - (0)	31.24
M200	399 - (13)	1 - (0)	0 - (0)	36.41
M201	1177 - (38)	3 - (0)	0 - (0)	40.75
M202	2474 - (80)	8 - (0)	0 - (0)	43.78
M203	3138 - (101)	29 - (1)	0 - (0)	45.74
M204	3344 - (108)	9 - (0)	0 - (0)	46.54
M205	4961 - (160)	34 - (1)	0 - (0)	47.94
M206	3059 - (99)	28 - (1)	0 - (0)	45.84
M207	1042 - (34)	75 - (2)	0 - (0)	46.25
M208	5965 - (192)	165 - (5)	0 - (0)	50.61
M209	952 - (31)	62 - (2)	0 - (0)	43.94
M210	445 - (14)	20 - (1)	0 - (0)	41.81
M211	269 - (9)	3 - (0)	0 - (0)	40.05
M212	87 - (3)	1 - (0)	0 - (0)	35.36
M213	27 - (1)	1 - (0)	0 - (0)	31.15
M214	20 - (1)	0 - (0)	0 - (0)	28.05
M215	12 - (0)	0 - (0)	0 - (0)	25.93
M216	3 - (0)	0 - (0)	0 - (0)	23.59
M217	186 - (6)	2 - (0)	0 - (0)	32.24
M218	651 - (21)	3 - (0)	0 - (0)	37.19
M219	1187 - (38)	3 - (0)	0 - (0)	40.75
M220	1919 - (62)	7 - (0)	0 - (0)	43.65
M221	3256 - (105)	50 - (2)	0 - (0)	46.41
M222	4163 - (134)	200 - (6)	0 - (0)	48.6
M223	5576 - (180)	697 - (22)	0 - (0)	50.53
M224	4244 - (137)	1968 - (63)	0 - (0)	52.24

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M225	5326 - (172)	2591 - (84)	0 - (0)	52.79
M226	7280 - (235)	615 - (20)	1 - (0)	51.41
M227	1706 - (55)	627 - (20)	1 - (0)	48.04
M228	1646 - (53)	115 - (4)	1 - (0)	46.11
M229	1332 - (43)	11 - (0)	1 - (0)	43.85
M230	505 - (16)	2 - (0)	0 - (0)	39.12
M231	52 - (2)	1 - (0)	0 - (0)	34.11
M232	19 - (1)	0 - (0)	0 - (0)	29.83
M233	10 - (0)	0 - (0)	0 - (0)	26.72
M234	5 - (0)	0 - (0)	0 - (0)	24.63
M235	95 - (3)	1 - (0)	0 - (0)	31.29
M236	220 - (7)	0 - (0)	0 - (0)	35.06
M237	207 - (7)	1 - (0)	0 - (0)	38.03
M238	473 - (15)	2 - (0)	0 - (0)	40.94
M239	900 - (29)	4 - (0)	0 - (0)	43.28
M240	2658 - (86)	52 - (2)	0 - (0)	46.49
M241	1065 - (34)	68 - (2)	0 - (0)	45.34
M242	1350 - (44)	127 - (4)	0 - (0)	48.24
M243	8491 - (274)	2904 - (94)	18 - (1)	55.58
M244	7169 - (231)	1546 - (50)	1 - (0)	53.76
M245	882 - (28)	132 - (4)	0 - (0)	44.67
M246	1103 - (36)	42 - (1)	0 - (0)	42.89
M247	1066 - (34)	12 - (0)	0 - (0)	42.49
M248	1221 - (39)	5 - (0)	1 - (0)	42.25
M249	98 - (3)	1 - (0)	0 - (0)	36.92
M250	30 - (1)	0 - (0)	0 - (0)	32.53
M251	10 - (0)	0 - (0)	0 - (0)	29.47
M252	3 - (0)	0 - (0)	0 - (0)	27.83
M253	58 - (2)	0 - (0)	0 - (0)	31.18
M254	90 - (3)	0 - (0)	0 - (0)	34.88
M255	173 - (6)	1 - (0)	0 - (0)	38.64
M256	1407 - (45)	3 - (0)	0 - (0)	42.23

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M257	1402 - (45)	8 - (0)	0 - (0)	42.51
M258	224 - (7)	10 - (0)	0 - (0)	40.76
M259	183 - (6)	28 - (1)	0 - (0)	41.99
M260	853 - (28)	37 - (1)	0 - (0)	45.62
M261	10060 - (325)	3525 - (114)	100 - (3)	57.07
M262	6998 - (226)	2102 - (68)	14 - (0)	54.25
M263	260 - (8)	123 - (4)	0 - (0)	43.56
M264	394 - (13)	23 - (1)	0 - (0)	40.63
M265	179 - (6)	13 - (0)	0 - (0)	39.44
M266	1082 - (35)	3 - (0)	1 - (0)	41.12
M267	567 - (18)	1 - (0)	0 - (0)	38.94
M268	34 - (1)	1 - (0)	0 - (0)	33.84
M269	9 - (0)	0 - (0)	0 - (0)	31.28
M270	7 - (0)	0 - (0)	0 - (0)	30.97
M271	52 - (2)	0 - (0)	0 - (0)	34.95
M272	288 - (9)	0 - (0)	0 - (0)	39.41
M273	1218 - (39)	1 - (0)	0 - (0)	41.15
M274	133 - (4)	3 - (0)	0 - (0)	38.54
M275	142 - (5)	10 - (0)	0 - (0)	37.61
M276	144 - (5)	14 - (0)	0 - (0)	38.8
M277	203 - (7)	32 - (1)	3 - (0)	41.67
M278	732 - (24)	37 - (1)	8 - (0)	44.84
M279	10817 - (349)	4997 - (161)	1017 - (33)	60.21
M280	6864 - (221)	3698 - (119)	153 - (5)	56.16
M281	177 - (6)	18 - (1)	3 - (0)	41.93
M282	168 - (5)	22 - (1)	0 - (0)	39.28
M283	120 - (4)	10 - (0)	0 - (0)	37.84
M284	191 - (6)	2 - (0)	0 - (0)	38.3
M285	769 - (25)	1 - (0)	0 - (0)	39.08
M286	74 - (2)	1 - (0)	0 - (0)	35.37
M287	28 - (1)	0 - (0)	0 - (0)	32.84
M288	11 - (0)	0 - (0)	0 - (0)	31.48

Noise Exposure: NA55, NA65, NA75 & DNL Cont'd

Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M289	775 - (25)	0 - (0)	0 - (0)	40.04
M290	192 - (6)	0 - (0)	0 - (0)	38.96
M291	90 - (3)	3 - (0)	0 - (0)	36.23
M292	103 - (3)	4 - (0)	0 - (0)	36.37
M293	149 - (5)	8 - (0)	0 - (0)	37.47
M294	322 - (10)	24 - (1)	0 - (0)	40.84
M295	122 - (4)	39 - (1)	3 - (0)	41.77
M296	203 - (7)	60 - (2)	9 - (0)	44.01
M297	9389 - (303)	5025 - (162)	1414 - (46)	58.52
M298	6899 - (223)	2114 - (68)	708 - (23)	56.71
M299	60 - (2)	17 - (1)	3 - (0)	40.18
M300	82 - (3)	9 - (0)	0 - (0)	37.91
M301	70 - (2)	10 - (0)	0 - (0)	36.5
M302	108 - (3)	5 - (0)	0 - (0)	35.56
M303	331 - (11)	2 - (0)	0 - (0)	37.29
M304	190 - (6)	1 - (0)	0 - (0)	35.86
M305	35 - (1)	0 - (0)	0 - (0)	32.43
M306	11 - (0)	0 - (0)	0 - (0)	29.57
M307	69 - (2)	0 - (0)	0 - (0)	35.95
M308	91 - (3)	0 - (0)	0 - (0)	34.82
M309	118 - (4)	3 - (0)	0 - (0)	35.24
M310	161 - (5)	8 - (0)	0 - (0)	37.04
M311	519 - (17)	17 - (1)	0 - (0)	40.97
M312	232 - (7)	26 - (1)	1 - (0)	40.68
M313	89 - (3)	29 - (1)	2 - (0)	40.91
M314	1593 - (51)	59 - (2)	6 - (0)	46.3
M315	8508 - (274)	6205 - (200)	1427 - (46)	57.22
M316	5270 - (170)	263 - (8)	7 - (0)	48.24
M317	272 - (9)	20 - (1)	7 - (0)	40
M318	71 - (2)	14 - (0)	0 - (0)	37.97
M319	63 - (2)	14 - (0)	0 - (0)	36.34
M320	79 - (3)	6 - (0)	0 - (0)	34.11
M321	92 - (3)	1 - (0)	0 - (0)	34.95
Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
M322	211 - (7)	0 - (0)	0 - (0)	34.37
M323	53 - (2)	0 - (0)	0 - (0)	31.39
M324	22 - (1)	0 - (0)	0 - (0)	28.27
Whitehall	653 - (21)	16 - (1)	0 - (0)	41.53
WatTumm	745 - (24)	52 - (2)	0 - (0)	44.39
Mannokee	4378 - (141)	931 - (30)	0 - (0)	50.97
KingdomHal	1572 - (51)	60 - (2)	0 - (0)	45.52
FaithUnite	3001 - (97)	72 - (2)	0 - (0)	46.79
AccoVFD	4816 - (155)	600 - (19)	0 - (0)	50.78
MoyaoneRes	479 - (15)	93 - (3)	0 - (0)	43.64
AliceFergu	546 - (18)	106 - (3)	0 - (0)	44.83
Piscatawa	343 - (11)	64 - (2)	1 - (0)	42.42
Landry	12304 - (397)	5741 - (185)	1657 - (53)	61.34
NUnionSt	12378 - (399)	10034 - (324)	2774 - (89)	63.5
Montgomery	12371 - (399)	6550 - (211)	2485 - (80)	63.09
BraddockW	5742 - (185)	2169 - (70)	11 - (0)	54.46
EAbingdon	12322 - (397)	5204 - (168)	1998 - (64)	61.97
SPatrickSt	6119 - (197)	2103 - (68)	2 - (0)	54.7
NPotomacY	7025 - (227)	3795 - (122)	33 - (1)	53.27
Tidelock	12428 - (401)	10435 - (337)	3850 - (124)	64.84
KingStreet	8463 - (273)	4044 - (130)	99 - (3)	57.64
FranklinSt	7026 - (227)	2559 - (83)	6 - (0)	55.85
OldTown	12325 - (398)	6604 - (213)	1690 - (55)	61.58
RoseSquare	10950 - (353)	5022 - (162)	1757 - (57)	61.8
Carpen1714	11235 - (362)	5041 - (163)	2003 - (65)	62.12
WAbingdon	12220 - (394)	5048 - (163)	2064 - (67)	62.21
BasilicaSc	7889 - (254)	3021 - (97)	19 - (1)	56.44
JonesPT	10073 - (325)	5017 - (162)	1322 - (43)	61.02
PortoVecch	6244 - (201)	1766 - (57)	10 - (0)	54.31
FoundersPK	12365 - (399)	9971 - (322)	2410 - (78)	62.89
HollinHill	4274 - (138)	1258 - (41)	0 - (0)	52.19
MrVernon	281 - (9)	34 - (1)	0 - (0)	42.59
Woodlawn	1099 - (35)	4 - (0)	0 - (0)	44.06
Number of Events Above Total - (Daily Average)				
Name	55dBA	65dBA	75dBA	DNL
FrankLLoyd	1288 - (42)	5 - (0)	0 - (0)	44.48
Distillery	823 - (27)	5 - (0)	0 - (0)	43.63
RiverFarm	5047 - (163)	243 - (8)	0 - (0)	50
Huntley	2764 - (89)	84 - (3)	1 - (0)	47.28
GumSprings	4176 - (135)	1133 - (37)	0 - (0)	50.7
FortHunt	328 - (11)	62 - (2)	0 - (0)	43.69
S2	12341 - (398)	5972 - (193)	1995 - (64)	62.14
S3	12446 - (401)	8156 - (263)	3840 - (124)	64.77
S6	6969 - (225)	4883 - (158)	187 - (6)	56.3
S16	12389 - (400)	11545 - (372)	2986 - (96)	63.87
S18	6030 - (195)	2002 - (65)	26 - (1)	51.33
S19	6987 - (225)	4993 - (161)	276 - (9)	58.34
S20	5739 - (185)	2899 - (94)	17 - (1)	53.13
S21	5686 - (183)	3369 - (109)	18 - (1)	54.92
S22	5750 - (185)	3435 - (111)	15 - (0)	55.92
S23	6741 - (217)	4965 - (160)	157 - (5)	58.63
S24	6746 - (218)	4910 - (158)	129 - (4)	58.76
S25	5865 - (189)	3545 - (114)	19 - (1)	56.59
S26	7033 - (227)	4930 - (159)	208 - (7)	59.23
S27	6106 - (197)	3880 - (125)	28 - (1)	57.41
S28	5972 - (193)	3664 - (118)	19 - (1)	57.04
S29	11254 - (363)	5022 - (162)	1527 - (49)	61.45
S30	6619 - (214)	4113 - (133)	39 - (1)	57.4
S31	10771 - (347)	4902 - (158)	875 - (28)	59.66
S32	10749 - (347)	4736 - (153)	732 - (24)	59.11
S33	6287 - (203)	2892 - (93)	4 - (0)	56.12
S34	11360 - (366)	4695 - (151)	820 - (26)	59.14
S35	6147 - (198)	1939 - (63)	2 - (0)	54.42
S36	9439 - (304)	3789 - (122)	113 - (4)	57.41
S37	12350 - (398)	6911 - (223)	1486 - (48)	61.21
S38	12358 - (399)	6974 - (225)	1249 - (40)	60.73
S39	5846 - (189)	1324 - (43)	3 - (0)	53.31
S40	7048 - (227)	3846 - (124)	33 - (1)	53.35
S41	12366 - (399)	5864 - (189)	834 - (27)	59.74

A Note About Operational Statistics

The primary source of aircraft operations data used in this report is the Federal Aviation Administration. Anomalies in the data may occur due to the complexity of the data collection and processing. As an example, some arrivals or departures may not include the correct runway assignment. Vianair makes every effort to provide as complete and accurate data possible. In such cases, these operations will be characterized as "Runway Undetermined." Every effort to provide complete and accurate data.

For More Information

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