



Noise Compatibility Report

2020 Quarter 3
July - September

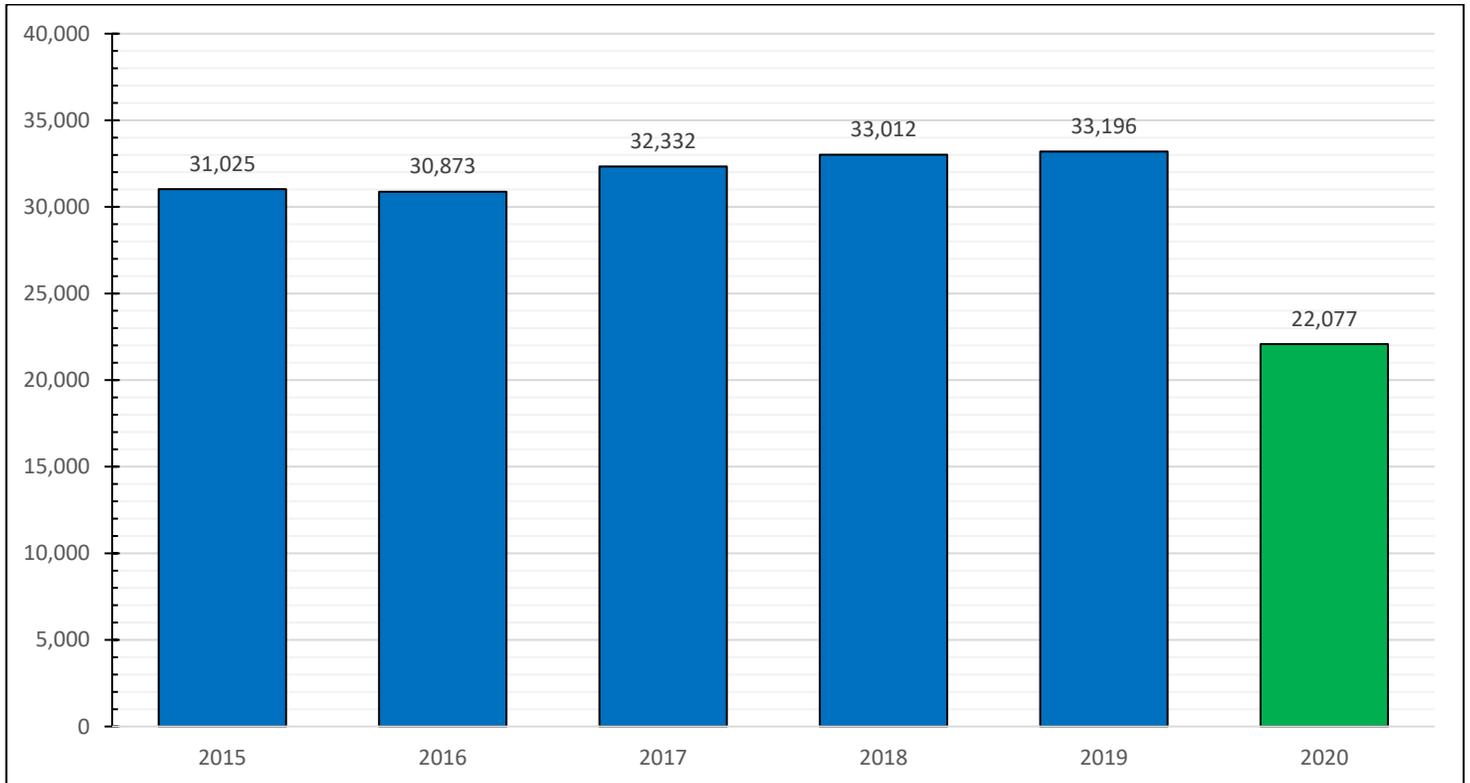
Disclaimer

- The Noise Compatibility Plan (NCP) at Cleveland Hopkins International Airport (CLE) combines the existing approved Part 150 Noise Compatibility Plan with Air Traffic Control Tower (ATCT) requirements to ensure the safe and expeditious handling of air traffic. While safety is paramount to any aircraft operation, noise sensitivity to the surrounding communities is also of key importance in airport operations.
- CLE is not directly responsible for changes made to flight plans or routes of aircraft.
- Adherence to approved noise abatement measures is voluntary and subject to change based on weather, efficiency, and safety.
- The contents of this report are for informational purposes only. The information cannot be used for enforcement of any Noise Abatement Measure.
- Due to the large volume of data when reporting noise, not all noise and flight information can be shown in this report.
- If more information is needed, please contact the noise hotline and the airport will respond as soon as possible.

Aircraft Operations

Cleveland 3rd Quarter Operations 2015 – 2020

- There were **22,077** operations in the 3rd Qtr. 2020; this is 33.5% below the 3rd Qtr. 2019.



Fleet Mix

Cleveland Hopkins had **22,077** operations in Quarter 3 of 2020. Here are some of the notable aircraft that CLE welcomes and sends off on a regular basis.

Aircraft	Q2 Total
Boeing 737 Series	3,681
Embraer ERJ 175	1,052
Bombardier CRJ-900	1,811
Airbus A320	743
MD-11	142

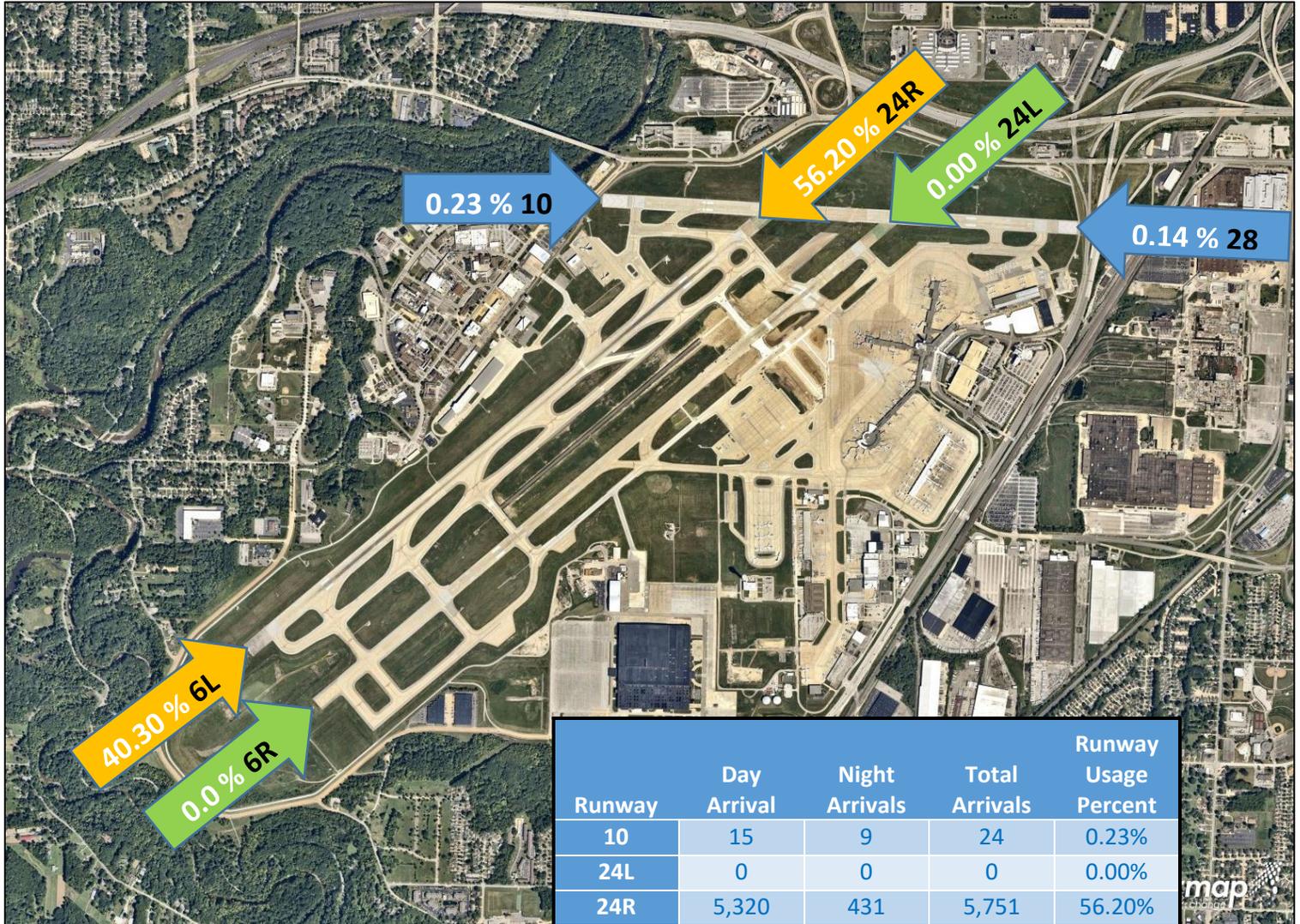


Other notable aircraft operations include:

Aircraft	Q2 Total
Air Taxi	13,407
General Aviation	1,434
Military	72



Runway Use: 3rd Quarter, 2020 Arrivals



Runway	Day Arrival	Night Arrivals	Total Arrivals	Runway Usage Percent
10	15	9	24	0.23%
24L	0	0	0	0.00%
24R	5,320	431	5,751	56.20%
28	8	6	14	0.14%
6L	3,798	326	4,124	40.30%
6R	0	0	0	0.00%
UNK	296	25	321	3.14%
Totals	9437	797	10234	100.00%

Runway Use: 3rd Quarter, 2020 Departures

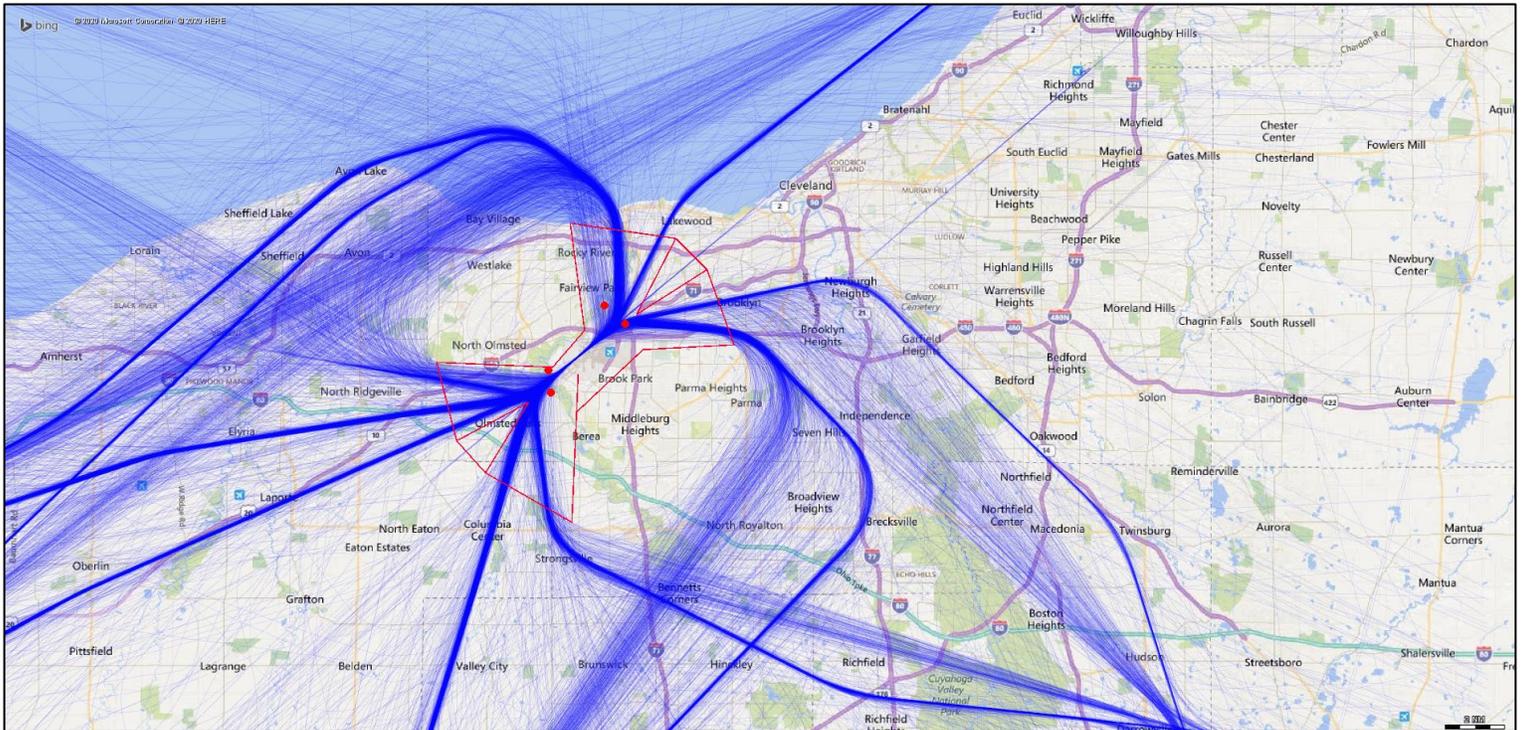


Runway	Day Departure	Night Departure	Total Departure	Runway Usage Percent
10	0	0	0	0.00%
24L	0	0	0	0.00%
24R	6,234	588	6,822	57.60%
28	0	0	0	0.00%
6L	4,276	332	4,608	38.91%
6R	0	0	0	0.00%
UNK	388	25	413	3.49%
Totals	10898	945	11843	100.00%

Departure Headings, 3rd Quarter: Day-time

2020 3rd Quarter day-time departure flight tracks (jet propulsion only). Day-time reflects 06:00 am to 11:00 pm.

Of **7,133** departure flights only **388 (5%)** were outside or too low for their respective departure corridor. These corridors represent the airspace through which aircraft depart and arrive. When an aircraft departs, it has a certain path it follows which is a function of altitude and heading.



Key:

Flight Tracks 

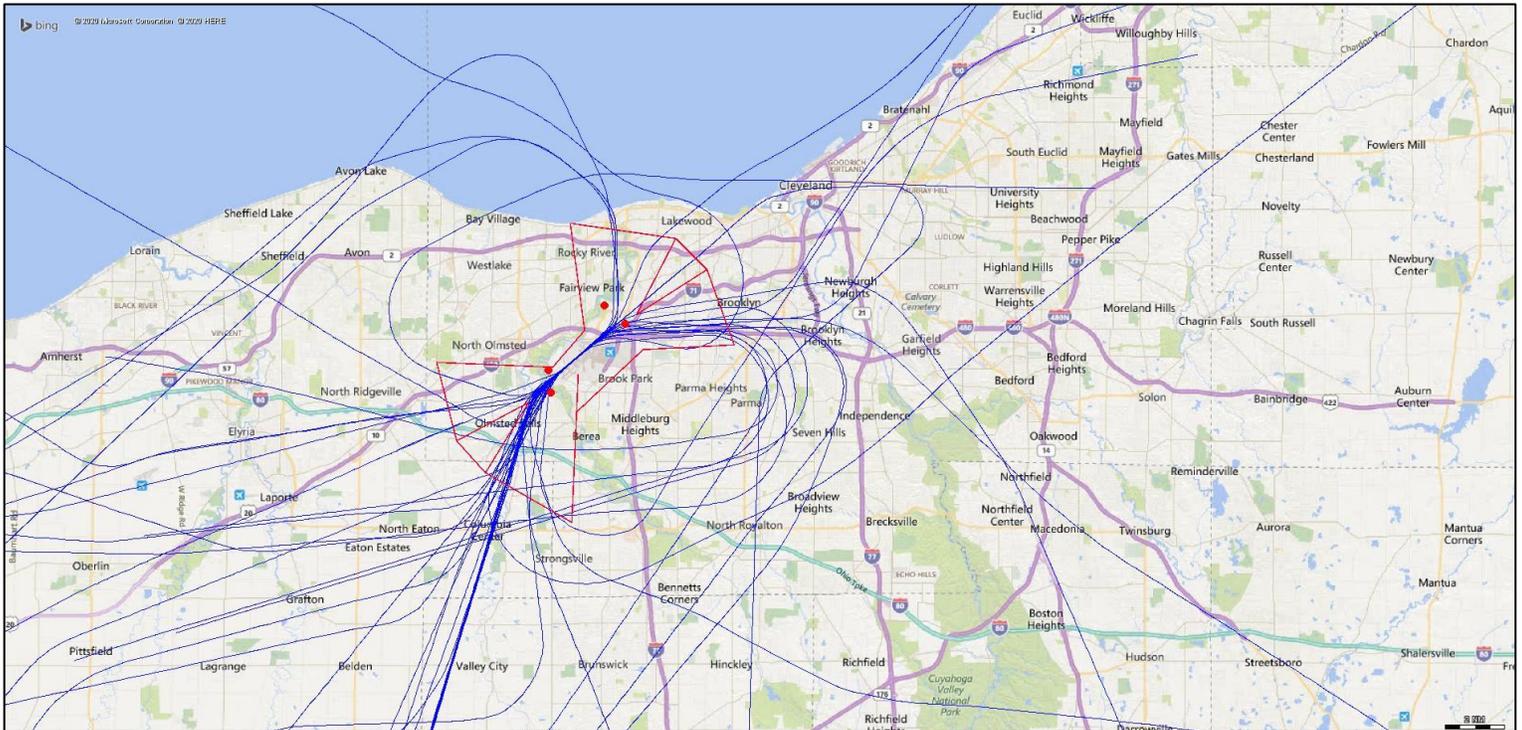
Departure Gates 

Noise Monitoring Station 

Departure Headings, 3rd Quarter: Night-time

2020 3rd Quarter night-time departure flight tracks (jet propulsion only). Night-time reflects 11:00 pm to 06:00 am.

Of 54 departure flights only 5 (9%) were outside or too low for their respective departure corridor. These corridors represent the airspace through which aircraft depart and arrive. When an aircraft departs, it has a certain path it follows which is a function of altitude and heading.



Key:

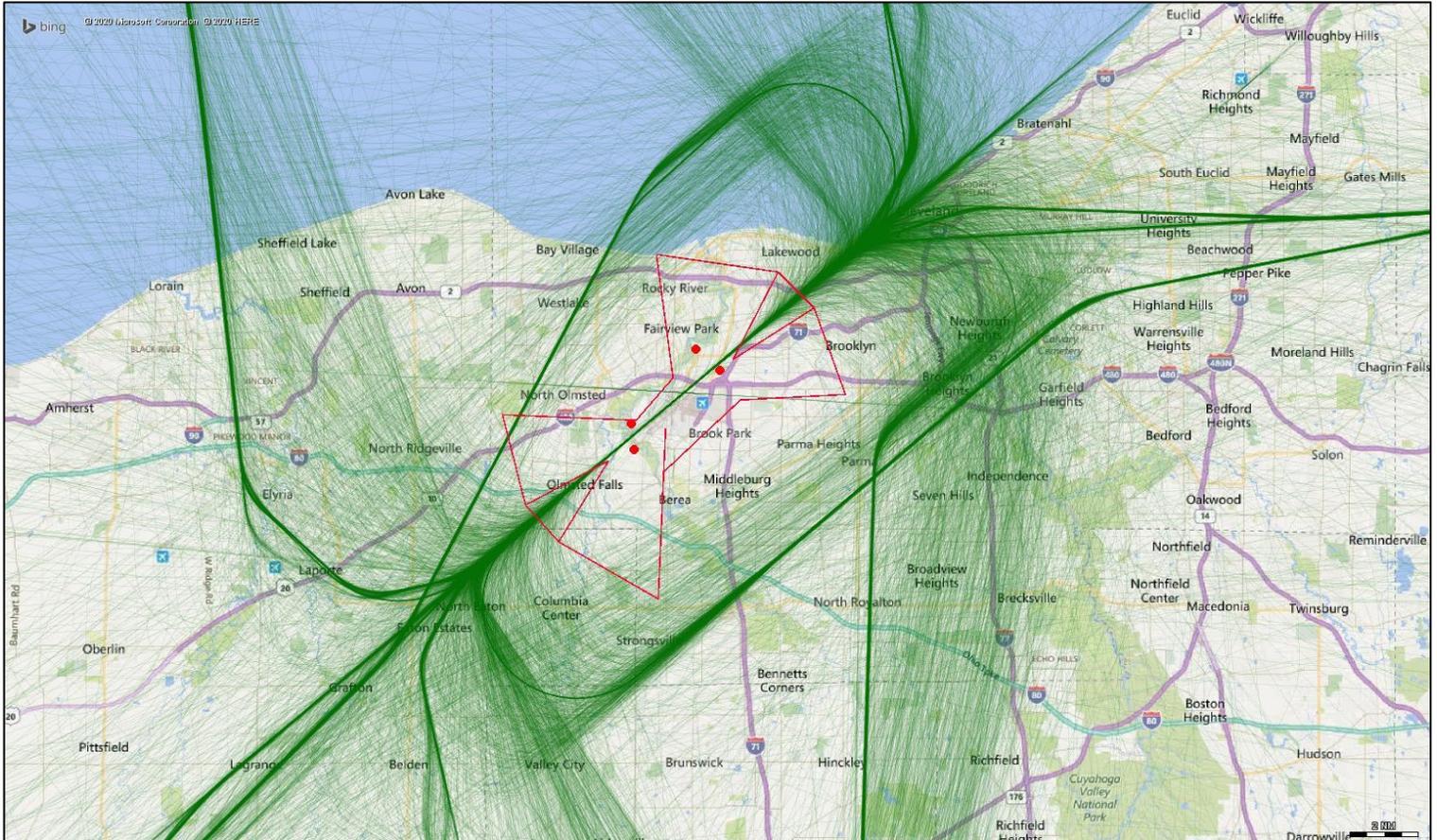
Flight Tracks ———

Departure Gates ———

Noise Monitoring Station ●

Arrival Headings, 3rd Quarter

Day-time and night-time arrivals for all of Quarter 3 are shown here (all propulsion types). Note that a voluntary measure or the Noise Compatibility Program calls for all aircraft arriving between 10:00 pm and 7:00 pm, wind and weather permitting, to intercept final approach course no closer than four miles before touchdown.



Flight Tracks —————

Noise Monitoring Station ●

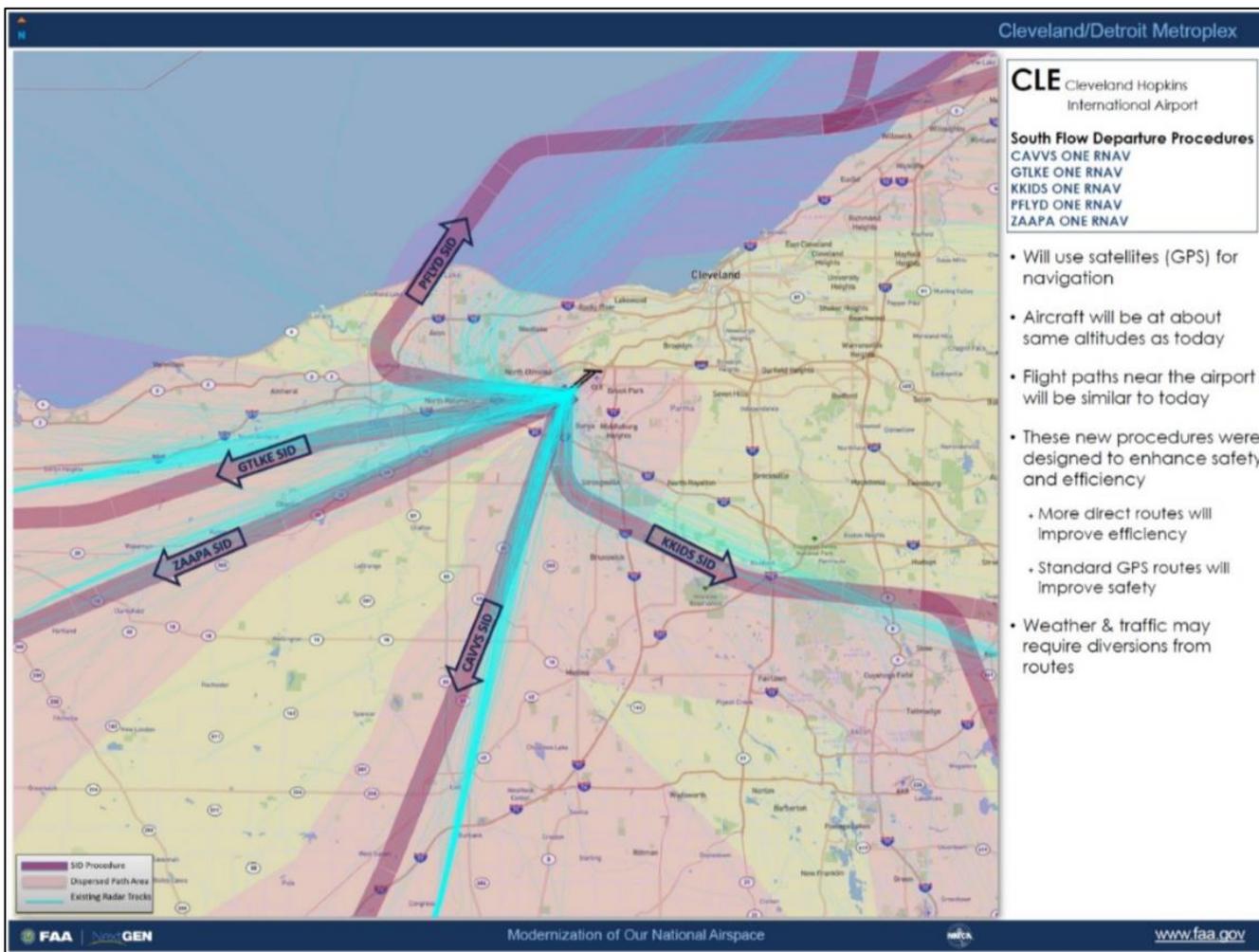
Metroplex: South Flow (Departures)

What is the Cleveland/Detroit Metroplex?

- Starting in mid-September 2018, the Federal Aviation Administration (FAA) made airspace changes in and around Cleveland and Detroit airports. These changes are part of the Cleveland-Detroit Metroplex project, which will bring updated satellite procedures to improve traffic flow.
- In most cases, aircraft will follow the same tracks that they do today. The difference is that aircraft will be using modernized procedures that replace dozens of decades-old conventional air traffic control procedures. In all, the Cleveland/Detroit Metroplex project includes 71 new satellite-based procedures. This project is a key component of the FAA's Next Generation Air Transportation System (NextGen) and a nationwide effort to build the foundation for future safety and efficiency improvements.

Source: <https://www.clevelandairport.com/faa-makes-airspace-changes-clevelanddetroit-metroplex-project>

South flow departures take off from runway 24L and runway 24R.



Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

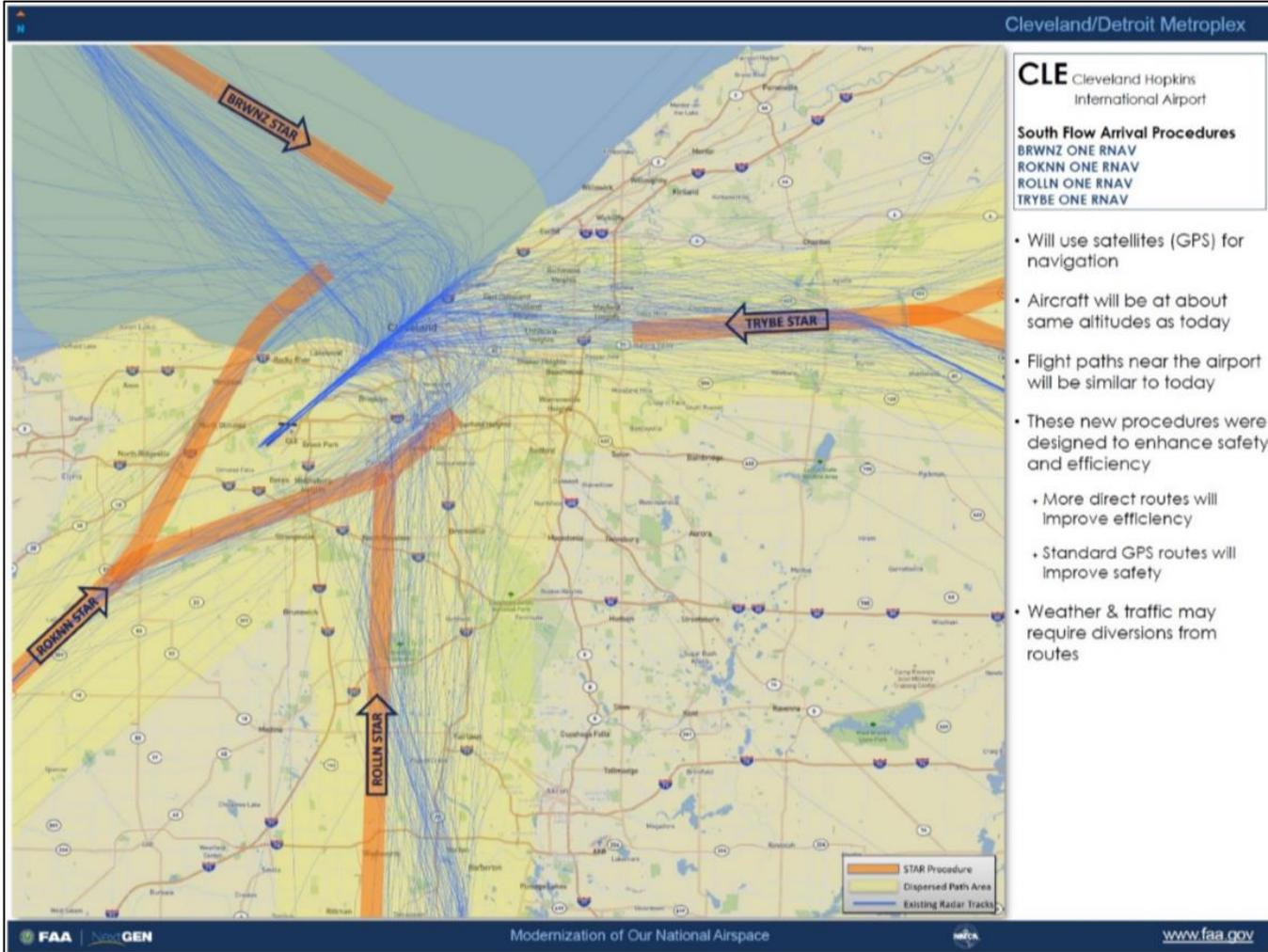
Cleveland Hopkins International Airport

Noise Hotline: 216-898-5220

clevelandairport.com

Metroplex: South Flow (Arrivals)

South flow arrivals land on runway 24L and runway 24R.

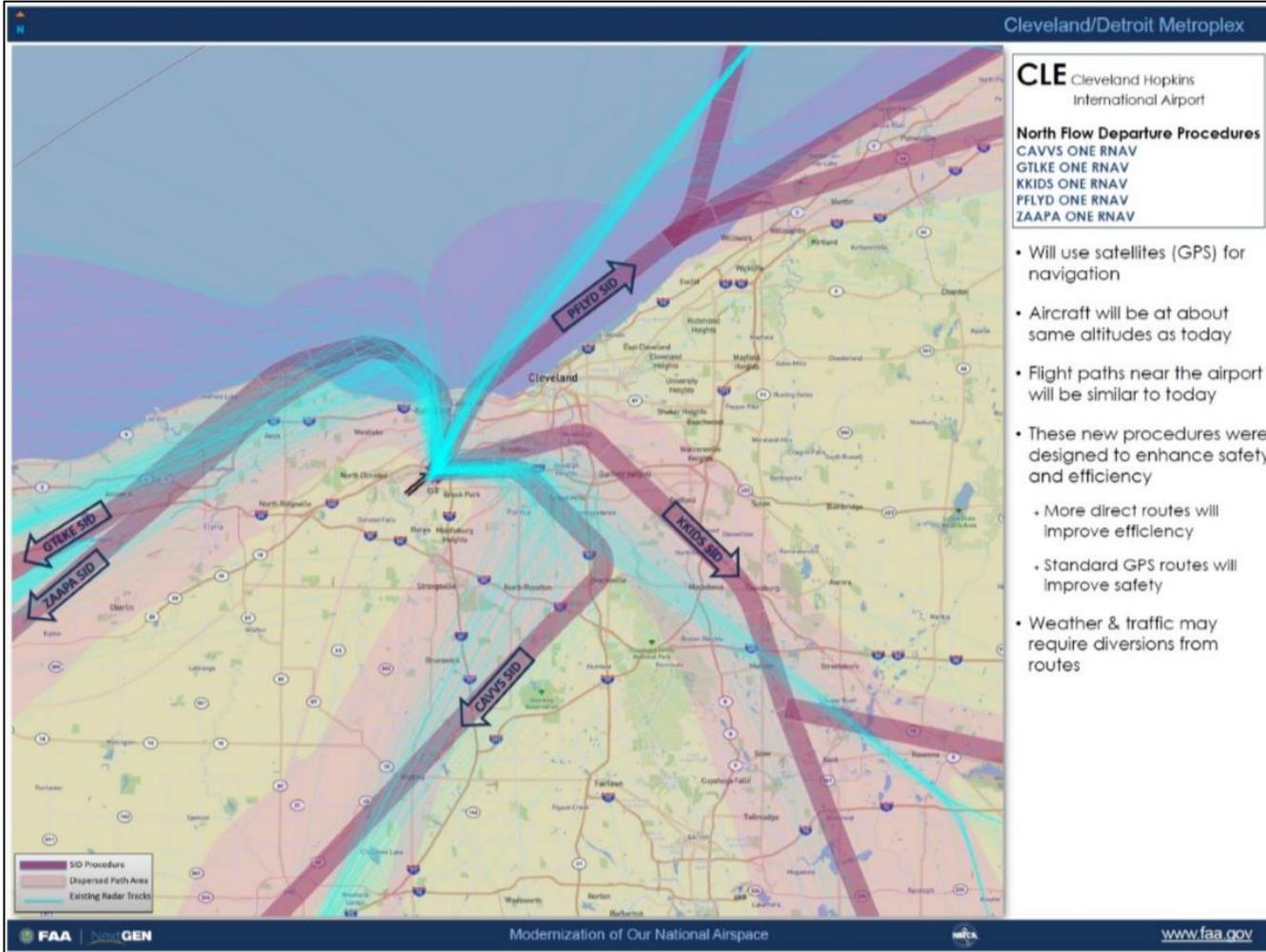


Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Metroplex: North Flow (Departures)

North flow departures take off from runway 6L and runway 6R.

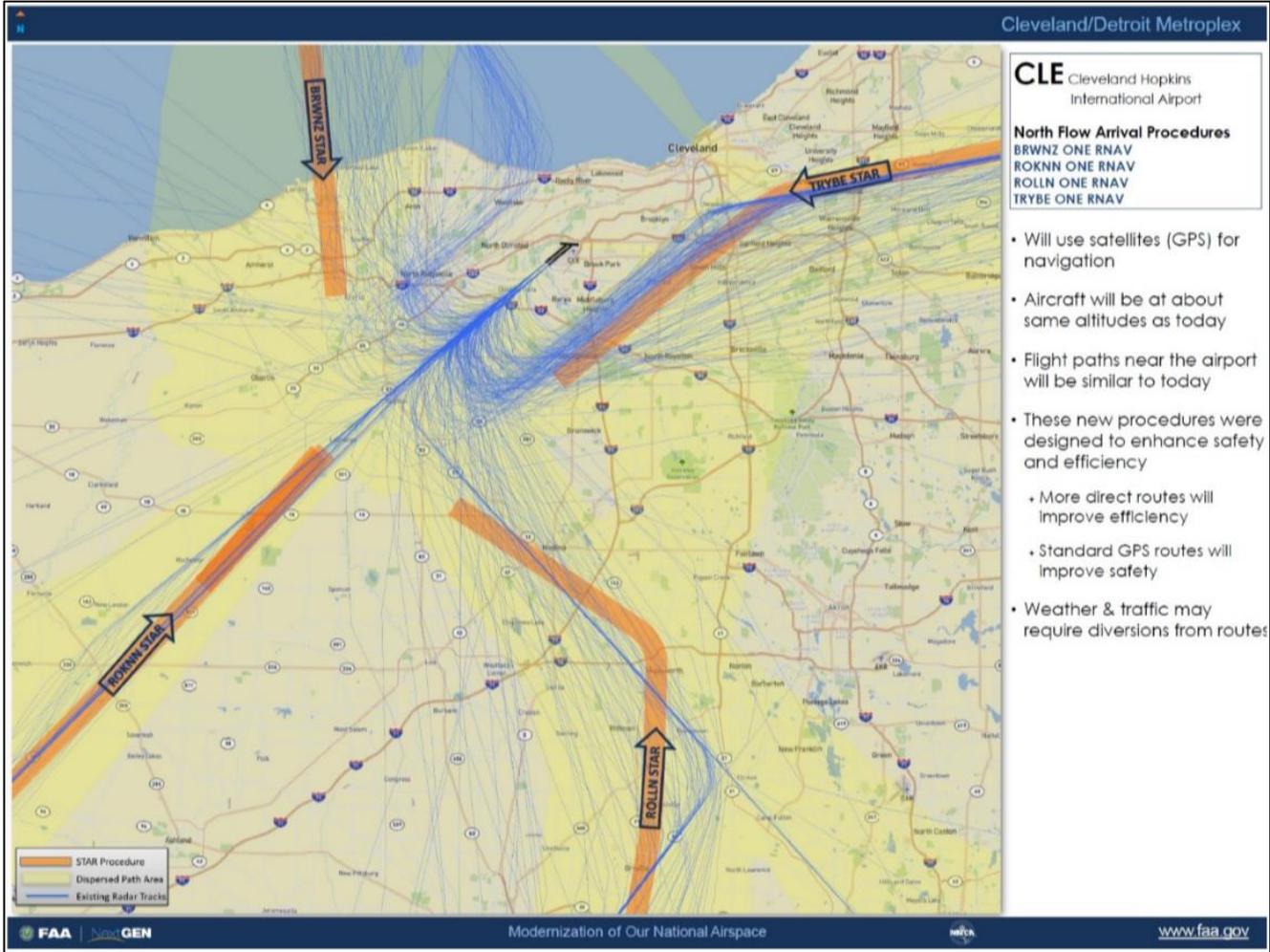


Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Metroplex: North Flow (Arrivals)

North flow arrivals land on runway 6L and runway 6R.



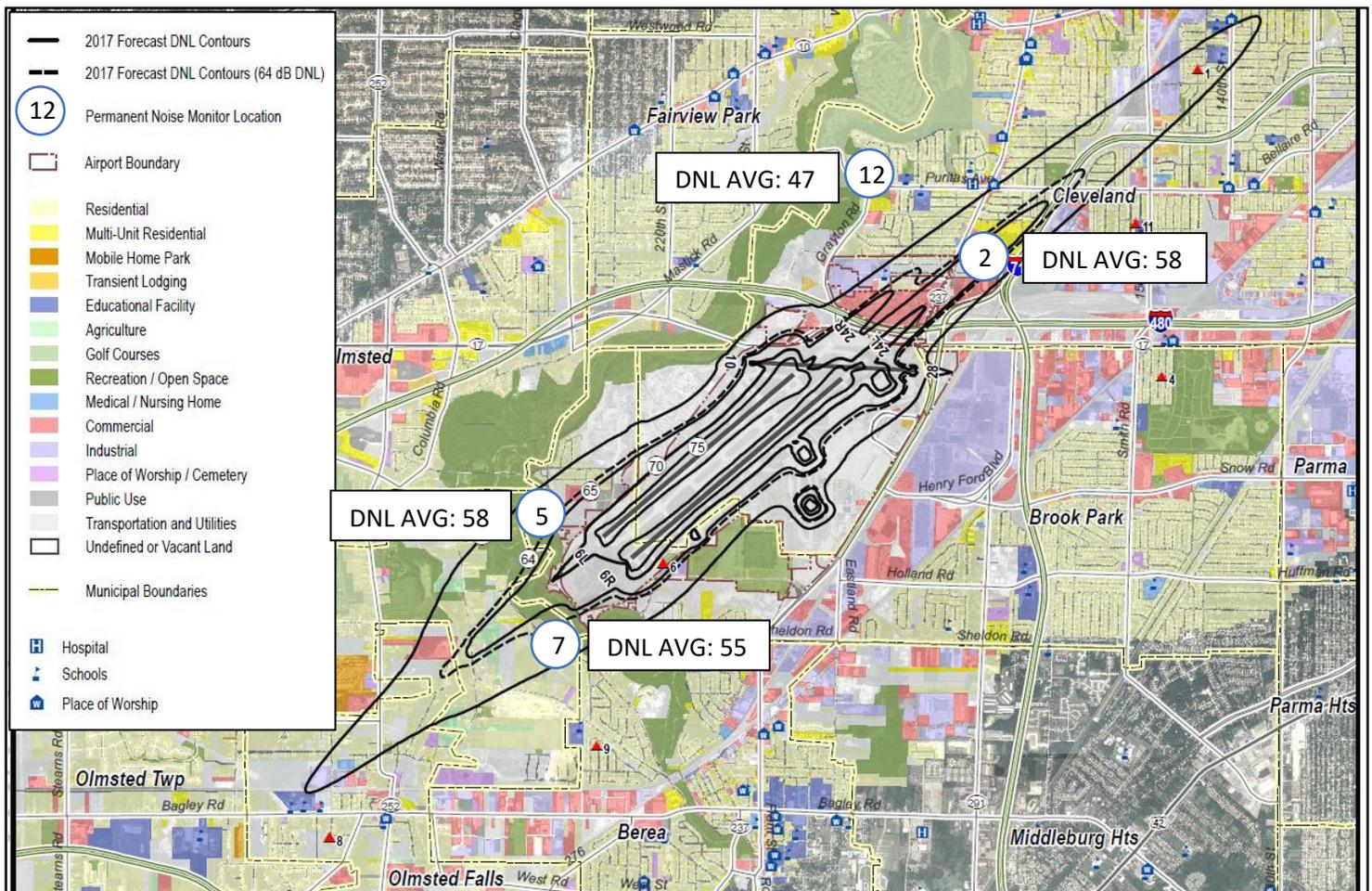
Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Aircraft Noise: Q3 Average DNL by Noise Monitoring Station (NMS)

What is DNL?

- As FAA's primary metric for aviation noise analysis, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of the day-night average sound level (DNL) in decibels (dB). The 65 DNL is the Federal significance threshold for aircraft noise exposure.
- If interested in the Fundamentals of Noise and Sound, please visit: https://www.faa.gov/regulations_policies/policy_guidance/noise/basics/



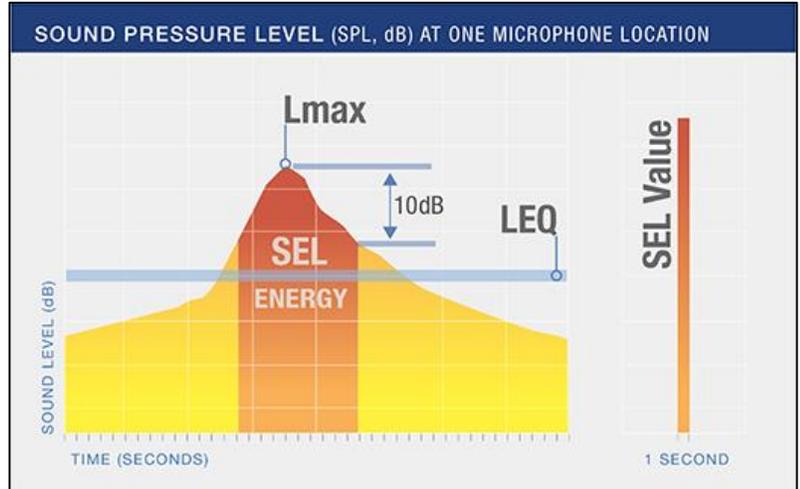
Top Three Lmax at Each NMS

Lmax is the single loudest point during a noise event.

Sounds Exposure Level (SEL) is a measure that takes into account all noises over the entire duration of the noise event.

Decibel (db) is the unit used to measure the intensity of a sound. The human ear hears sound pressures over a wide range. Decibels, which are measured on a *logarithmic* scale, correspond to the way our ears interpret sound pressures.

NMS – Noise Monitoring Station: For a map of these stations, refer to the previous page.

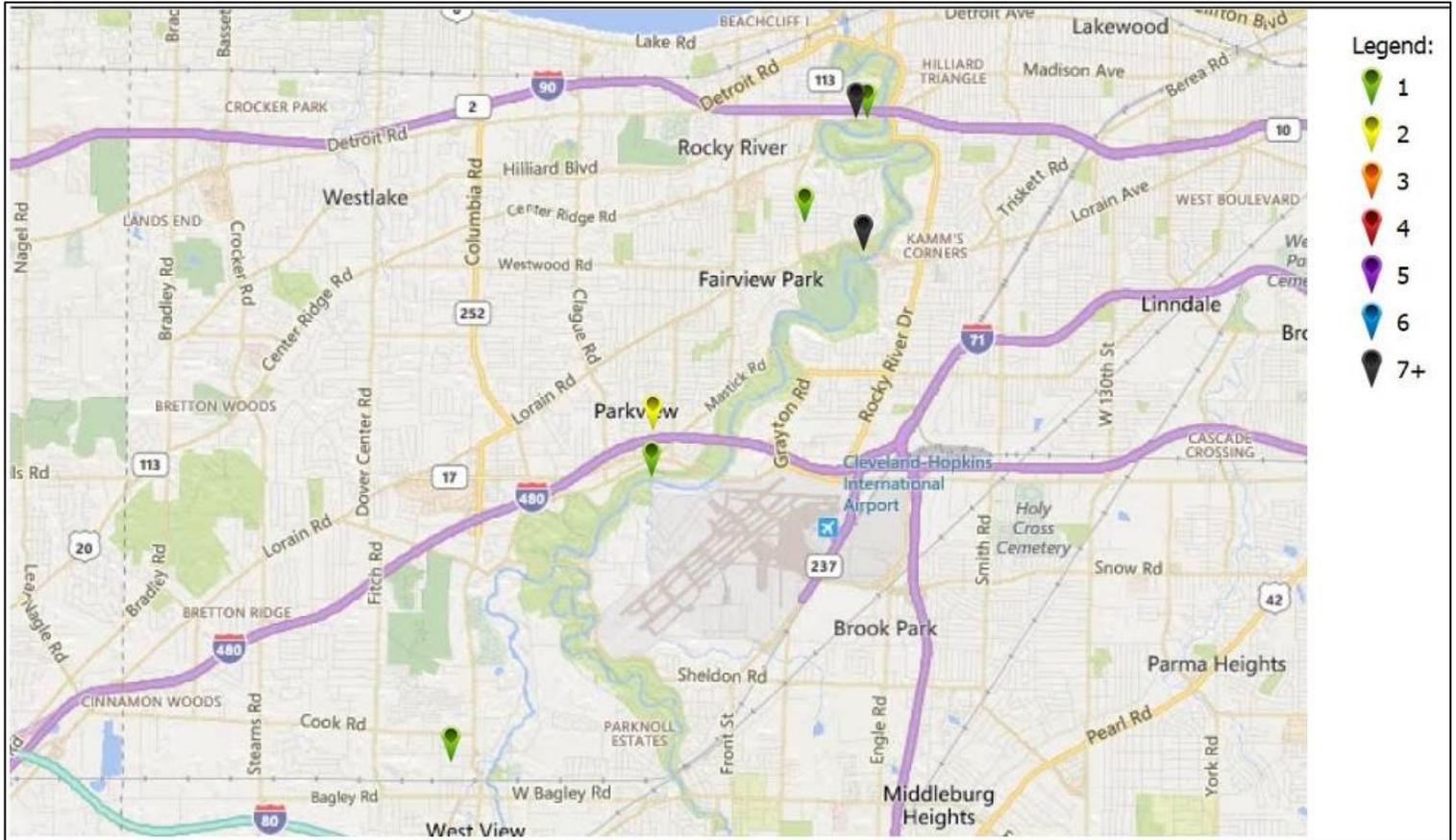


Source: www.faa.gov

Date and Time	NMS	Lmax (dB)	Sound Exposure Level (dB)	Duration (sec)	Operation	Aircraft
9/7/2020 9:23	NMS02	100.49	98.9	11	Departure 24R	Boeing 737
7/8/2020 8:24	NMS02	94.56	93.9	13	Departure 24R	Bombardier CRJ700
7/1/2020 16:09	NMS02	95.37	92.8	36	Departure 6L	Embraer E170
9/29/2020 8:14	NMS05	95.71	92.1	54	Departure 24R	Embraer E145
7/22/2020 7:02	NMS05	98.71	90.7	38	Departure 24R	MD-83
9/28/2020 8:49	NMS05	96.21	89.4	24	Departure 24R	Airbus A321
8/30/2020 21:08	NMS07	95.22	93.1	16	Departure 6L	Airbus A319
7/28/2020 21:28	NMS07	97.02	89.2	33	Departure 24R	MD-11
8/17/2020 18:05	NMS07	95.15	88.8	21	Departure 24R	Dassault Falcon 50
8/18/2020 21:41	NMS12	96.67	88.7	33	Departure 6L	MD-11
7/19/2020 17:14	NMS12	89.84	88.2	14	Departure 24L	Bombardier CRJ900
8/15/2020 8:01	NMS12	95.33	87.5	24	Departure 6L	MD-11

3rd Quarter Complaint Map

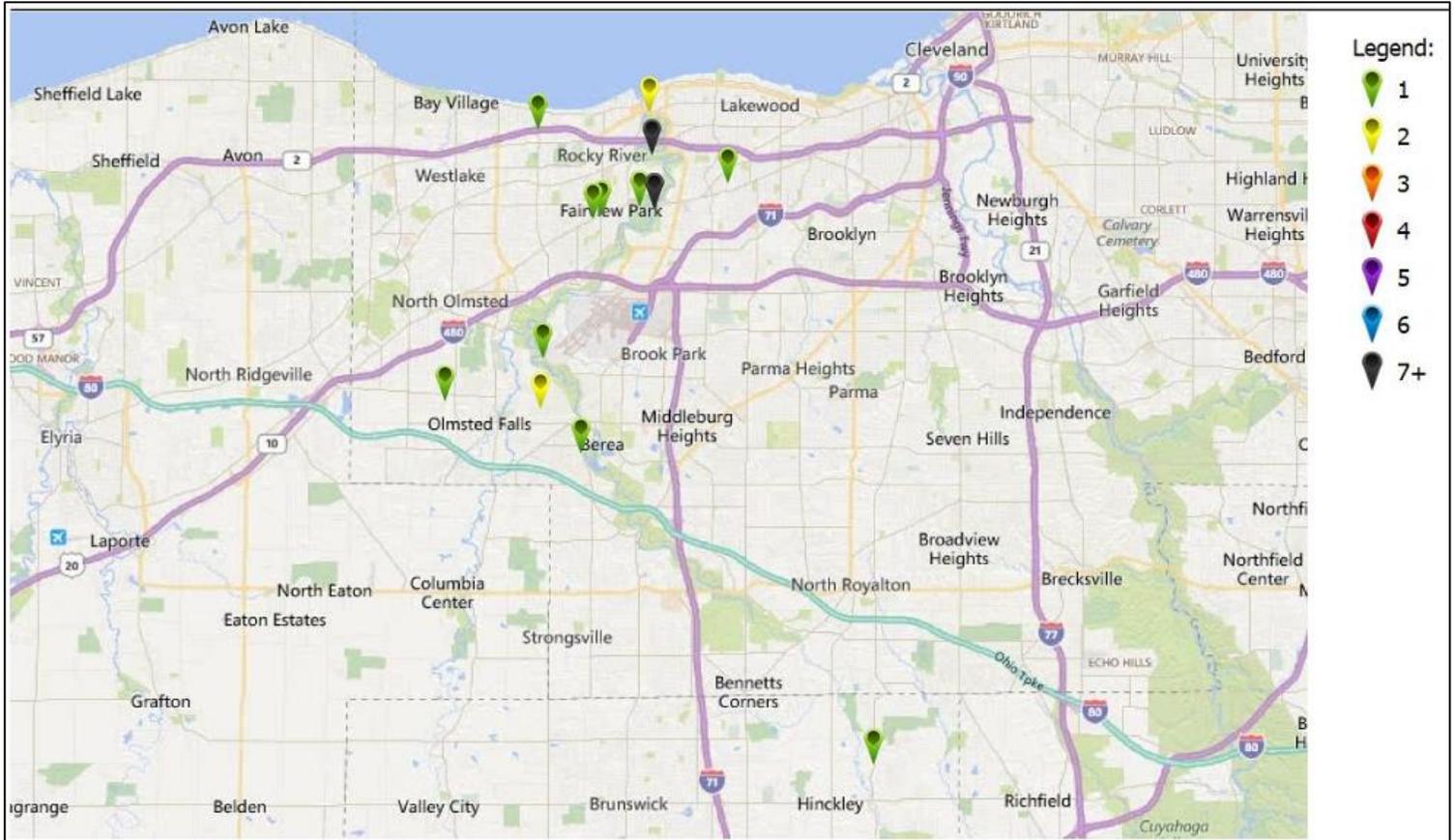
Complaints from July 2020



City	Number of Complainants	Number of Complaints
Fairview Park	4	456
Valley City	1	1
Rocky River	3	16
Olmsted Falls	1	1

3rd Quarter Complaint Map

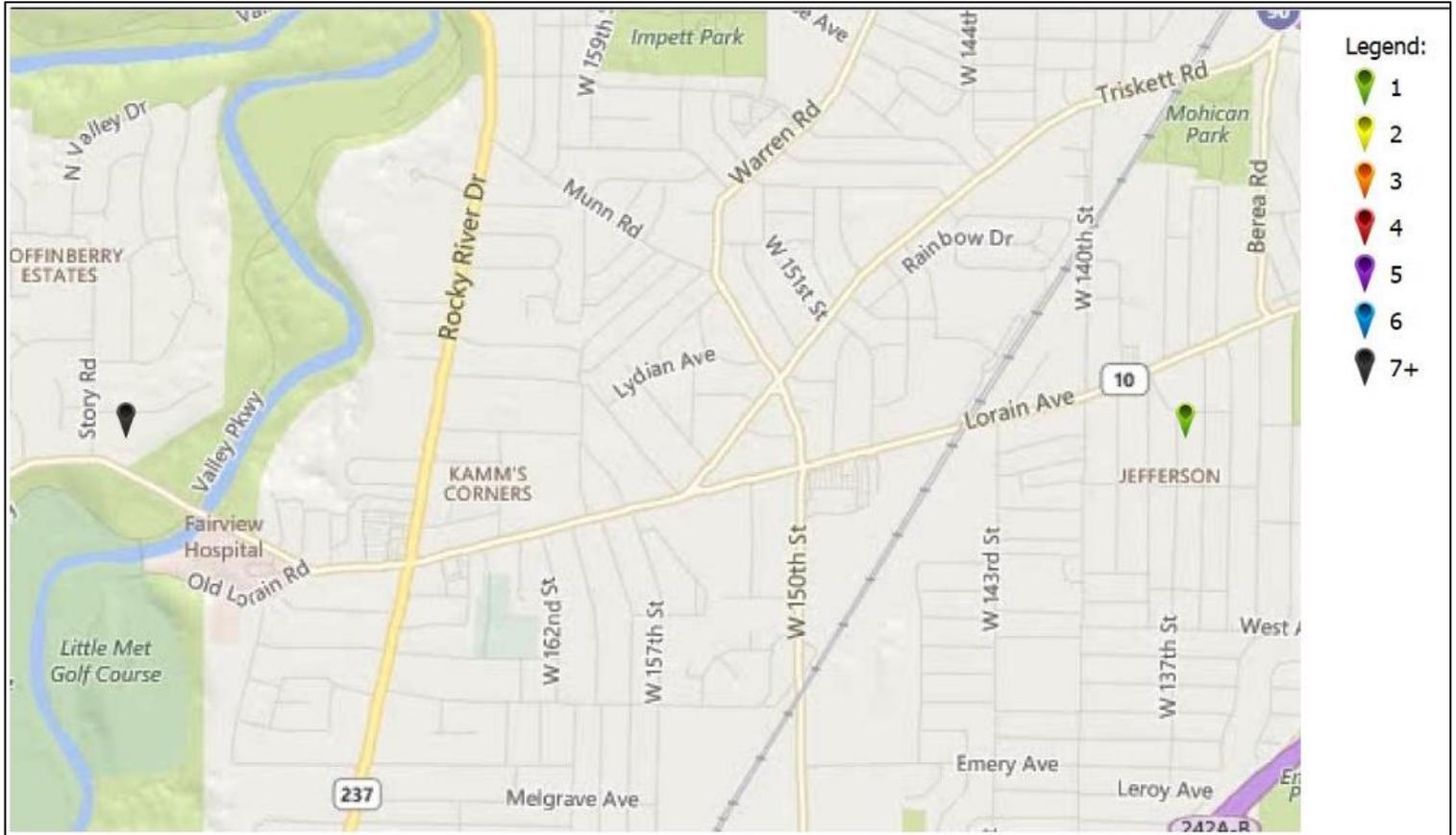
Complaints from August 2020



City	Number of Complainants	Number of Complaints
Berea	2	3
Fairview Park	5	149
Cleveland	1	1
Rocky River	1	13
Olmsted Twnp	1	1
Brook Park	1	1
Bay Village	1	1
Lakewood	1	2
Hinckley	1	1

3rd Quarter Complaint Map

Complaints from September 2020



City	Number of Complainants	Number of Complaints
Fairview Park	1	120
Berea	1	1
Cleveland	1	1
Hinkley	1	1

Do you have a noise complaint?

Please visit the [Symphony PublicVue](https://www.clevelandairport.com/contact) to submit a noise complaint. This site can also be found by going to <https://www.clevelandairport.com/contact> and click on “Learn More” under Noise Complaints. If you prefer to leave a message on our Noise Hotline, please call 216-898-5220. Please be patient while we take time to process your message and respond with the appropriate information.

