



METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

2013 Annual Aircraft Noise Report:

Ronald Reagan Washington National Airport (DCA) and Washington Dulles International Airport (IAD)

In 2013, Ronald Reagan Washington National Airport (Reagan National, DCA) and Washington Dulles International Airport (Washington Dulles, IAD) served approximately 42 million passengers and handled over 600,000 flight operations.* The Metropolitan Washington Airports Authority operates both airports for their owner, the United States government. They are the only two federally owned commercial airports in the nation and were operated by the Federal Aviation Administration until 1987, when the Metropolitan Washington Airports Authority was created to operate them under a federal lease. The airports are key contributors to the regional economy, with Airports Authority operations accounting for about 4.5 percent of the National Capital Region's gross domestic product and providing or supporting 387,000 jobs across the region in addition to \$15 billion in labor income, \$21 billion in business revenue, \$3 billion in tax revenue, according to an economic impact study for 2012. The airports, which follow federal rules and guidelines in their operations, frequently receive inquiries from the public regarding aircraft noise. This report provides information regarding flight operations, monitored noise levels, rules governing aircraft noise abatement efforts, and community complaint statistics associated with Reagan National and Washington Dulles airports.

Typical Daily Flight Tracks

On a typical day, more than 5,000 aircraft will operate through the metropolitan Washington region airspace. Many of these flights operate to/from Reagan National, Washington Dulles, Baltimore Washington, or Andrews Air Force Base. Additionally, many other flights operate at numerous general aviation and military airfields within the metropolitan Washington region.



The two flight track maps (Figures 1 and 2) depict 24-hours of typical flight operations at Reagan National and Washington Dulles, respectively. Departures are Red lines and Arrivals are Blue lines. Overflights are Green and depict aircraft operating in the airspace that are not operating to/from the airport identified in the Figure.

* For Air Traffic Statistics: visit www.mwaa.com; select DCA or IAD; Air Traffic Statistics.



Figure 1 - Ronald Reagan Washington National Airport (DCA): Typical 24-hour, Mixed Flow Operations
Departures - **Red (480 tracks)**, Arrivals - **Blue (468 tracks)**, Overflights - **Green (2927 tracks)**

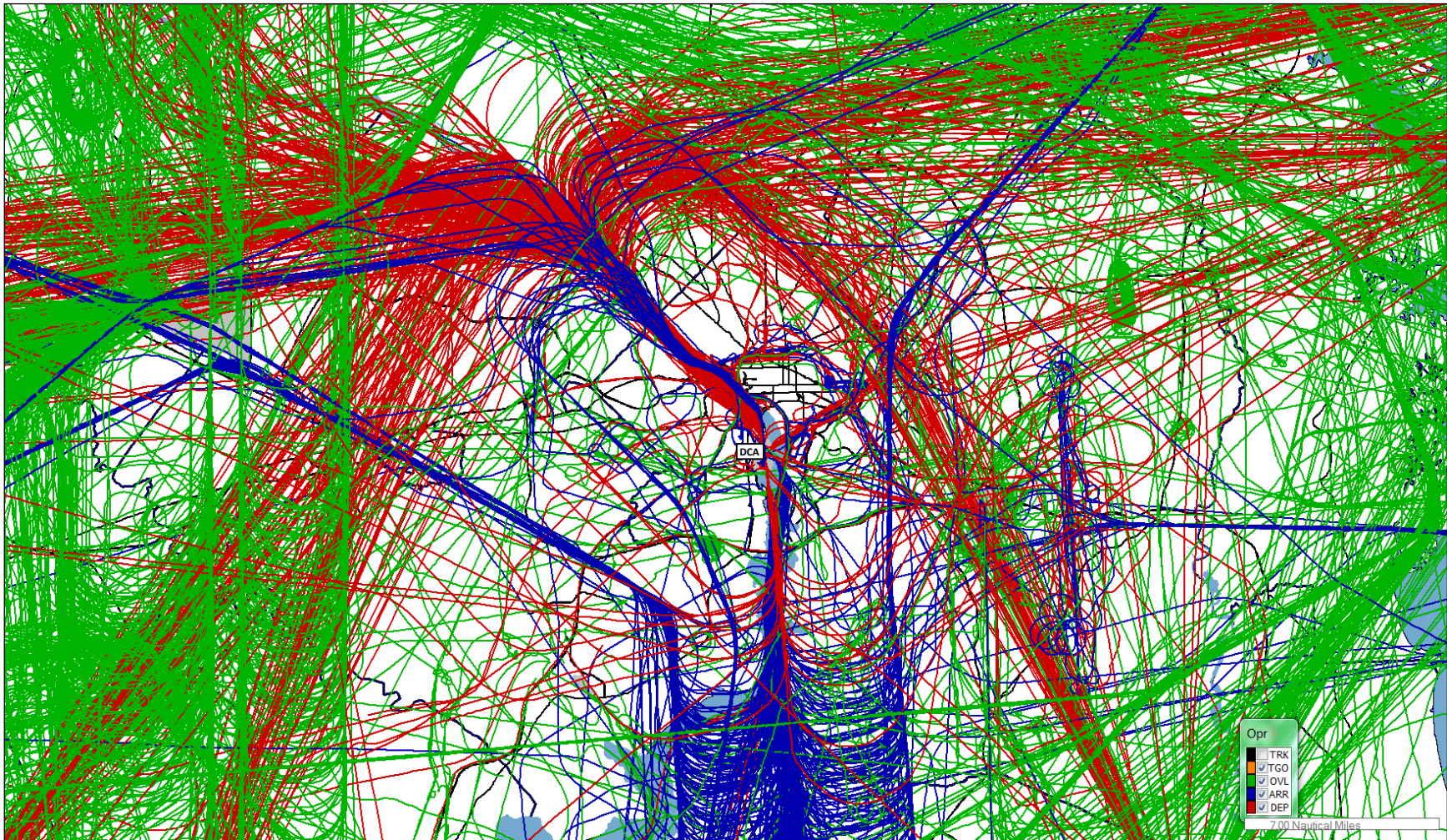
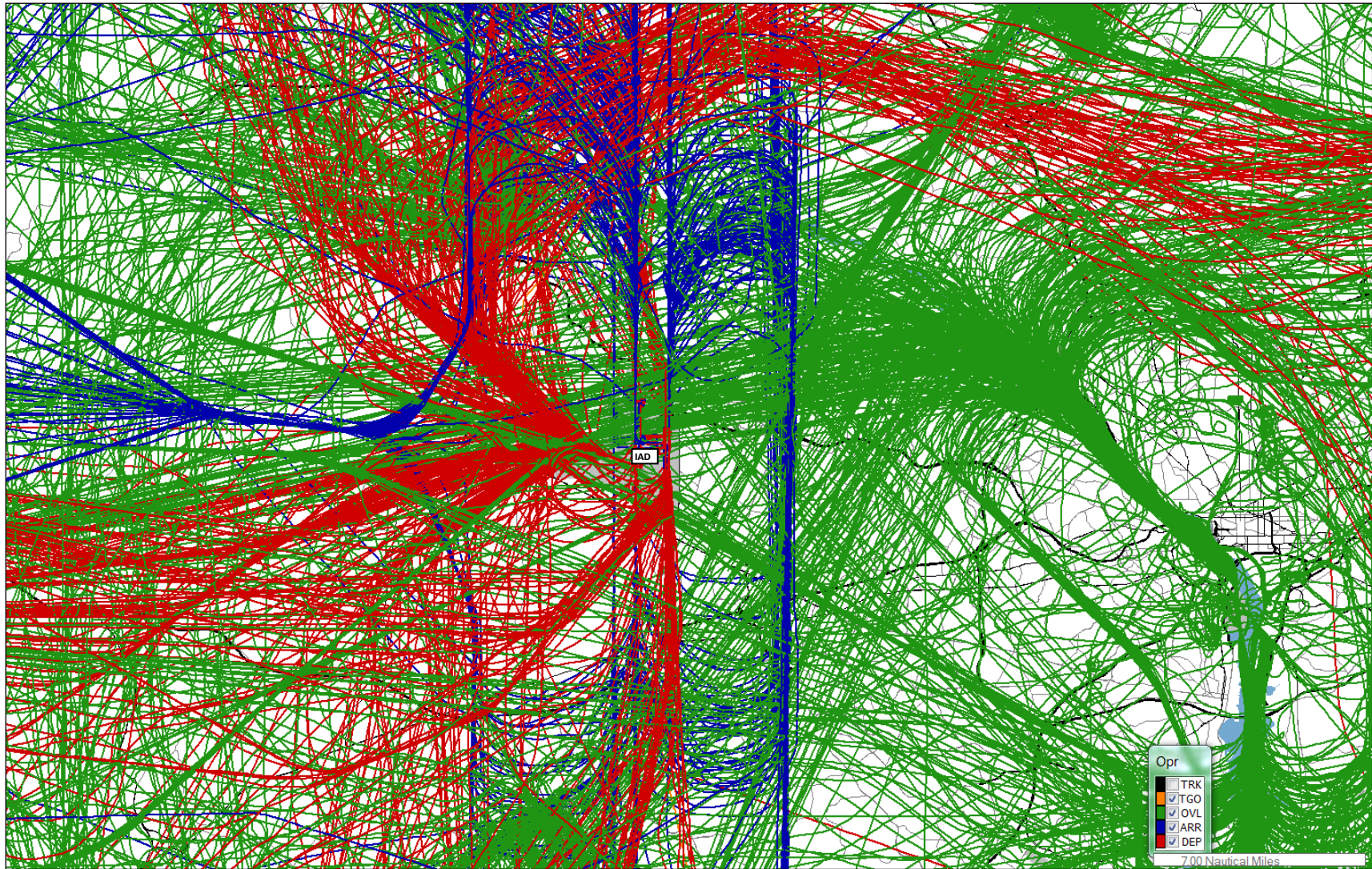




Figure 2 – Washington Dulles International Airport (IAD): Typical 24-hour, Mixed Flow Operations
Departures - **Red (430 tracks)**, Arrivals - **Blue (420 tracks)**, Overflights - **Green (3055 tracks)**





Ronald Reagan Washington National Airport (DCA):

DCA Nighttime Noise Rule Information

Ronald Reagan Washington National Airport (DCA) has a long history of reducing nighttime noise between 10 p.m. and 7 a.m. Although Reagan National has never had a curfew on flight operations, it has reduced aircraft types whose designs and weights would make them prone to higher noise levels on departure and arrival.

The DCA Nighttime Noise Rule was implemented in 1981 when Reagan National was operated by the Federal Aviation Administration (FAA), and aircraft were generally much louder than today's jets. The DCA Nighttime Noise Rule was one of the first of its kind in the nation, and it helped usher in federal requirements for quieter aircraft. While federal laws now require airlines to fly quieter aircraft, these same laws also prohibit individual airports from creating new or more stringent noise restrictions. DCA's Nighttime Noise Rule existed prior to the federal requirement to fly quieter aircraft and has been allowed to remain in effect with the same limitations as when it was implemented in 1981.

The DCA Nighttime Noise Rule's design-and-weight configurations for aircraft are intended to limit their average noise output during takeoff and landing at certain points near the runway to the following levels:

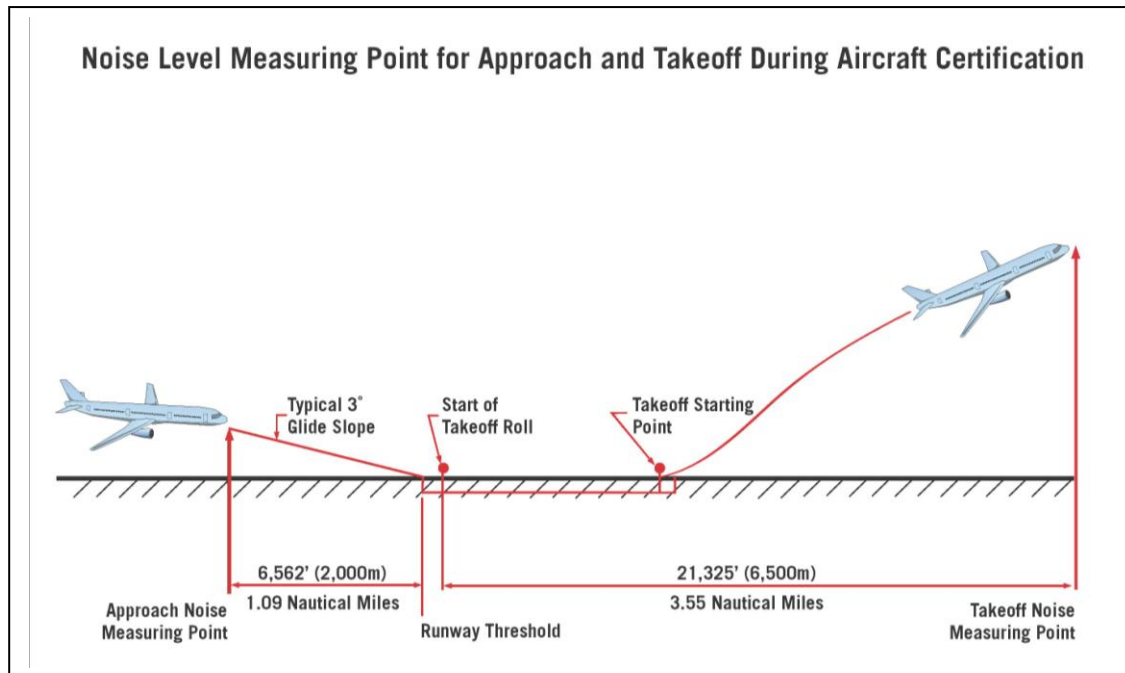
- ✦ **Departures - 72 dBA as determined during the FAA aircraft noise level certification process**
- ✦ **Arrivals - 85 dBA as determined during the FAA aircraft noise level certification process**
 - ✓ **dBA** is an A-weighted decibel and is the standard unit for measuring noise. The noise limits (72 on departure and 85 on arrival) are based on sleep disturbance research data.

The Metropolitan Washington Airports Authority enforces the DCA Nighttime Noise Rule based on noise-related data provided by FAA's standard certification processes for aircraft operating with all available engines. This method allows airlines and pilots to determine, in advance of flight, whether their aircraft – based on design, weight and engine type – will comply with the DCA Nighttime Noise Rule.

The certification process required by the FAA is summarized below and can be found in [Federal Aviation Regulation Part 36 – Noise Standards: Aircraft Type and Airworthiness Certification](#).

The FAA noise certification process measures aircraft noise levels at two locations. On approach, noise is measured on the ground at 2,000 meters before the end of the runway. On departure, noise is measured on the ground at 6,500 meters from the start of the takeoff roll, (Figure 3).

Figure 3 – FAA Aircraft Noise Certification Measurement Points



These noise measurements are taken at the time the aircraft is certified under strict compliance with airworthiness certification procedures before the aircraft enters into service; they cannot be measured during day-to-day departures or arrivals after the aircraft enters into service. The certification process does not include noise measurements during later parts of a flight, when an aircraft is farther from the airport. The FAA uses this method to compile and tabulate noise data on all aircraft types and engine configurations that operate in the United States. This data – which is used to determine which aircraft types and configurations will be in compliance with the DCA Nighttime Noise Rule – can be found in [FAA Advisory Circular 36-3H](#), “Estimated Airplane Noise Levels in A-Weighted Decibels,” dated May 25, 2012.

Typical aircraft serving Reagan National that may be deemed non-compliant with the DCA Nighttime Noise Rule between 10p.m. and 7a.m. are highlighted in pink on the two lists found on our nighttime noise rule webpage by clicking [here](#). Non-highlighted aircraft do not use DCA under normal operating conditions. Aircraft not on the lists meet the DCA Nighttime Noise Rule aircraft design-weight configuration standards and operate to/from Reagan National during the nighttime hours.

Figures 4 and 5 show the number of departures and arrivals during the early morning and late-night hours in recent years. The increase in operations can be attributed to airlines operating more aircraft that comply with the DCA Nighttime Noise Rule to meet the growing demands of travelers for earlier flights.



Figure 4 – DCA Average Daily Flight Operations, 5 a.m. – 7 a.m.

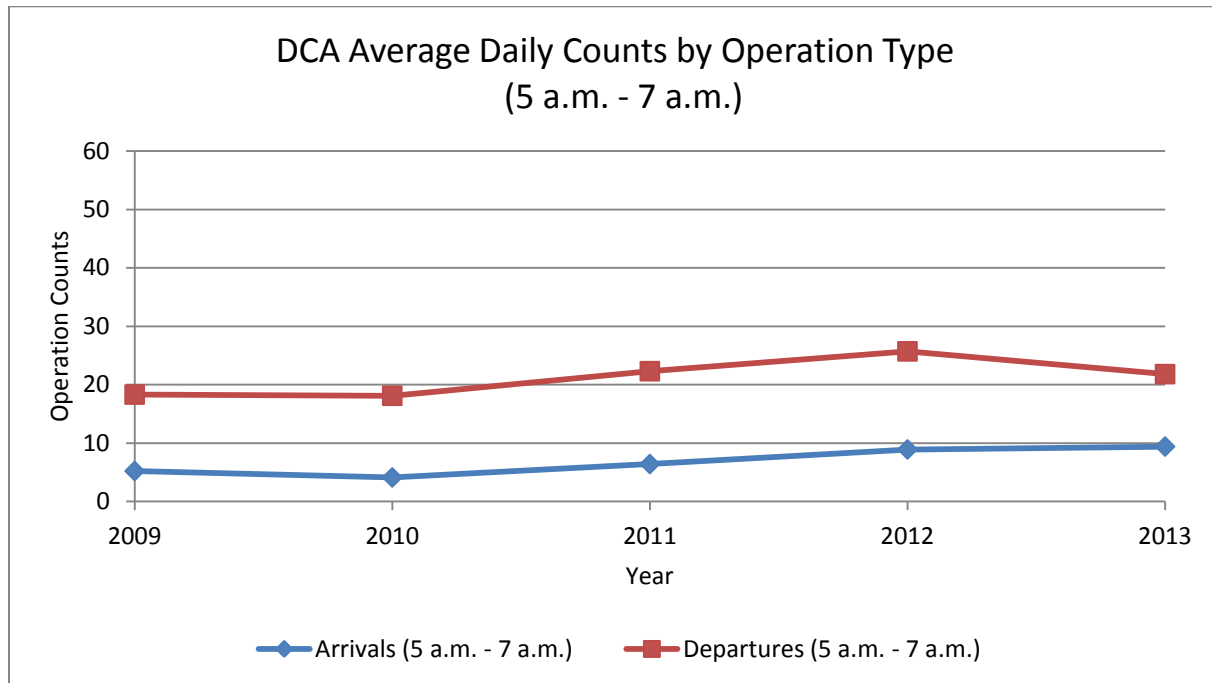
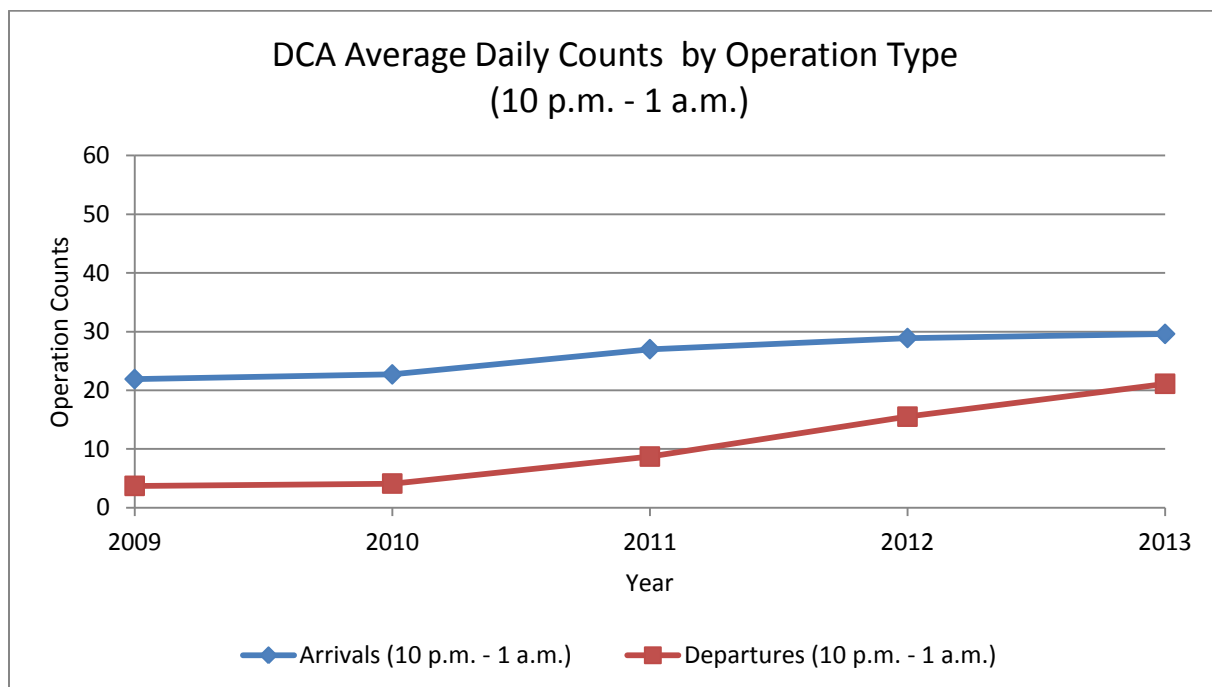


Figure 5 – DCA Average Daily Flight Operations, 10 p.m. – 1 a.m.



Due to data anomalies that can occur during data acquisition and processing, the aircraft operational counts depicted above may experience a significant margin of error**. The data provided is for general trend information only.

**** 2013 Flight Track Data Only:** During the first six (6) months, the data experienced processing errors resulting in the disclaimer above. The errors have been identified and corrected.



Regional Noise Monitoring

As a public service, the Airports Authority voluntarily monitors aircraft and community noise levels near Reagan National and Washington Dulles (Figures 6 and 7). The noise monitoring equipment records noise events, and system software analyzes each event to determine whether it was likely caused by an aircraft or some other source. It is important to note that noise event data from these monitors cannot be used for noise rule compliance or enforcement purposes. Data from the monitors are intended for general public information only.

A noise monitor detects and records sound in its vicinity and is calibrated to search for noise events. A noise event is defined as any noise that exceeds the general background noise level at the noise monitor location for a defined period of time. As an aircraft approaches, a noise monitor may begin to measure an incremental increase in noise that exceeds the background noise level. Aircraft noise typically peaks as the aircraft reaches its closest point to the noise monitor. As the aircraft continues on its flight path and moves farther away from the noise monitor, the noise detected by the monitor decreases until it returns to the background noise level.

The bell shaped curve depicting noise event data associated with aircraft overflights near a noise monitor also can be generated by community noise sources, such as vehicle traffic. Because the noise monitor cannot definitively identify the source of a noise event, the noise event data recorded by the monitor is compared with flight track data to determine if an aircraft was near the monitor at the time the noise event was recorded. If an aircraft was in the vicinity of the noise monitor, the computer labels the noise event as an Aircraft Noise Event. If an aircraft could not be identified in the vicinity of the noise monitor, the noise event is labeled as a community noise event.

Community noise fluctuates in intensity during the day and regularly occurs during aircraft overflights of noise monitors. When community noise occurs while an aircraft is in the vicinity of the noise monitor, the monitor is unable to separate community noise from the aircraft noise. This mixing of community noise with aircraft noise can artificially inflate the measured noise attributed to the aircraft and is one of the reasons that the FAA only allows airports to use noise monitor data for general informational purposes.

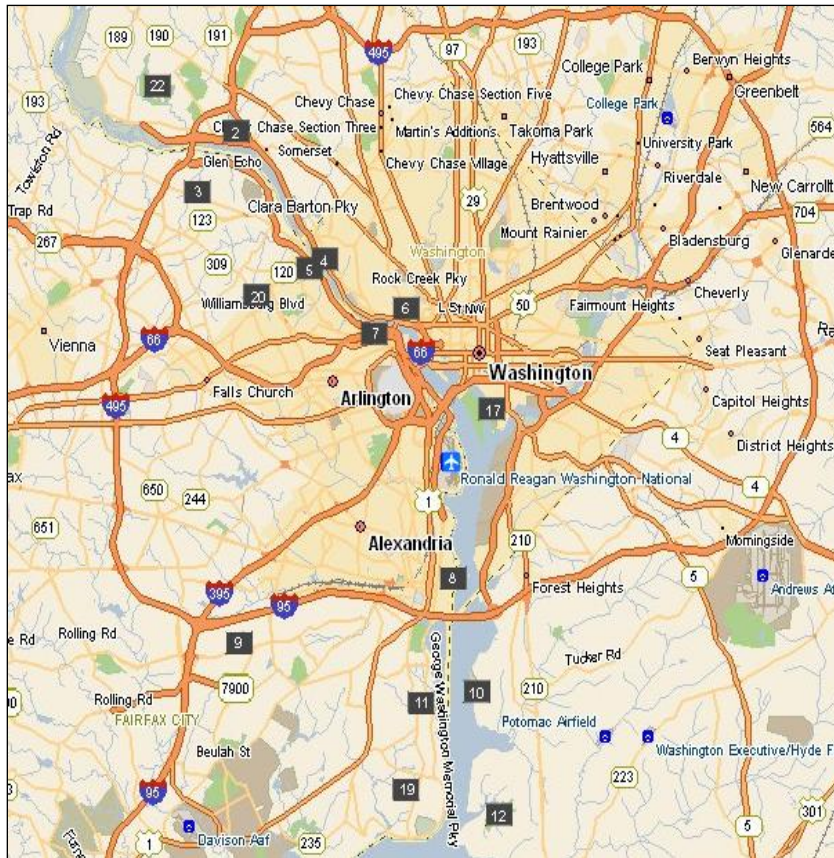
There are several FAA noise metrics commonly used to evaluate aircraft noise. For this report, all noise levels are displayed as Day-Night average sound level (DNL). DNL, per federal requirements, is A-weighted decibels (dBA). A-weighting reduces the decibel values of sounds at frequencies below around 1,000 hertz, and above around 6,000 hertz to account for the decreased ability of the human ear to detect these frequencies. Most noise emitted by aircraft is captured using the A-weighted scale. DNL is a 24-hour average that accounts for the peak noise level, the duration of each noise event, and the time of day that each noise event occurred. Each noise event that occurs between 10 p.m. and 7 a.m. is increased by 10 dB to account for the increased annoyance normally associated with nighttime noise, and the lower level of background noise during this timeframe. This is the FAA's preferred metric and is the standard metric for assessing the impact of aircraft noise exposure around airports in the United States.



This report provides three different DNL values for each noise monitor site. The data in the “Total DNL” column is the logarithmic sum of the aircraft and community DNL noise values. The “Aircraft DNL” column shows the average noise level likely contributed by aircraft operating in the vicinity of the noise monitor and the “Community DNL” column shows the average noise caused by other noise sources in the community. All three noise values are included to show the relationship of aircraft and community noise levels to the total noise level at each noise monitor.

Noise data may not always be available for a particular site due to technical issues associated with the noise monitoring equipment, software, power, communications, and other environmental factors. Noise monitor data is excluded when it cannot be confirmed. When data is excluded, an “NA” is placed in the corresponding location in the attached noise monitor data table. In addition, data from some noise monitors was unavailable or unreliable because of technical problems, damage or construction issues that caused service disruptions or excess noise that interfered with the monitor’s operation. In 2013, the noise monitoring sites excluded from this report are 19, 24 and 30.

**Figure 6 – Ronald Reagan Washington National Airport
Noise Monitors Locations**



Site	Location
2	Cabin John
3	Langley Forest
4	Potomac Palisades
5	Chain Bridge
6	Georgetown
7	Rosslyn
8	Old Town
9	Springfield
10	Fort Foote
11	Marlan Forest
12	Tantallon
17	Southwest, D.C.
19	North Mt. Vernon - <i>Suspended</i>
20	Dumbarton
22	Avenel



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
2	Jan	56.9	42.6	56.8
2	Feb	57.4	44.7	57.2
2	Mar	57.9	39.8	57.9
2	Apr	58.8	46.4	58.6
2	May	67.0	39.9	67.0
2	Jun	62.2	39.1	62.1
2	Jul	59.5	38.8	59.5
2	Aug	63.5	41.2	63.4
2	Sep	62.3	40.4	62.3
2	Oct	64.7	37.5	64.7
2	Nov	NA	NA	NA
2	Dec	57.4	43.1	57.3

3	Jan	54.6	37.2	54.6
3	Feb	55.0	37.4	54.9
3	Mar	55.3	39.8	55.2
3	Apr	59.4	44.6	59.3
3	May	59.2	53.5	57.9
3	Jun	59.2	47.7	58.8
3	Jul	59.7	49.9	59.2
3	Aug	62.6	47.7	62.4
3	Sep	61.2	48.8	60.9
3	Oct	59.8	48.4	59.5
3	Nov	58.7	47.9	58.3
3	Dec	56.7	44.8	56.4

4	Jan	60.9	54.5	59.8
4	Feb	61.0	54.7	59.8
4	Mar	62.7	55.3	61.9
4	Apr	62.4	54.8	61.6
4	May	66.7	57.0	66.2
4	Jun	63.1	54.5	62.4
4	Jul	61.8	55.1	60.8
4	Aug	64.0	55.3	63.4
4	Sep	62.9	55.7	61.9
4	Oct	62.0	55.3	60.9
4	Nov	61.6	55.0	60.5
4	Dec	60.5	54.6	59.2

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
5	Jan	60.5	53.2	59.6
5	Feb	60.9	54.1	59.9
5	Mar	60.9	53.1	60.1
5	Apr	62.2	54.1	61.4
5	May	62.2	54.5	61.3
5	Jun	62.2	55.1	61.3
5	Jul	62.1	54.3	61.3
5	Aug	63.9	54.8	63.3
5	Sep	63.5	54.5	62.9
5	Oct	62.1	54.4	61.3
5	Nov	61.4	53.3	60.7
5	Dec	61.5	54.1	60.6

6	Jan	59.8	50.1	59.3
6	Feb	60.3	50.0	59.9
6	Mar	60.0	52.2	59.2
6	Apr	63.2	50.1	63.0
6	May	62.4	53.3	61.8
6	Jun	61.6	48.6	61.3
6	Jul	61.3	48.3	61.0
6	Aug	62.7	48.9	62.5
6	Sep	62.5	49.3	62.3
6	Oct	61.7	50.7	61.3
6	Nov	61.0	50.7	60.5
6	Dec	59.9	49.4	59.4

7	Jan	62.5	58.4	60.4
7	Feb	63.2	59.7	60.6
7	Mar	64.0	59.9	61.8
7	Apr	66.5	60.7	65.2
7	May	NA	NA	NA
7	Jun	65.6	59.4	64.5
7	Jul	63.3	59.1	61.3
7	Aug	65.8	59.4	64.6
7	Sep	65.5	60.2	64.1
7	Oct	64.5	61.1	61.9
7	Nov	63.3	58.7	61.5
7	Dec	62.9	59.7	60.1

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
8	Jan	63.6	57.8	62.3
8	Feb	66.1	57.4	65.4
8	Mar	68.4	56.7	68.1
8	Apr	66.6	58.7	65.8
8	May	NA	NA	NA
8	Jun	63.9	59.4	62.0
8	Jul	63.2	58.3	61.5
8	Aug	63.2	58.8	61.2
8	Sep	62.6	57.5	61.0
8	Oct	64.3	56.6	63.5
8	Nov	64.8	57.1	64.0
8	Dec	61.9	57.1	60.1

9	Jan	59.4	39.4	59.3
9	Feb	59.6	40.3	59.5
9	Mar	60.3	38.9	60.3
9	Apr	60.5	43.7	60.4
9	May	62.9	41.9	62.8
9	Jun	61.8	45.2	61.7
9	Jul	60.9	43.2	60.9
9	Aug	61.1	39.3	61.1
9	Sep	61.9	38.6	61.9
9	Oct	61.5	40.0	61.5
9	Nov	61.3	40.8	61.2
9	Dec	59.8	42.3	59.7

10	Jan	62.1	53.3	61.5
10	Feb	61.9	53.3	61.3
10	Mar	61.9	53.6	61.3
10	Apr	62.0	53.7	61.4
10	May	66.1	54.5	65.7
10	Jun	62.7	54.9	61.9
10	Jul	62.2	54.2	61.5
10	Aug	63.7	54.1	63.1
10	Sep	63.5	52.7	63.2
10	Oct	63.0	53.9	62.4
10	Nov	62.3	54.2	61.6
10	Dec	62.4	54.8	61.5

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
11	Jan	56.9	46.8	56.5
11	Feb	55.0	39.5	54.9
11	Mar	59.8	46.0	59.6
11	Apr	63.8	49.3	63.7
11	May	62.2	55.3	61.2
11	Jun	59.0	46.3	58.8
11	Jul	59.9	49.7	59.4
11	Aug	62.2	47.2	62.1
11	Sep	59.6	47.0	59.4
11	Oct	68.2	47.4	68.1
11	Nov	NA	NA	NA
11	Dec	58.6	50.1	57.9

12	Jan	58.0	36.1	58.0
12	Feb	58.1	37.3	58.1
12	Mar	57.8	32.7	57.7
12	Apr	58.7	44.0	58.6
12	May	60.2	50.1	59.8
12	Jun	58.7	44.1	58.5
12	Jul	59.9	45.4	59.8
12	Aug	63.9	45.9	63.8
12	Sep	62.0	44.1	61.9
12	Oct	60.0	46.3	59.8
12	Nov	59.2	45.0	59.1
12	Dec	57.8	40.0	57.7

17	Jan	64.5	57.9	63.4
17	Feb	63.1	56.6	61.9
17	Mar	62.1	55.3	61.1
17	Apr	63.2	55.6	62.3
17	May	NA	NA	NA
17	Jun	62.4	55.7	61.3
17	Jul	62.4	56.4	61.1
17	Aug	62.1	57.3	60.3
17	Sep	61.3	55.1	60.1
17	Oct	68.2	64.0	66.0
17	Nov	64.4	58.9	63.0
17	Dec	63.2	56.6	62.2

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
20	Jan	56.7	45.5	56.4
20	Feb	54.0	42.1	53.7
20	Mar	54.1	44.6	53.6
20	Apr	56.6	44.9	56.2
20	May	57.9	46.7	57.6
20	Jun	57.2	44.2	57.0
20	Jul	57.5	48.1	57.0
20	Aug	62.4	43.3	62.3
20	Sep	59.1	43.2	59.0
20	Oct	56.9	43.8	56.7
20	Nov	58.3	44.8	58.1
20	Dec	53.3	39.0	53.2

22	Jan	55.8	41.8	55.6
22	Feb	56.0	42.7	55.8
22	Mar	55.8	40.4	55.6
22	Apr	57.7	46.5	57.4
22	May	63.4	47.0	63.3
22	Jun	58.2	45.6	57.9
22	Jul	56.8	44.8	56.5
22	Aug	57.7	44.6	57.5
22	Sep	56.1	44.2	55.8
22	Oct	57.0	48.5	56.3
22	Nov	57.7	49.6	57.0
22	Dec	56.1	46.6	55.5

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m.. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



**Figure 7 – Washington Dulles International Airport
Noise Monitor Locations**



Site	Location
13	Broad Run Farms
14	Arcola
15	Guilford Elementary School
16	Pleasant Valley
18	Ashburn Elementary School
21	Cub Run Elementary School
24	Floris Elementary School – <i>Vandalized/Retired</i>
25	Chantilly Post Office
26	Algonkian Elementary School
27	Broad Run High School
28	Aldie Elementary School
29	Union Mill Elementary School
30	London Towne Elementary School – <i>Vandalized/Retired</i>
33	Virginia Run Elementary School
34	Westfield High School
35	Crossfield Elementary School
36	Armstrong Elementary School
37	Mercer Middle School
38	Briar Woods High School
39	Stone Bridge High School
40	Sycolin Creek Elementary School



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
13	Jan	62.0	47.0	61.9
13	Feb	57.7	46.5	57.3
13	Mar	57.6	46.6	57.2
13	Apr	57.8	49.2	57.2
13	May	58.7	51.8	57.7
13	Jun	58.7	50.4	58.0
13	Jul	60.2	49.7	59.8
13	Aug	62.9	49.6	62.7
13	Sep	61.8	48.4	61.6
13	Oct	60.1	46.2	59.9
13	Nov	NA	NA	NA
13	Dec	57.2	47.7	56.7

14	Jan	72.6	63.9	72.0
14	Feb	72.8	63.7	72.2
14	Mar	72.4	62.9	71.9
14	Apr	72.7	64.0	72.1
14	May	NA	NA	NA
14	Jun	72.0	62.5	71.5
14	Jul	72.5	64.4	71.7
14	Aug	72.2	63.2	71.6
14	Sep	71.8	62.7	71.2
14	Oct	72.2	63.6	71.6
14	Nov	72.3	63.6	71.7
14	Dec	72.6	64.1	71.9

15	Jan	67.4	52.9	67.3
15	Feb	67.6	53.4	67.4
15	Mar	66.8	52.3	66.7
15	Apr	70.7	52.4	70.6
15	May	65.1	50.3	65.0
15	Jun	65.3	52.9	65.1
15	Jul	65.1	49.3	65.0
15	Aug	62.8	39.6	62.8
15	Sep	62.6	47.6	62.4
15	Oct	62.1	42.6	62.1
15	Nov	NA	NA	NA
15	Dec	60.1	46.2	60.0

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
16	Jan	57.0	44.7	56.7
16	Feb	58.1	45.6	57.9
16	Mar	57.1	45.0	56.8
16	Apr	58.4	49.4	57.9
16	May	60.2	52.3	59.5
16	Jun	59.6	51.0	58.9
16	Jul	63.5	50.4	63.3
16	Aug	66.2	52.2	66.0
16	Sep	64.1	51.0	63.8
16	Oct	60.2	49.9	59.8
16	Nov	59.0	50.2	58.4
16	Dec	56.0	48.4	55.2

18	Jan	67.2	55.2	66.9
18	Feb	70.0	59.5	69.6
18	Mar	69.9	58.1	69.6
18	Apr	69.6	58.1	69.3
18	May	65.1	53.3	64.8
18	Jun	61.1	45.8	61.0
18	Jul	60.7	45.3	60.6
18	Aug	60.9	47.7	60.7
18	Sep	60.8	45.7	60.7
18	Oct	NA	NA	NA
18	Nov	63.0	43.8	63.0
18	Dec	61.6	45.8	61.5

21	Jan	65.2	60.6	63.4
21	Feb	66.2	61.9	64.3
21	Mar	66.4	62.3	64.2
21	Apr	66.2	61.0	64.7
21	May	64.1	58.9	62.5
21	Jun	61.2	53.9	60.3
21	Jul	61.7	53.3	61.1
21	Aug	60.3	53.1	59.4
21	Sep	60.2	53.0	59.3
21	Oct	64.7	41.1	64.6
21	Nov	63.4	57.8	62.0
21	Dec	63.1	57.9	61.5

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
25	Jan	63.5	55.6	62.7
25	Feb	64.0	56.6	63.1
25	Mar	63.9	56.5	63.0
25	Apr	64.0	56.5	63.1
25	May	64.6	58.8	63.2
25	Jun	63.1	56.3	62.0
25	Jul	63.1	56.6	62.1
25	Aug	62.9	56.2	61.8
25	Sep	63.1	57.3	61.7
25	Oct	63.0	57.7	61.6
25	Nov	63.4	56.4	62.4
25	Dec	63.5	55.9	62.7

26	Jan	59.9	41.1	59.8
26	Feb	60.0	43.1	59.9
26	Mar	58.7	34.8	58.7
26	Apr	59.2	42.8	59.1
26	May	61.1	40.2	61.0
26	Jun	59.7	38.6	59.6
26	Jul	59.0	40.4	58.9
26	Aug	58.2	38.0	58.1
26	Sep	58.9	40.7	58.9
26	Oct	58.5	38.1	58.5
26	Nov	NA	NA	NA
26	Dec	NA	NA	NA

27	Jan	57.0	43.7	56.7
27	Feb	58.5	41.6	58.5
27	Mar	62.2	45.3	62.1
27	Apr	56.4	38.5	56.4
27	May	58.7	41.6	58.6
27	Jun	56.3	40.4	56.2
27	Jul	56.8	38.9	56.7
27	Aug	56.9	38.6	56.8
27	Sep	59.2	51.7	58.3
27	Oct	57.7	44.6	57.5
27	Nov	58.5	41.5	58.4
27	Dec	56.6	40.8	56.5

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
28	Jan	53.7	36.0	53.7
28	Feb	53.4	30.6	53.4
28	Mar	NA	NA	NA
28	Apr	54.9	40.6	54.7
28	May	57.9	45.0	57.7
28	Jun	58.7	35.5	58.7
28	Jul	56.0	34.0	56.0
28	Aug	57.1	38.9	57.1
28	Sep	56.4	35.9	56.4
28	Oct	63.4	51.8	63.0
28	Nov	NA	NA	NA
28	Dec	53.2	29.5	53.2

29	Jan	55.6	40.1	55.5
29	Feb	57.5	41.2	57.4
29	Mar	55.8	43.1	55.6
29	Apr	55.6	41.6	55.4
29	May	59.1	46.2	58.8
29	Jun	57.9	39.9	57.9
29	Jul	60.6	39.1	60.6
29	Aug	58.7	41.3	58.6
29	Sep	58.1	40.9	58.0
29	Oct	55.4	40.9	55.2
29	Nov	61.6	40.3	61.6
29	Dec	55.7	40.2	55.6

33	Jan	58.0	38.4	58.0
33	Feb	58.2	39.2	58.2
33	Mar	57.0	40.6	56.9
33	Apr	57.4	39.7	57.3
33	May	58.6	39.1	58.5
33	Jun	57.4	36.9	57.4
33	Jul	60.5	37.6	60.4
33	Aug	57.3	41.1	57.2
33	Sep	56.5	38.6	56.4
33	Oct	56.2	39.3	56.1
33	Nov	57.8	44.7	57.6
33	Dec	56.8	39.8	56.7

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
34	Jan	60.8	56.3	59.0
34	Feb	64.1	58.4	62.8
34	Mar	61.9	58.1	59.6
34	Apr	61.7	57.0	59.9
34	May	62.2	57.0	60.6
34	Jun	61.2	57.3	59.0
34	Jul	61.8	57.0	60.0
34	Aug	61.1	57.8	58.3
34	Sep	61.4	57.7	59.0
34	Oct	62.0	58.6	59.3
34	Nov	NA	NA	NA
34	Dec	60.4	56.6	58.1

35	Jan	60.9	35.7	60.9
35	Feb	61.7	44.1	61.6
35	Mar	61.0	32.9	61.0
35	Apr	60.1	37.7	60.1
35	May	60.0	35.1	60.0
35	Jun	59.1	38.8	59.1
35	Jul	59.6	36.8	59.6
35	Aug	60.3	34.0	60.3
35	Sep	59.7	41.4	59.6
35	Oct	59.8	37.3	59.7
35	Nov	61.4	38.9	61.4
35	Dec	60.9	37.7	60.9

36	Jan	69.1	38.3	69.1
36	Feb	69.3	38.6	69.3
36	Mar	68.8	28.8	68.8
36	Apr	65.9	54.2	65.6
36	May	63.8	51.7	63.5
36	Jun	61.6	42.0	61.5
36	Jul	63.2	50.2	63.0
36	Aug	60.2	37.5	60.2
36	Sep	59.5	39.5	59.4
36	Oct	64.3	53.2	63.9
36	Nov	NA	NA	NA
36	Dec	59.8	41.1	59.7

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
37	Jan	59.0	52.5	57.9
37	Feb	60.2	53.3	59.2
37	Mar	59.7	52.9	58.8
37	Apr	59.2	51.9	58.3
37	May	61.7	51.2	61.3
37	Jun	59.0	51.5	58.1
37	Jul	60.0	51.7	59.3
37	Aug	58.5	51.8	57.5
37	Sep	59.0	53.0	57.7
37	Oct	59.1	54.0	57.5
37	Nov	59.2	51.9	58.3
37	Dec	58.7	52.0	57.7

38	Jan	58.2	49.9	57.5
38	Feb	61.2	49.4	60.9
38	Mar	57.8	48.4	57.3
38	Apr	58.6	50.8	57.8
38	May	58.2	49.0	57.7
38	Jun	58.5	48.1	58.1
38	Jul	58.6	49.1	58.0
38	Aug	58.8	48.2	58.5
38	Sep	58.3	51.0	57.4
38	Oct	58.9	52.1	57.9
38	Jan	58.2	49.9	57.5
38	Feb	61.2	49.4	60.9

39	Jan	57.9	41.4	57.8
39	Feb	59.5	43.3	59.4
39	Mar	58.5	42.0	58.4
39	Apr	57.3	42.1	57.2
39	May	NA	NA	NA
39	Jun	59.7	43.1	59.6
39	Jul	59.5	41.5	59.5
39	Aug	58.7	40.4	58.6
39	Sep	58.5	45.0	58.3
39	Oct	59.2	46.1	59.0
39	Nov	58.8	43.3	58.7
39	Dec	56.7	42.9	56.6

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



Site #	2013 Month	DNL _{Total}	DNL _{Aircraft}	DNL _{Community}
40	Jan	55.4	42.4	55.2
40	Feb	56.2	42.0	56.1
40	Mar	54.6	39.3	54.5
40	Apr	55.4	37.4	55.4
40	May	NA	NA	NA
40	Jun	60.9	47.6	60.7
40	Jul	61.5	41.7	61.4
40	Aug	57.2	39.7	57.2
40	Sep	55.9	37.9	55.8
40	Oct	56.9	41.2	56.8
40	Nov	59.6	47.0	59.4
40	Dec	56.3	42.5	56.1

DNL (Day-Night Level) is the average noise level of a 24-hour period. DNL accounts for the peak noise levels, noise event duration, and the time a noise event occurred. Noise events occurring between 10 p.m. and 7 a.m. are artificially increased by 10 dB to account for increased annoyance associated with night time noise.



2013

Noise Complaint Statistics

The Airports Authority's Noise Information Office, located in the Authority's corporate office building at Reagan National Airport, fields inquiries, complaints and public comments for both airports. During 2013, a growing number of complaints were associated with aircraft noise during the late-night or early morning hours, between 10 p.m. and 7 a.m. The growing demand for personal and business travel during the early morning and late-night hours has prompted additional flights during the nighttime hours, which can be disturbing to nearby residents even though today's aircraft are significantly quieter than the jets from earlier generations.

The charts below provide data on the number and nature of aircraft noise complaints throughout 2013 for Reagan National and Washington Dulles.



Ronald Reagan Washington National Airport: 299 complaints from 77 callers;

- ✦ 112 complaints were received from 1 caller.

# of Callers	Complaints per Caller	# of Complaints	% of All Callers	% of All Complaints
47	1	47	61.04 %	15.72 %
15	2	30	19.48 %	10.03 %
5	3	15	6.49 %	5.02 %
2	4	8	2.60 %	2.68 %
2	5	10	2.60 %	3.34 %
1	10	10	1.30 %	3.34 %
1	13	13	1.30 %	4.35 %
1	15	15	1.30 %	5.02 %
1	16	16	1.30 %	5.35 %
1	23	23	1.30 %	7.69 %
1	112	112	1.30 %	37.46 %

Washington Dulles International Airport: 568 complaints from 84 callers;

- ✦ 380 complaints were received from 1 caller.

# of Callers	Complaints per Caller	# of Complaints	% of All Callers	% of All Complaints
60	1	60	71.43 %	10.56 %
8	2	16	9.52 %	2.82 %
5	3	15	5.95 %	2.64 %
1	4	4	1.19 %	0.70 %
2	5	10	2.38 %	1.76 %
1	6	6	1.19 %	1.06 %
1	7	7	1.19 %	1.23 %
1	9	9	1.19 %	1.58 %
1	10	10	1.19 %	1.76 %
1	15	15	1.19 %	2.64 %
1	16	16	1.19 %	2.82 %
1	20	20	1.19 %	3.52 %
1	380	380	1.19 %	66.90 %

**2013: Ronald Reagan Washington National Airport
Noise Complaint Locations**

ST	City	Quad	# of Callers	# of Complaints
DC	Washington	NW	13	149
		SW	1	2
		Total:	14	151

MD	Accokeek		1	1
	Bethesda		4	23
	Potomac		1	1
	Silver Spring		1	2
	Total:		7	27

VA	Alexandria		15	32
	Arlington		29	66
	Fairfax		1	1
	Falls Church		1	1
	McLean		8	19
	Springfield		2	2
	Total:		56	121

2013 Total:			77	299
--------------------	--	--	-----------	------------

**2013: Washington Dulles International Airport
Noise Complaint Locations**

ST	City	# of Callers	# of Complaints
MD	Bethesda	1	1
	Chevy Chase	1	1
	Poolesville	2	18
	Potomac	1	1
	Total:	5	21

VA	Aldie	2	11
	Ashburn	18	34
	Brambleton	3	11
	Bristow	1	2
	Centreville	6	9
	Chantilly	15	409
	Clifton	1	1
	Fairfax	4	12
	Fairfax Station	1	2
	Gainesville	1	1
	Great Falls	1	3
	Herndon	11	31
	Middleburg	1	1
	Oak Hill	2	2
	Oakton	1	1
	Purcellville	1	1
	Reston	6	8
	Sterling	1	1
	Stone Ridge	3	7
	Total:	79	547

2013 Total:	84	568
--------------------	-----------	------------



**2013: Ronald Reagan Washington National Airport
Noise Complaint Description**

Complaint Description: Nature of Disturbance	% of Total Complaints
Aircraft Off Course	5.0%
Aircraft Too Low	14.0%
Constant Noise	20.1%
Noise At Wrong Time	7.4%
Other	2.0%
Run-ups	0.3%
Too Much Noise	48.8%
Unknown	2.0%
Vibrations	0.3%

**2013: Washington Dulles International Airport
Noise Complaint Description**

Complaint Description: Nature of Disturbance	% of Total Complaints
Aircraft Off Course	0.2%
Aircraft Too Low	9.0%
Constant Noise	29.4%
Noise At Wrong Time	4.0%
Other	0.7%
Over Use of Runway	0.4%
Too Much Noise	27.5%
Unknown	1.8%
Vibrations	27.1%