



Noise Compatibility Report

**2021 Quarter 1
January - March**

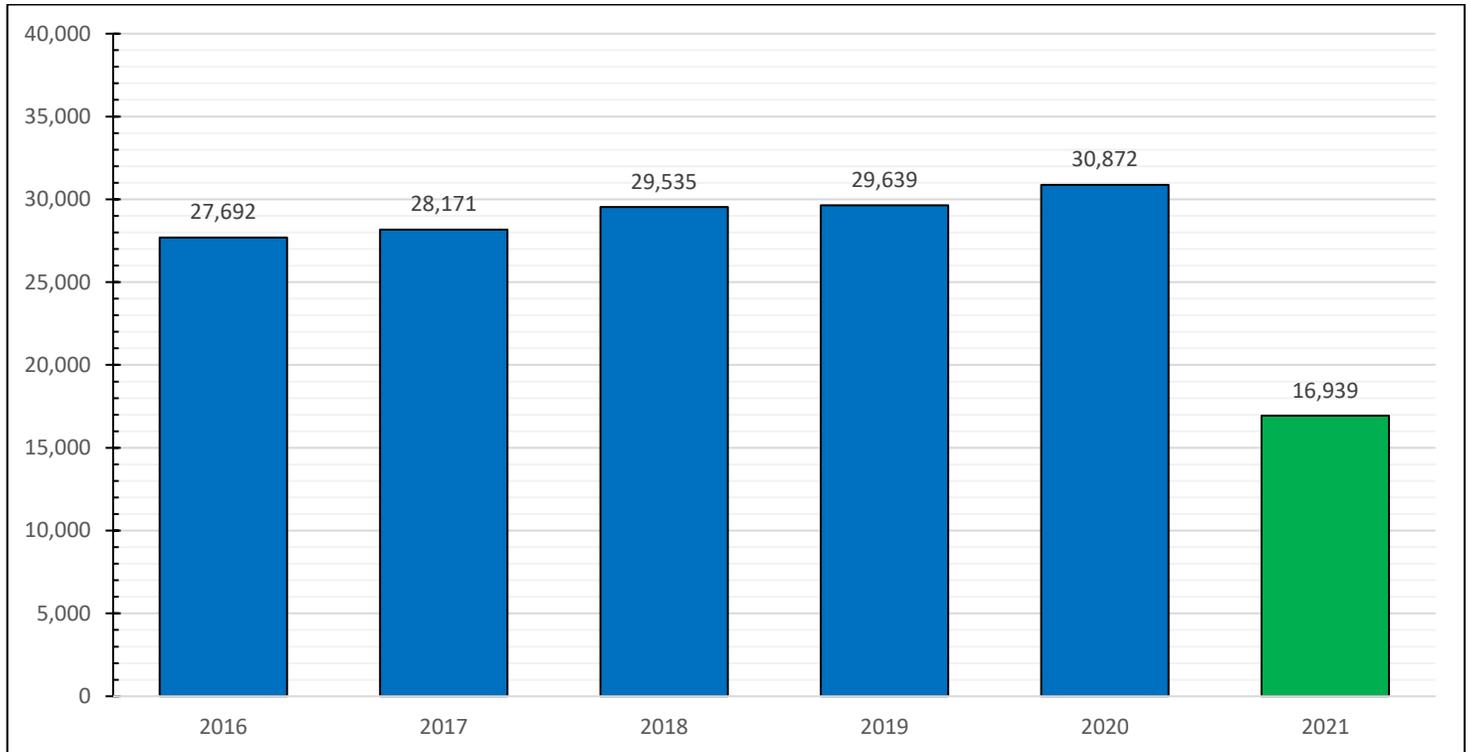
Disclaimer

- 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 1st Quarter Operations 2016 – 2021

- There were **16,939** operations in the 1st Qtr. 2021; this is 45% below the 1st Qtr. 2020.



Data Source: <https://aspm.faa.gov/opsnet/sys/Main.asp>

The Air Traffic Activity Data System (ATADS) contains the official NAS air traffic operations data available for public release. On the 20th of each month, data for the previous month is made available. The first year of data available is FY 1990.

Fleet Mix

Cleveland Hopkins had **16,939** operations in Quarter 1 of 2021. Here are some of the notable aircraft that CLE welcomes and sends off on a regular basis.

Aircraft	Total
Boeing 737 Series	3,840
Embraer ERJ 170	1,321
Bombardier CRJ-900	860
Airbus A320/A320/A319	3,496
MD-11	123

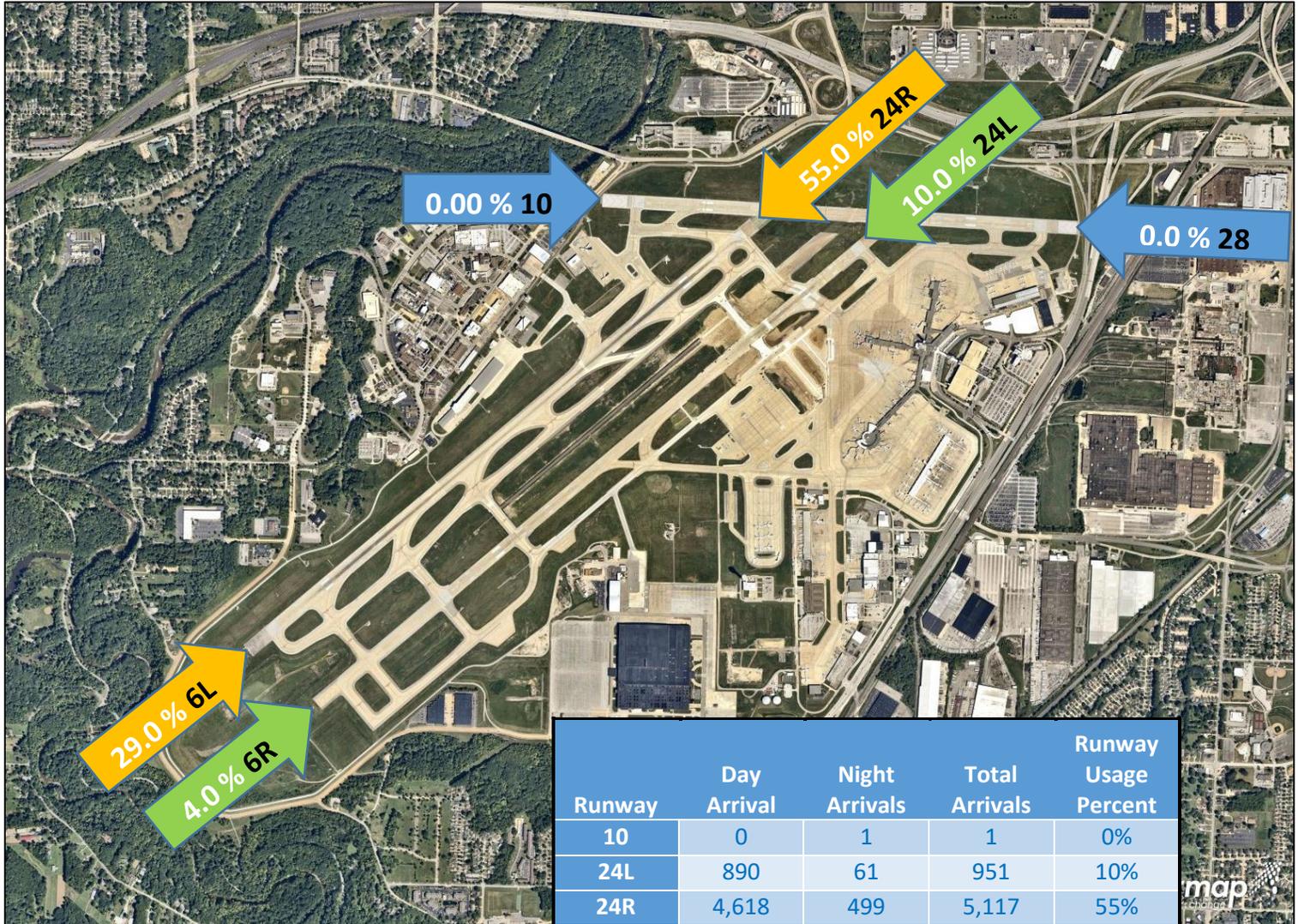


Other notable aircraft operations include:

Aircraft	Total
Air Taxi	2,472
General Aviation	1,205
Military	41



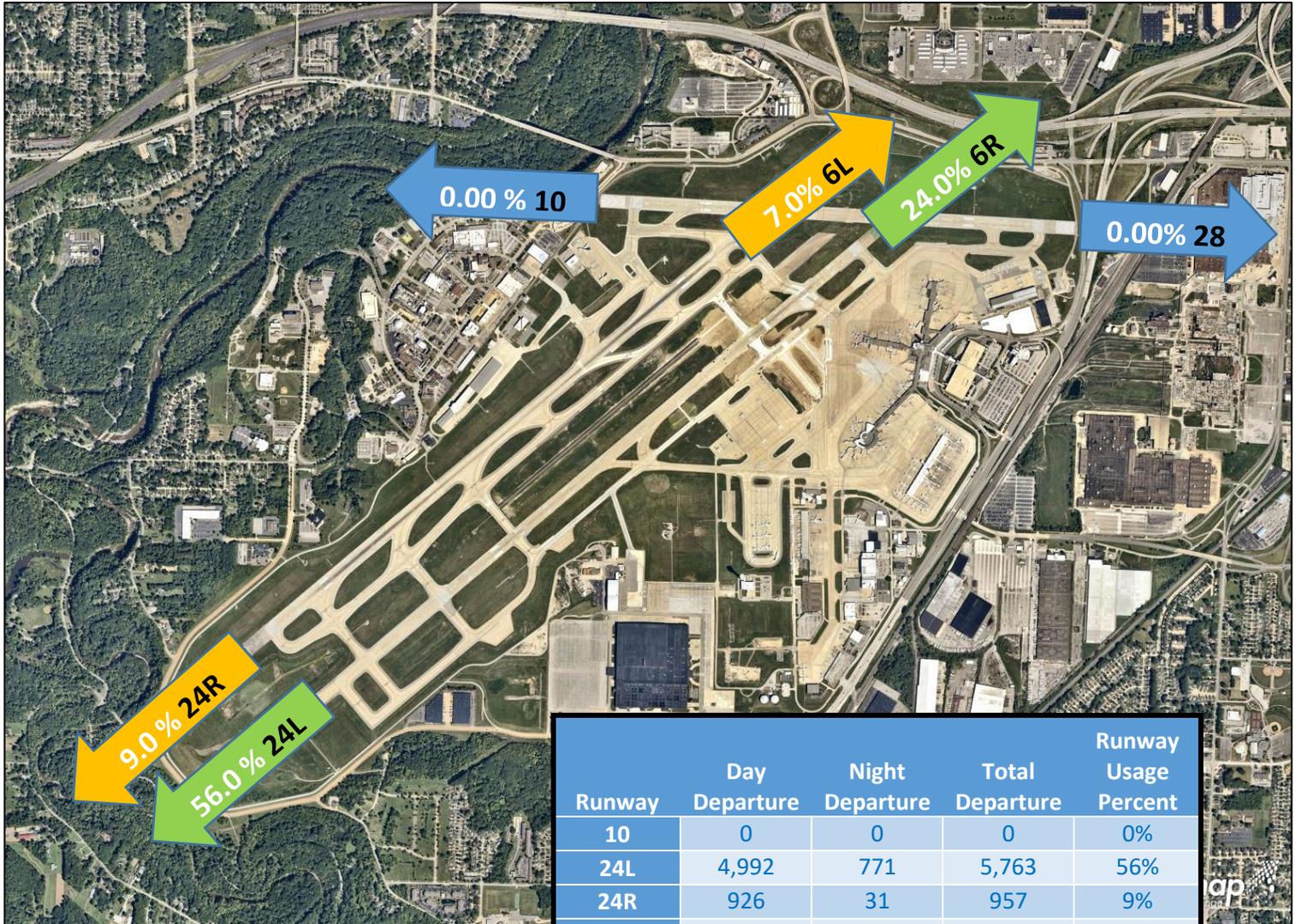
Runway Use: 1st Quarter, 2021 Arrivals



Runway	Day Arrival	Night Arrivals	Total Arrivals	Runway Usage Percent
10	0	1	1	0%
24L	890	61	951	10%
24R	4,618	499	5,117	55%
28	12	1	13	0%
6L	2,422	294	2,716	29%
6R	324	44	368	4%
UNK	125	7	132	1%
TOTALS	8391	907	9298	100%

Note: Totals are generated from Noise Monitoring Software and may not equal FAA total operations as the software may account for various other operations.

Runway Use: 1st Quarter, 2021 Departures



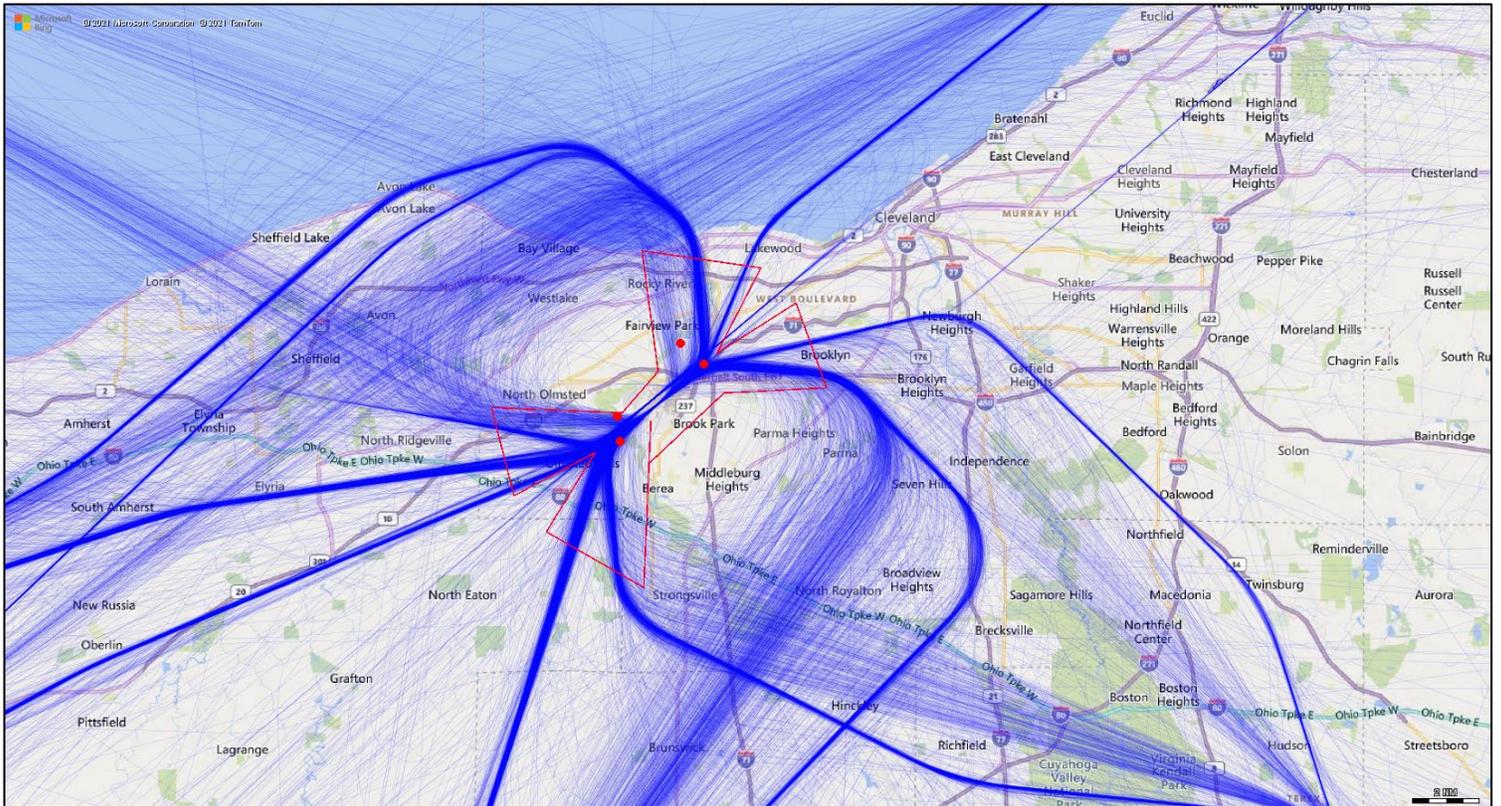
Note: Totals are generated from Noise Monitoring Software and may not equal FAA total operations as the software may account for various other operations.

Runway	Day Departure	Night Departure	Total Departure	Runway Usage Percent
10	0	0	0	0%
24L	4,992	771	5,763	56%
24R	926	31	957	9%
28	0	0	0	0%
6L	694	74	768	7%
6R	2,209	316	2,525	24%
UNK	278	26	304	3%
Totals	9099	1218	10317	100%

Departure Headings, 1st Quarter: Day-time

2021 1st Quarter day-time departure flight tracks (jet propulsion only). Day-time reflects 06:00 am to 11:00 pm.

Of **7,911** departure flights only **707 (8.9%)** 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.



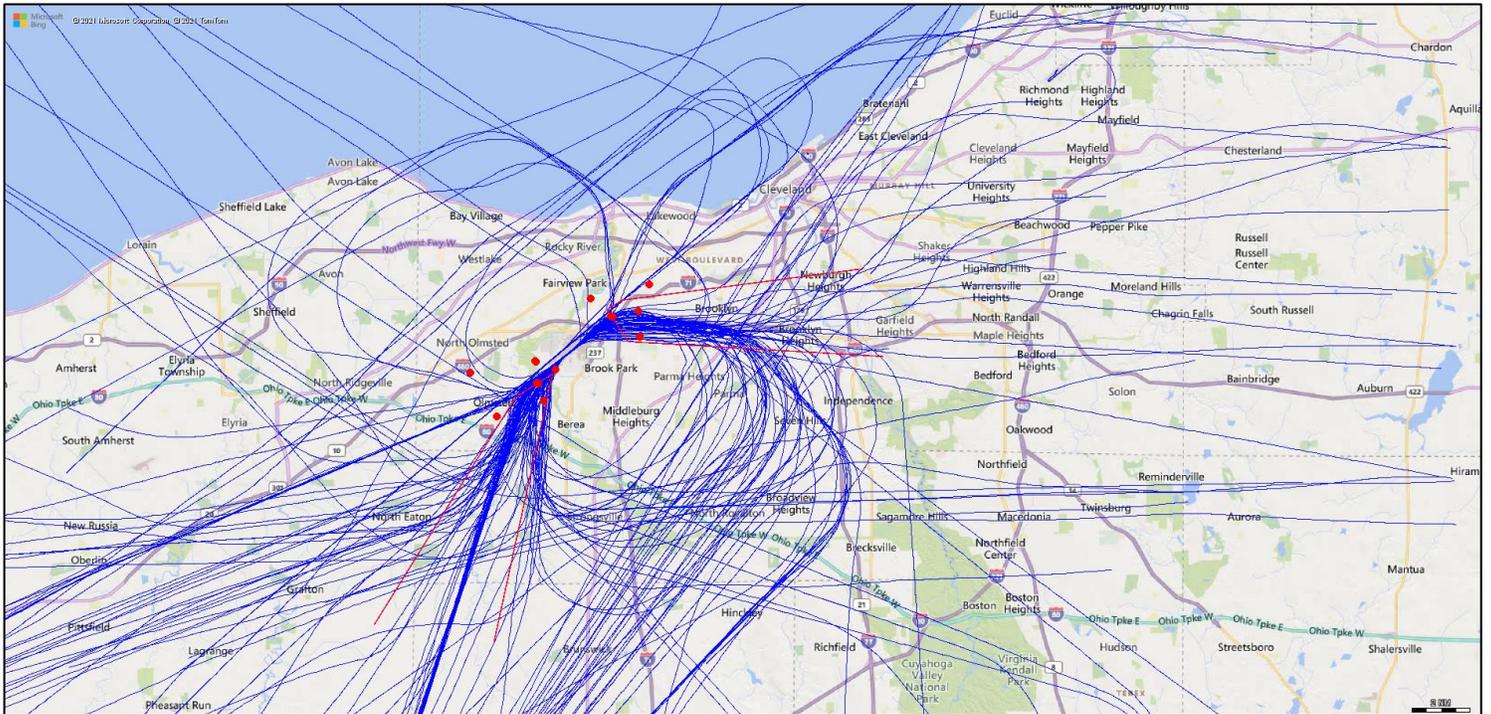
Key:

- Flight Tracks ———
- Departure Gates ———
- Noise Monitoring Station ●

Departure Headings, 1st Quarter: Night-time

2021 1st Quarter night-time departure flight tracks (jet propulsion only). Night-time reflects 11:00 pm to 06:00 am.

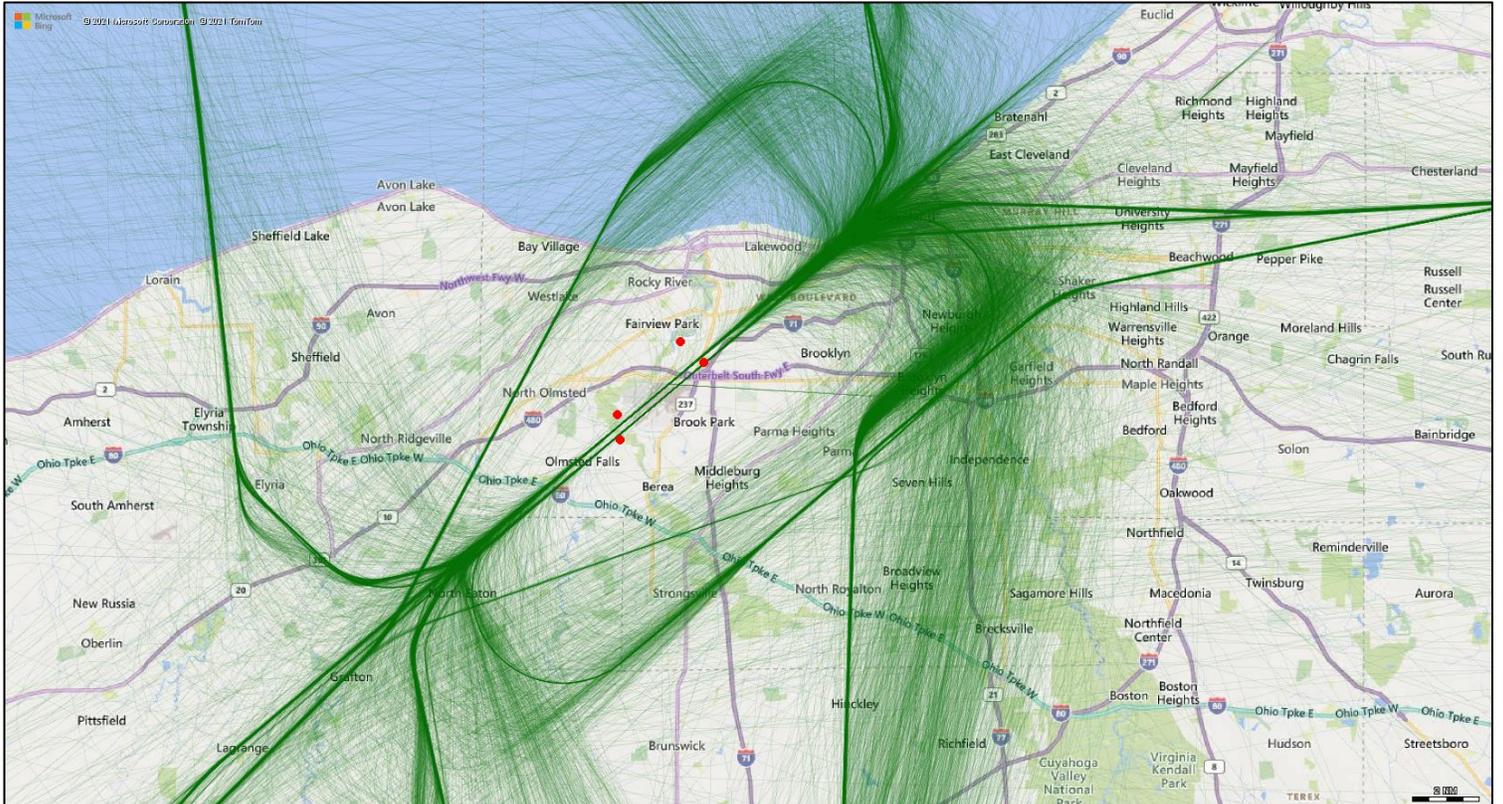
Of **169** departure flights, **48 (28%)** were outside or too low for their respective departure corridor. These corridors represent the airspace through which aircraft depart and arrive. When an aircraft departs, it has a certain path it follows which is a function of altitude and heading.



- Key:**
- Flight Tracks 
 - Departure Gates 
 - Noise Monitoring Station 

Arrival Headings, 1st Quarter

Day-time and night-time arrivals for all of Quarter 1 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)

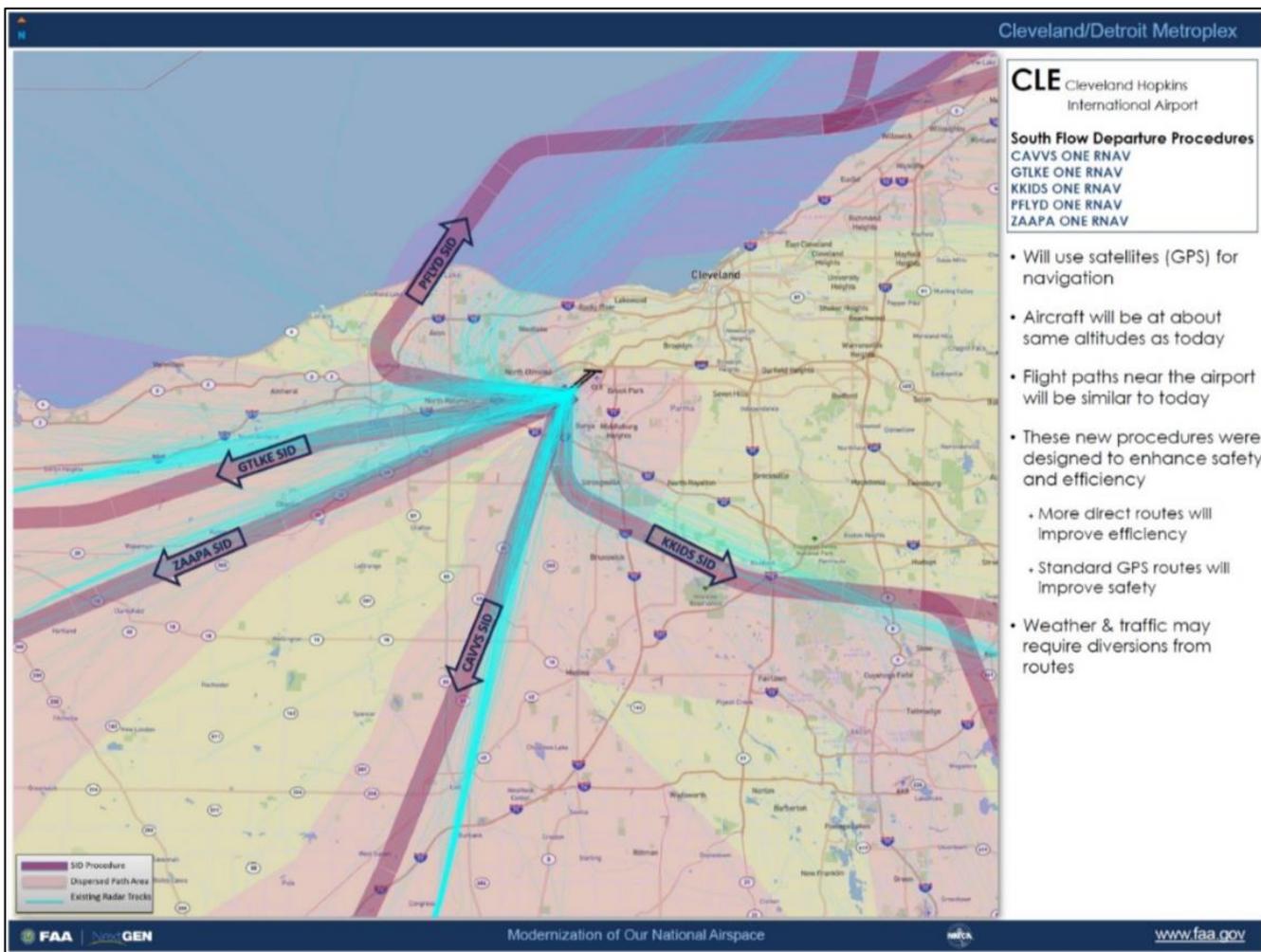


What is the Cleveland/Detroit Metroplex?

- 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

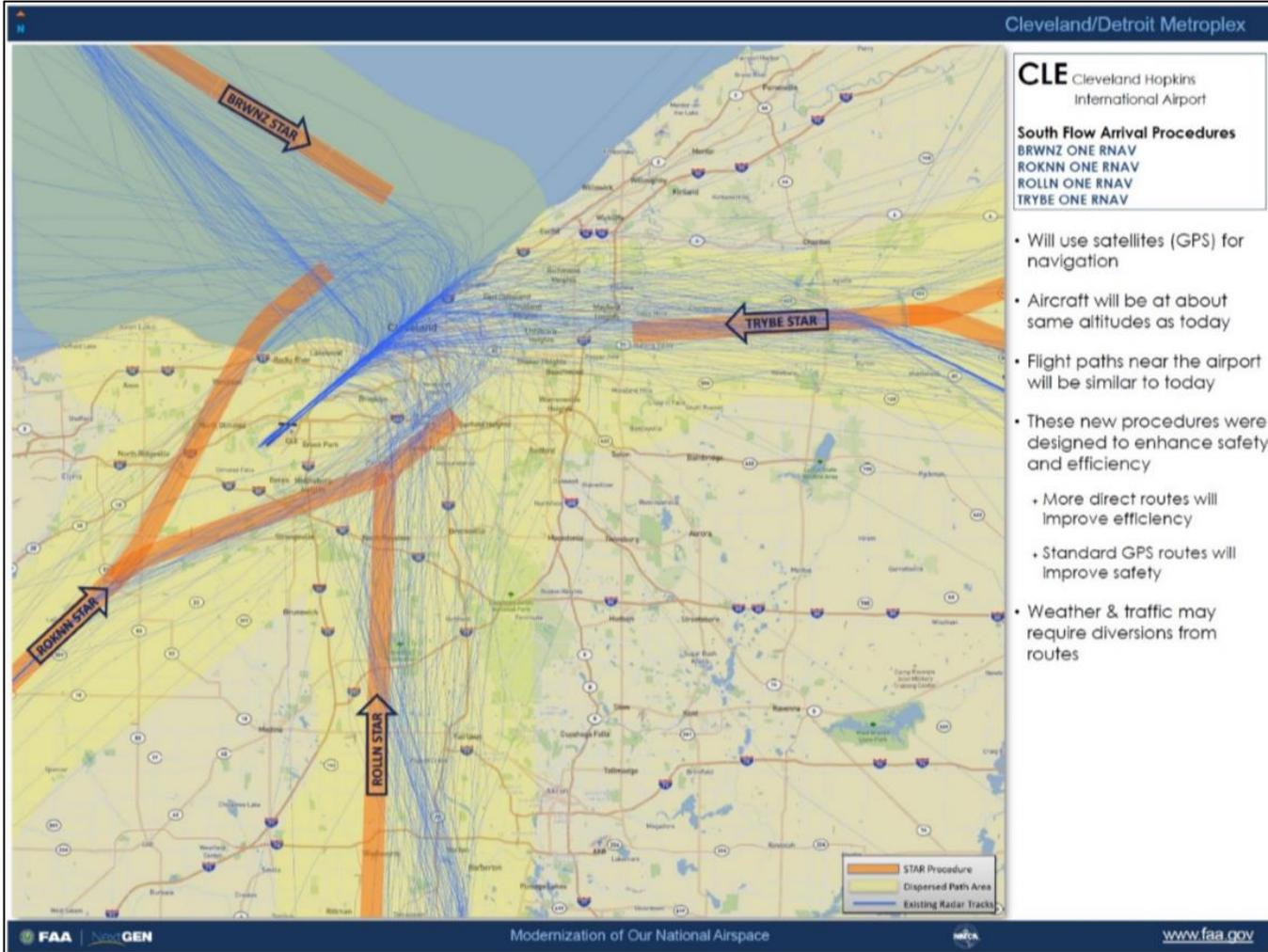
Noise Hotline: 216-898-5220

clevelandairport.com



Metroplex: South Flow (Arrivals)

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

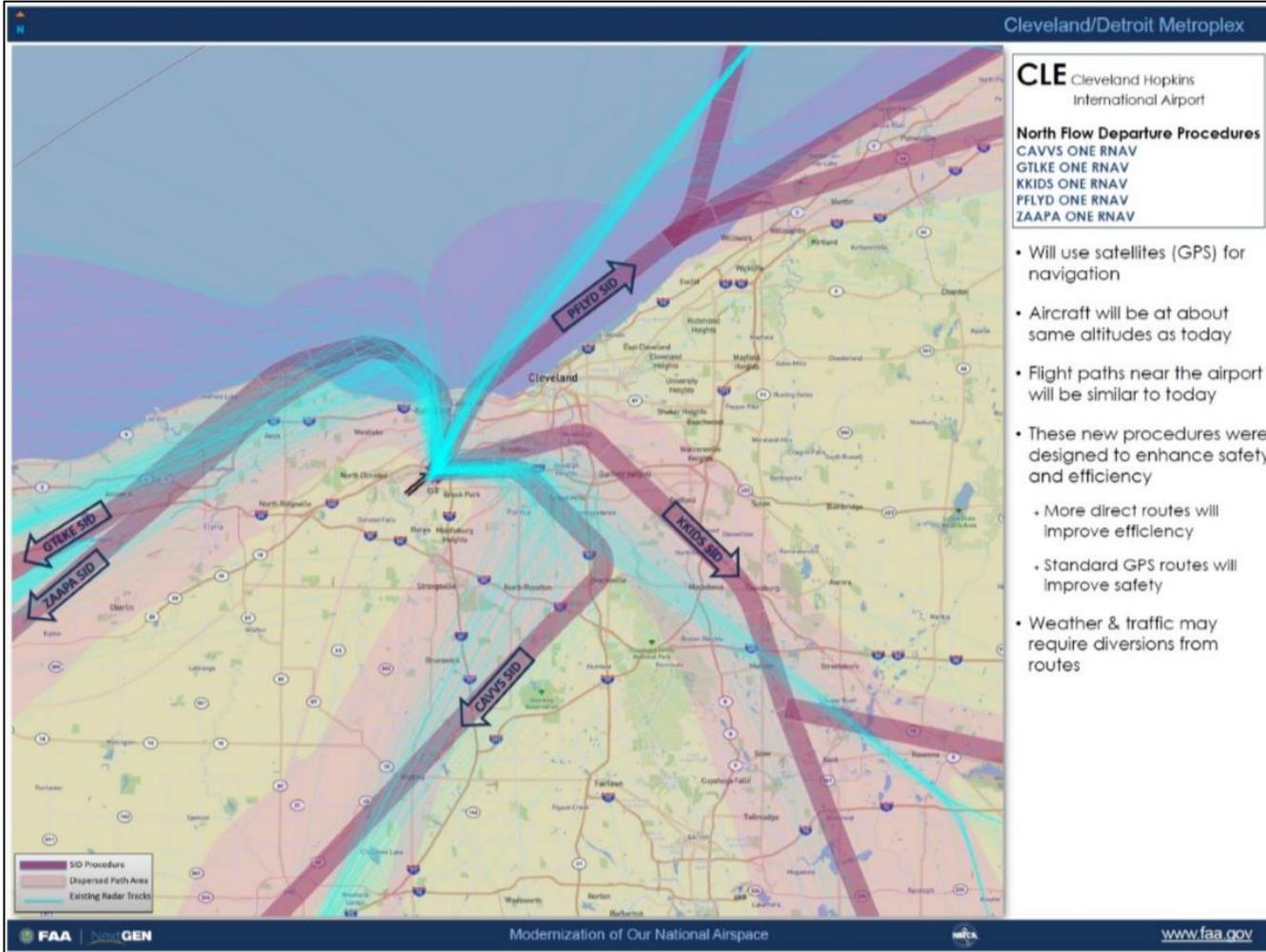


Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Metroplex: North Flow (Departures)

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

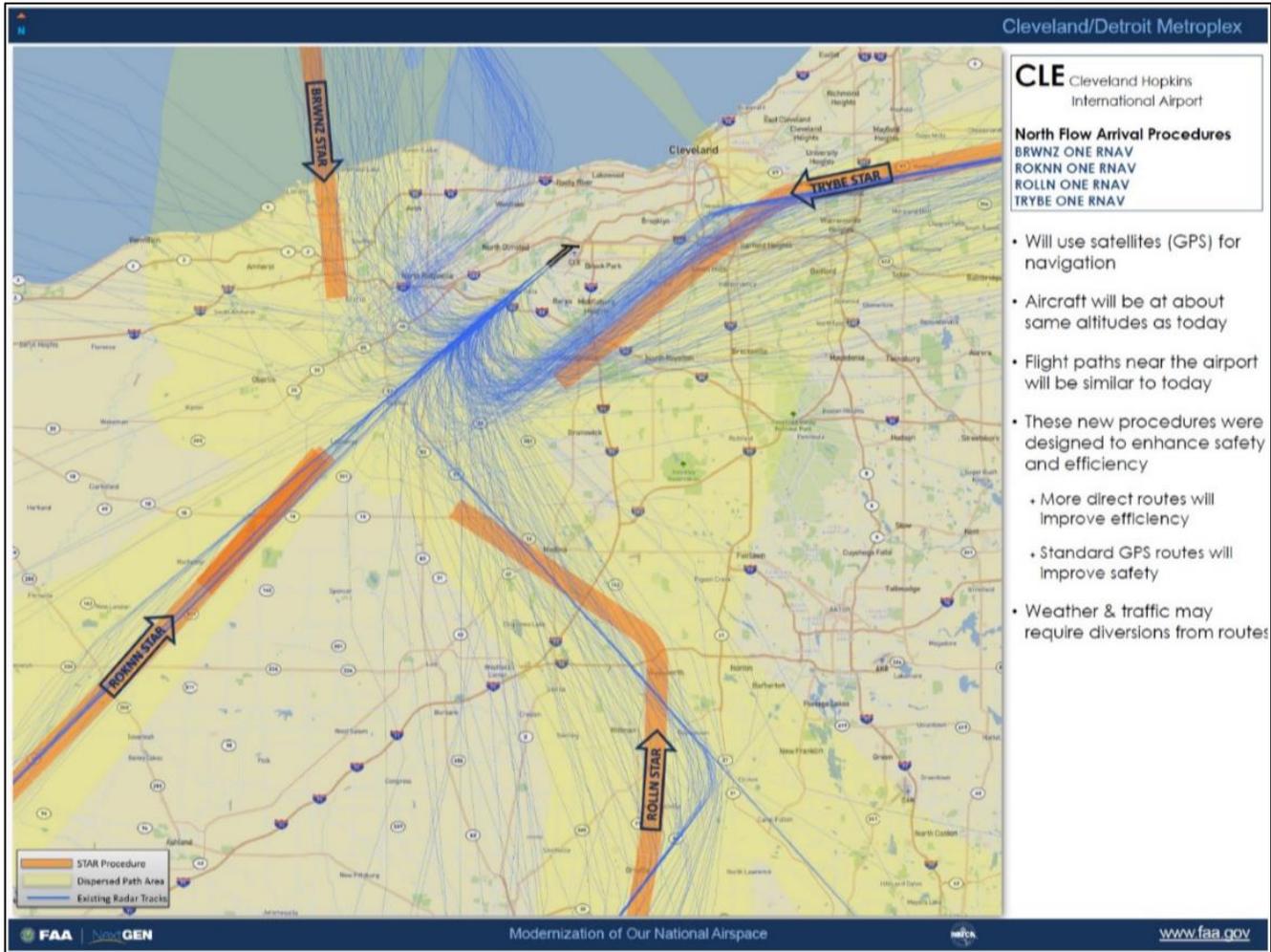


Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Metroplex: North Flow (Arrivals)

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



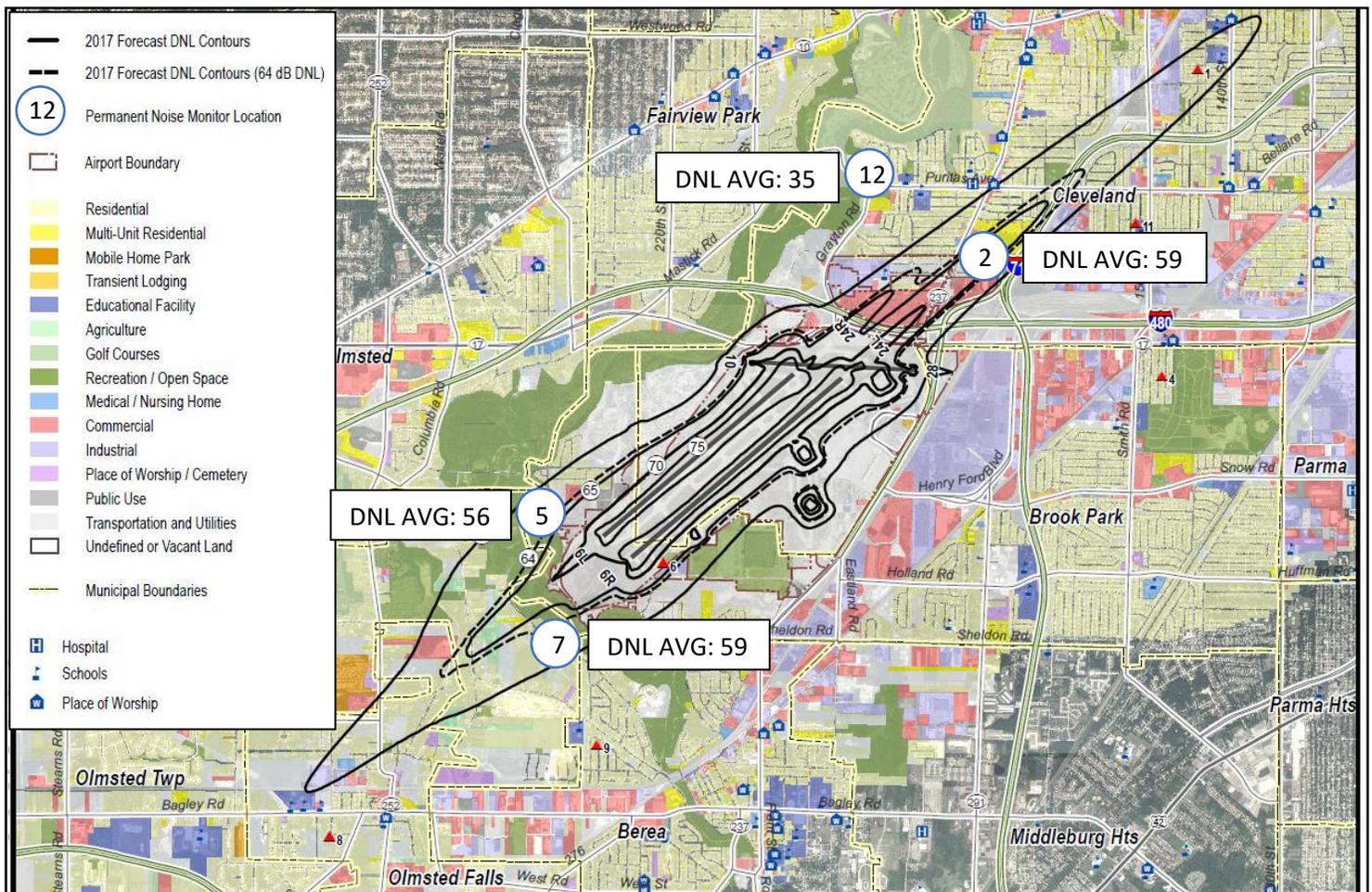
Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Aircraft Noise: Q1 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/



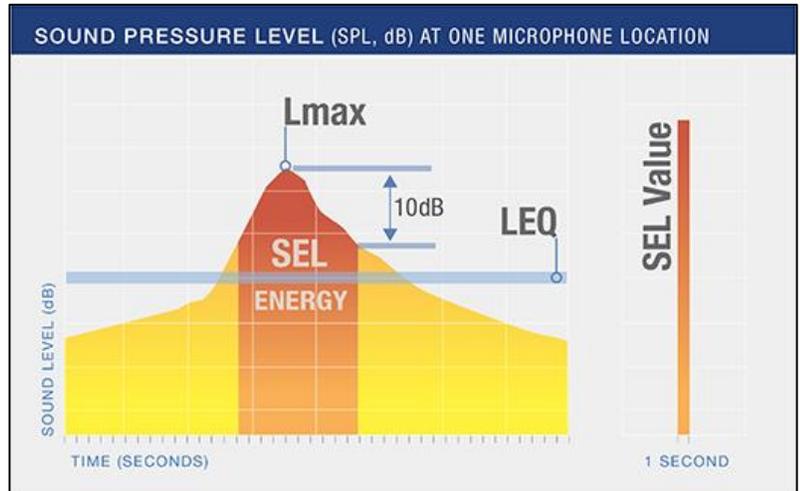
Top Three Lmax at Each NMS

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
2/7/2021 19:21	NMS02	94.6	100.0	14	Arrival 24L	Boeing 763
3/16/2021 05:58	NMS02	94.2	99.0	19	Arrival 24L	MD-11
3/28/2021 15:45	NMS02	93.5	97.9	17	Arrival 24L	Boeing 739
3/10/2021 14:57	NMS05	90.0	96.4	26	Departure 24R	Airbus A321
3/1/2021 21:42	NMS05	89.7	95.3	28	Departure 24R	MD-11
3/18/2021 21:24	NMS05	89.4	95.0	48	Departure 6L	Boeing 752
1/25/2021 17:17	NMS07	102.1	106.7	44	Arrival 6L	Airbus A320
2/38/2021 07:02	NMS07	90.6	98.8	29	Departure 24L	Airbus A321
1/22/2021 05:24	NMS07	89.9	97.8	37	Departure 24L	DC91
1/25/2021 21:39	NMS12	85.7	92.5	27	Departure 6R	MD-11
1/2/2021 10:49	NMS12	85.7	94.0	54	Arrival 24R	Boeing 738
2/5/2021 13:45	NMS12	82.6	86.3	9	Arrival 24R	E75L

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.

