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

NOC Committee Members

Jeff Hart	User Co-Chair, Scheduled Airline Representative (Delta Air Lines)
Dianne Miller	Community Co-Chair, City of Eagan Representative (City of Eagan)
Ryan Barette	Minnesota Business Aviation Association Representative
Paul Borgstrom	Chief Pilot Representative (Delta Air Lines)
Mary Brindle	At-Large Community Representative (Edina City Council)
Pam Dmytrenko	City of Richfield Representative (City of Richfield)
Julie Falk	Charter/Scheduled Operator Representative (Sun Country Airlines)
Chris Finlayson	At-Large Airport User Representative (Endeavor Air, Inc.)
Christine Koppen	Cargo Carrier Representative (United Parcel Service)
Patrick Martin	City of Bloomington Representative (Bloomington City Council)
Jay Miller	City of Mendota Heights Representative (Mendota Heights City Council)
Linea Palmisano	City of Minneapolis Representative (Minneapolis City Council)

MEETING AGENDA

September 16, 2020 at 1:30 PM

Jeff Hart, Delta Air Lines, will be the acting Chairperson for the meeting

TELECONFERENCE ONLY - The Teleconference is open to the public.
To participate, call 612-351-3093 and enter 239031.

1. **Consent**
   - 1.1. Approval of July 15, 2020 Meeting Minutes
   - 1.2. Reports
     - 1.2.1. Monthly Operations Reports: July and August 2020
2. **Public Comment Period**
3. **Business**
   - 3.1. Flight Procedure Change Request Guidelines
4. **Information**
   - 4.1. FAA Report to Congress – Community involvement in FAA NextGen projects located in metroplexes
   - 4.2. FAA Great Lakes Region Noise Complaint Initiative
   - 4.3. Eagan Flight Procedure Change Request Update
   - 4.4. Runways 12L and 12R Nighttime Arrivals Operations Report
   - 4.5. 2021 Draft NOC Work Plan
   - 4.6. Review of Summer Listening Session
5. **Announcements**
6. **Adjourn**

MSP NOISE OVERSIGHT COMMITTEE
DRAFT MEETING MINUTES
Wednesday, July 15, 2020 at 1:30 PM
By Teleconference Only

Call to Order

A regularly scheduled meeting of the Minneapolis-St. Paul International Airport (MSP) Noise Oversight Committee, (NOC) having been duly called, was held Wednesday, July 15, 2020, by teleconference only. **Chair Miller** called the meeting to order at 1:30 p.m. The following were on the teleconference:

Representatives: R. Barette, P. Borgstrom, P. Dmytrenko, J. Falk, J. Hart, C. Jacobson, C. Koppen, P. Martin, D. Miller, L. Olson*, L. Palmisano*, C. Stene, C. Koppen, M. Brindle
*Member Palmisano left the meeting at 2:32pm - Member Olson took her place at that time.

Staff: D. Anderson; R. Fuhrmann; P. Hogan; B. Juffer; J. Lewis; K. Martin; D. Nelson; N. Pesky; M. Ross; B. Ryks

Others: Y. Bizen – MAC Commissioner, District H; R. Bassler – FAA; R. MacPherson – FAA; D. O`Leary – Mayor Sunfish Lake; H. Rand – Inver Grove Heights; Hank Moody; Scott Norling– Mendota Heights and other members of the public

A quorum of four Community Representatives and four Industry Representatives was established by roll call attendance:

1. Consent

1.1. Review and Approval of May 20, 2020 Meeting Minutes

1.2. Reports

1.2.1. Monthly Operations Reports: May and June 2020

May

- Total Operations: 8,796
- Nighttime Operations: 351
- North/South/Mixed: 40/46/3
- Complaints: 3,417
- Complaint locations: 144
- Hours of aircraft sound events: 103
- R17 procedure: 95.5%
- Crossing procedure day: 36.9%
- Crossing procedure night: 45.7%
- RUS: 51.1%

June

- Total Operations: 10,355
- Nighttime Operations: 447
- North/South/Mixed: 37/55/2
- Complaints: 4,208
- Complaint locations: 188
- Hours of aircraft sound events: 128
- R17 procedure 98.5%
- Crossing procedure day: 38.8%
- Crossing procedure night: 65%
- RUS: 50.9%

1.2.2. Status of Aviation Noise, Environment, and Health-Related Research Initiatives

Co-Chair Hart moved, and Member Palmisano seconded approval of the Consent items listed above.

The motion passed on the following roll call vote:

Ayes: Twelve Barette, Borgstom, Brindle, Dmytrenko, Falk, Co-Chair Hart, Jacobson, Koppen, Martin, Chair Miller, Olson, Palmisano
Nays: None
Abstain: None

2. Public Comment Period

Chair Miller, City of Eagan, introduced the public comment period and gave the group guidelines for participating.

Scott Norling, Mendota Heights resident, thanked Brad Juffer for pointing out during past NOC meetings that the Eagan-Mendota Heights corridor contains some Mendota Heights residential parcels and would like the NOC to continue to keep that in mind when considering noise policy. **Mr. Norling** stated that the residential area begins 1.5 miles off Runway 12L and is often subjected to loud noise events as airplanes are approximately 1,200 feet above homes. He noted that this is only a concern during departures on Runway 12L as the predominate flight path used is an early turn to the NE which passes over the residential area. This is not an issue for landing operations because that flight path takes planes over noise compatible use areas within the corridor. **Mr. Norling** believes a methodology can be developed in the future to mitigate noise for these close in neighborhoods. The track his community desires is in very close proximity to an existing track today and overflies commercial and industrial parcels within the corridors.

3. Business

3.1. Flight Procedure Change Request Guidelines

Brad Juffer, Technical Advisor, introduced this item by explaining that it is intended to guide residents that may initiate future requests of the NOC to consider adjustments to FAA flight procedures at MSP. It was modeled after the guideline document in place for mobile noise monitoring requests. **Juffer** explained that in 2019, residents in the City of Eagan crafted several adjustment requests for NOC consideration. When that process began, there was no established minimum criteria for a request, and there was no expectation for how those requests would be considered. After they were created in August, the FAA then laid out a series of steps that would need to be followed for the requests to receive due consideration. **Juffer** highlighted that the draft guideline document seeks to provide a framework that may be used in the future. The document was crafted to provide residents with a reasonable expectation of the process and give them guidance on how requests will be considered and why.

Member Falk, Sun Country Airlines, asked Juffer, if this document would have been in place last August, would the community's voice have been heard to a point where there would be action? **Juffer** responded that the Community has been heard and the NOC is still in a process of working through potential procedure adjustment requests with the FAA. Had the document been available last summer, it would have aligned expectations between community members and the NOC and FAA capabilities.

Several proposals put together by the community were deemed to be infeasible, either by the NOC or the FAA and may not have been formally requested by the community if this document had been available at the time. From staff's perspective, it is meant to ensure everyone is starting from the same page, and with a framework for each specific request.

Member Jacobson, City of Mendota Heights, asked how the procedure change guidelines interact with the NOC work plan and if the work plan feeds into this as a precursor to the request guidelines or if they are separate? **Juffer** responded that the work plan is drafted in September and formalized in November and December of each year, for the following year. Items are routinely added to this plan based on input received from the community, through contact with staff, or through a listening session. Items are added to the current year or future years depending on meeting space, time, and capacity.

Member Palmisano, City of Minneapolis, stated she was not sure that this document is necessary as the committee already takes these factors into consideration when it discusses a concern from the community or the city. She said she worries that adding this step will feel like a barrier and would like the phrases, "no impact to efficiency" and "not moving noise to another community" to be reconsidered as any change would likely result in either or both to some degree. Member Palmisano suggested that rather than saying "must not" in the guidelines, instead write, "be mindful of these considerations". **Juffer** thanked Member Palmisano for her feedback and stated that the language would be revised to not be overly restrictive or over burdensome for communities to submit a request.

Chair Miller stated similar concerns as Member Palmisano's and suggested removing the word "criteria" and replacing it with the word "guidelines" so as not to cut off conversations with the community. Regarding the phrase, "The request must not duplicate a request that was previously evaluated", Chair Miller suggested adding the qualifier "unless there have been operational changes", because a request two or five years ago may have merit in the future. Chair Miller also suggested adding a qualifier to the phrase "must not move noise from one residential community to another" to "from one residential area of a community to another residential area of a community" because if there is a way to use a prescribed noise abatement procedure, there would be some merit in that. **Juffer** thanked Chair Miller for her feedback and stated that adjustments to the language will be made and that staff will bring an edited document back for a vote in September and that formal adoption would be requested at that time.

4. Information

4.1. Guest Speaker: MAC/MSP Update Brian Ryks, MAC Executive Director / CEO

Mr. Ryks spoke of the unprecedented challenges to the aviation industry, and more specifically the MAC, due to COVID-19. The pandemic hit at the beginning of Spring travel, dropping the daily passenger screening forecasts from between 40-50,000 passengers a day to less than 2,000. Airlines cut 105 routes down from 200 prior to the pandemic. Daily operations dropped from more than 1,200 per day to less than 400 per day and 1.9 million available seats were cut down to only 600,000. U.S. airports are now facing the loss of $23 Billion (ACI-NA) this year due to the dramatic drop in travel demand. Globally, the air transport industry (IATA) is estimating losses beyond $100 Billion.

Mr. Ryks detailed the MACs immediate response of both helping to prevent the spread of COVID-19 at MSP and accommodating the needs of airlines and airport business partners. MAC had recently

invested in IT which allows 35% of our employees to work remotely, limiting exposure for the system. MAC have had only 11 Covid cases at MSP out of 27k people that work there.

As planes were pulled from service around the world, where to put them became an issue. MSP has over 40 aircraft parked on ramp areas and taxiways awaiting the return of travel demand.

There has been a severe impact on MAC's non-aeronautical revenues which include food and beverage, retail, news and convenience, passenger services, auto rentals, parking, and ground transportation services. This represents over $194 Million or more than 47 percent of the MAC's total budgeted operating revenues for 2020.

Mr. Ryks said that lately there have been signs of a slow recovery as enplanements in May had doubled from the low of 70,000 in February and April. This is still down 91% from the same time in 2019. Airlines are restoring routes and frequencies to destinations with now 142 active routes, (139 domestic, 3 international), up from 91 two months ago.

The MAC has launched a health-safety program, Travel Confidently. It contains guidelines, best practices and measures supported by health agencies and our industry. This encompasses the entire airport community including, airline partners, concessionaires, federal agencies – like the TSA as well as the more than 20,000 employees working at MSP. The program consists of six steps the MAC is taking to keep travelers and employees safer: robust cleaning, facial coverings, social distancing, hand sanitizing, shields, and touchless parking. The cleaning program includes particular focus on high touch areas as well as providing electrostatic disinfectant spraying overnight in public areas of both Terminals 1 and 2. Travelers can pick up a care package with mask and hand sanitizer at info booths – the MAC is moving toward a mask requirement.

Travel Confidently is also a messaging campaign which begins at MSPairport.com where travelers can get the latest information on the health safety efforts before the arrive at the airport. At the airport, travelers will see banner signs, stanchions, etc. reminding people of best practices.

The MAC is very involved at a federal level pushing for consistent travel guidelines throughout the industry. The MAC will continue to monitor recommendations from state and federal agencies, best industry practices and even adopt the latest technologies and innovations to make the journey through the airport even safer while continuing to help people get to where they need to go.

Member Palmisano thanked Mr. Ryks for his vision and thoughtful approach in managing COVID-19 at the MAC and at MSP and recognized the importance of bringing back international air service for the community. She also thanked Mr. Ryks for the airport's recent comments on supersonic aircraft noise as it is an important item coming down from the FAA. **Mr. Ryks** thanked Member Palmisano and mentioned he feels very strongly about the supersonic certifications and also mentioned that the MAC is working to bring international flights back to MSP, like Mexico City.

Co-Chair Hart, Delta Airlines, commented on slide ten, showing a large variance in daily flight operations between last year and the current year. Co-Chair Hart stated that the recent uptick in flight activity is due to the 60% load factor cap for social distancing. If planes were operating at full capacity, flight operations would decrease. **Mr. Ryks** thanked Co-Chair Hart for his comments.

Chair Miller thanked Mr. Ryks for taking the time to be with the committee and his very informative presentation.

4.2 Runway 30L and 30R Departure Operations Report

Michele Ross, Assistant Technical Advisor, provided an overview of the Runways 30L and 30R Departure Operations Report which was part of the 2020 NOC workplan. The full report is available in the agenda packet on MACNoise.com.

Member Pam Dmytrenko, City of Richfield, thanked staff for the information and remarked that it was helpful to see the departure data for each runway. She remarked that residents in Richfield and Minneapolis have noticed changes since Runway 17, mixed flow, operations have decreased and asked if that could be a direct correlation to runway closure and increased north flow use? **Ross** stated there have been changes in runway usage due to substantially reduced flight operations as well as periods of time when a parallel runway is closed due to regular maintenance. Per the Runway Use System, Runways 12L and 12R are used as a first priority for departures and Runways 30L and 30R are used as a fourth priority for departures.

Member Dmytrenko remarked on the substantial use of the 230-degree heading off runway 30L having a big impact on the Richfield community. She asked why aircraft typically get that assignment? **Ross** stated that figure 15 in the report, breaks down the use of headings by time of day as well as airline schedules and destinations. She explained that primarily the 230-degree heading off runway 30L is used to avoid any conflicts with operations occurring on Runway 30R. There is also a need to avoid conflicts with the airspace around Flying Cloud Airport. While MSP has had a substantial drop in aircraft operations the activity at Flying Cloud has remained similar to last year's operations and there is a need to protect that airspace.

5. Announcements

Juffer announced there will be a virtual Summer Listening Session next Wednesday, July 22 @ 6pm. Details can be found on the NOC website and calendar as well as the listening session page. There is a phone number and link so people can participate. MAC is looking forward to restarting those discussions with our neighbors and listening to what residents have to say.

There were no other announcements from Committee members.

6. Chair Miller adjourned the meeting at 2:49pm

The next meeting of the NOC is scheduled for **Wednesday, September 16, 2020 at 1:30 PM.**

Respectfully Submitted,
Kris Martin, Recording Secretary

MEMORANDUM

ITEM 1.2.1

TO: MSP Noise Oversight Committee (NOC)

FROM: Michele Ross, Assistant Manager, Community Relations

SUBJECT: **REVIEW OF MSP MONTHLY OPERATIONS REPORTS: JULY AND AUGUST 2020**

DATE: September 2, 2020

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 September NOC meeting, MAC staff will provide a summary of this information for July and August 2020. To view these summary reports prior to the meeting, visit the "Archive" section at the link above.

MEMORANDUM

ITEM 2

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: **PUBLIC COMMENT PERIOD**

DATE: September 2, 2020

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 callers who wish to speak to indicate their desire following the direction of the chairperson. When called upon to speak by the chairperson, the meeting organizer will unmute your line. Speak clearly into your phone and 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.

- 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.

MEMORANDUM

ITEM 3.1

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: **FLIGHT PROCEDURE CHANGE REQUEST GUIDELINES**

DATE: September 2, 2020

At the July 2020 NOC meeting, MAC staff presented the Committee with proposed guidelines for procedure change requests for the NOC's consideration. These guidelines provide a consistent framework whereby the NOC will receive and evaluate flight procedure change requests and includes a Flight Procedure Request Form to help with initial submittal of a request.

After accepting feedback from NOC members in July, staff has revised the document to use less restrictive language, to not be overly burdensome to community members, and to clarify expectations for future requests. This document continues to incorporate the process shared by the FAA and shares the criteria and process MAC staff and the NOC will use to evaluate future requests.

The Flight Procedure Change Request Guidelines document is included on the following three pages.

REQUESTED ACTION

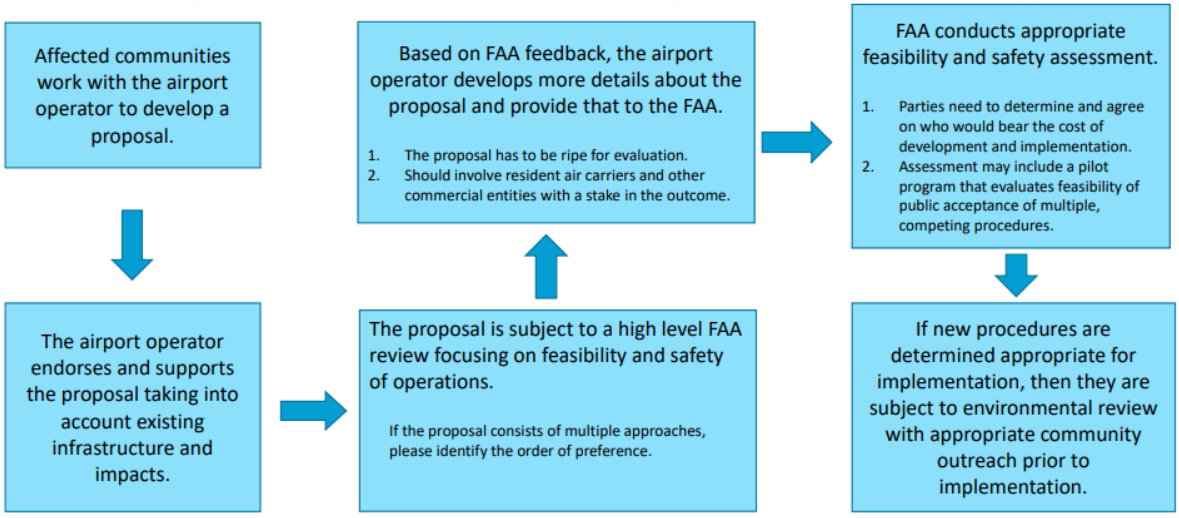
REQUEST APPROVAL AND ADOPTION OF FLIGHT PROCEDURE CHANGE REQUEST GUIDELINES.

Flight Procedure Change Request Guidelines

The Metropolitan Airports Commission (MAC) owns seven airports in the seven-county Twin Cities metropolitan area, however the authority over aircraft flight procedures rests solely with Federal Aviation Administration (FAA). Flight procedures are used to maintain an orderly flow of air traffic to and from airports. Systematic procedures are used to guide aircraft in predicable ways and are necessary to reduce conflicts to ensure the surrounding airspace is operating in the safest manner possible.

The process for creating or modifying flight procedures can take up to several years and involves input and examination by various aspects of the FAA before draft procedures are tested and implemented. This careful vetting and scrutiny are vital because each flight procedure being developed must be able to be flown in concert with other flight procedures to avoid airspace conflicts.

The FAA encourages communities to work together with their municipal leadership and with the MAC for proposals to develop new flight procedures or modify existing procedures when those procedures affect flight operations at MSP. The process is illustrated below for reference:



Citizens requesting a new flight procedure, or changes to an existing procedure, should work with their elected officials, City administrators, or Airport Advisory group to coordinate the request prior to submitting it to the MSP Noise Oversight Committee (NOC). Once a flight procedure has received broad support from a community group, then a flight procedure change request form can be submitted. Forms should be submitted to the NOC member appointed for your area. If your area does not have an appointed member, submit the form and documentation to the Metropolitan Airports Commission Community Relations Office.

NOC Criteria

Requests that are evaluated will be shared with NOC members during a regularly scheduled committee meeting. For the request to move forward, the following criteria should be considered. These criteria may be evaluated by the NOC and some may be evaluated by the FAA.

- All portions of the Flight Procedure Request Form must be fully completed.
- The request should consider previously established noise abatement procedures.
- The request shall not duplicate a request that was previously evaluated unless circumstances have changed that would materially affect the original decision.
- The request should consider the potential effect on airspace, airport and runway capacity and should attempt to minimize undue delay.
- The request should consider the noise exposure to residential parcels by comparing existing operations and proposed operations with a goal to decrease the number of residential parcels exposed to higher noise levels.
- The procedure request must be usable by aircraft pilots.
- The FAA must determine that the request is operationally feasible and follow existing FAA regulations regarding air traffic.
- The FAA must determine that the request will maintain the safety of aircraft operations.
- The FAA must determine that the request cannot unduly increase air traffic controller workload.

Flight Procedure Request Form

Requests for new or modified flight procedures must consider numerous details. The MAC Aircraft Noise Basics video series (www.macnoise.com/aircraft-noise-basics) and online MAC FlightTracker tool (www.macnoise.com/tools-reports/flighttracker) are great references for runway use, collaboration, government roles, and more.

Please complete the following details for the flight procedure request (One procedure per form):

1. Date

2. Name of community sponsor

3. Describe the reason for seeking this flight procedure request

4. Indicate length of time the existing conditions have taken place

5. Describe the proposed flight procedure being requested with as much detail as possible, including airport runway names, aircraft types, day of week, time of day, unique operating situations, weather conditions, etc.

6. Describe the benefit of the flight procedure being requested:

7. Is this a new flight procedure or a modification to an existing flight procedure?

8. Provide MAP 1, which shows the existing condition that clearly indicates the affected runways, an illustration of the existing flight procedure you are seeking to change, and land uses being overflown by existing flight procedure. *(If assistance is needed, contact the MAC Community Relations Office).*

Provide MAP 2, which shows the proposed condition that clearly indicates the affected runways, an illustration of the proposed new/modified flight procedure, land uses being overflown by new/modified flight procedure being requested (residential, commercial, industrial, open space, etc.) *(If assistance is needed, contact the MAC Community Relations Office).*

MEMORANDUM

ITEM 4.1

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: **FAA REPORT TO CONGRESS – COMMUNITY INVOLVEMENT IN FAA NEXTGEN PROJECTS LOCATED IN METROPLEXES**

DATE: September 2, 2020

The FAA Reauthorization Act of 2018 contained provisions that required the Federal Aviation Administration (FAA) to provide reports to Congress on several of the agency's activities. Specifically, Section 176 required the Administrator to review and provide a report to Congress regarding the Agency's Community Involvement practices. Subpart (b) required a report that outlined the following:

1. how the Administration will improve community involvement practices for NextGen projects located in metroplexes;
2. how and when the Administration will engage airports and communities in performance-based navigation proposals; and
3. lessons learned from NextGen projects and pilot programs and how those lessons learned are being integrated into community involvement practices for future NextGen projects located in metroplexes.

The FAA completed this review and submitted the report to Congress on July 1, 2020. This report is included below. At the September NOC meeting, a representative from the FAA will present a summary of this report.

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Administrator

800 Independence Ave., SW.
Washington, DC 20591

July 1, 2020

The Honorable Roger Wicker
Chairman, Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This letter is the report to Congress from the Federal Aviation Administration (FAA) as required under Section 176(b) of the FAA Reauthorization Act of 2018.

Section 176(b) directs the FAA to submit to the appropriate committees of Congress a report on:

(1) How the FAA will improve community involvement practices for NextGen projects located in metroplexes;
(2) How and when the FAA will engage airports and communities in performance-based navigation proposals; and
(3) Lessons learned from NextGen projects and pilot programs and how those lessons learned are being integrated into community involvement practices for future NextGen projects located in metroplexes.

We look forward to continued collaboration with your staff and would be happy to schedule time to brief you further if desired.

We have sent identical letters to Chairman DeFazio, Senator Cantwell, and Congressman Graves.

Sincerely,

Steve Dickson
Administrator

Enclosure

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Administrator

800 Independence Ave., SW.
Washington, DC 20591

July 1, 2020

The Honorable Peter A. DeFazio
Chairman, Committee on Transportation
and Infrastructure
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

This letter is the Federal Aviation Administration's (FAA) report to Congress as required under Section 176(b) of the FAA Reauthorization Act of 2018.

Section 176(b) directs the FAA to submit to the appropriate committees of Congress a report on:

(1) How the FAA will improve community involvement practices for NextGen projects located in metroplexes;
(2) How and when the FAA will engage airports and communities in performance-based navigation proposals; and
(3) Lessons learned from NextGen projects and pilot programs and how those lessons learned are being integrated into community involvement practices for future NextGen projects located in metroplexes.

We look forward to continued collaboration with your staff and would be happy to schedule time to brief you further if desired.

We have sent identical letters to Chairman Wicker, Senator Cantwell, and Congressman Graves.

Sincerely,

Steve Dickson
Administrator

Enclosure

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Administrator

800 Independence Ave., SW.
Washington, DC 20591

July 1, 2020

The Honorable Maria Cantwell
Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

Dear Senator Cantwell:

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(1) How the FAA will improve community involvement practices for NextGen projects located in metroplexes;
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We have sent identical letters to Chairmen Wicker and DeFazio and Congressman Graves.

Sincerely,

Steve Dickson
Administrator

Enclosure

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Administrator

800 Independence Ave., SW.
Washington, DC 20591

July 1, 2020

The Honorable Sam Graves
Committee on Transportation and
Infrastructure
House of Representatives
Washington, DC 20515

Dear Congressman Graves:

This letter is the Federal Aviation Administration's (FAA) report to Congress as required under Section 176(b) of the FAA Reauthorization Act of 2018.

Section 176(b) directs the FAA to submit to the appropriate committees of Congress a report on:

(1) How the FAA will improve community involvement practices for NextGen projects located in metroplexes;
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We look forward to continued collaboration with your staff and would be happy to schedule time to brief you further if desired.

We have sent identical letters to Chairmen Wicker and DeFazio and Senator Cantwell.

Sincerely,

Steve Dickson
Administrator

Enclosure

Federal Aviation Administration
Air Traffic Organization

FAA Reauthorization Act of 2018, Section 176(b)

Report on Community Involvement in FAA NextGen Projects Located in Metroplexes

Introduction

Congress has asked the Federal Aviation Administration (FAA) to complete a review of its community involvement (CI) practices for NextGen projects located in metroplexes identified by the FAA. This report describes:

(1) Lessons learned from NextGen projects and pilot programs and how those lessons learned are being integrated into CI practices for future NextGen projects located in metroplexes;
(2) How and when the FAA will engage airports and communities in performance-based navigation proposals; and
(3) How the FAA will improve CI practices for NextGen projects located in metroplexes.

Background

A Metroplex is a metropolitan area where multiple commercial and general aviation airports operate within the same airspace. A Single Site initiative optimizes the airspace surrounding smaller cities. Metroplex and Single Site initiatives allow airports to replace legacy conventional procedures or to provide new precision procedures for airports wherein none existed previously. Over the past few years, the FAA has developed a new framework for CI during Metroplex and Single-Site Performance Based Navigation (PBN) projects, incorporating best practices and lessons learned from prior work. The following sections describe the evolution of the FAA approach to community involvement as well as an overview of the Metroplex Program.

Community Involvement for PBN

As the FAA transitions to a National Airspace System (NAS) built around more efficient, satellite-enabled PBN procedures (as outlined in the PBN NAS Navigation Strategy 2016), flight paths are adjusted for many reasons. Typically, the revisions are intended to increase safety and efficiency, but they can also result in changes to the aircraft noise experienced by nearby communities. The FAA is committed to giving meaningful consideration to community concerns when making aviation decisions that affect these localities and their residents.

Enhancing CI has been an FAA-wide effort. Over the past few years, the Air Traffic Organization (ATO) has focused on creating a more robust, transparent, and consistent CI process through new or updated policies and guidance. These efforts have resulted not only in best practices to be applied to future projects, but also with lessons learned for continuous improvement of the process.

Metroplex Program Overview

A key NextGen goal is to safely improve the overall efficiency of the NAS by increasing efficiencies in metroplexes—metropolitan areas with multiple airports and complex air traffic flows. The FAA's goal is to enhance the way aircraft navigate this complex airspace to improve airport access and provide efficient flight routes.

Through the Metroplex program, the FAA is collaborating with aviation stakeholders to improve regional traffic movement by optimizing airspace and procedures based on precise satellite-based navigation. Metroplex projects have resulted in and are expected to continue providing many benefits. In addition to improving navigation, metroplex projects can reduce distance flown, create repeatable and predictable flight paths, deconflict procedures, and improve flight safety. Passengers and the general public benefit from more direct routes.

In collaboration with the aviation industry, the FAA identified metroplexes where improved performance could yield benefits not only to the region but the entire NAS. The 11 active or completed metroplex sites are shown on the map in Figure 1.

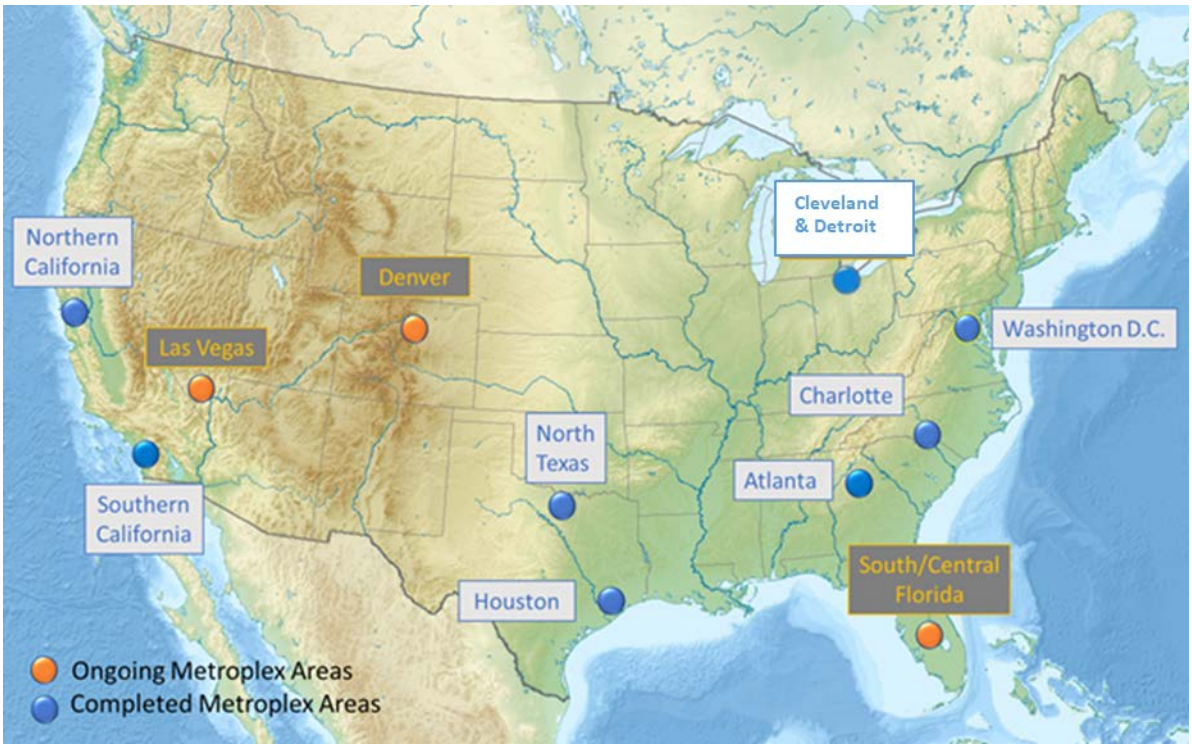

Figure 1. Metroplex Locations[1]

Table 1 summarizes the status of each Metroplex site in terms of the Finding of No Significant Impact/Record of Decision (FONSI/ROD) date as well as the CI activities that were conducted during the project. For the three projects that are still ongoing, completed or planned CI activities are reflected. There may be future CI activities for these projects that are not currently planned or reflected in Table 1.

[1] The New York-New Jersey-Philadelphia area is a metroplex by definition, and the airspace in that region is being addressed by the joint FAA/Industry Northeast Corridor Initiative, which focuses on making continuous improvements to the system in the Northeast that operationally benefit the entire NAS.

Table 1 Summary of CI Activities at Metroplex Sites

Metroplex Site	FONSI/ROD Date	Airport Outreach Briefings	Other Outreach Briefings*	Public Workshops	Webinars	Documented CI Plan
Houston	June 2013	✓				
Washington DC	December 2013	✓				
North Texas	June 2014	✓				
Atlanta	July 2014	✓				
Northern California	July 2014	✓	✓	✓		
Charlotte	June 2015	✓	✓	✓		
Southern California	August 2016	✓	✓	✓	✓	
Cleveland-Detroit	April 2018	✓	✓	✓	✓	✓
Denver	January 2020**	✓	✓	✓		✓
Las Vegas	March 2020**	✓	✓	✓		✓
South-Central Florida	September 2020**	✓	✓	✓	✓	✓

*Elected or appointed officials, agencies, etc.
** Projected dates

As seen in Table 1, as the Metroplex program has progressed, the CI activities have expanded to include additional public workshops, outreach briefings, webinars, and documented CI plans.

Lessons Learned from Metroplex and Other NextGen Projects

Recent Metroplex and other PBN projects have given the FAA the opportunity to mine lessons learned and evolve guidance and best practices.

2017 ATO Survey

In 2017, ATO's Mission Support Services organization (AJV) conducted an internal survey to collect lessons learned and best practices from recent CI activities associated with airspace and procedures projects. The survey was distributed to the ATO Service Center Directors, the Director of Airspace Services, and select members of their staff. The purpose was to collect information from a representative sample of projects that demonstrate how ATO CI activities have evolved and to collect feedback from a mix of Metroplex and Single-Site projects with a range of small- to large-scale changes and varying levels of controversy.

The best practices and lessons learned collected from this exercise shared some common threads that are being leveraged in ongoing and future PBN projects. The following summarizes the fundamental themes for engaging key stakeholders:

- **Internal FAA**
  - Engage with Lines of Business/Staff Offices across the agency as needed for coordination and support. The Regional Administrator, Office of Communications, Airports District Office, Operations Support Group, Environmental Protection Specialist, Administrative Services Group, Business Services Group, and air traffic control facility staff were all identified as contributing to CI activities.
  - Develop a strategy to ensure key stakeholder participation, effective public outreach materials, and productive outreach meetings when appropriate.
- **Airport operators**
  - Consult with and seek buy-in/support from all airport operators affected by the project at the outset and continually during the project.
  - Ensure users and industry are aware of community characteristics and constraints and share their insights with the FAA.
  - Involve airlines or other aircraft operators in developing a consistent message about the project mission.
  - Involve aircraft operators, as NAS users, to be a part of FAA engagement efforts, from airport and local elected and/or appointed officials' briefings to community workshops.
- **Elected and/or Appointed Officials**[2]
  - Elected and/or appointed officials should advise in determining the type of outreach to the public and the number and location of public workshops, if needed.
- **Public**
  - Apply the appropriate type and amount of outreach to the public, depending on the potential impact of the action.
  - Consider different methods of engaging the public, to include websites, social media, webinars, and in-person workshops.

Other Metroplex Lessons Learned

As part of this review and report, the FAA conducted an informal update to the original survey and reaffirmed the same key themes, including:

- Clearly define and communicate the purpose and mission of the project.
- Align expectations and responsibilities with FAA lines of business and staff offices on their expected roles in the execution of community outreach activities throughout the entire lifecycle of an airspace project.

[2] Representatives at appropriate levels of Federal, State, local, and Tribal government agencies with jurisdiction over potentially affected communities, including surrounding municipalities, national parks, and state departments of transportation.

- Early and frequent engagement is essential, particularly with airport owners.
- Partnering with elected and/or appointed officials and local municipalities assists in reaching out to their constituents.
- It is critical to give attention to the graphical way that information, including the procedures, is presented to a public audience. Consider the use of videos or relevant base maps to convey the changes. Clearly depict views of current air traffic and how air traffic is expected to change based on the proposed action.

How and When the FAA Will Engage Airports and Communities in PBN Proposals

The FAA has enhanced its approach to CI. Central to this enhanced approach is developing and implementing practices for earlier and ongoing community involvement as well as the development of community partnerships. The agency's approach is reflected in its updated policies and guidance, which include a framework for its CI efforts.

Guiding Principles

The guiding principles to approaching CI include:

- Airport operators and aircraft operators are considered strategic partners in CI and are expected to support the FAA with CI efforts for current and future NextGen projects by being active participants in CI activities.
- The level of CI will be tailored to the NextGen improvements under consideration and the potential impact of the specific initiatives

Policy and Guidance Updates

In 2016, the FAA completely updated its *Community Involvement Manual*, available on the FAA Community Involvement Website. This manual reaffirms the agency's commitment to give the public an opportunity to be informed, become involved, and have their concerns and views considered as the FAA makes aviation decisions that affect them. It also provides guidance for FAA employees who are involved in planning, conducting, or approving aviation actions that may raise concerns within a community, and emphasizes the need for internal alignment of expectations and responsibilities of FAA community outreach practitioners.

Additionally, in its *Community Involvement Plan*, the ATO established a standard, repeatable process to ensure productive and effective CI for PBN implementation projects.

The ATO has developed a *Community Involvement PBN Desk Guide*, which supplements the FAA *Community Involvement Manual* and the ATO *Community Involvement Plan* with roles and responsibilities for CI activities throughout a PBN project.

A new online training course, *Enhancing Community Involvement for ATO Airspace Actions*, is now required for various managers in the FAA AJT and AJV organizations.

Engagement with Airports and Communities through the PBN Project Lifecycle

Guidance focused on executing CI activities during PBN projects has been developed for use by FAA practitioners. The Community Involvement PBN Desk Guide was developed to guide CI activities and roles and responsibilities for PBN projects following the process outlined in FAA Order 7110.41A. The Metroplex Handbook has also been expanded to include CI recommendations for each phase of the project lifecycle.

In general, the approach to conducting CI for a PBN project is dependent on the scope of the project and magnitude of expected changes. As summarized in Table 2, the CI process is scaled based on the expected impact of the project.

Table 2 Community Involvement Process by Expected Impact

Potential Impact	**Potential CI Process**
Change to airspace, or flight paths at higher altitudes	Notification to airport operators, aircraft operators, and elected and appointed officials
Change to flight paths, utilization, or the concentration of flight tracks at lower altitudes	Outreach to airport operators, aircraft operators, elected and appointed officials, and community groups (e.g., roundtables) using Community Involvement Manual five-phase CI process: 1. Pre-planning 2. Initiation 3. Planning 4. Implementation 5. Close-out

The appropriate level of CI and public engagement will vary to some degree depending on the project and local community characteristics. Many smaller projects may require very limited CI beyond notification, while some may require outreach to and feedback from the general public.
For PBN projects that are expected to change flight paths, their utilization, or the concentration of flight tracks at lower altitudes, as well as those that have potential Environmental Justice impacts or perceived controversy, the five-phase process outlined in the FAA Community Involvement Manual is followed during the project lifecycle. The five-phase process is summarized at a high level in the following sections.

Pre-Planning

- Conduct internal FAA coordination
- Understand community characteristics – background, history, etc.
- Coordinate with airport operators
- Identify existing community concerns
- Develop CI plan/level of CI

Initiation

- Prepare materials
    - Set up project page on FAA Community Involvement website (https://www.faa.gov/air_traffic/community_involvement/)
    - Informational materials (fact sheet, public notice, etc.)
- Initiate CI
    - Overall principles, timeline, notional schedule

Planning

- Coordinate with airport operator on proposed project(s)
- Coordinate with elected and appointed officials on proposed project(s)
- Conduct public engagement activities, which may include:
    - Posting project page of FAA Community Involvement website
    - Webinars
    - Other notifications
    - Roundtable engagement
    - Public workshops, if necessary
    - If appropriate, solicitation and consideration of public comments

Implementation

- Notification of implementation to airport operator and elected and appointed officials
- Public information and notification activities, which may include:
    - Posting on project page of FAA Community Involvement website
    - Webinars
    - Other notifications
    - Roundtable engagements
    - Public workshops, if necessary

Close-out

- Notification of project completion to airport operator and elected and appointed officials
- Posting on the project page of FAA Community Involvement website, where appropriate
- Public information and notification activities, if necessary

How the FAA Will Improve Community Involvement Practices

The FAA has accomplished many improvements in its CI activities, policies, and guidance, including the following:

- Creating the ATO CI Repository, which houses guidance and tools for use by FAA personnel conducting CI activities (e.g., how to work with community roundtables, checklists for staging

public workshop, CI activities tracking templates, videos for the layperson explaining the basic concepts of PBN, fact sheet templates, elected official letter templates, etc.);

- Collecting and streamlining guidance for conducting CI in FAA Order JO 7400.2, *Procedures for Handling Airspace Matters*—the CI section of the Order refers practitioners to CI guidance such as the *FAA Community Involvement Manual*, the *Community Involvement PBN Desk Guide,* the *FAA Air Traffic Organization Community Involvement Plan,* and FAA Order 1050.1, *Environmental Impacts: Policies and Procedures;*
- Developing an electronic Learning Management System (eLMS) course on community involvement, which is required course material for targeted FAA personnel. The course teaches the basic elements of the National Environmental Policy Act (NEPA) and related community involvement, when CI might be needed for airspace actions, the important role of air traffic personnel in the FAA's partnership with stakeholders, and common community involvement activities;
- Reviewing roles, responsibilities, and capacity for conducting CI activities, including the hiring of personnel for placement in FAA Air Traffic Service Areas to assist with outreach efforts and noise analysis;
- Conducting Service Area CI Forums to share information, examine case studies, explore lessons learned, and refine best practices with FAA CI practitioners;
- Developing process and policy changes regarding instrument flight procedures (IFP) development and associated implementation tools (e.g., updates to FAA Orders JO 7100.41, JO 7400.2, and the IFP Gateway); and
- To ensure actions are in accordance with applicable laws and policy, providing training for FAA environmental protection specialists to deepen their understanding of the nuances of environmental law and how it applies to airspace actions

The FAA is committed to continuing to improve CI practices in the following ways:

- Ensuring policy and guidance are up-to-date and consistent with current FAA practices;
- Encouraging further coordination and collaboration across lines of business, staff offices, and stakeholders to address a wide range of concerns including aircraft noise;
- Developing additional training for FAA practitioners involved in CI activities;
- Maintaining and updating a collection of CI best practices and lessons learned from ongoing projects;
- Providing consistent guidance on the recommended level of CI activities based on project circumstances; and,
- Continuing to note lessons learned and apply them to future projects.

Conclusion

The FAA has developed a process that considers best practices and lessons learned for conducting CI during Metroplex and PBN projects. A standardized approach to how and when the FAA engages airports and other stakeholders during Metroplex projects was developed and deployed for those projects still in progress and has been adapted for use on future PBN projects. Policy and guidance documents have been updated, renewing the FAA's commitment to involving the community and reflecting the

additional CI activities and stakeholder engagement expected to happen during PBN projects. The FAA is continually working to develop further tools, guidance, resources, and practices to effectively involve stakeholders.

MEMORANDUM

ITEM 4.2

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: **FAA GREAT LAKES REGION NOISE COMPLAINT INITIATIVE**

DATE: September 2, 2020

The Federal Aviation Administration (FAA) has established regional aircraft noise websites that will address aircraft and community noise issues, with information and links to where and how the public can directly submit aircraft noise complaints or inquiries. The Great Lakes region website was launched in August 2020.

The purpose of these sites is to identify how the FAA can more efficiently and effectively respond to and address noise complaints in a clear, consistent and repeatable manner that is responsive to the public and applies the best use of FAA resources.

The agency intends to do this through two parts:

1. Identify and implement improved and consistent agency-wide policy and procedures for the FAA's process to respond to noise complaints and inquiries, and
2. Identify and evaluate potential actions that the FAA might take to better address the underlying issue raised by complaints, particularly regarding the implementation of NextGen procedures.

MAC staff remains committed to being the first resource for airport neighbors concerned with learning more about aircraft operations in the seven-county Minneapolis-St. Paul metropolitan area. To that end, the FAA website encourages residents living near MAC's system of airports to first contact MAC for information prior to submitting an inquiry with the FAA. MAC staff will direct customers to the FAA only if contact with the agency is directly requested.

At the September NOC meeting, a representative from the FAA will present the Noise Complaint Initiative and the Great Lakes region website.

MEMORANDUM

ITEM 4.3

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: **EAGAN FLIGHT PROCEDURE CHANGE REQUEST UPDATE**

DATE: September 2, 2020

In September 2019, the Eagan City Council sent a letter to the NOC requesting endorsement of the recommendations developed by the Eagan Airport Relations Commission to modify specific procedures to reduce the number of departures from MSP that fly over residential portions of Eagan.

The NOC considered the letter and the specific requests in November 2019 and forwarded its endorsement of four requests to the MAC Commission for review. In December 2019, the MAC Commission unanimously approved forwarding the proposals to the Federal Aviation Administration (FAA).

The FAA conducted a high-level safety and feasibility review of these proposals and determined two had merit and warranted further consideration.

The NOC reviewed the two proposals in May 2020, which included comprehensive noise modeling and analysis to determine the potential impact of the changes. After review, the NOC concluded that one amended proposal should continue through the process and forwarded the request to the MAC Commission. In June 2020, the MAC reviewed and unanimously supported sending the amended proposal to the FAA to conduct the next step in the process: a feasibility and safety assessment.

The FAA has responded to the MAC Commission's June 2020 letter regarding the Eagan flight procedure change request. A copy of that letter is included below. At the September NOC meeting, a representative from the FAA will be available to answer questions on the letter.

U.S. Department
of Transportation
**Federal Aviation
Administration**

Great Lakes Region
2300 East Devon Avenue
Des Plaines, IL 60018

September 2, 2020

Rick King
Chairman, Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, MN 55450

Re: MSP Departure Procedure Adjustment Requests

Dear Mr. King,

Thank you for your letter requesting that the Federal Aviation Administration (FAA) conduct an appropriate feasibility and safety assessment of directing departures from Runway 17 with an initial departure fix of COULT to Runway 12R and Runway 12L unless the departure would impede or be impeded by arrival traffic to those runways and provided these departures would utilize the Crossing-in-the-Corridor noise abatement procedure. This letter provides a preliminary, high-level assessment of your proposal. The FAA has not conducted an in-depth analysis of whether the proposal is either feasible or safe. This type of detailed analysis is premature at this time.

The FAA has tentatively determined that the fix of COULT can be moved from departures on Runway 17 to departures on Runway 12L during times of low traffic demand. When MSP aircraft are landing and departing using a Runway 12L, Runway 12R, and Runway 17 configuration, aircraft land and depart on Runway 12L, land on Runway 12R, and depart on Runway 17. The feasibility of moving aircraft that are departing Runway 17 with an initial fix of COULT to Runway 12L during times of low traffic demand is predicated on the use of Runway 12L for both arrival and departure traffic. Departures with an initial fix of COULT utilizing Runway 12L would normally be assigned an initial heading of 120, which would be consistent with the Crossing-in-the-Corridor procedure.

However, as with all the changes proposed by the Noise Oversight Committee (NOC), traffic demand will need to be considered to determine when this procedure would be used.

This procedure must be ripe for evaluation in order to be properly tested. At this time, traffic levels are such that Runway 17 is not being regularly used for departing traffic. This means that the FAA cannot evaluate the potential impact of the proposal from either a safety or an efficiency perspective. Until the demand at MSP reaches approximately 80% of the pre-COVID levels, the FAA does not expect to be in a position to be able to test this procedure, or any of the other changes proposed by the NOC. The FAA will determine when traffic levels are high enough to meaningfully start the required analysis and engage MAC staff at that time. No additional action on the part of the MAC or the NOC will be required.

As a point of clarification, directing departures from Runway 17 with an initial departure fix of COULT to Runway 12R and Runway 12L will necessarily impede, or be impeded by, arrival traffic to Runway 12R under certain conditions. As mentioned above, during a Runway 12L/R and 17 configuration, Runway 12R is being utilized as a landing only Runway. Sometimes the longest runway for departures is required from this configuration for operational necessity, thus Runway 12R is requested for departures. When this occurs, the FAA must adjust the arrival spacing and create a "gap" for this departure, causing a delay for the departure aircraft while they wait for space to be created, and impeding arrivals to this runway. For this reason, the FAA cannot commit to moving a departure with an initial fix of COULT from Runway 17 to Runway 12R without impeding or being impeded by arrival traffic to Runway 12R. Testing of this procedure, once operations rebound, will help determine the conditions under which

COULT departures can be removed from Runway 17 and placed on either parallel runway. By testing during low arrival demand periods, more will become known about the extent to which other traffic would be impeded, ensuring continued safe and efficient operations. A procedure testing period will also allow the FAA to fully respond to the NOC's desire to learn how the procedure changes would be operationalized.

I trust the information provided addresses your question. If you would like to discuss the matter further, please feel free to contact me at 847-294-7294.

Sincerely,

Rebecca MacPherson
Regional Administrator
Great Lakes Region

MEMORANDUM

ITEM 4.4

TO: MSP Noise Oversight Committee (NOC)

FROM: Michele Ross, Assistant Manager, Community Relations

SUBJECT: **RUNWAYS 12L AND 12R NIGHTTIME ARRIVAL OPERATIONS REPORT**

DATE: September 2, 2020

The 2020 MSP Noise Oversight Committee Work Plan directs MAC staff to conduct an analysis of MSP Runways 12L and 12R nighttime arrival activity over cities to the northwest of the airport.

Airport data from 2016 through 2019 was used to examine the use of Runways 12L and 12R. Specifically, the following topics were researched:

- Runway Use
- Flight Frequency
- Origin and Airport Parking
- Complaints

The completed Runways 12L and 12R Nighttime Arrival Operations Report is attached, and the report will be presented and discussed at the September NOC meeting.

RUNWAYS 12L AND 12R NIGHTTIME ARRIVALS OPERATIONS REPORT

September 2020

Community Relations Office

RUNWAYS 12L AND 12R NIGHTTIME ARRIVALS OPERATIONS REPORT

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EXECUTIVE SUMMARY

During a Minneapolis-St. Paul International Airport (MSP) Listening Session held in Edina in July 2019, community members discussed concerns related to nighttime arrivals to Runways 12L and 12R. At the MSP Noise Oversight Committee (NOC) meeting in September 2019, some NOC members echoed these concerns and, in response, included an item to conduct a Runways 12L and 12R Nighttime Arrivals Operations Report on the 2020 Work Plan.

This study provides trend information on the use of Runways 12L and 12R for arrivals between 10:30 PM and 6:00 AM in 2019 and compares that to aircraft activity from 2016 through 2018. Differences in the use of runways is noted as applicable. Data from 2020 was intentionally precluded from this study, due to changes in airport operations from COVID-19. The study examines runway use, arrival flight frequency, aircraft origin combined with airport parking destinations, and aircraft noise complaint data trends.

The use of Runways 12L and 12R for nighttime arrivals has varied since 2005. In 2019, Runway 12L was used for 13 percent of MSP nighttime arrivals and Runway 12R was used for 26 percent of nighttime arrivals.

Weather, special events and runway closures all impact the operational flow of air traffic daily. These activities often necessitate closure of airport surfaces to ensure the safety of aircraft and ground support personnel. Between 2016 and 2019, routine runway maintenance and snow removal activities accounted for 75 percent of all nighttime closures of Runways 12L and 12R. The remaining 25 percent was categorized as either construction or routine inspections.

Airline schedules and changing fleet characteristics affect runway use monthly and annually. On both runways, the frequency of arrivals drops off after midnight and picks up again in the 5:00 AM hour.

Aircraft origin and airport parking destination are important determinants to the runway assigned. Standard Terminal Arrival Routes (STARs) are arrival flight procedures where aircraft transition from enroute to the approach phase of the flight. This report examines the strong correlation between an aircraft's arrival runway and a combination of the STAR and parking location on the airport. There is a strong correlation between an aircraft's arrival runway and a combination of the STAR and parking location on the airport. Due to the strong correlations identified in the report, there is evidence that FAA Air Traffic Control practices a standardized way in which arrival runways are assigned, leading to consistency and predictability between controllers and pilots. This standardization contributes to the imbalanced use of these runways at night.

Although Runway 12R is used more often at night, aircraft noise complaints are registered from aircraft arriving to both Runways 12L and 12R at night. This is an indication that aircraft arrival activity, regardless of runway, is intrusive to airport neighbors during the nighttime period.

1. Introduction

The Metropolitan Airports Commission (MAC) is a public corporation governed by a board of commissioners that reports to the Governor of Minnesota and the Minnesota State Legislature. The MAC is charged with managing a system of seven airports within the Minneapolis-St. Paul metropolitan area, including Minneapolis-St. Paul International Airport (MSP). In addition to the MAC, other air transportation entities play critical roles in the successful operation of an airport. The Federal Aviation Administration (FAA) regulates all aircraft activity. At MSP, the FAA's Air Traffic Control (ATC) is solely responsible for directing aircraft on the ground and in the air. ATC's highest priority is the safe and efficient movement of air traffic. Air transportation companies, such as airlines, provide transportation services for people and products. **Figure 1 - Air Transportation Entities** below outlines the primary air transportation units responsible for the successful operation of MSP.

Figure 1 - Air Transportation Entities

The MAC has designated the Noise Oversight Committee (NOC) as its primary advisory body regarding aircraft noise issues associated with flight operations at MSP. The NOC directed MAC staff to conduct an analysis of MSP Runways 12L and 12R nighttime arrival activity. A graphic of the MSP runway layout is provided in **Figure 2 - MSP Runway Layout**.

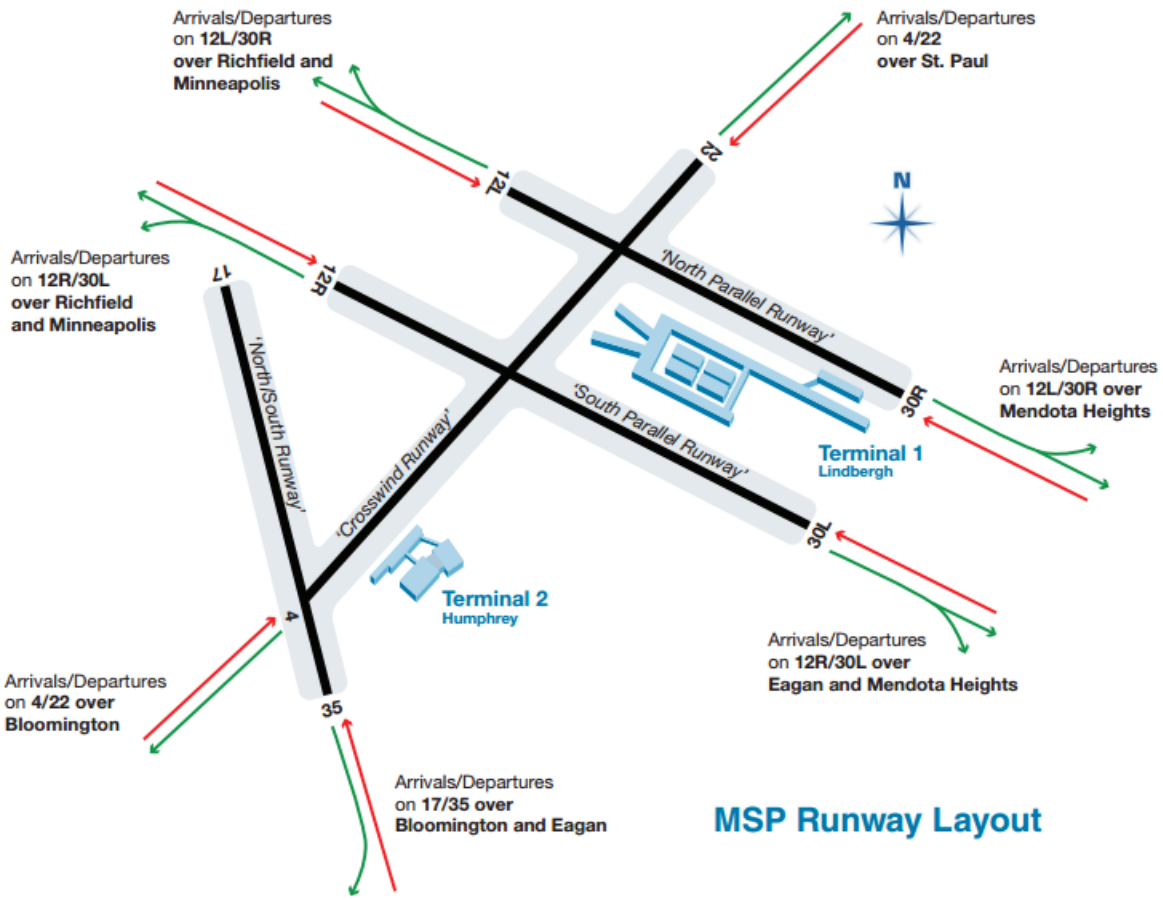


Figure 2 - MSP Runway Layout

2. BACKGROUND

As shown in **Figure 3 - MSP Runway Configurations**, Runways 12L and 12R are used for arrivals during a South Flow or Straight South Flow airport configuration. These configurations are typically used when prevailing winds are out of the south or east.

The MSP Runway Use System (RUS) prioritizes arrival and departure runways to promote flight activity over less-populated residential areas as much as possible. During a South Flow, the Priority 4 arrival runways (12L and 12R) are used for aircraft arriving to MSP.

As shown in **Figure 4 - MSP Arrivals by Year,** the use of Runways 12L and 12R for nighttime arrivals has varied since 2005. In 2019, Runway 12L was used for 13 percent of all MSP nighttime arrivals and Runway 12R was used for 26 percent of all nighttime arrivals. As discussed later in this report, the higher use of Runway 12R is correlated to flight origin and on airport parking destination.

In 2019, there were a total of 2,520 nighttime arrivals to 12L and 4,904 nighttime arrivals to 12R. The use of Runway 12L, as a percentage of total nighttime arrivals, was highest in 2007 and 2015. The use of Runway 12R, as a percentage of total nighttime arrivals, was highest in 2012.

Runway 12R is 10,000 feet long, which is 1,800 feet longer than 12L. The added length may be necessary for wide-body or heavy aircraft to land safely.

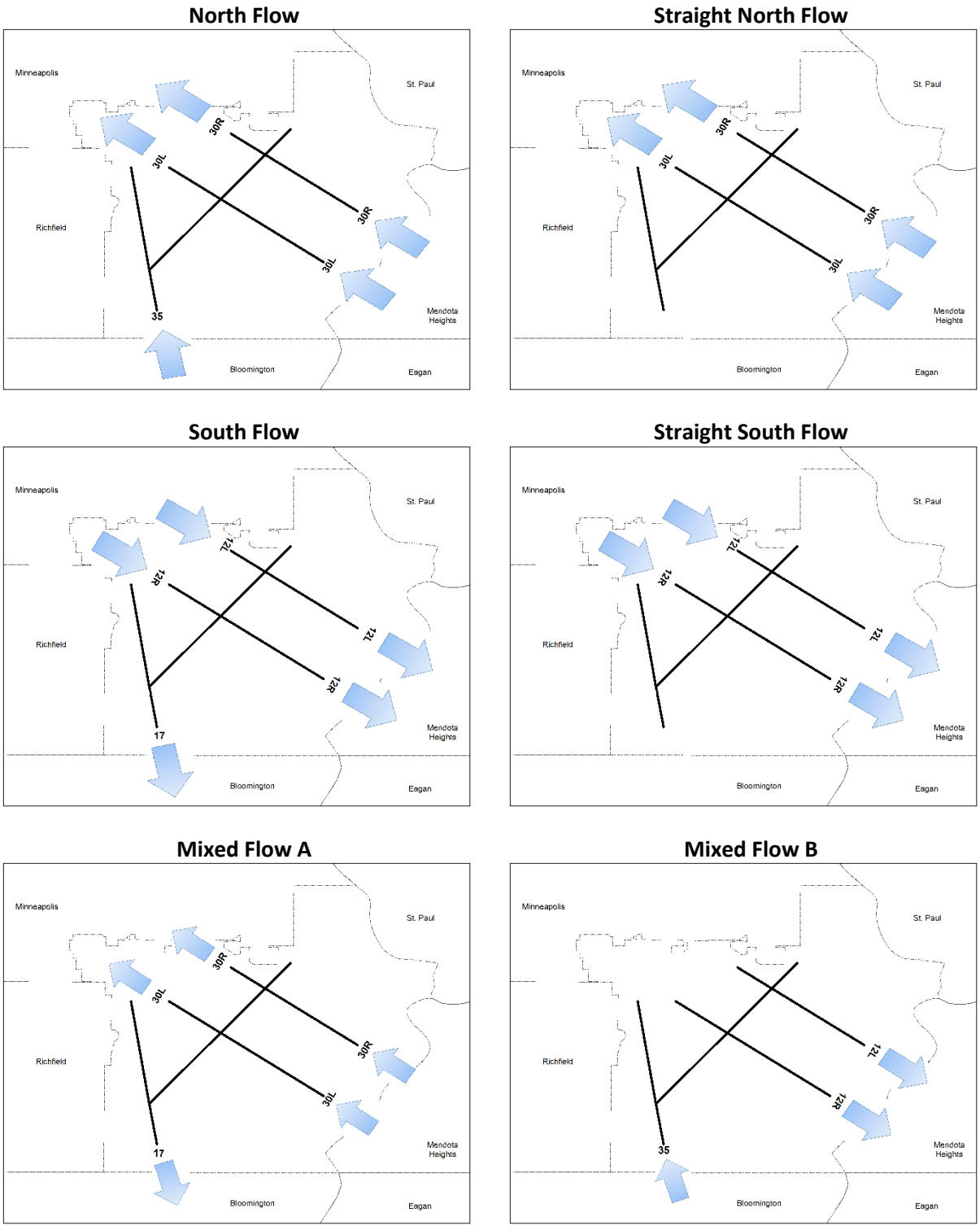


Figure 3 - MSP Runway Configurations

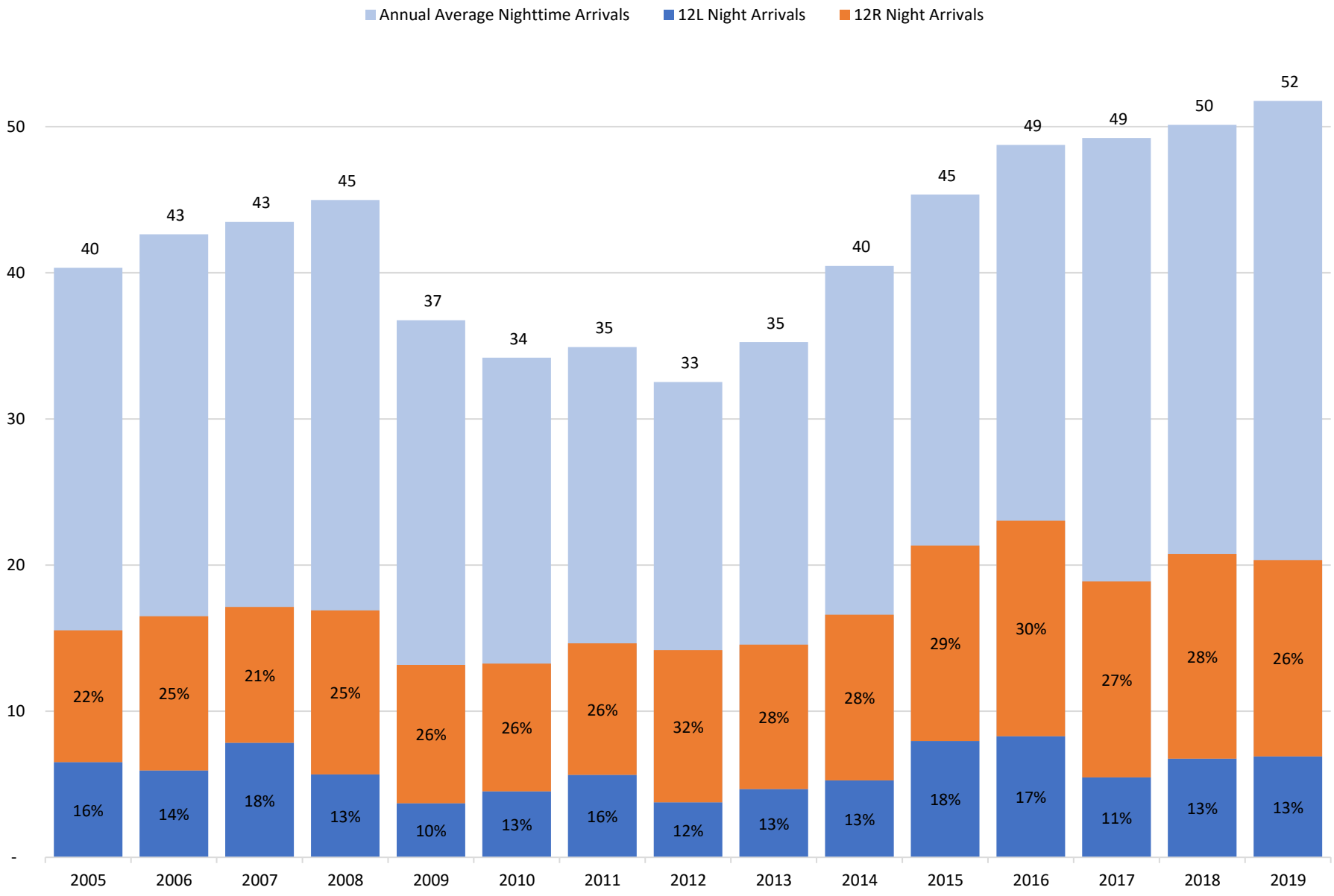


Figure 4 - MSP Arrivals by Year

3. Runway Use

Weather, special events and runway closures all impact the operational flow of air traffic daily. Airline schedules and changing fleet characteristics affect runway use monthly and annually.

Figure 5 - Nighttime Runway Closures shows the type of closures on Runways 12L or 12R between 10:30 PM and 6:00 AM from 2016 through 2019. As much as possible, runways are closed at night to perform regular maintenance activities as to not impact aircraft operations during the day. As shown, routine maintenance and snow removal activities account for 75 percent of all nighttime closures of Runways 12L and 12R during this period with construction and inspection activities accounting for the remaining 25 percent. Runway 12L was closed an average of about 130 hours at night each year in the study period and Runway 12R was closed an average of about 172 hours at night. It is not common that both parallel runways are closed at the same time. Aircraft arrivals and departures are routed to another runway while one is closed.

Figure 6 - Runway 12L Average Annual Night and **Figure 7 - Runway 12R Average Annual Night** show the average number of arrivals during each nighttime hour when the airport was in either a South Flow or Straight South Flow in 2019 compared to an average of the previous three years. On both runways, arrivals drop off after midnight and pick up again in the 5:00 AM hour.

Figure 8 - Nighttime Arrival Runway Distribution illustrates the distribution of runways used for nighttime arrivals in 2016-2018 (average) and 2019 when the airport was operating in a South Flow or Straight South Flow. When MSP was configured in a South Flow or Straight South Flow in 2016-2018 (average), 33 percent of nighttime arrivals used Runway 12L and 67 percent of nighttime arrivals used Runway 12R. That percentage changed slightly to 34 percent and 66 percent in 2019.

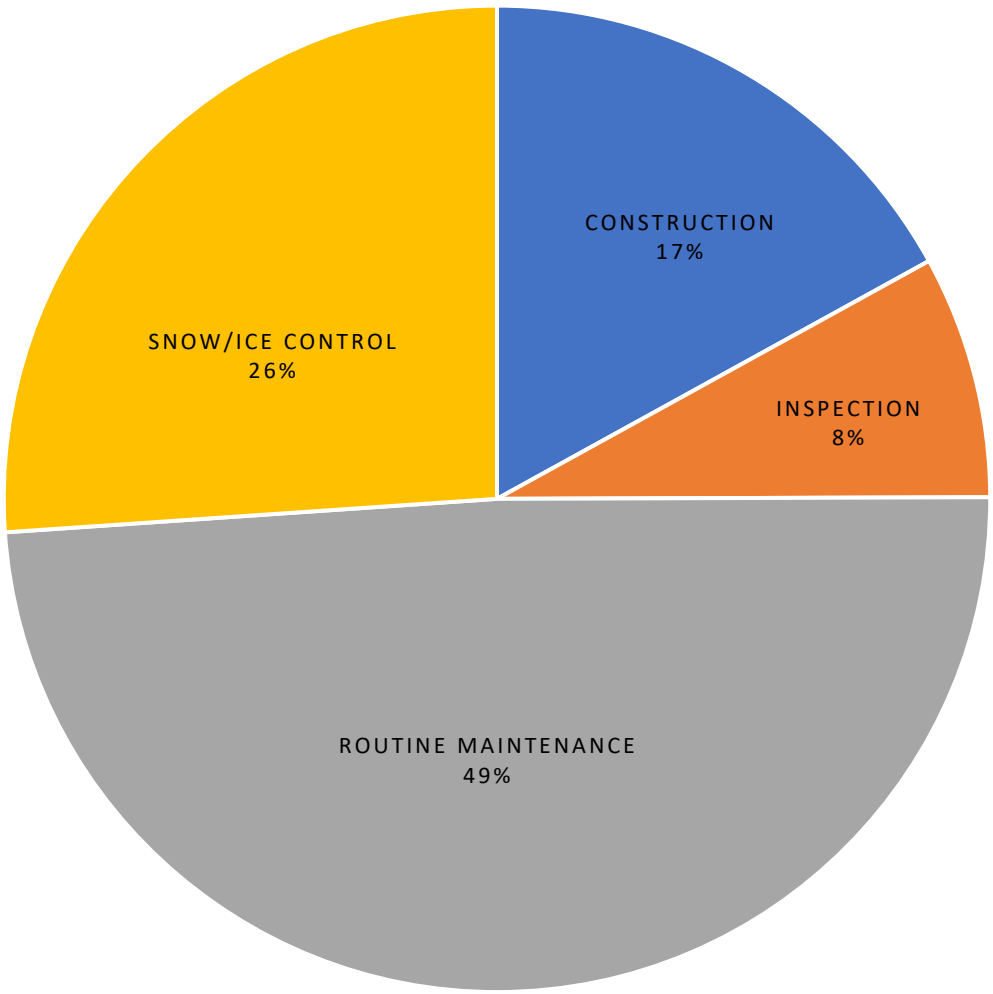
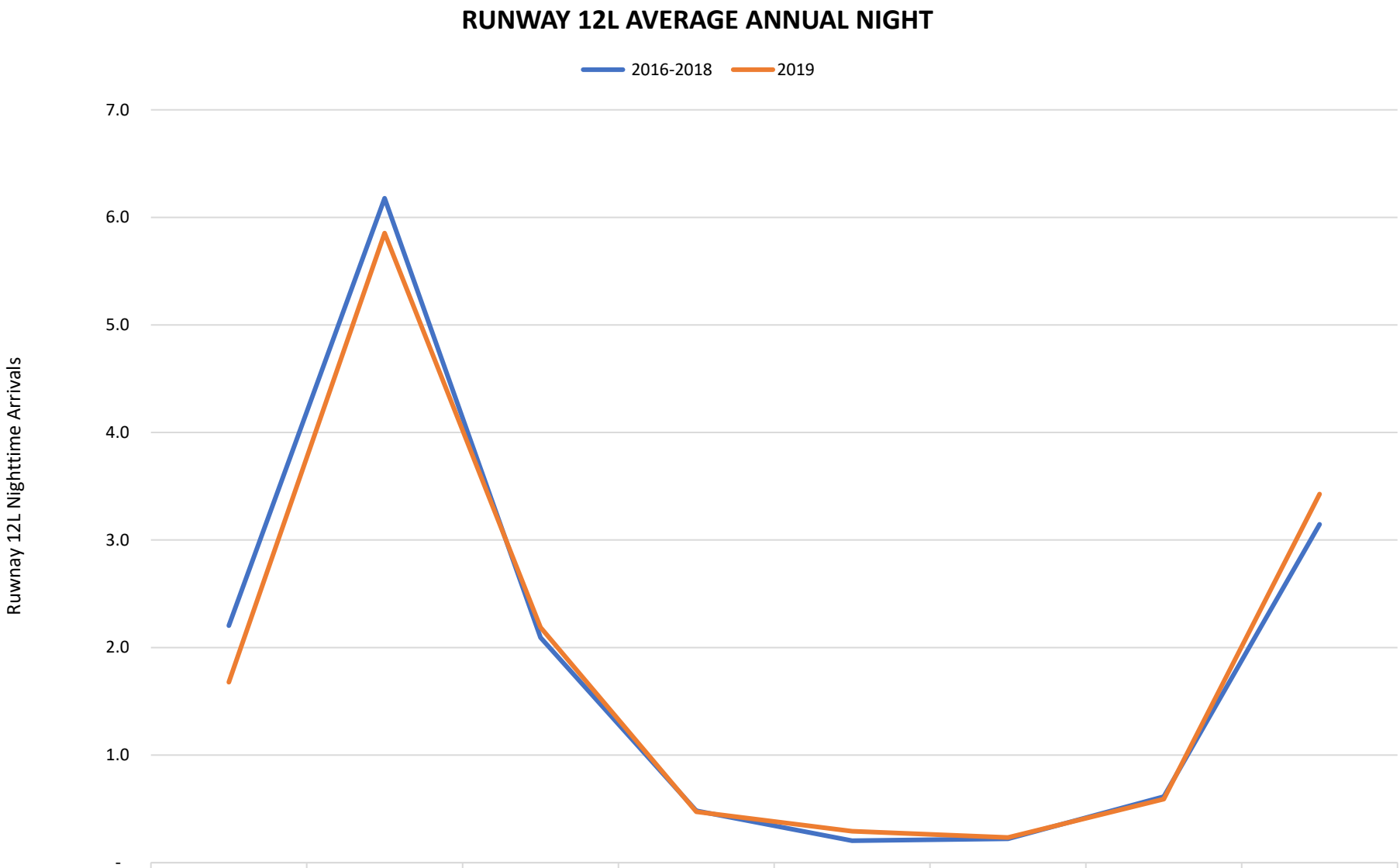
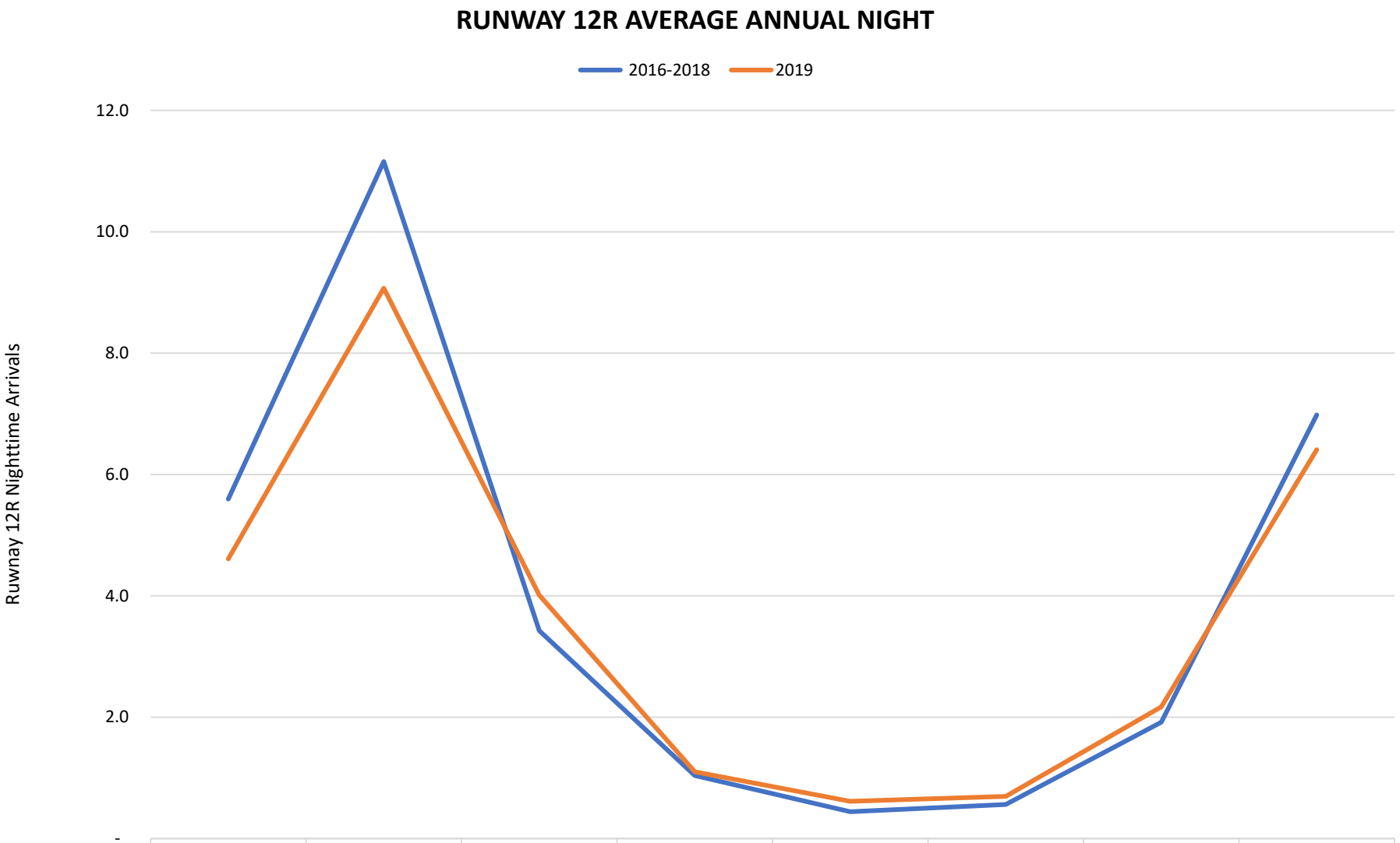


Figure 5 - Nighttime Runway Closures



	22:30	23:00	0:00	1:00	2:00	3:00	4:00	5:00
2016-2018	2.2	6.2	2.1	0.5	0.2	0.2	0.6	3.1
2019	1.7	5.9	2.2	0.5	0.3	0.2	0.6	3.4

Figure 6 - Runway 12L Average Annual Night



	22:30	23:00	0:00	1:00	2:00	3:00	4:00	5:00
2016-2018	5.6	11.2	3.4	1.0	0.4	0.6	1.9	7.0
2019	4.6	9.1	4.0	1.1	0.6	0.7	2.2	6.4

Figure 7 - Runway 12R Average Annual Night

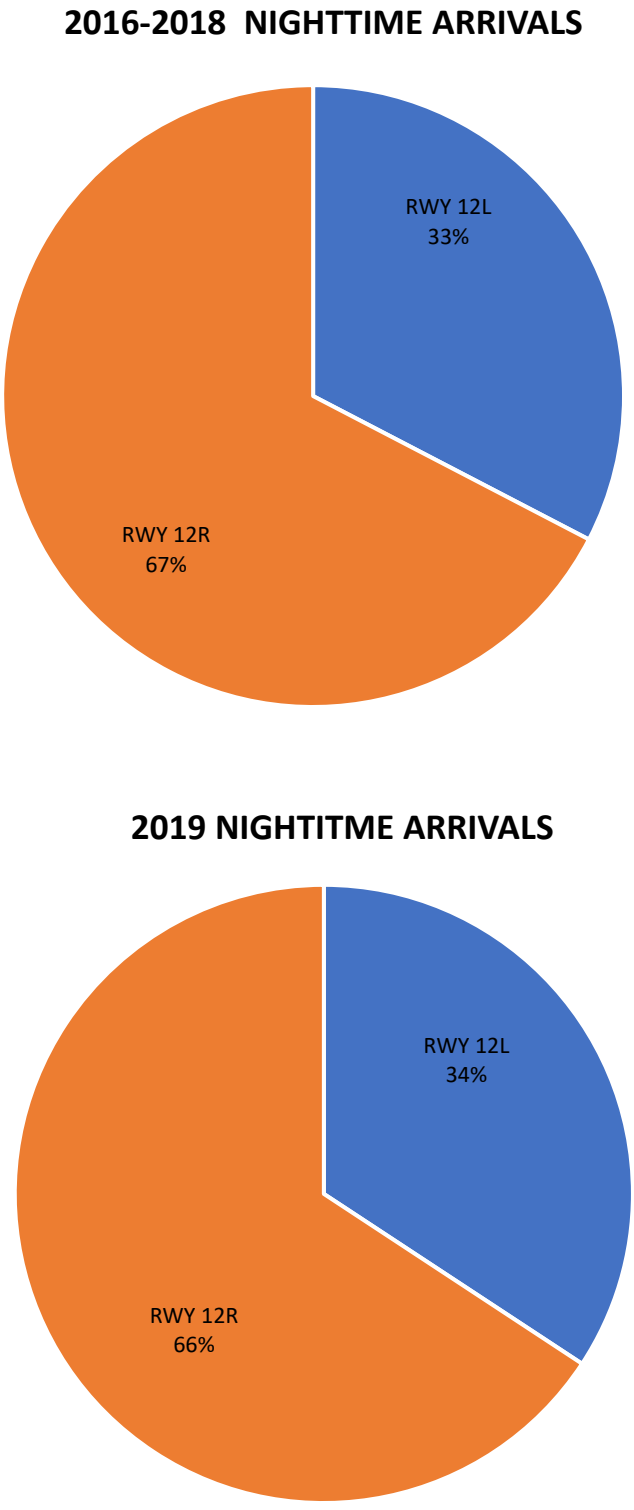


Figure 8 - Nighttime Arrival Runway Distribution

4. Flight Frequency

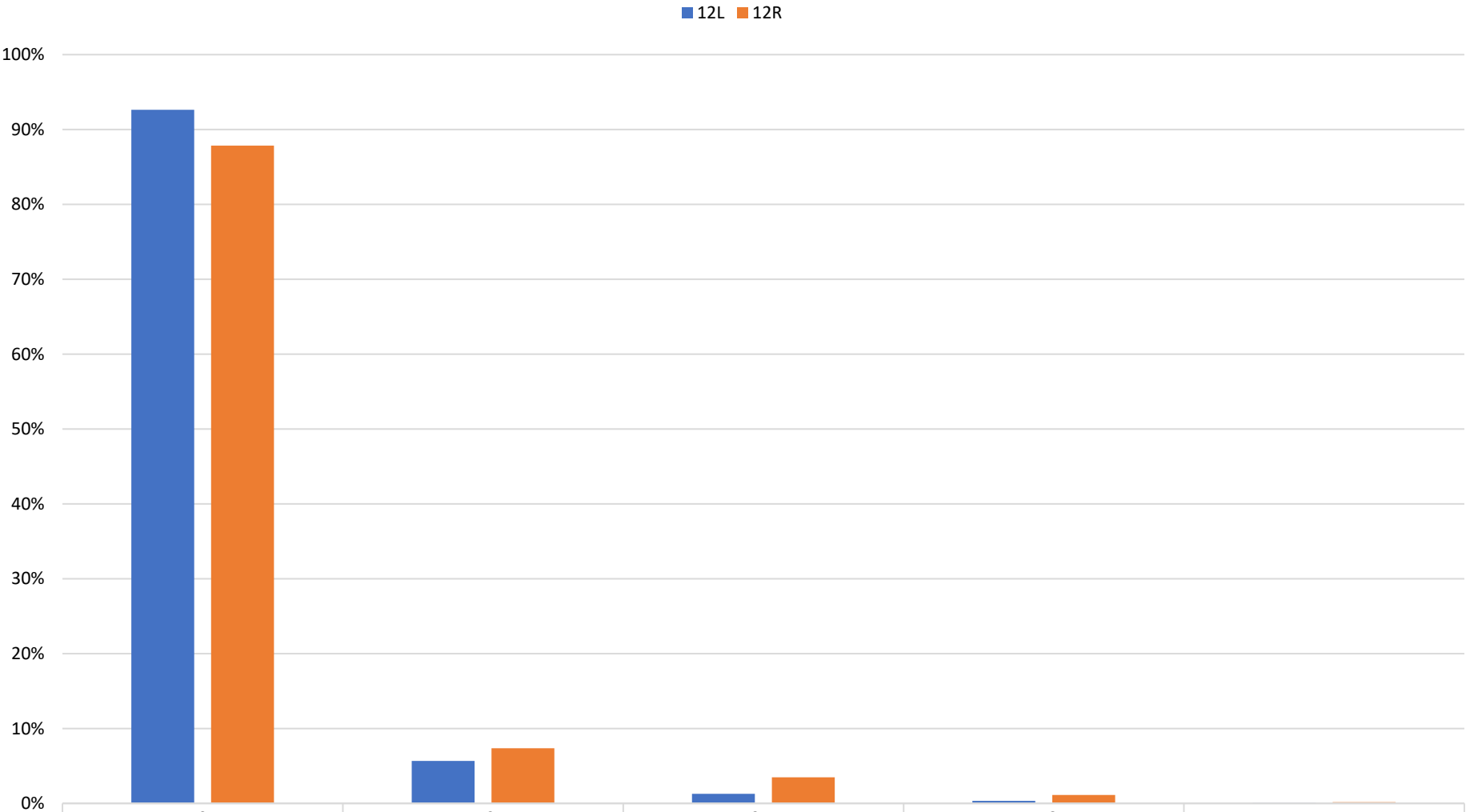
The frequency of aircraft arrivals is oftentimes a concern raised by airport neighbors. To ensure a safe and stable landing, aircraft arriving to a runway will line up on the extended centerline of that runway, overflying the same areas upon arrival. Therefore, frequent arrivals at night are often intrusive to those living under an arrival path to a runway.

To investigate whether the flight frequency within the 15-minute segments has changed, this analysis counts the number of Runway 12L and 12R nighttime arrivals during 15-minute segments in 2019 and compares to 2016-2018 (average). **Figure 9 - 2016-2018 (Average) 15-Minute Nighttime Arrival Use** and **Figure 10 - 2019 15-Minute Nighttime Arrival Use** displays the percent of time runway arrivals occurred at various levels of frequency (i.e. the number of Runway 12L arrivals per 15-minutes was 0, 1-2, 3-4, 5-6, etc.).

It is important to note that although the runways may be available for arrivals, they may not necessarily be used. Overnight hours are the most frequent occurrence of this situation. While there are many instances when the runways are available for use, Runway 12L was not used 93 percent and Runway 12R was not used 88 percent of the time they were available for use in 2019 as well as the previous three-year average.

The charts show the frequency of arrivals to Runways 12L and 12R have not substantially changed between the three-year average of 2016-2018 and 2019. Also shown is the higher frequency of arrivals on 12R compared to 12L, due to the increased overall use of Runway 12R at night.

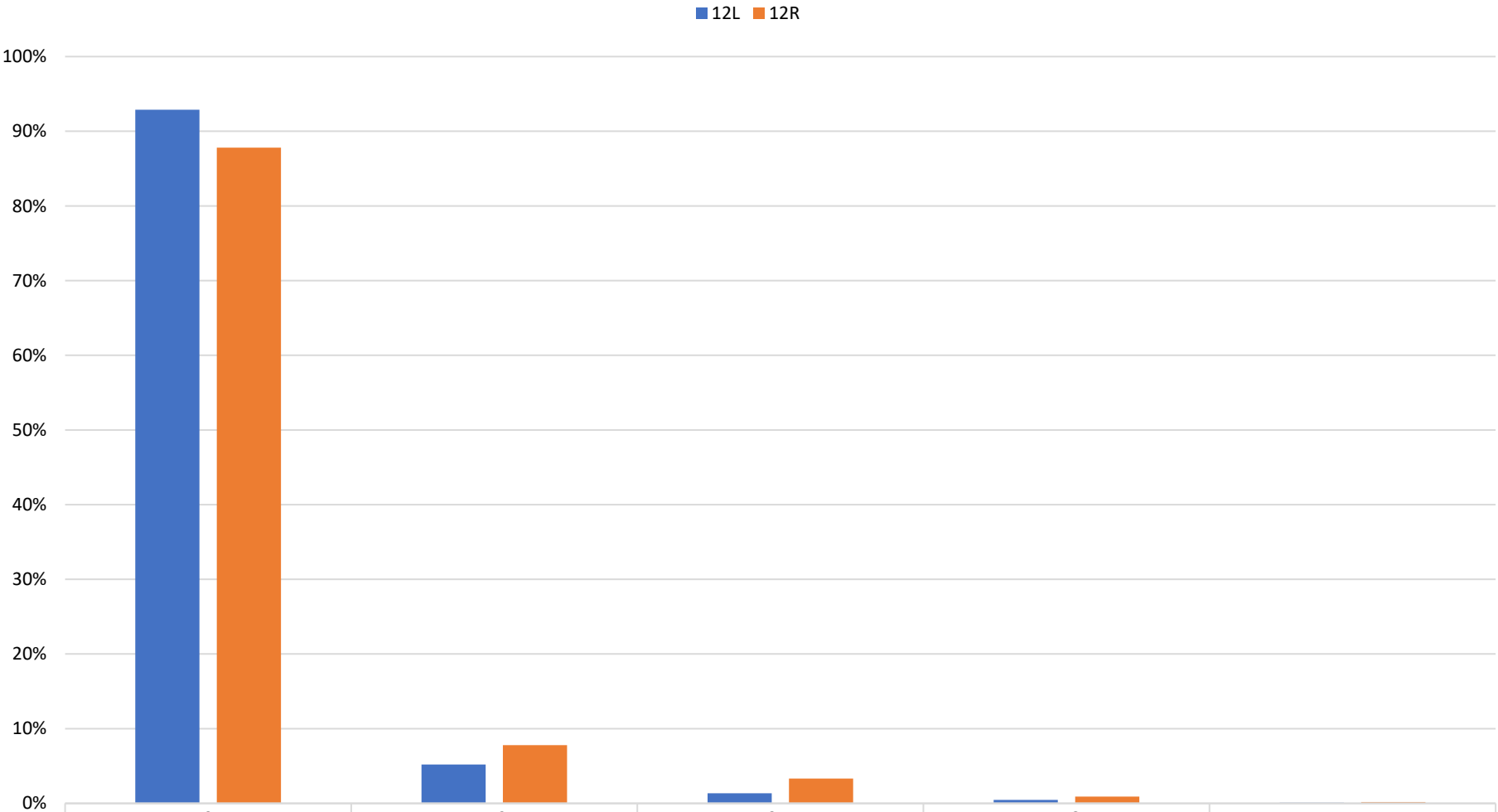
2016-2018 AVERAGE 15-MINUTE NIGHTTIME ARRIVAL USE
DURING SOUTH FLOW



	0	1-2	3-4	5-6	>7
12L	93%	6%	1%	0%	0.1%
12R	88%	7%	3%	1%	0.2%

Figure 9 - 2016-2018 (Average) 15-Minute Nighttime Arrival Use

2019 15-MINUTE NIGHTTIME ARRIVAL USE
DURING SOUTH FLOW



	0	1-2	3-4	5-6	>7
12L	93%	5%	1%	0%	0.1%
12R	88%	8%	3%	1%	0.2%

Figure 10 - 2019 15-Minute Nighttime Arrival Use

5. Origin and Airport Parking Destination

During nighttime hours, particularly between midnight and 6:00 AM, ATC staffing typically consists of one controller directing arrivals for all of MSP. ATC will direct arriving aircraft to utilize a runway based on numerous factors including origin of the aircraft, airport parking location, aircraft type, weather conditions, and runway closures.

Aircraft origin and airport parking destination are important determinants to the runway assigned. Standard Terminal Arrival Routes (STARs) are arrival route flight procedures where aircraft transition from enroute to the approach phase of flight. **Figure 11 - Standard Terminal Arrival Routes (STARs)** illustrates the general location of the named airspace fixes for MSP STARs. These are the locations where aircraft begin this transition. The STARs are assigned based on the filed route of the flight. Aircraft utilizing BAINY, MUSCL, or KKLIR typically originate from airports to the north, northeast, east, or southeast. Aircraft utilizing TORGY, NITZR, or BLUEM typically originate from airports to the west, southwest or south. While the aircraft origin largely determines which STAR is assigned, weather, airspace restrictions, or other traffic may affect the assignment.

Figure 12 - 2019 Nighttime STARs Distribution illustrates the distribution of all nighttime arrivals to Runways 12L and 12R. As shown, 72 percent of Runway 12L and Runway 12R arrivals at nighttime utilize the TORGY, NITZR or BLUEM arrival routes to the west, southwest, and south of the airport. This concludes that close to three-quarters of nighttime arrivals to MSP are originating at airports to the west, southwest and south. Aircraft entering the airspace from this direction are closest to Runway 12R and more likely to be assigned that runway, particularly if the aircraft parking location is on the west or south side of the airport.

Figure 13 - MSP Airport Parking Locations illustrate the options for parking destinations of aircraft arriving to MSP. **Figure 14 - 2019 Nighttime Parking Locations** identifies the parking location for nighttime arrivals to Runways 12L and 12R in 2019. As shown, 62 percent of arriving aircraft had on-airport parking destinations on the west or south side of the airport (Terminal 2/Concourse H, Concourse G, Concourse F, cargo or general aviation). Since Runway 12R is closer to these parking locations than 12L, ATC is more likely to direct the aircraft to land on Runway 12R, especially if the aircraft is coming inbound from the west, southwest or south.

Figure 15 - 2019 Nighttime Runway Use by Arrival Gate and Parking Location combines arrival route with parking destination and compares runway usage. As shown, 67 percent of operations on the BAINY, MUSCL, or KKILR arrival routes utilized Runway 12L and 71 percent of operations on the TORGY, NITZR or BLUEM arrival routes utilized Runway 12R.

There is a strong correlation between an aircraft's arrival runway and a combination of the STAR and parking location on the airport. Due to the strong correlations identified in the report, there is evidence that FAA Air Traffic Control practices a standardized way in which arrival runways are assigned, leading to consistency and predictability between controllers and pilots. This standardization contributes to the imbalanced use of these runways at night.

Flight schedules, specifically airport origin, is determined by the aircraft operator. At MSP, airlines determine the schedule of aircraft operations, the frequency of flights to their chosen destinations and the time of day those flights operate. How quickly the airlines change the schedule would be contingent on their responsiveness to passenger demand. Because airline scheduling decisions vary throughout the day, origins that favor certain regions of the country may be more prevalent during certain hours of the day.

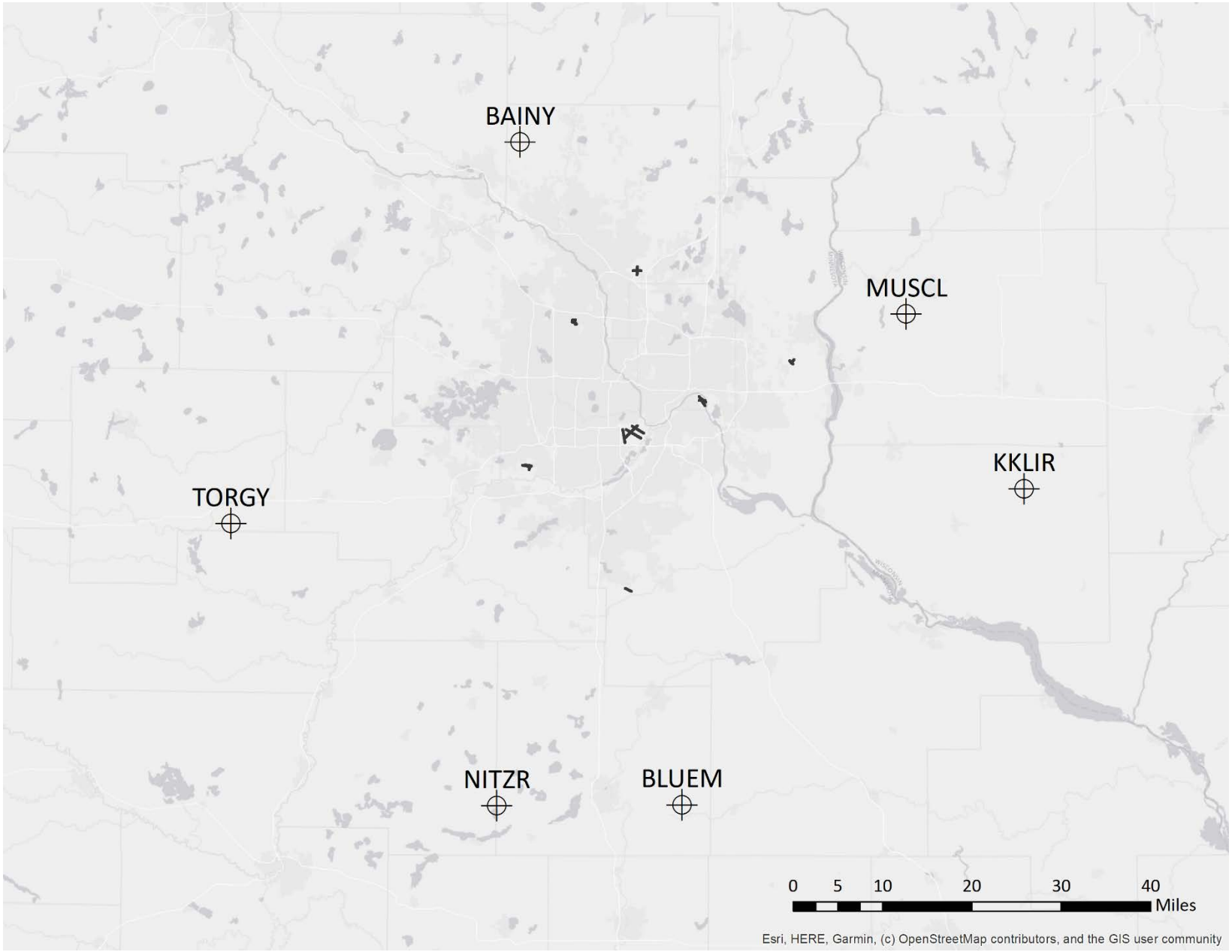


Figure 11 - Standard Terminal Arrival Routes (STARs)

2019 NIGHTTIME STARS DISTRIBUTION
RUNWAY 12L AND 12R ARRIVALS

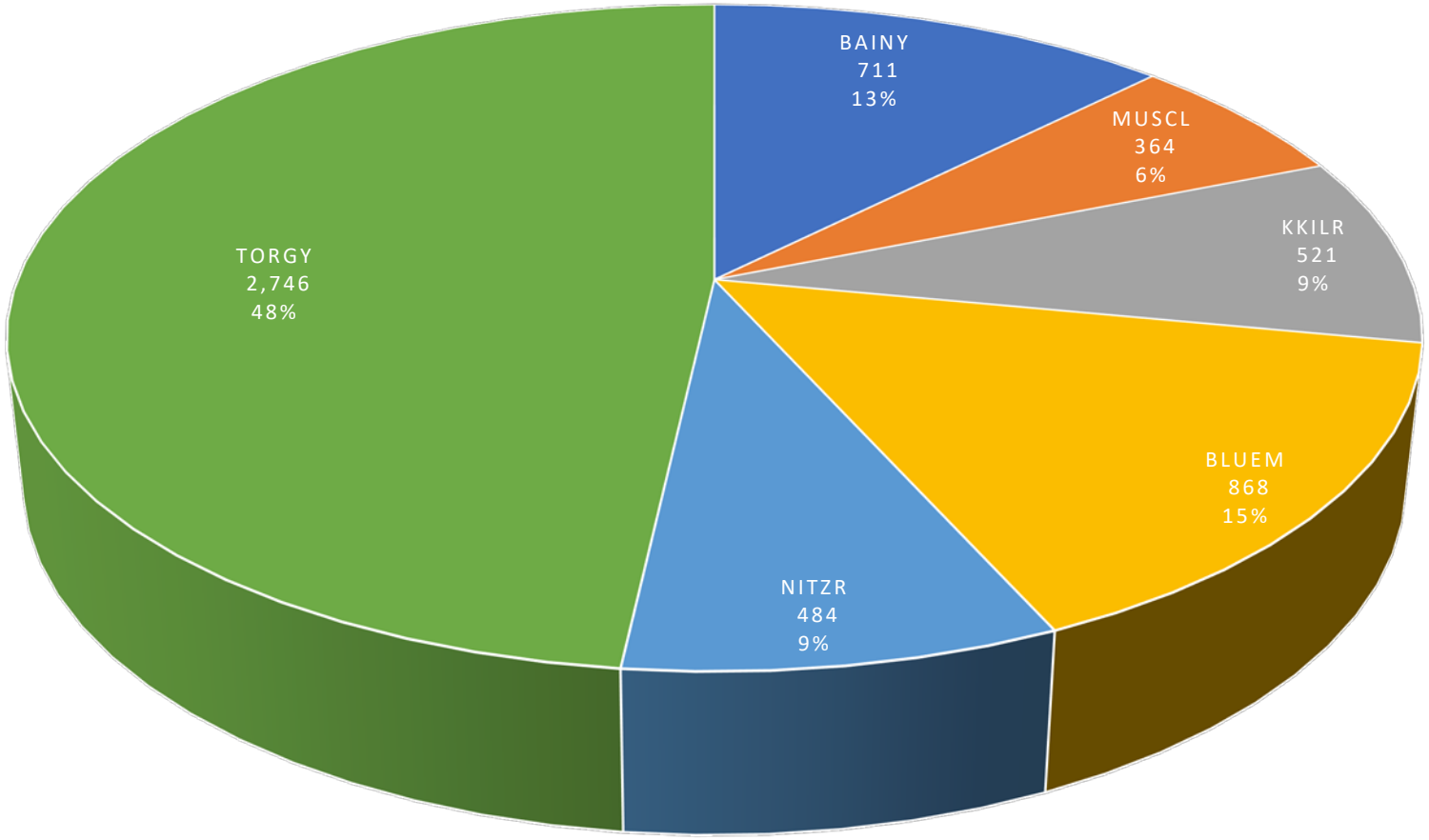


Figure 12 - 2019 Nighttime STARs Distribution

Figure 13 - MSP Airport Parking Locations

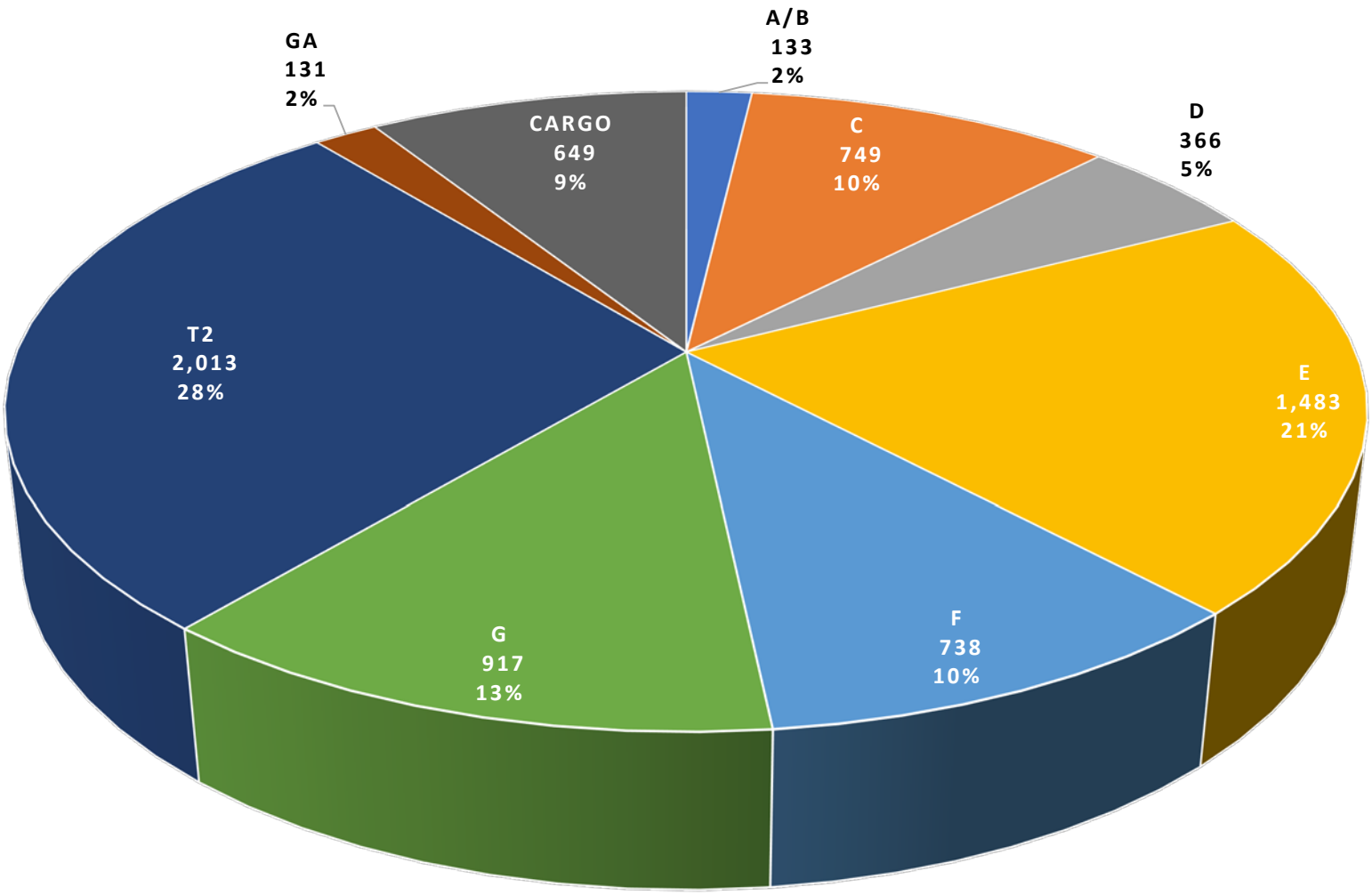


Figure 14 - 2019 Nighttime Parking Locations

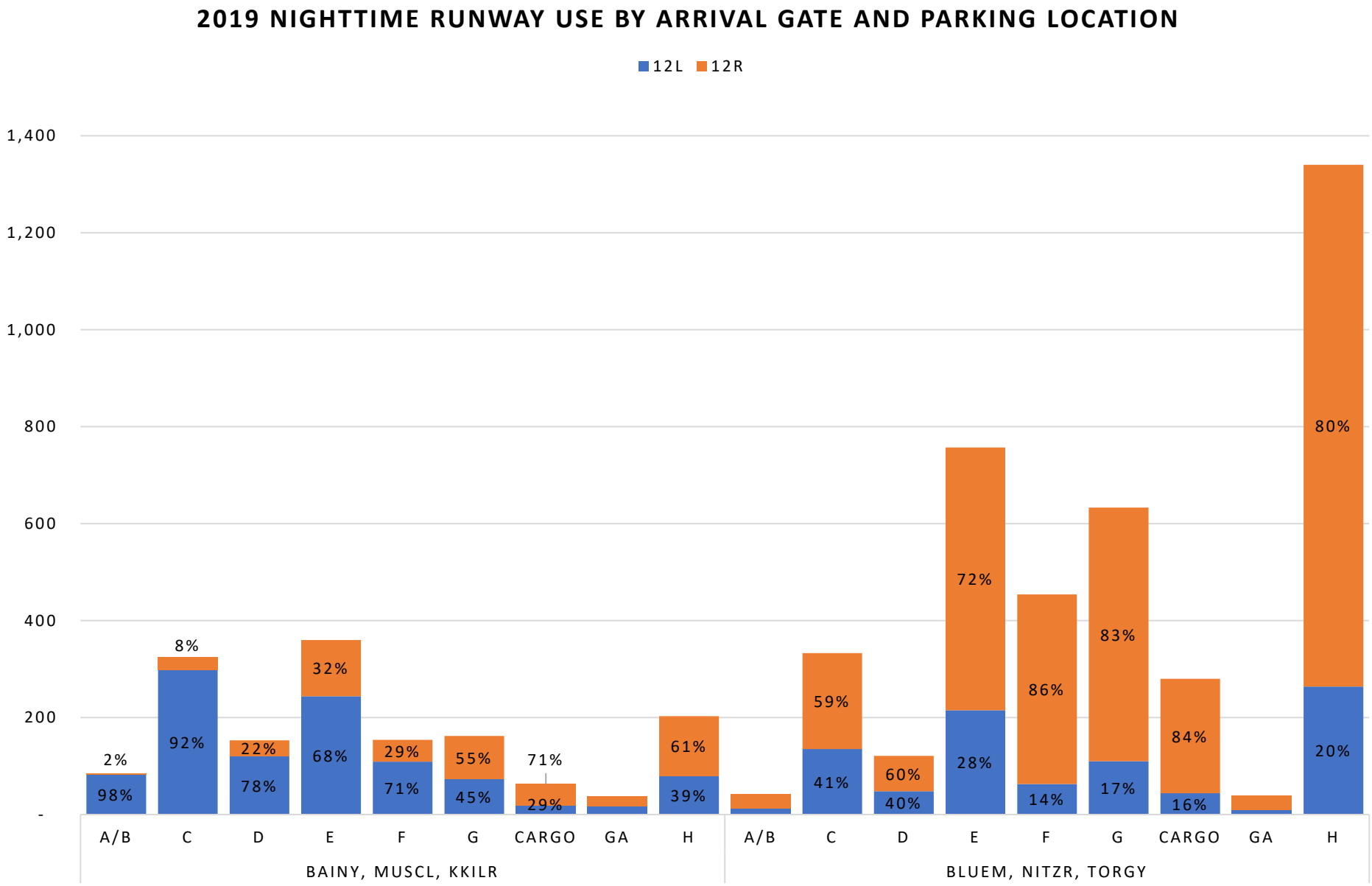


Figure 15 - 2019 Nighttime Runway Use by Arrival Gate and Parking Location

6. Complaint Data

This section evaluates the aircraft noise complaint data collected by the MAC. **Figure 16 – 2019 Complaints Correlated to MSP Nighttime Arrivals** displays households that filed complaints in 2019 that were correlated to an aircraft arriving between 10:30 PM and 6:00 AM on Runway 12L or Runway 12R. Households that filed more than one complaint are represented by a white dot. Households filing complaints are concentrated in Minneapolis under the final approach for Runways 12L and 12R. Many of the other households filing complaints are located under arrival routes as aircraft transition to final approach.

Although Runway 12R is used more often at night, aircraft noise complaints are registered from aircraft arriving to both Runways 12L and 12R at night. This is an indication that aircraft arrival activity, regardless of runway, is intrusive to airport neighbors during the nighttime period.

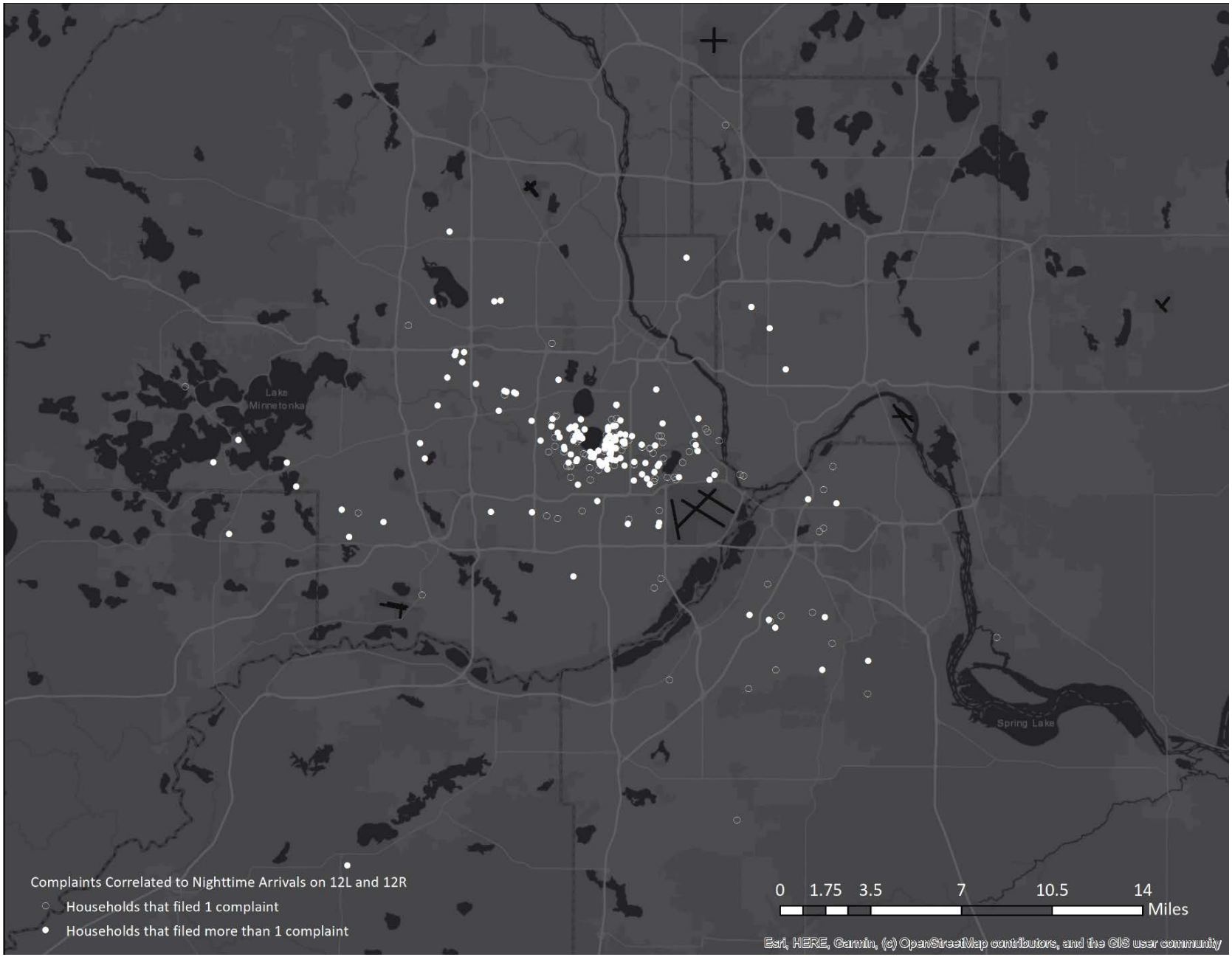


Figure 16 – 2019 Complaints Correlated to MSP Nighttime Arrivals

Metropolitan Airports Commission
6040 28th Avenue South, Minneapolis, MN 55450
metroairports.org

MEMORANDUM

ITEM 4.5

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: **2021 DRAFT NOC WORK PLAN**

DATE: September 2, 2020

Each September, the NOC membership reviews the proposed draft Work Plan items for the coming year. The Fall Listening Session will be held in October to solicit ideas from the public for the Committee's consideration upon finalizing the Work Plan. The final draft Work Plan will be presented in November with a request to finalize and adopt. Subsequently, it will then be presented for approval at the MAC Planning, Development and Environment Committee in December. The preliminary list of 2021 Work Plan topics are provided below:

DRAFT 2021 MSP NOC WORK PLAN

1. Residential Noise Mitigation Program

   a) Review Residential Noise Mitigation Program Implementation Status

      Description: Staff from MAC Airport Development will update the NOC on the current Mitigation Program.

2. MSP Noise Program Specific Efforts

   a) 2020 Actual Noise Contour Report and the Consent Decree Noise Mitigation Program Eligibility

      Description: Each year in March, under the terms and conditions of the amended 2007 Consent Decree, MAC publishes an actual annual Noise Exposure Map for the previous year. The 2020 noise contours will be used to establish an address list of the single and multifamily parcels that have met one, two and three years of candidate eligibility under the First Amendment to the Consent Decree, as applicable. To be fully eligible, a candidate home must be located for a period of three consecutive years (the first of the three years cannot be later than calendar year 2020) in the actual 60-64 DNL noise contour and within a higher noise impact area when compared to the home's status under the noise mitigation program prior to the amendment.

   b) MSP Fleet Mix and Nighttime Operations Assessment

Description: MSP is federally obligated to stay open 24 hours per day. Recognizing the impacts of nighttime operations, the NOC regularly assesses nighttime trends in airport operations. This is an annual assessment reviewing actual and scheduled nighttime operations at MSP.

c) MSP Annual Aircraft Noise Complaint Data Assessment

Description: Complaints are one of the tools the MAC uses to communicate with the community about aircraft activity and report to the NOC about concerns received from airport neighbors. This annual assessment reviews MSP complaints and households filing complaints.

d) Status of FAA Center of Excellence/ASCENT, TRB, and FICAN Research Initiatives

Description: This is an annual report on the status of scientific, engineering, and medical research literature prepared by universities, governmental organizations, and transportation boards located within the United States.

- PARTNER – Partnership for AiR Transportation Noise and Emissions Reduction
- TRB – Transportation Research Board, which manages Airports Cooperative Research Program (ACRP)
- FICAN – Federal Interagency Committee on Aviation Noise

e) Update on Converging Runway Operations at MSP

Description: The FAA began applying new CRO mitigation strategies for both parallel runways in March 2016. The FAA will provide updates on the progress of their tactics to mitigate safety issues from CRO, public outreach plans and impacts to runway use and airport capacity throughout in 2021.

f) Update on the MSP Long Term Plan (LTP) and Associated Stakeholder Engagement

Description: The MAC is currently preparing the 20-year Long-Term Plan for MSP. Throughout 2021, the MAC will provide regular updates to the NOC on the progress of the LTP and associated stakeholder engagement.

g) Update on the FAA's Survey to Re-Evaluate Noise Measurement Methods

Description: Beginning in 2015, the FAA conducted surveys of residents around select U.S. airports to assess annoyance levels from aviation noise. The agency is assessing the survey results to determine if changes to the federal noise measurement methods and/or compatible land use considerations are warranted. The NOC will receive updates on this process as the FAA makes the information available.

h) Minnetonka Aircraft Noise Monitoring

Description: Based on a request received by the City of Minnetonka in November 2019 and subsequently approved by the NOC, the MAC will conduct a mobile monitoring study in the northeastern portion of the City of Minnetonka. One monitoring location will collect measurement of aircraft related sounds associated with operations from MSP. Monitoring was planned for 2020 but postponed due to the reduction in aircraft operations.

3. Continue to Review Input Received from the NOC Listening Sessions as Possible Agenda Items

This is an information item; no NOC action is requested at this time. The October Listening Session will be held to solicit Work Plan ideas from the public. MAC staff will report the results to the NOC at its November meeting.

The final 2021 Work Plan will be placed on the NOC Agenda for November 18, 2020, with a request to finalize and adopt. The NOC Co-Chairs will present and seek approval for the 2021 NOC Work Plan to the MAC Planning Development and Environment Committee on December 7, 2020.

MEMORANDUM

ITEM 4.6

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: **REVIEW OF SUMMER LISTENING SESSION**

DATE: September 2, 2020

One of the elements of the framework for the MSP Noise Oversight Committee (NOC) includes convening a quarterly meeting with the public. This report reviews the recently held Summer Listening Session.

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.

On July 22, 2020 at 6:00 P.M., MAC Community Relations staff conducted the first ever virtual Listening Session as the engagement was held via Skype. Three residents from Eagan, three residents from Eden Prairie, one resident from Minneapolis, one resident from St. Bonifacius, one resident from Richfield and eight residents from other locations joined the call. Also in attendance were Sean Fortier with the FAA, NOC representatives Jeff Hart, Linea Palmisano, Loren Olsen, Paul Borgstrom, and Lynn Moore, and five MAC staff.

MAC staff opened the meeting and asked each of the audience members to introduce themselves and where they were from. Staff then provided a brief NOC update and an overview of recent MSP activity. The presentation slides are available on the Listening Session page on our website: www.macnoise.com/our-neighbors/msp-quarterly-listening-sessions.

After the presentation, staff opened the floor to discussion. The topics discussed during the conversation included:

- Noise from arrival traffic to Runways 12L and 12R.
- Use of Runway 17 for departures during periods of low operations at MSP.
- Eagan-Mendota Heights Corridor compliance during periods of low operations at MSP.
- Frequency of use of the crosswind runway.
- Noise impacts from activity at Flying Cloud Airport.
- Operational restrictions at Flying Cloud Airport.
- How new residents and homebuyers are informed and engaged about the potential for airport noise from an existing facility.

The next Listening Session will be on October 28, 2020. Further details will be made available on the www.macnoise.com website.