

Airport Noise Community Questionnaire: Initial Draft Results

MWAA CWG North of Airport Committee

October 1, 2020

Questionnaire Basics

- Questionnaire open for web responses from August 21, 2020 to September 21, 2020
- 10 questions over eight web pages (including cover page, shown at right)
- Self-selecting responses (convenience sample)
- 1,642 unique responses

Aircraft Noise Mitigation Study

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Arlington County and Montgomery County have jointly funded a study to identify, evaluate and propose mitigations to reduce aviation noise impacts on communities north of Reagan Washington National Airport (DCA). The study will be conducted by ABCx2, who will provide technical resources to elected officials, staff, and the North of Airport Committee of the DCA Community Working Group.

The North of Airport Committee is made up of representatives of Montgomery County, Arlington County, Fairfax County and Washington, D.C. Feedback from members of these communities is sought as the team develops guiding principles by which future proposals will be measured.

Please Note: Helicopter noise is not part of the scope of work for this study. In addition, any flight procedures proposed to the FAA must meet flyability and safety design criteria and be endorsed by the DCA Community Working Group.

For more information and updates on the Aircraft Noise Mitigation Study, visit the [NOWGEN-DCA Project site](#), [Aircraft Noise Updates](#), or email noise2020@arlingtonva.us.

Arlington County and Montgomery County, along with the study team, want to hear from you!

GET STARTED NOW!

Residential Location of Respondents

Q9 Residential ZIP Code	
Response	1601
NR	41
Total	1642
Resp. Rate	97.5%

District of Columbia	148	9.2%
Maryland	956	59.7%
Virginia	489	30.5%
Outside of National Capital Region	8	0.5%
Total	1,601	100.0%

Source of ZIP Code reference table:

<https://simplemaps.com/data/us-zips>

How Many Years Have You Lived In Your Neighborhood?

Q10 Length of Residence	
Response	1,638
NR	4
Total	1,642
Resp. Rate	99.8%
Frequency Distribution	
Q10	CountOfQ10
Less Than 1 Year	33
1 to 5 Years	287
6 to 10 Years	247
10 or More Years	1071
Total	1,638

Outdoor Noise at Home

Q1 Outdoor	
Response	1,592
NR	50
Total	1,642
Resp. Rate	97.0%
Frequency Distribution	
Q1_NUM	Count
1	101
2	78
3	155
4	428
5	830
Average	
4.1	5= highly disruptive

Indoor Noise at Home

Q2 Indoor	
Response	1,588
NR	54
Total	1,642
Resp. Rate	96.7%
Frequency Distribution	
Q2_NUM	Count
1	160
2	197
3	323
4	508
5	400
Average	
3.5	5= highly disruptive

Change Over Last 4-5 Years

Q3 Noise Change		
Response	1632	
NR	10	
Total	1642	
Resp. Rate	99.4%	
Frequency Distribution		
Q3_NUM	Q3	Count
1	Much Less Noise	18
2	Less Noise	48
3	No Difference	155
4	Greater Noise	435
5	Much Greater Noise	976
Average		
4.4	5=Much Greater Noise	

Flight Procedure Design Priorities

Q4A_OPTIONS	P1	P2	P3	P4	P5	P6
Design flight paths based on the nature of land use considering non-aircraft ambient noise levels.	87	222	397	440	394	102
Design flight paths over the Potomac River corridor to maximize time over water.	426	336	259	271	245	105
Design flight paths so noise exposure is shared equitably among all communities so that no communities experience all of the noise for the entire region.	467	383	301	229	189	73
Design flight paths to avoid areas of highest residential density.	340	384	358	294	210	56
Design flight paths to be consistent with historical (pre-2014) patterns.	222	261	253	320	460	126
Other	100	56	74	88	144	1,180

Flight Procedure Design Priorities (VA Responses Only)

Q4A_OPTIONS	P1	P2	P3	P4	P5	P6
Design flight paths based on the nature of land use considering non-aircraft ambient noise levels.	23	83	124	115	116	28
Design flight paths over the Potomac River corridor to maximize time over water.	180	118	76	51	44	20
Design flight paths so noise exposure is shared equitably among all communities so that no communities experience all of the noise for the entire region.	95	104	97	92	73	28
Design flight paths to avoid areas of highest residential density.	99	118	103	87	60	22
Design flight paths to be consistent with historical (pre-2014) patterns.	41	49	67	119	160	53
Other	51	17	22	25	36	338

Flight Procedure Design Priorities (MD Responses Only)

Q4A_OPTIONS	P1	P2	P3	P4	P5	P6
Design flight paths based on the nature of land use considering non-aircraft ambient noise levels.	48	108	231	268	238	63
Design flight paths over the Potomac River corridor to maximize time over water.	181	185	157	187	170	76
Design flight paths so noise exposure is shared equitably among all communities so that no communities experience all of the noise for the entire region.	337	237	173	95	90	24
Design flight paths to avoid areas of highest residential density.	192	224	203	178	132	27
Design flight paths to be consistent with historical (pre-2014) patterns.	159	179	152	173	237	56
Other	39	23	40	55	89	710

Flight Procedure Design Priorities (DC Responses Only)

Q4A_OPTIONS	P1	P2	P3	P4	P5	P6
Design flight paths based on the nature of land use considering non-aircraft ambient noise levels.	11	23	26	44	34	10
Design flight paths over the Potomac River corridor to maximize time over water.	57	24	21	19	21	6
Design flight paths so noise exposure is shared equitably among all communities so that no communities experience all of the noise for the entire region.	23	25	24	35	22	19
Design flight paths to avoid areas of highest residential density.	32	32	43	22	15	4
Design flight paths to be consistent with historical (pre-2014) patterns.	18	28	26	22	43	11
Other	7	16	8	6	13	98

Noise Sensitive Land Uses

Q5A_OPTIONS	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Bodies of Water (e.g. Potomac River)	29	69	108	134	178	191	160	250	418	105
Commercial Properties	9	19	54	135	230	317	350	284	192	52
Government Properties/Installations	10	13	40	93	174	303	385	321	225	78
Historic Areas	26	82	207	358	369	250	168	92	58	32
Other	39	18	24	33	39	76	82	89	90	1,152
Outdoor Spaces (parks, monuments, etc.)	89	402	458	303	145	81	76	44	31	13
Residential Areas	1,291	176	62	37	18	9	9	12	17	11
Roads (highways, parkways)	8	21	31	59	91	135	224	416	515	142
Schools	103	604	405	223	136	60	40	28	24	19
Urban Areas	38	238	253	267	262	220	148	106	72	38

Noise Sensitive Land Uses (VA Responses Only)

Q5A_OPTIONS	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Bodies of Water (e.g. Potomac River)	6	19	22	26	46	52	41	90	156	31
Commercial Properties	5	7	19	47	67	100	104	81	49	10
Government Properties/Installations	4	8	12	23	64	95	117	87	55	24
Historic Areas	6	27	62	108	111	74	46	20	21	14
Other	16	9	10	13	10	16	28	19	28	340
Outdoor Spaces (parks, monuments, etc.)	35	126	123	80	43	30	24	14	8	6
Residential Areas	359	62	22	17	6	5	4	9	3	2
Roads (highways, parkways)	3	6	9	22	25	42	68	128	143	43
Schools	38	156	125	68	41	21	12	8	12	8
Urban Areas	17	69	85	85	76	54	45	33	14	11

Noise Sensitive Land Uses (MD Responses Only)

Q5A_OPTIONS	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Bodies of Water (e.g. Potomac River)	20	48	77	92	113	110	97	131	212	56
Commercial Properties	1	11	29	69	138	173	206	169	124	36
Government Properties/Installations	4	4	18	57	93	183	210	202	136	49
Historic Areas	10	33	116	216	219	148	106	60	30	18
Other	18	4	10	14	25	48	43	55	49	690
Outdoor Spaces (parks, monuments, etc.)	45	247	286	184	72	39	40	23	17	3
Residential Areas	780	96	32	15	9	3	4	3	10	4
Roads (highways, parkways)	4	12	19	33	50	78	136	237	315	72
Schools	57	370	235	129	77	33	24	15	9	7
Urban Areas	17	131	134	147	160	141	90	61	54	21

Noise Sensitive Land Uses (DC Responses Only)

Q5A_OPTIONS	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Bodies of Water (e.g. Potomac River)	1	1	4	12	14	17	17	25	43	14
Commercial Properties	0	1	5	14	20	32	29	30	13	4
Government Properties/Installations	0	1	6	11	14	19	42	22	29	4
Historic Areas	9	17	20	28	27	24	13	6	4	0
Other	4	4	3	3	2	11	9	9	8	95
Outdoor Spaces (parks, monuments, etc.)	6	21	38	30	25	10	8	5	3	2
Residential Areas	119	15	6	2	1	0	0	0	1	4
Roads (highways, parkways)	0	0	0	3	11	13	17	40	43	21
Schools	6	59	39	21	11	5	2	4	1	0
Urban Areas	3	29	27	24	23	17	11	7	3	4

Arrivals or Departures More Disruptive

Most Disruptive Time of Day

Q6 Most Disruption	
Response	1601
NR	41
Total	1642
Resp. Rate	97.5%
Frequency Distribution	
Q6	Count
Flights arriving	267
Flights departing	116
Both equally	586
Both, but flights arriving disrupt more than flights departing	399
Both, but flights departing disrupt more than flights arriving	233

Q7 Most Disruptive Time of Day				
TIME	P1	P2	P3	P4
Early morning between 5:00 a.m. and 8:00 a.m.	710	325	334	273
Midday between 8:00 a.m. and 4:00 p.m.	214	384	491	553
Afternoon/early evening between 4:00 p.m. and 8:00 p.m.	379	422	551	290
Evening/night between 8:00 p.m. and 2:00 a.m.	339	511	266	526

Next Steps

- Validate Analysis
- Additional Tabulations?
- Written Report for Project Website