



NOISE OVERSIGHT COMMITTEE

May 17, 2023

Audio recordings are made of this meeting

Agenda

1. Consent

1.1 – Approval of March 15, 2023 Meeting Minutes

1.2 – Reports

1.2.1 – Monthly Operations Reports: March and April

1.2.2 – Review of Spring Listening Session

1.2.3 – MSP Construction Updates

2. Public Comment Period

3. Business

4. Information

4.1 – FAA Update on Noise Policy Review

4.2 – FAA Update on the MSP VOR-MON and Procedure Development

4.3 – FAA Update on Converging Runway Operations

5. Announcements

Adjourn



**NOISE OVERSIGHT COMMITTEE
MAY 17, 2023**

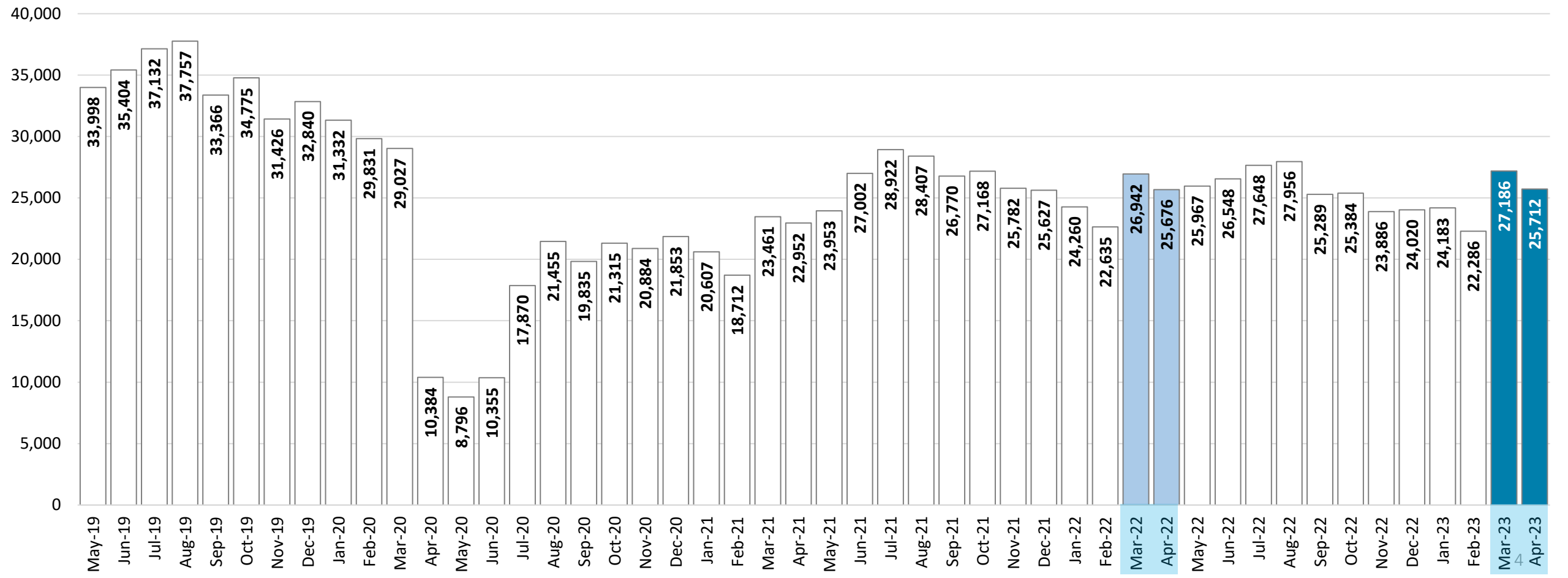
ITEM 1.2.1

MONTHLY OPERATIONS REPORTS: MARCH & APRIL 2023



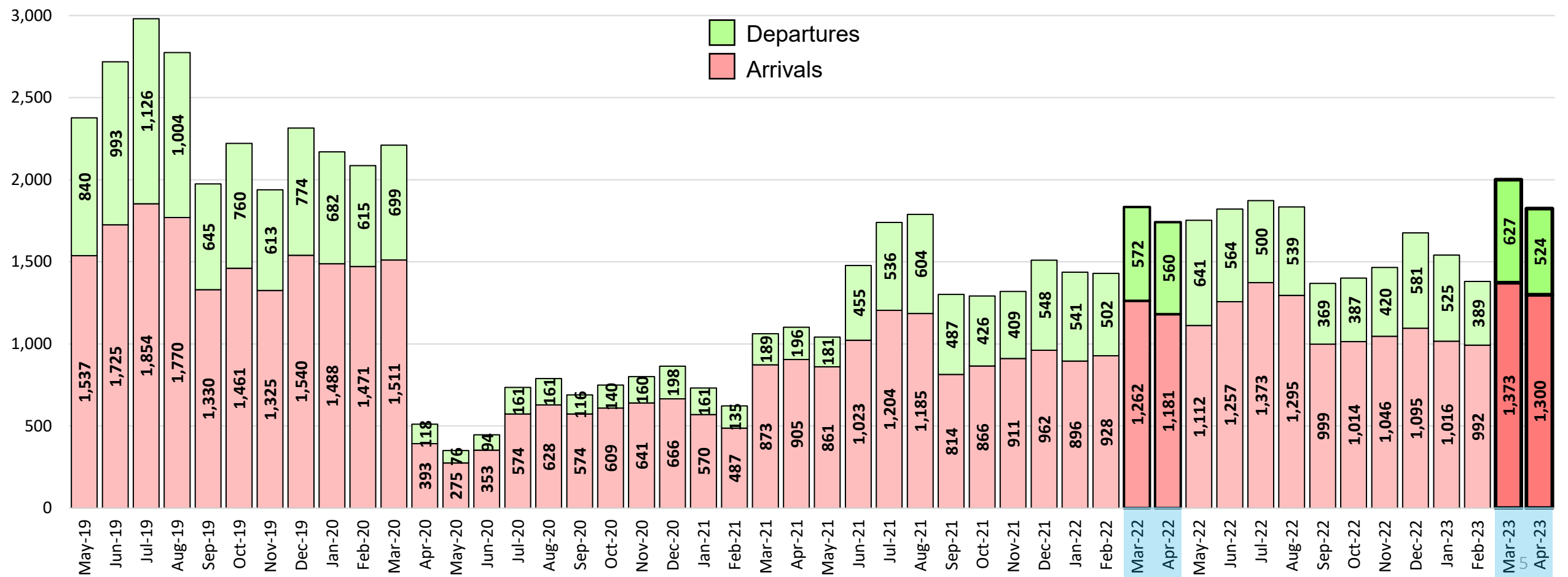
NOISE OVERSIGHT COMMITTEE
MAY 17, 2023

March 2023		April 2023	
27,186	2,000	25,712	1,824
Operations	Nighttime Operations (10:30 PM – 6:00 AM)	Operations	Nighttime Operations (10:30 PM – 6:00 AM)



MSP NIGHTTIME OPERATIONS

March 2023		April 2023	
27,186	2,000	25,712	1,824
Operations	Nighttime Operations (10:30 PM – 6:00 AM)	Operations	Nighttime Operations (10:30 PM – 6:00 AM)



MSP RUNWAY USE

MAR 2023			APR 2023		
NORTH FLOWS	SOUTH FLOWS	MIXED FLOWS	NORTH FLOWS	SOUTH FLOWS	MIXED FLOWS
34%	45%	13%	43%	37%	12%

2022 JAN – APR			2023 JAN – APR		
NORTH FLOWS	SOUTH FLOWS	MIXED FLOWS	NORTH FLOWS	SOUTH FLOWS	MIXED FLOWS
49%	36%	7%	37%	42%	13%

North Flow

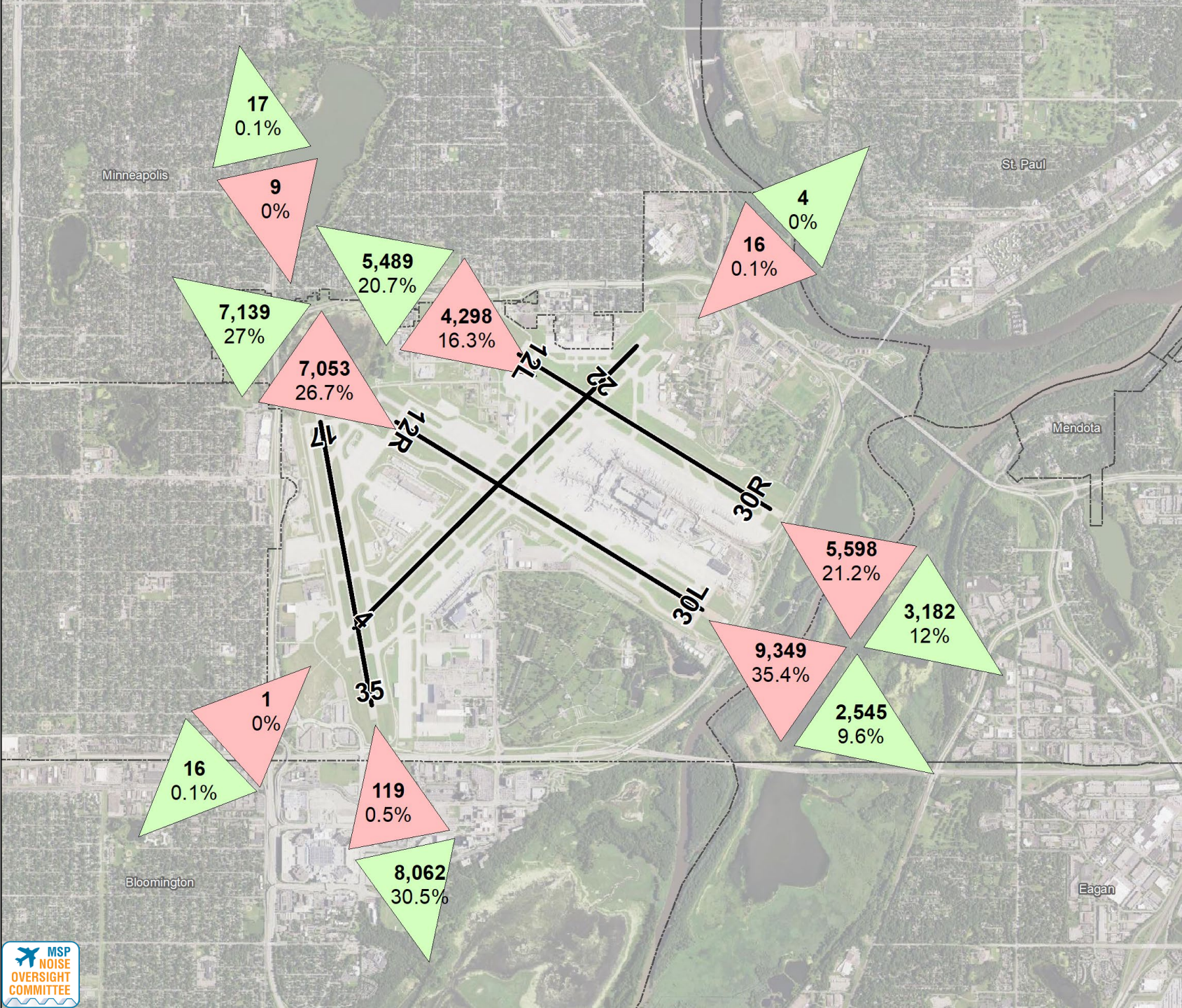


South Flow



Mixed Flow





MAR – APR RUNWAY USE

52,898
OPERATIONS IN MAR – APR

PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4
39%	15%	0%	45%

26,443
ARRIVALS

PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4
57%	0%	0%	43%

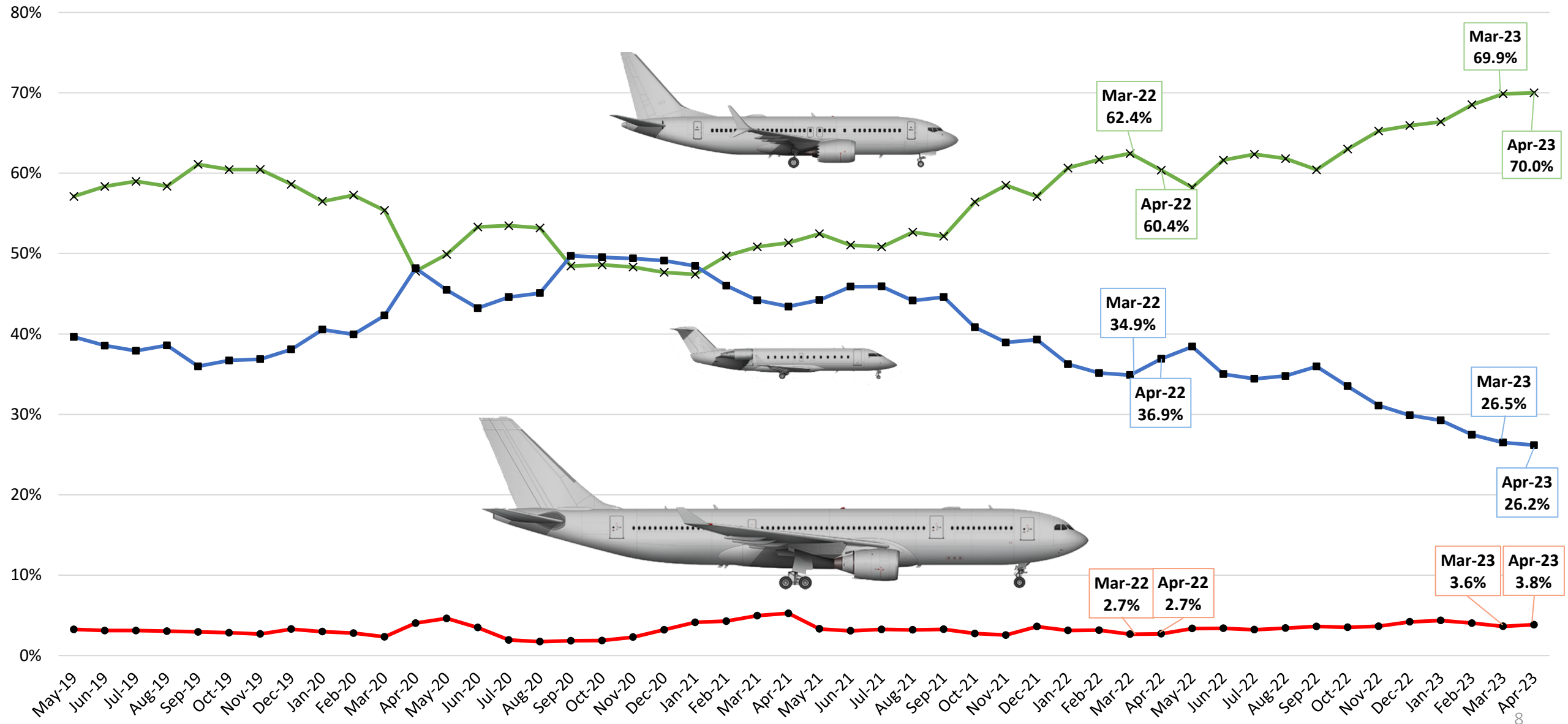
26,455
DEPARTURES

PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4
22%	30%	0%	48%

MSP OPERATIONS FLEET MIX

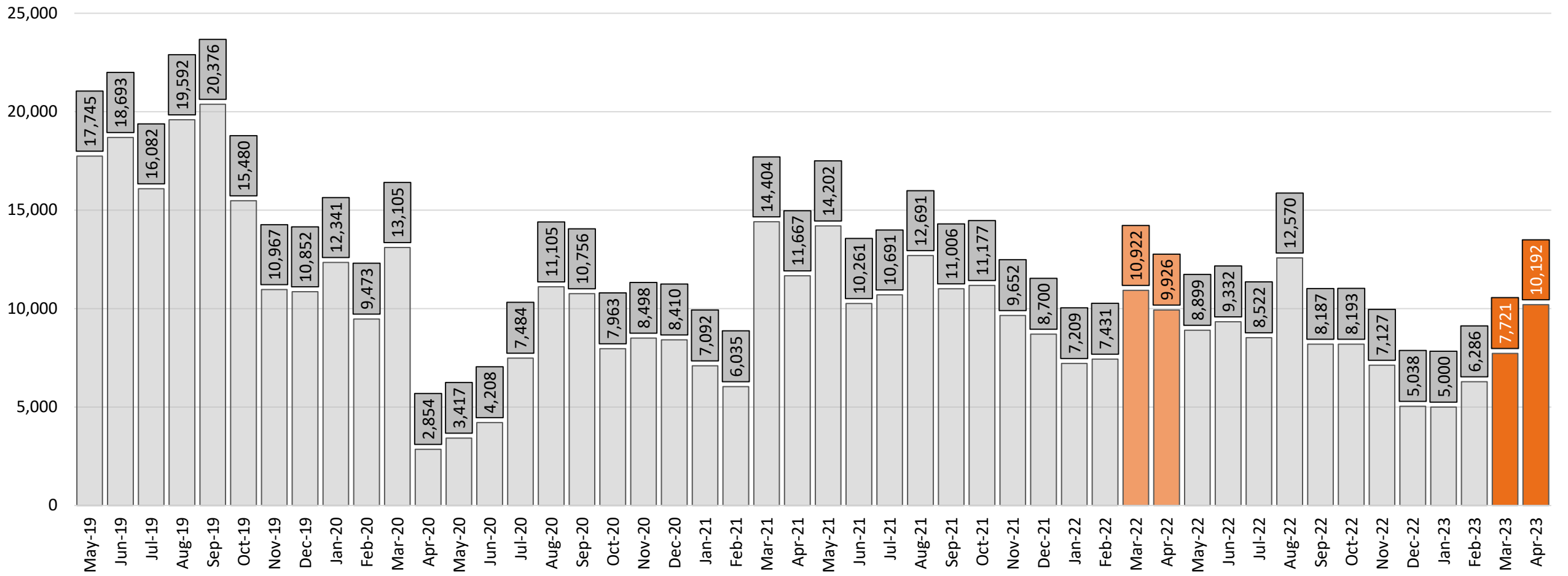
CARRIER JET FLEET MIX

—x— NARROWBODY
 —■— RJ
 —●— WIDEBODY



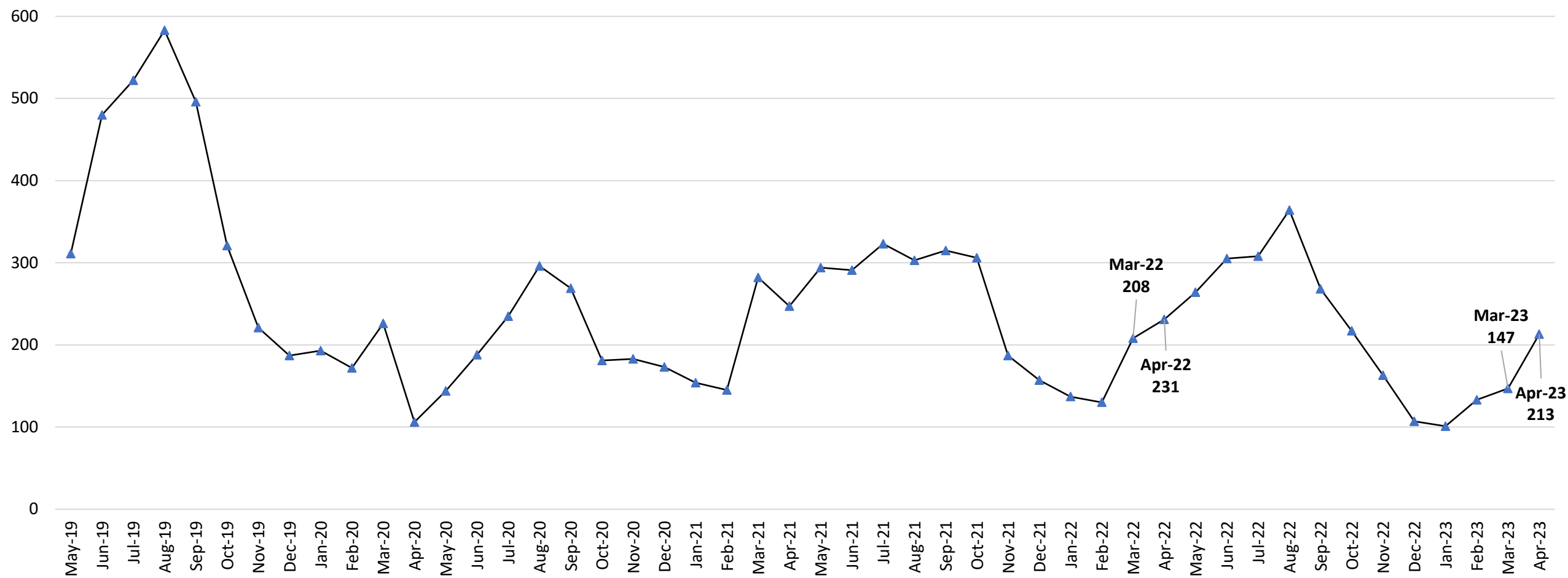
MSP COMPLAINTS

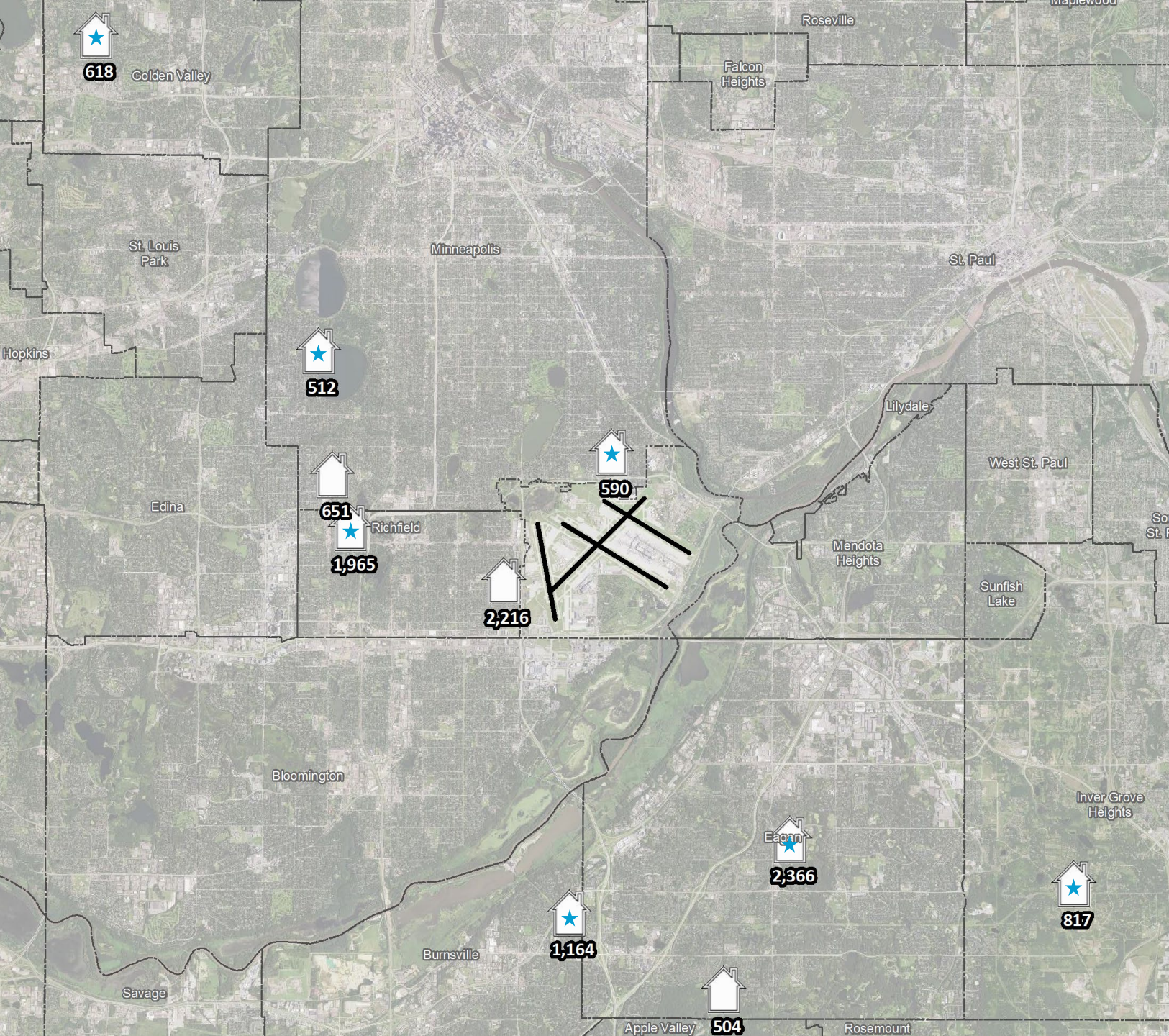
March 2023				April 2023			
COMPLAINTS		LOCATIONS		COMPLAINTS		LOCATIONS	
7,721		147		10,192		213	
Ops per Complaint	New Locations	Average	Median	Ops per Complaint	New Locations	Average	Median
3.5	2	53	5	2.5	10	48	4



MSP COMPLAINT LOCATIONS

March 2023				April 2023			
COMPLAINTS		LOCATIONS		COMPLAINTS		LOCATIONS	
7,721		147		10,192		213	
Ops per Complaint	New Locations	Average	Median	Ops per Complaint	New Locations	Average	Median
3.5	2	53	5	2.5	10	48	4





TOP 10 LOCATIONS

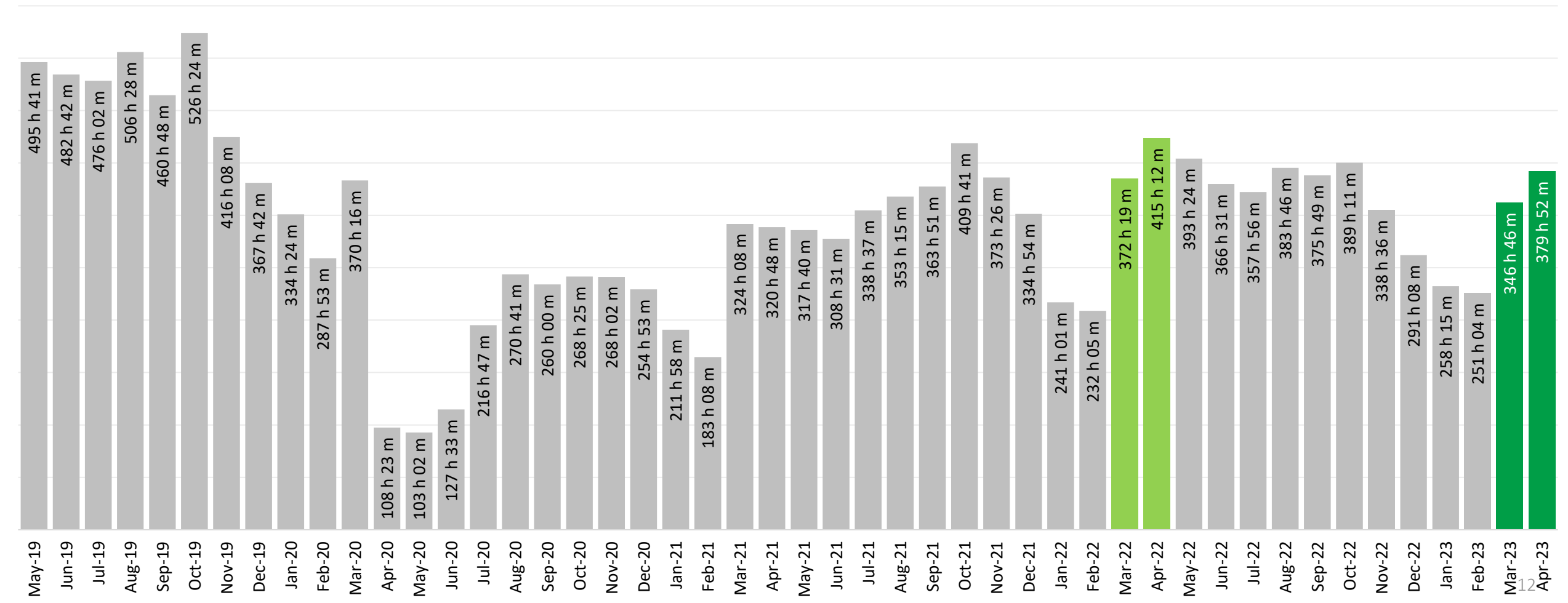
TOP 10 FILED
11,403 COMPLAINTS
OUT OF 17,913 (64%)
DURING MAR – APR

7 OF 10 LOCATIONS
FROM JAN – FEB TOP 10
(★)

164 LOCATIONS
(68%)
FILED 10 OR FEWER COMPLAINTS

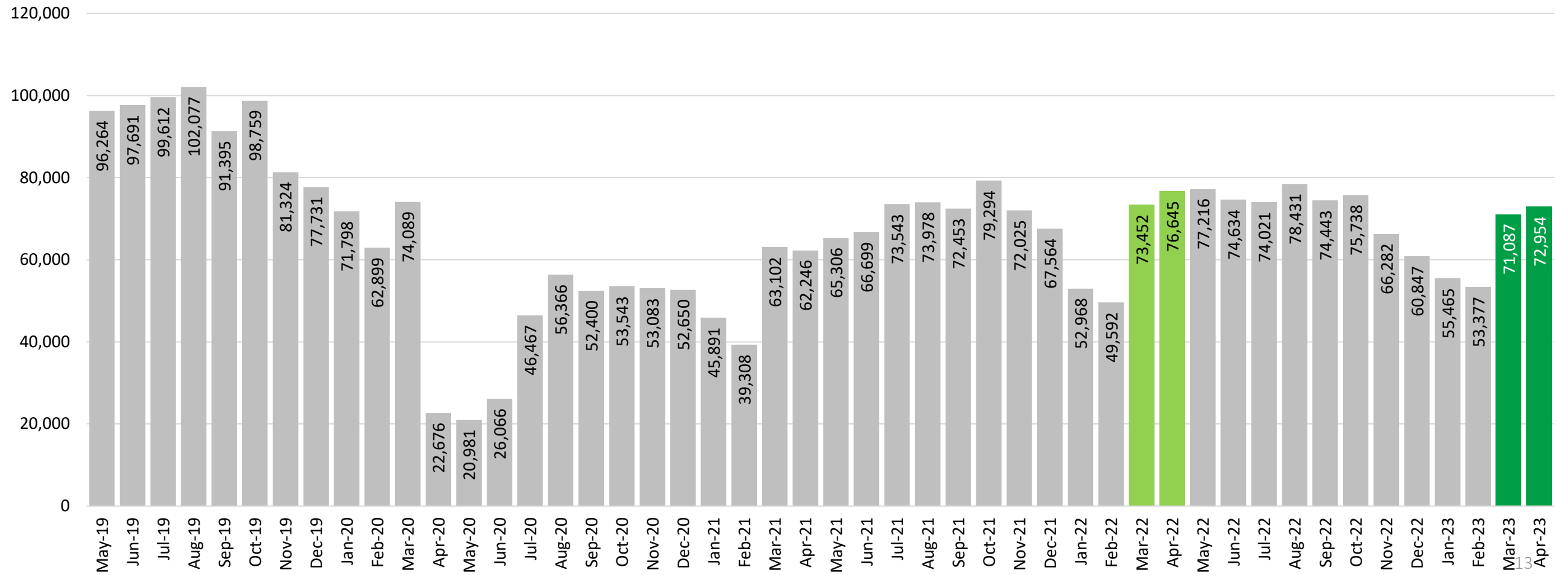
SOUND MONITORING

March 2023			April 2023		
Time Above	46 TA ⁶⁵ Per Operation	346 h 46 m TA ⁶⁵	Time Above	53 TA ⁶⁵ Per Operation	379 h 52 m TA ⁶⁵
Count Above	2.62 N ⁶⁵ Per Operation	71,087 N ⁶⁵	Count Above	2.84 N ⁶⁵ Per Operation	72,954 N ⁶⁵



SOUND MONITORING

March 2023			April 2023		
Time Above	46 TA ⁶⁵ Per Operation	346 h 46 m TA ⁶⁵	Time Above	53 TA ⁶⁵ Per Operation	379 h 52 m TA ⁶⁵
Count Above	2.62 N ⁶⁵ Per Operation	71,087 N ⁶⁵	Count Above	2.84 N ⁶⁵ Per Operation	72,954 N ⁶⁵



March 2023

Runway 17	99.4%
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EMH Corridor	87.4%
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Cross Day	25.4%
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Cross Night	36.5%
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April 2023

Runway 17	99.2%
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EMH Corridor	84.9%
---------------------	--------------

Cross Day	24.2%
------------------	--------------

Cross Night	21.7%
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RUS	54.4%	Arrive - 53%	Depart - 56%
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RUS	54.7%	Arrive - 61%	Depart - 48%
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ITEM 2

PUBLIC COMMENT PERIOD



NOISE OVERSIGHT COMMITTEE
MAY 17, 2023

ITEM 2

PUBLIC COMMENT PERIOD

Speaking at a Meeting

- Each speaker will have one opportunity to speak and is allotted three (3) minutes.
- When called upon to speak, speak clearly, state your name and address. If you are affiliated with any organization, please state your affiliation.
- 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.



NOISE OVERSIGHT COMMITTEE
MAY 17, 2023

4.1 – FAA UPDATE ON NOISE POLICY REVIEW



NOISE OVERSIGHT COMMITTEE
MAY 17, 2023

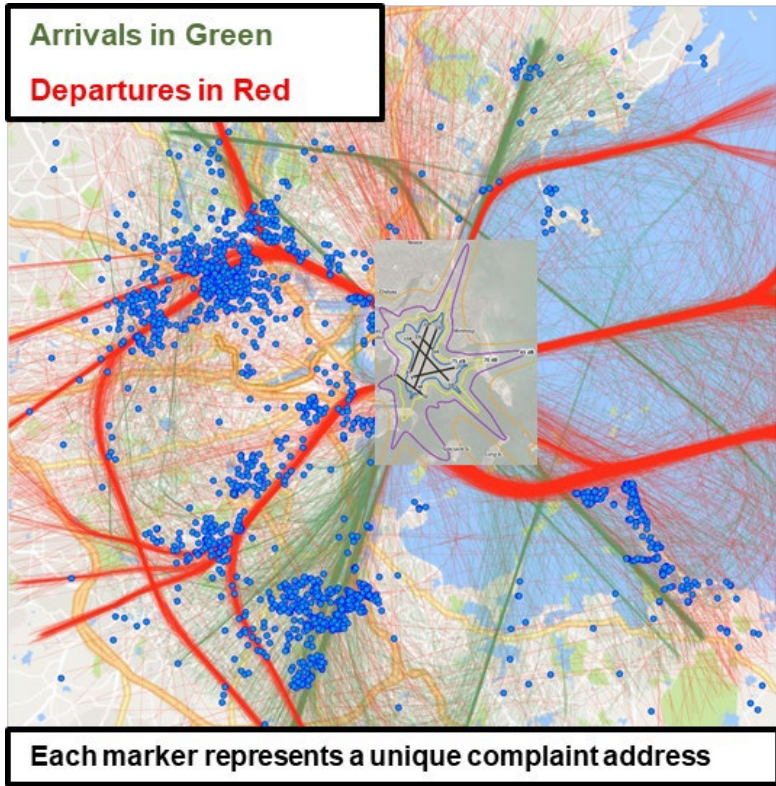


NOISE POLICY REVIEW

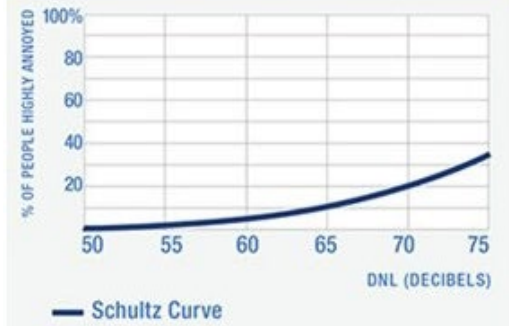




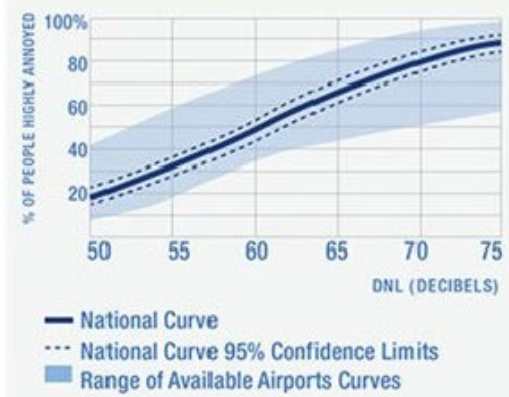
THE NOISE PROBLEM: THEN AND NOW



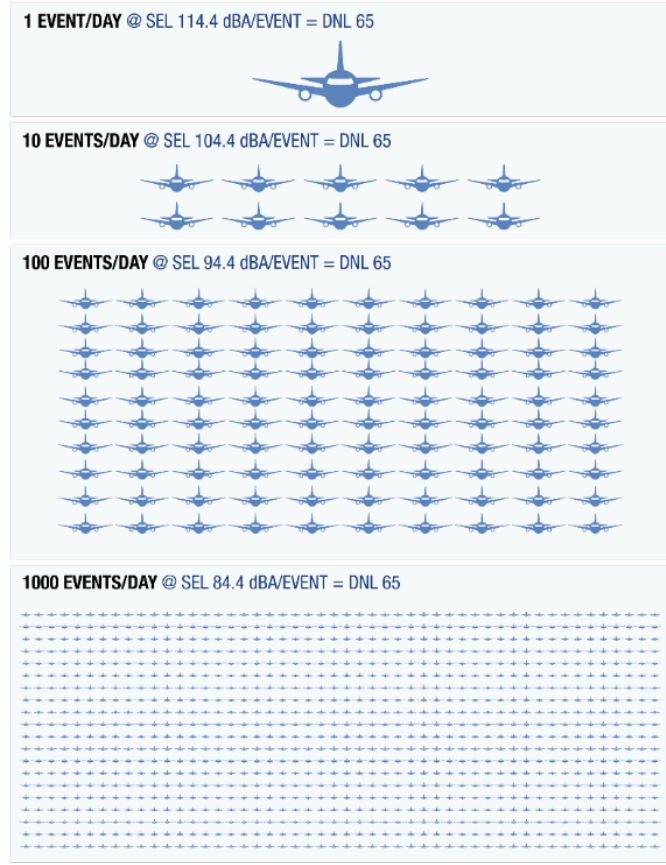
SCHULTZ CURVE



NATIONAL CURVE



EQUIVALENT OPERATIONS FOR DNL = 65

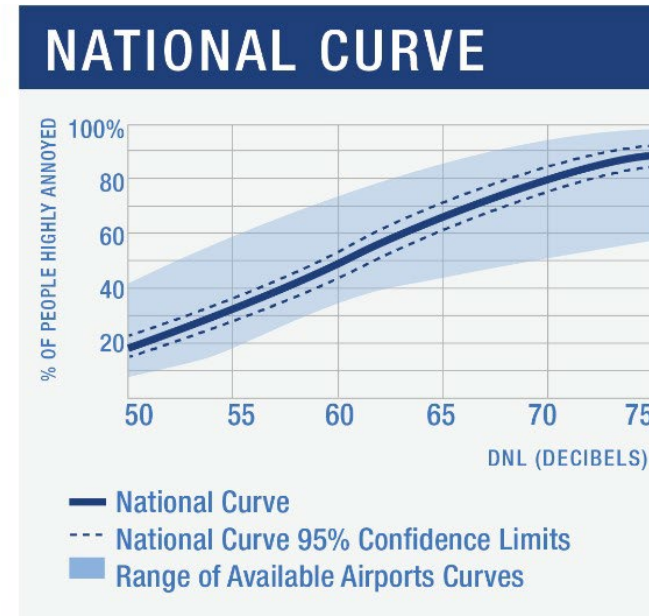
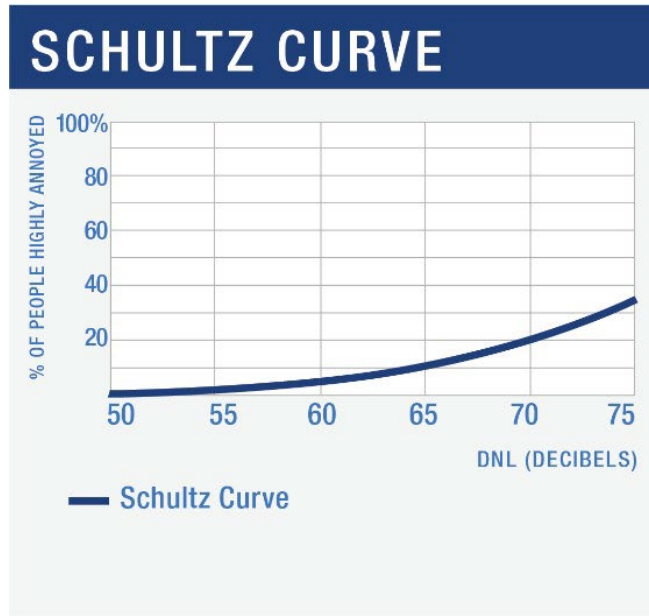


NEIGHBORHOOD ENVIRONMENTAL SURVEY RESULTS



The Neighborhood Environmental Survey results support an observed increase in annoyance from aircraft noise:

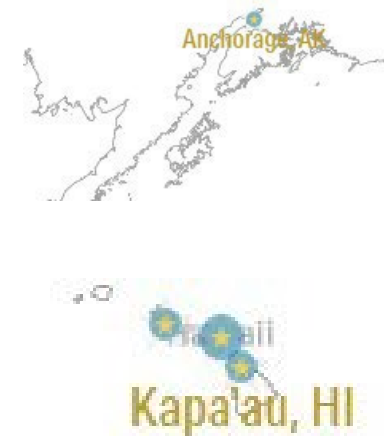
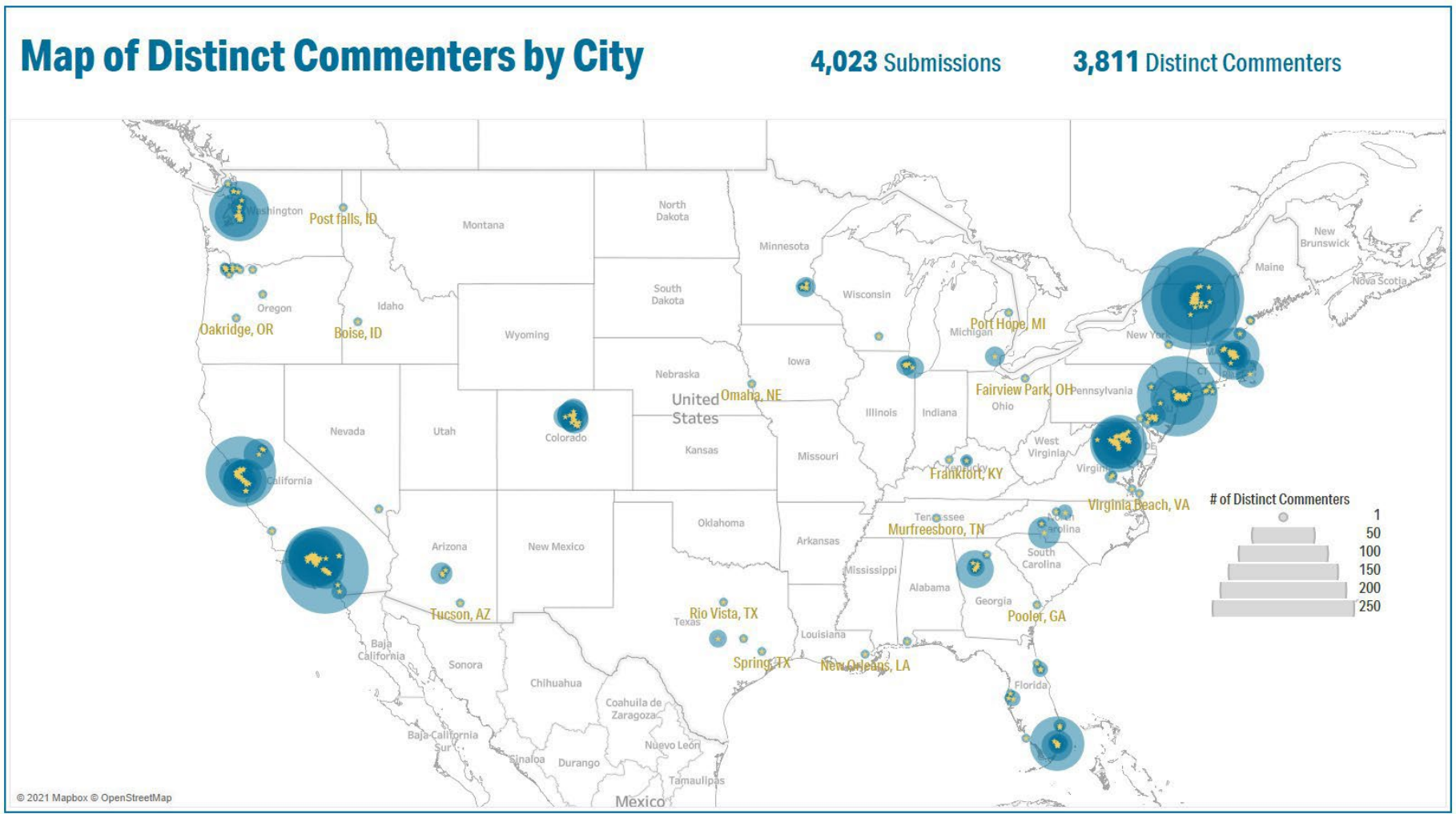
- The results show a substantial increase in annoyance for the population living in the vicinity of airports
- The increase in annoyance is generally consistent across various levels of noise exposure



The new Survey was designed to use a consistent approach across each airport community surveyed. This has allowed for an enhanced ability to provide additional statistical information about the new results, such as the 95% Confidence Limits and range of results from each of the 20 airports, as shown on the plot above. This was not possible with the older Schultz Curve.



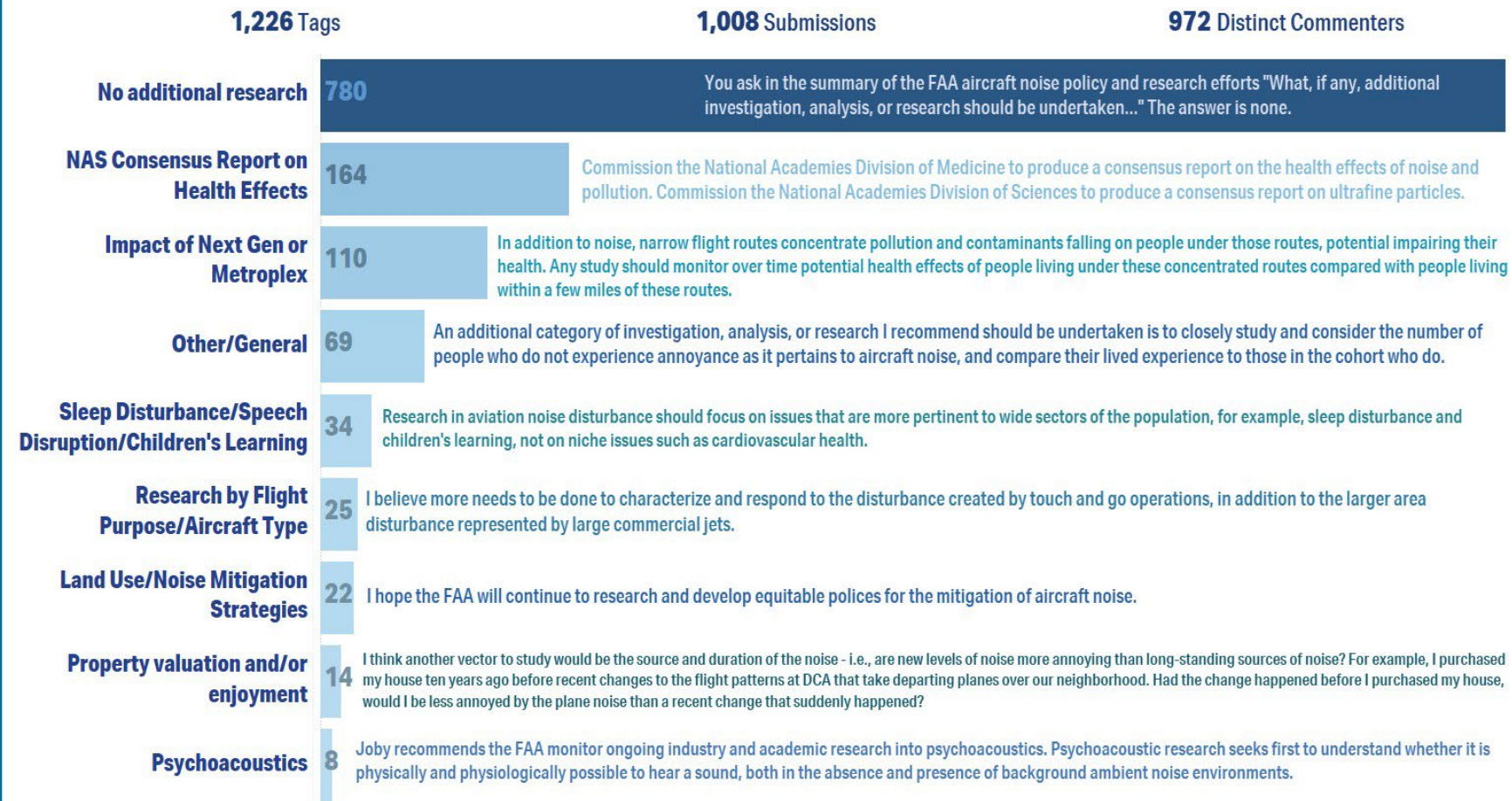
FAA NOISE RESEARCH FRN COMMENTS



FAA NOISE RESEARCH FRN COMMENTS



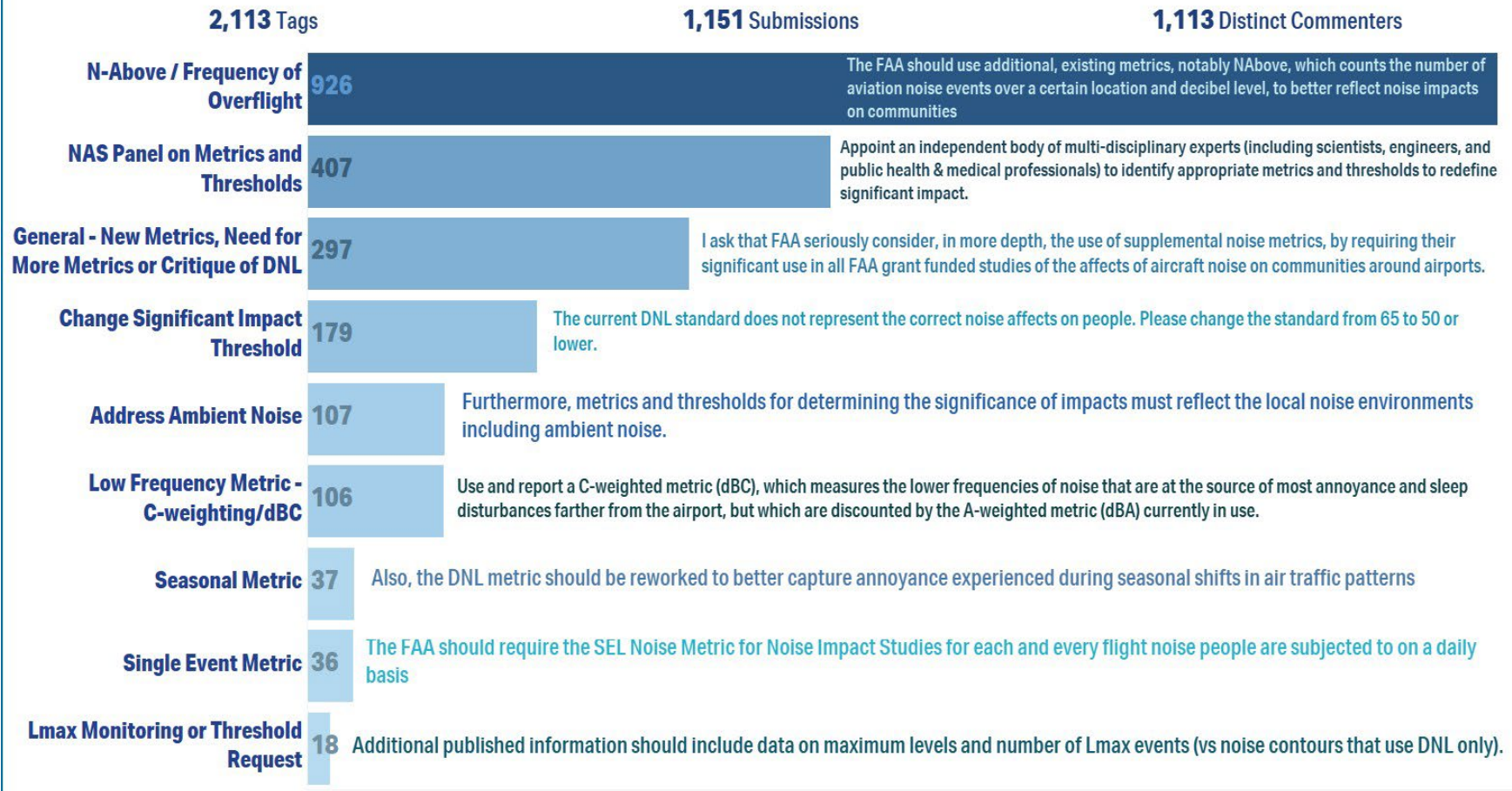
Distribution of Sub-topics for Additional Research (Number of Tags)



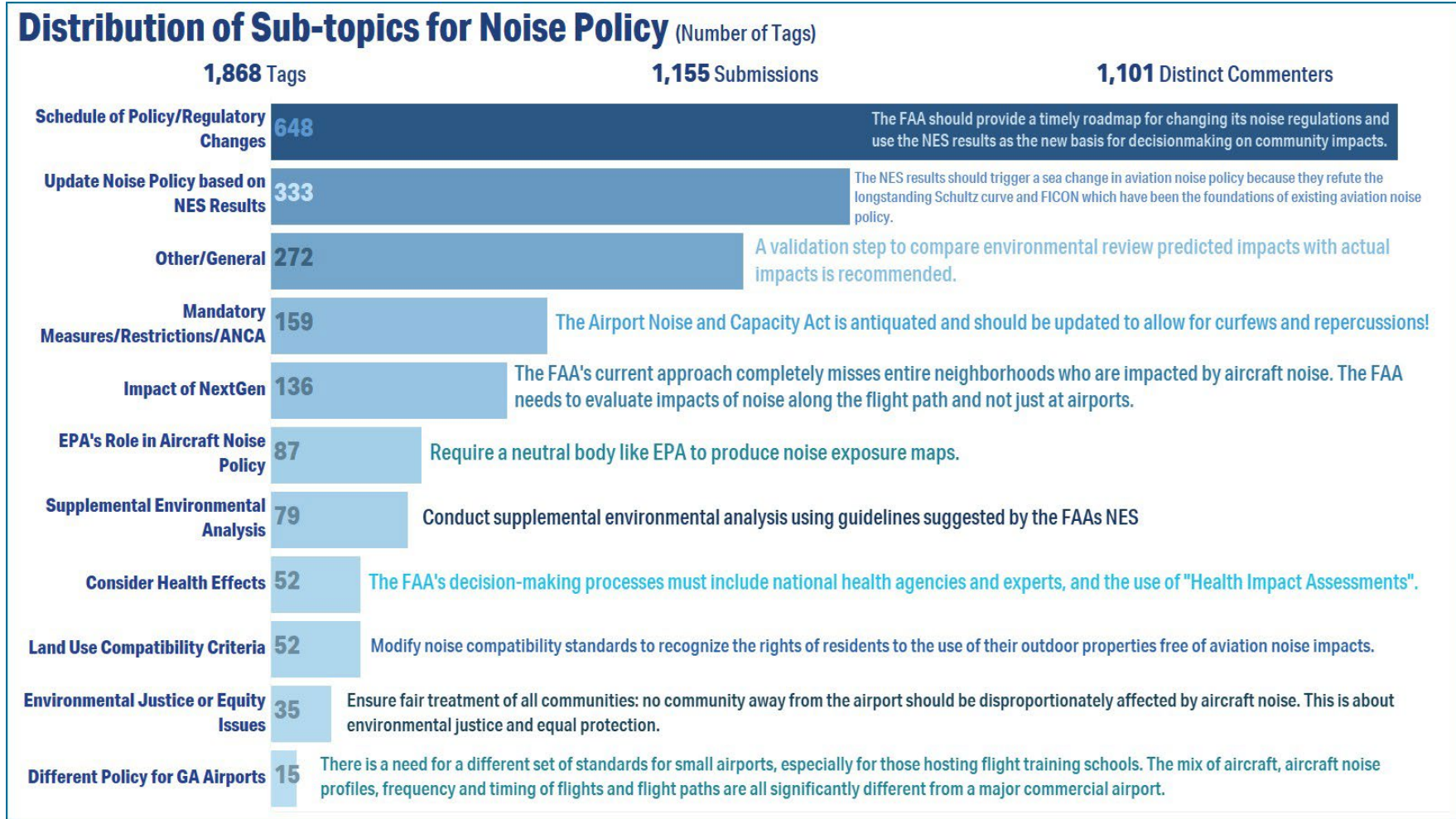
FAA NOISE RESEARCH FRN COMMENTS



Distribution of Sub-topics for Noise Metrics and Thresholds (Number of Tags)



FAA NOISE RESEARCH FRN COMMENTS



NOISE POLICY REVIEW



- In late 2021, the FAA initiated a review of our noise policy as part of our ongoing commitment to address aircraft noise. This effort will build on our work to advance the scientific understanding of noise impacts as well as the development of analytical tools and technologies.
- It will consider new evidence from the agency’s noise research program, including from the Neighborhood Environmental Survey, and the distribution of environmental risks, tradeoffs, or externalities across communities.
- Goals
 - Identify and implement well-reasoned, scientifically-grounded noise policy updates that incorporate FAA’s updated understanding of aviation noise and human response and the development of analytical tools and technologies to better manage and reduce the environmental impacts of aviation
 - Conduct an inclusive, transparent, and participatory process that prioritizes input from substantially affected stakeholders, including local communities





SCOPE OF NOISE POLICY REVIEW

- **Focus on foundational elements of FAA's noise policy, including:**
 - **Metrics:** hard look at DNL, consideration of other metrics (e.g., Number Above), and how they are calculated
 - **Noise Thresholds:** Consider NES findings and other research, investigate lowering below DNL 65 dBA the definition of the level of significant noise exposure for actions subject to environmental review requirements and modifying the definitions of the levels of noise exposure that are deemed to be “normally compatible” with airport operations, as set forth in Table 1 of Appendix A to Part 150.
 - For new metrics, consider whether it is appropriate to establish a noise threshold and its potential value



FEDERAL REGISTER NOTICE (FRN)



- [Published](#) on May 1, 2023
- 90-day comment period ends July 31, 2023
- Includes a background on FAA Noise Policy
- Request for comments includes 11 questions
- Links to a companion [framing paper](#)
- Submit comments to [Docket FAA-2023-0855](#) at [regulations.gov](https://www.regulations.gov)



FRAMING PAPER



- Entitled “*The Foundational Elements of the Federal Aviation Administration Civil Aviation Noise Policy: The Noise Measurement System, its Component Noise Metrics, and Noise Thresholds*”
- Intended to be read in parallel with FRN
- Provides additional context and discussion around the 11 questions included in the FRN
- Aimed at providing context for the review and helping stakeholders better understand the questions included in the FRN



UNPACKING POLICY OPTIONS



Should FAA transition away from a noise policy with a single metric comprising the system in favor of an expanded system of metrics?

An expanded system of metrics may consider:

Vehicle Types	Analysis Purpose	Type of Analysis
Aircraft	Environmental Review	Airfield Changes
Helicopters	Land Use Planning	Airspace Changes
Rockets	Eligibility Requirements	New Entrants



UNPACKING POLICY OPTIONS



An expanded system of metrics may include:

- Accounting for cumulative, operational/single-event, and low-frequency metrics for use alone, in combination, or in lieu of another metric? e.g., Day-Night Average Sound Level (DNL) in combination with Number Above an Lmax (NA) or others.



UNPACKING POLICY OPTIONS



Example situations an expanded system of metrics may consider include:

- Accounting for operational considerations: vehicle types; location/resource affected; purpose of analysis; and type of analysis? e.g., Day-Night Average Sound Level (DNL) for commercial aircraft and land use planning purposes, but Time Above an Lmax (TA) for new entrants such as drones.



UNPACKING POLICY OPTIONS



For example, FAA could review the following metrics that may comprise the system

Cumulative	Cumulative/ Single Event	Other
Day-Night Average Sound Level (DNL)	Number Above an L_{max} (NA)	FAA seeking feedback None identified at this time
Community Noise Equivalent Level (CNEL)	Time Above an L_{max} (TA)	
School/Work Hour Equivalent Sound Level (L_{eq})	L_{max}	



UNPACKING POLICY OPTIONS



- 1) Revisit the elements of the Day-Night Average Sound Level (DNL) by exploring the methods used for calculating it.
- 2) Examine existing noise thresholds and consider whether to:
 - Retain the current thresholds, with no change.
 - Set noise thresholds for any, some, or all the noise metrics in the system.
 - Change the metric and level used to define the threshold of significance and reportable impacts.
 - Revise the metric and level used to define compatible land use and noise sensitive uses.
- 3) Consider reviewing the noise policy at least once every 3-5 years to determine whether updates or revisions are necessary to respond to new information.



KEY TAKEAWAYS REGARDING FAA POLICYMAKING



Potential Outcomes of Policy Changes

- Possible updates to regulations, orders, guidance, etc.
- Change level of review needed for a given action
- Improve FAA's communication about noise impacts to public

Policy Changes Will Not Affect . . .

- Current/existing aviation noise exposure
- Where/when aircraft currently fly
- Completed or ongoing environmental reviews



ENGAGEMENT



FAA NOISE POLICY REVIEW LANDING PAGE:



- FAA has published a **landing page** for the noise policy review <https://www.faa.gov/noisepolicyreview>
- The landing page will be revised as the noise policy review progresses.
- Landing page content will include:
 - Noise Policy Review information and status;
 - Framing Paper
 - Resources (education materials, videos, FAQs, primary sources, etc.);
 - Links to join virtual webinars; and
 - Link to subscribe to FAA project updates.



NOISE POLICY REVIEW WEBINARS



Date	Time	How to Attend
Tuesday, May 16th, 2023	1:00 pm - 3:00 pm ET	<ul style="list-style-type: none">• Attend Through Zoom<ul style="list-style-type: none">○ Password: 059052• YouTube Live Stream
Thursday, May 18th, 2023	6:00 pm - 8:00 pm ET	<ul style="list-style-type: none">• Attend Through Zoom<ul style="list-style-type: none">○ Password: 007544• YouTube Live Stream
Tuesday, May 23rd, 2023	9:00 pm - 11:00 pm ET	<ul style="list-style-type: none">• Attend Through Zoom<ul style="list-style-type: none">○ Password: 170360• YouTube Live Stream
Thursday, May 25th, 2023	4:00 pm - 6:00 pm ET	<ul style="list-style-type: none">• Attend Through Zoom<ul style="list-style-type: none">○ Password: 561270• YouTube Live Stream



FURTHER INFORMATION



Webpage: www.faa.gov/noisepolicyreview

Email: NoisePolicyReview@faa.gov

Phone: 202-269-6999



LIST OF ACRONYMS



- AAD - Average Annual Day
- CNEL – Community Noise Equivalent Level
- dB – Decibel
- dBA – A-weighted decibel
- DNL – Day-Night Average Sound Level
- FRN – Federal Register Notice
- GA – General Aviation
- L_{eq} – Equivalent Sound Level
- L_{max} – Maximum Sound Level
- NA – Number Above
- NAS – National Airspace System
- NEPA – National Environmental Policy Act
- NES – Neighborhood Environmental Survey
- NPR – Noise Policy Review
- SAF – Sustainable Aviation Fuels
- SEL – Sound Exposure Level
- TA – Time Above



4.2 – FAA UPDATE ON MSP VOR-MON AND PROCEDURE DEVELOPMENT



NOISE OVERSIGHT COMMITTEE
MAY 17, 2023

FAA MSP VOR Discontinuance

Project Update and Community Engagement

Presented to: Noise Oversight Committee

By: Nitin Rao, FAA

Date: May 17, 2023



Federal Aviation
Administration



MSP VOR Discontinuance

- **Conventional departure procedures based on MSP VOR will be cancelled.**
 - RNAV Vector Departures will be replacing these conventional procedures
- **Goal is to replicate to the extent possible the current procedures in place.**
 - Safety
 - Efficiency
 - Criteria (FAA Orders and operational and airworthiness guidance)



MSP VOR Discontinuance Status Update

- **Project Design**
 - **Second round of design meetings this week**
 - **Core work group members: FAA, MAC, Industry**
 - **Procedure development and discussion**
 - **Hopeful to have the preliminary design completed by August 2023**



FAA MSP Community Engagement Overview



FAA MSP Community Engagement

- **FAA's Mission to Develop Safe and Efficient Procedures while considering stakeholder needs**
- **Community Engagement**
 - National Environmental Policy Act (NEPA) requirements
 - FAA Community Engagement Policy
- **Community Engagement will consist of both educational activities and community input.**



FAA MSP Community Engagement (Cont.)

The screenshot shows a web browser window displaying the FAA MSP Community Engagement page for Minneapolis-St. Paul. The browser's address bar shows the URL https://www.faa.gov/air_traffic/community_engagement/msp. The page header includes the United States Department of Transportation logo and the Federal Aviation Administration logo. The main navigation menu includes links for About, Jobs, News, and a search bar. Below the navigation, there are links for Aircraft, Air Traffic, Airports, Pilots & Airmen, Data & Research, Regulations, Space, and Drones. The breadcrumb trail reads: Home / Air Traffic / Community Engagement / Community Engagement. The page title is "Community Engagement – Minneapolis-St. Paul". The main content area is titled "Minneapolis VOR Update (January 2023 - Current)". The text states: "The Minneapolis VOR (Very High-Frequency Omnidirectional Range) is decommissioning in mid-to-late 2025. It is one of approximately 300 ground-based navigational aids that are no longer necessary due to the development and implementation of GPS navigation." It further explains that Performance-Based Navigation procedures, developed by the FAA in conjunction with the Metropolitan Airports Commission and aviation stakeholders, will safely and efficiently replace the VOR's function for Minneapolis. The FAA is decommissioning approximately one-third of the nation's VOR network. The remaining 600 VORs will remain in place in strategic locations throughout the nation to serve in the event of a satellite outage. You can learn more about the VOR Minimal Operational Network (MON) watching this [video](#) or reading this [web page](#). A "Resource Archive: RNAV STAR Amendment/Optimization Project (Completed 2016)" section lists four resources: [MSP Fact Sheet, STARS \(PDF\)](#), [Environmental Fact Sheet \(PDF\)](#), [Environmental Process Briefing \(MS PowerPoint\)](#), and [Categorical Exclusion Declaration: PBN Procedure Amendments \(MSP\) \(PDF\)](#). The page was last updated on Wednesday, May 10, 2023. A chatbot icon is visible in the bottom right corner with the text "¿Tienes una pregunta? Pregunte a FAA Chatbot".

https://www.faa.gov/air_traffic/community_engagement/msp



Federal Aviation
Administration

FAA MSP Community Engagement (Cont.)

- **The FAA will continue to:**
 - Provide status updates to the MAC and NOC
 - Meet with Congressional staff
 - Update the FAA MSP Community Engagement Webpage
 - Discuss and understand community concerns with the MAC and NOC



Community Engagement Activities Planned



Upcoming Community Engagement Activities

- **The FAA will brief the MAC and NOC upon preliminary design completion**
 - The FAA will present current and proposed design tracks
 - The FAA will seek input on the proposed design from the NOC
 - Input provided by the MAC via suggestions from the NOC
 - The FAA has built in time in the schedule to review and evaluate proposed suggestions



Upcoming Community Engagement Activities

- **The FAA will develop a video of the procedure changes including a modeling of aircraft dispersion**
- **The FAA is planning to host public workshops in the spring/early summer of 2024**
 - Will solicit and review community comments
 - Community comments will be considered via an email inbox
 - Will evaluate the feasibility and whether or not comments can be incorporated into the design.



Upcoming Community Engagement Activities

- **The FAA will also conduct a National Environmental Policy Act (NEPA) Review**
 - Type of review to be determined
 - Final NEPA results will be presented to MAC and NOC
 - Community comments will be considered via an email inbox
 - Will evaluate the feasibility and whether or not comments can be incorporated into the design.
 - Anticipate NEPA completion in the Fall of 2024



Questions?

Contact Information:

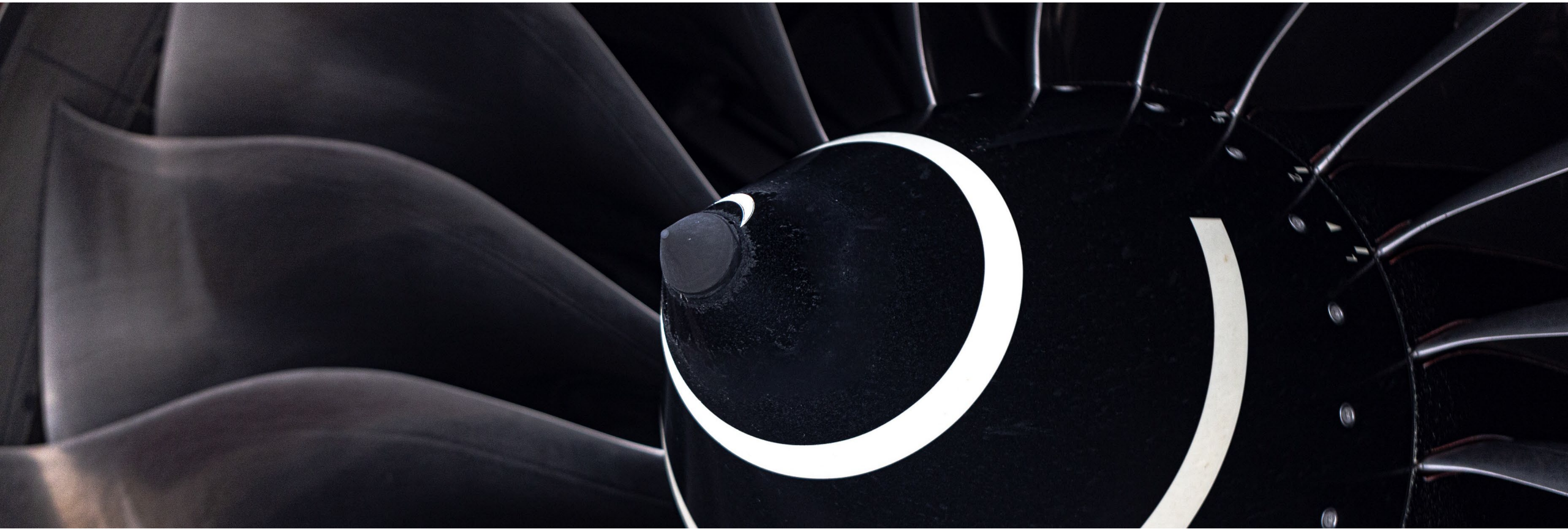
Nitin Rao, Community Engagement Officer for the Regional Administrator

(p) 847-294-7375

(e) Nitin.Rao@faa.gov



4.3 – FAA UPDATE ON CONVERGING RUNWAY OPERATIONS



**NOISE OVERSIGHT COMMITTEE
MAY 17, 2023**

MSP CRO Update May 2023

Presented to:

MSP NOC

By:

Sean Fortier, Traffic
Management Officer (A),
Minneapolis District

Date:

May 17, 2023



Federal Aviation
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Objectives

- **Describe CRO and Mitigations**
- **Provide brief history of MSP CRO Mitigations**
- **Present MSP CRO Test Procedures**



What are CRO Mitigations

- **Required ATC procedures for directing traffic when Converging Runway Operations exist:**
 - FAA JO 7110.65 3-9-8 – Treat runways as though they cross
 - » OR
 - FAA JO 7110.65 3-9-9 – Utilize aids such as an Arrival Departure Window, Virtual Runway Intersection Point, Converging Runway Display Aid



Arrival Departure Window (ADW)

- **Depiction on ATC Display**
- **Prevents possible conflict between arrivals to, and departures from, one or more runways**
- **Identifies the point(s) on the final approach course by which a departing aircraft must have begun takeoff**
- **Area between these points identified as:**
 - No Departure Zone



Virtual Runway Intersection Point (VRIP)

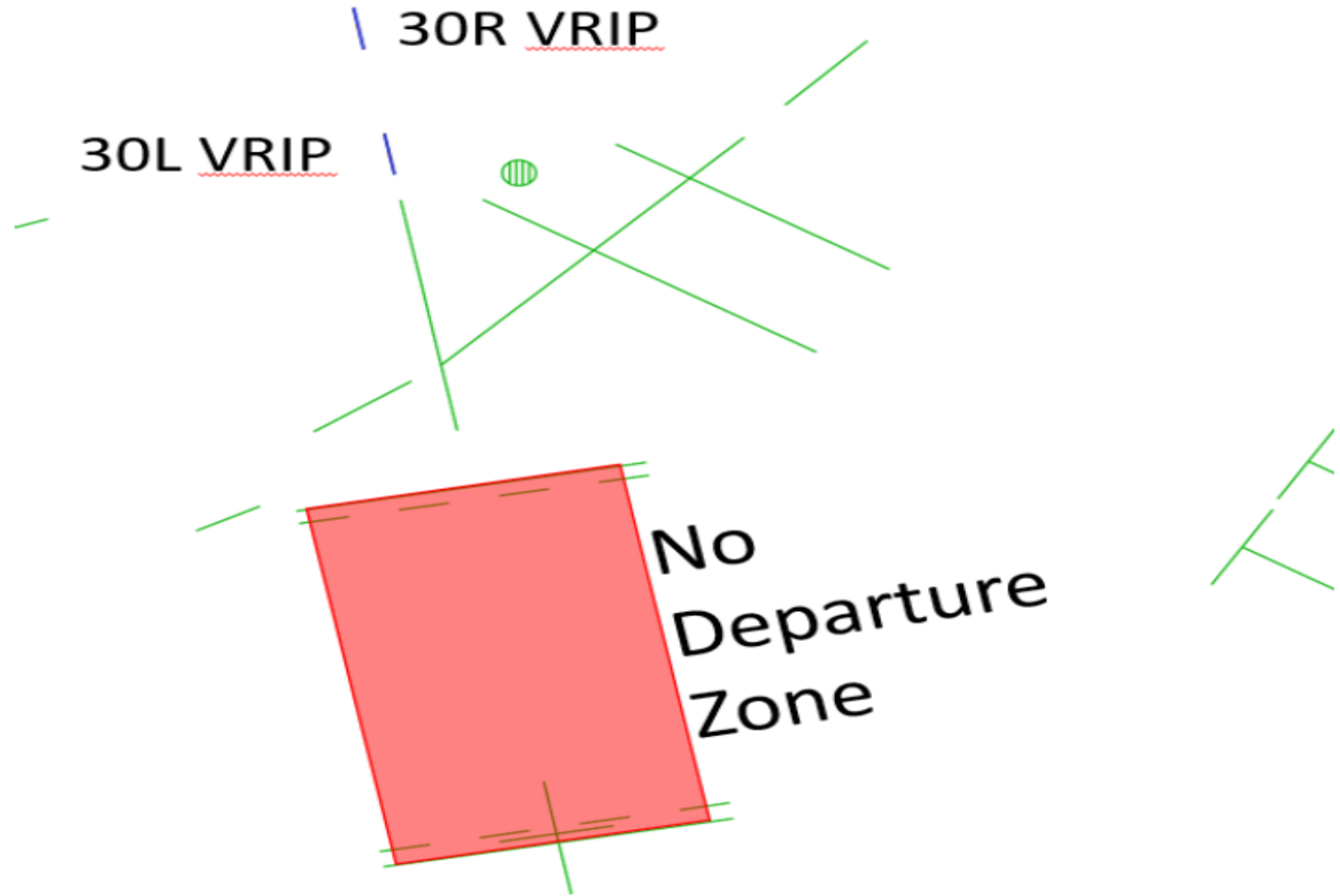
- **Depiction on ATC Display**
- **Identifies the point at which the extended centerline of two runways cross**



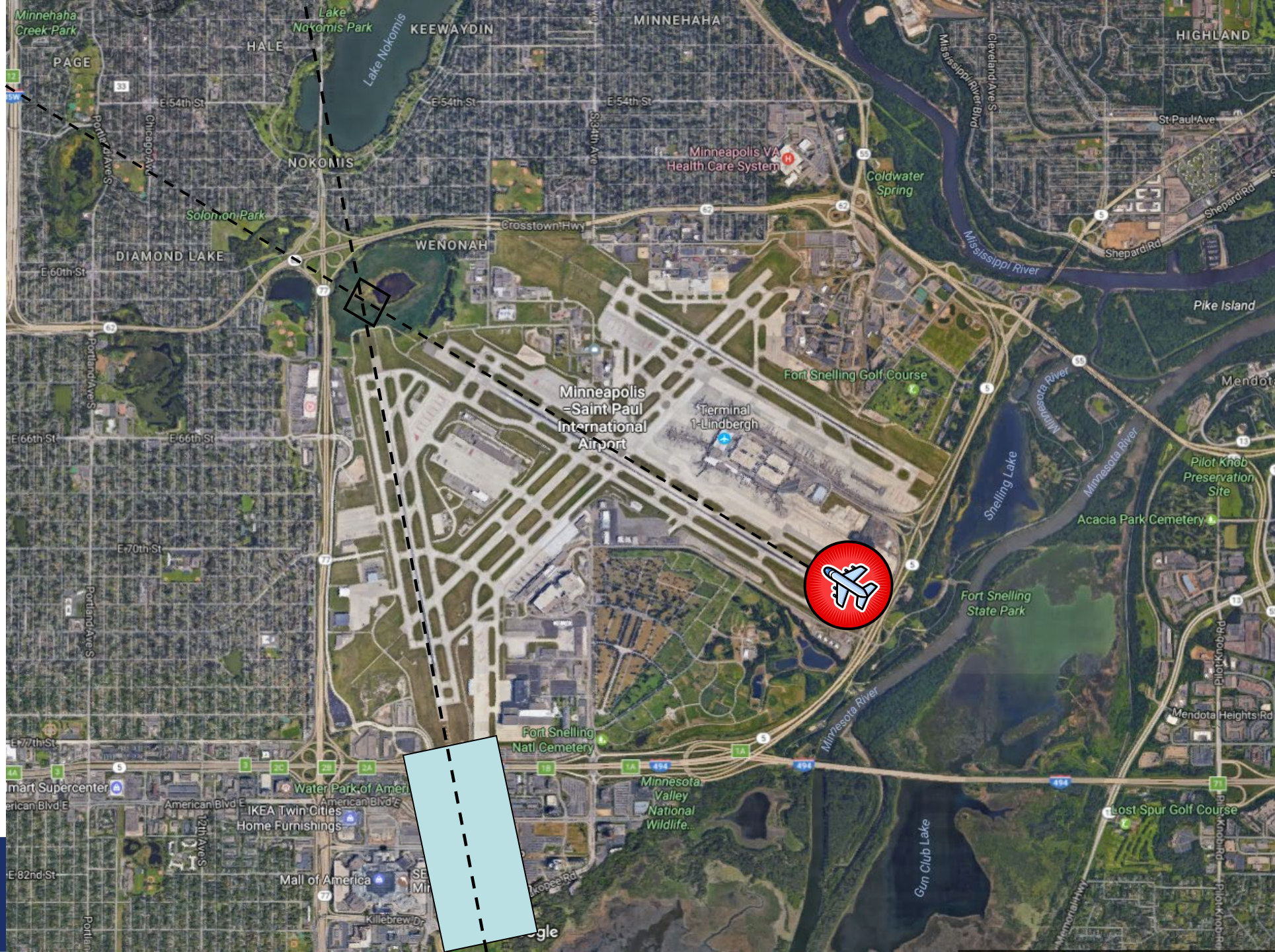
Converging Runway Display Aid (CRDA)

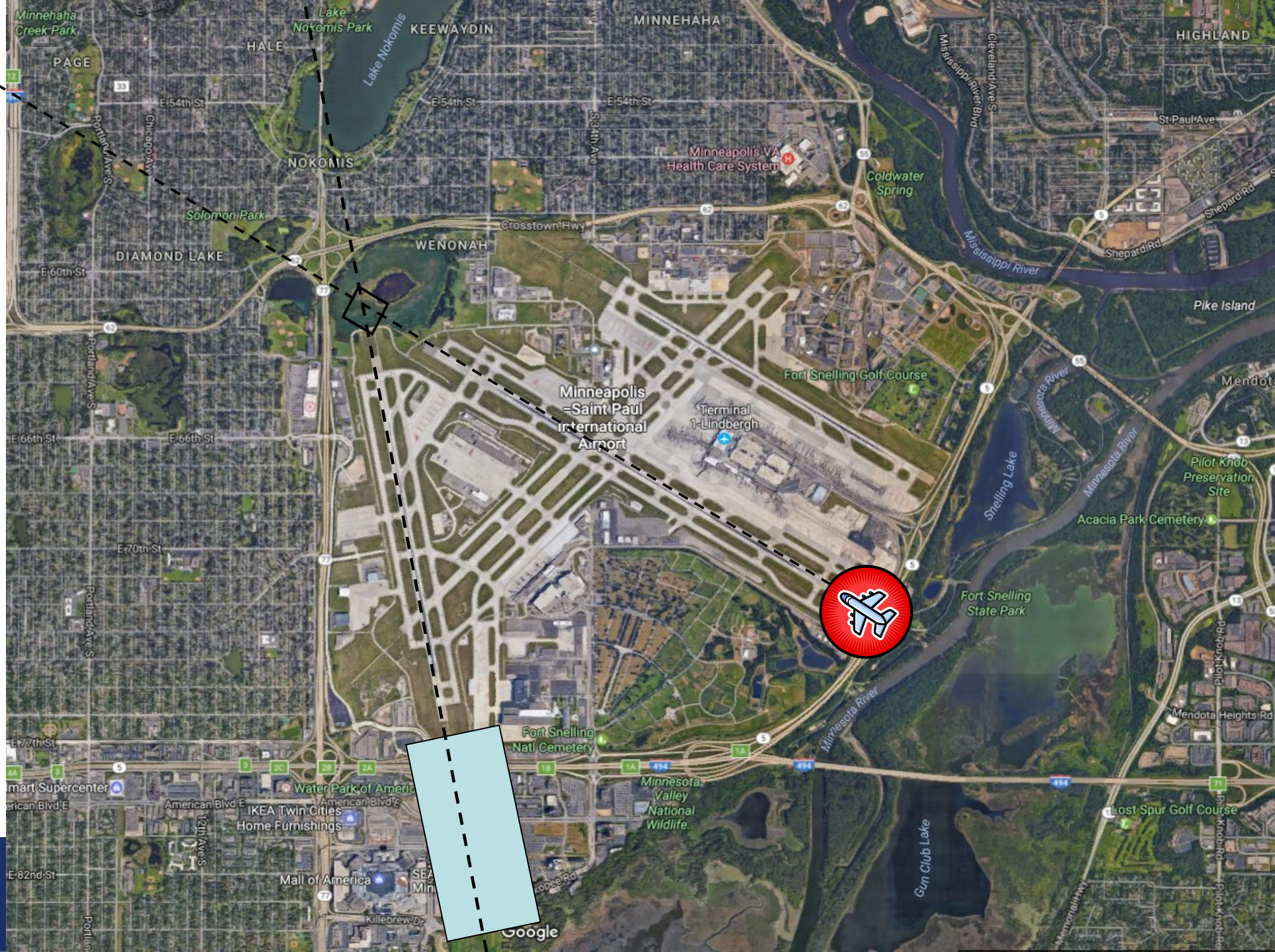
- **Depiction on ATC Display**
- **Mirrors the track of an aircraft on final for Runway 30L to display a “Ghost Target” on final for Runway 35.**
- **Provides guidance to the controller in order to ensure appropriate spacing is achieved**











MSP CRO History

- **2015 – Determination that MSP CRO Mitigations were not sufficient to meet new standards**
- **2016-2018 – Series of test procedures were developed leading to use of dual ADWs and CRDA**
- **2019-2020 – Additional mitigations explored**
- **2020-Present – Pandemic effects reduced traffic, new ADWs were developed**



MSP CRO Test Procedures

- **Criteria requirements:**
 - Weather minima
 - NW Winds, X-Wind/Tailwind limits, Wind Shear limits
 - >2200' ceiling, and >5 Miles Vis
 - Personnel and equipment requirements
 - Demand exceeding 2 Runway Capacity

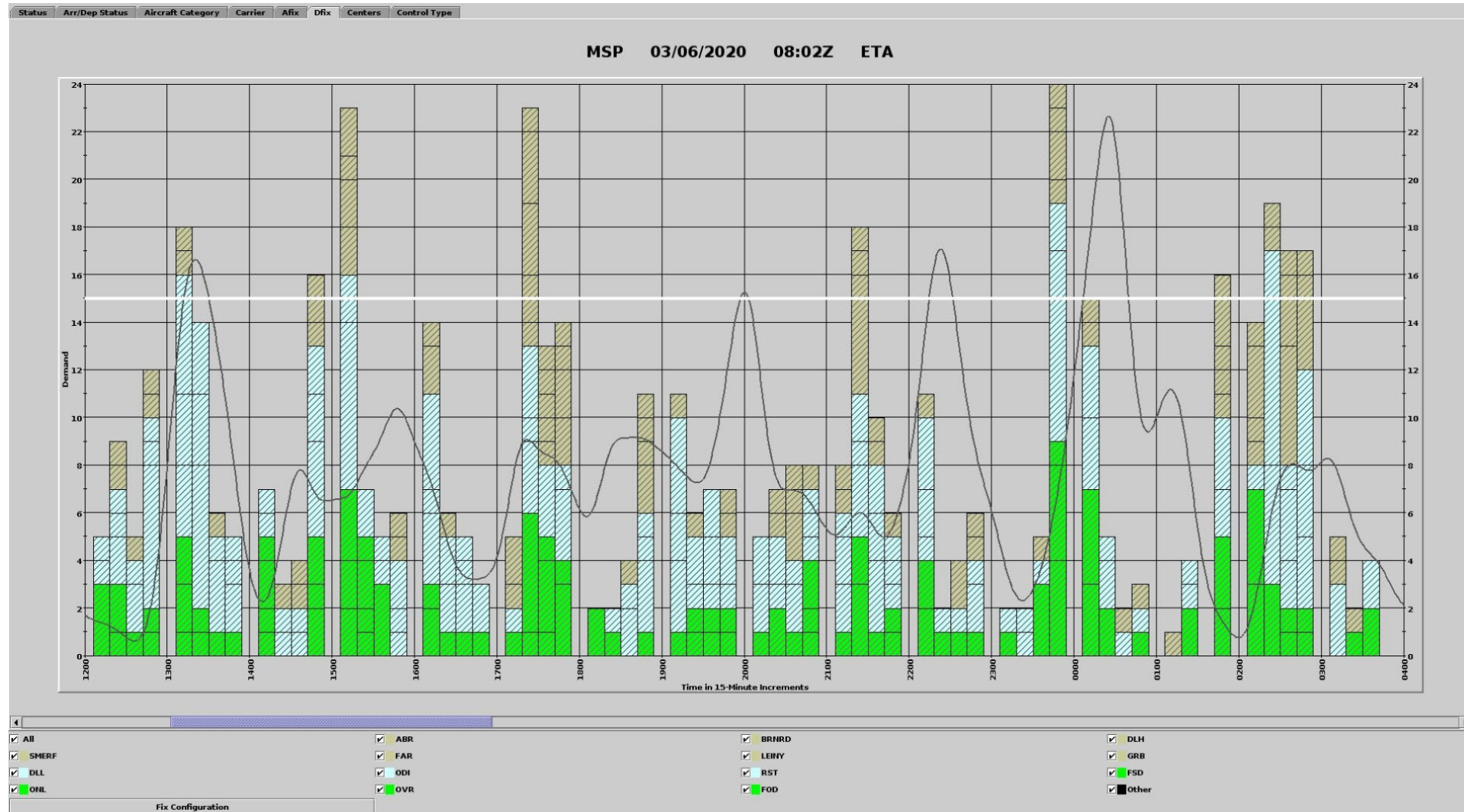


MSP CRO Test Procedures Cont.

- **Controllers will direct aircraft departing Runway 30L to fly runway heading until passing the Runway 30L/35 VRIP**
- **Controllers will then issue headings for divergence as they do today**
- **MSP will remain in a 30L/R and 35 configuration when conditions allow**



When Can CRO Be Expected?



Going Forward

- **Test procedures will be continuously evaluated**
- **Test procedures may be terminated, extended, or made permanent**
- **Updates will be provided to the MAC and NOC during future meetings**
- **Appropriate level of environmental review and FAA community engagement TBD**



ITEM 5

ANNOUNCEMENTS

July NOC Meeting

Wednesday, July 19, 2023 @ 1:30 PM

Summer Listening Session

Wednesday, July 26, 2023 @ 6:00 PM



NOISE OVERSIGHT COMMITTEE
MAY 17, 2023

A pilot wearing sunglasses and a checkered shirt is seen from the side, looking out of the cockpit window. The view outside shows a suburban neighborhood with houses, trees, and a large body of water in the distance. The sky is clear and blue.

MEET *the* FLEET

Piper Archer

Join the Metropolitan Airports Commission on

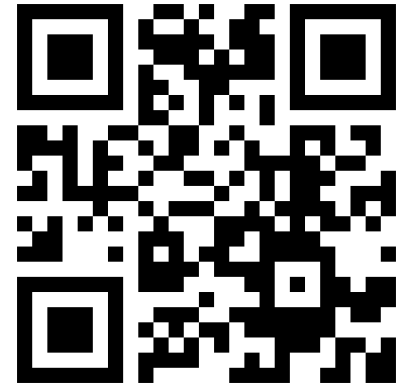
July 11 at the next **EXPERIENCE**msp™ event and...

- Learn how the MAC engages and supports MSP's surrounding communities
- Receive an update on the MSP Airport Long-Term Planning process and how you can provide comments during the upcoming public comment period
- Enjoy displays from airport functions and partners

4:30 p.m. | Open House

5:30 p.m. | Long-Term Planning Presentation

8:30 p.m. | Event Close



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Get all the details at: mspairport.com/long-term-plan

