CLE®

CLEVELAND HOPKINS
INTERNATIONAL AIRPORT

Noise Compatibility Report

2020 Quarter 2

April - June

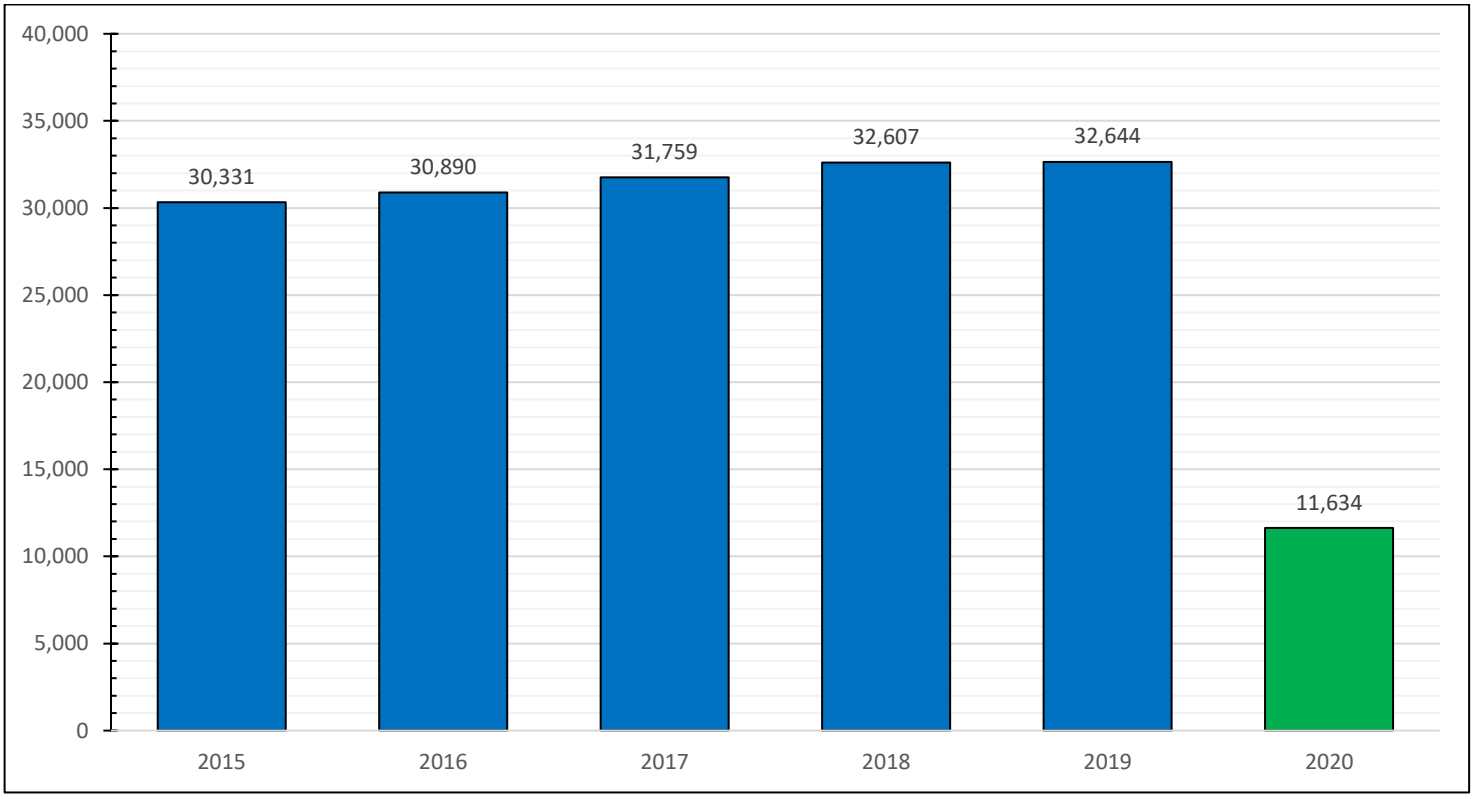
Disclaimer

- 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 2nd Quarter Operations 2015 – 2020

- There were **11,634** operations in the 2nd Qtr. 2020; this is 64.4% below the 2nd Qtr. 2019.



Fleet Mix

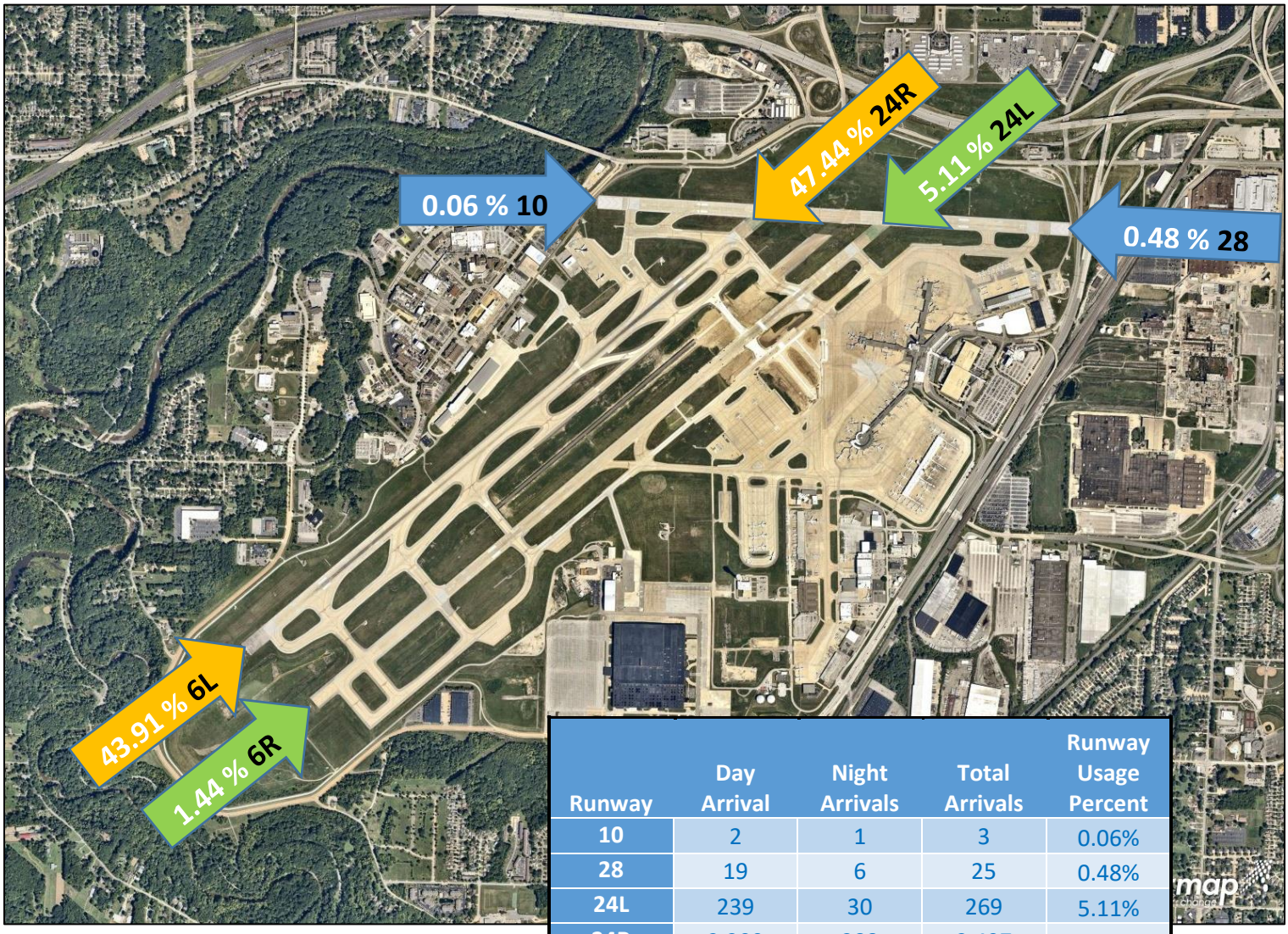
Cleveland Hopkins had **11,634** operations in Quarter 2 of 2020. Here are some of the notable aircraft that CLE welcomes and sends off on a regular basis.

Aircraft	Q2 Total
Boeing 737 Series	1366
Embraer ERJ 145	449
Bombardier CRJ-900	674
Airbus A320	743
MD-11	125

Other notable aircraft operations include:

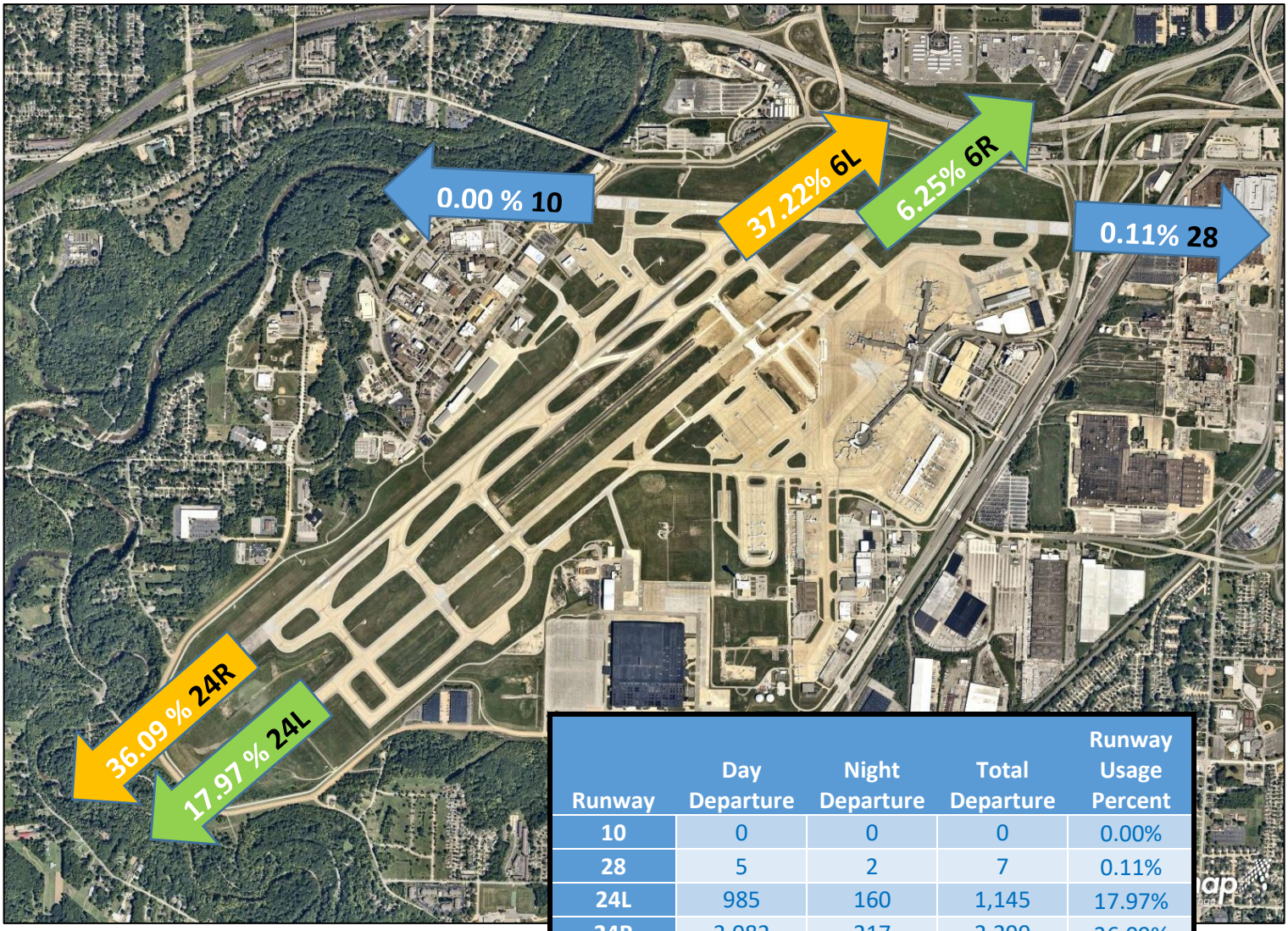
Aircraft	Q2 Total
Air Taxi	1687
General Aviation	1064
Military	0

Runway Use: 2nd Quarter, 2020 Arrivals



Runway	Day Arrival	Night Arrivals	Total Arrivals	Runway Usage Percent
10	2	1	3	0.06%
28	19	6	25	0.48%
24L	239	30	269	5.11%
24R	2,209	288	2,497	47.44%
6L	2,049	262	2,311	43.91%
6R	64	12	76	1.44%
UNK	74	8	82	1.56%
Totals	4656	607	5263	100.00%

Runway Use: 2nd Quarter, 2020 Departures

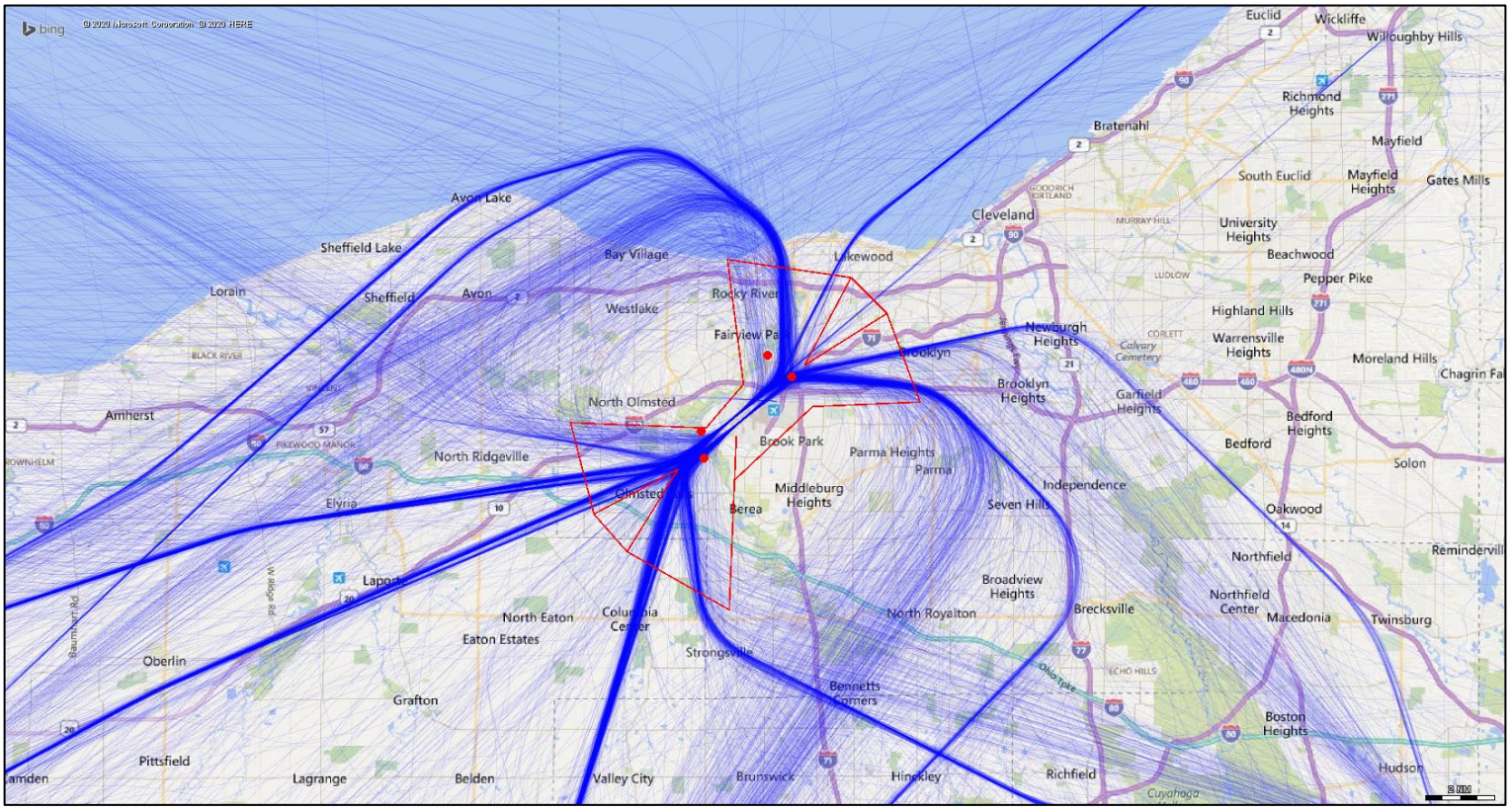


Runway	Day Departure	Night Departure	Total Departure	Runway Usage Percent
10	0	0	0	0.00%
28	5	2	7	0.11%
24L	985	160	1,145	17.97%
24R	2,082	217	2,299	36.09%
6L	2,164	207	2,371	37.22%
6R	339	59	398	6.25%
UNK	140	11	151	2.37%
Totals	5715	656	6371	100.00%

Departure Headings, 2nd Quarter: Day-time

2020 2nd Quarter day-time departure flight tracks (jet propulsion only). Day-time reflects 06:00 am to 11:00 pm.

Of **3,681** departure flights only **163 (4%)** 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

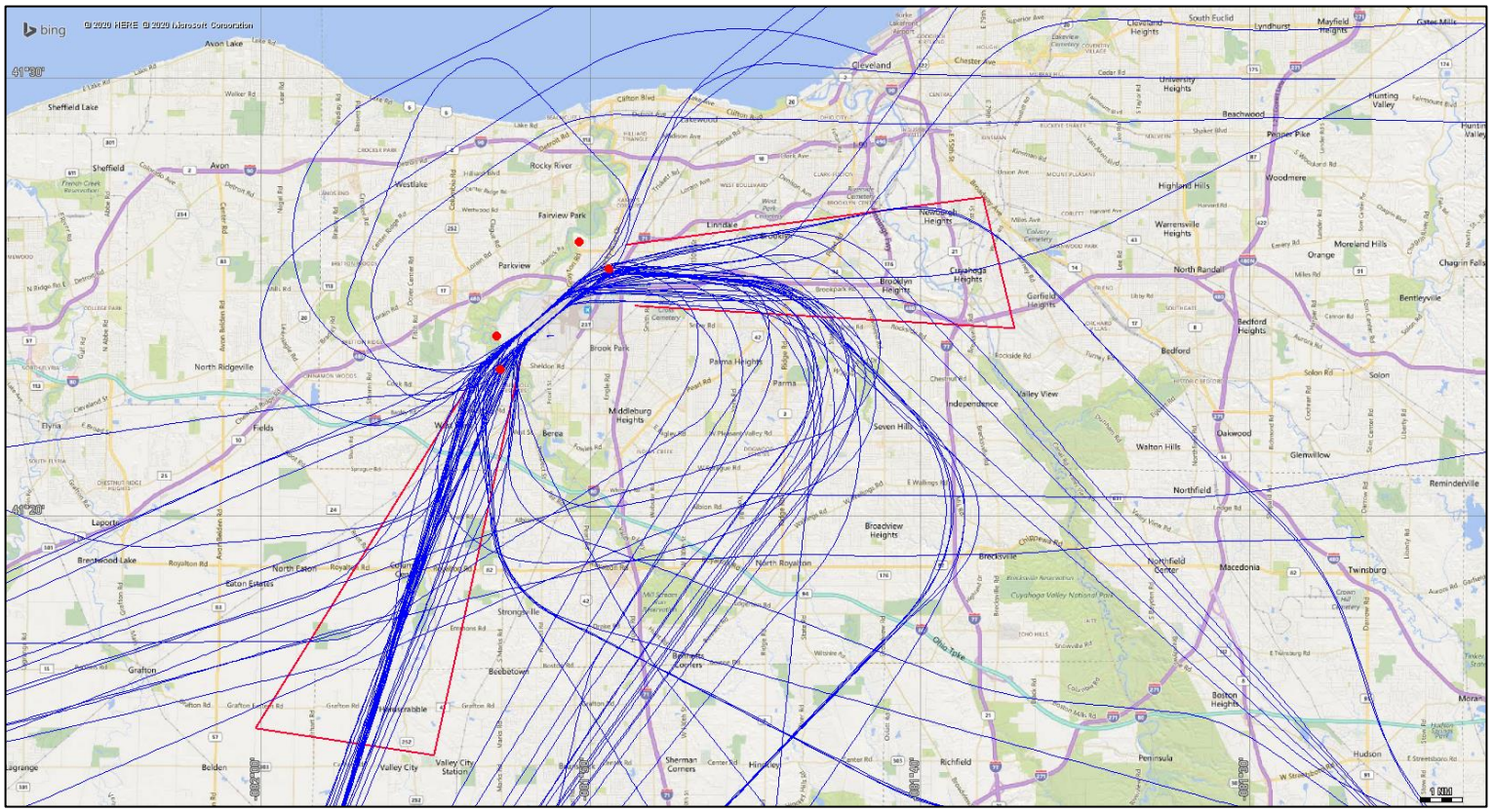
Departure Gates

Noise Monitoring Station

Departure Headings, 2nd Quarter: Night-time

2020 2nd Quarter night-time departure flight tracks (jet propulsion only). Night-time reflects 11:00 pm to 06:00 am.

Of **92** departure flights only **14 (15%)** 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:

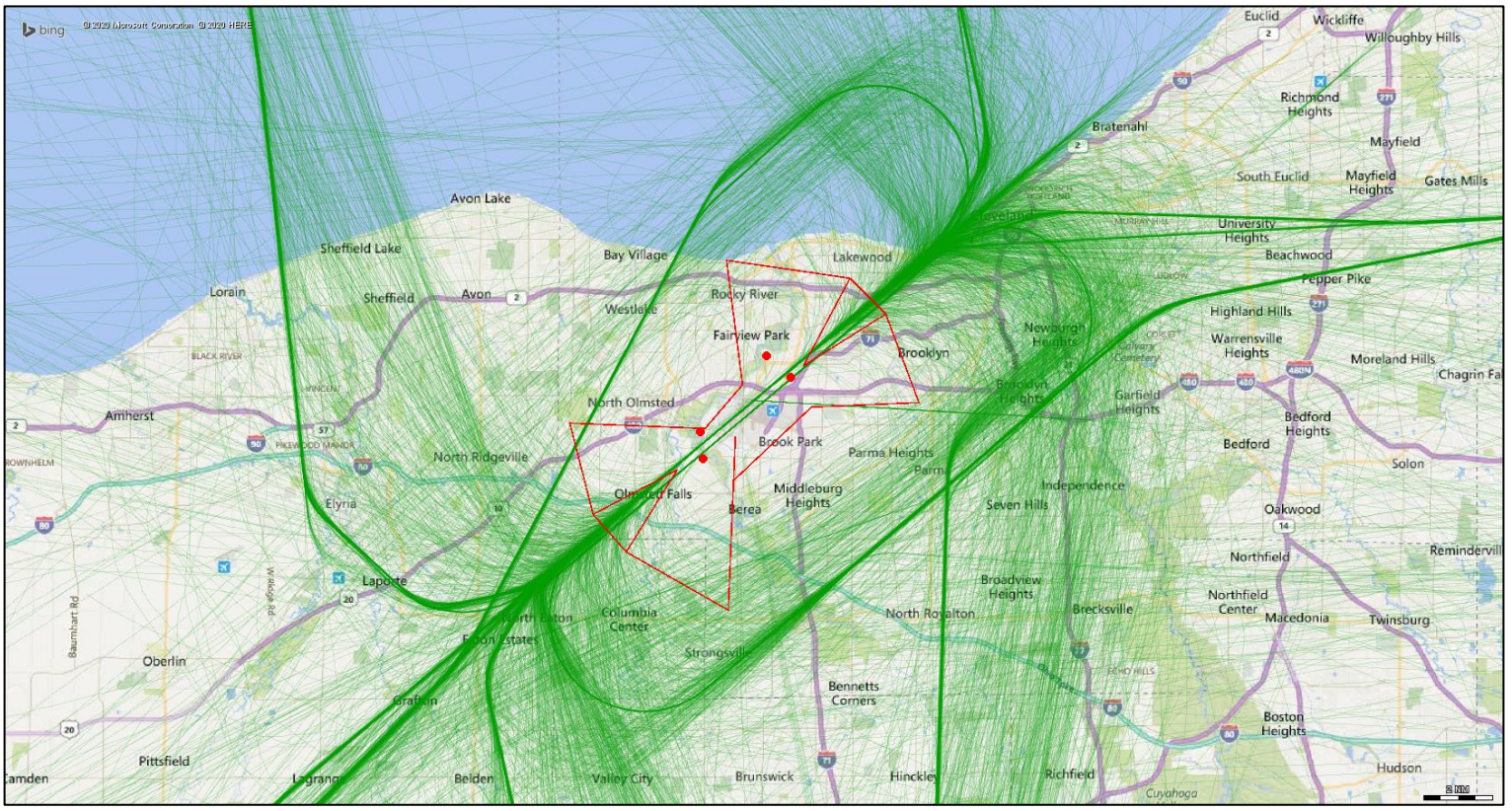
Flight Tracks

Departure Gates

Noise Monitoring Station

Arrival Headings, 2nd Quarter

Day-time and night-time arrivals for all of Quarter 2 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

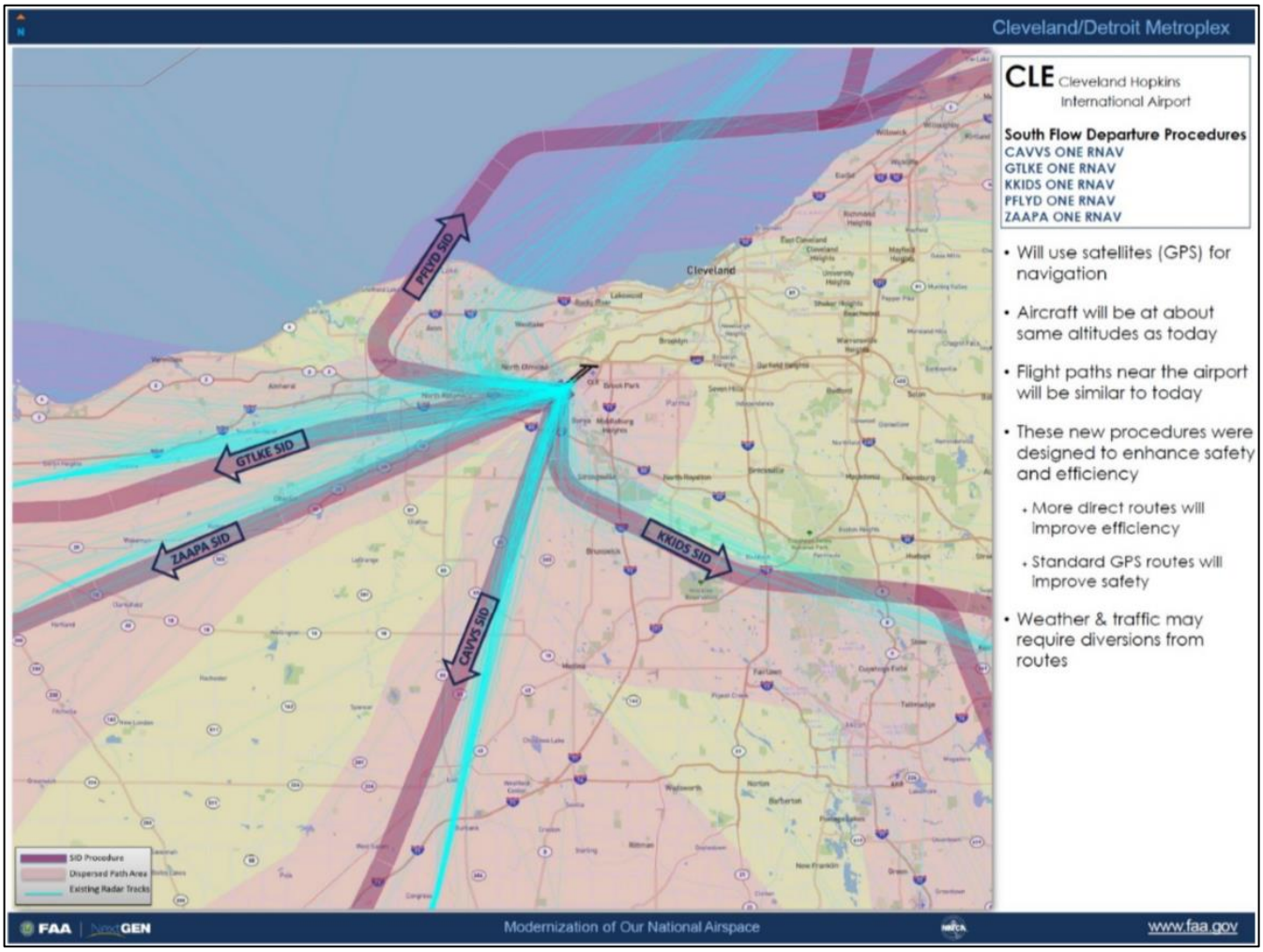
Cleveland Hopkins International Airport
Noise Hotline: 216-898-5220
clevelandairport.com

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

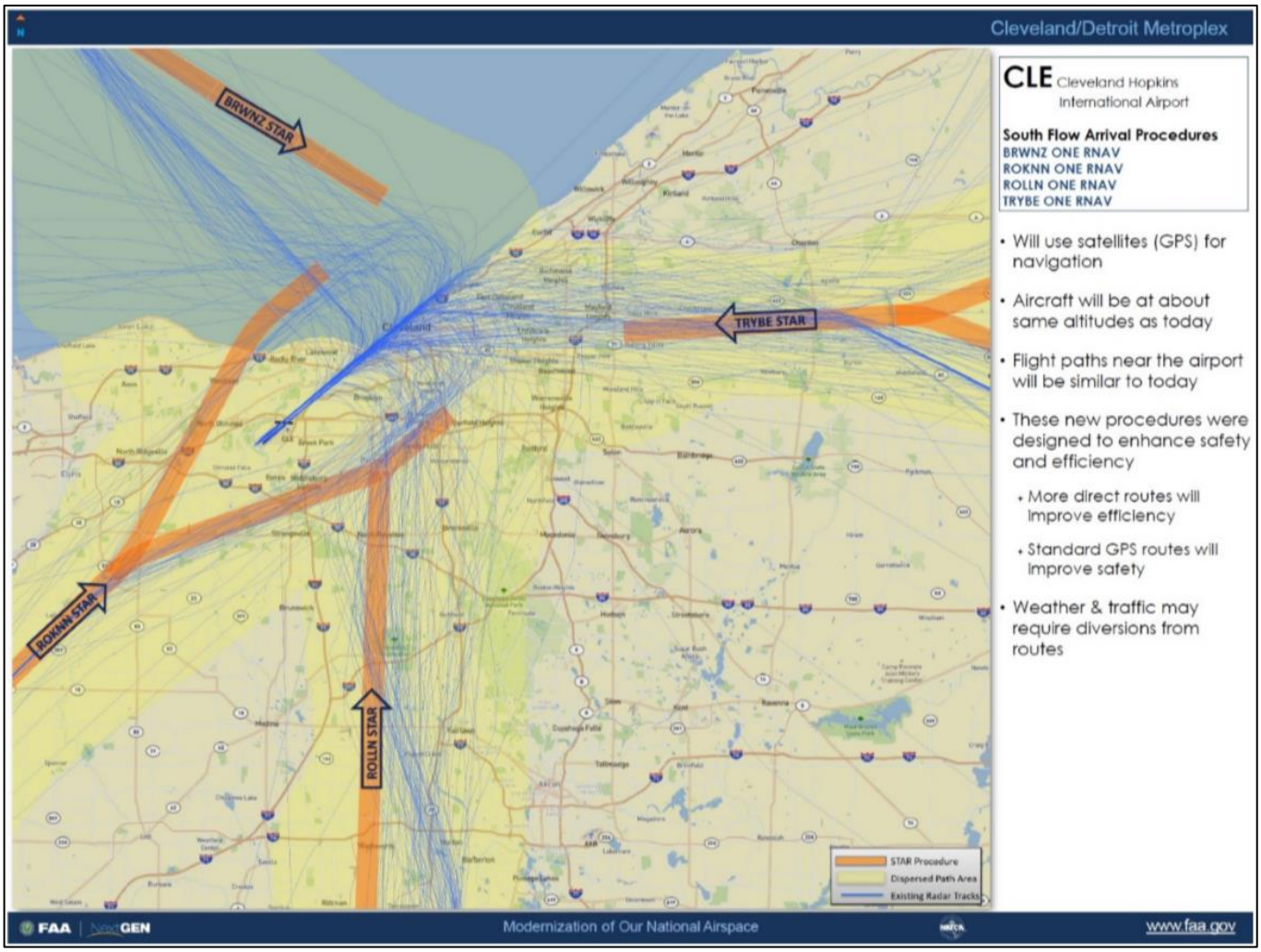
South flow departures take off from runway 24L and runway 24R.



Note: Flight tracks are historic and do not represent the current quarter.
Source: www.metroplexenvironmental.com

Metroplex: South Flow (Arrivals)

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

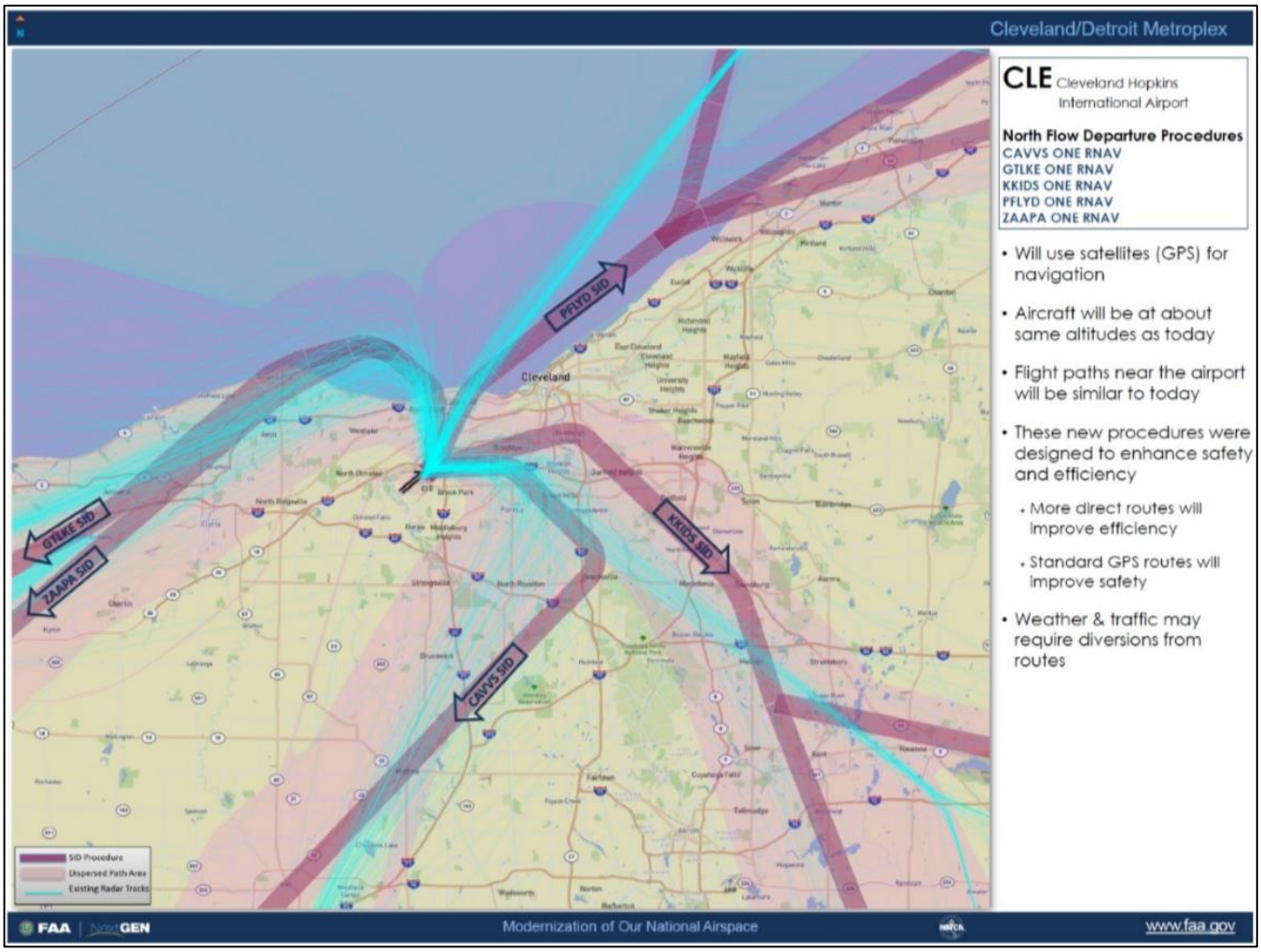


Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Metroplex: North Flow (Departures)

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



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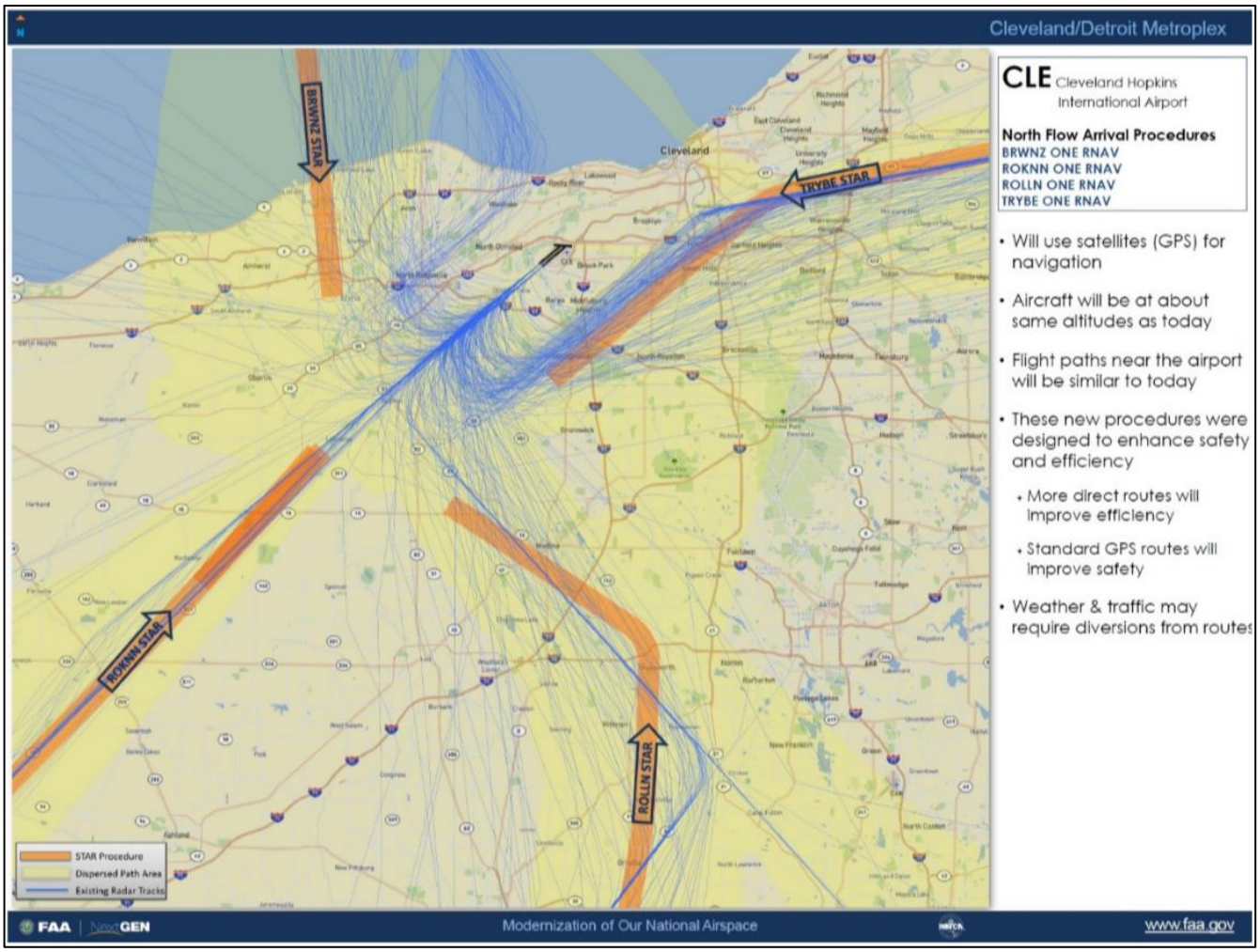
Metroplex: North Flow (Arrivals)

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



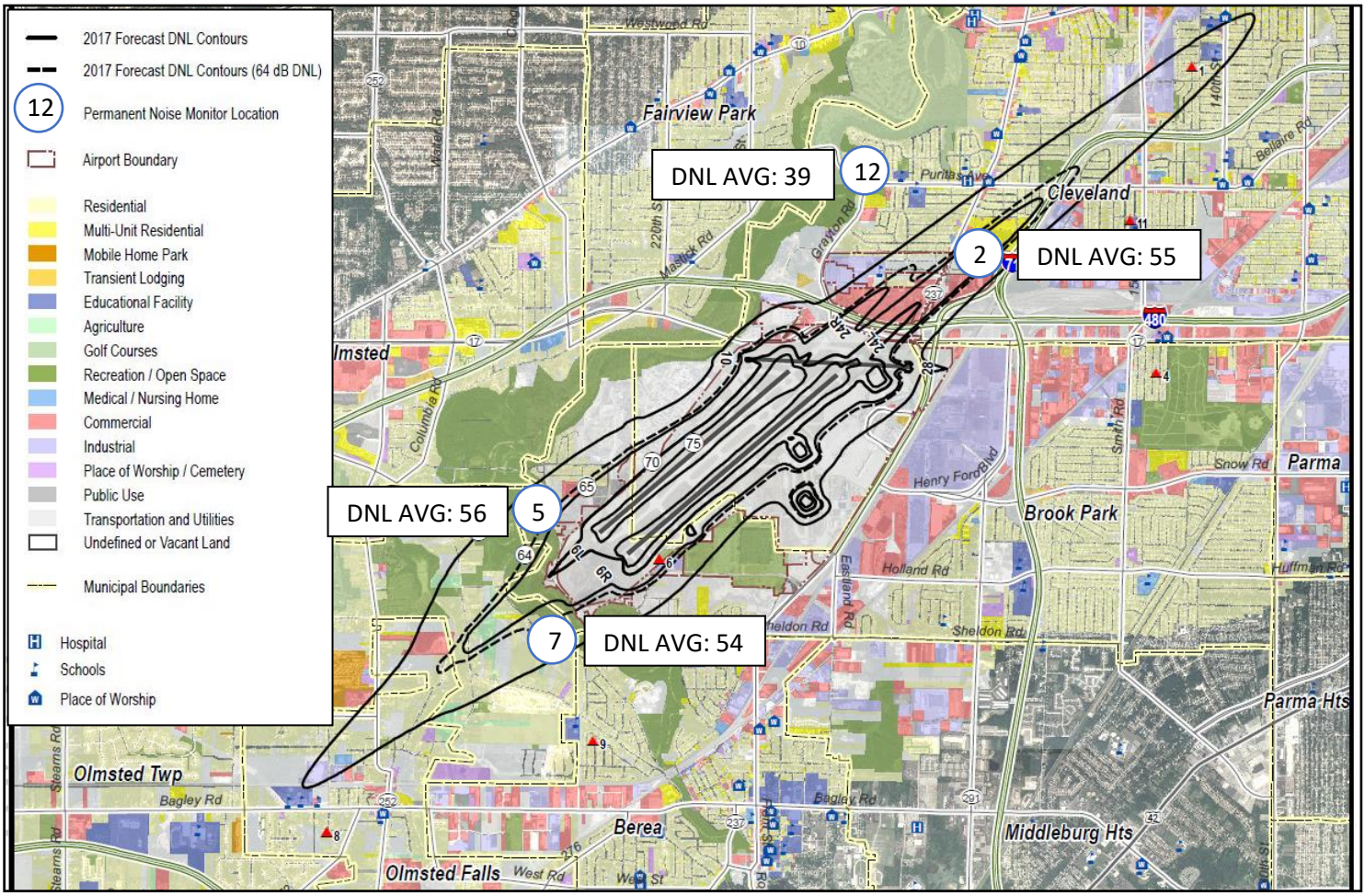
Note: Flight tracks are historic and do not represent the current quarter.

Source: www.metroplexenvironmental.com

Aircraft Noise: 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/



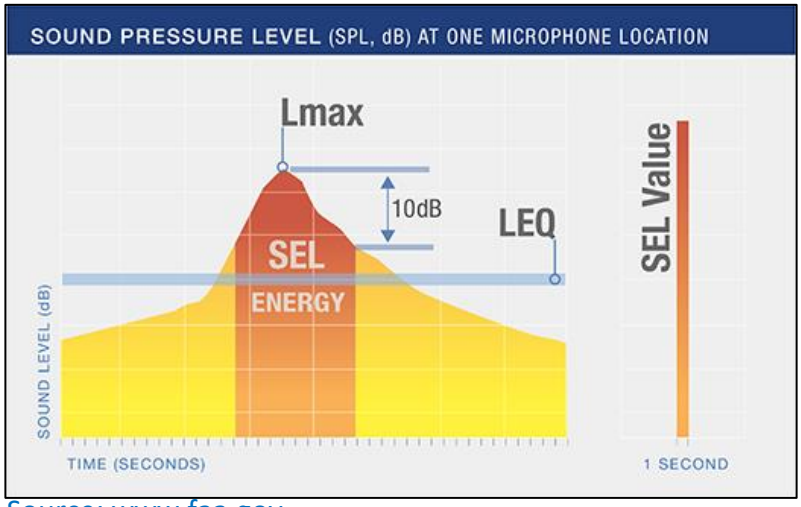
Top Three Lmaxs at Each NMS

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 precious page.

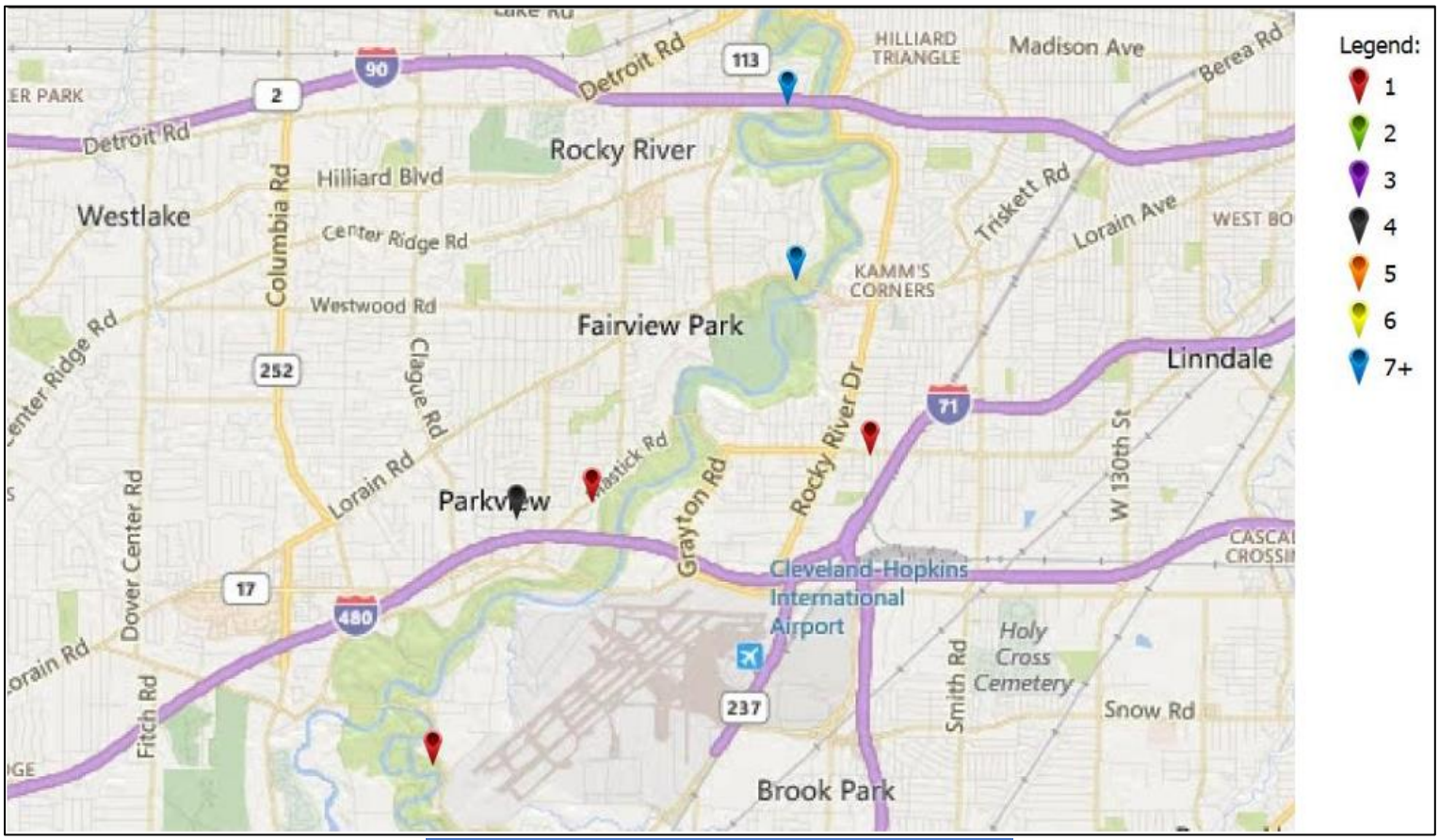


Source: www.faa.gov

Date and Time	NMS	Lmax (dB)	Sound Esposure Level (dB)	Duration (sec)	Operation	Aircraft
6/9/2020 8:41	**NMS02**	99.65	86.1	94	Departure 24R	Dassault Falcon 2000
6/19/2020 12:20	**NMS02**	96.94	84.3	57	Departure 24R	Embraer E170
6/25/2020 15:09	**NMS02**	98.317	87.6	40	Departure 24R	Bombardier CRJ700
5/14/2020 21:42	**NMS05**	97.345	88.5	30	Departure 24R	MD-11
5/29/2020 21:59	**NMS05**	96.886	88	32	Departure 24R	MD-11
6/26/2020 8:38	**NMS05**	97.5	89	34	Departure 24R	Airbus A300
4/2/2020 9:26	**NMS07**	98.973	91.3	32	Departure 24L	MD-88
6/5/2020 19:35	**NMS07**	100.743	98.2	39	Departure 24R	Dassault Falcon 900
6/23/2020 21:28	**NMS07**	97.172	89.7	30	Departure 24R	MD-11
4/23/2020 21:36	**NMS12**	93.133	84.7	24	Departure 24L	MD-11
5/7/2020 21:40	**NMS12**	94.805	86.9	27	Departure 24L	MR-11
6/30/2020 12:57	**NMS12**	89.77	80.8	20	Departure 24L	Dassault Falcon 50

2nd Quarter Complaint Map

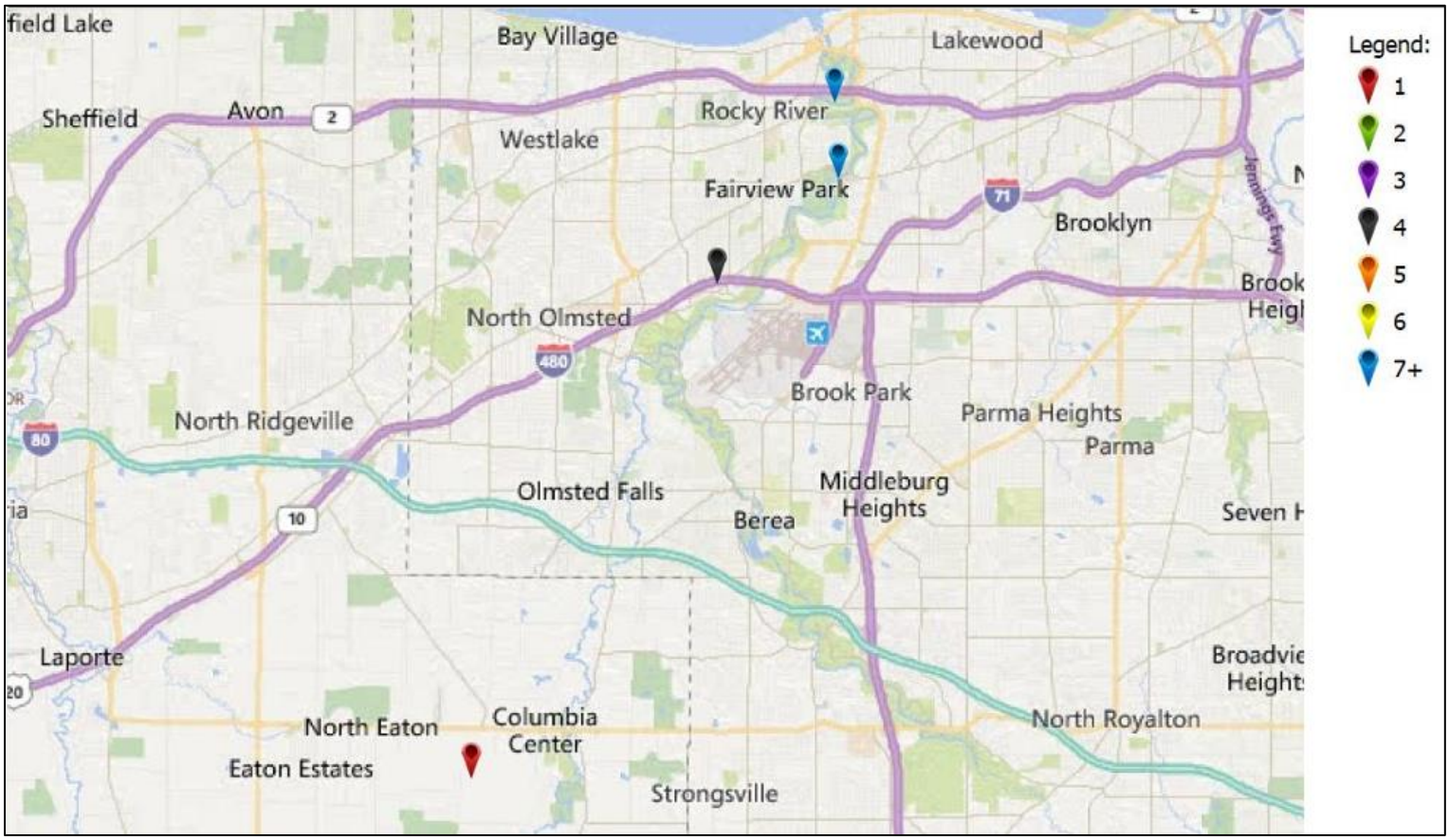
Complaints from April 2020



City	Number of Complainants	Number of Complaints
Fairview Park	4	43
Cleveland	1	1
Rocky River	1	14
Brook Park	1	1

2nd Quarter Complaint Map

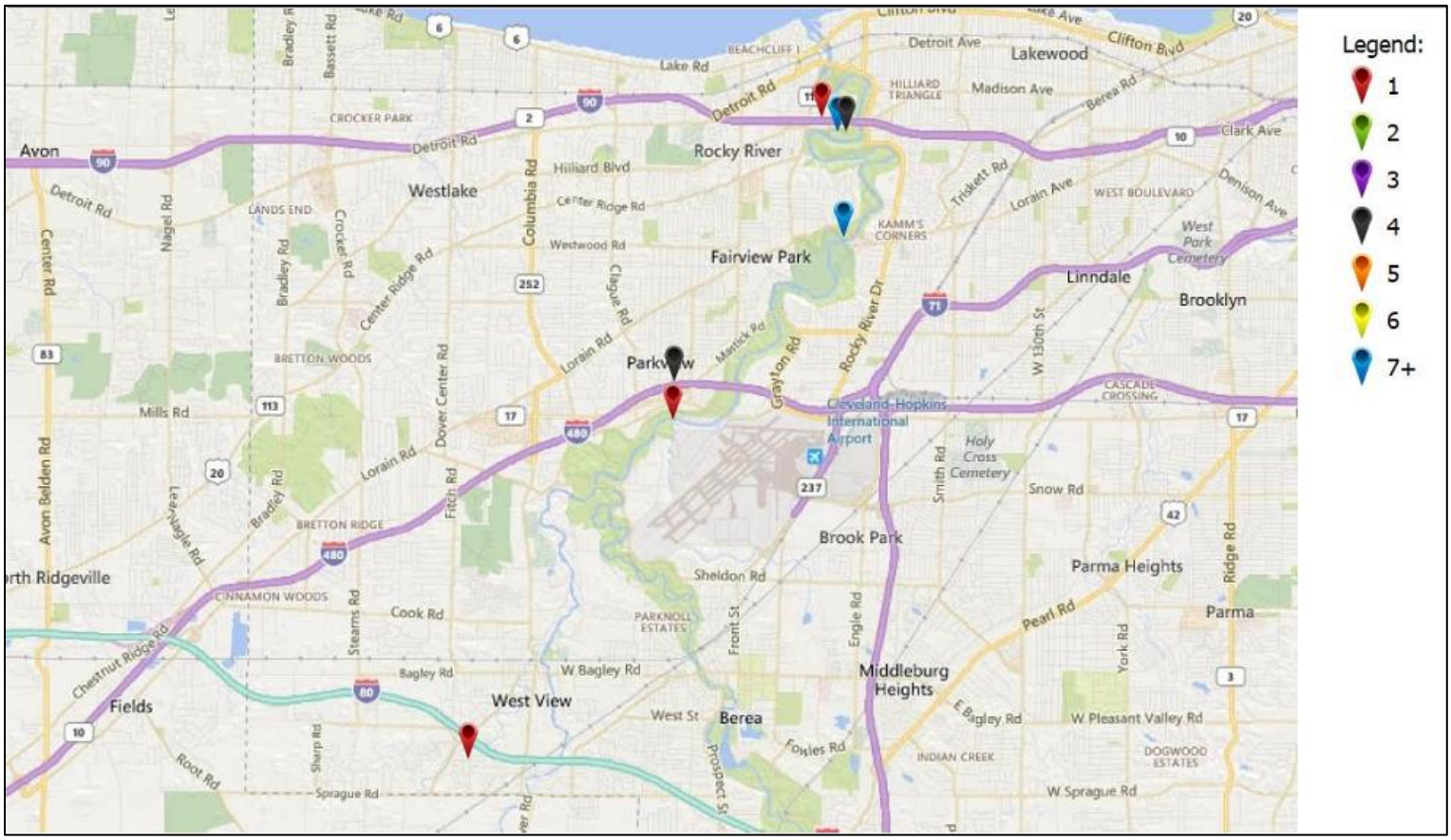
Complaints from May 2020



City	Number of Complainants	Number of Complaints
Columbia Station	1	1
Fairview Park	2	55
Cleveland	1	1
Rocky River	1	18

2nd Quarter Complaint Map

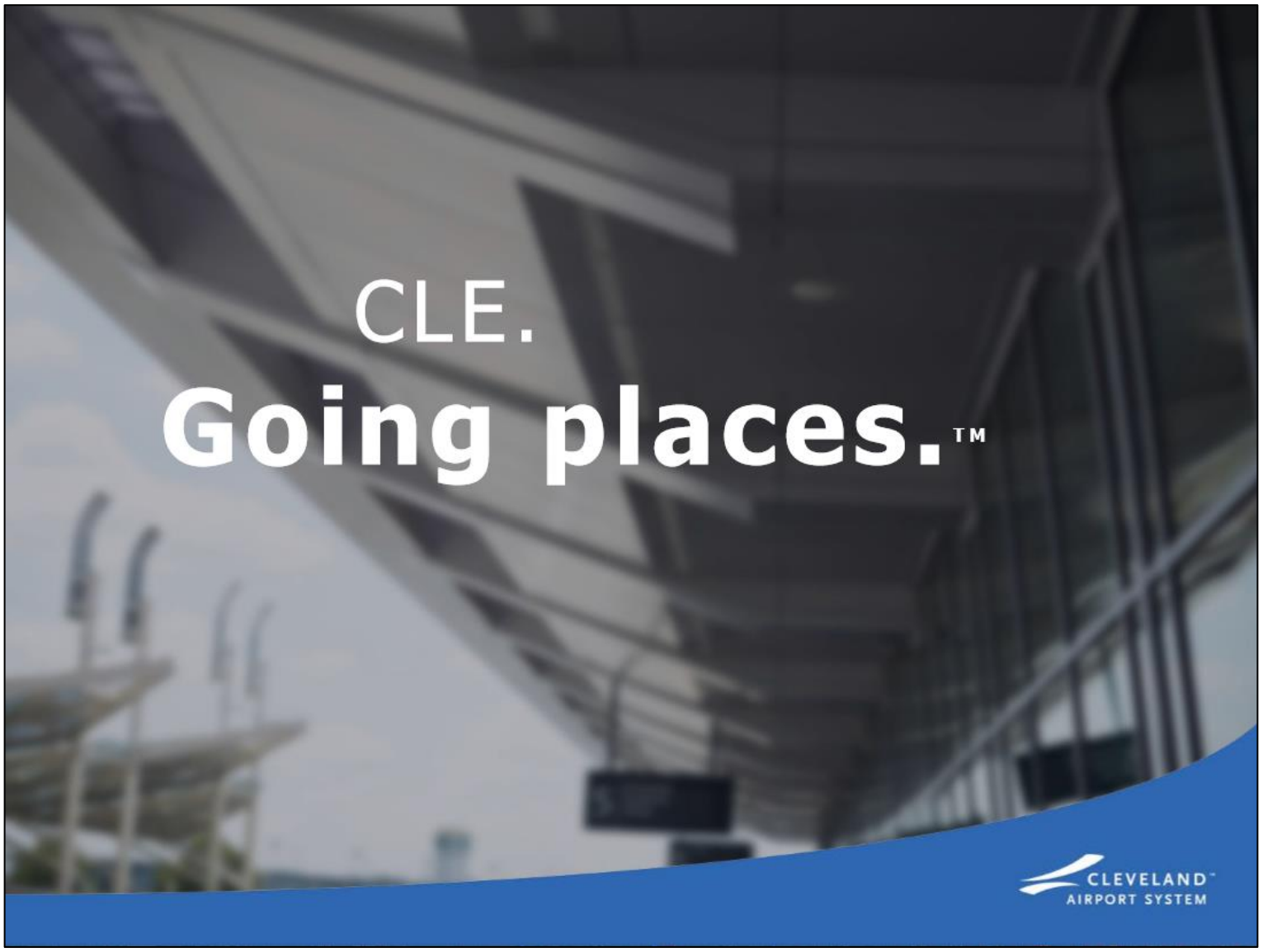
Complaints from June 2020



City	Number of Complainants	Number of Complaints
Fairview Park	4	36
Rocky River	3	19
Olmsted Falls	3	3
Wadsworth	1	1

Do you have a noise complaint?

Please visit the Symphony PublicVue 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.



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