

## MEETING DATE CHANGE

The MSP Noise Oversight Committee will meet on January 31, 2024 at 1:30 PM at the MAC General Office Building, 6040 28th Avenue South, Minneapolis MN.



## Minneapolis-St. Paul International Airport Noise Oversight Committee (NOC)



### **NOC Committee Members**

Paul Buckley	Scheduled Airline Representative (Delta Air Lines)
Cheryl Jacobson	Community Co-Chair, City of Mendota Heights Representative
Sarah Alig	City of Eagan Representative (City of Eagan)
Grant Fitzer	Minnesota Business Aviation Association Representative
John Bergman	At-Large Community Representative (Apple Valley City Council)
Connor Arnold	At-Large Airport User Representative (Endeavor Air, Inc.)
Chris Swanson	City of Richfield Representative (City of Richfield)
John Klinger	Chief Pilot Representative (Delta Air Lines)
Emily Koski	City of Minneapolis Representative (Minneapolis City Council)
Dwayne Lohman	City of Bloomington Representative (Bloomington City Council)
Angie Moos	Cargo Carrier Representative (United Parcel Service)
Casey Potter	Charter/Scheduled Operator Representative (Sun Country Airlines)

### **MEETING AGENDA**

January 31, 2024 at 1:30 PM

#### **IN-PERSON AND VIRTUAL MEETING FORMATS AVAILABLE**

**MAC General Office Building, Legends Conference Room, 6040 28th Avenue South, Mpls, MN 55450**

**Microsoft Teams Link:** [Click here to join the meeting](#) or **By Phone:** 612-405-6798, ID: 720 478 115#

*Cheryl Jacobson, City of Mendota Heights, will be the acting Chairperson for the meeting*

**Note:** 1:00 to 1:30 PM – Committee Agenda Review Session

(NOC members, alternates, and at-large contacts only in the Coleman Conference Room)

#### **1. Consent**

- 1.1. Approval of November 15, 2023 and November 29, 2023 Meeting Minutes
- 1.2. Reports
  - 1.2.1. Monthly Operations Reports: November and December 2023
  - 1.2.2. Review of Winter Listening Session

#### **2. Public Comment Period**

#### **3. Business**

- 3.1. Nomination and Election of User Co-Chair
- 3.2. RNAV Procedure Review Sub-Committee Recommendations

#### **4. Information**

- 4.1. 2023 Fleet Mix and Nighttime Operations Assessment
- 4.2. 2023 Complaint Data Assessment
- 4.3. Meet the Fleet

#### **5. Announcements**

**Adjourn**



## MSP NOISE OVERSIGHT COMMITTEE

### DRAFT MEETING MINUTES

Wednesday, November 15, 2023, at 1:30 PM

MAC General Offices

6040 28<sup>th</sup> Avenue South

Minneapolis, MN 55450



#### **Call to Order**

A regularly scheduled meeting of the Minneapolis, Saint Paul International Airport (MSP) Noise Oversight Committee, (NOC) having been duly called, was held Wednesday, November 15, 2023, at the Metropolitan Airports Commission (MAC), General Offices, Legends conference room, a videoconference option was also provided. **Chair Hart** called the meeting to order at 1:30 p.m. The following participated in the meeting:

**Representatives:** S. Alig, C. Arnold, J. Hart, B. Hoffman, C. Jacobson, P. Martin, A. Moos, L. Olson, J. Otzen, C. Swanson

**Staff:** Y. Bizen, R. Fuhrmann, B. Juffer, J. Lewis, K. Martin, P. Mosites, D. Nelson, N. Pesky, M. Ross

**Others:** G. Albjerg – HNTB, N. Benson – Jet, P. Buckley – Delta, S. Fortier – FAA, K. Gallatin, J. Hays, F. Hetman – Mon-Ray, Inc., T. Lattimer, C. Morris, S. Morris, N. Rao – FAA, K. Regotti – FAA, J. Risser – City of Edina, M. Thissen, J. Widing, A. Williams – FAA, Y. Xu – HNTB, C. Vassegni – Mon-Ray, Inc., and others

A quorum of at least four Community and four Industry Representatives was established.

**Community Representatives:** Alig, Hoffman, Jacobson, Martin, Olson

**Industry Representatives:** Arnold, Hart, Moos, Otzen

#### **1. Consent**

##### **1.1. Approval of September 20, 2023, Meeting Minutes**

There were no questions.

##### **1.2. Reports**

###### **1.2.1. Monthly Operations Report: September, and October 2023**

**Michele Ross, Technical Advisor**, provided the following September / October operations updates prefacing that each month, the MAC reports information on MSP aircraft operations, aircraft noise complaints, sound levels associated with MSP aircraft operations, and compliance with established noise abatement procedures on its interactive reporting website: <https://customers.macnoms.com/reports>

September

- Total Operations: 26,757

October

- Total Operations: 28,327

- Nighttime Operations: 1,660
  - North/South/Mixed: 18/71/8 (%)
  - RUS (Priority 1/2/3/4):29/24/0/47 (%)
  - RJ/Narrow/Wide: 26/70/4 (%)
  - Complaints: 12,147
  - Complaint locations: 328
  - Top 10 Households: 55%
  - Hours of events\*: 386
  - Number of events\*: 78,012
  - R17 procedure: 99.5%
  - EMH Corridor procedure: 95%
  - Crossing procedure day: 29.7%
  - Crossing procedure night: 48.8%
  - RUS: 52.9%
- Nighttime Operations: 1,851
  - North/South/Mixed: 42/37/12 (%)
  - RUS(Priority1/2/3/4): 40/14/0/46(%)
  - RJ/Narrow/Wide: 25/72/3 (%)
  - Complaints: 10,276
  - Complaint locations: 262
  - Top 10 Households: 61%
  - Hours of events\*: 444
  - Number of events\*: 84,596
  - R17 procedure: 99.2%
  - EMH Corridor procedure: 87.6%
  - Crossing procedure day: 25.6%
  - Crossing procedure night: 42.6%
  - RUS: 53.6%

\* Aircraft sound events above 65dB.

### 1.2.2 Review of Fall Listening Session

The Fall Listening Session review was provided in the meeting packet and was not presented at this meeting though **Chair Hart** offered to take questions. There were no questions.

### 1.2.3 Review of Residential Noise Mitigation Program Implementation Status

The Residential Noise Mitigation review was provided in the meeting packet and was not presented at this meeting though **Chair Hart** offered to take questions. There were no questions.

### Questions / Comments:

**Member Olson** requested that the density map be added into future presentations.

## 2. Public Comment Period

There were no public comments.

## 3. Business

### 3.1. Resolution Honoring Co-Chair Jeff Hart

**Michele Ross, Technical Advisor**, read NOC resolution #01-2023, honoring Co Chair Jeff Hart’s 13 years of service on the NOC Committee representing MSP Airport Users. Co-Chair Hart has served the longest tenure as a Co-Chair in the NOC’s history. The resolution also honored Co-Chair Hart’s 44 years of service at Delta Air Lines (formerly Northwest, and Northwest Orient) as a General Manager for Customer Relations.

### Action Requested:

ADOPT RESOLUTION #01-2023 HONORING CO-CHAIR JEFF HART FOR HIS DEDICATED SERVICE TO THE MINNEAPOLIS, ST PAUL INTERNATIONAL AIRPORT NOISE COMMUNITY.

**Member Jacobson** moved to approve the motion. The motion was seconded by **Member Olson**. The motion passed unanimously via a voice vote.

### **3.2 Review and Approval of the 2023 NOC Accomplishments, 2024 NOC Work Plan, 2024 NOC Meeting Dates**

**Michele Ross, Technical Advisor**, spoke about the 2023 NOC Accomplishments listed in the presentation, and in the agenda packet, as representative of the work that the Committee had undertaken in the past year.

**Ross** thanked the Committee members on behalf of MAC staff, for volunteering their time and talent over the past year.

**Ross** went on to speak about the 2024 Draft NOC work plan, noting that since the plan was presented last September, item G was added regarding MSP construction updates.

The 2024 meeting dates were also presented to the Committee:

- January 17, 2024, at 1:30 PM
- March 20, 2024, at 1:30 PM
- May 15, 2024, at 1:30 PM
- July 17, 2024, at 1:30 PM
- September 18, 2024, at 1:30 PM
- November 20, 2024, at 1:30 PM

**Questions / Comments:** There were no questions or comments.

#### **Action Requested:**

APPROVE AND RECOMMEND TO THE MAC PLANNING, DEVELOPMENT, AND ENVIRONMENT COMMITTEE APPROVAL OF THE 2023 MSP NOC WORK PLAN AND THE 2024 MEETING DATES.

**Member Hoffman** moved to approve the motion, seconded by **Member Jacobson**. The motion passed unanimously via a voice vote.

The 2023 NOC Accomplishments, 2024 NOC Work Plan, and the 2024 Proposed NOC Meeting Times, will move forward to be presented by the NOC's Co-Chairs at the MAC's Planning Development and Environment meeting, December 4, 2023.

## **4. Information**

### **4.1. Reduce Thrust Modeling Update**

**Michele Ross, Technical Advisor**, began by stating that the MAC has undertaken a Reduced Thrust Modeling Project in order to quantify the noise environment more accurately around the MSP airport by refining model inputs pertaining to airline operational practices. The MAC's contractor, HNTB, prepares the annual noise contour report for MSP, and develops the custom profiles for FAA's Aviation Environmental Design Tool (AEDT).

**Yue Xu, HNTB**, provided a status update on the project stating that AEDT is the FAA's standard tool used to analyze aviation noise, air quality and fuel burn. The AEDT database has a wide range of noise signatures and aircraft performance profiles for commercial, general aviation,

and military aircraft. The AEDT profiles represent how aircraft take off and land at airports. MSP has used AEDT to model the MSP Annual Noise Contour Report since 2016.

AEDT has two types of aircraft performance inputs/profiles, standard and nonstandard. Standard profiles are those that are included as a default in AEDT, and nonstandard profiles are custom built and can more accurately represent how aircraft perform at a specific airports. Nonstandard inputs into AEDT require the FAA's concurrence if it is a part of a federal environmental project.

HNTB developed some custom departure profiles at MSP in 2011, 2014, and 2018. These nonstandard inputs were approved by the FAA at the time of inclusion and were used in the MSP Annual Noise Contour Project. Historically, operations with custom profiles account for more than half of the departures at MSP, usually 60 to 70 percent. All custom profiles developed in the past were noise abatement departure procedure profiles, widely utilized by airlines at MSP.

The Reduce Thrust Modeling Project is not a federal project, but an informal review of the custom profiles to ensure that the model is as technically sound as possible. This project will use the AEDT new modeling capabilities to model reduced thrust profiles, also known as derated thrust profiles, and combine them with the AEDT profiles developed for MSP in the past.

AEDT standard profiles assume aircraft depart airports with full thrust. At MSP, most airlines do not use full thrust at departure, so this project's objective is to capture this behavior and model aircraft's derated departure accurately at MSP.

A case study and white paper were put together in 2020 using the 2019 annual noise contour. The difference between the 2019 actual noise contour with the standard Boeing 737-800 AEDT profile and the 2019 noise contour using a reduced thrust profile for the 737-800. The contour with the custom profile is slightly smaller than the one with the standard profile, and it also shows the majority of the benefits appear to be near the airport.

The project methodology included a fleet evaluation of the most commonly flown aircraft at MSP, along with identification of the aircraft types with the highest noise signature. 2022 data from aircraft and airlines with the highest cumulative noise levels were used. Additionally the potential for aircraft retirement and replacement were also considered. Next, coordination with the airlines at MSP was undertaken to request derated thrust percentage data, operational performance information and departure procedures. Based on the information received from the airlines, a series of custom profiles were developed that incorporated both derated thrust departures and AEDT standard procedures. The custom profiles were then sent to the participating airlines for their review and verification. Once feedback from the airlines has been received, any necessary changes will be made and then submitted to the FAA for review. The last step of the project is to evaluate the potential noise impacts on the MSP annual noise contour.

The standard profiles show that aircraft using full thrust take off faster, while the derated AEDT aircraft lift off slower.

In the coordination letter to the airlines, other comparisons were made which include conventions such as flap settings and speed. To date, full duration data has been received from three airlines. The data received shows 20 percent of operations use 5 percent reduction during departure, 75 percent operations use 10 percent reduction and 5 percent use operations use 15 percent reduction. These numbers may change. Custom profiles were built based on the data and were sent to the airlines for review and verification, that is where the project is to date.

Next steps will be to address any comments that airlines may have, then finalize the custom profiles, and send them to the FAA for their technical review and concurrence. The last step of the project is to evaluate any potential impacts of the custom profiles on the MSP annual noise contour project.

**Ms. Ross** mentioned that it is anticipated that the Co-Chairs may request that the NOC is briefed further regarding the project at a future meeting prior to application to any future contours.

#### **Questions / Comments:**

**Member Olson** asked if the project objective was whether the departure profile could be changed in order to increase altitude? She also asked what the objective of the project is and asked if Mr. Xu could go over the graph showing altitude compared to nautical miles and what the benefit is to be gained from this work?

**Ms. Ross** answered that the project objective is to model the noise environment more precisely around MSP. She stated that the airline's actual procedures will not be impacted, and rather that the objective was to gather data to identify how aircraft are actually departing from the airport and to better model that information. From the white paper case study mentioned, there is some evidence that using reduced thrust results could reduce noise impacts to communities. The question is if aircraft are operating using reduced thrust – can that be incorporated into MSP's annual contour model.

**Member Olson** asked clarifying questions regarding the graphics provided.

**Ms. Ross** stated that the project is not yet complete, so it is too early to share specific information regarding specific airlines and aircraft types without having received all airline feedback. This presentation is meant to be more of an overview and does not provide specific information about each aircraft type or profile.

**Member Hoffman** asked if a reduced thrust takeoff policy was airline driven or is it dependent on aircraft specifications and other factors.

**Member Arnold** offered that she could not speak for other airline companies but usually reduced thrust take-offs saves wear and tear on the airplane engine. Typically, the amount of

thrust used on takeoff is based on factors like aircraft weight, if the runway is wet, runway length, obstacles, etc. Endeavor pilots always assume a reduced thrust take off when safely possible.

**Member Olson** asked if the purpose of the study was to reflect the reality of current operations at MSP; specifically, aircraft taking off at lower altitudes using reduced thrust, versus taking off at higher altitudes using full thrust. The current AEDT modeling assumptions do not account for aircraft using reduced thrust and can that be captured in future modeling.

**Mr. Xu** stated that regarding the current model for the contour, there are two sides to the equation; when aircraft fly lower with reduced thrust, they produce less noise, so they may offset each other. He went on to say that the case study conducted in 2020 showed some noise reductions with reduced thrust, especially in areas closer to the airport.

**Co-Chair Hart** asked if there a is connection between the Reduced Thrust Modeling study and the FAA VOR-MON project.

**Ms. Ross** stated that there is no current connection between the two projects. The reduced thrust project was undertaken prior to FAA's procedure development project as a part of the VOR MON decommissioning. However, when those procedures are established at MSP a reevaluation will need to take place in order to reassess the model inputs that go into AEDT to determine if they continue to be appropriate. It may require reaching back out to airlines to get additional feedback regarding operational procedures moving forward.

**Member Arnold** said that pilots receive specific flight information about which flight took off on which day and how much thrust was used, but she said that she was not sure if that data can be pulled and used as real data within the model.

**Miss Ross** said that to date coordination with airlines has been primarily with their standard operating procedures. The model uses an average annual day and overall average operational conditions. **Ms. Ross** went on to say that if there is more data available there would be a definite interest in it.

**Member Swanson** said that he is interested in how the study results might be used to quantify any reduction in noise impact on our communities.

## 5. Announcements

### **MAC Planning Development & Environment**

Monday, December 4<sup>th</sup>, 10:30am

Location: Terminal 1, MAC Commission Chambers

### **January NOC Meeting**

Wednesday, January 17, 2024 @ 1:30 pm

Location: MAC General Offices, Legends conference room + Teams



**NOC Winter Listening Session**

Wednesday, January 24, 2024 @ 6:00 pm

Location: MAC General Offices + Teams

**6. Adjourn**

**Chair Hart** thanked the members of the Committee, NOC staff, and residents in attendance. The meeting was adjourned at 2:20 pm.



## MSP NOISE OVERSIGHT COMMITTEE

### DRAFT MEETING MINUTES

Wednesday, November 29, 2023, at 10:15 AM

MAC General Offices

6040 28<sup>th</sup> Avenue South

Minneapolis, MN 55450



#### **Call to Order**

A special meeting of the Minneapolis, Saint Paul International Airport (MSP) Noise Oversight Committee, (NOC) was held Wednesday, November 29, 2023, at the Metropolitan Airports Commission (MAC) General Offices, Coleman conference room, a videoconference option was also provided. **Chair Jacobson** called the meeting to order at 10:30 a.m. The following participated in the meeting:

**Representatives:** S. Alig, J. Bergman, P. Buckley, G. Fitzner, C. Jacobson, R. Jaeger, D. Lowman, A. Moos, C. Potter, C. Swanson

**Staff:** R. King, R. Fuhrmann, B. Juffer, E. Wilson, M. Kilian, J. Lewis, K. Martin, D. Nelson, N. Pesky, M. Ross, J. Sonju, M. Takamiya, M. Dockter

**Others:** K. Gallatin – St. Paul, J. Hart – Delta, J. Hays – FAA, E. Johnson – FAA, S. Neal – City of Edina, N. Rao – FAA, K. Regotti – FAA, L. Corey – FAA, M. Jenny – FAA, J. Risser – City of Edina, Lynne Moore – Bloomington, Bill Raker – Eagan ARC, D. Venters, WCCO-TV, J. Widing – Met Council, Y. Xu – HNTB, K. Hughes – HNTB, G. Albjerg – HNTB, B. Smith, R. Bassarab, B. Rineer, A. Kiorpes, C. Vasseghi, F. Herman, B. Kane, S. Thompson, R. Agnew, J. Grove, A. Petersen, and others

A quorum of at least four Community and four Industry Representatives was established.

**Community Representatives:** Alig, Bergman, Jacobson, Lowman, Swanson

**Industry Representatives:** Fitzner, Buckley, Moos, Potter, Jaeger

#### **1. Business**

##### **1.1. Approve Special Meeting and Agenda**

**Michele Ross, Technical Advisor**, shared that the FAA has provided the NOC an opportunity to offer input on the proposed MSP Area Navigation (RNAV) procedures currently under development. The deadline for preliminary recommendations is on or before February 1, 2024. There will be additional opportunities for both public engagement and NOC comments after the February first date, but this is a great opportunity to have our comments considered and potentially incorporated into the new RNAV procedures. Given the timeline, and the importance of providing feedback to the FAA regarding their procedure development process, and engagement efforts, the NOC determined it necessary to hold this Special NOC Meeting.

The November 29, 10:15 a.m. meeting time was the option that worked for most NOC members, subcommittee members, and MAC Staff. Due to the short timeline, notice for this meeting was unable to be provided pursuant to the NOC Bylaws, Article 7. However, the Bylaws allow the NOC to meet if

it elects to consider the matter. Therefore, the following action is requested, to allow for the convening of the NOC today with the agenda as proposed.

**Action Requested:**

APPROVE SUSPENDING THE NOTICE REQUIREMENT IN ARTICLE V11(3) OF THE NOC BYLAWS; AND APPROVE TODAY'S AGENDA THAT WAS NOT PROVIDED PURSUANT TO ARTICLE V11(3).

**Member Bergman** moved to approve the motion. The motion was seconded by **Member Potter**. The motion passed unanimously via a voice vote.

2. **Consent**

**2.1. Approval of September 20, 2023, Meeting Minutes**

**Member Bergman** moved to approve the motion. The motion was seconded by **Member Alig**. The motion to approve the Consent Agenda passed unanimously via a voice vote.

3. **Public Comment Period**

**Co-Chair Jacobson** asked members of the public, in person and online, if they had any questions - there were none.

4. **Business**

**4.1. RNAV Procedure Review Sub-Committee Recommendations**

**Michele Ross, Technical Advisor**, shared that the FAA informed the NOC, at its January 2020 meeting, that due to the decommissioning of the VOR ground-based navigation system, the FAA would need to develop new RNAV satellite-based departure procedures for MSP. The original decommissioning had been set for September 2022, but due to the global pandemic, it was pushed back to August 7, 2025. The FAA has since provided several updates at NOC meetings regarding departure procedure development.

The RNAV Procedure Review Sub-Committee was established at the September 20, 2023, meeting of the NOC. It was tasked with reviewing the proposed RNAV procedures and any impacts for MSP and the MSP communities, as well as reviewing the FAA's engagement plan. The sub-committee will remain effective until the MSP VOR is decommissioned and new departure procedures have been charted, or until December 31, 2025, whichever is later. The sub-committee, per NOC by-laws, is comprised of an equal balance of airport users and community representatives. The airport user members are represented by the Airport User Co-Chair, the Chief Pilot Representative, and the Scheduled Airline Representative. The community members are represented by the Community Co-Chair, and representatives from the cities of Minneapolis and Eagan.

The sub-committee met October 30, and received a draft overview from the FAA regarding their proposed departure procedures and public engagement plan. At that meeting, the FAA shared that they are offering an opportunity for the NOC to provide preliminary comments regarding any changes to the departure procedures as well as the FAA's plan to engage the public. The deadline for comments is on or before February 1, 2024. This timeframe allows the FAA to consider incorporating potential recommendations prior to beginning its larger public engagement process that is slated to start in the summer of 2024.

The sub-committee met again on November 20, 2023, to discuss and draft potential recommendations for consideration by the NOC. The sub-committee's recommendations have been provided as an addendum to the agenda packet for this meeting, they are also available at [metroairports.org/NOC](https://metroairports.org/NOC). The sub-committee determined that it was timely to provide recommendations to the FAA related to their engagement efforts in order to increase transparency, increase communication, and increase opportunities for the public to engage with the procedures and learn more about any potential impacts at and around MSP.

The committee is requesting that the full NOC approve the RNAV Procedure Review Sub-Committee's recommendations and forward those to the FAA. Staff recommends that the action be amended to include a cover letter signed by Members Jacobson and Buckley as representatives of both the Airport Users and the Communities sides of the NOC.

Questions / Comments:

**Member Bergman** prefaced by saying that as an At-Large committee member, representing other cities, he has had the opportunity to attend the RNAV Procedure Review Sub-Committee as a guest, to listen to the information presented and offer comments. **Member Bergman** said he firmly believes that the NOC should make a recommendation to the FAA regarding their proposed departure procedures and community engagement.

**Member Bergman** went on to say that he, and the City of Apple Valley, met with Ms. Ross and Ms. Dana Nelson, Director MAC Stakeholder Engagement, to talk about what could be improved in the airspace over Apple Valley and other communities. He referred to a 63-page handout from the U.S. Government Accountability Office (GAO) which is a document comprised of easy-to-understand public information, pertinent to the RNAV procedures and engagement topic. He asked that the document be entered into the meeting record and recommended that the committee look at the information: [www.gao.gov/products/gao-21-103933#summary\\_recommend](https://www.gao.gov/products/gao-21-103933#summary_recommend) **Member Bergman** credited the local FAA and the FAA as a whole for their work with the RNAV Sub-Committee and the NOC.

**Ms. Ross** said that the report will be sent to NOC members and reiterated that the NOC would have additional opportunities and potentially more NOC meetings to look through additional information coming from the FAA as they work through their procedures. She also stated that staff would strive to provide greater notice for the next meetings on the topic.

**Member Lowman** mentioned that he has trust in the sub-committee and the NOC, having known and worked with many of the members over many years. **Member Lowman** said that some Bloomington residents are concerned about how ready the FAA will be to work with recommendations that are brought forward, acknowledging that some statutory items are non-negotiable. He closed his comments by thanking Staff for putting the Special NOC meeting together, noting that it's difficult to work with so many calendars on short notice.

**Member Risser** said that her biggest concern is for an opportunity for public engagement prior to February meeting. She wondered if outreach could be done at public libraries, perhaps through a group Teams meeting in one of the conference rooms so that community members could attend in person. **Member Risser** noted that the Teams application can be hard to work with.

**Member Swanson** appreciated the information that was presented and thought the letter was clear in expressing the committee's hopes for the process. He wondered if information that was well-packaged and easy to understand could be sent to residents prior to February 1, 2024.

**Co-Chair Jacobson** asked staff to reiterate timing and the schedule for the NOC's recommendations going to the FAA.

**Ms. Ross** said that the preliminary recommendations from the NOC are due to the FAA by February 1, 2024. Any recommendations that are available prior to that date have been requested to be forwarded to the FAA. The FAA will consider recommendations provided by the NOC and adapt their plans, if possible, then conduct an environmental review. The FAA has stated they will hold two public virtual open houses so that FAA can provide packaged materials of easy to digest information for the public to learn about the procedures and any potential impacts expected for MSP and surrounding communities. FAA has stated there will be a 30-day period for public comments after which the FAA will review comments, finalize the procedures, and do the final testing and review of the procedures. Upon FAA approval, the new RNAV procedures are expected to go into effect August 7, 2025.

**Co-Chair Jacobson** asked if there will be more procedure details available once the environmental review is started and do we have a timeline for when the information will be made public.

**Ms. Ross** said that specific details about what level of information will be shared has not been provided by the FAA, which is why the draft recommendations recommend transparency and additional opportunities to engage both NOC members and members of the public.

**Ms. Nelson** said that she thought the comments from Members Lowman, Swanson, and Risser were well captured in the RNAV Procedure Review Sub-Committee's letter to the FAA. **Ms. Nelson** mentioned that the letter recommends that the FAA broaden their public engagement efforts and also requests that the FAA come to an open meeting of the NOC, or some other body, on or before January 3, 2024 to afford the FAA an opportunity to share details about the new procedures. **Ms. Nelson** went on to say that if the FAA is not able to attend a meeting prior to January 3, there will be opportunities for public engagement this summer prior to finalizing the environmental review.

**Action Requested:**

APPROVE THE RNAV PROCEDURE REVIEW SUB-COMMITTEE RECOMMENDATIONS AND FORWARD THEM TO THE FAA, WITH A COVER LETTER SIGNED BY REPRESENTATIVES JACOBSON AND BUCKLEY.

**Member Lowman** moved to approve the motion as stated. The motion was seconded by **Member Bergman**. The motion passed unanimously via a voice vote.

**5. Information**

There were no information items on the agenda.

**6. Announcements**

**January NOC Meeting**

Wednesday, January 17, 2024 @ 1:30 p.m.

Location: MAC General Offices, Legends conference room + Teams

**NOC Winter Listening Session**

Wednesday, January 24, 2024 @ 6:00 p.m.

Location: MAC General Offices + Teams

**Member Lowman** thanked the NOC and MAC Staff for putting this special NOC meeting together, he acknowledged that it can be difficult to get a large group together on such short notice.

7. **Adjourn**

**Chair Jacobson** thanked the members of the committee, NOC staff, and residents in attendance. The meeting was adjourned at 10:46 a.m.

# MEMORANDUM

ITEM 1.2.1

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**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Michele Ross, Manager, Community Relations

**SUBJECT:** **REVIEW OF MSP MONTHLY OPERATIONS REPORTS: NOVEMBER AND DECEMBER 2023**

**DATE:** January 17, 2024

Each month, the MAC reports information on MSP aircraft operations, aircraft noise complaints, sound levels associated with MSP aircraft operations, and compliance with established noise abatement procedures on its interactive reporting website:

<https://customers.macnoms.com/reports>.

At the January NOC meeting, MAC staff will provide a summary of this information for November and December 2023. To view these summary reports prior to the meeting, visit the “Archive” section at the link above.

# MEMORANDUM

ITEM 1.2.2

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**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Michele Ross, Manager, Community Relations

**SUBJECT:** REVIEW OF WINTER LISTENING SESSION

**DATE:** January 17, 2024

The primary goal of Listening Session meetings is to ensure residents' concerns are heard and considered as part of the ongoing effort by the MAC and the NOC to address noise and other topics around MSP.

MAC Community Relations staff will conduct a Listening Session at MAC General Offices and via Teams on January 24, 2024 at 6:00 P.M. Additional information will be available on the [Listening Session website](#).

To encourage participation in the Listening Session, the event was included on the [metroairports.org](http://metroairports.org) website and an email will be distributed. NOC community representatives are encouraged to share the event with their communities.

At the January meeting, staff will provide an update on this item.



# MEMORANDUM

ITEM 3

**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Michele Ross, Manager, Community Relations

**SUBJECT:** PUBLIC COMMENT PERIOD

**DATE:** January 17, 2024

Members of the public are welcome to listen to the NOC meeting. During the meeting, a public comment period of no more than 20 minutes is included on the agenda. Individuals who wish to speak during the public comment period may do so by following the directions of the chairperson.

Below are some rules of decorum for speaking at NOC meetings.

- Each speaker will have one opportunity to speak and is allotted three (3) minutes. The public comment period is limited to 20 minutes.
- The chairperson will open the public comment period by asking for participants who wish to speak to indicate their desire following the direction of the chairperson. Comments can be made in-person or virtually for those participating using Microsoft Teams.
- Commenters shall address their comments to the NOC and not to the audience.
- Use of profanity, personal attacks, or threats of violence will not be tolerated.
- Interruptions from the audience, such as speaking out of turn, shouting, and other disruptive behavior are not permitted.
- If special assistance is needed to make a public comment, please contact the NOC Secretary at least two days prior to the meeting by sending an email to: [nocsecretary@mspmac.org](mailto:nocsecretary@mspmac.org).

# MEMORANDUM

ITEM 3.1

**TO:** MSP Noise Oversight Committee (NOC)  
**FROM:** Michele Ross, Manager, Community Relations  
**SUBJECT:** **NOMINATION AND ELECTION OF USER CO-CHAIR**  
**DATE:** January 17, 2024

The representative for Delta Air Lines, Jeff Hart, retired at the end of 2023 and will no longer be serving the Airport User Co-Chair position on the Noise Oversight Committee. As such, a new Airport User Co-Chair is needed.

The process for the selection of Co-Chairs is found in the NOC Bylaws in Article V, given below:

*“The airport user and community segments of the Committee shall each select a Co-Chairperson who will serve at the pleasure of the appointing group. Each Co-Chairperson will serve for a two-(2) year term or until his/her representation on the Committee terminates, or until replaced by the appointing group, whichever occurs first.*

*The powers and duties of the Co-Chairpersons are as follows:*

1. *To review agendas.*
2. *To preside over meetings – the presiding Chairperson will alternate every other meeting.*
3. *By the mutual consent of the Co-Chairpersons, special meetings may be called, or upon request of a majority of the Committee, four (4) users and four (4) community representatives.*
4. *To sign as Co-Chairpersons of this Committee, all instruments in writing that may require such signature, unless the membership shall otherwise direct, and to perform such other duties and tasks as these Bylaws or as the membership shall from time to time prescribe.*
5. *Each segment of the Committee, by a majority vote, shall elect their respective Co-Chairperson.”*

At the January NOC meeting, a nomination process and vote will be conducted for the Airport User representatives to select the Airport User NOC Co-Chair.

COMMITTEE ACTION REQUESTED

CONDUCT AIRPORT USER CO-CHAIR NOMINATIONS AND ELECTIONS TO ESTABLISH THE AIRPORT USER CO-CHAIR TO SERVE FROM JANUARY 31, 2024 THROUGH JUNE 25, 2025.

# MEMORANDUM

ITEM 3.2

**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Michele Ross, Manager, Community Relations

**SUBJECT:** RNAV Procedure Review Sub-Committee Recommendations

**DATE:** January 17, 2024

The Federal Aviation Administration (FAA) manages the navigational systems used to determine and manage flight procedures at airports nationwide, including the Minneapolis-St. Paul International Airport (MSP). The FAA is in the process of retiring outdated navigational systems across the United States and replacing it with satellite technology.

One of the systems set to be retired is called a Very High Frequency Omnidirectional Range (VOR), that is currently being used at the MSP Airport. VORs are aircraft navigation systems developed in the 1950s.

The FAA seeks to reduce the nationwide inventory of VORs through its VOR Minimum Operational Network (MON) program. Flight procedures currently using VORs will be updated to use satellite-based technology, which includes Area Navigation (RNAV). The following video by the FAA provides more information about the agency's VOR MON program: [www.youtube.com/watch?v=2WOjg-RvRME](http://www.youtube.com/watch?v=2WOjg-RvRME)

According to the FAA, updating this technology, coupled with FAA safety standard changes, requires modifying the flight procedures used by aircraft departing MSP. The FAA has stated that the updated flight procedures will increase safety due to more efficient communications between pilots and air traffic control. The FAA has scheduled the updated procedures to go into effect August 2025.

To learn more about the FAA's project and how the FAA will engage the public, visit [www.faa.gov/air\\_traffic/community\\_engagement/msp](http://www.faa.gov/air_traffic/community_engagement/msp)

The NOC has received updates from the FAA on this work at their meetings on January 29, 2020, January 19, 2022, January 18, 2023, May 17, 2023, and September 20, 2023.

The MAC is not the decision-making authority on flight procedures. The FAA is fully managing and implementing the update to the departure flight procedures, as the FAA has sole authority over where and how aircraft fly. The MAC is providing input to the FAA on procedure design, including potential for operational or environmental impacts to surrounding communities. The MAC is requesting that the FAA share timely information with surrounding communities about how updated departure flight procedures may impact them.

The MAC advocated for, and the FAA agreed, to add an initial feedback period for the NOC. The NOC established an RNAV Procedure Review Sub-Committee to develop initial feedback intended to share local expectations related to aircraft overflights, noise and meaningful public engagement with the FAA. The FAA is requiring the NOC provide initial feedback prior to February 2024.

The RNAV Procedure Review Sub-Committee developed the first round of recommendations to provide to FAA, which were approved at a Special NOC meeting on November 29, 2023. The RNAV Procedure

Review Sub-Committee is drafting additional recommendations for consideration by the NOC. At the January meeting, the NOC will receive an update on this topic, review the draft recommendations and consider the following action.

**REQUESTED ACTION**

APPROVE THE RNAV PROCEDURE REVIEW SUB-COMMITTEE RECOMMENDATIONS AND FORWARD TO THE FAA.

# MEMORANDUM

ITEM 4.1

**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Michele Ross, Manager, Community Relations

**SUBJECT:** **2023 FLEET MIX AND NIGHTTIME OPERATIONS ASSESSMENT**

**DATE:** January 17, 2024

The 2024 NOC Work Plan includes an assessment of current fleet mix and nighttime operational trends.

The report provides year-end 2023 data in comparison with historical trends. The report includes the following sections:

- MSP Fleet Mix
  - Historical Carrier Jet Trends
  - Trends in Aircraft Passenger Load Factors
  - MSP Carrier Jet Usage with Cumulative Certificated Noise Levels
  - Average Altitude Trends
- Nighttime Operations
  - Average Daily Nighttime Operations
  - Nighttime Operations by Runway, Airline, Aircraft Type, Origin/Destination
  - Trends in Nighttime Operations by Hour
  - Scheduled versus Actual Nighttime Operations by Hour

Staff will present information from this report at the January meeting.



**2023 ANNUAL MSP FLEET MIX AND  
NIGHTTIME OPERATIONS REPORT**  
JANUARY 2024

**COMMUNITY RELATIONS OFFICE**

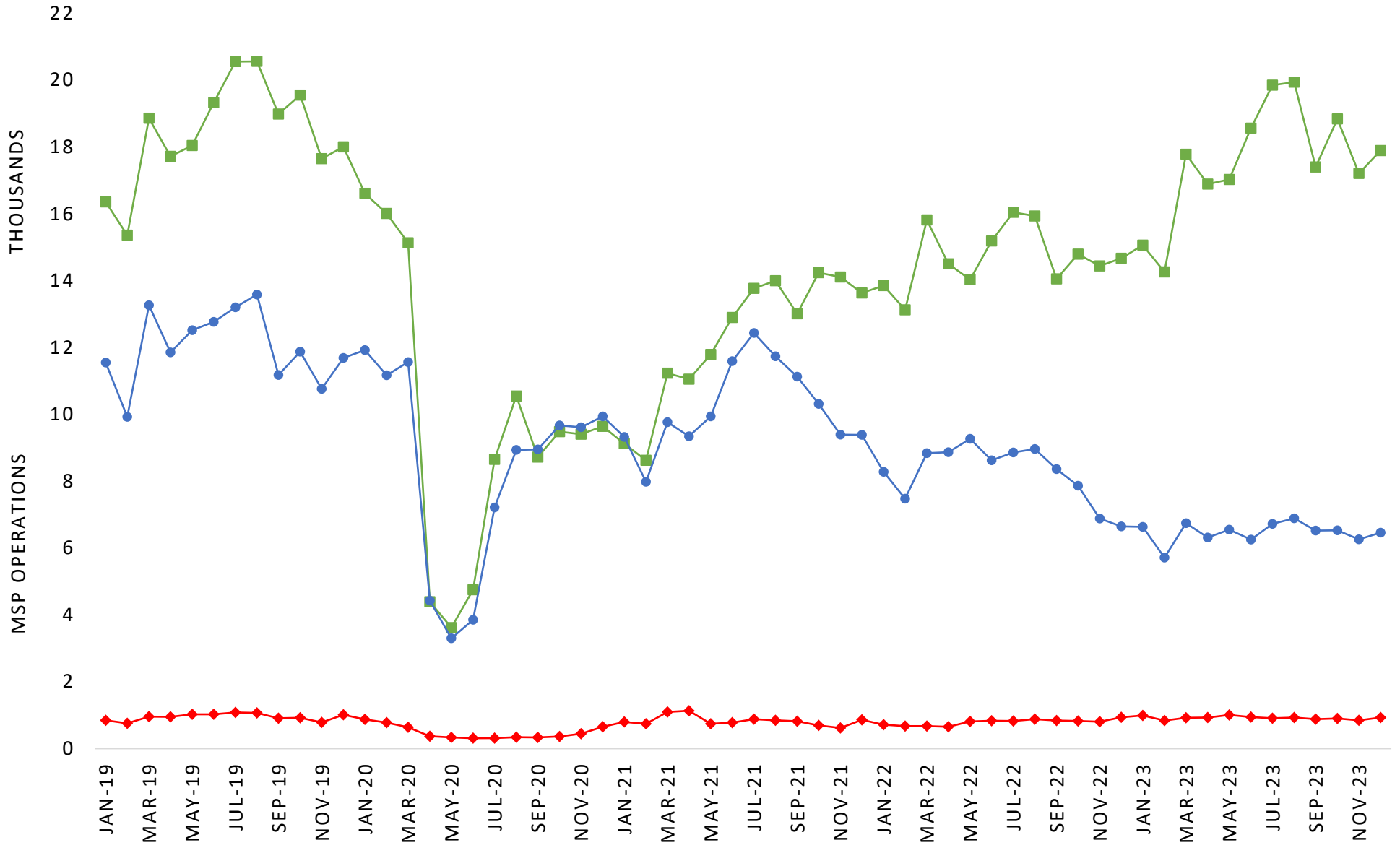
## 2023 ANNUAL MSP FLEET MIX AND NIGHTTIME OPERATIONS REPORT

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MSP FLEET MIX REPORT

**MONTHLY CARRIER JET COUNTS BY TYPE**

■ NARROWBODY    ◆ WIDEBODY    ● RJ



HUSHKIT BY YEAR: 2018 - 32, 2019 - 18, 2020 - 8, 2021 - 68, 2022 - 10



**WIDEBODY JET ACTIVITY**



WIDEBODY	TYPE	2019	2020	2021	2022	2023
	A124	0.0%	0.0%	0.0%	0.0%	0.0%
	A300	0.2%	0.4%	0.1%	0.0%	0.3%
	A330	0.6%	0.3%	1.0%	1.2%	1.6%
	A340	0.0%	0.0%	0.0%	0.0%	0.0%
	A350	0.0%	0.1%	0.0%	0.1%	0.3%
	B742	0.0%	0.0%	0.0%	0.0%	0.0%
	B744	0.0%	0.0%	0.1%	0.1%	0.0%
	B748	0.0%	0.0%	0.1%	0.1%	0.0%
	B762	0.0%	0.0%	0.0%	0.0%	0.1%
	B763	1.1%	1.1%	1.8%	1.5%	0.9%
	B764	0.1%	0.0%	0.2%	0.1%	0.0%
	B767	0.0%	0.0%	0.0%	0.0%	0.0%
	B777	0.5%	0.1%	0.0%	0.1%	0.0%
	B7878	0.1%	0.0%	0.1%	0.0%	0.1%
	DC10	0.0%	0.1%	0.0%	0.0%	0.0%
MD11	0.2%	0.4%	0.2%	0.1%	0.4%	
<b>Total</b>	<b>3.0%</b>	<b>2.6%</b>	<b>3.6%</b>	<b>3.3%</b>	<b>3.7%</b>	

**NARROWBODY JET ACTIVITY**



NARROWBODY	TYPE	2019	2020	2021	2022	2023
	A220	0.3%	0.9%	2.0%	1.9%	2.7%
	A319	6.7%	7.0%	6.6%	9.2%	6.8%
	A20N	0.0%	0.3%	0.5%	0.6%	0.9%
	A320	8.1%	5.7%	6.0%	6.2%	9.4%
	A21N	0.0%	0.0%	0.0%	0.1%	0.8%
	A321	6.6%	9.6%	10.4%	12.5%	10.5%
	B717	7.8%	2.4%	0.4%	2.4%	5.8%
	B72Q	0.0%	0.0%	0.0%	0.0%	0.0%
	B733	0.0%	0.0%	0.0%	0.0%	0.0%
	B734	0.0%	0.1%	0.1%	0.3%	0.1%
	B735	0.0%	0.0%	0.0%	0.0%	0.0%
	B7377	3.8%	2.6%	2.1%	2.5%	2.6%
	B738	11.3%	10.8%	11.1%	12.6%	15.4%
	B739	8.1%	8.0%	8.7%	9.4%	11.5%
	B38M	0.0%	0.0%	0.3%	0.5%	1.3%
	B73Q	0.0%	0.0%	0.0%	0.0%	0.0%
	B757	5.1%	5.0%	4.6%	3.8%	2.5%
	DC9Q	0.0%	0.0%	0.0%	0.0%	0.0%
	MD80	0.0%	0.0%	0.0%	0.0%	0.0%
MD90	0.6%	0.0%	0.0%	0.0%	0.0%	
<b>TOTAL</b>	<b>58.7%</b>	<b>52.4%</b>	<b>52.7%</b>	<b>61.9%</b>	<b>70.4%</b>	

MSP FLEET MIX REPORT

**REGIONAL JET ACTIVITY**



REGIONAL JET	TYPE	2019	2020	2021	2022	2023
	CRJ2	12.9%	10.8%	11.9%	8.5%	3.1%
	CRJ7	3.9%	2.9%	2.3%	1.7%	1.8%
	CRJ9	13.8%	20.2%	21.3%	12.4%	8.4%
	E135	0.0%	0.0%	0.0%	0.1%	0.0%
	E145	0.0%	0.4%	0.2%	0.3%	0.1%
	E170	7.3%	10.6%	7.3%	10.7%	11.8%
	E190	0.4%	0.1%	0.3%	0.4%	0.1%
	J328	0.0%	0.0%	0.4%	0.5%	0.6%
	<b>TOTAL</b>	<b>38.3%</b>	<b>45.0%</b>	<b>43.7%</b>	<b>34.7%</b>	<b>25.9%</b>

MSP FLEET MIX REPORT

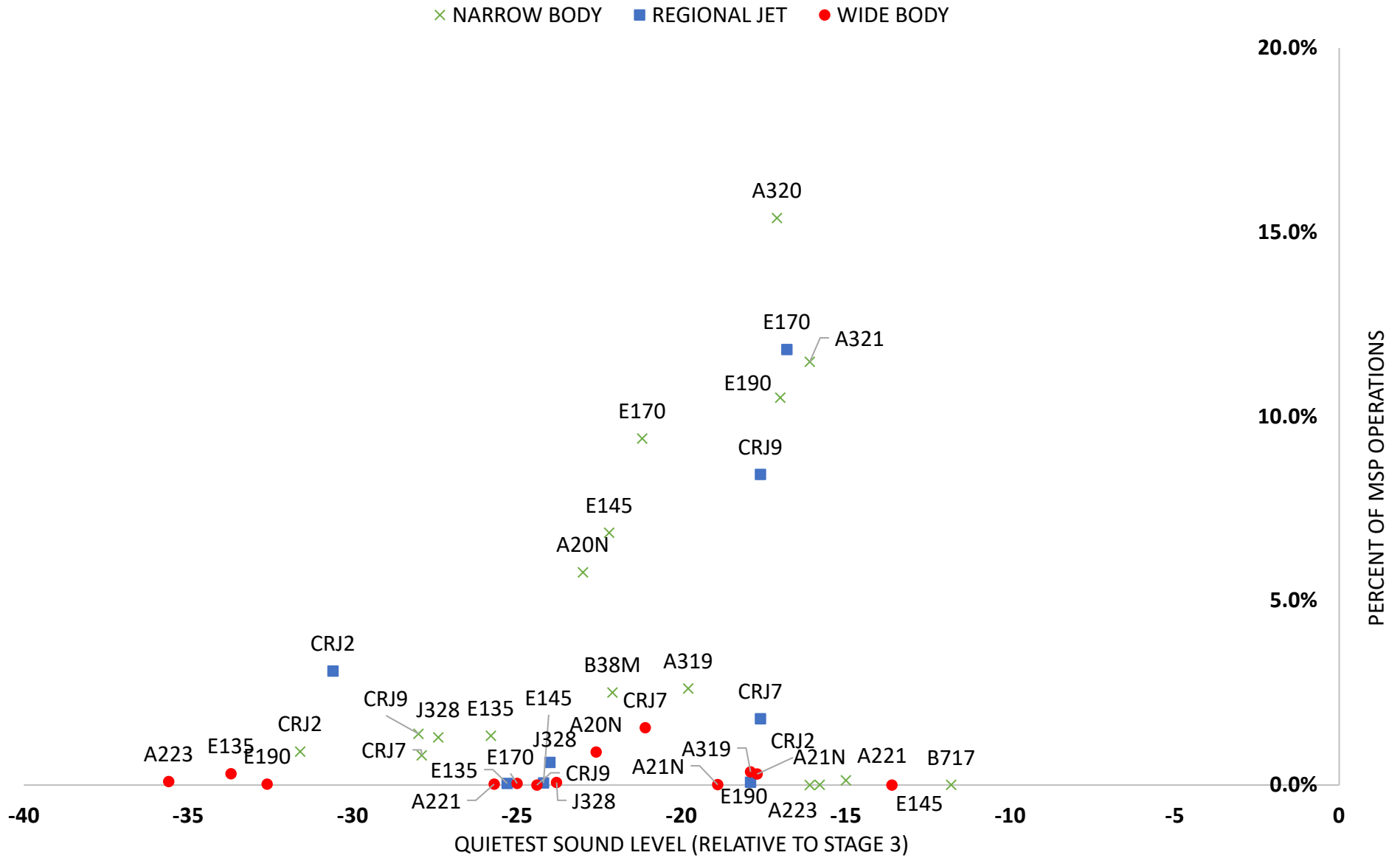
**AVERAGE PASSENGERS PER FLIGHT**

130  
110  
90  
70  
50  
30  
10

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
◆ 2020	96.7	100.1	63.4	14.1	36.6	57.7	57.1	56.0	56.7	58.3	50.5	53.3
● 2021	56.5	63.8	78.2	78.0	92.3	96.7	105.8	100.5	93.4	99.2	100.1	98.9
■ 2022	89.6	99.4	112.5	109.0	112.6	116.3	114.9	112.7	111.9	114.4	113.1	112.3
● 2023	105.8	108.5	119.6	115.5	115.9	126.2	123.8	120.2	114.3	113.9	113.6	

SOURCE: MSP MONTHLY OPERATIONS REPORTS

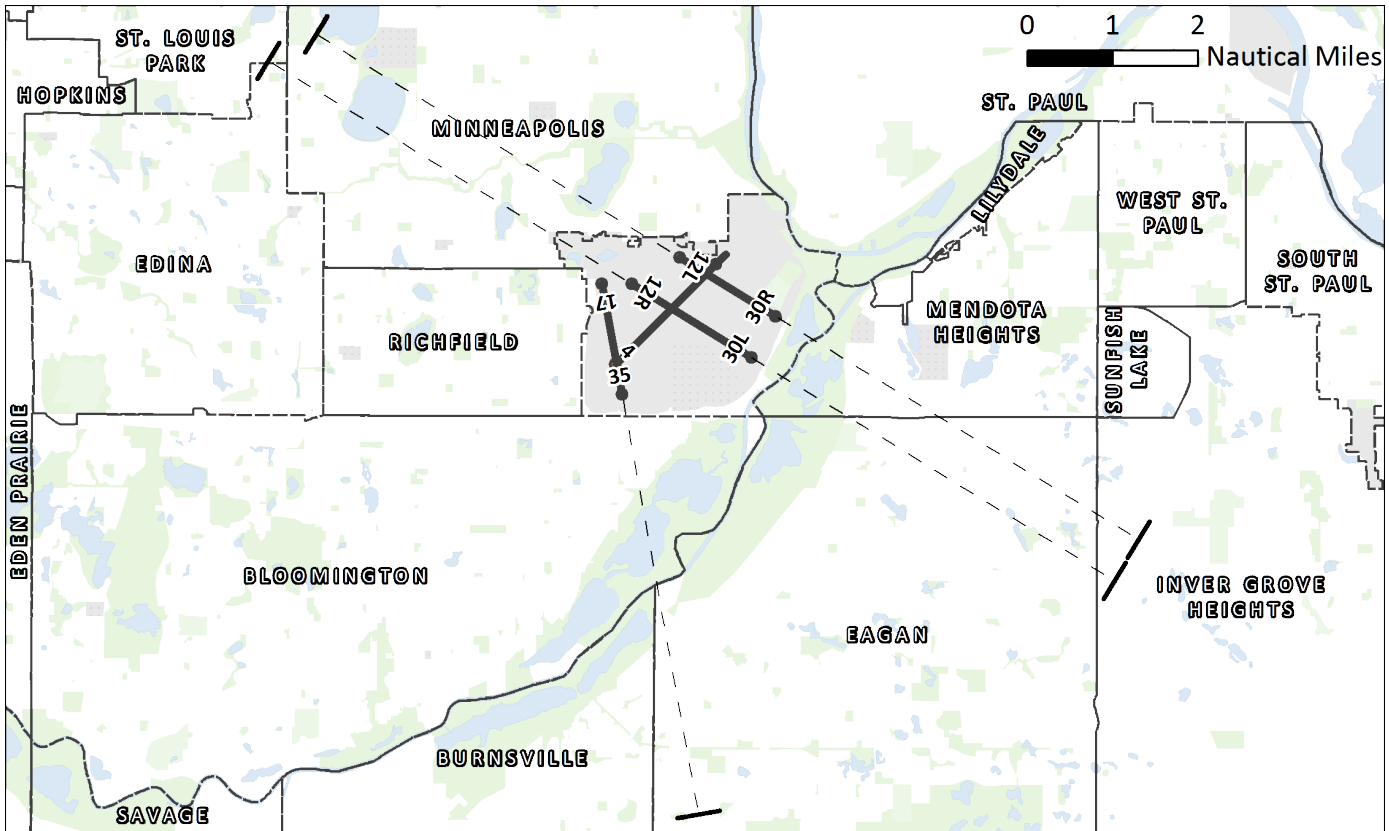
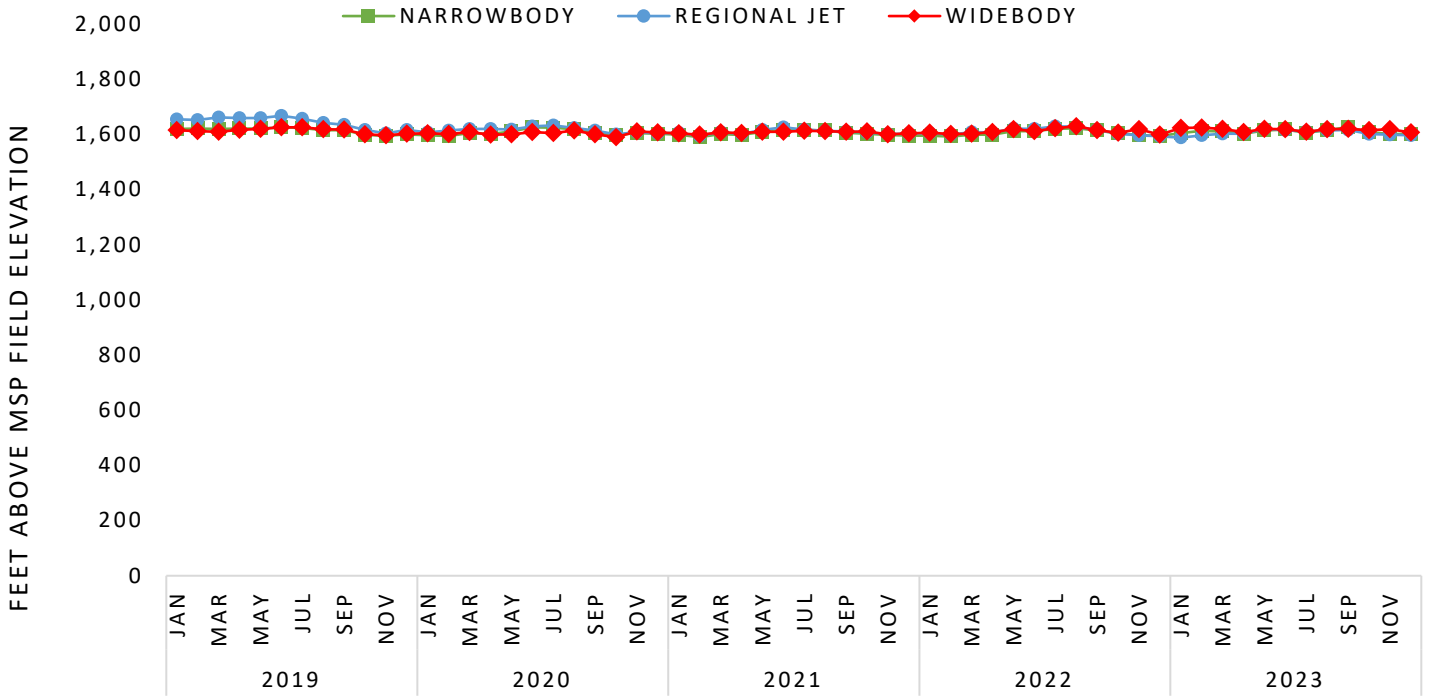
2023 MSP CARRIER JET USAGE WITH CUMULATIVE CERTIFICATED NOISE LEVELS



Source: USAGE DATA: MACNOMS; NOISE CERTIFICATION DATA: European Aviation Safety Agency

MSP FLEET MIX REPORT

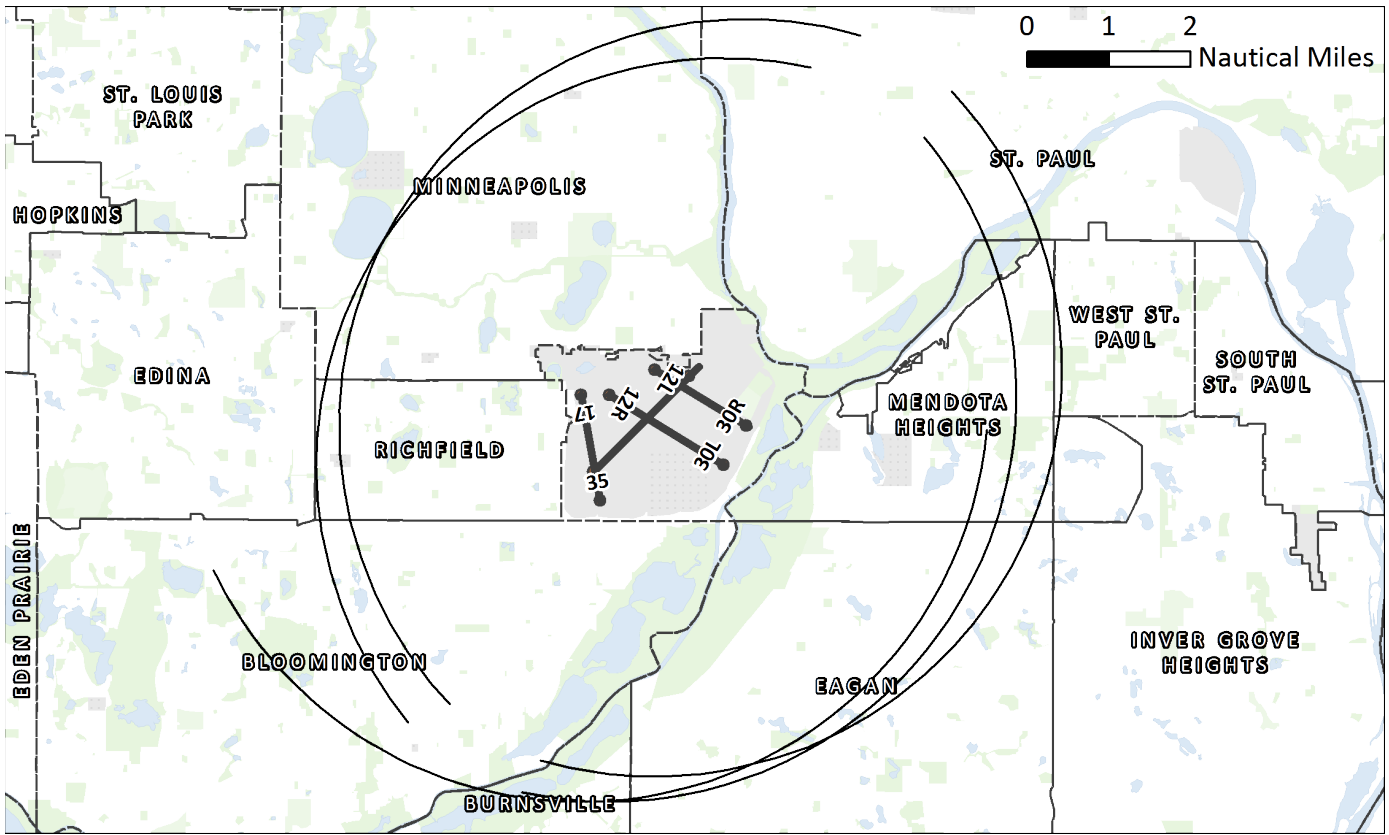
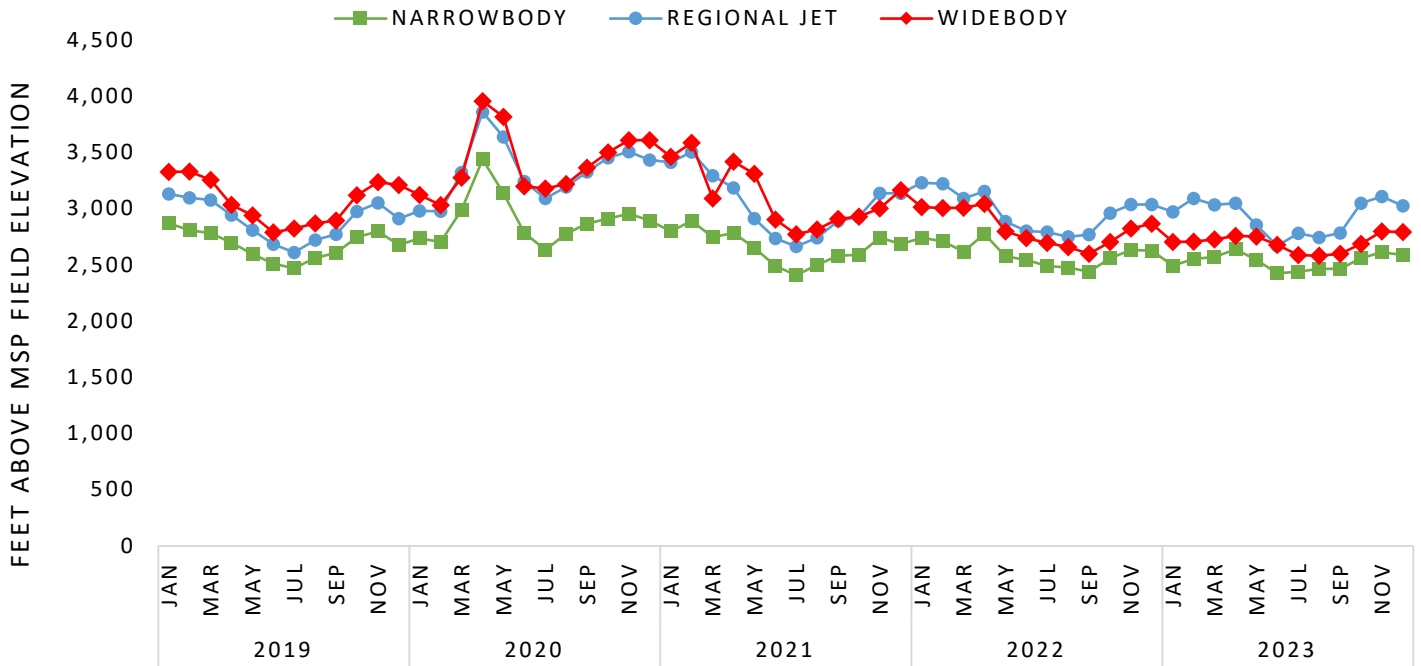
AVERAGE ALTITUDE FOR AIRCRAFT ARRIVING TO MSP



MEASUREMENT GATE IS FIVE NAUTICAL MILES FROM THE THRESHOLD OF THE ARRIVAL RUNWAY

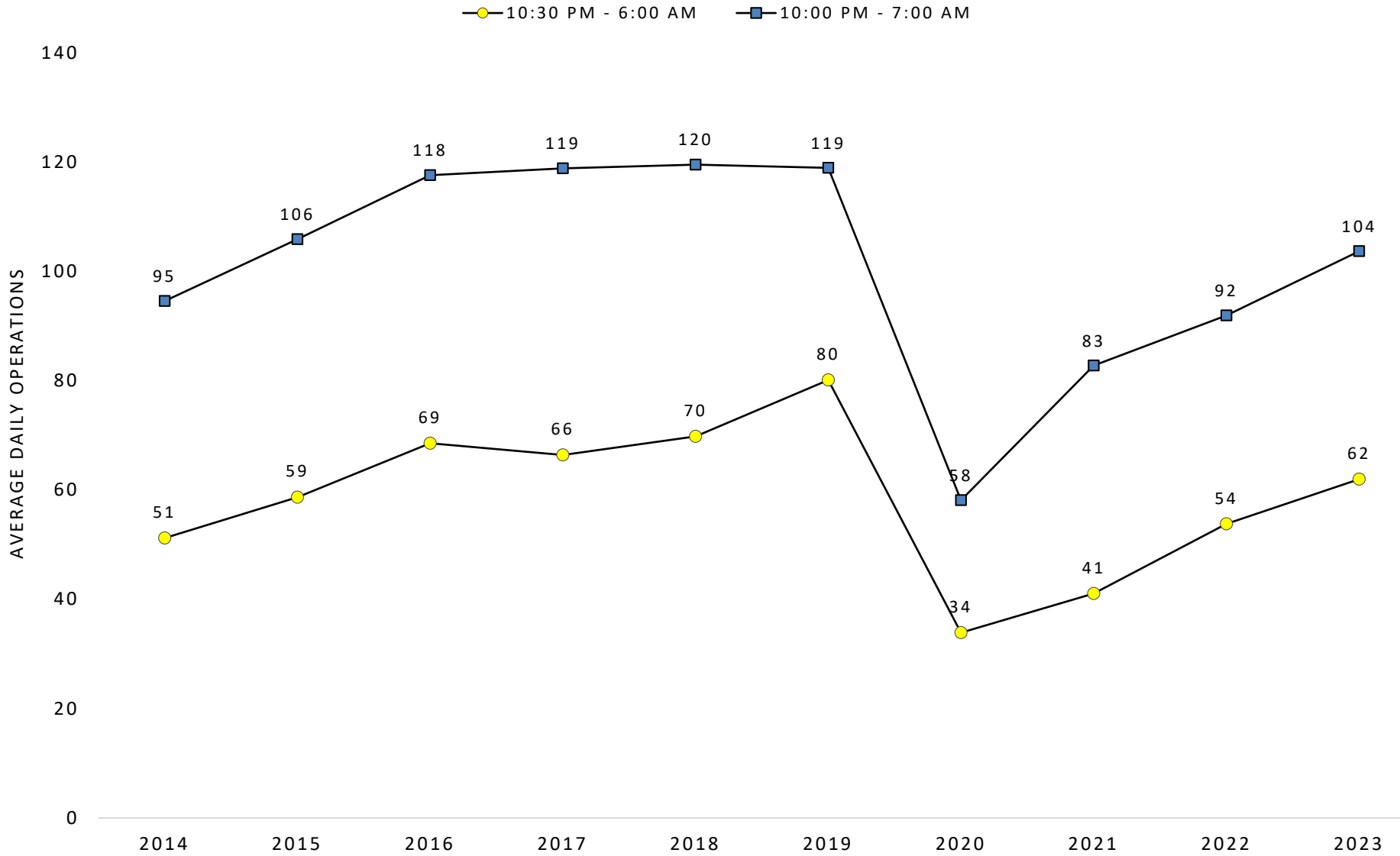
MSP FLEET MIX REPORT

**AVERAGE ALTITUDE FOR AIRCRAFT DEPARTING FROM MSP**



MSP NIGHTTIME OPERATIONS REPORT

**AVERAGE DAILY NIGHTTIME OPERATIONS**



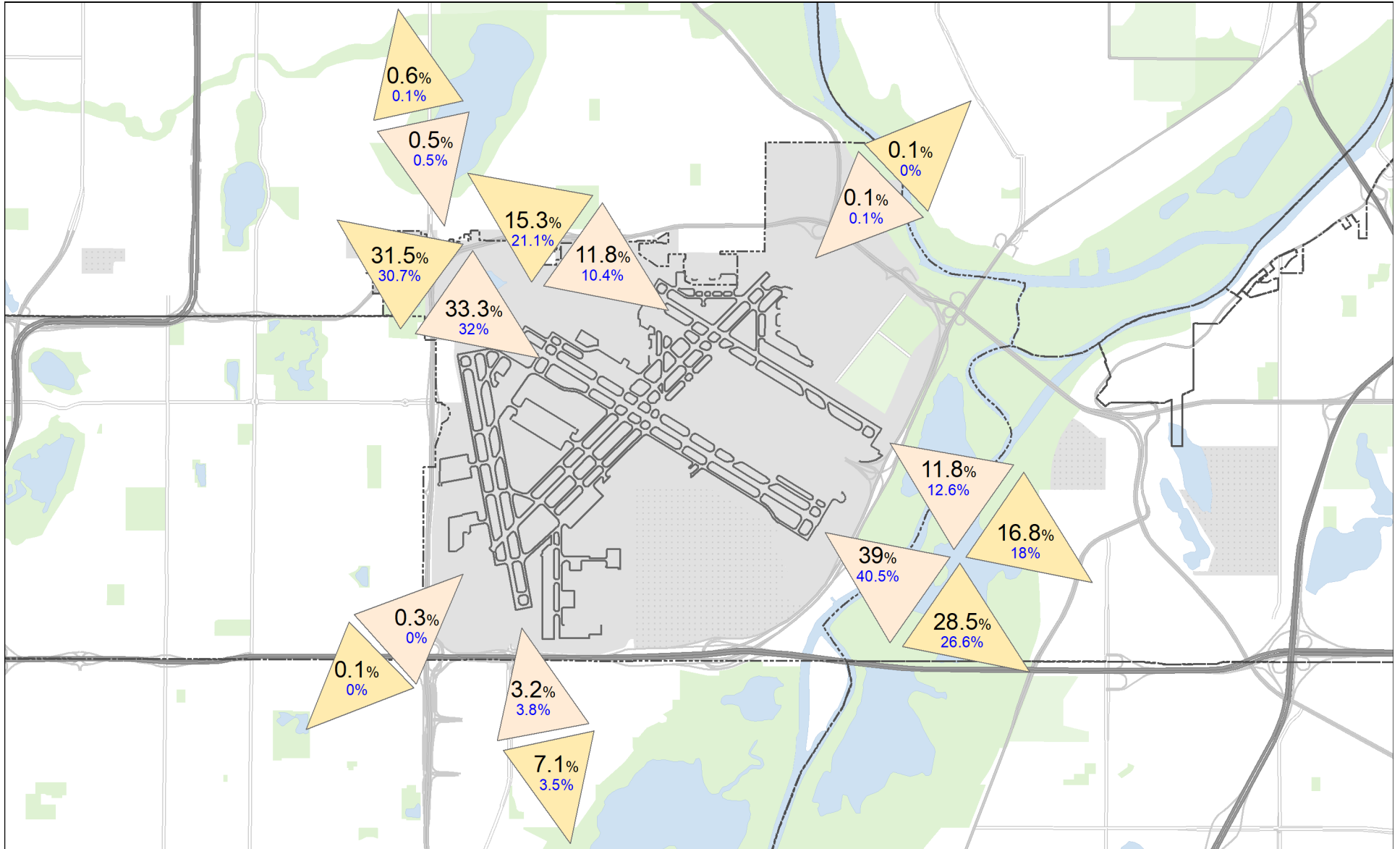


MSP NIGHTTIME OPERATIONS REPORT

**2023 AND THREE-YEAR AVERAGE NIGHTTIME OPERATIONS BY RUNWAY**  
(10:30 PM – 6:00 AM)

RWY	ARR / DEP	OVERFLIGHT AREA	2023			2020 - 2022 AVERAGE		
			TOTAL NIGHT OPS	AVERAGE DAILY NIGHT OPS	%	TOTAL NIGHT OPS	AVERAGE DAILY NIGHT OPS	%
04	ARR	SO. RICHFIELD/BLOOMINGTON	54	0.1	0.3%	2	0.0	0.0%
12L	ARR	SO. MINNEAPOLIS/NO. RICHFIELD	1,818	5.0	11.8%	1,150	3.1	10.4%
12R	ARR	SO. MINNEAPOLIS/NO. RICHFIELD	5,132	14.1	33.3%	3,553	9.7	32.0%
17	ARR	SO. MINNEAPOLIS	71	0.2	0.5%	59	0.2	0.5%
22	ARR	ST. PAUL/HIGHLAND PARK	19	0.1	0.1%	13	0.0	0.1%
30L	ARR	EAGAN/MENDOTA HEIGHTS	6,021	16.5	39.0%	4,496	12.3	40.5%
30R	ARR	EAGAN/MENDOTA HEIGHTS	1,828	5.0	11.8%	1,404	3.8	12.6%
35	ARR	BLOOMINGTON/EAGAN	489	1.3	3.2%	424	1.2	3.8%
<b>TOTAL NIGHTTIME ARRIVALS</b>			<b>15,432</b>	<b>42.3</b>		<b>11,101</b>	<b>30.3</b>	
04	DEP	ST. PAUL/HIGHLAND PARK	8	0.0	0.1%	1	0.0	0.0%
12L	DEP	EAGAN/MENDOTA HEIGHTS	1,205	3.3	16.8%	825	2.3	18.0%
12R	DEP	EAGAN/MENDOTA HEIGHTS	2,049	5.6	28.5%	1,215	3.3	26.6%
17	DEP	BLOOMINGTON/EAGAN	511	1.4	7.1%	162	0.4	3.5%
22	DEP	SO. RICHFIELD/BLOOMINGTON	10	0.0	0.1%	2	0.0	0.0%
30L	DEP	SO. MINNEAPOLIS/NO. RICHFIELD	2,265	6.2	31.5%	1,402	3.8	30.7%
30R	DEP	SO. MINNEAPOLIS/NO. RICHFIELD	1,099	3.0	15.3%	963	2.6	21.1%
35	DEP	SO. MINNEAPOLIS	43	3.0	0.6%	3	0.0	0.1%
<b>TOTAL NIGHTTIME DEPARTURES</b>			<b>7,190</b>	<b>22.5</b>		<b>4,573</b>	<b>12.4</b>	
<b>TOTAL NIGHTTIME OPERATIONS</b>			<b>22,622</b>	<b>64.8</b>		<b>15,674</b>	<b>42.7</b>	

**2023 AND THREE-YEAR AVERAGE NIGHTTIME OPERATIONS BY RUNWAY MAP  
(10:30 PM – 6:00 AM)**



MSP NIGHTTIME OPERATIONS REPORT

**NIGHTTIME OPERATIONS BY AIRLINE  
(TOP 15 BY COUNT)**

2023	AIRLINE	ID	COUNT	PERCENT OF AIRLINE OPERATIONS OCCURRING AT NIGHT*	PERCENT OF CONTRIBUTION TO NIGHTTIME TOTAL <sup>†</sup>
	DELTA	DAL	8,263	5.7%	38.1%
	SUN COUNTRY	SCX	4,147	15.0%	19.1%
	SOUTHWEST	SWA	2,345	16.0%	10.8%
	UNITED	UAL	1,430	14.3%	6.6%
	AMERICAN	AAL	1,398	17.3%	6.4%
	SKYWEST AIRLINES	SKW	1,113	2.3%	5.1%
	UPS	UPS	877	33.4%	4.0%
	FEDEX	FDX	588	24.7%	2.7%
	FRONTIER AIRLINES	FFT	402	24.5%	1.9%
	GULF & CARIBBEAN CARGO	TSU	368	95.6%	1.7%
	ALASKA	ASA	266	19.0%	1.2%
	SPIRIT	NKS	213	6.8%	1.0%
	ENDEAVOR AIR	EDV	155	0.9%	0.7%
	REPUBLIC AIRLINES	RPA	64	2.5%	0.3%
AIR CANADA JAZZ	JZA	59	2.6%	0.3%	

2022	AIRLINE	ID	COUNT	PERCENT OF AIRLINE OPERATIONS OCCURRING AT NIGHT*	PERCENT OF CONTRIBUTION TO NIGHTTIME TOTAL <sup>†</sup>
	DELTA	DAL	5,823	4.9%	31.0%
	SUN COUNTRY	SCX	3,591	15.3%	19.1%
	SKYWEST AIRLINES	SKW	2,149	3.1%	11.4%
	SOUTHWEST	SWA	1,679	15.9%	8.9%
	AMERICAN	AAL	1,239	17.6%	6.6%
	UPS	UPS	1,119	33.6%	6.0%
	UNITED	UAL	781	9.7%	4.2%
	FEDEX	FDX	693	22.6%	3.7%
	GULF & CARIBBEAN CARGO	TSU	356	96.0%	1.9%
	JETBLUE AIRWAYS	JBU	350	18.4%	1.9%
	ALASKA	ASA	284	18.0%	1.5%
	FRONTIER AIRLINES	FFT	232	19.2%	1.2%
	SPIRIT	NKS	230	7.9%	1.2%
	ENDEAVOR AIR	EDV	163	0.9%	0.9%
SWIFT AIR (USA)	SWQ	85	16.4%	0.5%	

\*AIRLINE OPERATIONS OCCURRING AT NIGHT REPRESENTS THE PERCENTAGE OF RESPECTIVE AIRLINE SCHEDULE THAT OCCURS AT NIGHT

<sup>†</sup>CONTRIBUTION TO TOTAL IS RESPECTIVE AIRLINE CONTRIBUTIONS TO OVERALL MSP NIGHT OPERATIONS

MSP NIGHTTIME OPERATIONS REPORT

**2023 NIGHTTIME OPERATIONS BY AIRCRAFT  
(TOP 15 BY COUNT)**

AIRCRAFT CODE	DESCRIPTION	COUNT	NOISE LEVEL CERTIFICATION (EPNdB BELOW STAGE 3)
B738	BOEING 737-800	6,900	11.3 - 17.1
B739	BOEING 737-900	2,542	10.9 - 16.1
A321	AIRBUS INDUSTRIES A321	2,473	6.4 – 17.0
A320	AIRBUS INDUSTRIES A320	1,900	12.1 - 21.2
B757	BOEING 757-200	1,224	11.1 - 22.1
E170	EMBRAER 170	1,010	9.2 - 16.8
A319	AIRBUS INDUSTRIES A319	940	12.9 - 22.2
B38M	BOEING 737 MAX 8	845	24.3 - 27.4
B7377	BOEING 737-700	834	11.6 - 19.8
B717	BOEING 717	728	19.2 – 23.0
B763	BOEING 767-300	622	4.4 - 22.6
CRJ2	CANADAIR REGIONAL JET CRJ-200	455	26.5 - 30.6
A300	AIRBUS INDUSTRIES A300	308	4.3 - 17.7
MD11	MCDONNELL DOUGLAS MD11	270	12.8 - 17.9
CRJ9	CANADAIR REGIONAL JET CRJ-900	263	14.5 - 17.6

NOISE CERTIFICATION DATA SOURCE: EUROPEAN AVIATION SAFETY AGENCY

CUMULATIVE CERTIFICATED NOISE LEVELS REPRESENTED AS A RANGE BELOW STAGE 3 NOISE LEVELS TO ACCOUNT FOR MULTIPLE CERTIFICATION VARIABLES (WEIGHT, MODEL, ENGINE TYPE, AIRFRAME CONFIGURATION, ETC)

MSP NIGHTTIME OPERATIONS REPORT

**2023 NIGHTTIME OPERATIONS BY ORIGIN AND DESTINATION  
(TOP 15 BY COUNT)**

<b>AIRPORT CODE</b>	<b>ORIGIN AIRPORT</b>	<b>COUNT</b>
PHX	PHOENIX	1,169
DEN	DENVER	1,128
LAS	LAS VEGAS	959
LAX	LOS ANGELES	854
SEA	SEATTLE	758
SFO	SAN FRANCISCO	693
DFW	DALLAS FORT WORTH	509
MEM	MEMPHIS	454
SDF	LOUISVILLE	419
ATL	ATLANTA	416
ORD	CHICAGO O'HARE	406
PDX	PORTLAND	374
EWR	NEW YORK NEWARK	365
MCO	ORLANDO	365
IAH	HOUSTON	359

<b>AIRPORT CODE</b>	<b>DESTINATION AIRPORT</b>	<b>COUNT</b>
DEN	DENVER	711
LAS	LAS VEGAS	391
ATL	ATLANTA	370
STL	ST LOUIS	298
FSD	SIOUX FALLS	286
FAR	FARGO	284
BIS	BISMARCK	275
MDW	CHICAGO MIDWAY	273
PHX	PHOENIX	271
RST	ROCHESTER MN	266
GFK	GRAND FORKS	261
DLH	DULUTH	260
DFW	DALLAS FORT WORTH	211
ORD	CHICAGO O'HARE	208
MOT	MINOT	186

MSP NIGHTTIME OPERATIONS REPORT

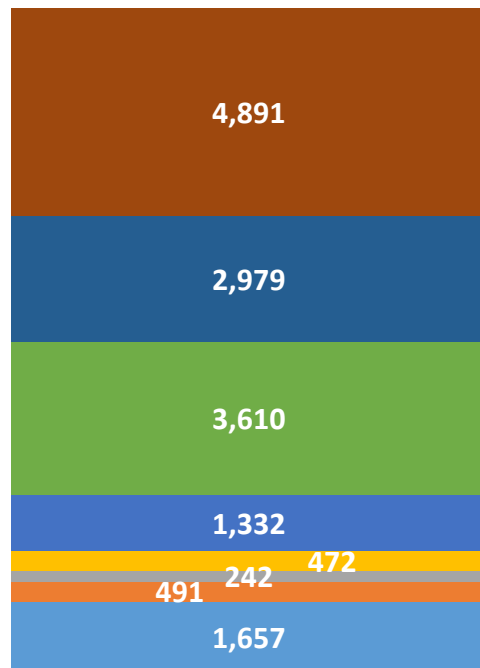
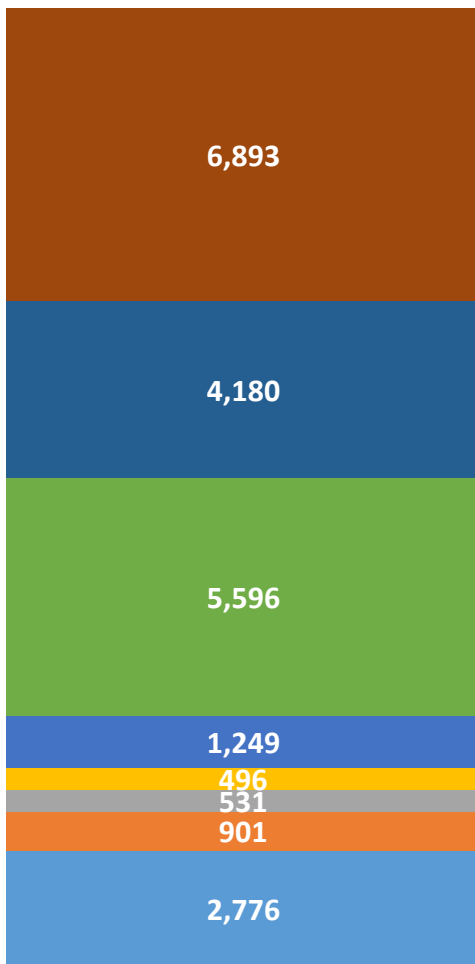
**NIGHTTIME OPERATIONS BY HOUR**

**2023**

- 0:00   ■ 1:00   ■ 2:00   ■ 3:00
- 4:00   ■ 5:00   ■ 22:30   ■ 23:00

**3-YEAR HISTORICAL AVERAGE**

- 0:00   ■ 1:00   ■ 2:00   ■ 3:00
- 4:00   ■ 5:00   ■ 22:30   ■ 23:00



MSP NIGHTTIME OPERATIONS REPORT

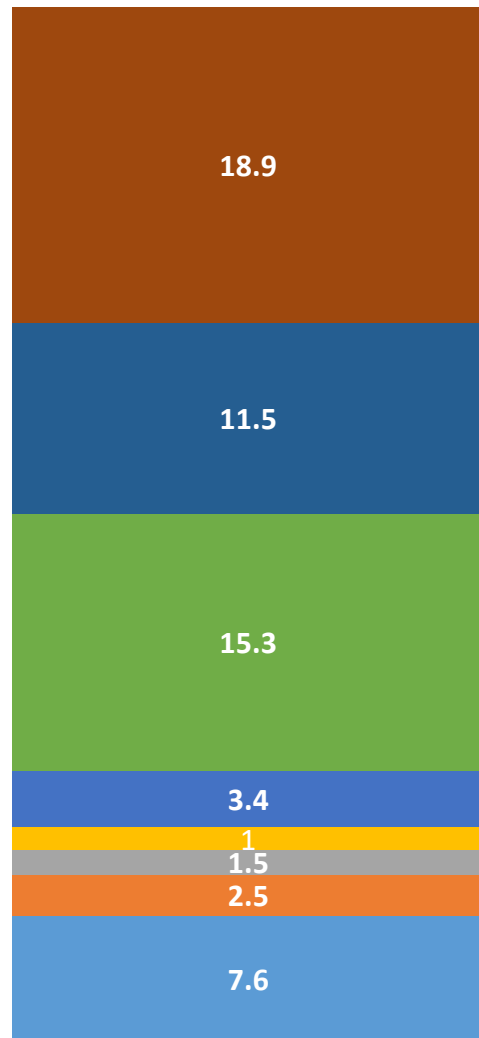
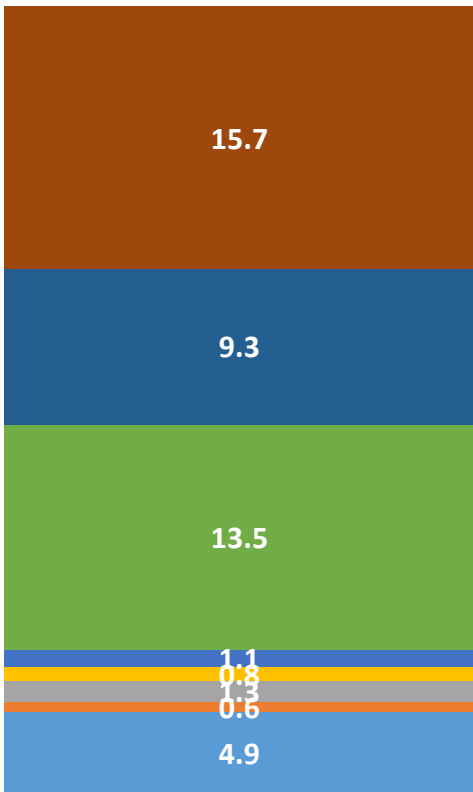
**SCHEDULED VERSUS ACTUAL OPERATIONS**  
(AVERAGE BY HOUR)

**DAILY SCHEDULED NIGHT OPERATIONS**

0:00 1:00 2:00 3:00  
4:00 5:00 22:30 23:00

**DAILY ACTUAL NIGHT OPERATIONS**

0:00 1:00 2:00 3:00  
4:00 5:00 22:30 23:00



GENERAL AVIATION AND CHARTER AIRCRAFT OPERATORS DO NOT REPORT SCHEDULED OPERATIONS



**Metropolitan Airports Commission**

6040 28th Avenue South, Minneapolis, MN 55450

[metroairports.org](http://metroairports.org)

*This report is for informational purposes only.*



# MEMORANDUM

**TO:** MSP Noise Oversight Committee (NOC)  
**FROM:** Michele Ross, Manager, Community Relations  
**SUBJECT:** 2023 COMPLAINT DATA ASSESSMENT  
**DATE:** January 17, 2024

The 2024 NOC Work Plan includes generation of an MSP Complaint Data Assessment. The assessment examines complaint data trends from 2021 through 2023 and includes the following sections:

- Annual Complaint and Households
  - Total Households Filing Complaints
  - Top 10 Households Filing Complaints
  - New Households Filing Complaints
  - Three Year Total Complaints
  - Ground Noise and Runup Complaints
- Households Filing Complaints by Home Purchase Year
- Complaints Filed by Complaint Reason
- Three Year Complaints Filed by Top 10 Cities
- Three Year Households Filing Complaints by Top 10 Cities
- Complaints Filed by City
- Households Filing Complaints by City
- Three Year Complaints and Operations by Time of Day
- Complaints and Operations Ratio by Hour
- Complaint and Operation Monthly Ratio
- Complaints by Aircraft Category
- Complaints by Aircraft Type
- Top 10 Flights that Generated Complaints
- Three Year Complaints by Flow
- Three Year Total Flow
- Complaints by Temperature and Weather Conditions

Staff will present information from this report at the January meeting.

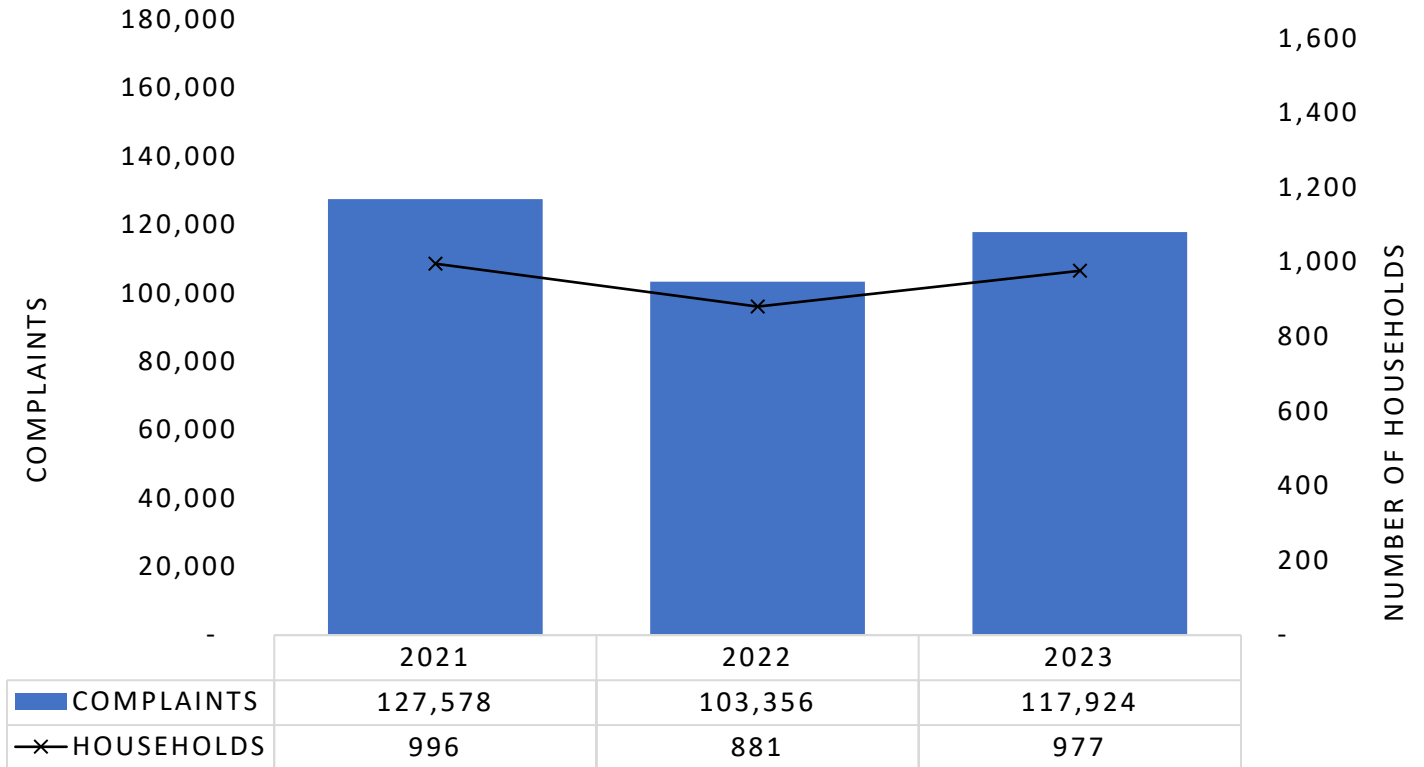


# 2023 MSP COMPLAINT DATA ASSESSMENT

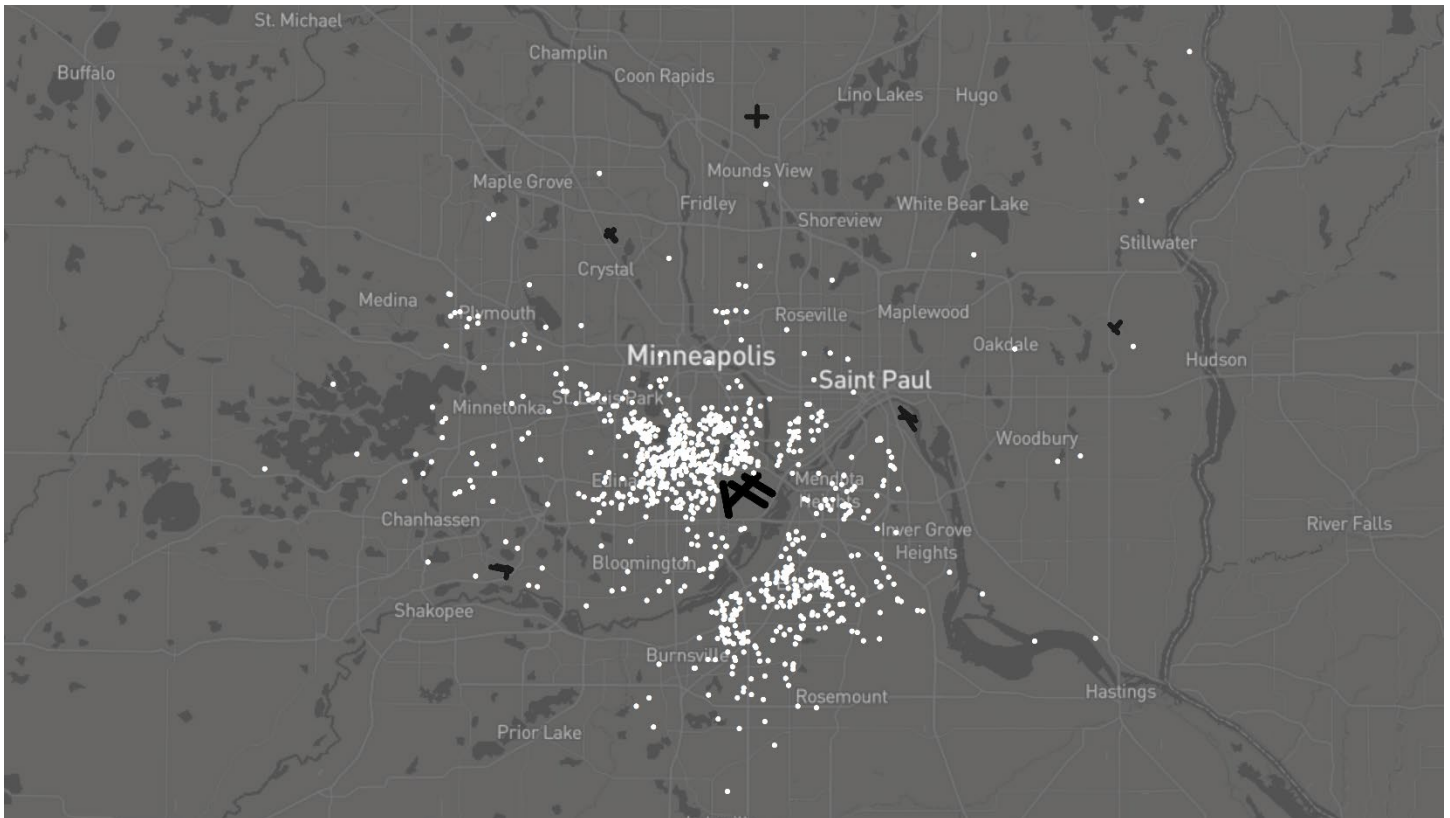
JANUARY 2024

COMMUNITY RELATIONS OFFICE

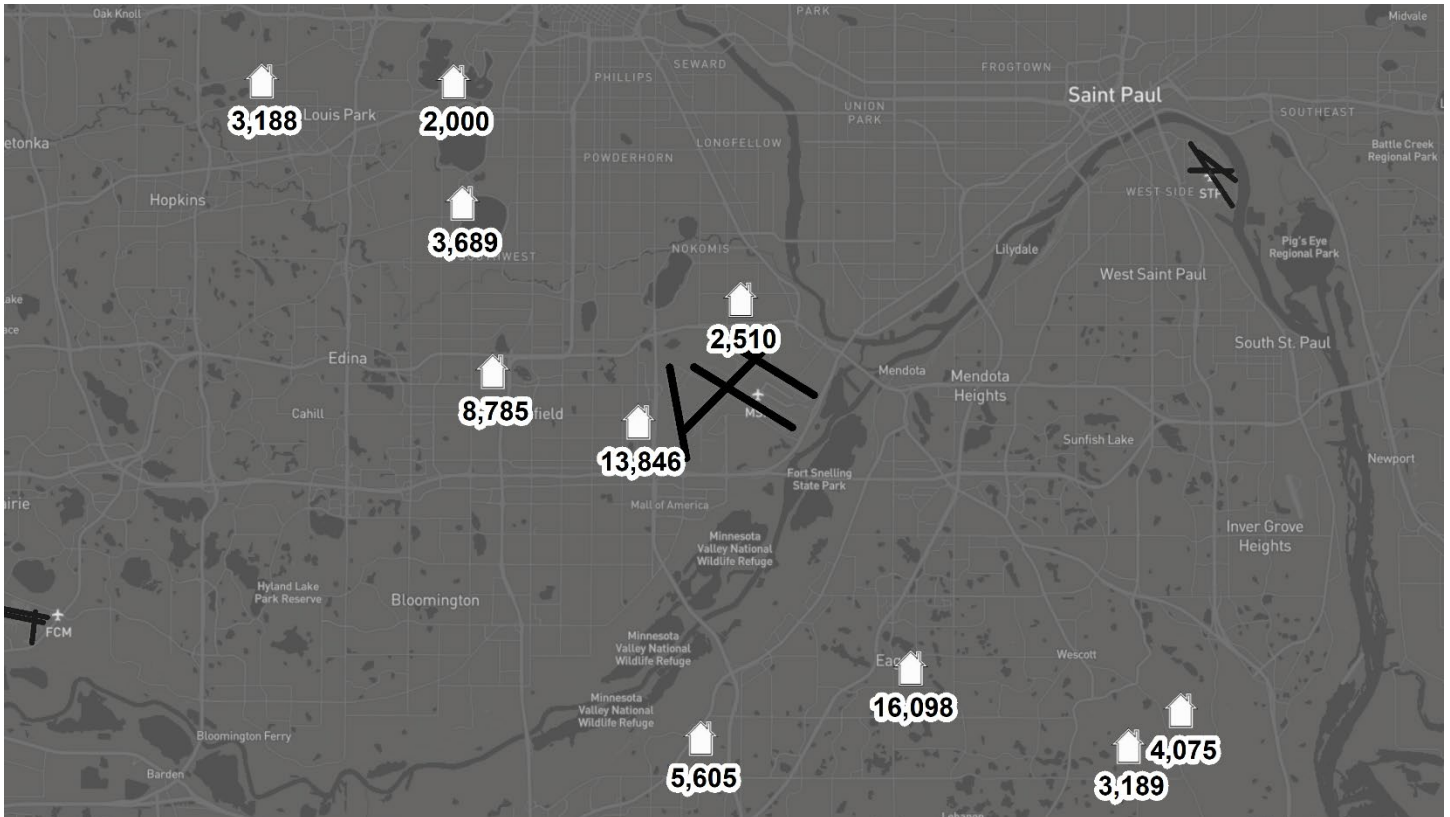
## 2021-2023 ANNUAL COMPLAINTS AND HOUSEHOLDS



## 2023 HOUSEHOLDS FILING COMPLAINTS

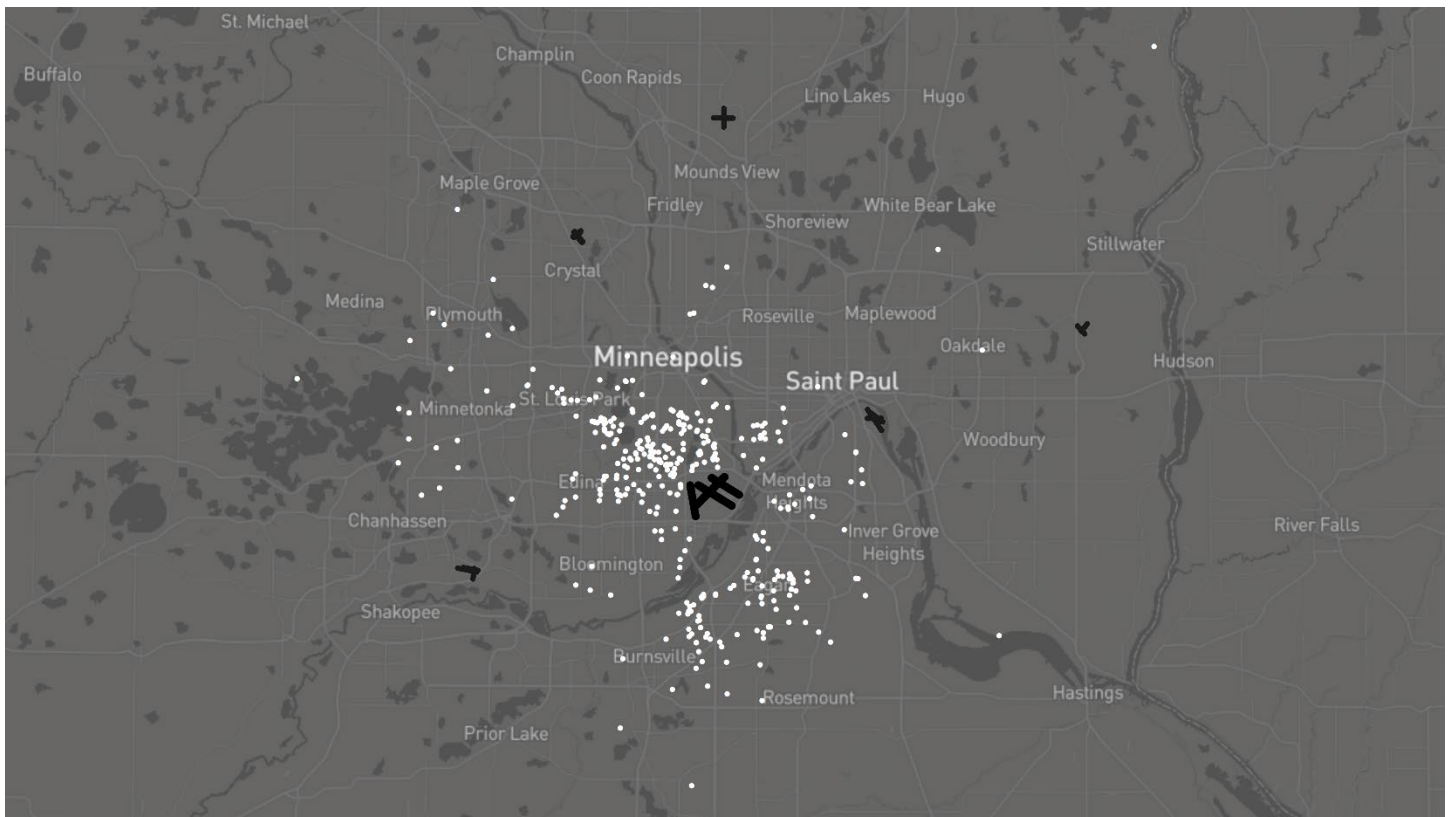


## 2023 TOP 10 HOUSEHOLDS FILING COMPLAINTS

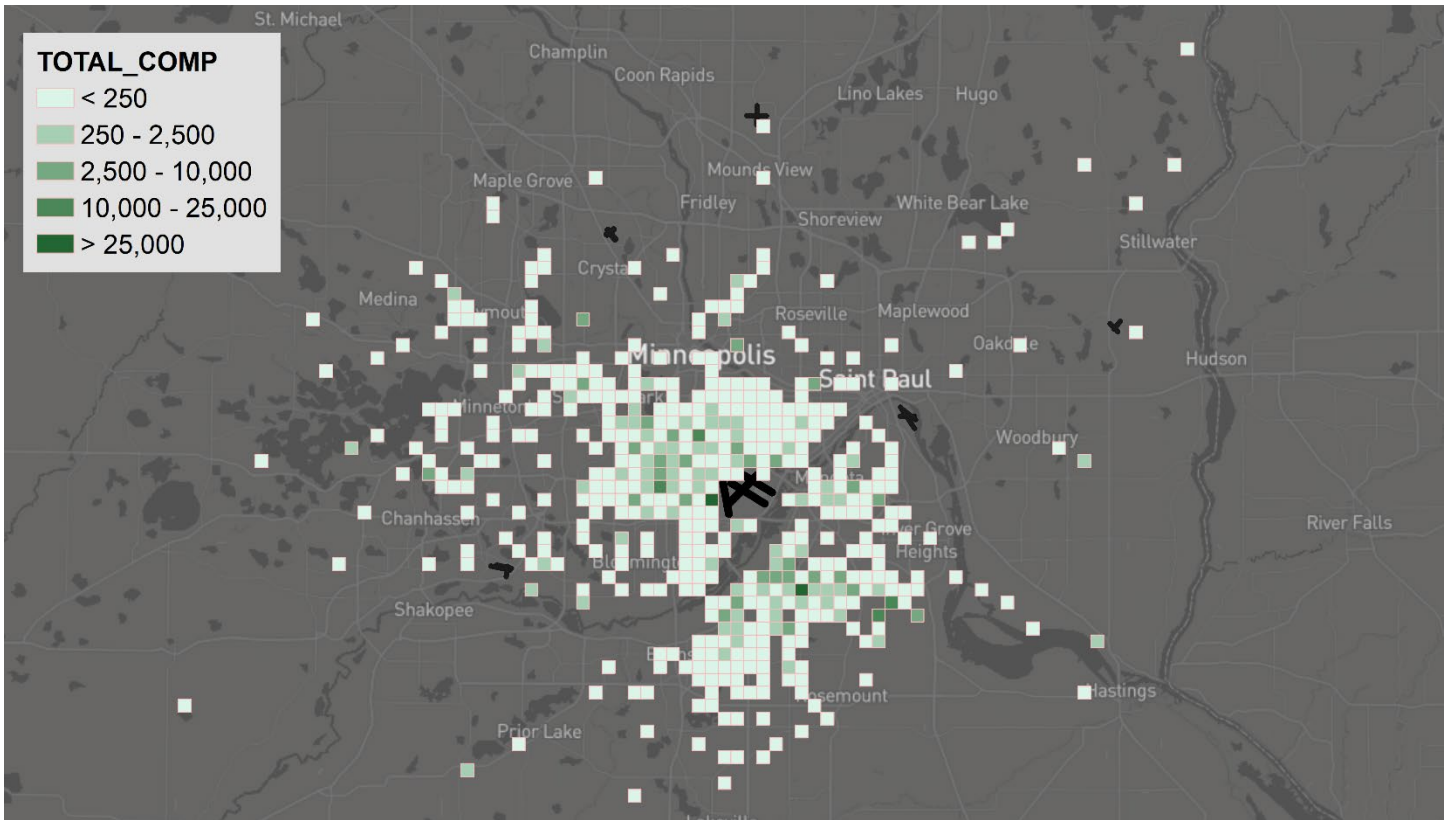


Note: Top 10 households filed 53% of all complaints filed in 2023.

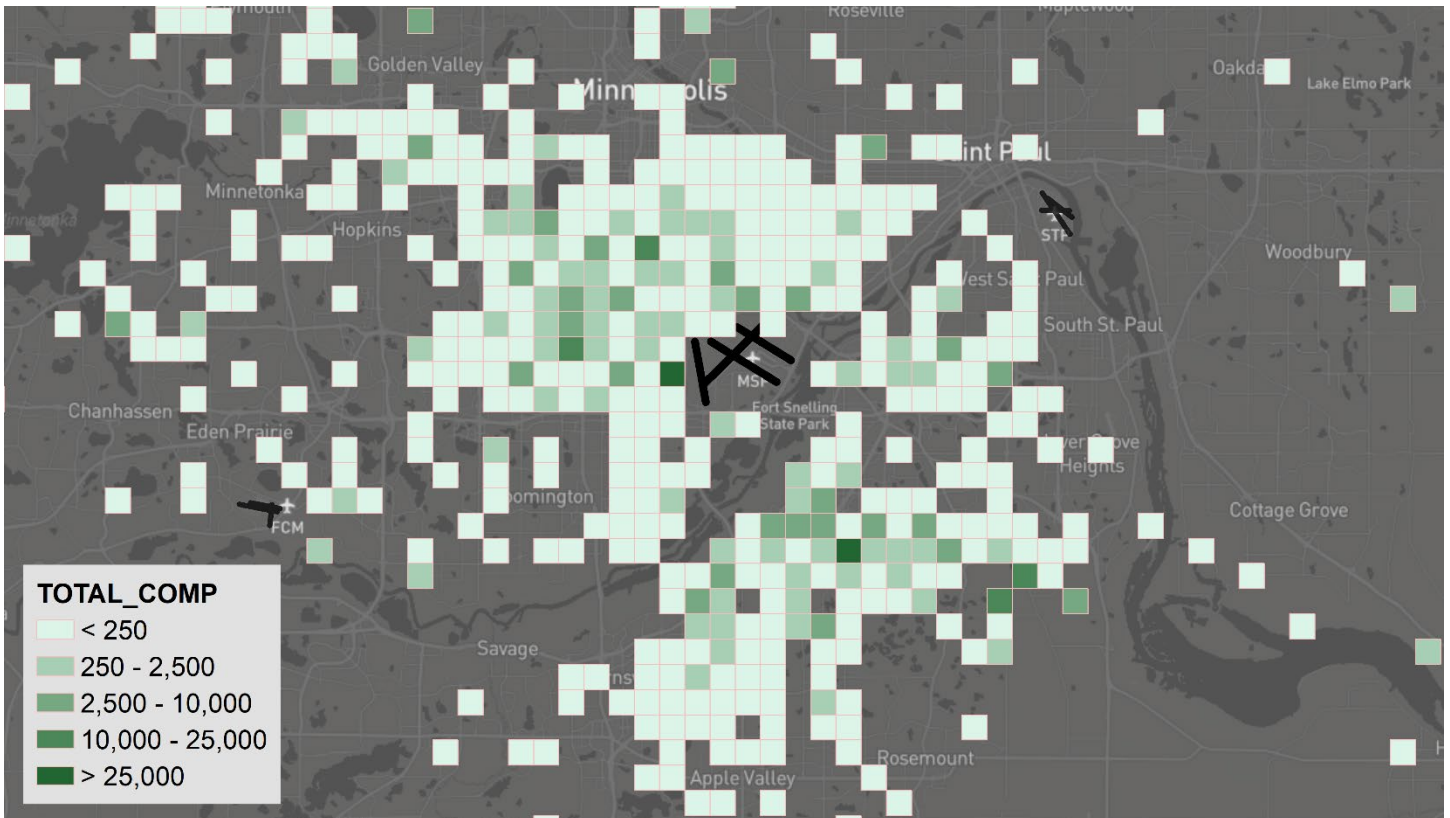
## 2023 NEW HOUSEHOLDS FILING COMPLAINTS



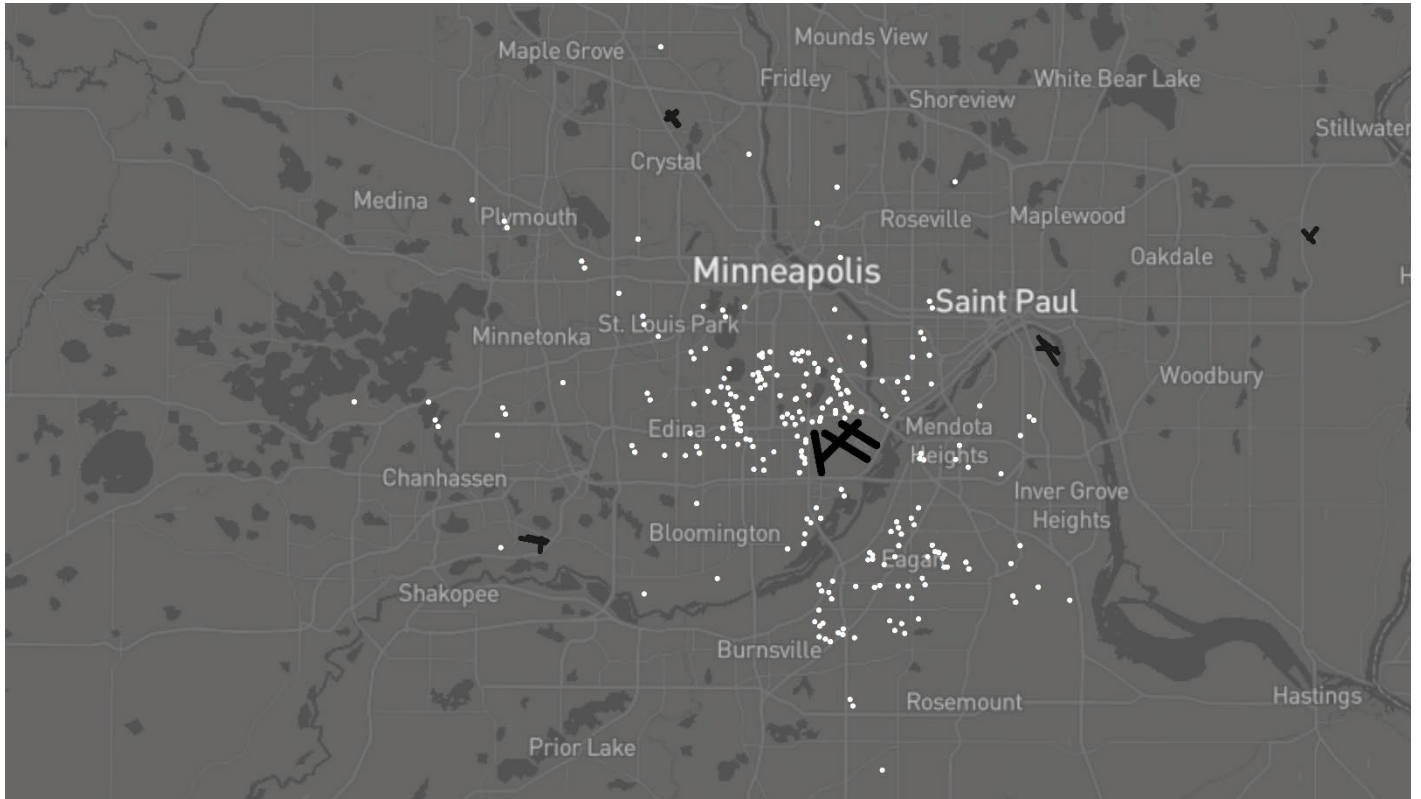
## 2021-2023 TOTAL COMPLAINTS



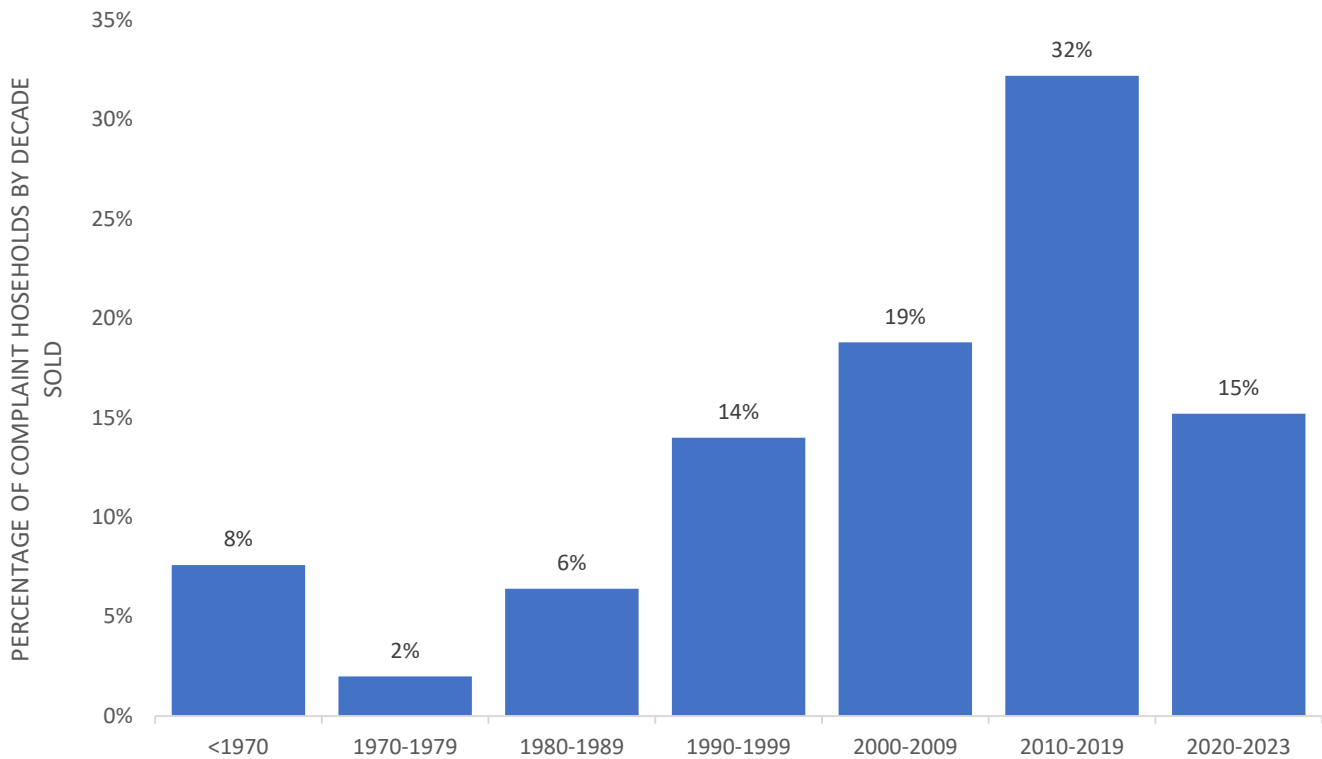
## 2021 - 2023 TOTAL COMPLAINTS



## 2023 GROUND NOISE & RUN UP COMPLAINTS

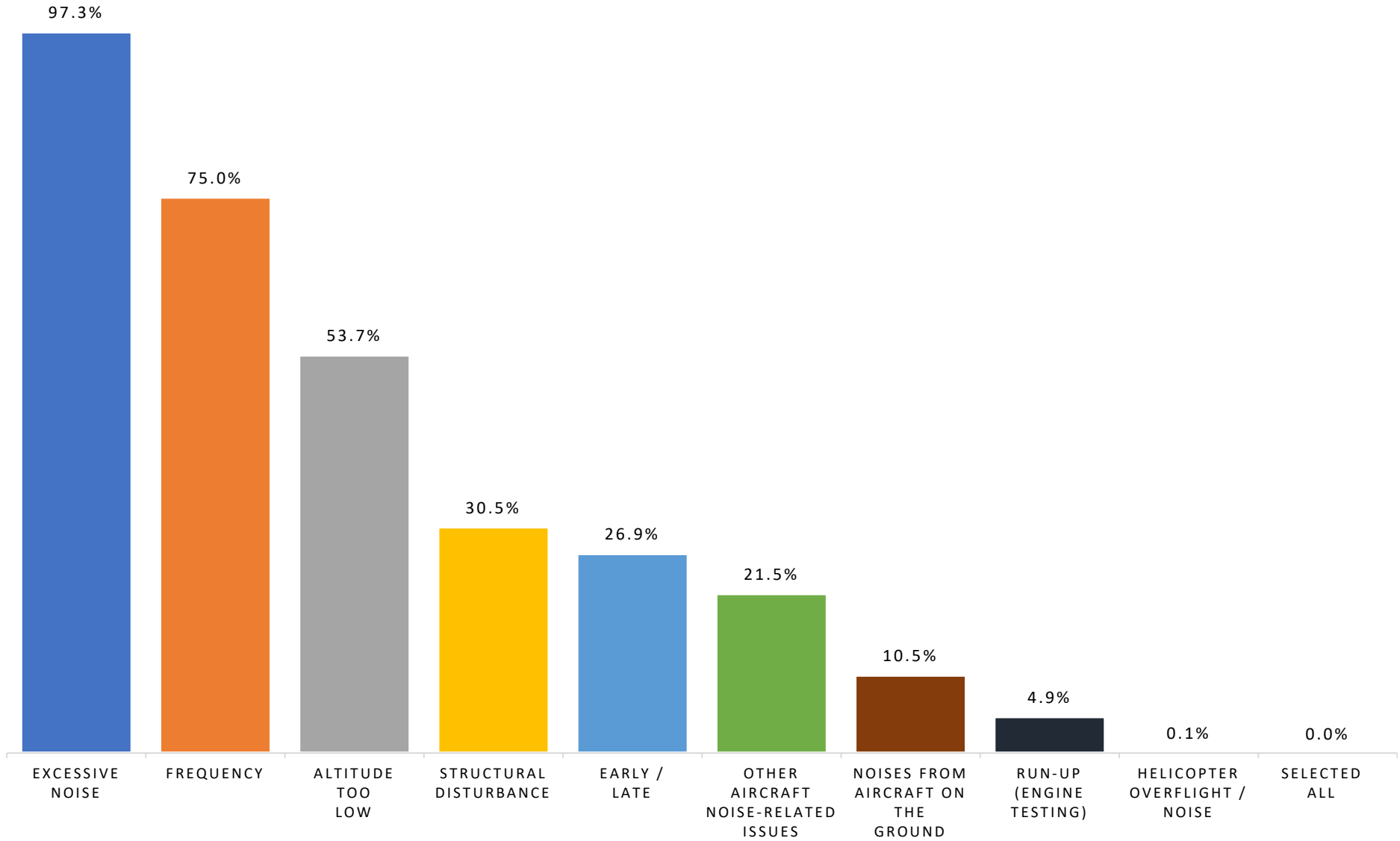


## 2023 HOUSEHOLDS FILING COMPLAINTS BY HOME PURCHASE YEAR



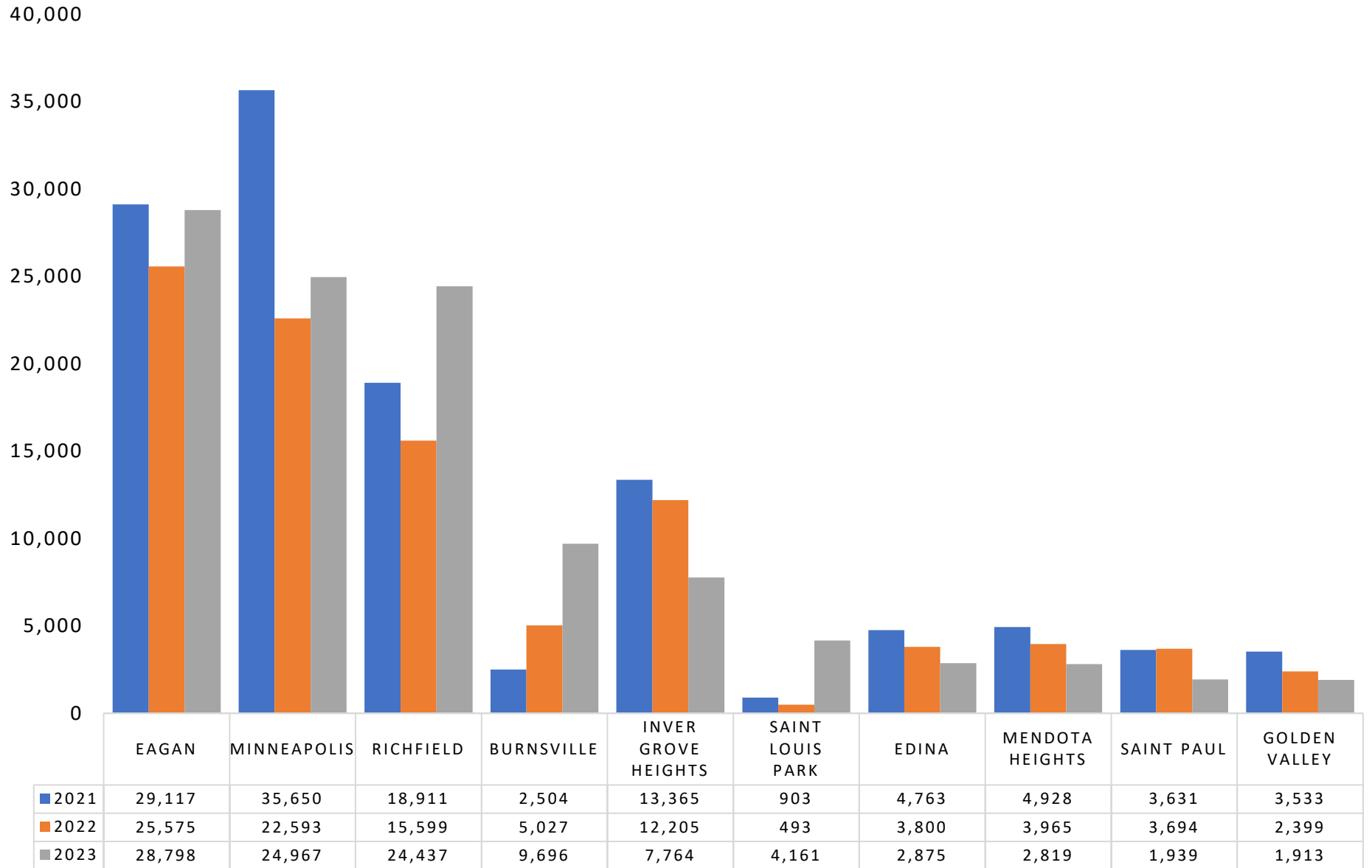
*Note: single-family owner-occupied households only based on county parcel data (2023).*

## 2023 COMPLAINTS FILED BY COMPLAINT REASON



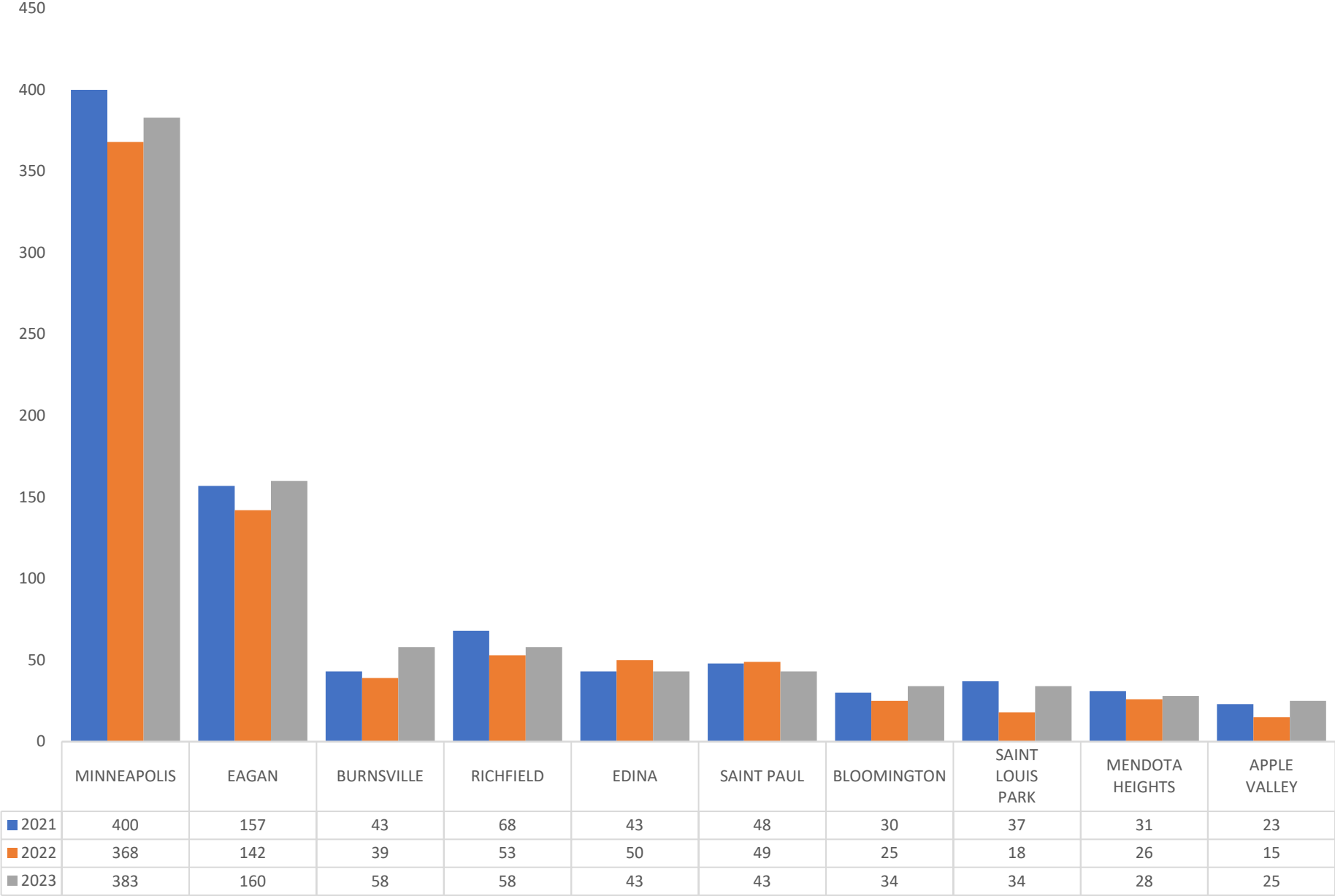
NOTE: BECAUSE MORE THAN ONE OPTION CAN BE SELECTED, THESE DO NOT ADD UP TO 100%. SELECTED ALL INDICATES EVERY COMPLAINT TYPE SELECTED.

## 2021-2023 COMPLAINTS FILED BY TOP 10 CITIES

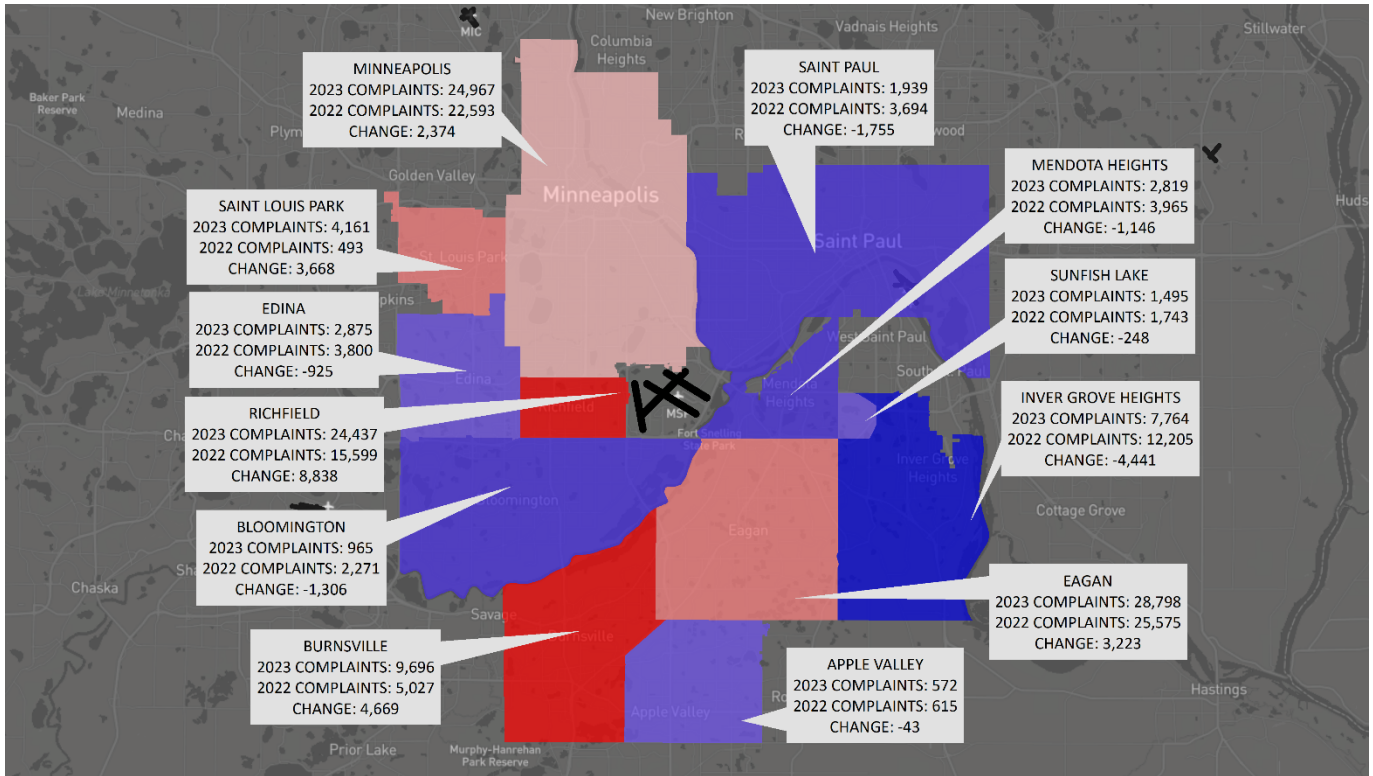




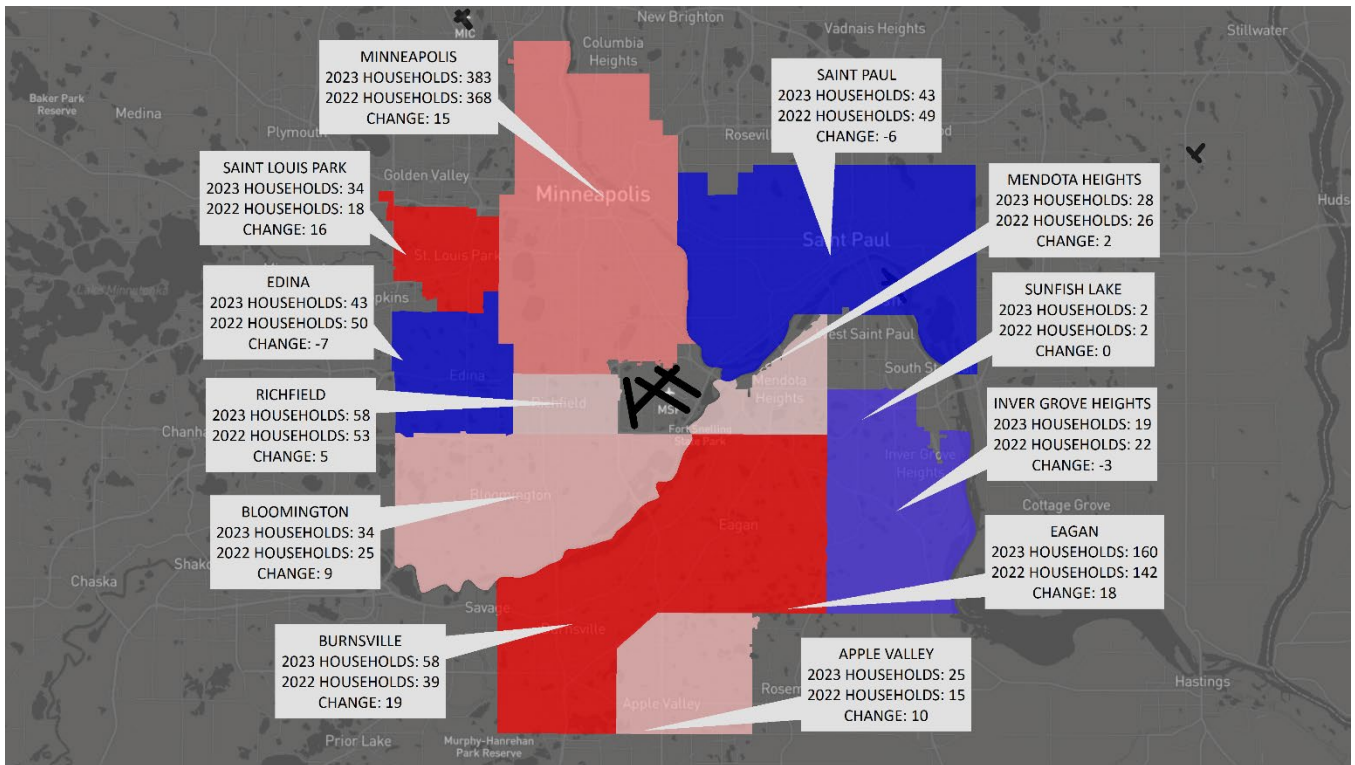
## 2021-2023 HOUSEHOLDS FILING COMPLAINTS BY TOP 10 CITIES



## 2022 TO 2023 COMPARISON - COMPLAINTS BY CITY



## 2022 TO 2023 COMPARISON - HOUSEHOLDS FILING COMPLAINTS BY CITY



## 2021-2023 COMPLAINTS AND OPERATIONS BY TIME OF DAY

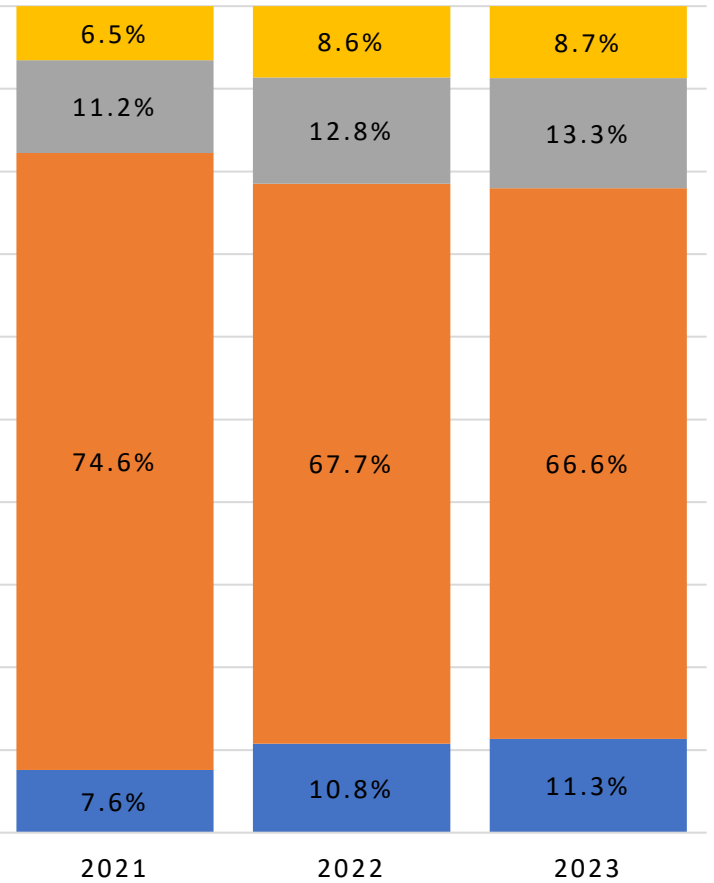
### OPERATIONS BY TIME PERIOD

■ MORNING   
 ■ DAY   
 ■ EVENING   
 ■ NIGHT



### COMPLAINTS BY TIME PERIOD

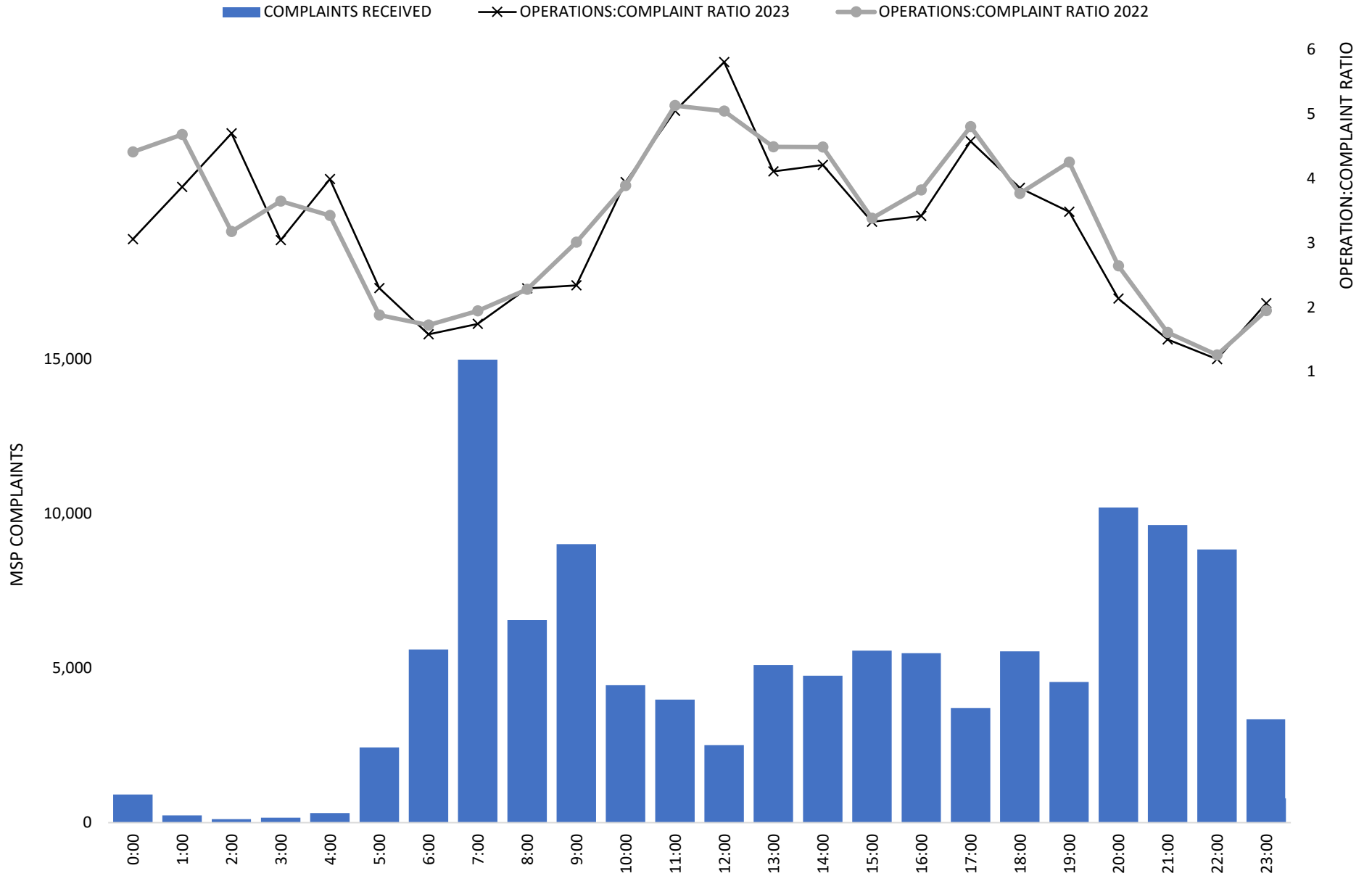
■ MORNING   
 ■ DAY   
 ■ EVENING   
 ■ NIGHT



*Note:*

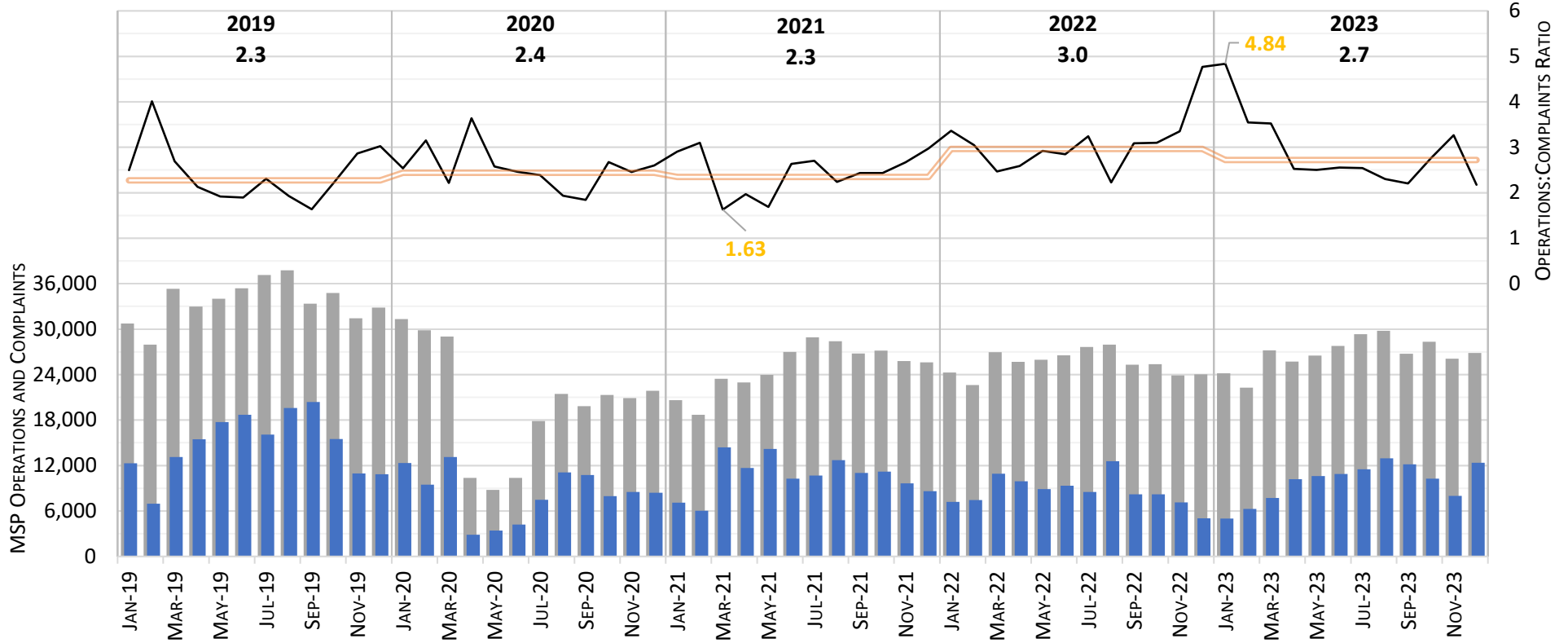
*Morning:* 6:00 AM – 7:30 AM  
*Day:* 7:30 AM – 9:00 PM  
*Evening:* 9:00 PM – 10:30 PM  
*Night:* 10:30 PM – 6:00 AM

## 2023 COMPLAINTS AND OPERATION RATIO BY HOUR

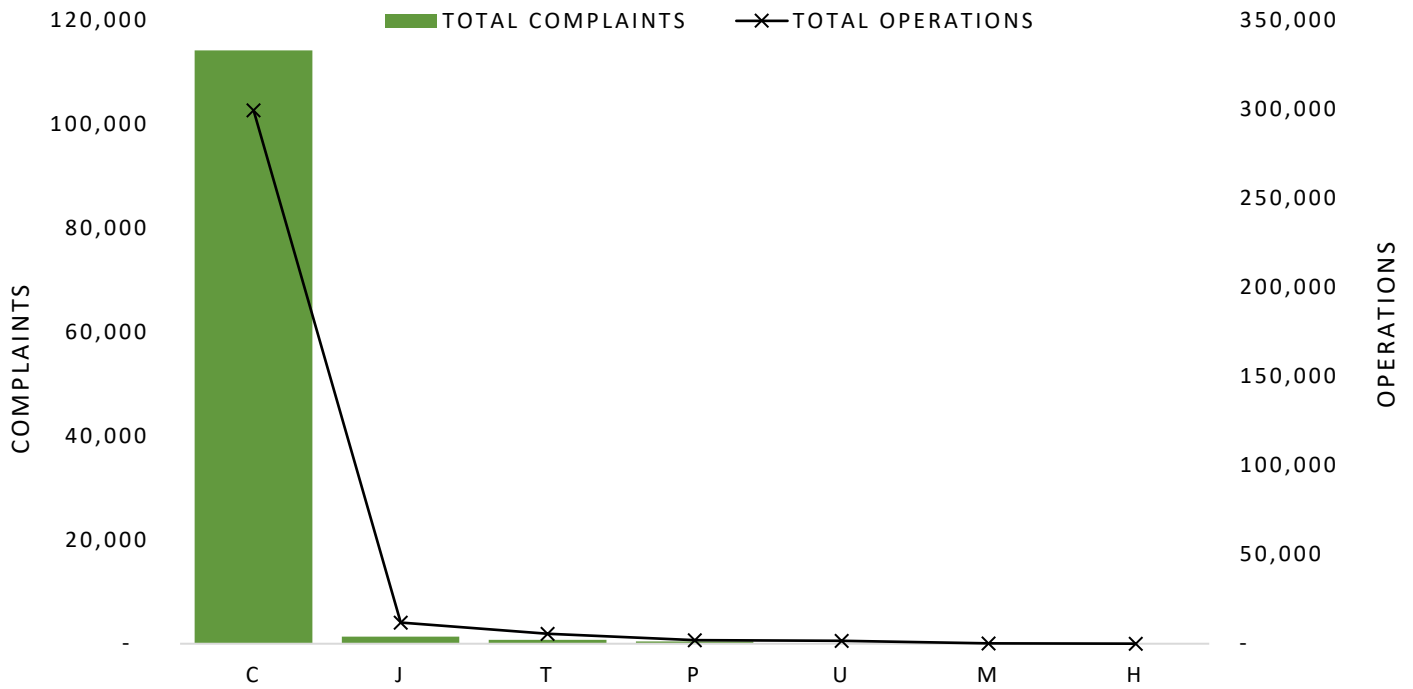


# OPERATION:COMPLAINTS MONTHLY RATIO

OPERATIONS
  COMPLAINTS
  OPS:COMPLAINTS MONTHLY RATIO
  OPS:COMPLAINTS ANNUAL RATIO

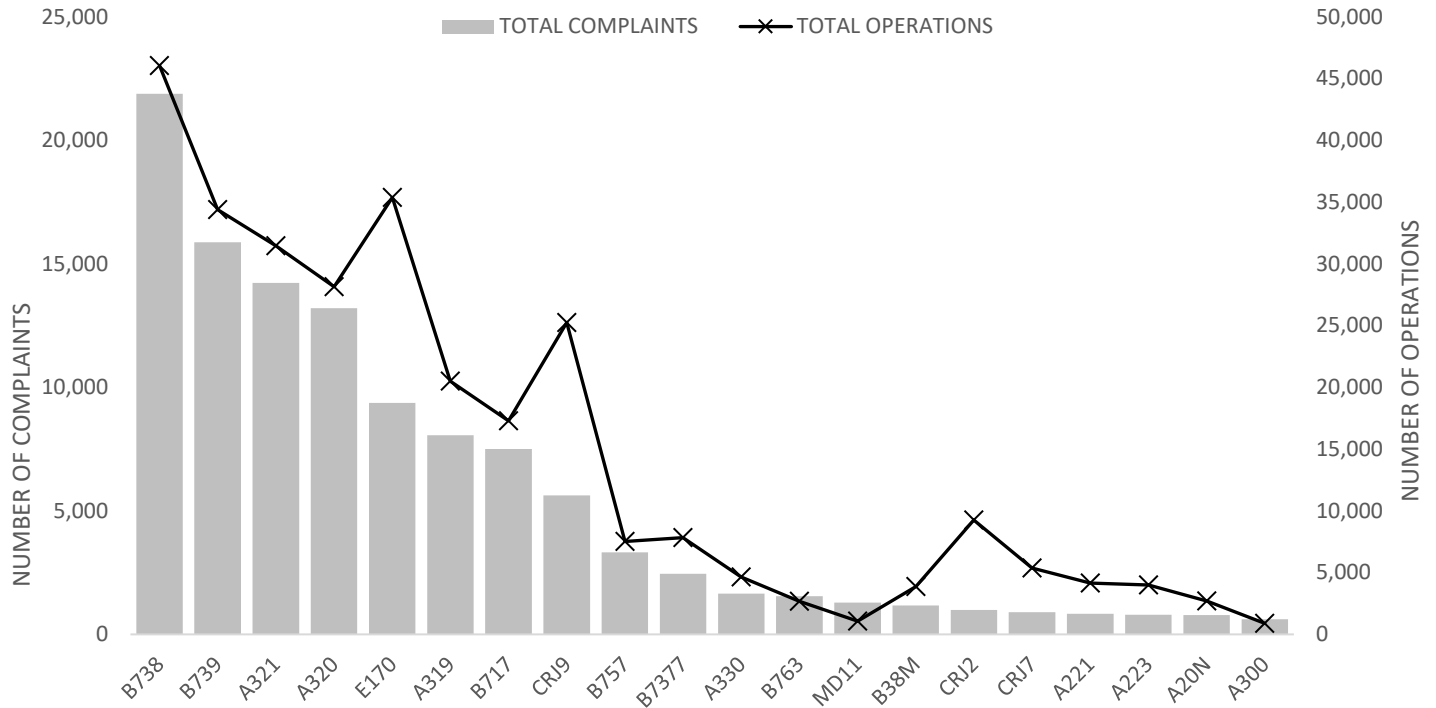


## 2023 COMPLAINTS BY AIRCRAFT CATEGORY



Operation Type	Total Operations	Total Complaints	Ratio
Commercial Jet (C)	299,434	114,183	2.6
Jet (J)	11,873	1,384	8.6
Turboprop (T)	5,572	744	7.5
Propeller (P)	2,032	457	4.4
Military (M)	1,630	93	17.5
Unknown (U)	224	60	3.7
Helicopter (H)	30	10	3.0

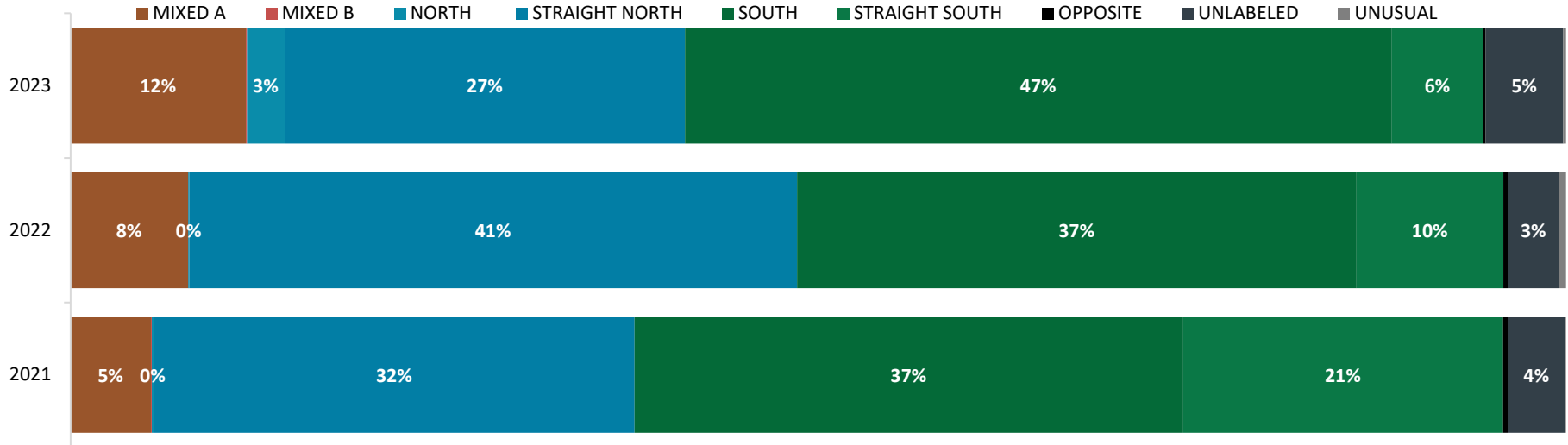
## 2023 COMPLAINTS BY AIRCRAFT TYPE



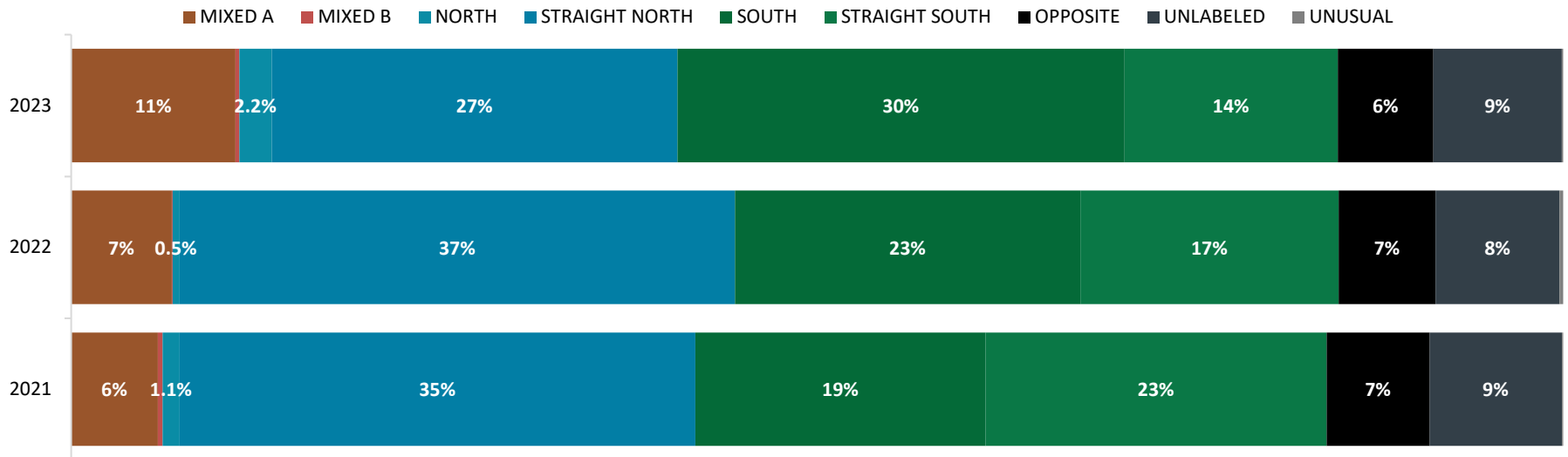
## 2023 TOP 10 FLIGHTS THAT GENERATED COMPLAINTS

Date and Time	Aircraft Type	Flight ID	Operation Type	Number of Complaints	Number of Households
10/26/2023 22:11	A321	DAL1441	Departure	12	7
9/10/2023 21:24	B738	SCX109	Departure	11	7
9/25/2023 22:02	A320	DAL2137	Departure	9	7
7/29/2023 7:07	B738	AAL894	Departure	9	6
8/14/2023 21:51	MD11	UPS559	Departure	8	8
6/30/2023 7:28	B763	FDX420	Departure	8	7
9/28/2023 21:42	MD11	UPS559	Departure	8	7
8/21/2023 20:38	B739	DAL2635	Departure	8	7
8/14/2023 22:12	B734	ASH185	Departure	8	7
8/27/2023 7:26	B738	DAL1402	Departure	8	7

## 2021-2023 COMPLAINTS BY FLOW

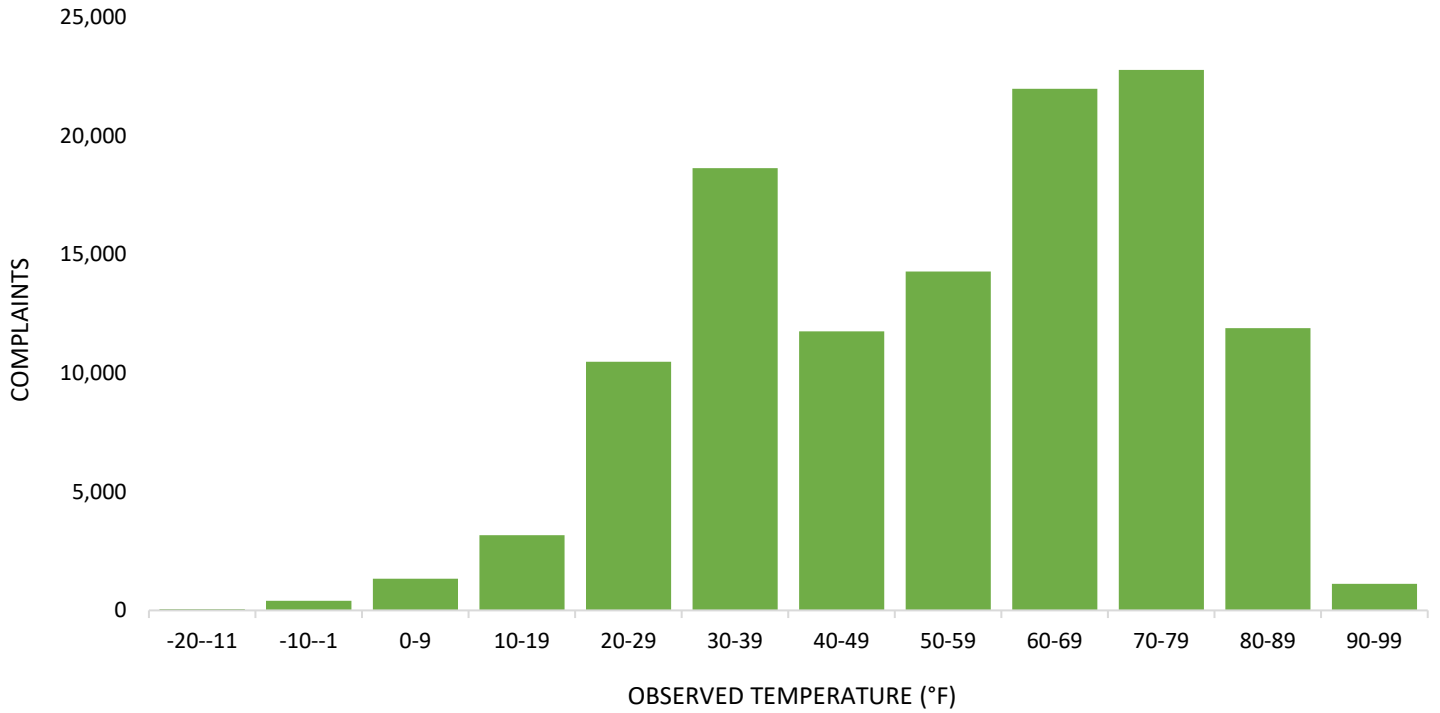


## 2021-2023 TOTAL FLOW

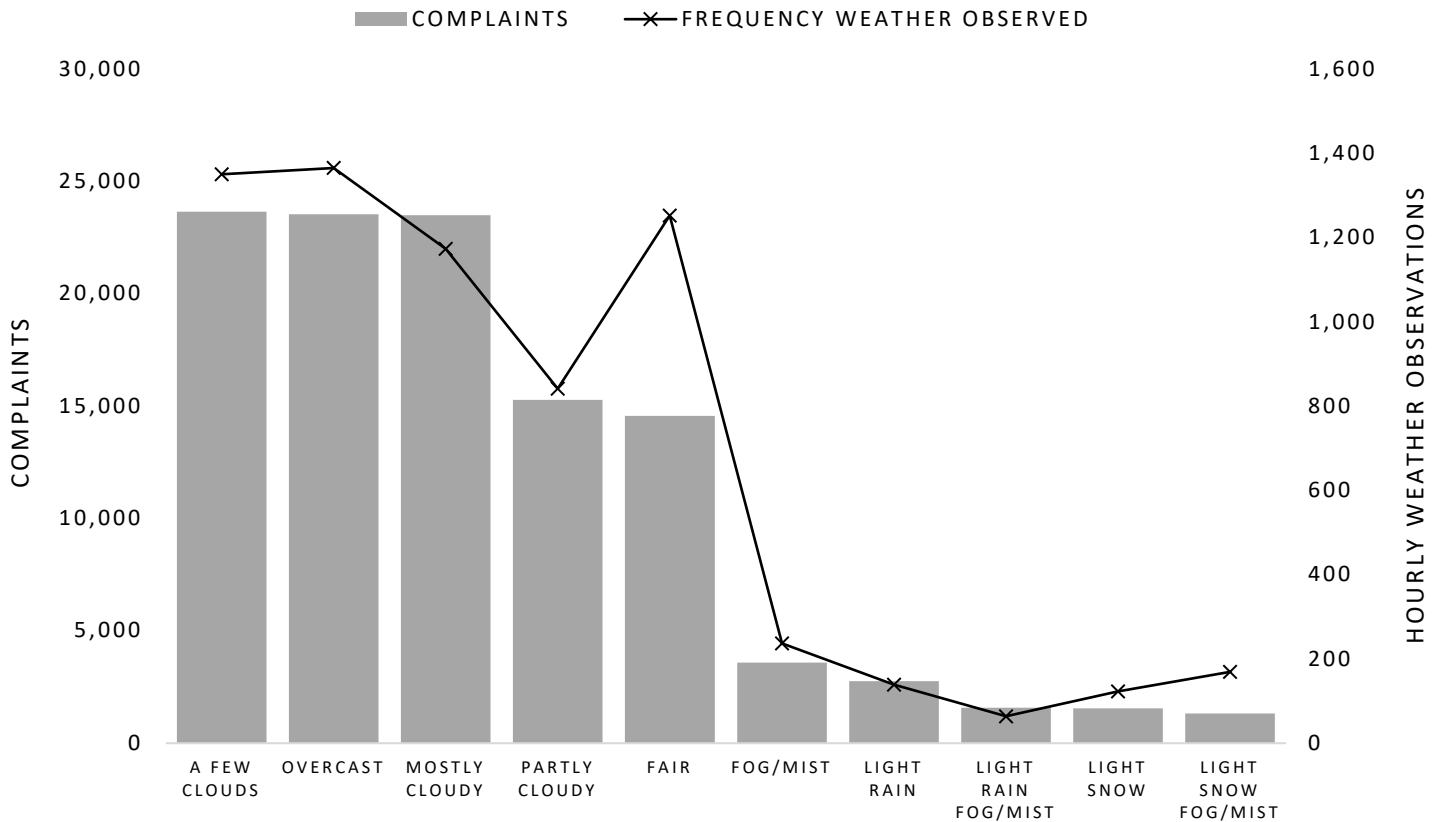




## 2023 COMPLAINTS BY TEMPERATURE



## 2023 COMPLAINTS BY WEATHER





**Metropolitan Airports Commission**

6040 28th Avenue South, Minneapolis, MN 55450

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# MEMORANDUM

ITEM 4.3

**TO:** MSP Noise Oversight Committee (NOC)  
**FROM:** Michele Ross, Manager, Community Relations  
**SUBJECT:** MEET THE FLEET  
**DATE:** January 17, 2024

The MAC Stakeholder Engagement department and Community Relations office strives to grow our community engagement efforts and expand our offerings to connect with the many people that are interested in our airports.

To continue to provide our communities with an insight into aviation, MAC staff has produced a new video in the award-winning Meet the Fleet video series. In partnership with our talented NOC pilots and other airport users, Meet the Fleet gives viewers a behind-the-scenes view of different aircraft types that frequently use the MAC’s system of airports. The videos feature commentary from pilots sharing interesting facts about specific aircraft, identifying characteristics, common routes flown and up-close footage of the fleet.

At the January meeting, staff will share the first Meet the Fleet video for 2024, which features the Goodyear Blimp.