



NOISE OVERSIGHT COMMITTEE

May 16, 2018

Audio recordings are made of this meeting

ITEM 1

REVIEW AND APPROVAL OF MARCH 21, 2018 MEETING MINUTES



NOISE OVERSIGHT COMMITTEE
MAY 16, 2018



ITEM 2

REVIEW OF MONTHLY OPERATIONS REPORTS: MARCH AND APRIL 2018



NOISE OVERSIGHT COMMITTEE
MAY 16, 2018



MSP OPERATIONS

MARCH 2018

35,397

Operations

2,381

Nighttime Operations
(10:30 PM – 6:00 AM)

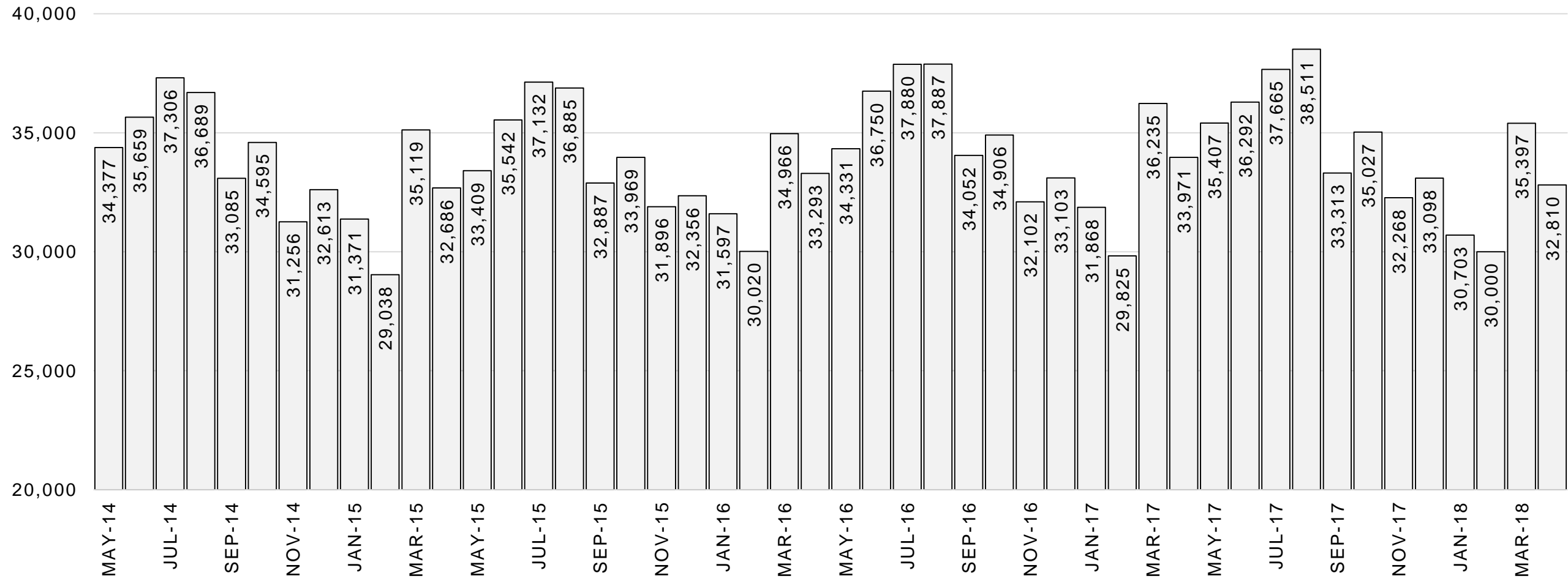
APRIL 2018

32,810

Operations

2,191

Nighttime Operations
(10:30 PM – 6:00 AM)



MSP OPERATIONS

MARCH 2018

APRIL 2018

35,397

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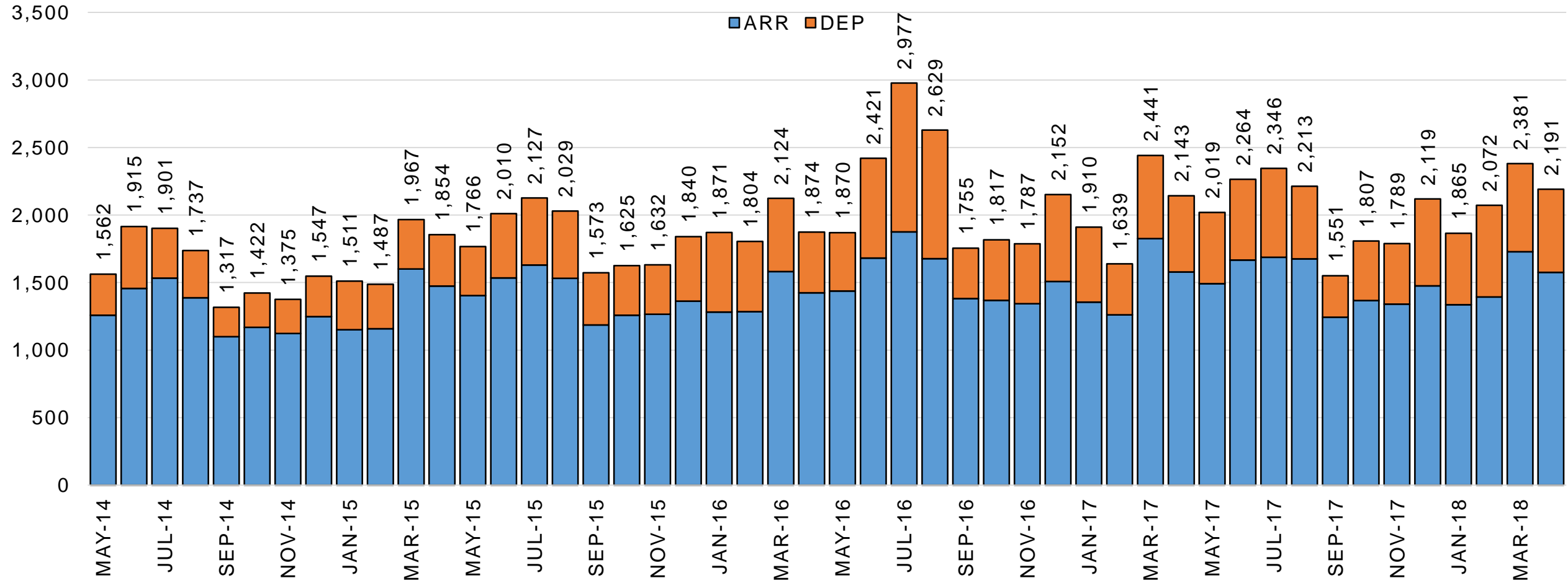
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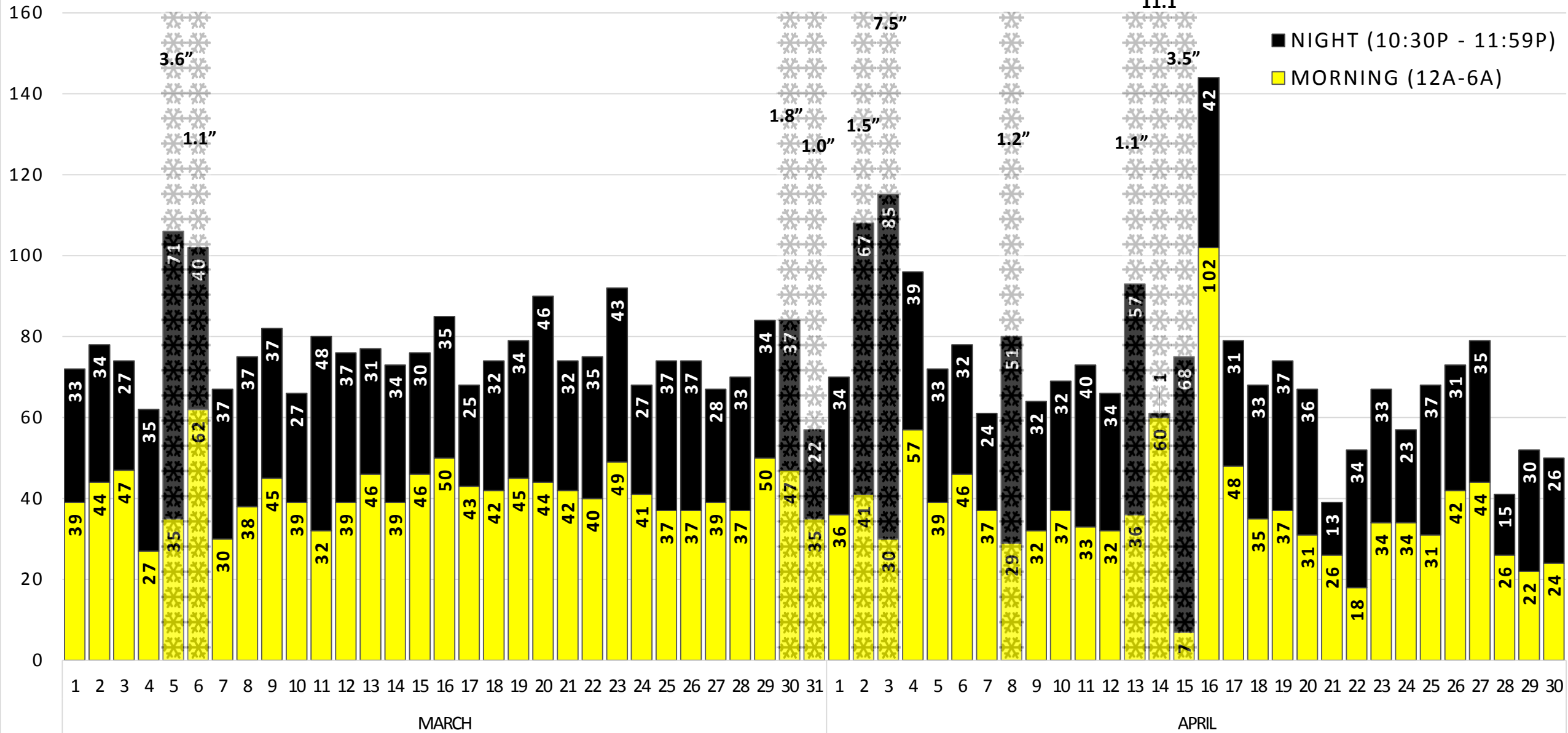
2,191

Nighttime Operations
(10:30 PM – 6:00 AM)



MSP OPERATIONS

MSP NIGHTTIME OPERATIONS MARCH - APRIL 2018



MAR-APR RUNWAY USE

34,124
ARRIVALS RECORDED

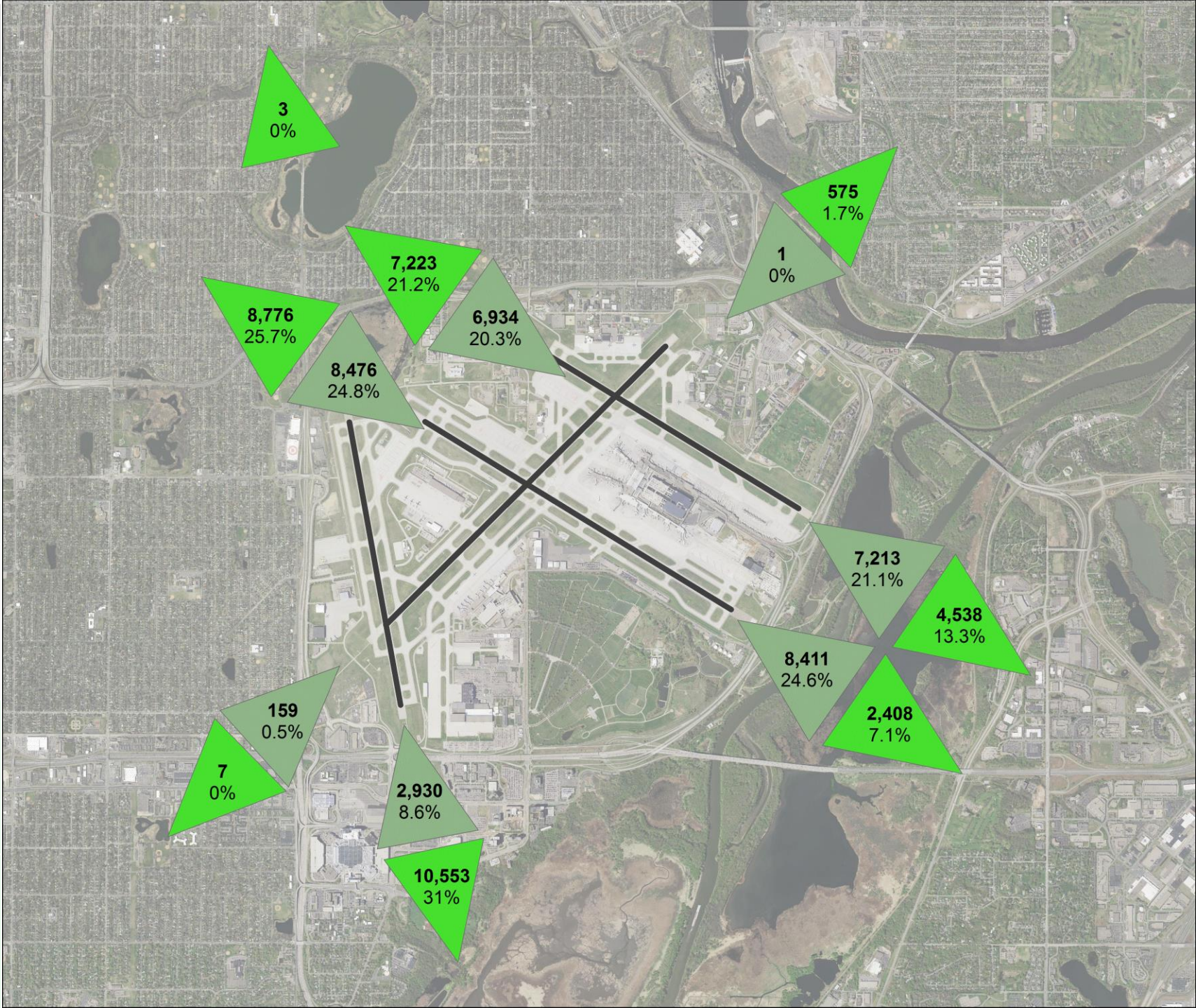
54.4%
RUNWAYS 30L, 30R OR 35

45.2%
RUNWAYS 12L OR 12R

34,083
DEPARTURES RECORDED

46.9%
RUNWAYS 30L OR 30R

51.3%
RUNWAYS 12L, 12R OR 17



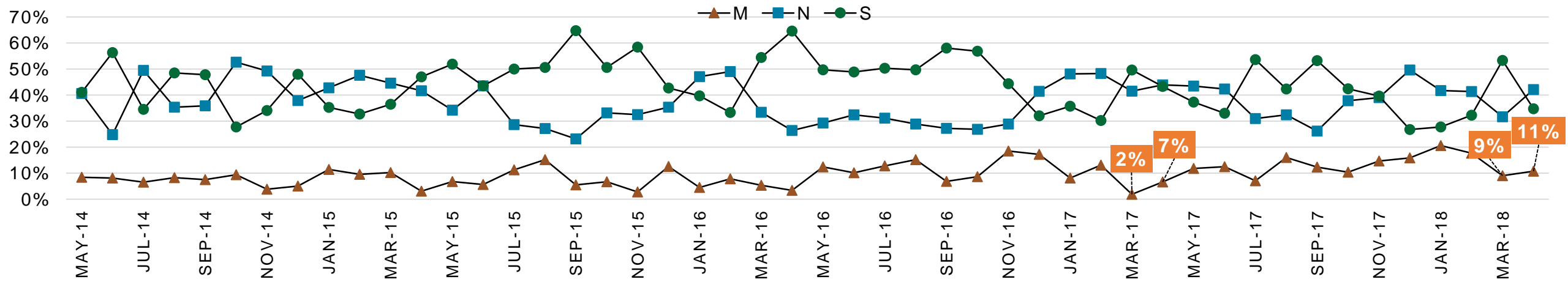
RUNWAY USE

MARCH 2018			APRIL 2018		
NORTH FLOW	SOUTH FLOW	MIXED FLOW	NORTH FLOW	SOUTH FLOW	MIXED FLOW
32%	53%	9%	42%	35%	11%

NORTH FLOW – 482 HOURS (37%)

SOUTH FLOW – 582 HOURS (44%)

MIXED FLOW – 129 HOURS (10%)

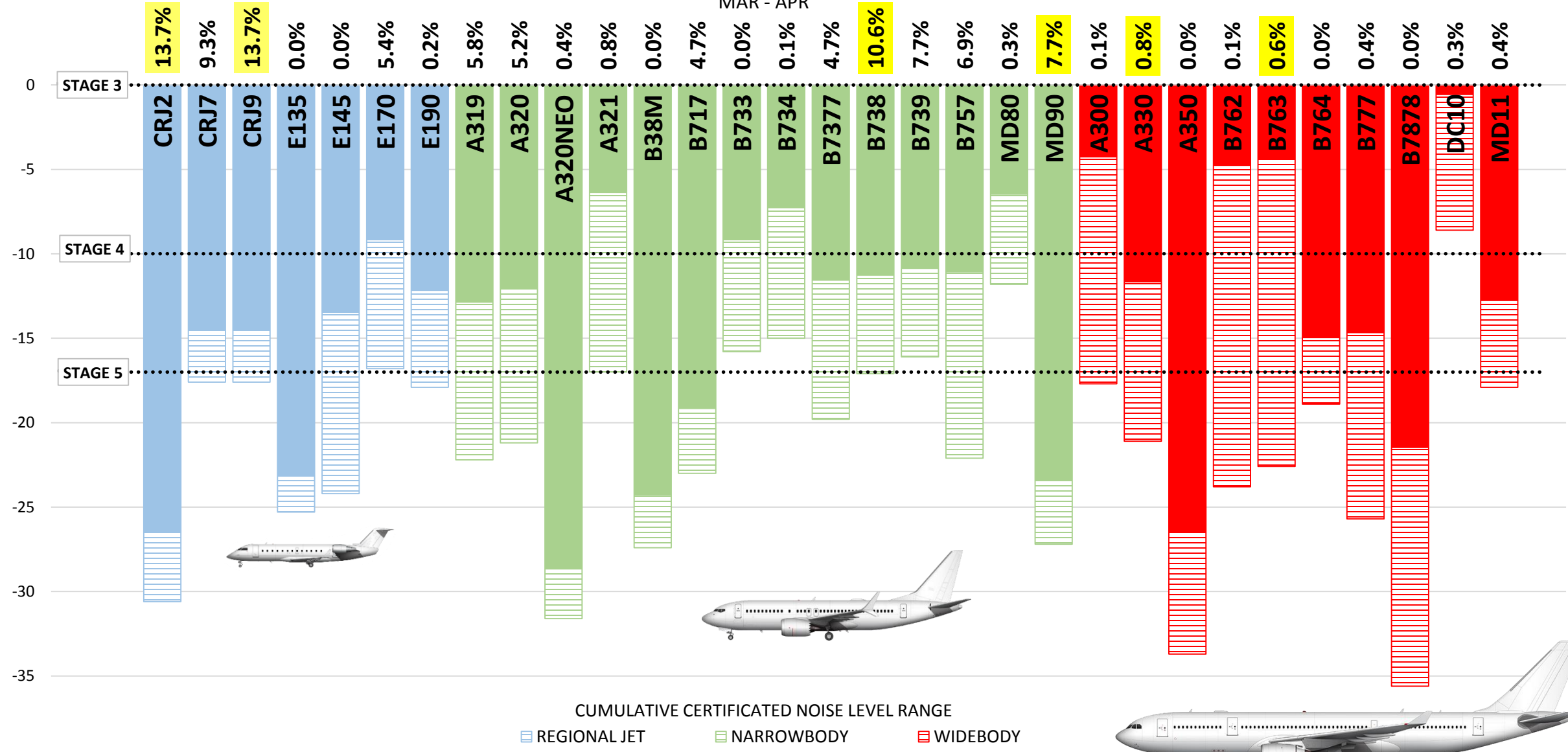


CARRIER JET FLEET MIX

2018 MSP CARRIER JET USAGE WITH CUMULATIVE CERTIFICATED NOISE LEVELS

MAR - APR

CUMULATIVE CERTIFICATED NOISE LEVEL BELOW STAGE 3 LIMITS (EPNDB)



CUMULATIVE CERTIFICATED NOISE LEVEL RANGE

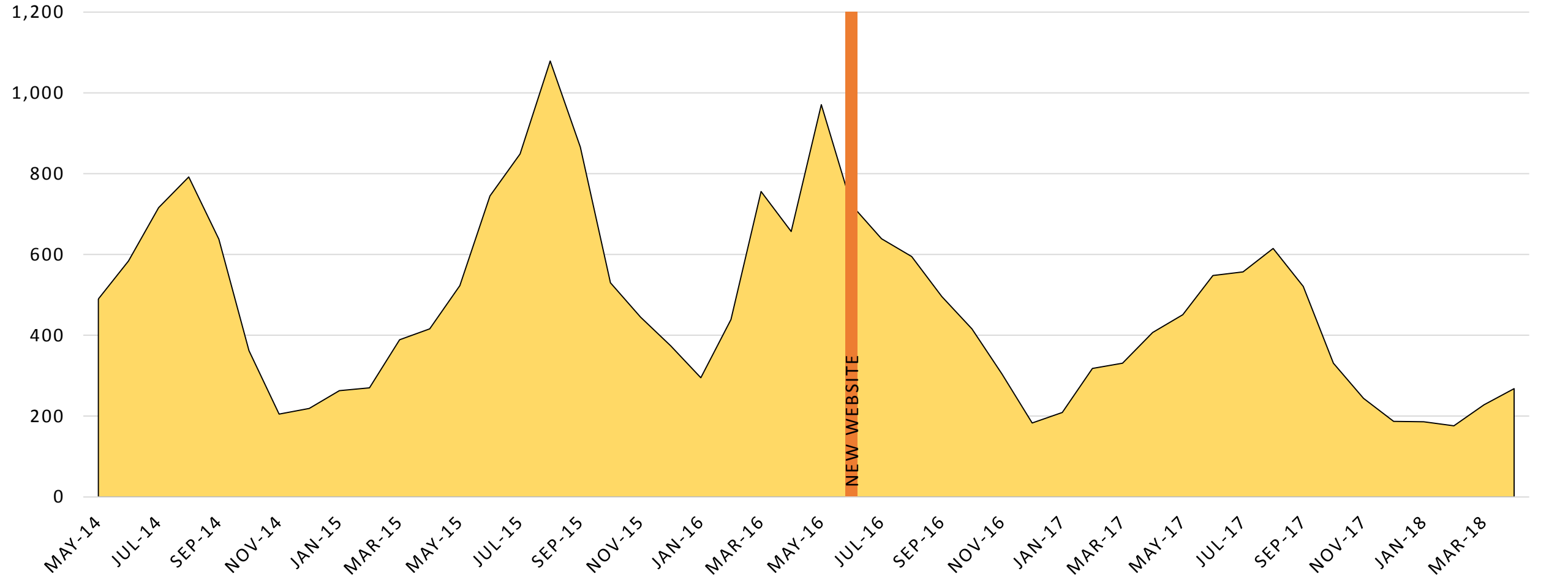
REGIONAL JET NARROWBODY WIDEBODY

SOURCE: USAGE DATA: MACNOMS; NOISE CERTIFICATION DATA: EUROPEAN AVIATION SAFETY AGENCY

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

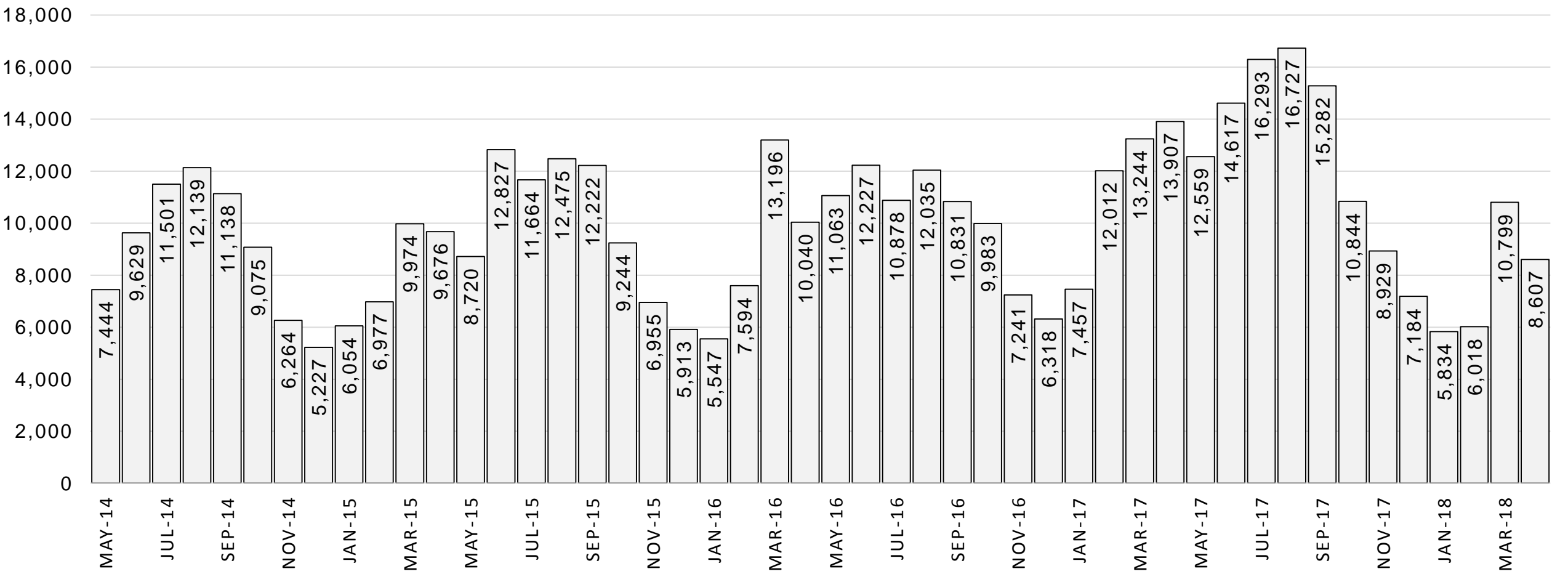
MSP COMPLAINTS

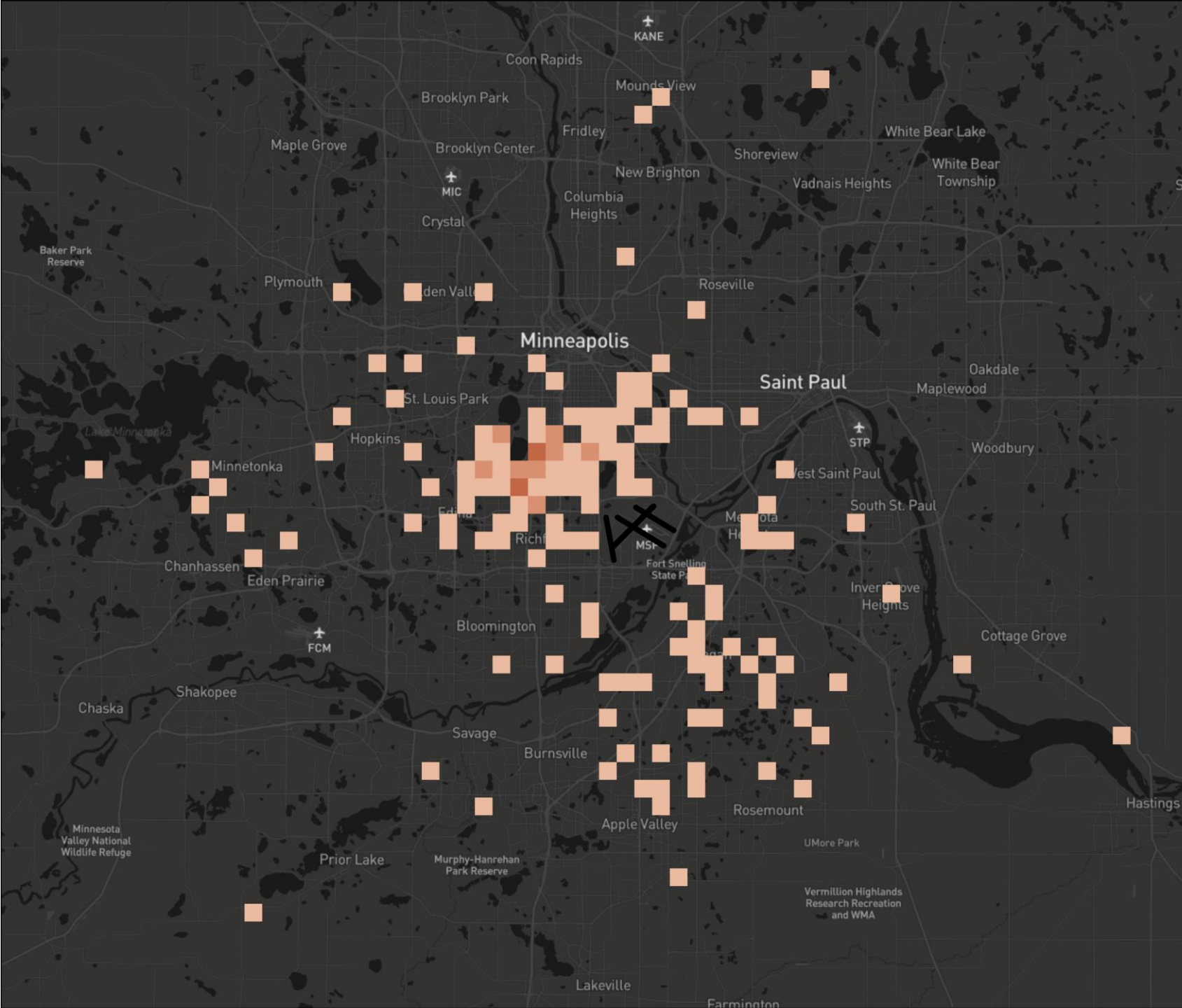
MARCH 2018				APRIL 2018			
COMPLAINTS	LOCATIONS			COMPLAINTS	LOCATIONS		
10,799	228			8,607	268		
Operations per Complaint	New Locations	Average	Median	Operations per Complaint	New Locations	Average	Median
3.3	17	47	5	3.8	27	32	4



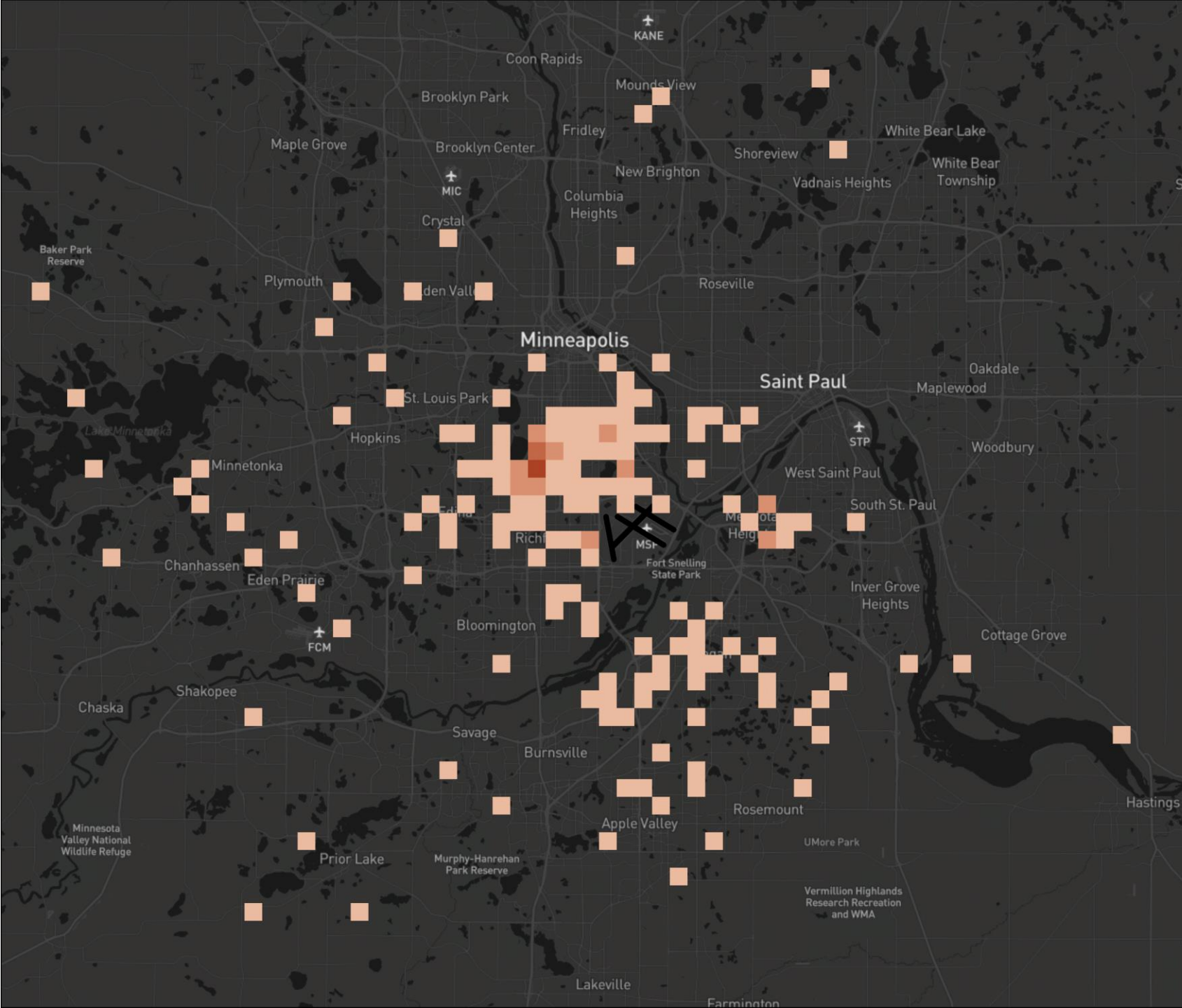
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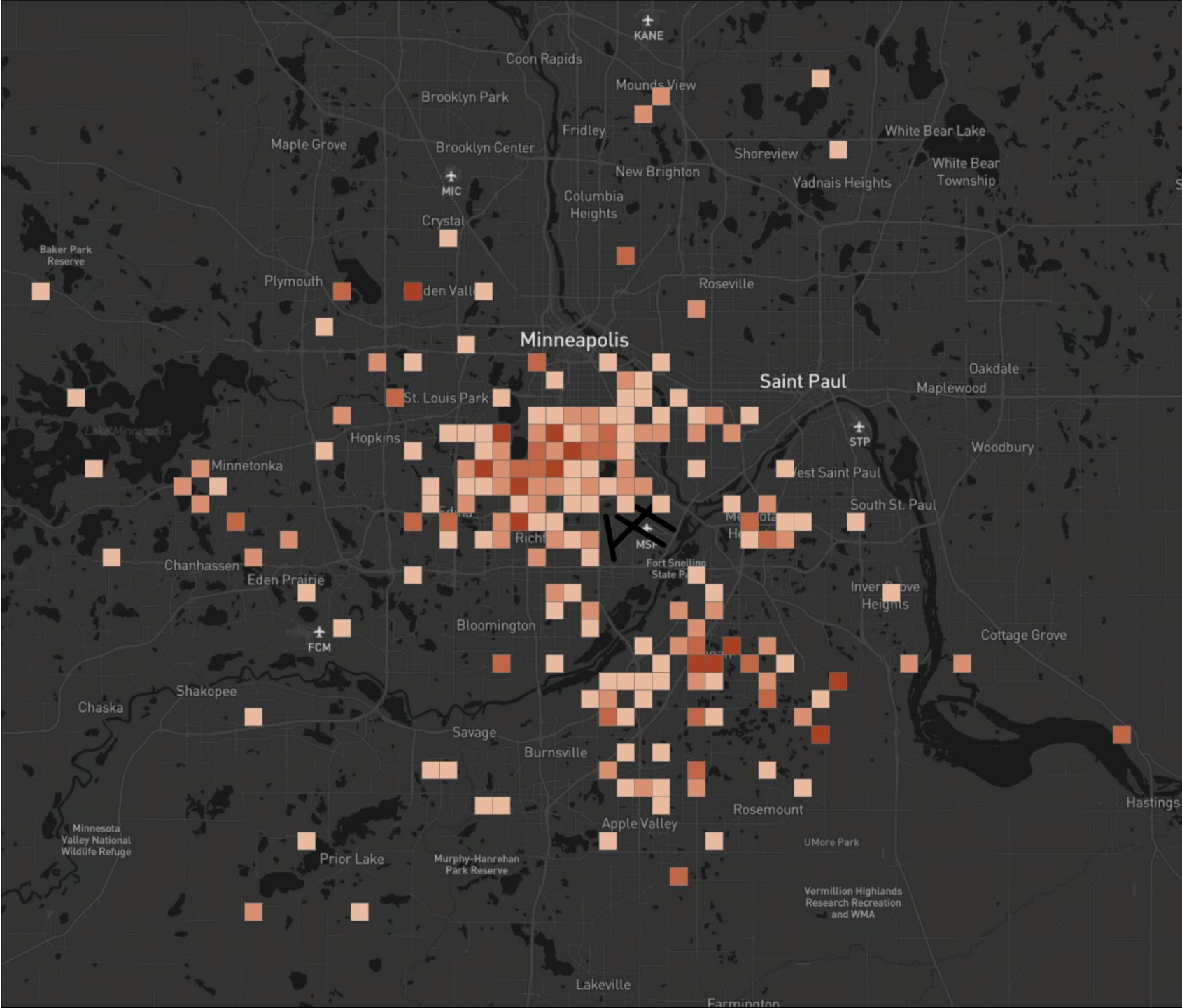




MARCH LOCATIONS	
145	AREAS WITH AT LEAST 1 LOCATION
0	AREAS WITH MORE THAN 10 LOCATIONS – 0%
2	AREAS WITH 6 – 10 LOCATIONS – 1.4%
8	AREAS WITH 4 OR 5 LOCATIONS – 5.5%
135	AREAS WITH 1 – 3 LOCATIONS – 93.1%



APRIL LOCATIONS	
160	AREAS WITH AT LEAST 1 LOCATION
1	AREAS WITH MORE THAN 10 LOCATIONS – 0.6%
1	AREAS WITH 6 – 10 LOCATIONS – 0.6%
10	AREAS WITH 4 OR 5 LOCATIONS – 6.3%
148	AREAS WITH 1 – 3 LOCATIONS – 92.5%



TOTAL COMPLAINTS	
195	AREAS WITH AT LEAST 1 LOCATION
13	AREAS WITH MORE THAN 300 COMPLAINTS – 6.7%
25	AREAS BETWEEN 60 AND 300 COMPLAINTS – 12.8%
60	AREAS BETWEEN 8 AND 60 COMPLAINTS – 30.8%
97	AREAS WITH LESS THAN 8 COMPLAINTS – 49.7%



TOP 10 LOCATIONS

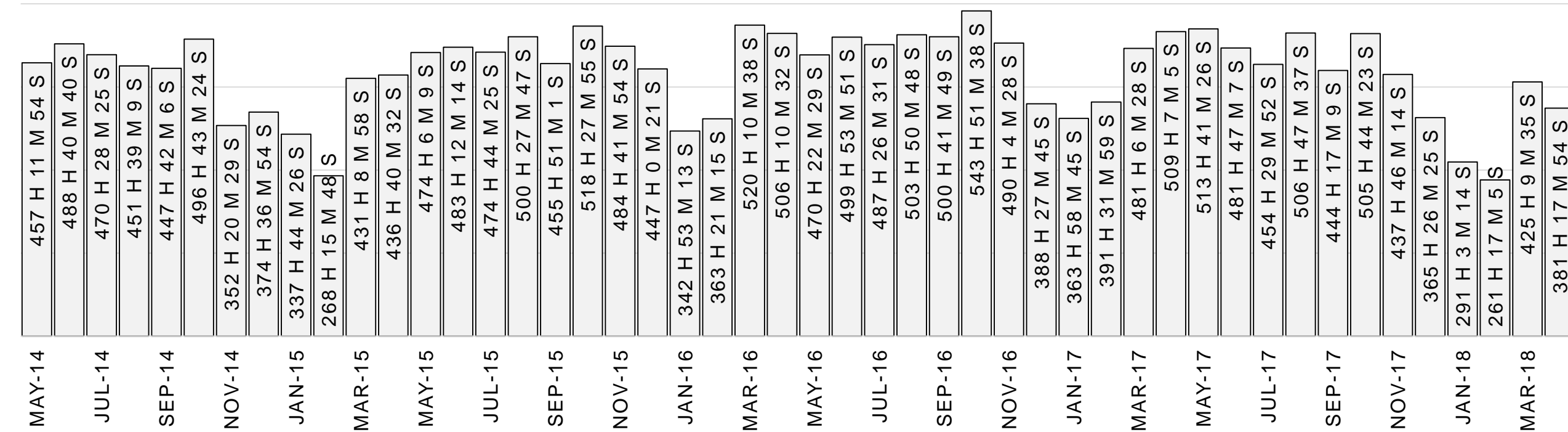
FILED
11,930
 (61.5%)
 COMPLAINTS DURING THE PREVIOUS
 2 MONTHS

8 OF 10
 LOCATIONS WERE IN THE TOP 10
 FOR JANUARY / FEBRUARY DATA

241
 (67.5%)
 LOCATIONS FILED 10 OR LESS
 COMPLAINTS

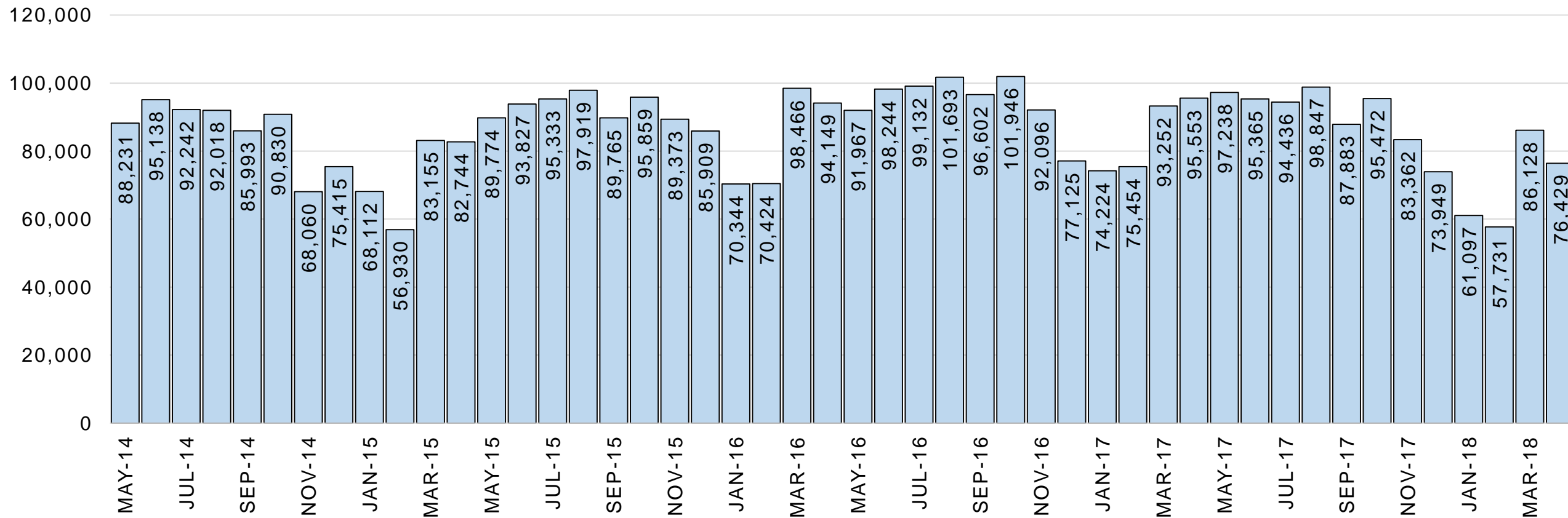
SOUND MONITORING

MARCH 2018			APRIL 2018		
Time Above	43_s TA ⁶⁵ per operation	425^h 9^m TA ⁶⁵	Time Above	42_s TA ⁶⁵ per operation	381^h 17^m TA ⁶⁵
Count Above	2.43 N ⁶⁵ per operation	86,128 N ⁶⁵	Count Above	2.33 N ⁶⁵ per operation	76,429 N ⁶⁵



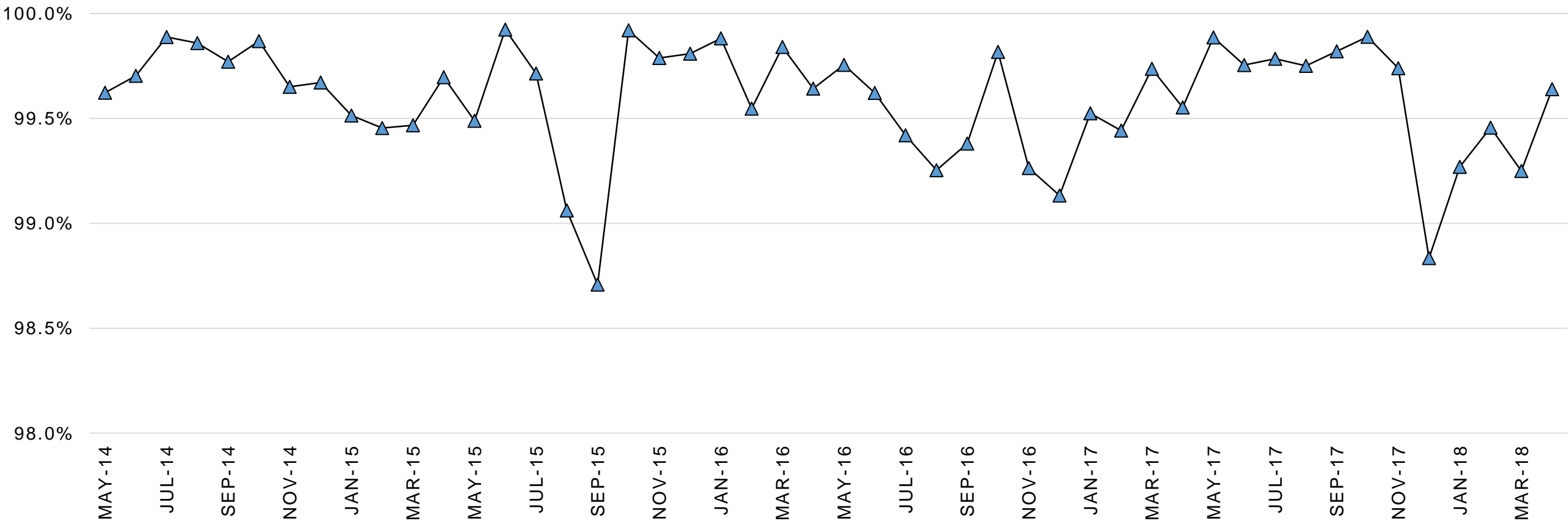
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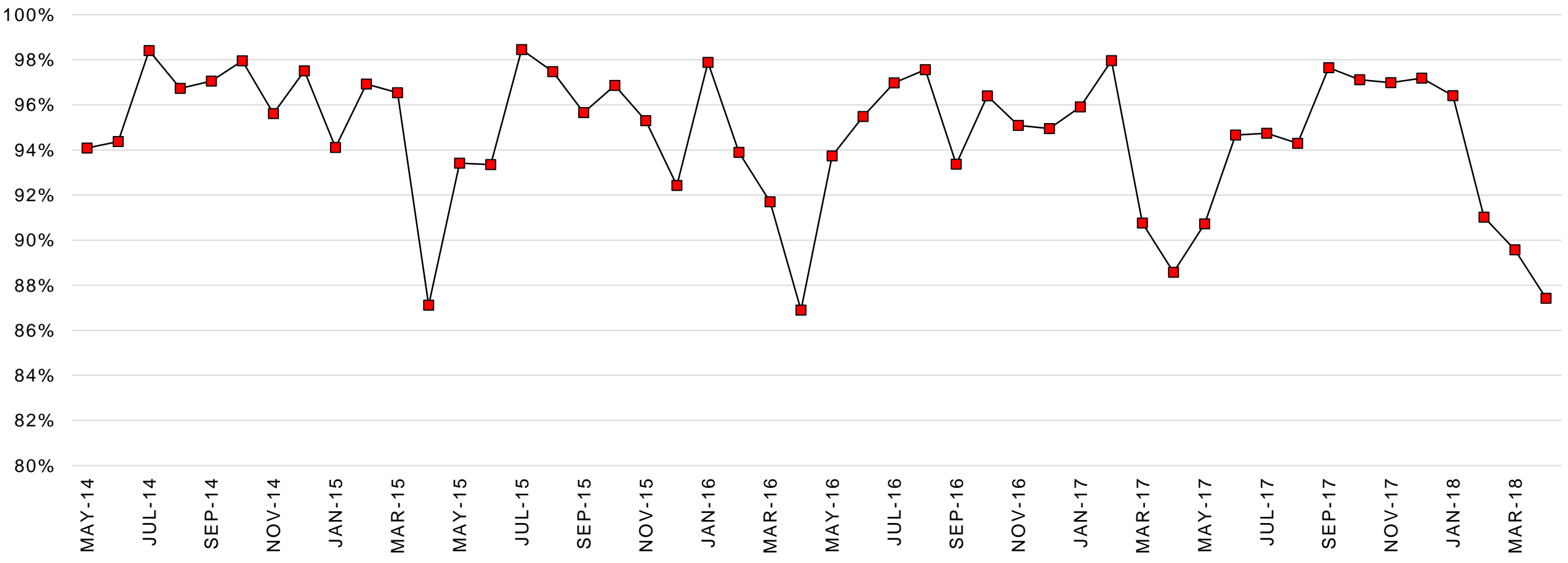
NOISE ABATEMENT

MARCH 2018				APRIL 2018			
Runway 17	99.2%	Cross Day	31.6%	Runway 17	99.6%	Cross Day	36.8%
Corridor	89.6%	Cross Night	29.4%	Corridor	87.4%	Cross Night	32.0%
RUS	52.8%	Arrive – 47%	Depart – 58%	RUS	52.9%	Arrive – 62%	Depart – 44%



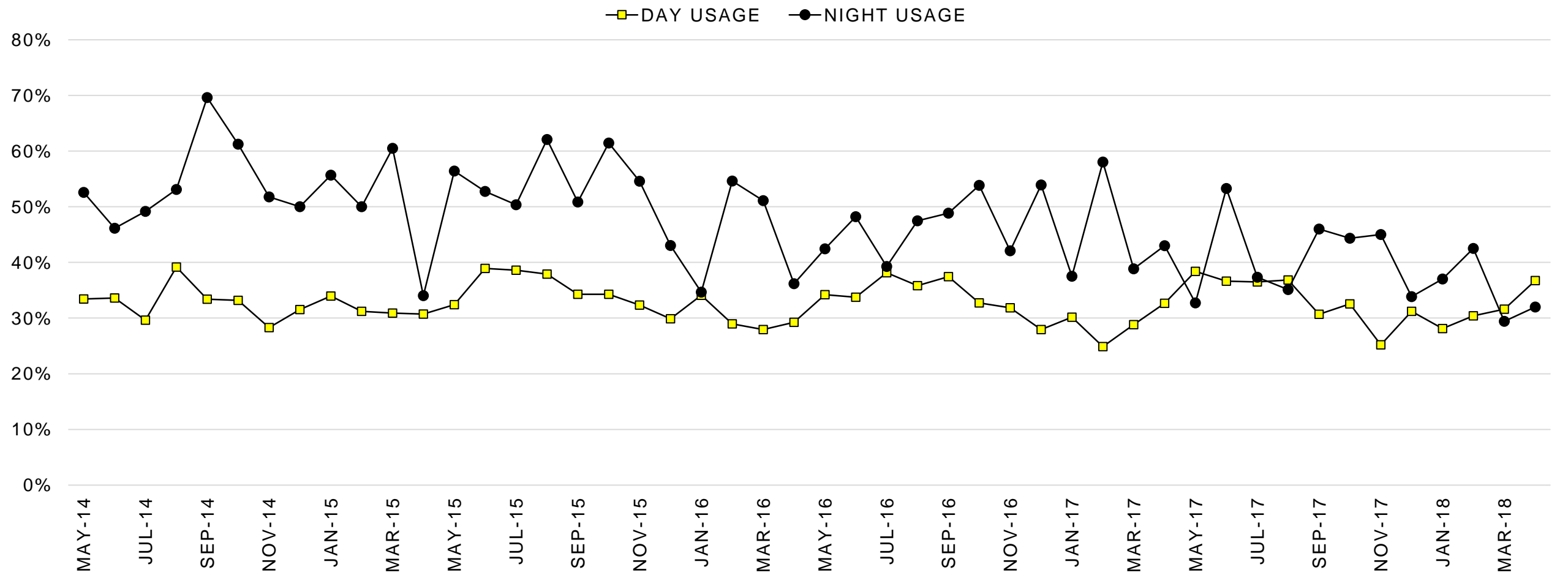
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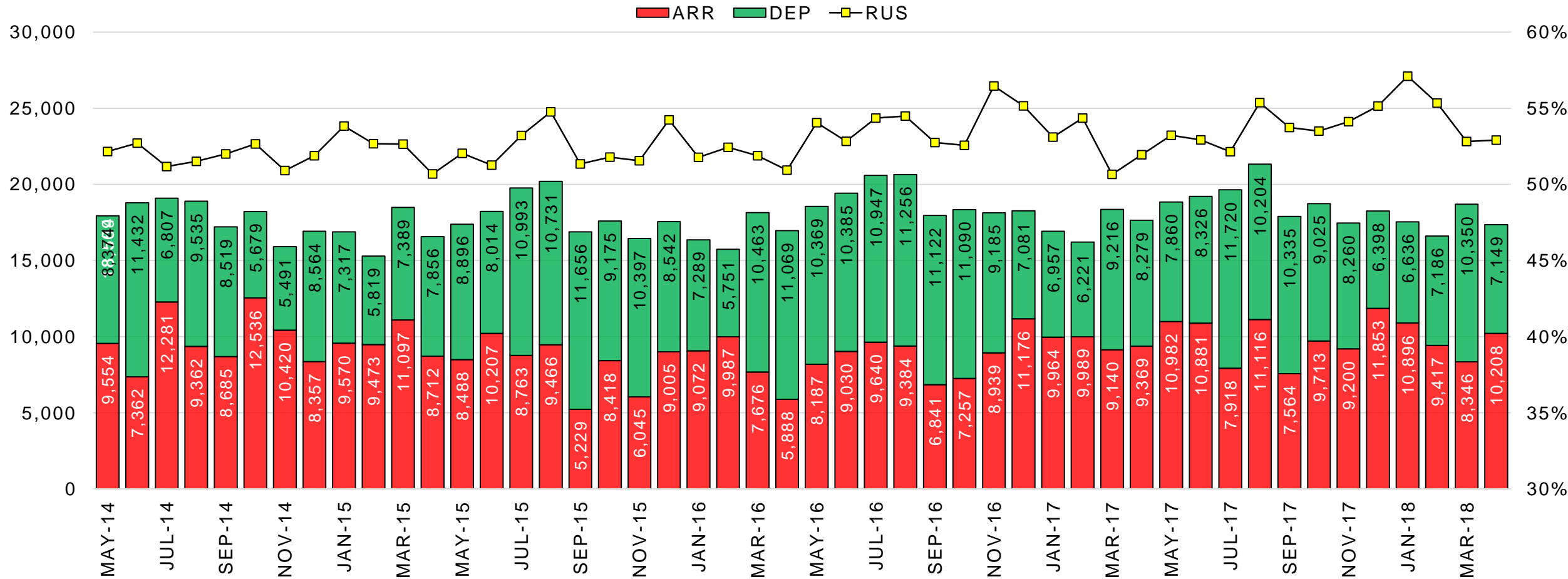


NOISE ABATEMENT

MARCH 2018

APRIL 2018

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ITEM 3 NOC BYLAW SUBCOMMITTEE RECOMMENDATIONS



MINNEAPOLIS - SAINT PAUL INTERNATIONAL AIRPORT



**NOISE OVERSIGHT COMMITTEE
MAY 16, 2018**



Item 3: NOC Bylaw Subcommittee Recommendations

- In January, the NOC established a Bylaw Review Subcommittee in response to a request from MSP FairSkies to “Enhance the NOC with greater stakeholder (citizen) representation”
- The following NOC members volunteered to participate:
 - Alex Mason (Endeavor Air)
 - Dwayne Lowman (Council Member – City of Bloomington)
 - Capt. Gordy Goss (Delta Air Lines Chief Pilot)
 - Loren Olson (City of Minneapolis)
- The group established the following objective at its February 14 meeting:

Evaluate the Committee Meeting structure of the NOC Bylaws, identify opportunities for improved citizen input during meetings, and develop recommended changes for consideration by the full NOC.



The Subcommittee met on Feb 14 and April 4 and focused on the following sections of the NOC Bylaws:

ARTICLE VIII Committee Meetings

4. Time and location of NOC meetings
5. Items added to future agendas
6. Public comment period at NOC meetings



Subsection 4 - time and location of NOC meetings. The following ideas were discussed and received support from the Subcommittee:

- NOC members are strongly suggested to attend Listening Sessions when able.
- Hold one evening meeting by the NOC each year (suggested November for approval of the Work Plan).
- Changing the time and location of the NOC meetings should be further evaluated in the future.
- The Subcommittee members agreed that this section of the Bylaws should be amended to allow more flexibility for evening meetings.



Subsection 5 – Items added to future agendas. The following ideas were discussed and received support from the Subcommittee:

- Due to the rigid and lengthy process for adding agenda items to NOC meeting agendas, the Bylaws should be revised to allow some flexibility for the Co-Chairs to add items to upcoming meetings at their discretion.



Subsection 6 – Public comment period at NOC meetings. The following ideas were discussed and received support from the Subcommittee:

- Remove the requirement in the Bylaws to have speakers sponsored by two (2) members of the Committee.
- Model the public comment period after “Citizens to be Heard” at city meetings using “I wish to speak” cards for individuals wishing to make a comment, then the acting Chairperson can make a final request for those wishing to speak who did not fill out a card.
- Move the comment period on the agenda to after the monthly operations update report, however keep this specificity out of the Bylaws to allow flexibility on the agenda structure.
- The time for the public comment period should be extended from the current fifteen (15) minutes to twenty (20) minutes with the ability to change it at meeting by majority vote.



Subsection 6 – Public comment period at NOC meetings. (Cont'd) The following ideas were discussed and received support from the Subcommittee:

- The time limit for individual speakers should continue to be three (3) minutes, but there are some situations where the acting chairperson may need to allow additional time and that ability should be reflected in the Bylaws.
- The NOC members should have the ability to ask clarifying questions of the speaker, if necessary.
- MAC Staff should provide the Co-Chairs with a prepared script to open up the public comment period of the meeting. The script would cover the public comment guidelines, such as speaking into the microphone, stating name and address, the speaker's comment time, and what the Committee does with comments.
- A section on the macnoise.com website should be created to provide public comment period guidelines at NOC meetings so individuals wishing to speak know what to expect. This would include the steps individuals wishing to speak should go through to provide comment, what they can expect at the meeting, and what the Committee does with comments.



Item 3: NOC Bylaw Subcommittee Recommendations

- Proposed redline edits to the Bylaws were included in the NOC Agenda Packet.
- The Subcommittee proposes to allow time for members to deliberate the recommendations and come back with the action at the July 18, 2018 NOC meeting.



ITEM 4

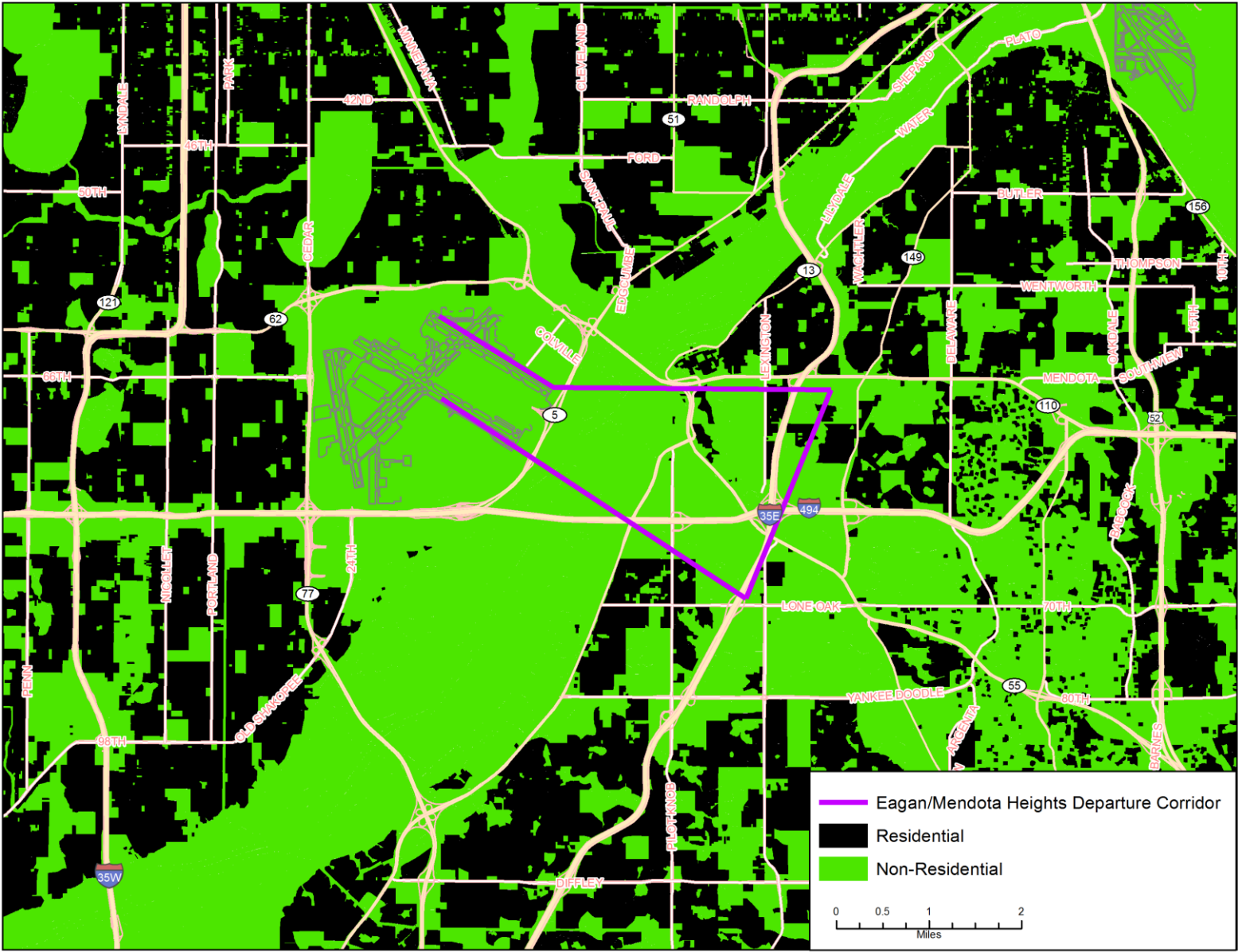
EVALUATE MENDOTA HEIGHTS AIRPORT RELATIONS COMMISSION RUNWAY 12L DEPARTURE PROPOSAL



NOISE OVERSIGHT COMMITTEE
MAY 16, 2018

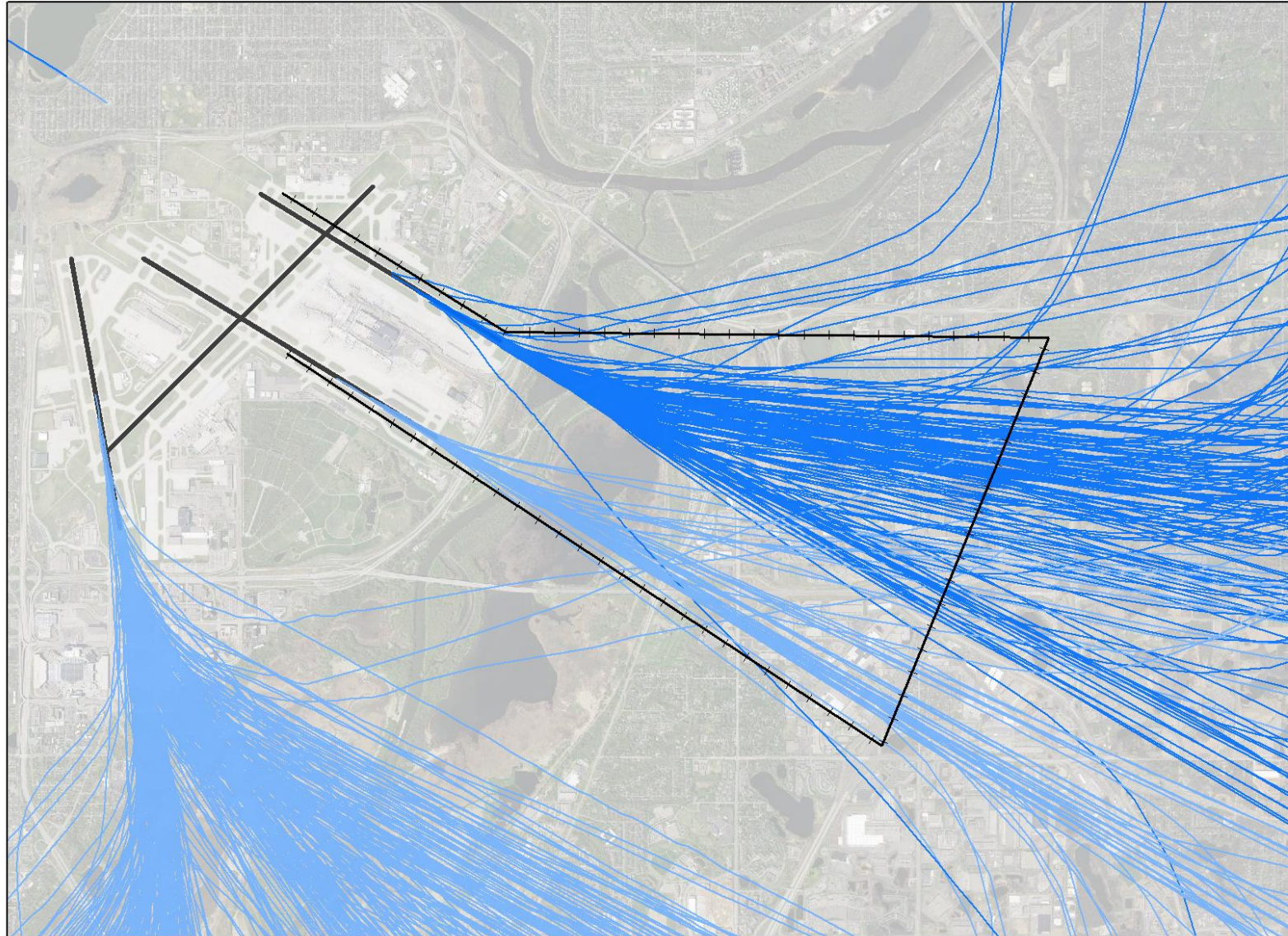


Item 4: Evaluate Mendota Heights Airport Relations Commission Runway 12L Departure Proposal



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MSP SOUTH DEPARTURES - MARCH 2, 2018



Item 4: Evaluate Mendota Heights Airport Relations Commission Runway 12L Departure Proposal

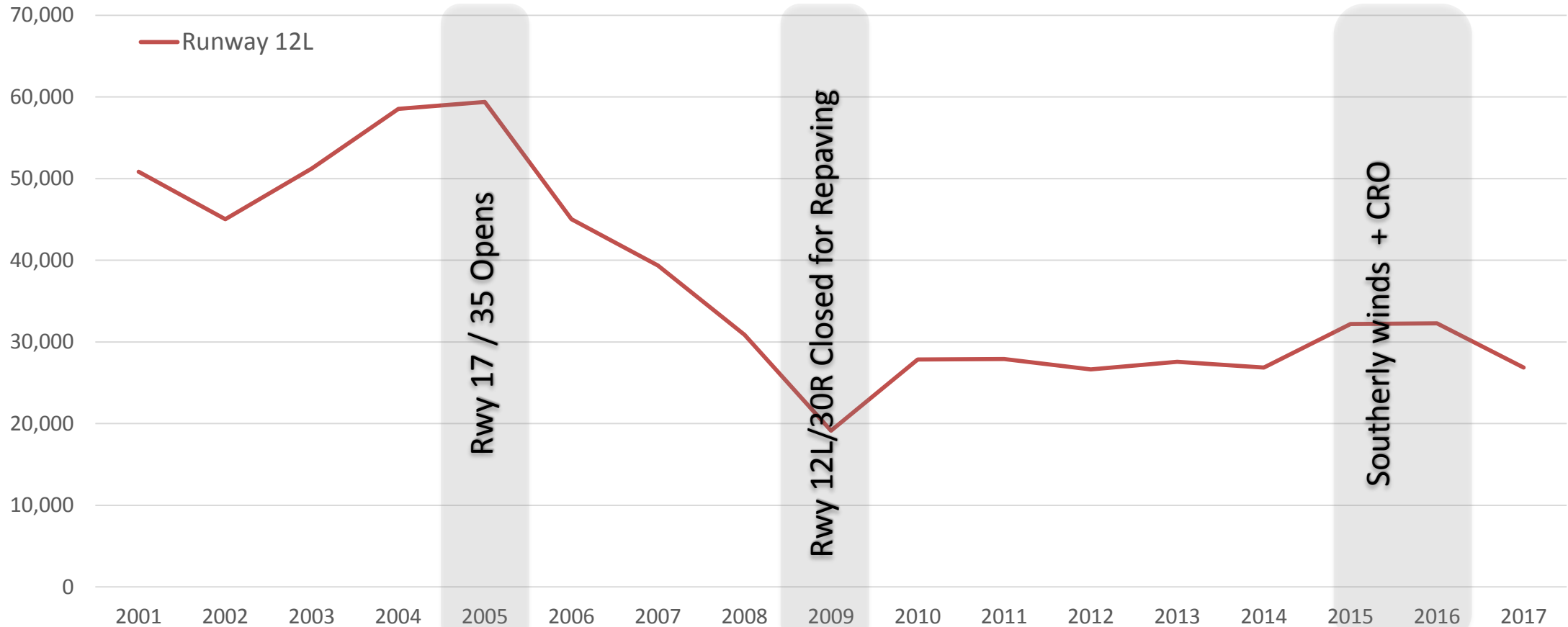
Eagan/Mendota Heights Departure Corridor History

- Preferential Runway system, established in 1969, affirmed the use of the Corridor as the 1st priority for overflights.
- Corridor procedures were defined/implemented in 1974 and the existing procedures were established in the mid-1980s.
- In the early 1990s, the MAC made two proposals for altering Corridor operations, which were evaluated in the Part 150 Update:
 - Crossing-in-the-Corridor using low-demand flight tracks. These are runway heading for Runway 12L departures and a 105-degree heading for Runway 12R departures. This would place the departures near the middle of the Corridor near the 35E/494 interchange. These were included in the Noise Compatibility Plan and incorporated into the ATCT standard operating procedures.
 - Moving the 090-degree northern boundary to 095. The Part 150 Update found this option would reduce the available headings from 3 to 2 off Runway 12L and was dismissed as it would significantly reduce runway capacity and increase delay.



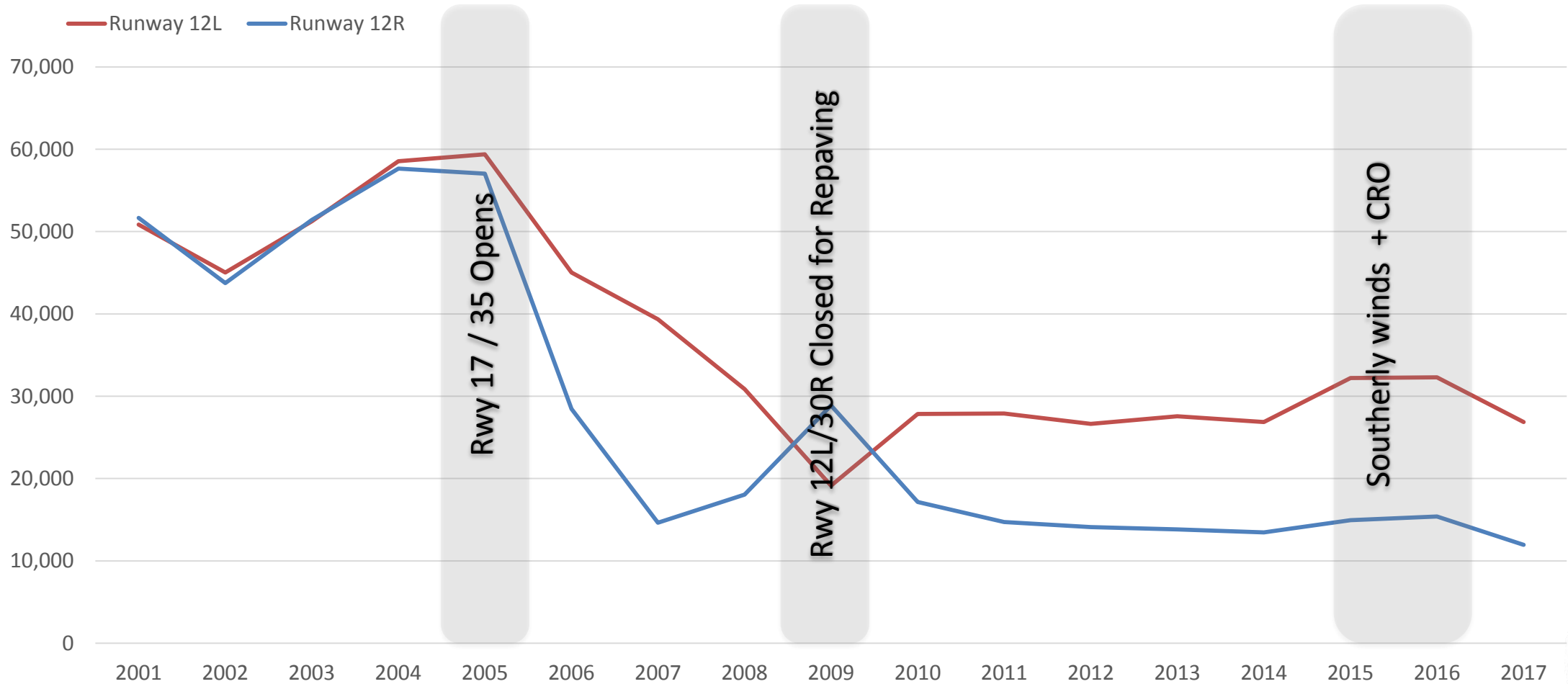
Item 4: Evaluate Mendota Heights Airport Relations Commission Runway 12L Departure Proposal

Runway 12L Departure Operational Trends (2001-2017)



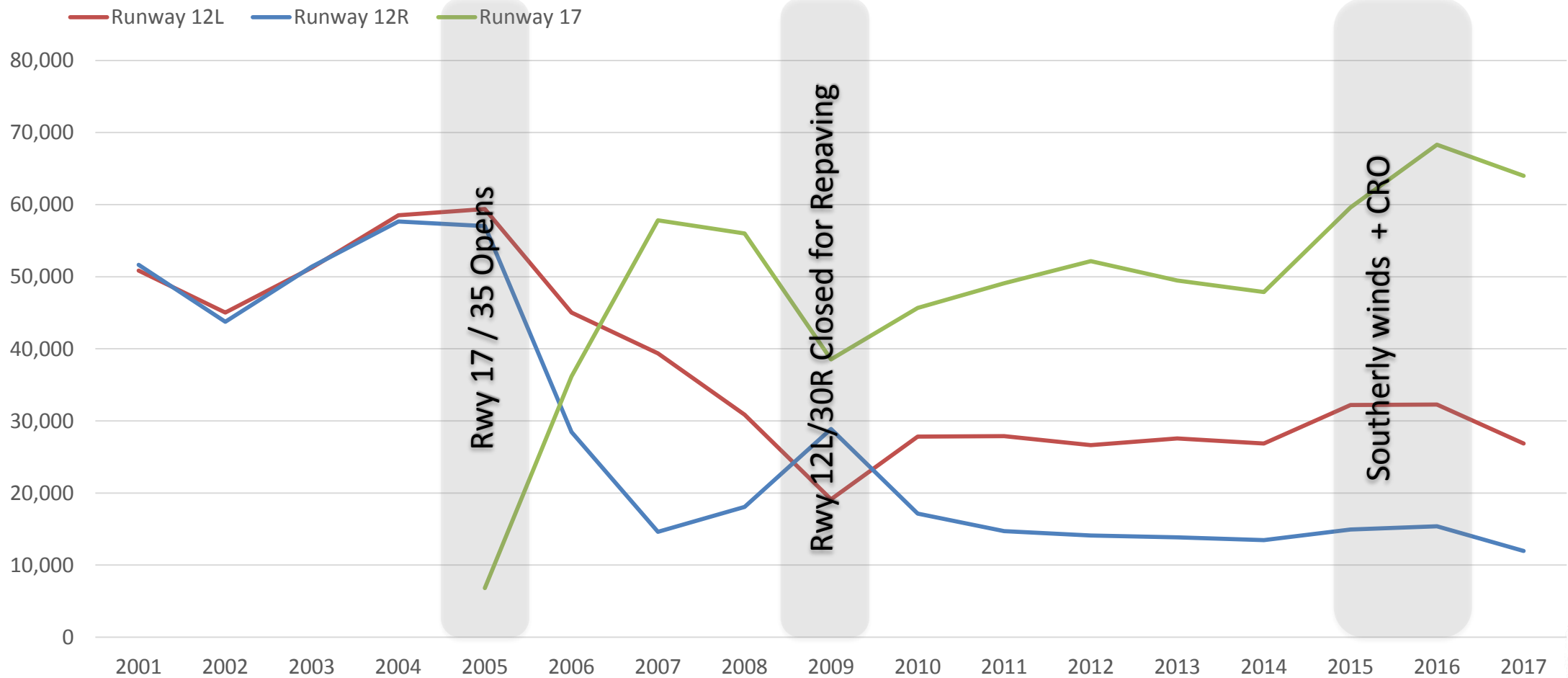
Item 4: Evaluate Mendota Heights Airport Relations Commission Runway 12L Departure Proposal

Runway 12L & 12R Departure Operational Trends (2001-2017)



Item 4: Evaluate Mendota Heights Airport Relations Commission Runway 12L Departure Proposal

Runway 12L, 12R, 17 Departure Operational Trends (2001-2017)



ITEM 5

REVIEW AND DISCUSS RUNWAY USE SYSTEM PRIORITIES



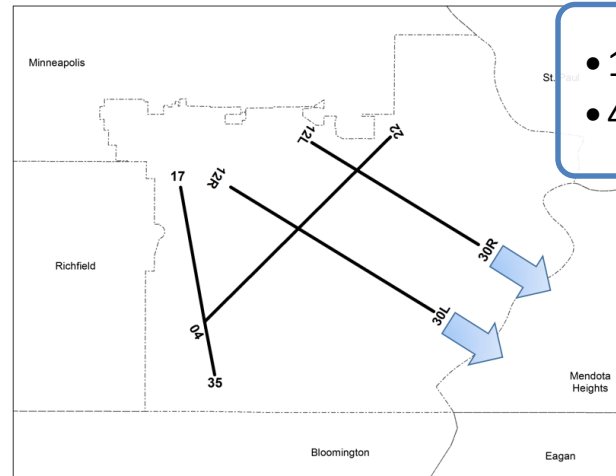
NOISE OVERSIGHT COMMITTEE
MAY 16, 2018



Item 5: Review and Discuss Runway Use System Priorities

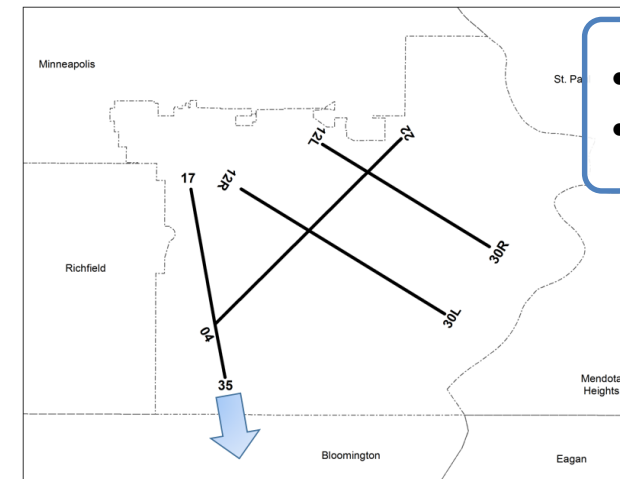
2017 Departures

Priority 1 (12L and 12R)



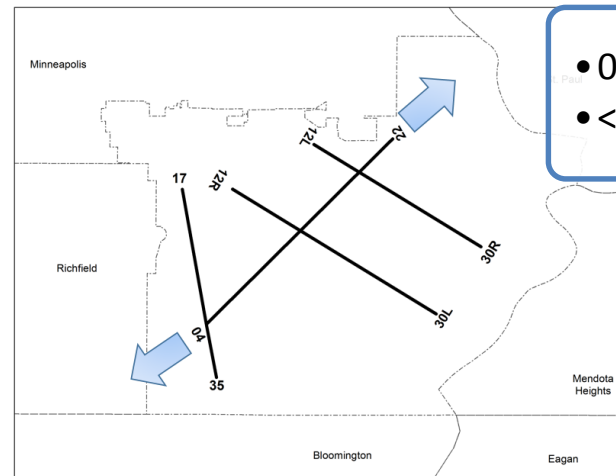
- 18.8% all hours
- 42.9% at night

Priority 2 (17)



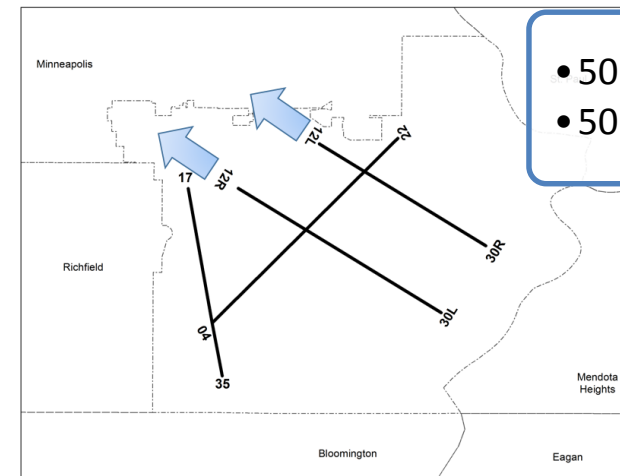
- 31.0% all hours
- 6.3% at night

Priority 3 (Balanced Use of 4/22)



- 0.1% all hours
- <0.1% at night

Priority 4 (30L and 30R)



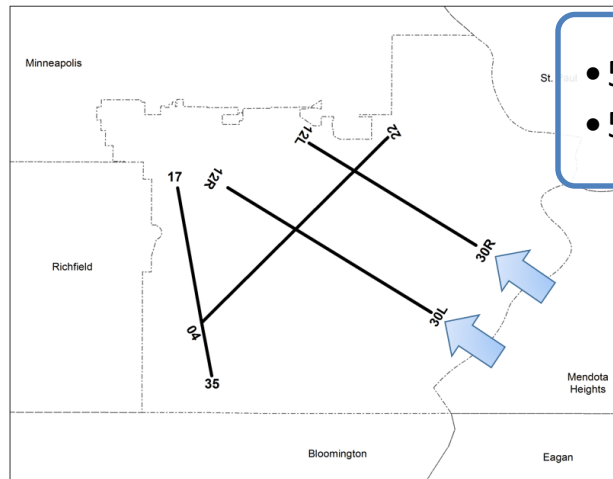
- 50.1% all hours
- 50.7% at night



Item 5: Review and Discuss Runway Use System Priorities

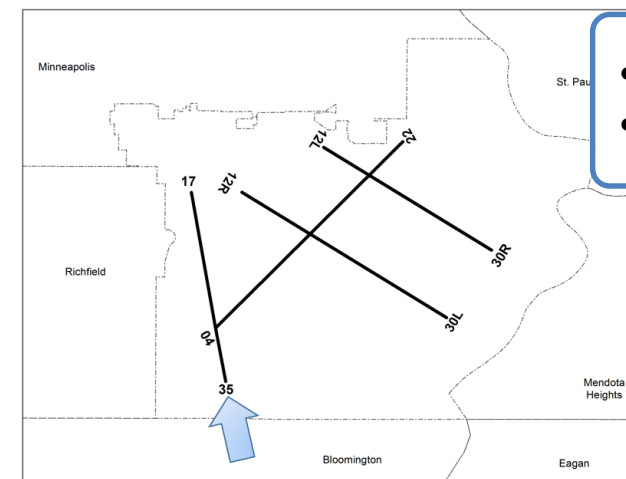
2017 Arrivals

Priority 1 (30L and 30R)



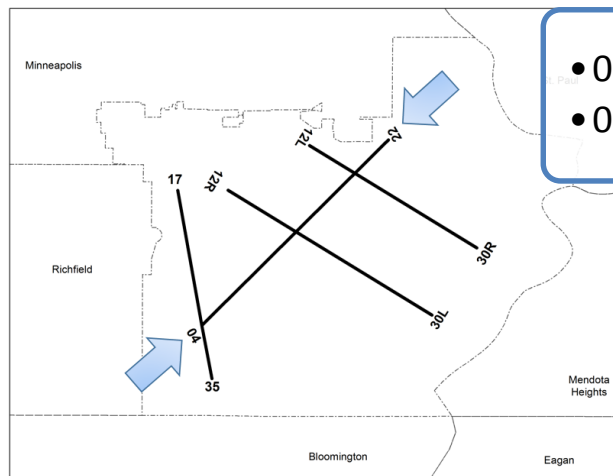
- 50.5% all hours
- 58.2% at night

Priority 2 (35)



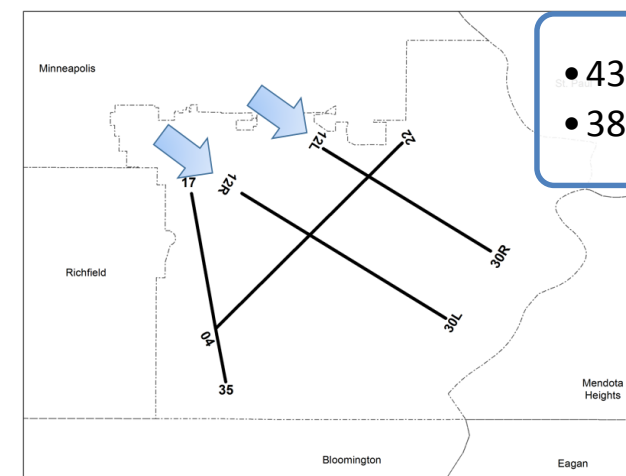
- 6.4% all hours
- 3.3% at night

Priority 3 (Balanced Use of 4/22)



- 0.1% all hours
- 0.1% at night

Priority 4 (12L and 12R)



- 43.0% all hours
- 38.4% at night



Item 5: Review and Discuss Runway Use System Priorities

Reporting the RUS under the Abatement tab of the Interactive Reports website macenvironment.org/reports/

Runway Use System

ARRIVALS						
RUNWAY	TOTAL	%	NIGHT	%	MORNING	%
12L	4144	23.4%	208	1.2%	127	0.7%
12R	5219	29.5%	651	3.7%	94	0.5%
30L	3801	21.5%	609	3.4%	112	0.6%
30R	3225	18.2%	168	0.9%	148	0.8%
35	1320	7.5%	92	0.5%	32	0.2%
ARRIVALS	17709	100%	1728	9.8%	513	2.9%
TOTAL	35397		2381		1995	

DEPARTURES						
RUNWAY	TOTAL	%	NIGHT	%	MORNING	%
12L	2682	15.2%	114	0.6%	160	0.9%
12R	1499	8.5%	271	1.5%	287	1.6%
17	6169	34.9%	39	0.2%	397	2.2%
22	2	0.0%	0	0.0%	1	0.0%
30L	4160	23.5%	161	0.9%	386	2.2%
30R	3176	18.0%	68	0.4%	251	1.4%
DEPARTURES	17688	100%	653	3.7%	1482	8.3%
TOTAL	35397		2381		1995	

Download the CSV

USE OF RUS HIGH-PRIORITY RUNWAYS		Count
DESCRIPTION		
Arrivals 30L, 30R, 35		83
Departures 12L, 12R, 17		103
Use of RUS High-Priority Runways		186

Download the CSV

NOTE: Night: 10:30 PM – 6:00 AM, Morning: 6:00 AM – 7:30 PM, Evening: 9:00 PM – 10:30 PM

Source: MACNOMS

Runway Use System Tool

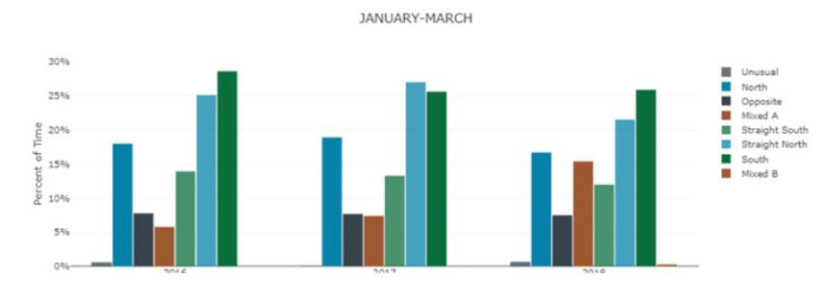
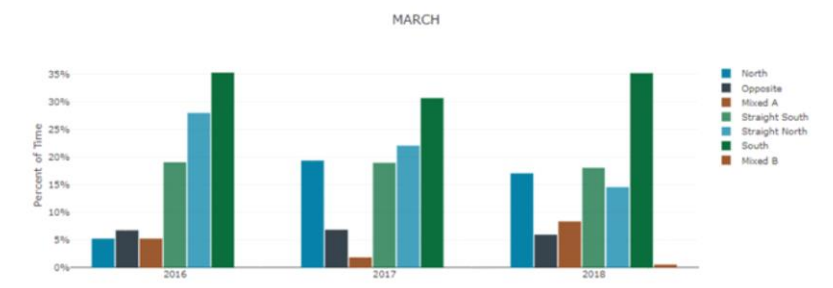
Previous 2018-03-01 Next



Runway Use System by Flow

All Night What is the runway use system? Learn More

YEAR	MARCH				JANUARY-MARCH			
	MIXED	NORTH	SOUTH	OPPOSITE	MIXED	NORTH	SOUTH	OPPOSITE
2016	5.3%	33.3%	54.4%	6.8%	5.8%	43.1%	42.8%	7.8%
2017	1.0%	41.5%	40.7%	6.0%	7.4%	45.9%	38.9%	7.7%
2018	9.0%	31.7%	53.3%	6%	15.7%	38.2%	37.9%	7.5%



Item 5: Review and Discuss Runway Use System Priorities

Traffic Demand Period Criteria

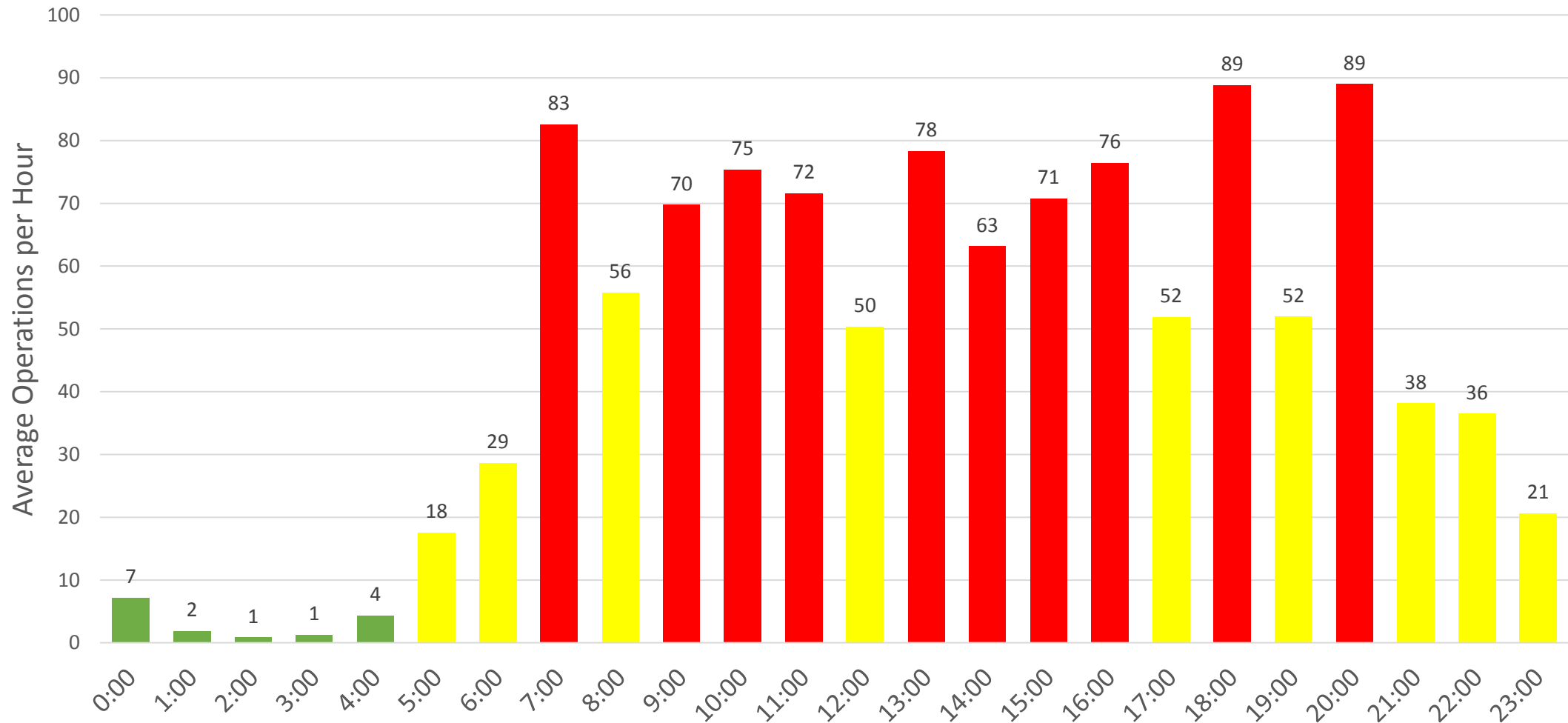
Demand Period	Traffic Demand (Operations per 15-minute segment)	RUS Status
Low	Less than 3.5	Traffic levels allow for maximum flexibility in runway selection and RUS implementation, including the use of unique procedures such as Opposite Direction.
Mid	Between 3.5 and 15	Traffic levels allow for efficient selection of runways based on noise considerations, given requirements for runway crossings, capacity, etc.; moderate use of the RUS.
High	Greater than 15	The need to maintain operational capacity does not allow ATC flexibility in runway selection; limited use of the RUS.

Source: Table A-3 from Final Environmental Assessment and Finding of No Significant Impact (FONSI)/Record of Decision (ROD); July 2003.



Item 5: Review and Discuss Runway Use System Priorities

Average Hourly Traffic Demand, 2017: Total Operations
Green = Low Demand Yellow = Mid Demand Red = High Demand



ITEM 6

UPDATE ON THE FAA'S SURVEY TO RE-EVALUATE NOISE MEASUREMENT METHODS

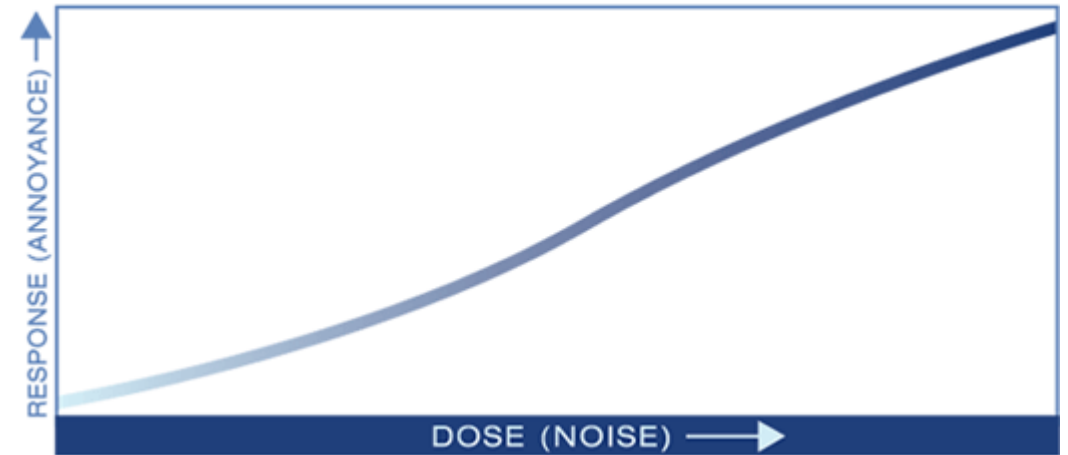


NOISE OVERSIGHT COMMITTEE
MAY 16, 2018



Item 6: Update on the FAA's Survey to Re-Evaluate Noise Measurement Metrics

- May 2015 FAA announced it would begin updating the dose-response relationship between noise exposure and the percentage of people who are highly annoyed
- This is a part of a larger effort by the FAA, which includes studying the relationship between noise and sleep disturbance, cardiovascular health, and children's cognitive learning
- FAA has indicated that the survey results are planned to be released in Q2 2018, however they are still undergoing inter-agency review (DOD and HUD)
- The results will be released in the form of a report, covering the purpose of the study, the scientific approach and the survey results
- FAA has stated that when the results will be released on their website and announced through the federal register to begin the process of taking stakeholder feedback
- The release of the results will not include any discussion on implications to changing policy



Item 6: Update on the FAA's Survey to Re-Evaluate Noise Measurement Metrics

The survey

- A 12-question survey called the “Neighborhood Environmental Survey” was sent to residents around 20 airports throughout 2016 and early 2017
- The FAA is not releasing the airports involved in the survey
- The methodology behind the wording of the question, the position of the question within the survey and the selection of respondents were derived from and/or vetted through the International Committee on the Biological Effects of Noise (ICBEN), BTS, OMB, social scientists and a pilot project through ACRP
- Airports were selected using the following criteria
 - Needed at least 100 annual jet operations
 - Needed at least 100 households in the 65 DNL
 - Needed at least 100 households in the 60-65 DNL
- The 20 final airports were determined using Balanced Sampling, which ensures the cohort of airports matches the overall 95 airports on the following factors:
 - Geographic balance
 - Average temperature
 - Number of operations
 - % of nighttime operations
 - Fleetmix
 - Population in the vicinity of the airports



Item 6: Update on the FAA's Survey to Re-Evaluate Noise Measurement Metrics

The survey

- Residents were selected by running noise contours in 5 dB bands from DNL 50-70 using flight data for the 20 airports
- Their response goal was to have at least 100 respondents per contour band for a total of 500 respondents per airport and a grand total of 10,000 respondents
- The FAA plans to use the Federal Register to publish a link to an FAA website to view the detailed noise annoyance survey report
- FAA has built a new section of this website with information on the fundamentals of noise and sound, community response to noise and history of noise:
https://www.faa.gov/regulations_policies/policy_guidance/noise/history/



ITEM 7 REVIEW OF THE SPRING LISTENING SESSION



**NOISE OVERSIGHT COMMITTEE
MAY 16, 2018**



Item 7: Review of the Spring Listening Session

On April 25, 5 residents attended the Spring Listening Session at the MAC General Offices.

The attendees were from Minneapolis, Apple Valley and Eagan.

The meeting was also attended by representatives from FAA air traffic, MAC Commission, and Minneapolis.

MAC staff opened with an introduction and presentation. Slides are available at:

www.macnoise.com/sites/www.macenvironment.org/files/pdf/20180425_spring_1.pdf

The open floor conversation focused on:

- Percentage of MD-80 and MD-90 aircraft operations
- MSP nighttime and early morning cargo operations
- Overall trends in operations, complaints and noise
- Area Navigation (RNAV) procedures at MSP
- MAC Residential Noise Mitigation Program



NOISE OVERSIGHT COMMITTEE
MAY 16, 2018

ITEM 8 PUBLIC COMMENT PERIOD



**NOISE OVERSIGHT COMMITTEE
MAY 16, 2018**



ITEM 9 ANNOUNCEMENTS

Summer Listening Session

Tuesday, July 17, 2018 @ 7:00 PM

Richfield City Hall

Next NOC Meeting

Wednesday, July 18, 2018 @ 1:30 PM

MAC General Offices



**NOISE OVERSIGHT COMMITTEE
MAY 16, 2018**

