



MEETING AGENDA

November 27, 2023

3 p.m.

Baytown Township Hall

4020 McDonald Dr N, Stillwater, MN 55082

1. Welcome and Introductions
2. Approval of Meeting Minutes for 8-28-2023 **(Action Item)**
3. Public Comment (3 min. per speaker)
4. Airport Manager Update
5. Airport User Spotlight
6. Noise Abatement Plan Recommendations
7. Member Comment
8. Set Future LEAAC Meeting Schedule
9. Adjourn

Unless otherwise noted, agenda topics are presented as information only.

For assistance with meeting accommodations, please contact:

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Reliever Airports: NOISE ABATEMENT PLAN

Lake Elmo Airport (21D)

INTRODUCTION

The Noise Abatement Plan (NAP) for Lake Elmo Airport has been prepared in recognition of the need to make the airport and the surrounding community as environmentally compatible as possible.

This NAP is a set of voluntary measures designed to reduce the negative impacts of aircraft noise experienced by the communities surrounding the airport. These measures were developed through a cooperative effort between airport users, airport businesses, local communities, City officials, Federal Aviation Administration representatives, the Lake Elmo Airport Advisory Commission, and the Metropolitan Airports Commission.

The NAP measures below are voluntary and are not intended to conflict with Federal Aviation Administration regulations or any safety requirements. As such, the airport is open for use 24-hours per day, however, pilots are asked to consider operating with the following measures in mind.

1. - NOISE ABATEMENT TAKEOFF AND APPROACH

Use of noise abatement takeoff and landing procedures attempt to reduce the amount of aircraft noise affecting sensitive land uses, such as homes. It is recognized that a wide variety of aircraft use Lake Elmo Airport and each aircraft performs differently. All aircraft operators are encouraged to follow noise abatement procedures with due regard to the performance capabilities of the aircraft being flown, as follows:

- A. When the winds are calm the preferred runway shall be 32. However, if traffic density or air traffic procedures dictate, Runway 14 may also be used.
- B. In most circumstances the winds, weather or traffic density will dictate the runway to be used. However, when circumstances allow, pilots are asked to utilize a runway and flight path that offers the quietest impact for the surrounding community, particularly between 2200-0700 local time. The following priorities are recommended when selecting a runway:

- 1. Piston Engine Aircraft or Turbo-prop Aircraft:

- Arrivals - 32, 14, 22, 4

- Departures - 32, 14, 4, 22

2. Jet Aircraft:

Arrivals/Departures - 32, 14

- C. An aircraft approaching to land on a runway served by a visual approach slope indicator (VASI) or precision approach slope indicator (PAPI) shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.
- D. Use noise abatement arrival and departure guidance published by the Federal Aviation Administration (FAA), National Business Aircraft Association (NBAA) or Aircraft Owners and Pilots Association (AOPA) when arriving to or departing from the airport.

FAA AC 91-53A - Noise Abatement Departure Profile:

https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/22420

FAA AC 91-36D - Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas:

https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentid/23156

NBAA:

<https://nbaa.org/aircraft-operations/environmental-sustainability/noise-abatement-program/>

AOPA:

<https://www.aopa.org/-/media/Files/AOPA/Home/Advocacy/AOPANoiseSteps.pdf>

- E. Turbine-powered aircraft and itinerant aircraft departing on Runways 32 or 14 fly runway heading and turn to a northerly heading after attaining an altitude of 500 feet agl. Avoid overflight of noise-sensitive residential areas, and gain as much altitude as practical before overflying residential areas.

2. - TRAFFIC PATTERN PROCEDURES

The traffic pattern at Lake Elmo Airport consists of standard left turns for each runway. The following procedures pertain to aircraft while operating in the traffic pattern at the Lake Elmo Airport:

- A. Operate aircraft at the airport traffic pattern altitude as follows, unless a lower altitude is needed while in the process of departing or arriving:
 - Turbine-powered aircraft traffic pattern altitude is 1,500 feet agl (2433 msl)
 - Propellor-driven aircraft traffic pattern altitude is 1,000 feet agl (1933 msl)
- B. Avoid multiple training events by turbine-powered aircraft in the traffic pattern.
- C. Keep traffic pattern legs as short as possible and close to the airport without risking safety.

D. Use the full length of runway for arrivals and departures:

- Avoid intersection takeoffs, and
- Avoid stop and go operations.

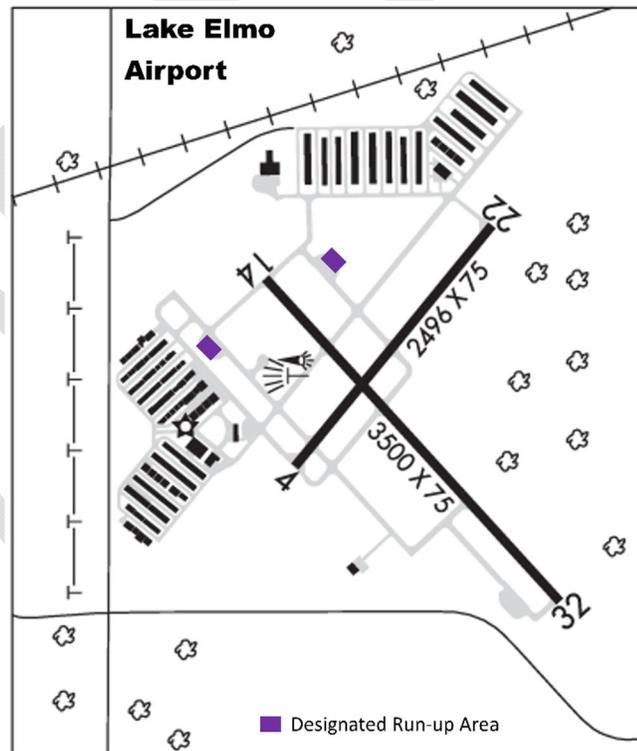
E. Avoid repetitive activity over residences as much as possible.

F. When departing the traffic pattern, choose a path that avoids overflight of residential areas if practical. Follow FAA guidelines regarding close-in noise abatement procedures to reduce impact to surrounding areas.

3. - MAINTENANCE RUN-UPS

Specific locations on the airfield are designated for engine tests and maintenance run-ups. These locations are selected to minimize the amount of noise projected toward adjacent residential areas (see map below). NOTE: A pre-departure run-up with less than 5-minute duration may be conducted at other areas on the airfield, as needed.

A. Conduct all engine tests and maintenance run-ups in excess of 5-minutes in a designated area only



B. Avoid engine tests and maintenance run-ups between 2200 and 0800 local time.

4. - HELICOPTER TRAINING

The unique design and operational characteristics of helicopters operations do not require use of a runway surface; however, helicopter operators must avoid conflicting with the flow of fixed wing aircraft. The following procedures apply to helicopter training.

- A. Avoid helicopter training in the traffic pattern from 2200 to 0700 local time.
- B. Avoid hovering for extended durations in the vicinity of residential areas.
- C. Avoid repetitive activity over the same neighborhoods as much as possible.

5. - NIGHTTIME OPERATIONS

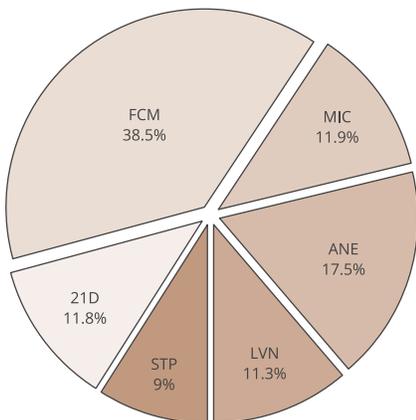
Nighttime hours (2200 to 0700 local time) are noise sensitive because people are resting and noise intrusions are more noticeable. When nighttime flight activity is needed, please limit the noise and operate with consideration for the neighbors during nighttime hours by following these measures:

- A. Avoid operating aircraft between 2200 and 0700 local time as much as possible.
- B. Avoid flight training and repetitive activity in the traffic pattern between 2400 and 0700 local time.
- C. Avoid intersection takeoffs and stop and go operations at all times.
- D. Avoid low-level flight over the airport.

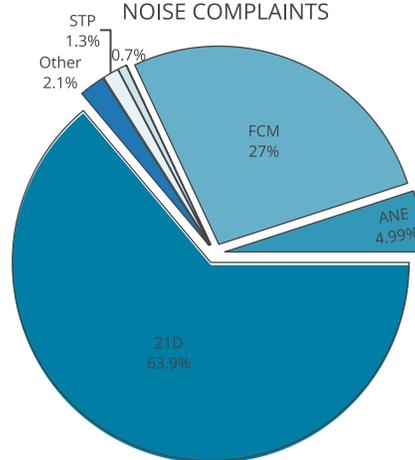
Metropolitan Airports Commission (MAC) Reliever Airport Operations and Noise Complaint Report



AIRCRAFT OPERATIONS



NOISE COMPLAINTS

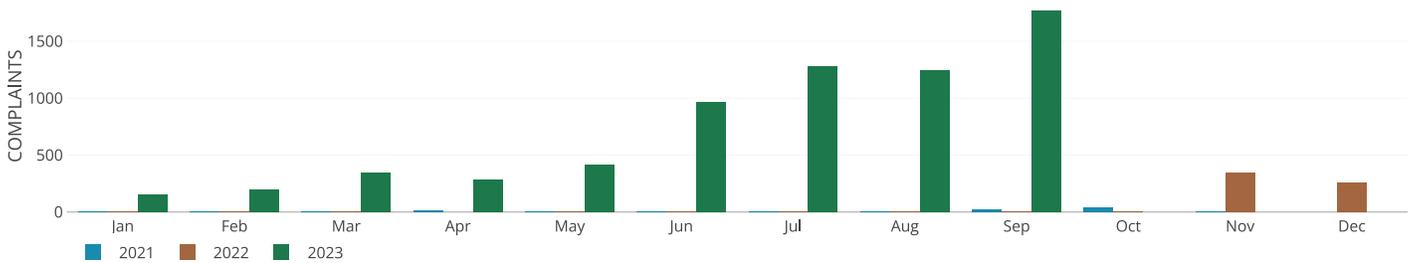
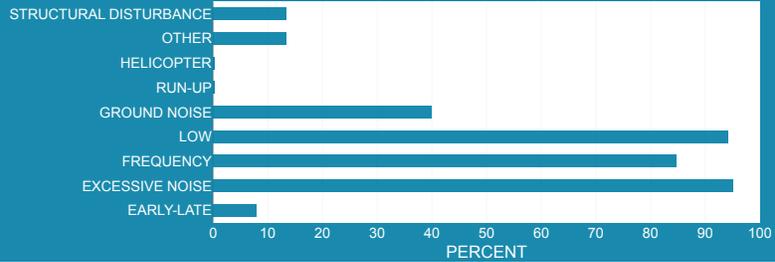


NOTE: Beginning on July 1, 2021, the MACNOMS methodology for counting operations was updated to more accurately reflect total aircraft departures or arrivals at MAC airports.

COMPLAINTS

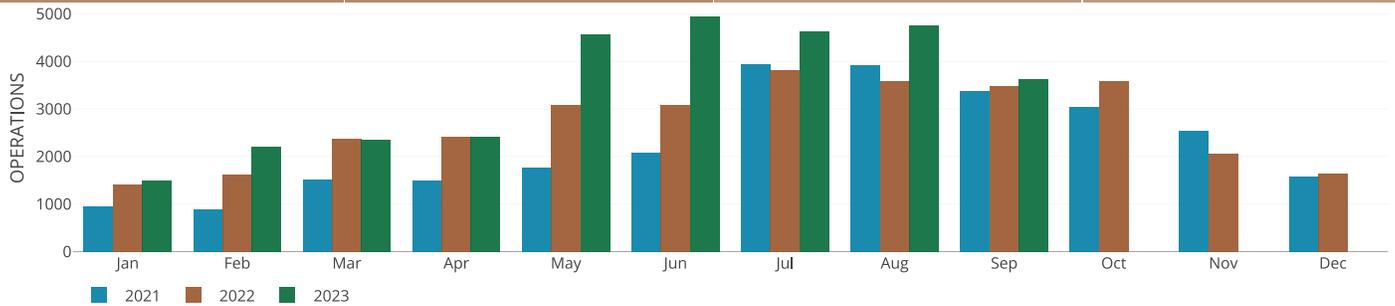
2023	4,291 COMPLAINTS	16 LOCATIONS	80 NIGHTTIME COMPLAINTS	9 NIGHTTIME HOUSEHOLDS
2022	6 COMPLAINTS	4 LOCATIONS	0 NIGHTTIME COMPLAINTS	0 NIGHTTIME HOUSEHOLDS

COMPLAINT DESCRIPTORS



OPERATIONS

2023		2022	
13,031 OPERATIONS	253 NIGHTTIME OPERATIONS	10,888 OPERATIONS	224 NIGHTTIME OPERATIONS

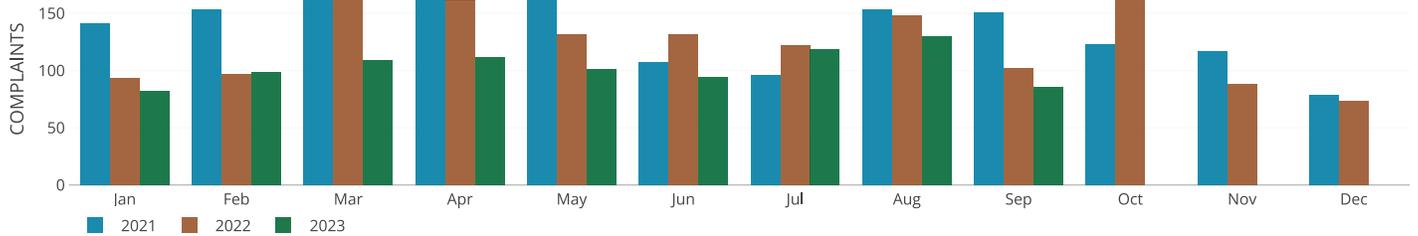
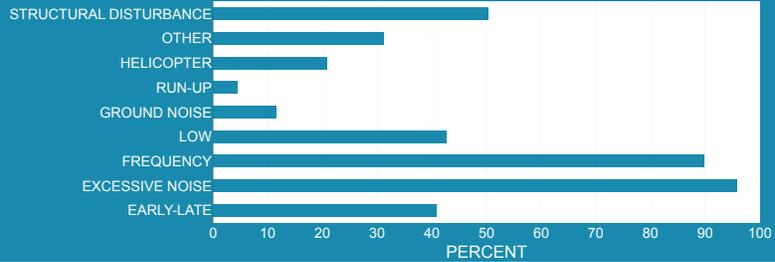


AIRCRAFT TYPE	OPERATIONS	%	COMPLAINTS	%
JET	2	0.0 %	17	0.4 %
HELICOPTER	147	1.1 %	32	0.7 %
NOT-CORRELATED	0	0.0 %	29	0.7 %
PISTON	12,585	96.6 %	4,114	95.9 %
TURBO-PROP	42	0.3 %	30	0.7 %
UNKNOWN	255	2.0 %	69	1.6 %
RUN-UP	0	0.0 %	0	0.0 %

COMPLAINTS

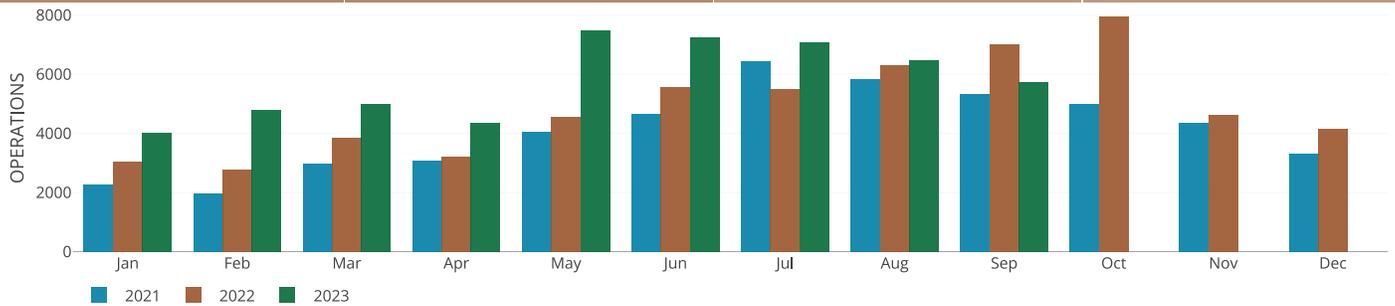
2023	335 COMPLAINTS	14 LOCATIONS	90 NIGHTTIME COMPLAINTS	8 NIGHTTIME HOUSEHOLDS
2022	372 COMPLAINTS	12 LOCATIONS	97 NIGHTTIME COMPLAINTS	8 NIGHTTIME HOUSEHOLDS

COMPLAINT DESCRIPTORS



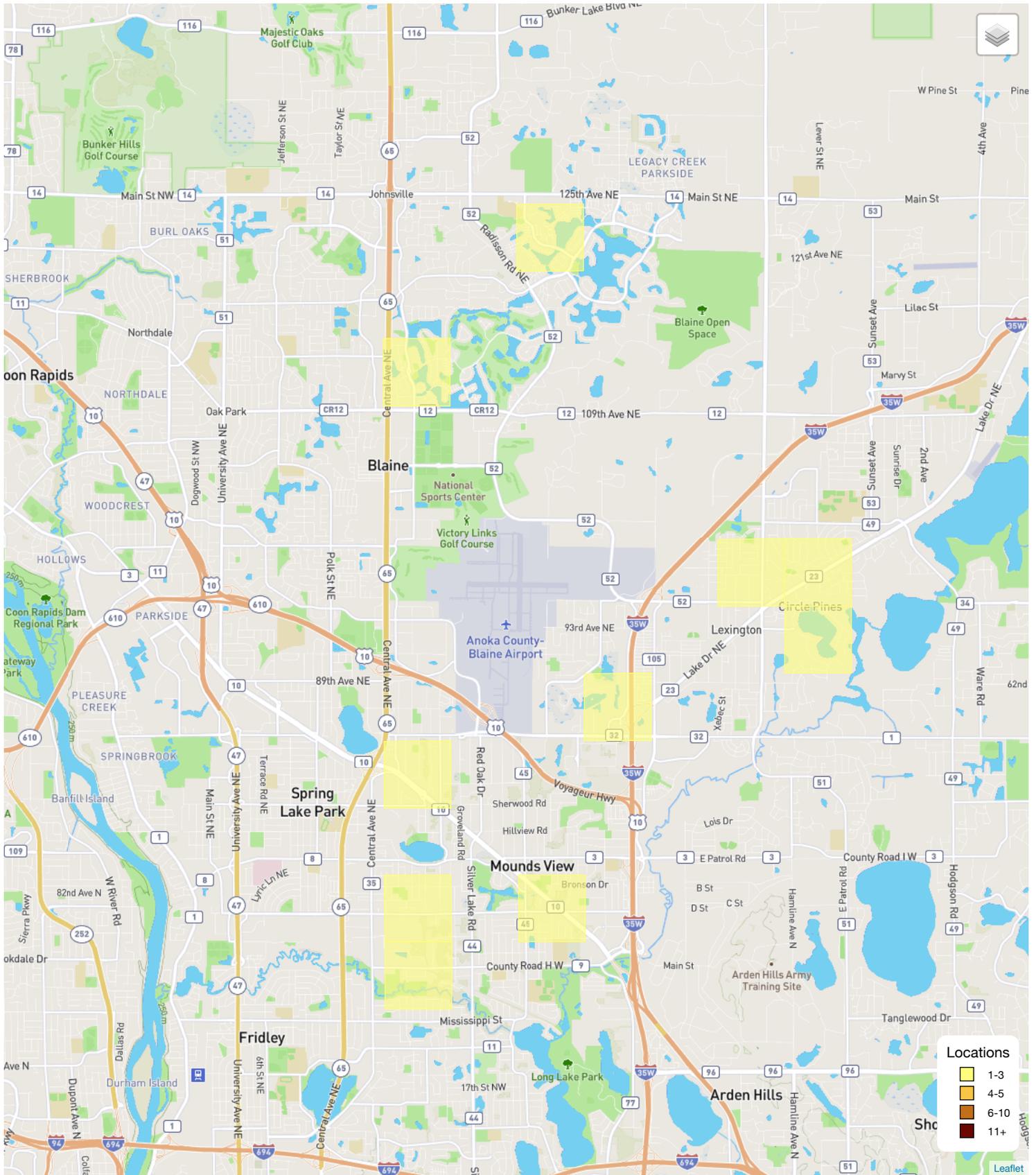
OPERATIONS

2023		2022	
19,328 OPERATIONS	1,274 NIGHTTIME OPERATIONS	18,815 OPERATIONS	1,113 NIGHTTIME OPERATIONS



AIRCRAFT TYPE	OPERATIONS	%	COMPLAINTS	%
JET	631	3.3 %	47	14.0 %
HELICOPTER	567	2.9 %	31	9.3 %
MILITARY	6	0.0 %	1	0.3 %
NOT-CORRELATED	0	0.0 %	1	0.3 %
PISTON	16,827	87.1 %	194	57.9 %
TURBO-PROP	958	5.0 %	45	13.4 %
UNKNOWN	339	1.8 %	16	4.8 %
RUN-UP	0	0.0 %	0	0.0 %

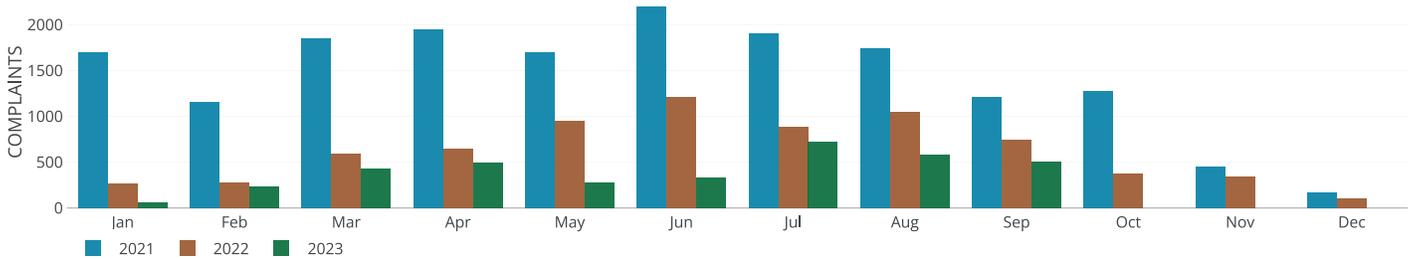
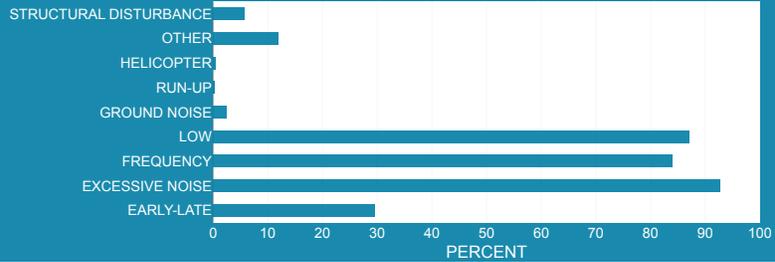
Anoka County-Blaine (Janes Field) Airport (ANE) - COMPLAINTS HEATMAP



COMPLAINTS

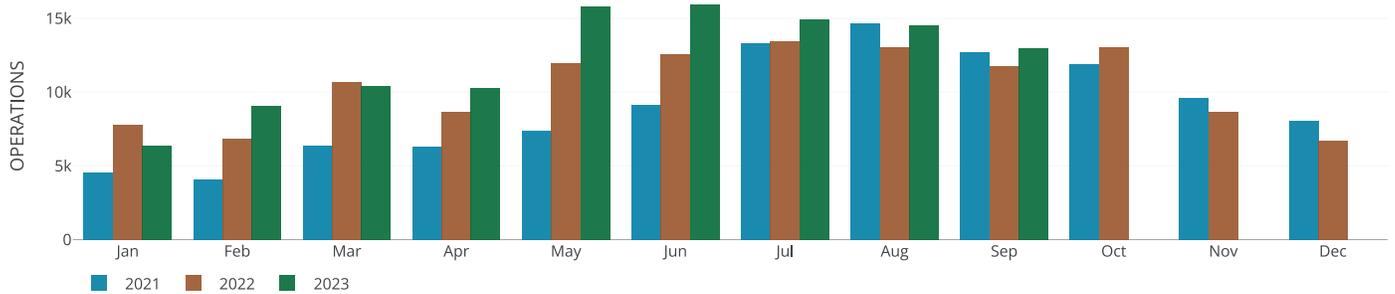
2023	1,812 COMPLAINTS	45 LOCATIONS	395 NIGHTTIME COMPLAINTS	23 NIGHTTIME HOUSEHOLDS
2022	2,673 COMPLAINTS	51 LOCATIONS	370 NIGHTTIME COMPLAINTS	29 NIGHTTIME HOUSEHOLDS

COMPLAINT DESCRIPTORS



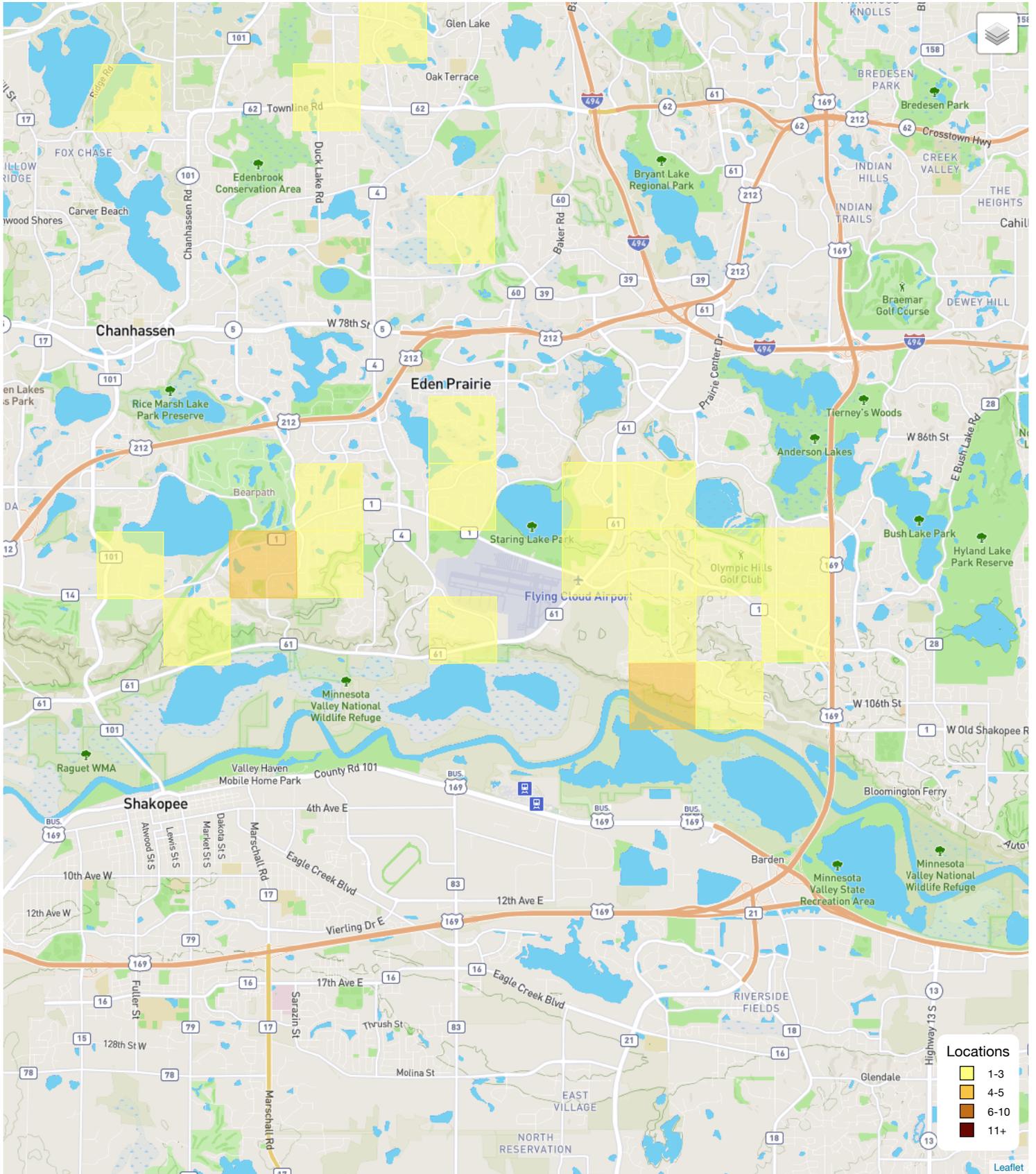
OPERATIONS

2023		2022	
42,493 OPERATIONS	2,332 NIGHTTIME OPERATIONS	38,334 OPERATIONS	1,665 NIGHTTIME OPERATIONS



AIRCRAFT TYPE	OPERATIONS	%	COMPLAINTS	%
JET	3,111	7.3 %	220	12.1 %
HELICOPTER	561	1.3 %	4	0.2 %
NOT-CORRELATED	0	0.0 %	11	0.6 %
PISTON	36,339	85.5 %	1,369	75.6 %
TURBO-PROP	2,187	5.1 %	193	10.7 %
UNKNOWN	290	0.7 %	15	0.8 %
MILITARY	5	0.0 %	0	0.0 %
RUN-UP	0	0.0 %	0	0.0 %

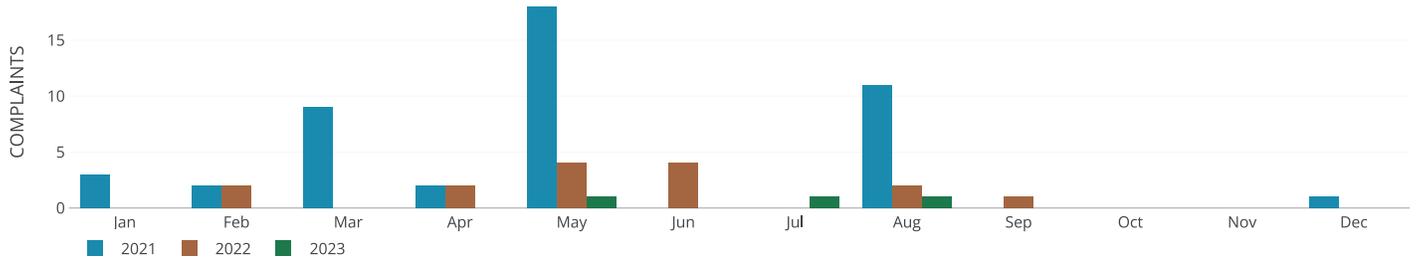
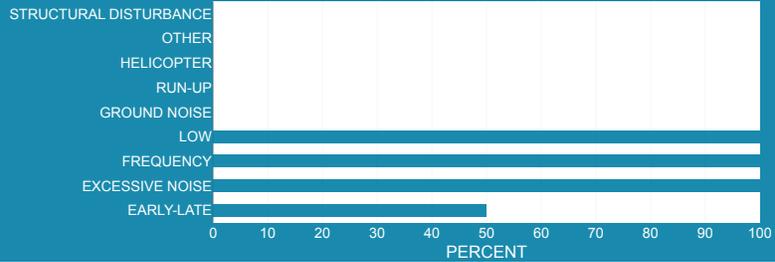
Flying Cloud Airport (FCM) - COMPLAINTS HEATMAP



COMPLAINTS

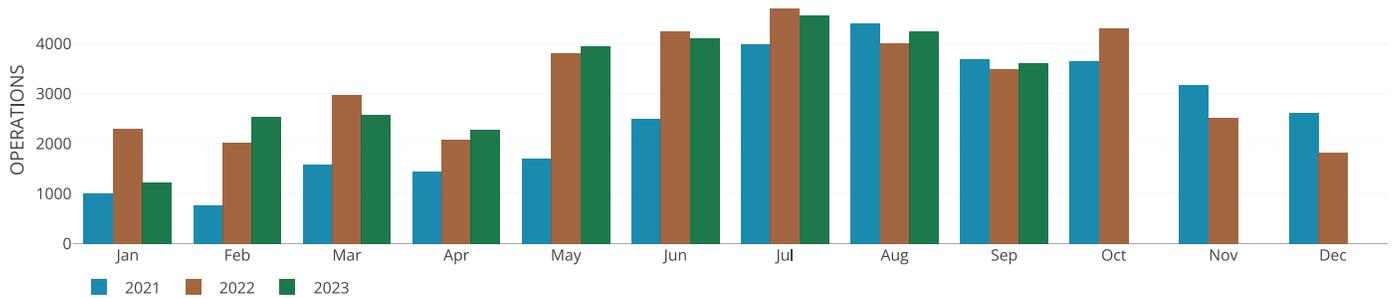
2023	2 COMPLAINTS	2 LOCATIONS	0 NIGHTTIME COMPLAINTS	0 NIGHTTIME HOUSEHOLDS
2022	3 COMPLAINTS	2 LOCATIONS	2 NIGHTTIME COMPLAINTS	1 NIGHTTIME HOUSEHOLDS

COMPLAINT DESCRIPTORS



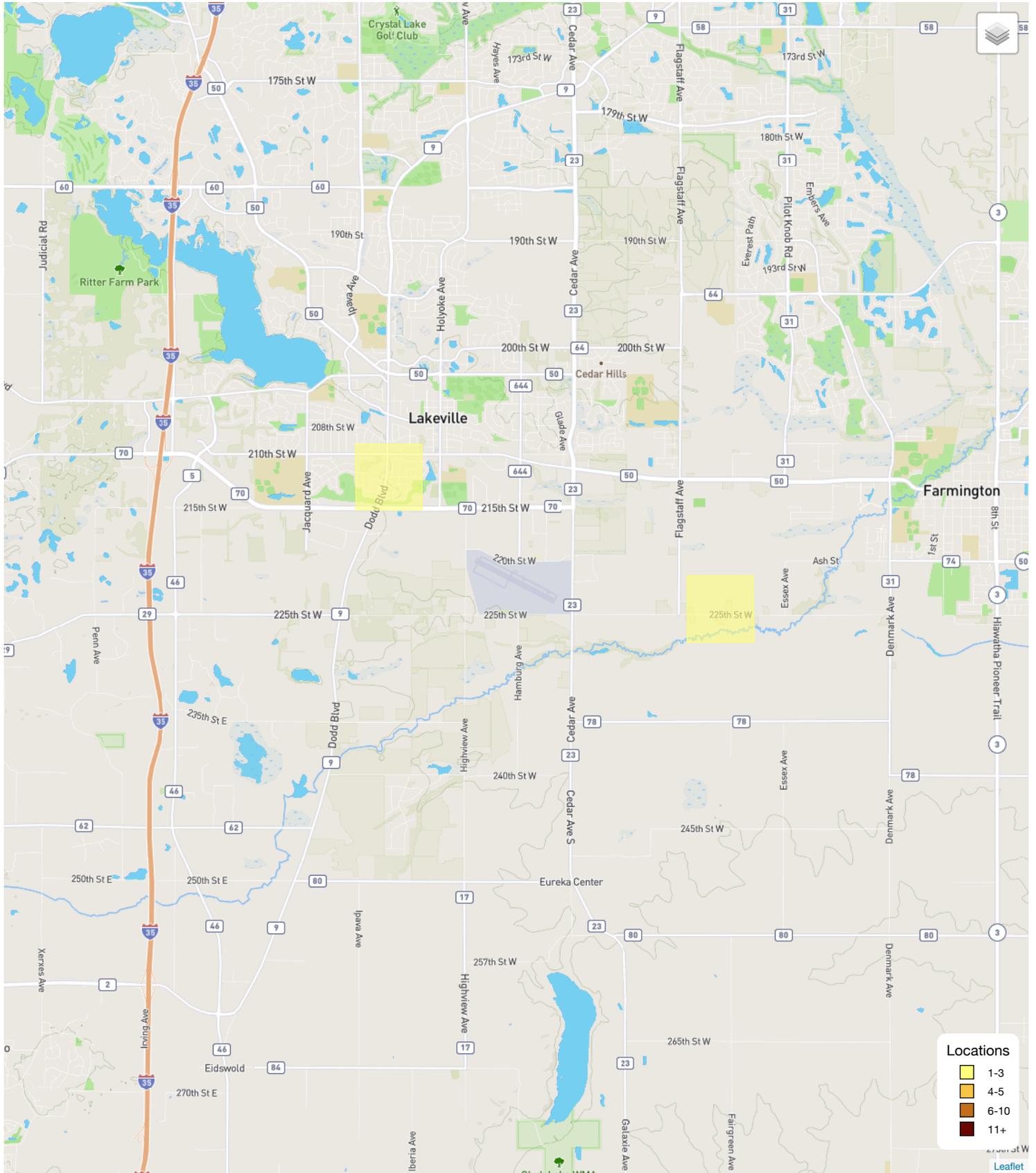
OPERATIONS

2023		2022	
12,423 OPERATIONS	260 NIGHTTIME OPERATIONS	12,191 OPERATIONS	295 NIGHTTIME OPERATIONS



AIRCRAFT TYPE	OPERATIONS	%	COMPLAINTS	%
PISTON	11,944	96.1 %	2	100.0 %
HELICOPTER	25	0.2 %	0	0.0 %
JET	78	0.6 %	0	0.0 %
TURBO-PROP	112	0.9 %	0	0.0 %
UNKNOWN	264	2.1 %	0	0.0 %
RUN-UP	0	0.0 %	0	0.0 %

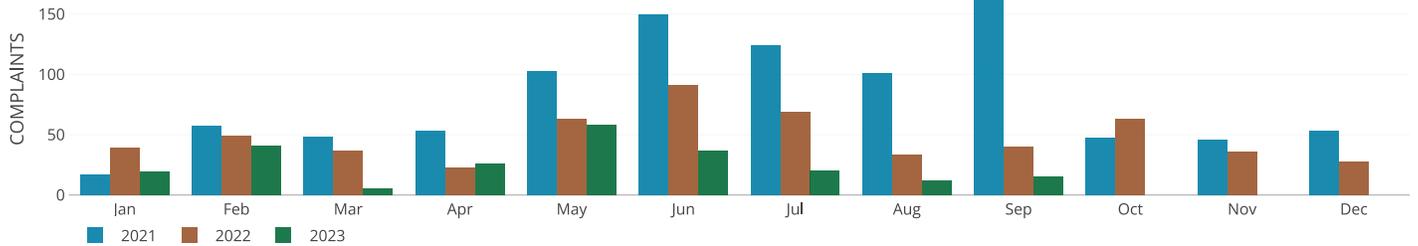
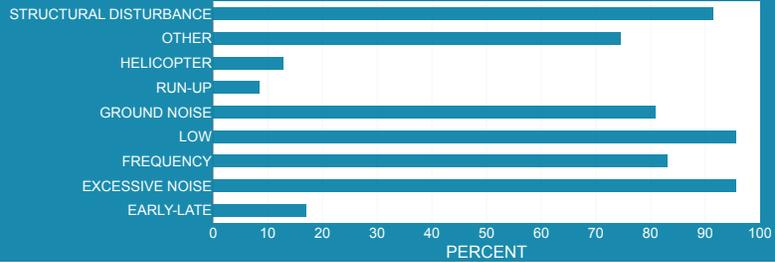
Airlake Airport (LVN) - COMPLAINTS HEATMAP



COMPLAINTS

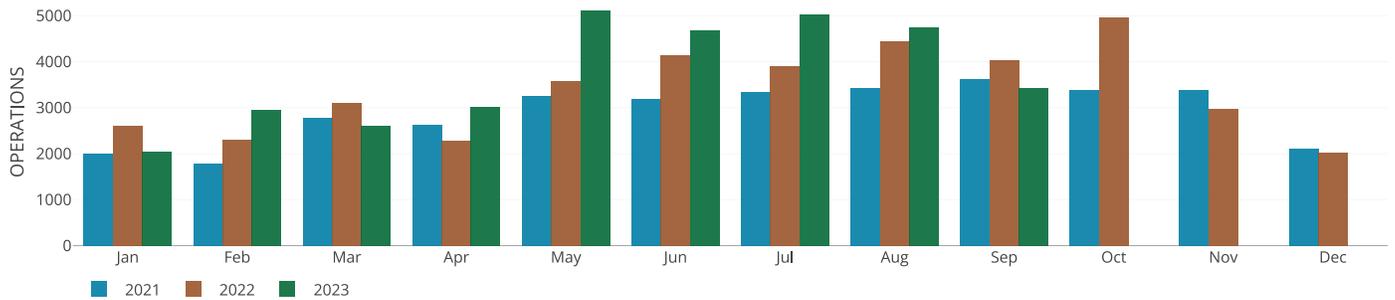
2023	47 COMPLAINTS	5 LOCATIONS	6 NIGHTTIME COMPLAINTS	1 NIGHTTIME HOUSEHOLDS
2022	142 COMPLAINTS	5 LOCATIONS	8 NIGHTTIME COMPLAINTS	2 NIGHTTIME HOUSEHOLDS

COMPLAINT DESCRIPTORS



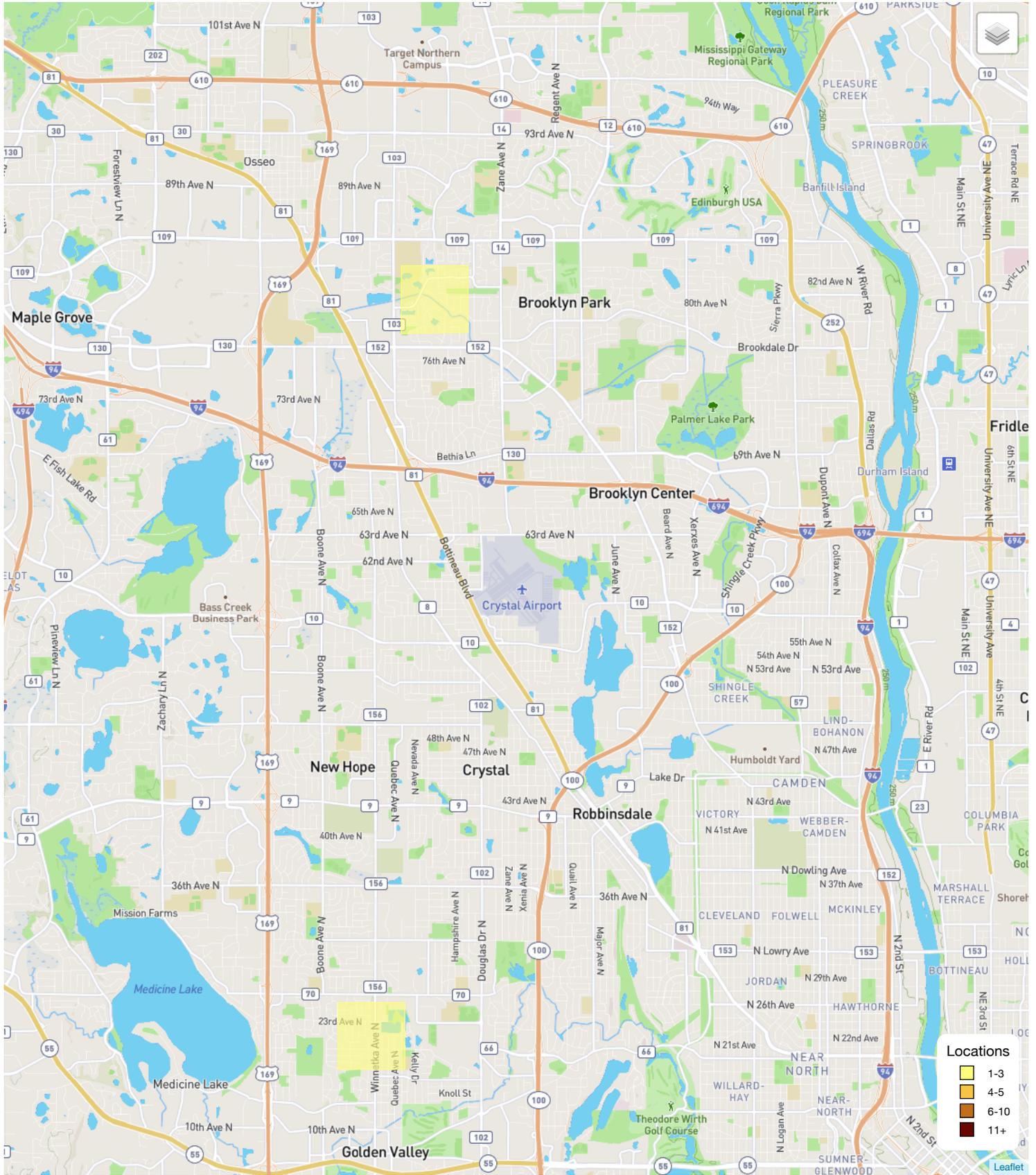
OPERATIONS

2023		2022	
13,188 OPERATIONS	469 NIGHTTIME OPERATIONS	12,379 OPERATIONS	340 NIGHTTIME OPERATIONS



AIRCRAFT TYPE	OPERATIONS	%	COMPLAINTS	%
JET	2	0.0 %	1	2.1 %
HELICOPTER	116	0.9 %	4	8.5 %
PISTON	12,578	95.4 %	42	89.4 %
TURBO-PROP	53	0.4 %	0	0.0 %
UNKNOWN	439	3.3 %	0	0.0 %
RUN-UP	0	0.0 %	0	0.0 %

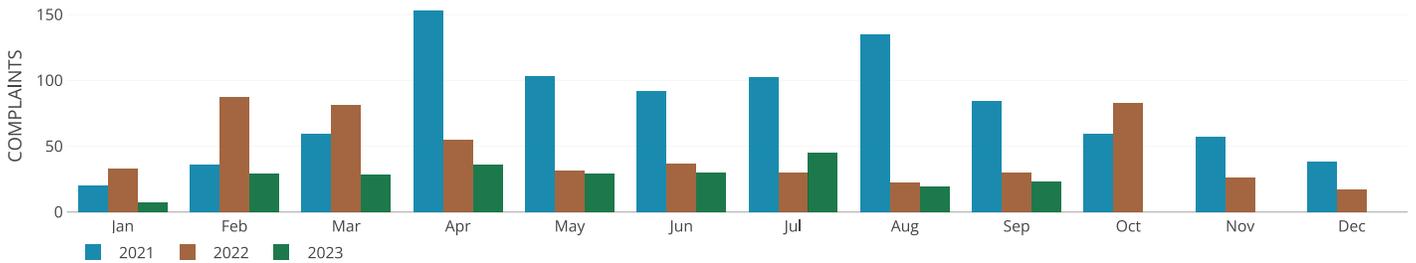
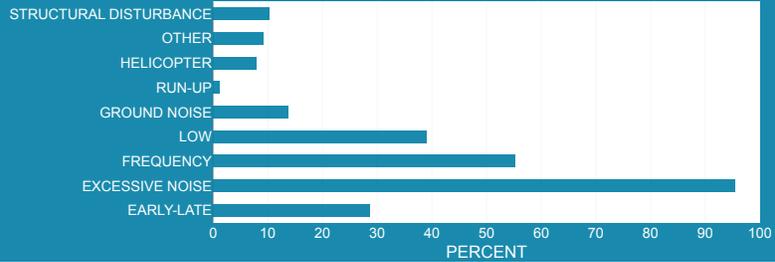
Crystal Airport (MIC) - COMPLAINTS HEATMAP



COMPLAINTS

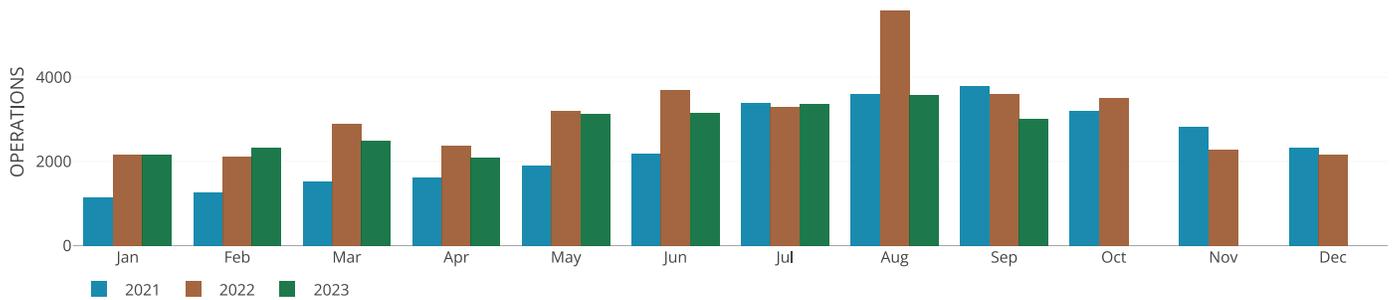
2023	87 COMPLAINTS	14 LOCATIONS	19 NIGHTTIME COMPLAINTS	8 NIGHTTIME HOUSEHOLDS
2022	82 COMPLAINTS	21 LOCATIONS	24 NIGHTTIME COMPLAINTS	9 NIGHTTIME HOUSEHOLDS

COMPLAINT DESCRIPTORS



OPERATIONS

2023		2022	
9,941 OPERATIONS	696 NIGHTTIME OPERATIONS	12,477 OPERATIONS	798 NIGHTTIME OPERATIONS



AIRCRAFT TYPE	OPERATIONS	%	COMPLAINTS	%
JET	2,897	29.1 %	66	75.9 %
HELICOPTER	734	7.4 %	4	4.6 %
PISTON	4,749	47.8 %	6	6.9 %
TURBO-PROP	1,349	13.6 %	8	9.2 %
UNKNOWN	212	2.1 %	3	3.4 %
RUN-UP	0	0.0 %	0	0.0 %

St Paul Downtown Holman Field (STP) - COMPLAINTS HEATMAP

