



**NOISE OVERSIGHT COMMITTEE
SEPTEMBER 20, 2017**

Audio recordings are made of this meeting





**NOISE OVERSIGHT COMMITTEE
SEPTEMBER 20, 2017**

**Item 1: Review and Approval of July 19, 2017 Meeting
Minutes**





NOISE OVERSIGHT COMMITTEE
SEPTEMBER 20, 2017

Item 2: MSP FairSkies Presentation



Noise Oversight Committee: *MSP FairSkies Coalition Goals*

Steve Kittleson
Kevin Terrell

September 20th 2017





What do we want?

Less noise

No surprises

What concerns us?

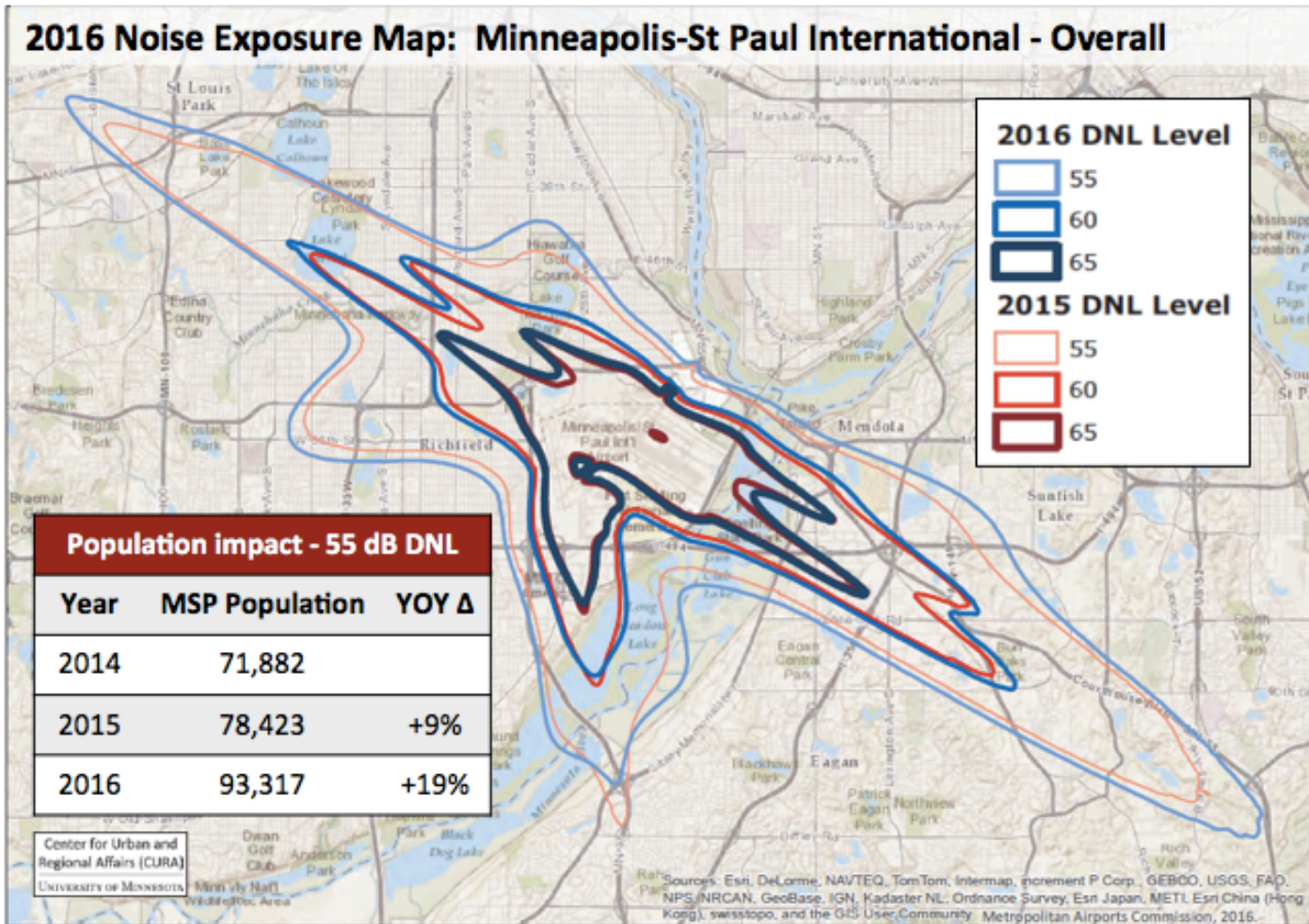
MSP noise is increasing



How do we know this?

MAC data we acquired show that across the MSP area, the population impacted by at least 55 dB DNL aircraft noise increased 30% in the last two years, to nearly 100,000

ESTIMATED



What concerns us?

MSP noise is increasing

**FAA on noise impact is
“arbitrary and capricious”**

How do we know this?

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued March 17, 2017

Decided August 29, 2017

*“The petitioners argue that the
FAA’s approval of the new
flight routes was
arbitrary and capricious...
We agree.”**

* City of Phoenix v. Huerta and FAA. The court decided unanimously on the merits of the case. The sole dissent addressed only the question of timeliness in filing the case



What we don't want

PHX

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

A result of FAA's NextGen implementation



STATE OF MARYLAND
OFFICE OF THE GOVERNOR

LARRY HOGAN
GOVERNOR

May 11, 2017

Michael P. Huerta, Administrator
U.S. Department of Transportation
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Re: NextGen Flight Path

NYC LGA

Population exposed to 55 dB DNL Noise*

2010 **370,000**

Pre NextGen

2016 **774,000**

Post NextGen

MSP

**Any of that to
happen here**

AKA outdated NEPA processes used against us

* Analysis of FAA data obtained through FOIA and Port Authority Part 150
We also are not asking for additional mitigation, further out than 60 dB DNL

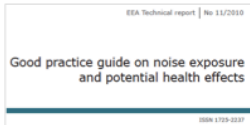


How to succeed?

- 1. Agree on the problem**
- 2. Baseline with meaningful and readily available data**
- 3. Set improvement goals**
- 4. Collaborate to reach goals**

Anatomy of a problem

Annoyance is just one concern with airplane noise. Studies also show a negative association between 55 dB DNL noise, health and learning



Lower levels of reading comprehension for children
2010



Increased risk of cardiovascular disease
2013



Increased risk of stroke, cardiovascular and congestive heart disease
2013

Environmental Protection Agency evaluation of noise, 1978

Table VIII
Yearly L_{dn} Values That Protect Public Health and Welfare with a Margin of Safety

EFFECT	LEVEL	AREA
Hearing	$L_{eq(24)} \leq 70$ dB	All areas (at the ear)
Outdoor activity interference and annoyance	$L_{dn} \leq 55$ dB	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
	$L_{eq(24)} \leq 55$ dB	Outdoor areas where people spend limited amounts of time, such as school yards, playgrounds, etc.
Indoor activity interference and annoyance	$L_{dn} \leq 45$ dB	Indoor residential areas
	$L_{eq(24)} \leq 45$ dB	Other indoor areas with human activities such as schools, etc.

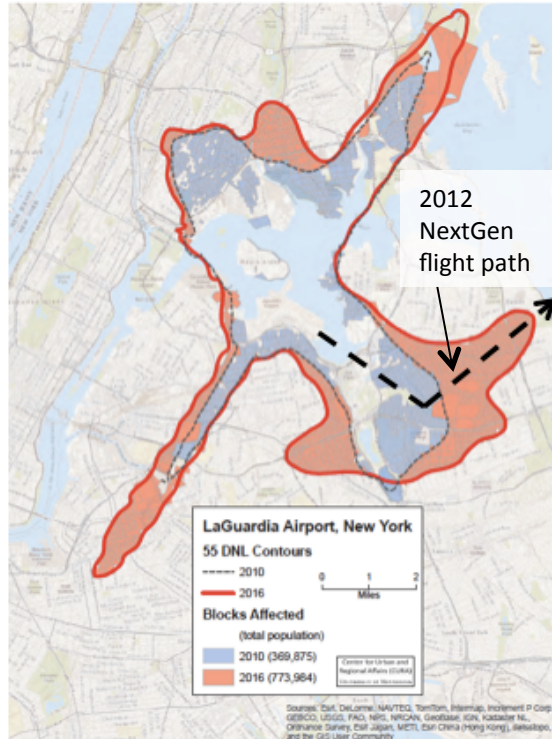
Is this a problem?

A bad trend at MSP

Impact of
55 dB DNL
increases
30% in two
years

Hiding noise with 55 dB DNL

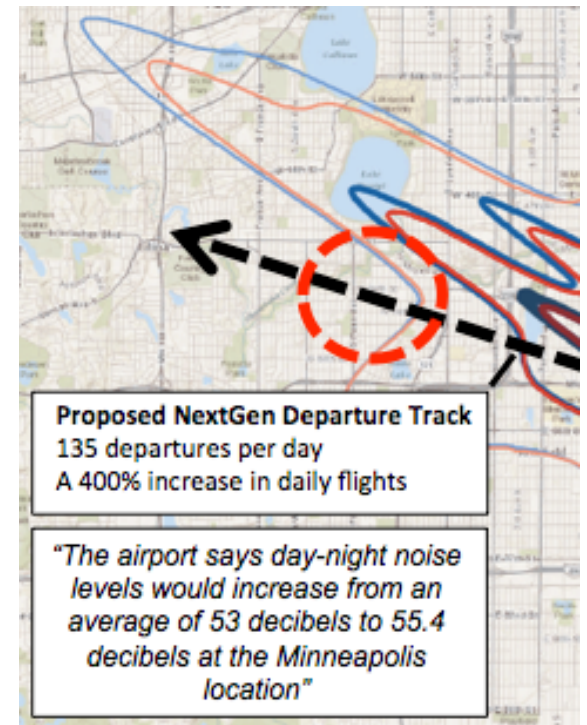
LGA Noise Exposure Map 2010 vs. 2016



110% increase in people exposed to 55 dB DNL noise post NextGen flight path

What's past is prologue

2012 proposal for MSP NextGen departures



Baseline: Today's view

“The Annual Noise Contour Report does not include population counts.”

The FAA reporting standard would show only a couple thousand people impacted by **65 dB DNL**



Minneapolis St. Paul International Airport (MSP) 2016 Annual Noise Contour Report

Table 2.5 Summary of 2016 Actual DNL Noise Contour Unit Counts

City	Count	Dwelling Units Within DNL (dB) Interval									
		Single Family					Multi-Family				
		60-64	65-69	70-74	75+	Total	60-64	65-69	70-74	75+	Total
Minneapolis	Completed	7045	1636	-	-	8681	447	507	-	-	954
	Additional	1352	-	-	-	1352	237	-	-	-	237
	Total	8387	1636	-	-	10023	684	507	-	-	1191
Bloomington	Completed	16	1	-	-	17	513	-	-	-	513
	Additional	-	-	-	-	-	-	-	-	-	-
	Total	16	1	-	-	17	513	-	-	-	513
Richfield	Completed	689	22	-	-	711	66	-	-	-	66
	Additional	-	-	-	-	-	-	-	-	-	-
	Total	689	22	-	-	711	66	-	-	-	66
Eagan	Completed	319	15	-	-	334	38	-	-	-	38
	Additional	-	-	-	-	-	-	-	-	-	-
	Total	319	15	-	-	334	-	-	-	-	-
Mendota Heights	Completed	43	1	-	-	44	-	-	-	-	-
	Additional	-	-	-	-	-	-	-	-	-	-
	Total	43	1	-	-	44	-	-	-	-	-
All Cities	Completed	8112	1675	-	-	9787	1064	507	-	-	1571
	Additional	1352	-	-	-	1352	237	-	-	-	237
	Total	9464	1675	-	-	11139	1301	507	-	-	1808

Notes:

Block intersect methodology

Multi-Family = 4+ Units

Units that declined mitigation or were determined to be ineligible for participation in the current program are not included in the table.

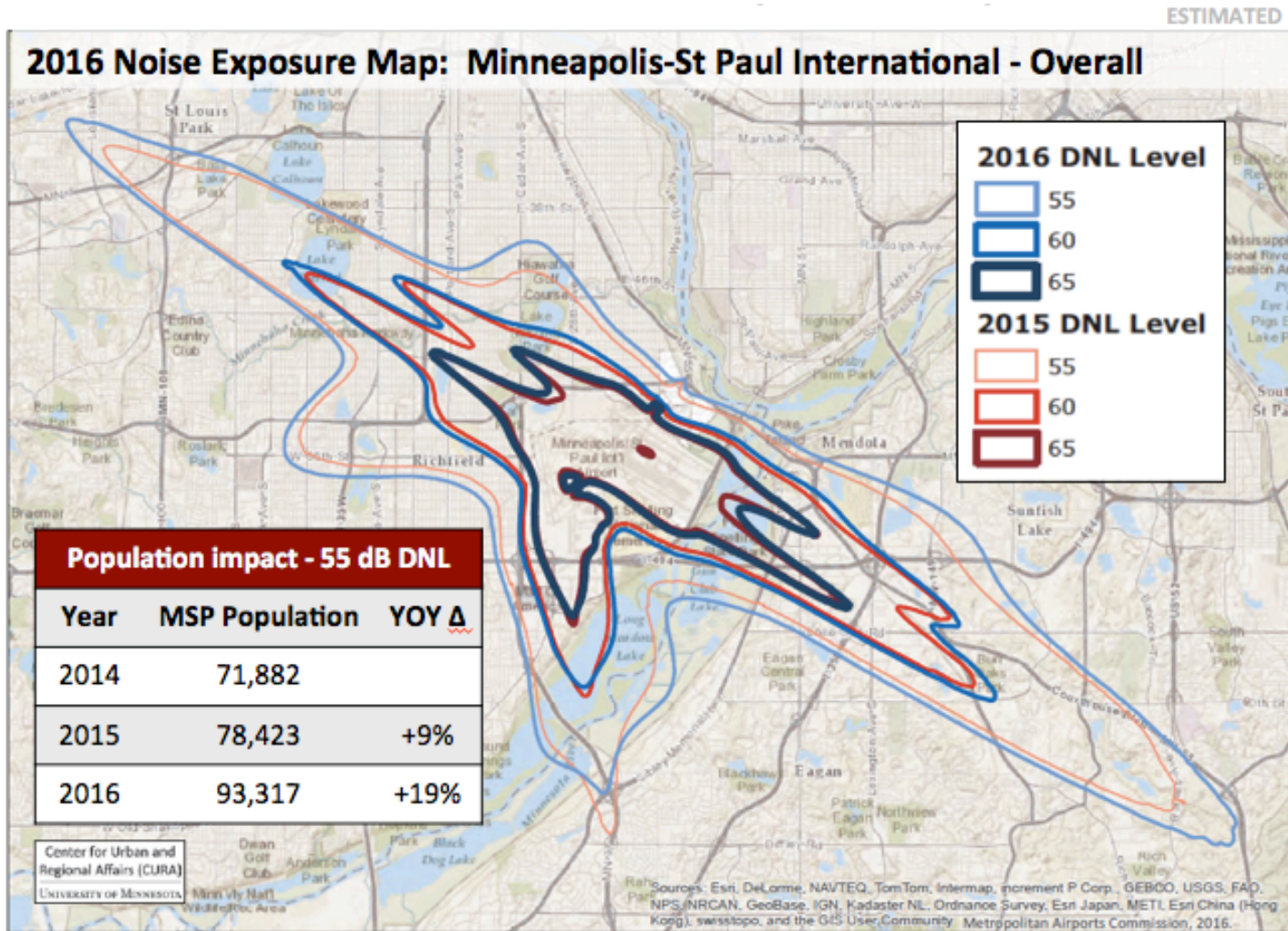
As a result of updated parcel information the MAC obtained from Metro GIS in January 2017, the unit counts in the tables above have slightly different values than previously published.

Source: HNTB provided AEDT contours, MAC analysis, 2017



Baseline: A better view

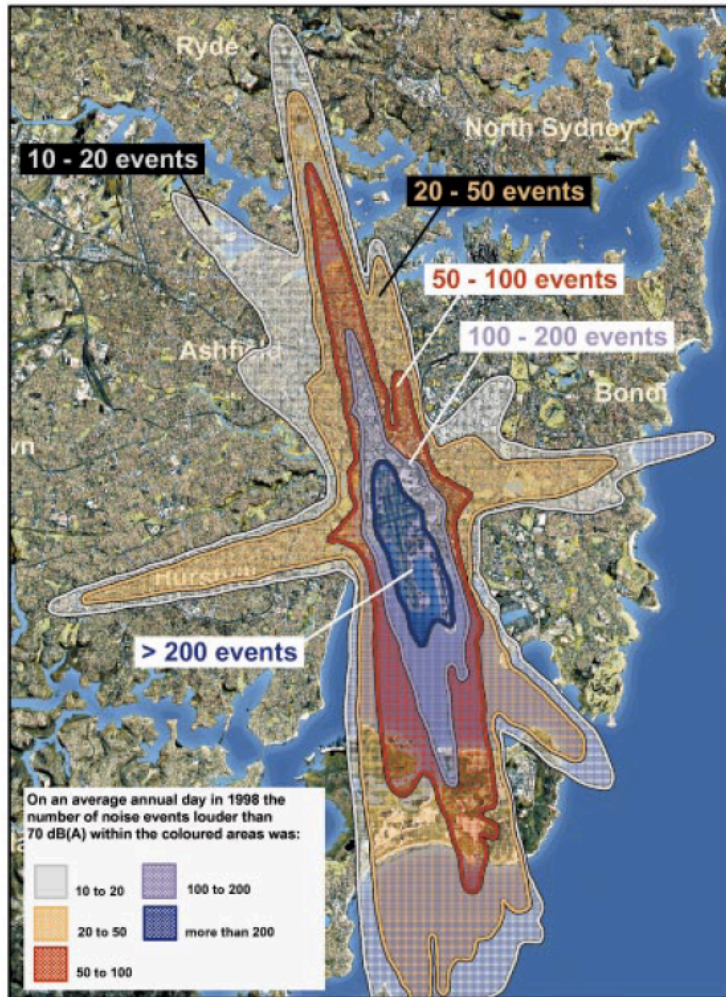
International standards (**55 dB DNL**) show the impact of noise is far larger & is growing dramatically



Baseline: A new view

Nx (N70) single event map

Sydney Airport



United States Court of Appeals FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued March 17, 2017

Decided August 29, 2017

- “The FAA’s proposal **would increase by 300%** the number of aircraft flying over twenty-five historic neighborhoods...The idea that a change with these effects would not be highly controversial is “so implausible” that it could not reflect reasoned decisionmaking.”
- “In short, the FAA had several reasons to anticipate that the new flight routes would be highly controversial: The agency was **changing routes that had been in place for a long time**...The air traffic in some areas would **increase by 300%**”

A baseline to prepare us

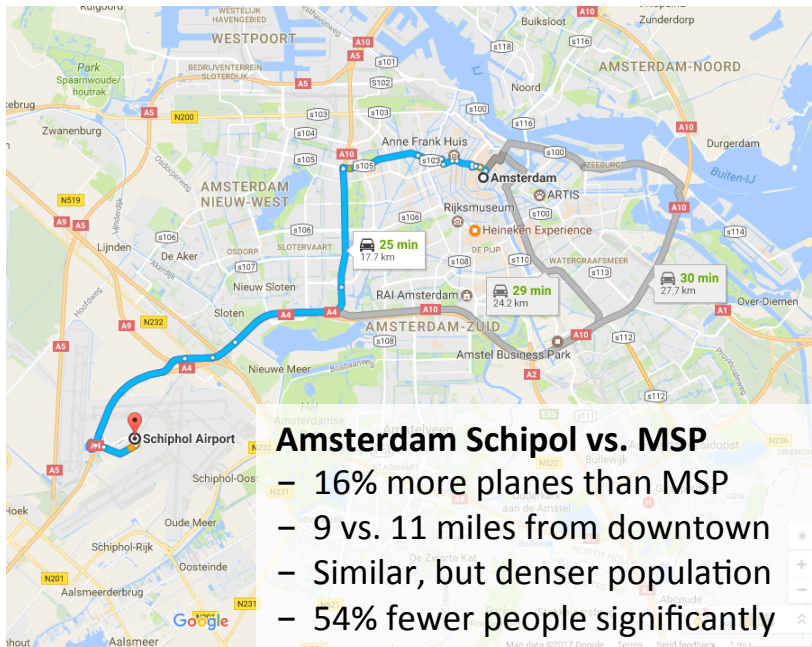
1. A 55 dB DNL contour
 2. A 55 dB DNL NEM
 3. An N65 contour
 4. An N65 NEM
- NOC/MAC staff suggestions?
 - Data-driven decisions based on citizen expectations

3. Set goals

Target Amsterdam:

Reduce the population impacted by 55 dB DNL noise from MSP by 50% by 2025 AND ensure it's fairly distributed

NOC suggestion:



4. Collaborate

Voice of Citizen

1. Noise Oversight?
 2. City reps on NOC have many stakeholders, not just residents
 3. Industry-City / 6-6 split on NOC:
Few citizens we talk to deem this to be fair, reasonable or as providing citizens a true voice in the process
- These concerns undermine the legitimacy and effectiveness of the NOC in the eyes of concerned citizens
 - Citizens need a “seat at the table” in order to effectively collaborate

Alternatives

1. Noise Reduction
2. Directly integrate a Voice of Citizen “listening post” onto the NRC.
Several possible models exist:
 - School Board “student” rep who applies and is selected
 - Appointed Ombudsman
 - Elected/seconded by citizen groups (e.g. LAX Roundtable)
 - Other?
3. Use that direct VOC to better understand community standards and enhance NRC’s legitimacy

Will you...

Ways to help improve our community

Decision

If not, why not?

1. Produce a 55 dB DNL contour?

Yes No

2. Publish a 55 dB DNL NEM?

Yes No

3. Produce an N65 contour?

Yes No

4. Publish an N65 NEM?

Yes No

5. Establish a goal to reduce noise?

Yes No

6. Enhance the NOC with greater stakeholder (citizen) representation?

Yes No



Next steps

1. NOC to review this proposal
2. Integrate into the work plan
3. Collaborate to reduce noise



What?

Less Noise



www.mspfairskies.com



What?

No Surprises



www.mspfairskies.com



What?

Meaningful data



www.mspfairskies.com



What?

Collaborative plan



www.mspfairskies.com



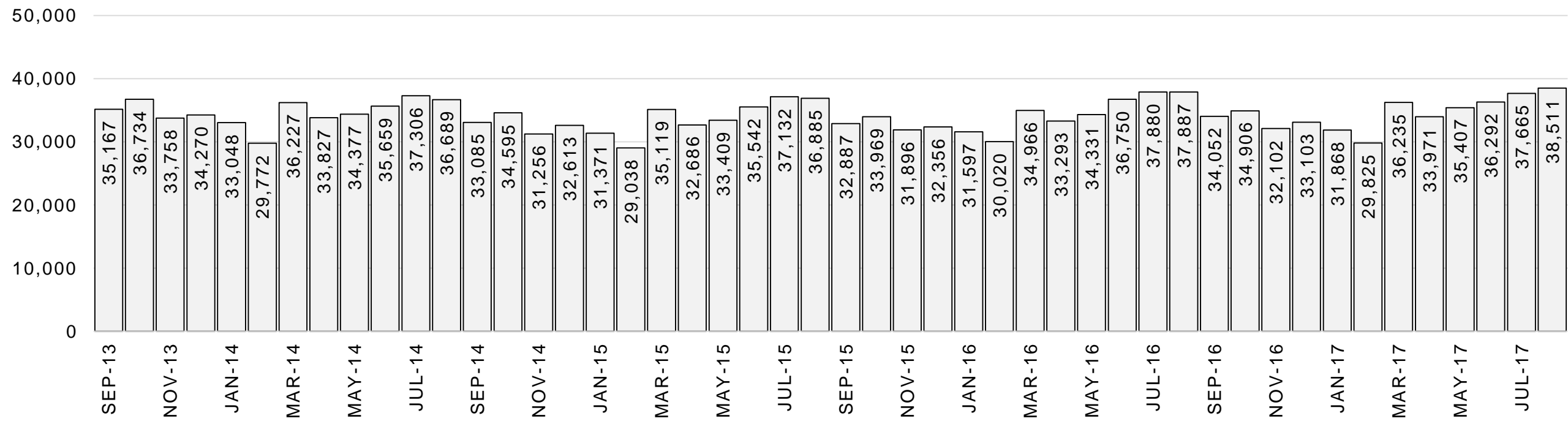
NOISE OVERSIGHT COMMITTEE
SEPTEMBER 20, 2017

Item 3: Review of Monthly Operations Reports: July and August 2017



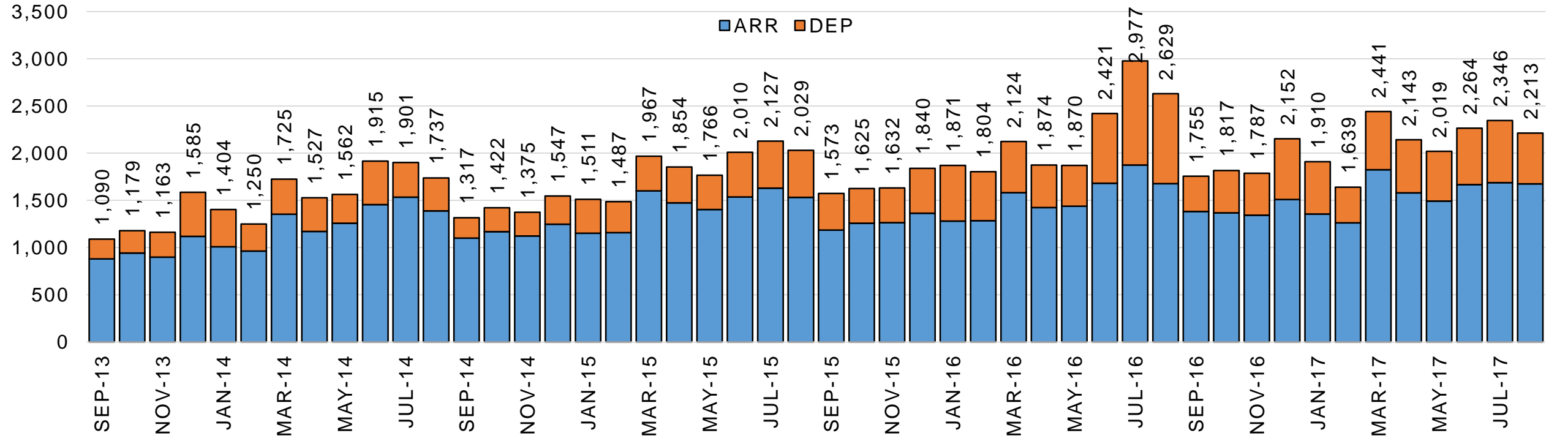
MSP OPERATIONS

JULY 2017		AUGUST 2017	
37,665	2,346	38,511	2,213
Operations	Nighttime Operations (10:30 PM – 6:00 AM)	Operations	Nighttime Operations (10:30 PM – 6:00 AM)



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RUNWAY USE

JULY 2017

AUGUST 2017

Arrivals

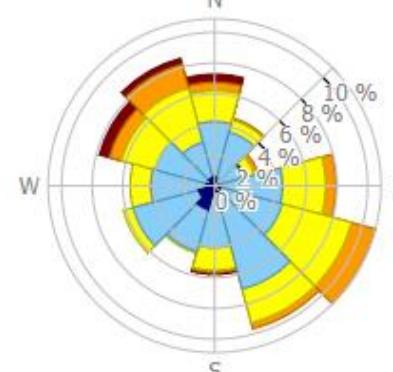
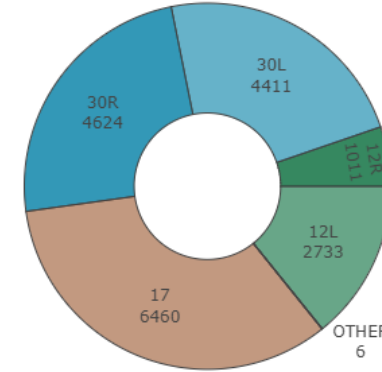
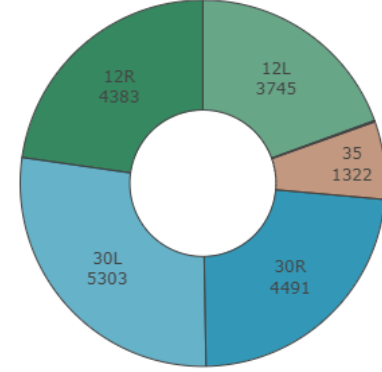
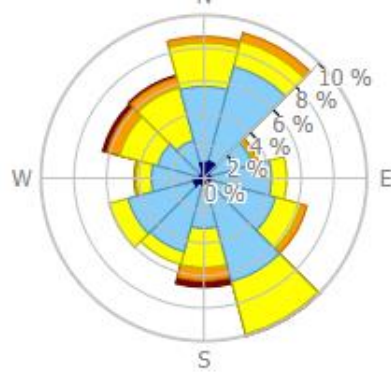
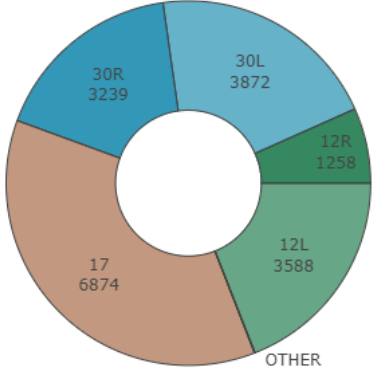
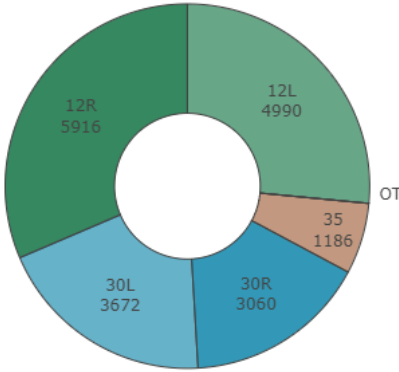
Departures

Calm or variable: 15.99%

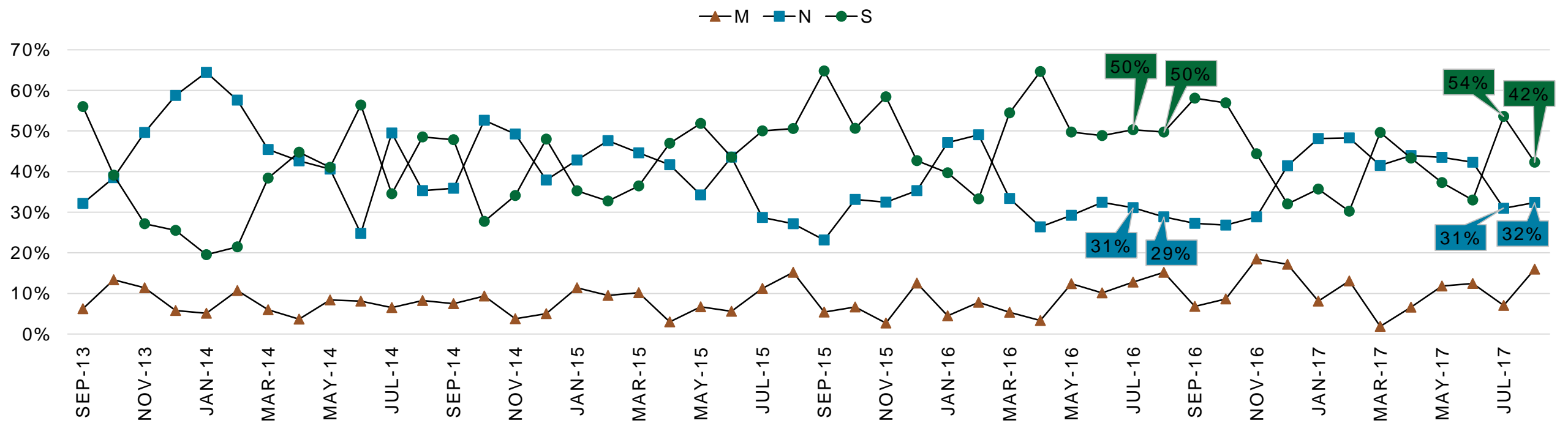
Arrivals

Departures

Calm or variable: 13.99%

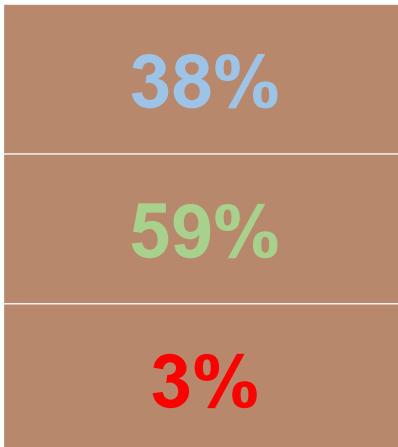
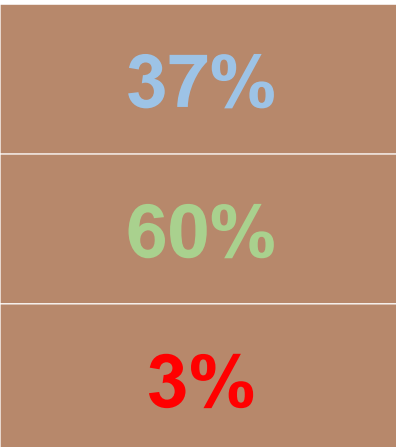


NORTH FLOW	SOUTH FLOW	MIXED FLOW	NORTH FLOW	SOUTH FLOW	MIXED FLOW
31%	54%	7%	32%	42%	16%

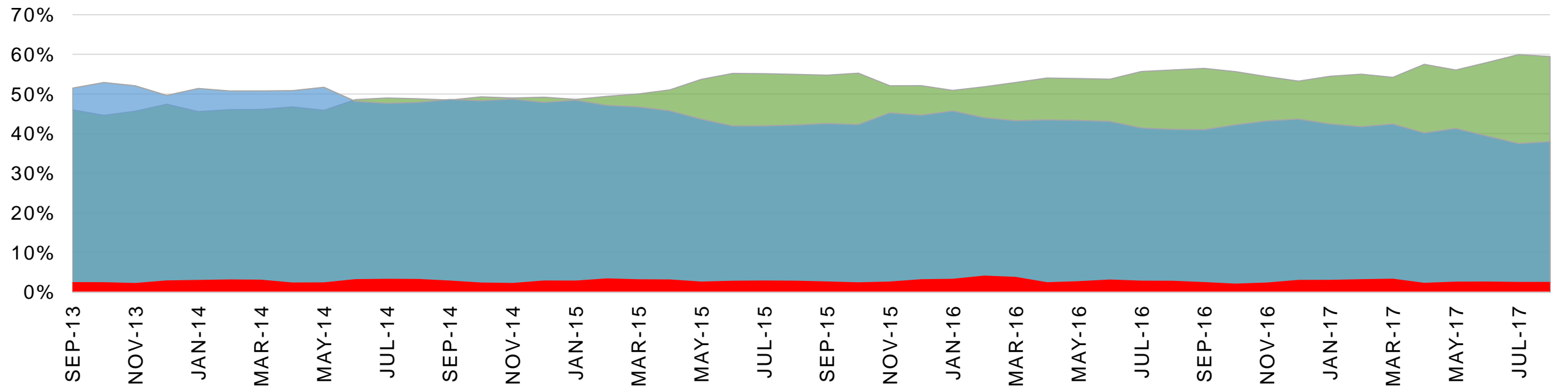


CARRIER JET FLEET MIX

JULY 2017 AUGUST 2017

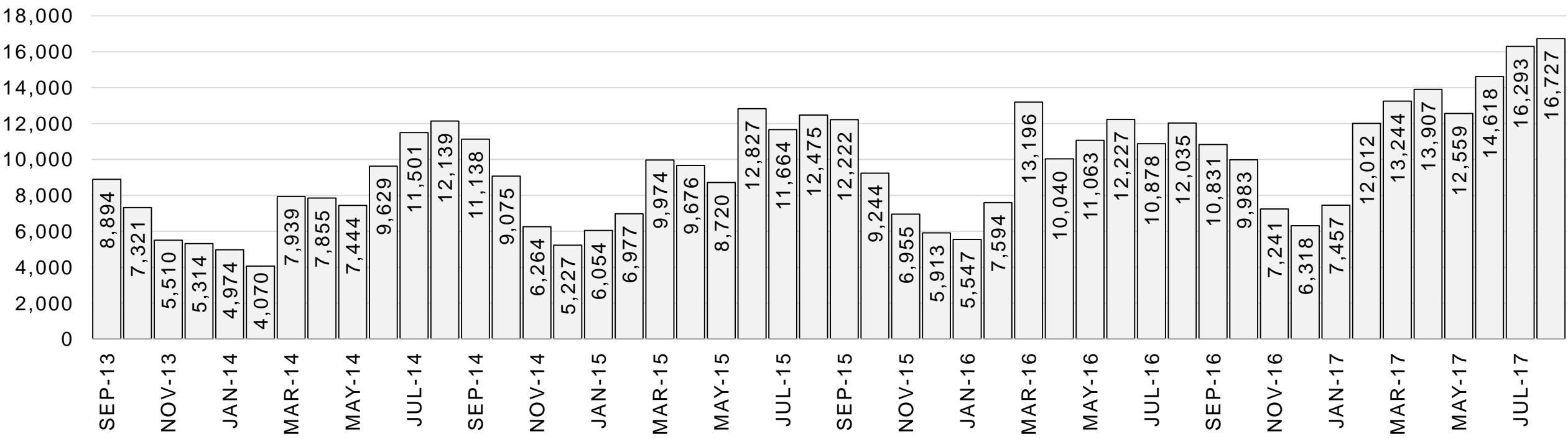


■ NARROWBODY ■ RJ ■ WIDEBODY



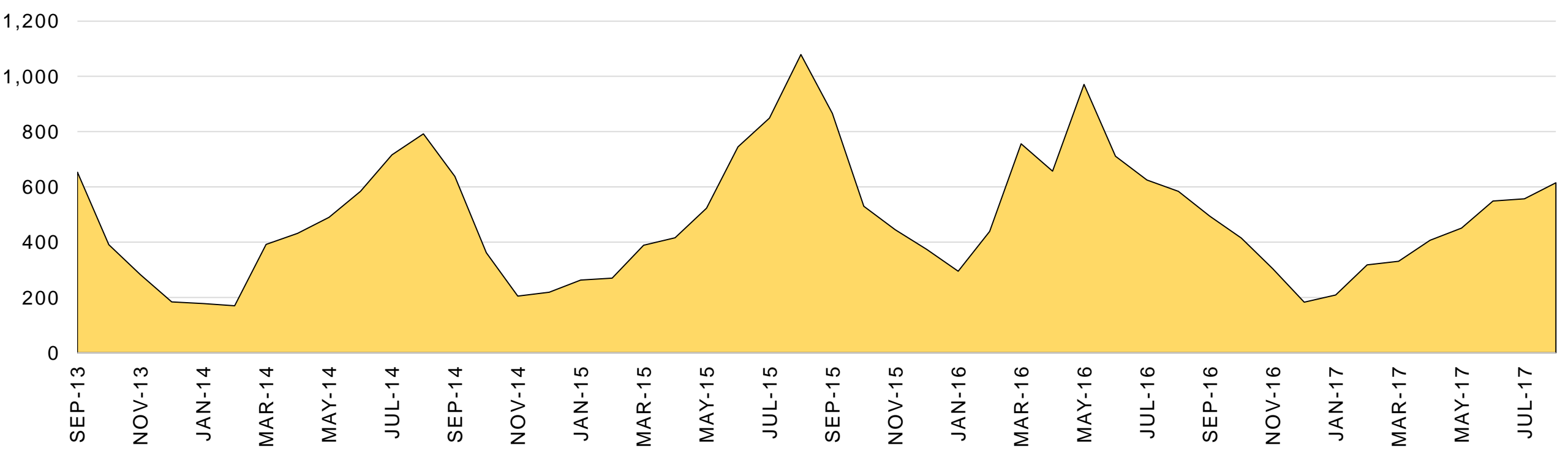
MSP COMPLAINTS

JULY 2017				AUGUST 2017			
COMPLAINTS	LOCATIONS			COMPLAINTS	LOCATIONS		
16,293	557			16,727	615		
Operations per Complaint	New Locations	Average	Median	Operations per Complaint	New Locations	Average	Median
2.3	145	29	3	2.3	157	27	3



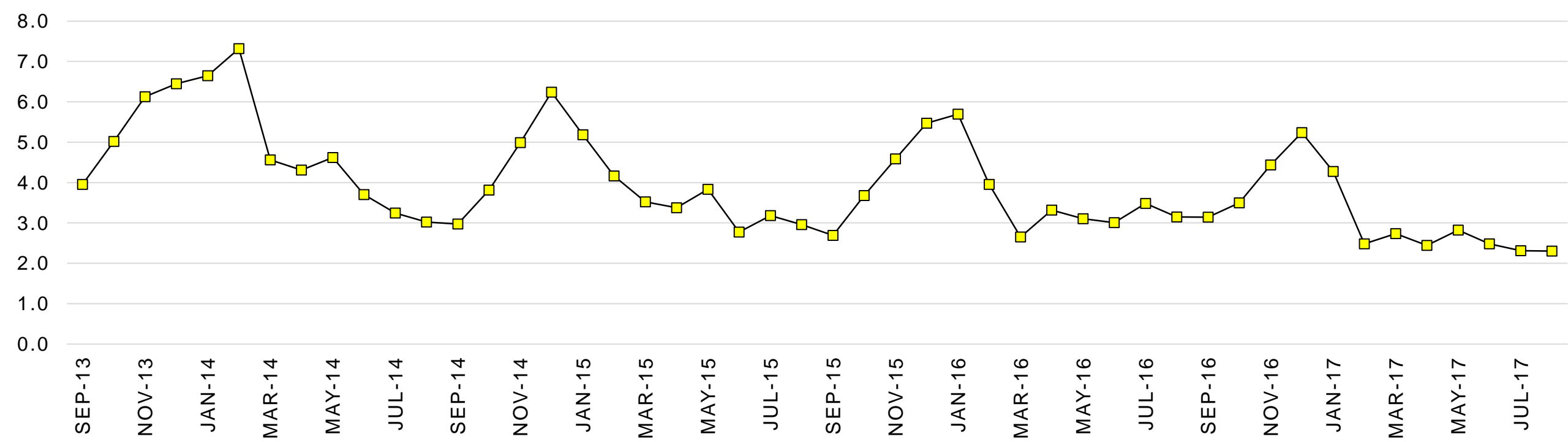
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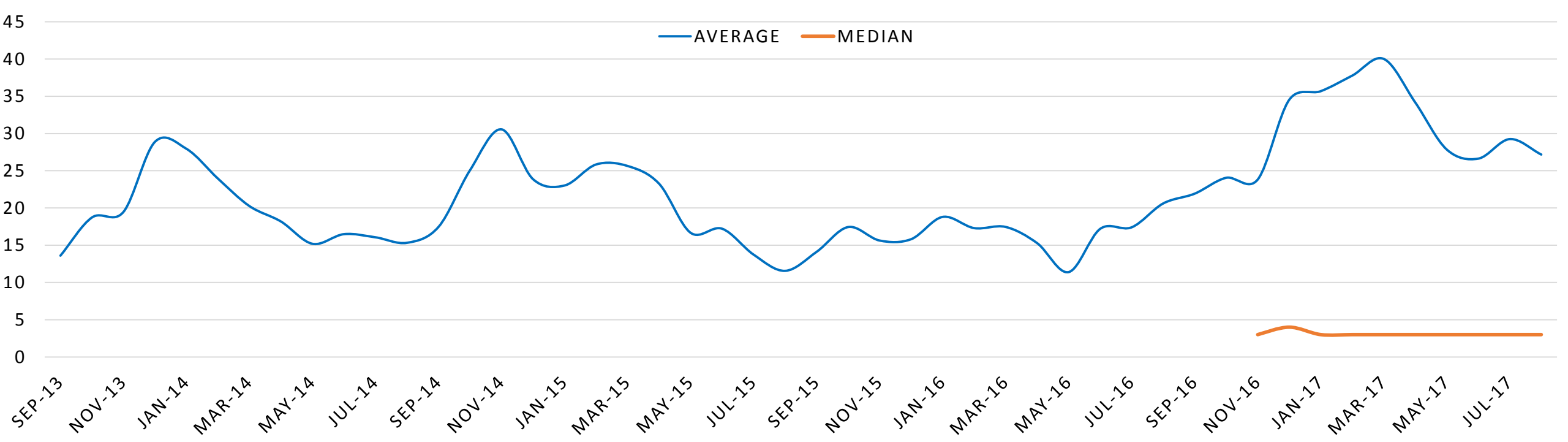
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JULY – AUGUST COMPLAINT DATA

TOP 10 LOCATIONS FILED
52%
OF ALL COMPLAINTS

TOP 50 LOCATIONS FILED
80%
OF ALL COMPLAINTS

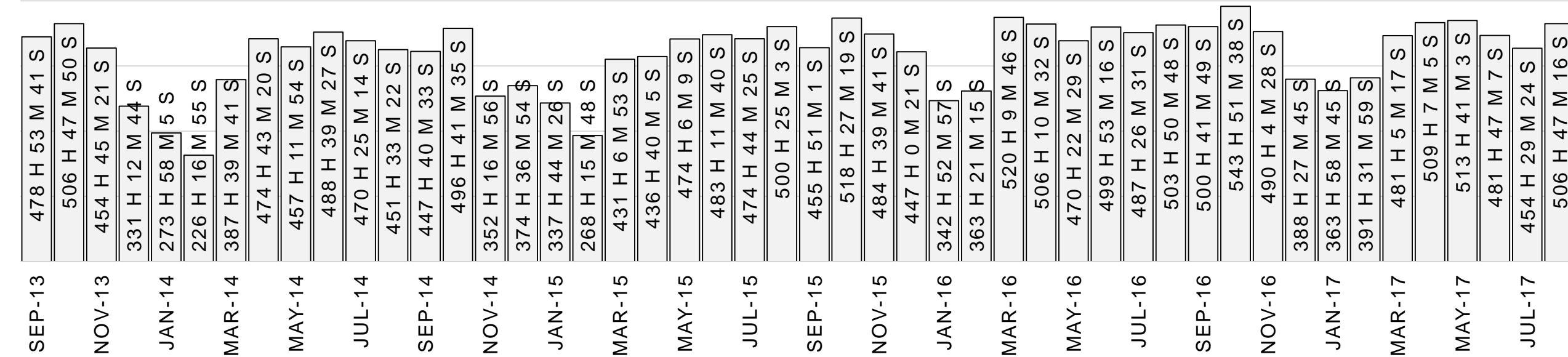
TOP 100 LOCATIONS FILED
88%
OF ALL COMPLAINTS

632 (75%)
LOCATIONS FILED 10 OR
LESS COMPLAINTS



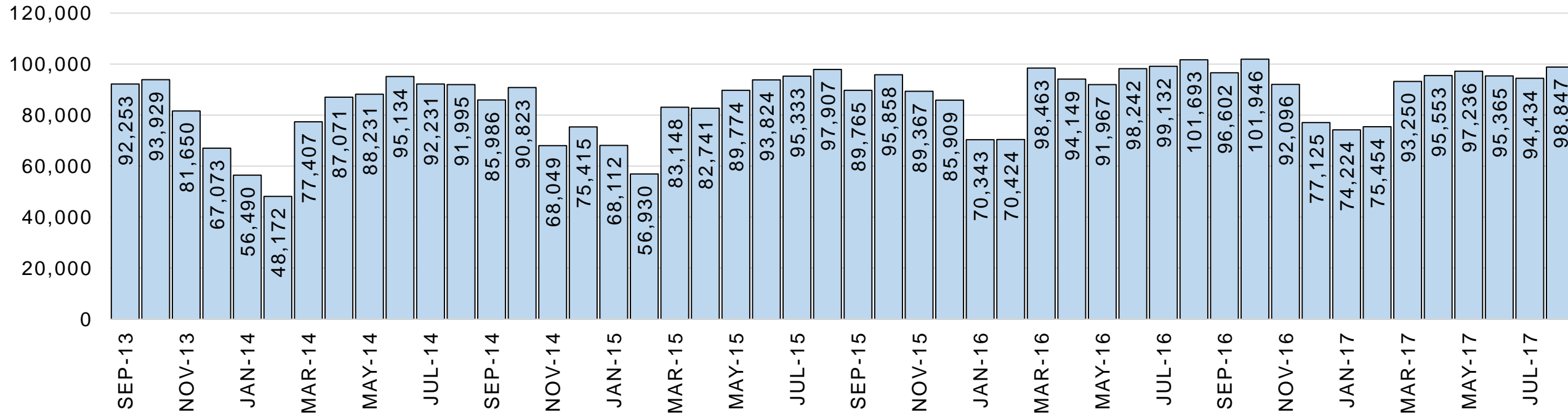
SOUND MONITORING

JULY 2017			AUGUST 2017		
Time Above	43_s TA ⁶⁵ per operation	454_h 29_m TA ⁶⁵	Time Above	47_s TA ⁶⁵ per operation	506_h 47_m TA ⁶⁵
Count Above	2.51 N ⁶⁵ per operation	94,434 N ⁶⁵	Count Above	2.57 N ⁶⁵ per operation	98,847 N ⁶⁵



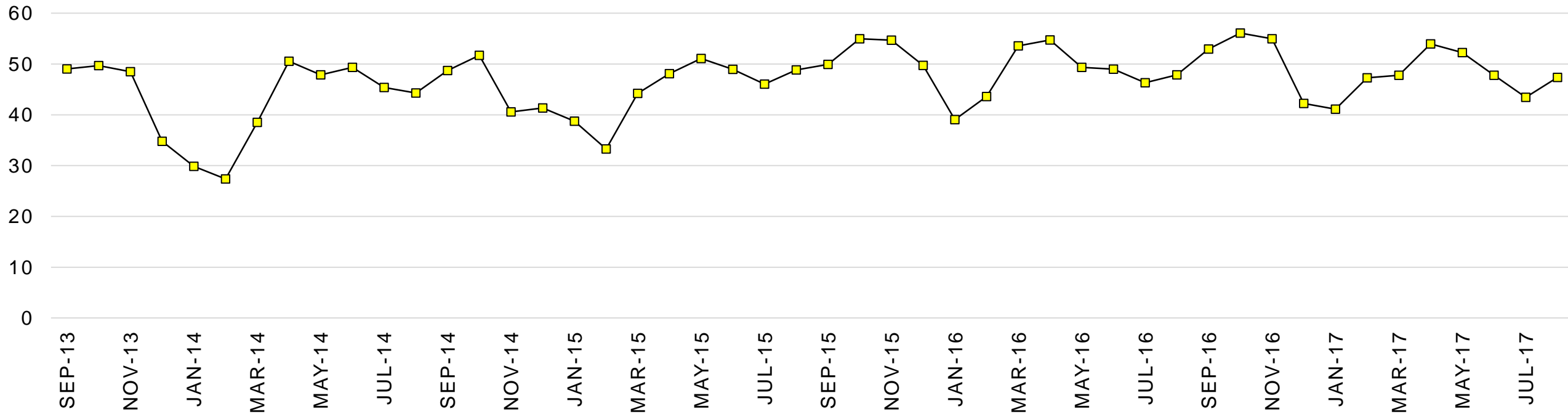
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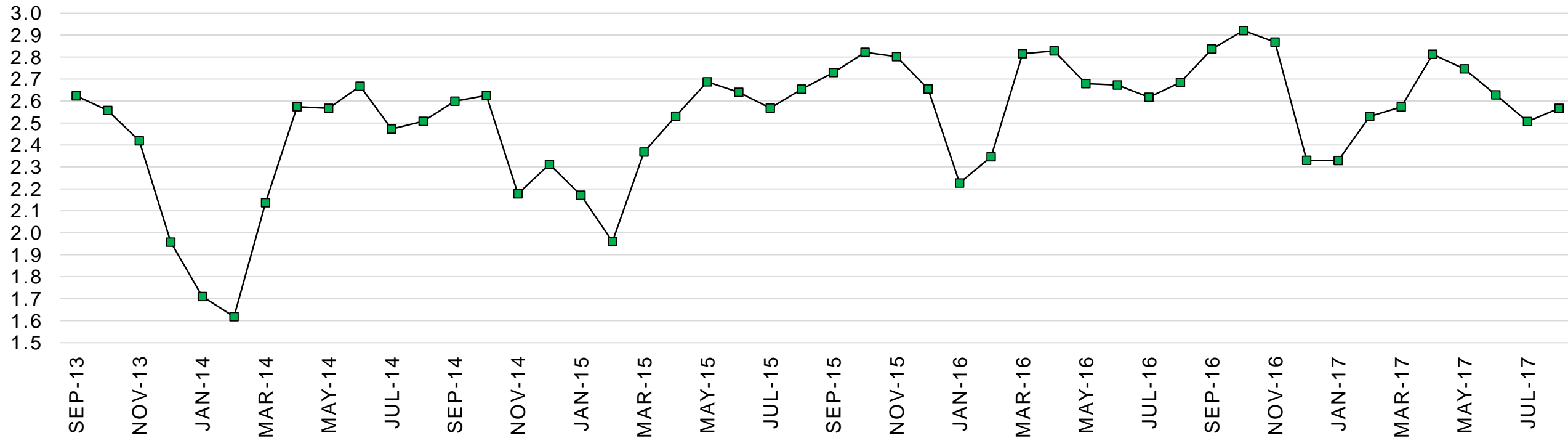
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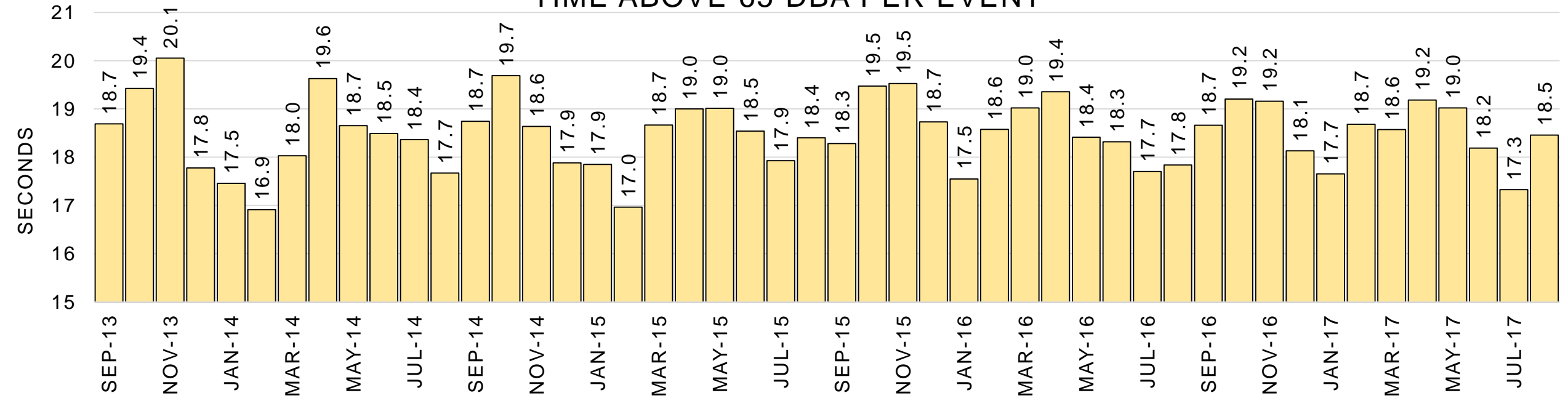
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SOUND MONITORING

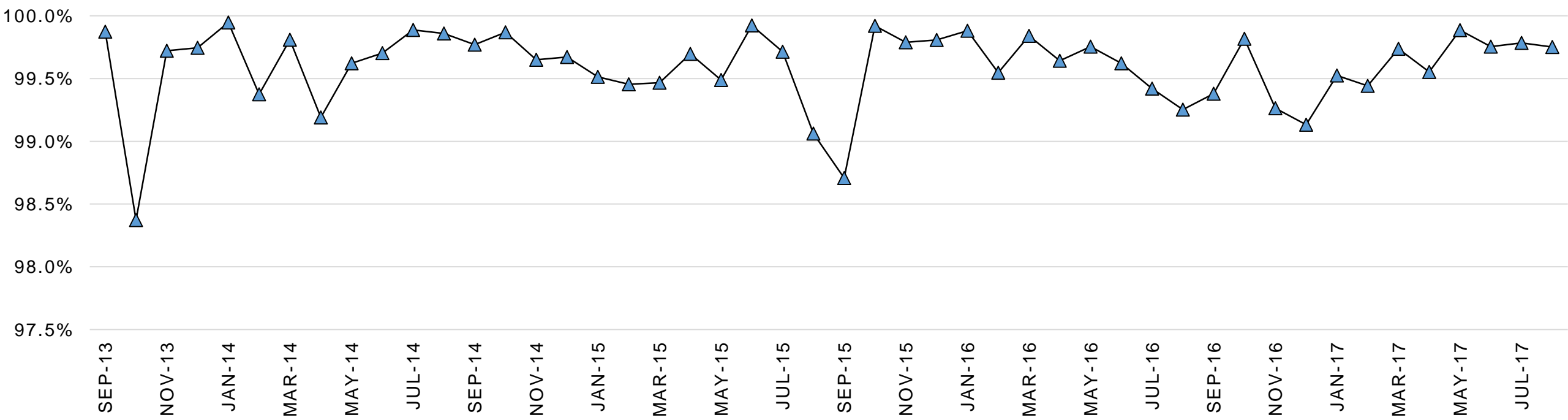
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TIME ABOVE 65 DBA PER EVENT



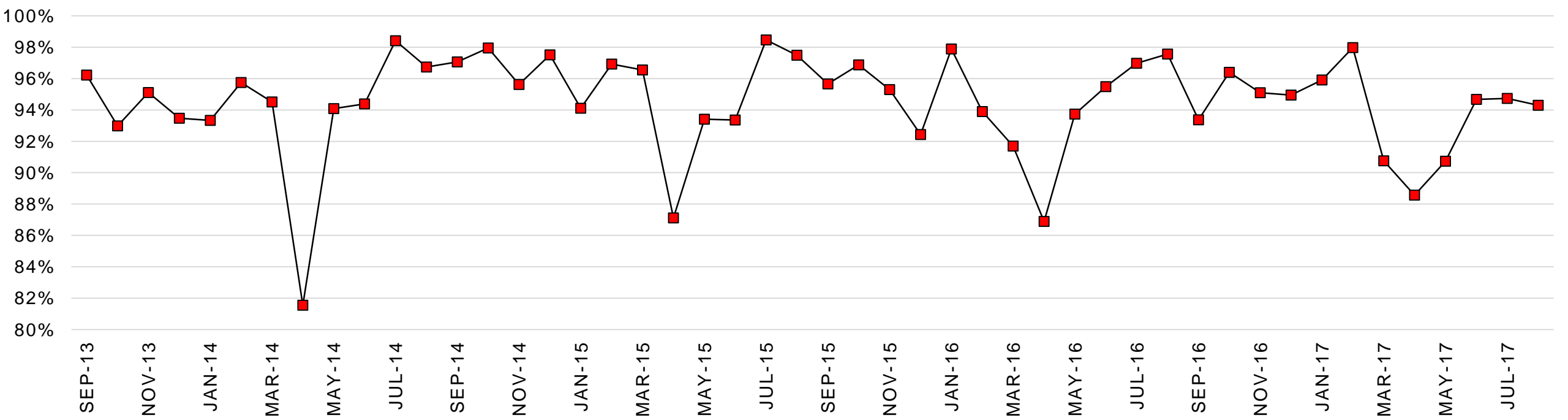
NOISE ABATEMENT

JULY 2017				AUGUST 2017			
Runway 17		99.8%		Runway 17		99.8%	
Corridor		94.7%		Corridor		94.3%	
Crossing		Day 36.5%	Night 37.3%	Crossing		Day 36.9%	Night 35.1%
RUS	Overall 52.1%	Arrivals 42%	Departures 62%	RUS	Overall 55.4%	Arrivals 58%	Departures 53%



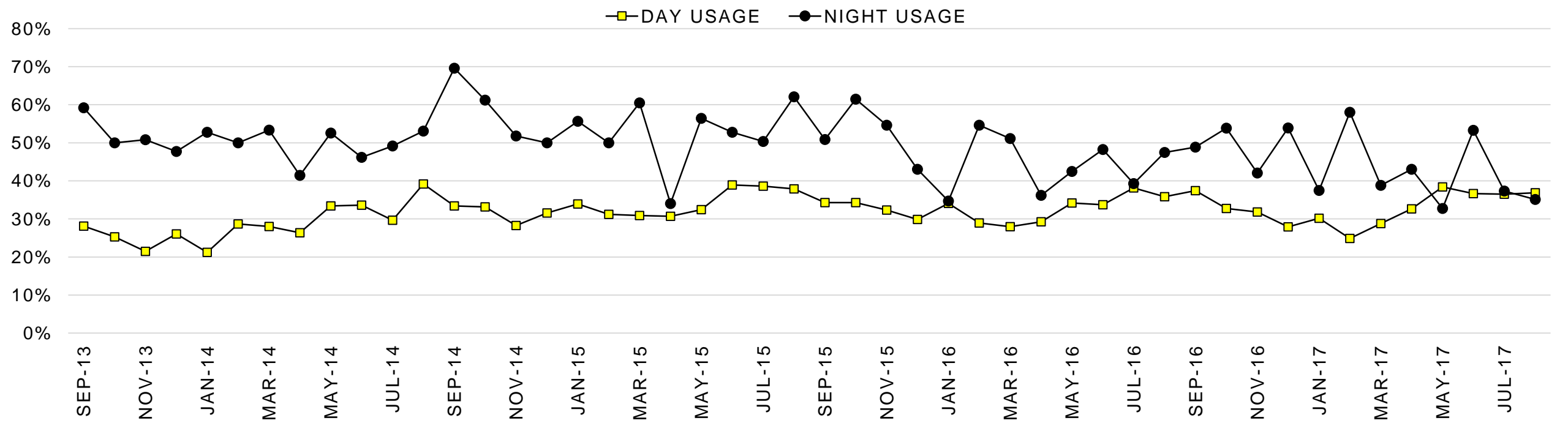
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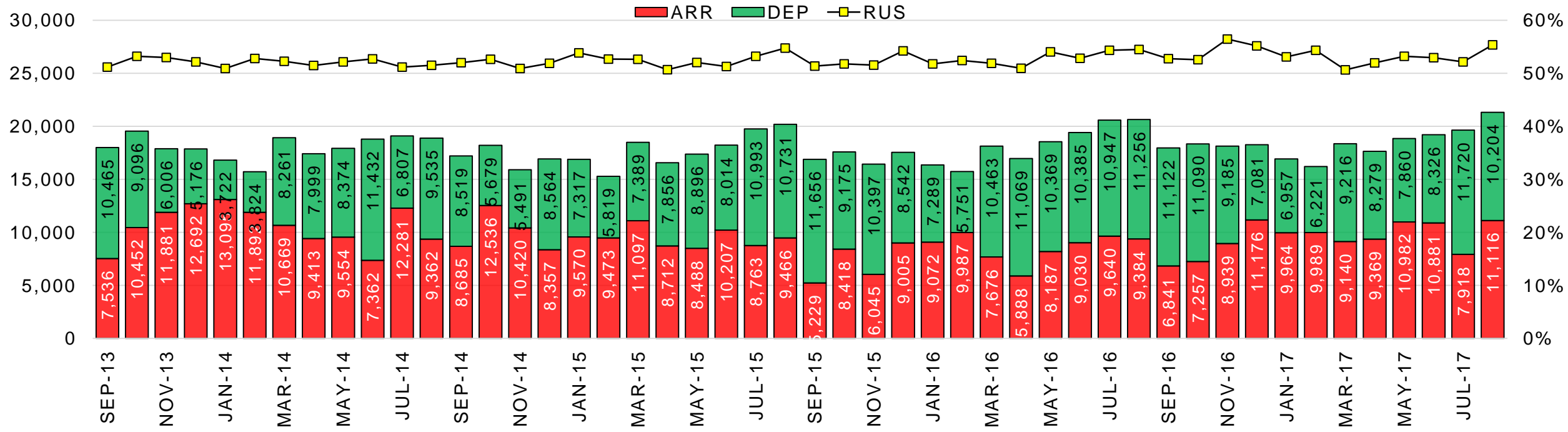
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NOISE ABATEMENT

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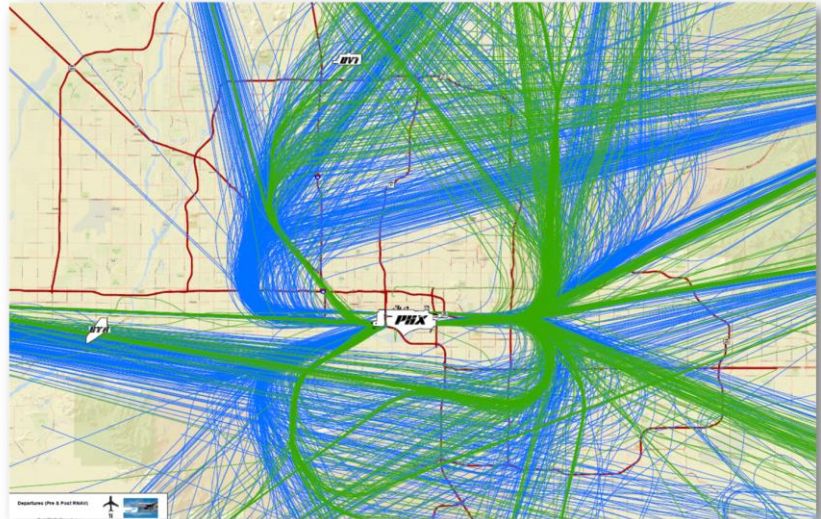


NOISE OVERSIGHT COMMITTEE
SEPTEMBER 20, 2017

**Item 4: Update on Phoenix Sky Harbor International
Airport PBN Ruling**



Item 4: Update on Phoenix Sky Harbor International Airport PBN Ruling



PHX v. Huerta, Procedural Issues

- 49 U.S.C. 46110 60-day clock starts at time of route publication
- PHX reasonably waited to file
 - Narrow exception
 - But, FAA promised to address concerns
- FAA failed to adequately consult with City under:
 - NEPA
 - National Historic Preservation Act
 - Section 4(f)

PHX v. Huerta, Holdings

- FAA unreasonably concluded a categorical exclusion was appropriate
 - 5 dB increase in 45-60 dB contours
 - Community concern
- FAA inappropriately applied DNL 65 standards under NHPA and Section 4(f)
 - Assumed Historic Districts and parks were “urban”
 - Required to consult with city

NOC RNAV Resolution

- Establishes “Extraordinary Circumstances” at MSP
- Provides strong message with all stakeholders aligned around a set of local expectation
- A foundational element for industry position on airport and community role
- Speaks to role/extent of community engagement and nature of analyses





NOISE OVERSIGHT COMMITTEE SEPTEMBER 20, 2017

Item 5: Evaluate and Enhance the Reporting of the Runway Use System (RUS)

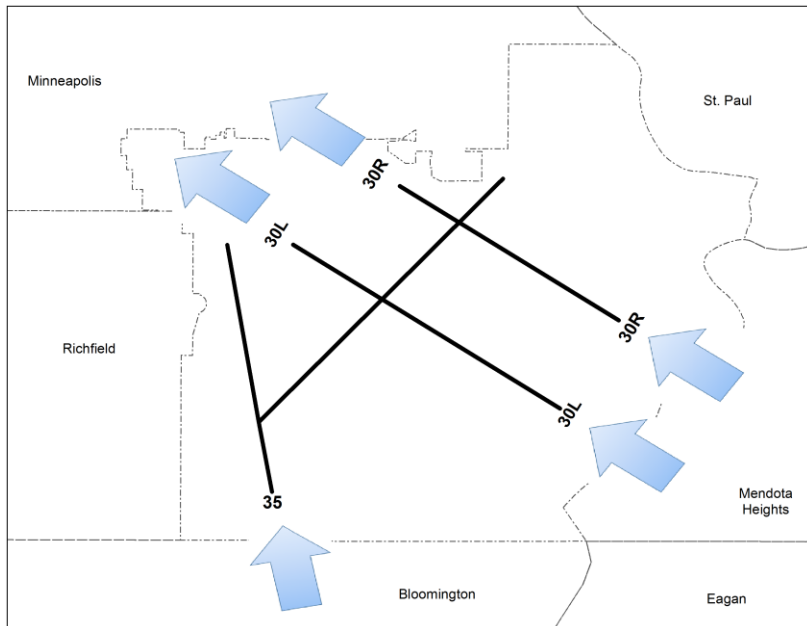
The 2017 NOC Work Plan includes an evaluation of enhancements to the Runway Use System (RUS) reporting to evaluate different options for reporting airport configurations, rather than individual runways.



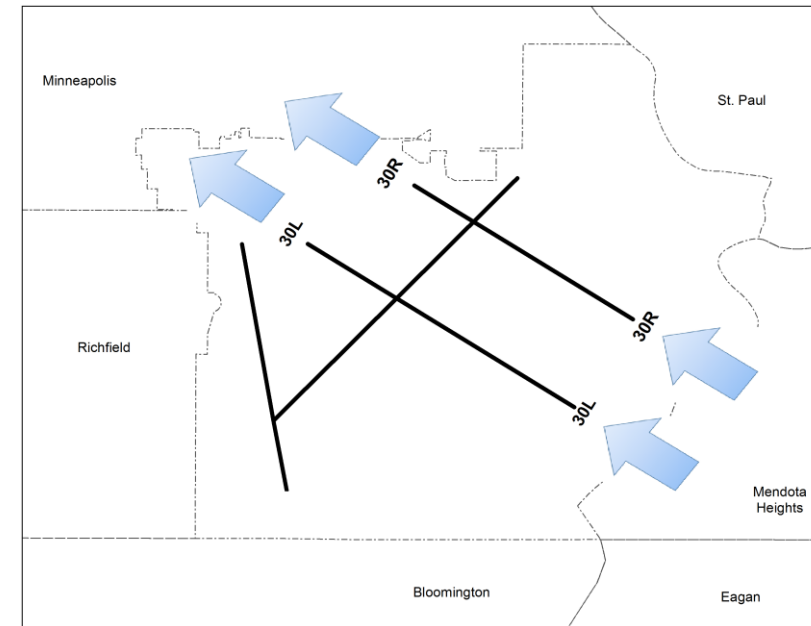
Item 5: Evaluate and Enhance the Reporting of the Runway Use System (RUS)

Airport Configurations – “Flows” – at MSP

North Flow (“30s, 35”)



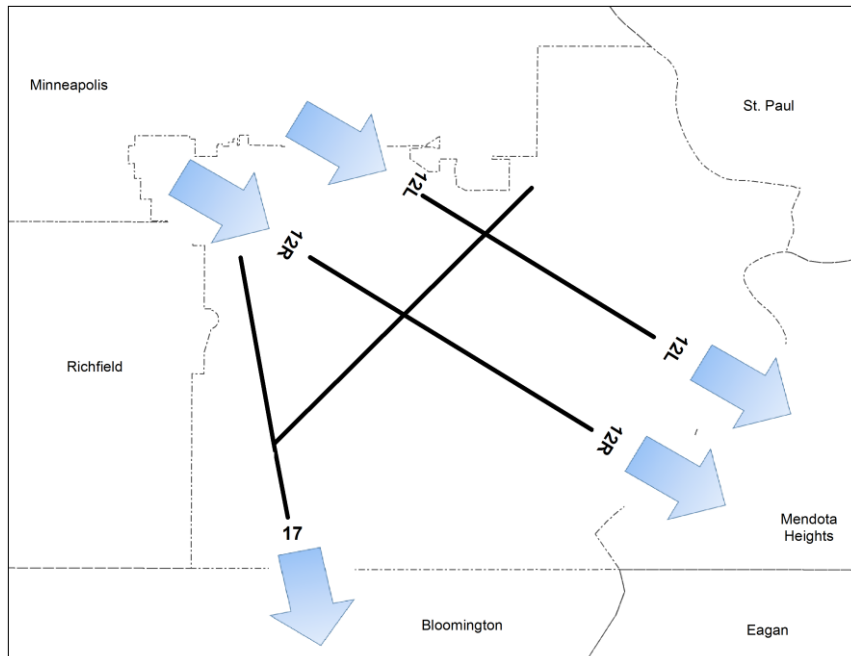
Straight North Flow (“Straight 30s”)



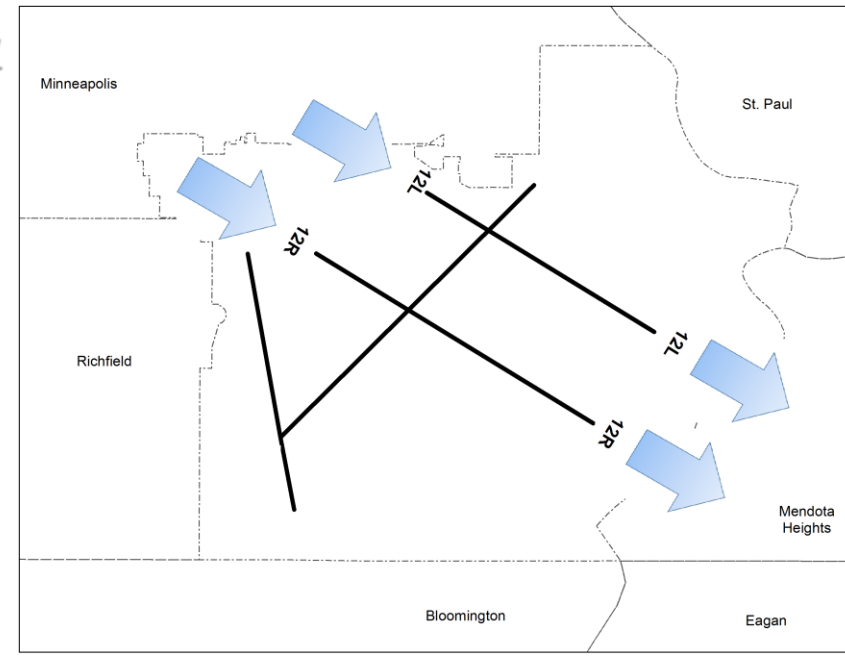
Item 5: Evaluate and Enhance the Reporting of the Runway Use System (RUS)

Airport Configurations – “Flows” – at MSP

South Flow (“12s, 17”)



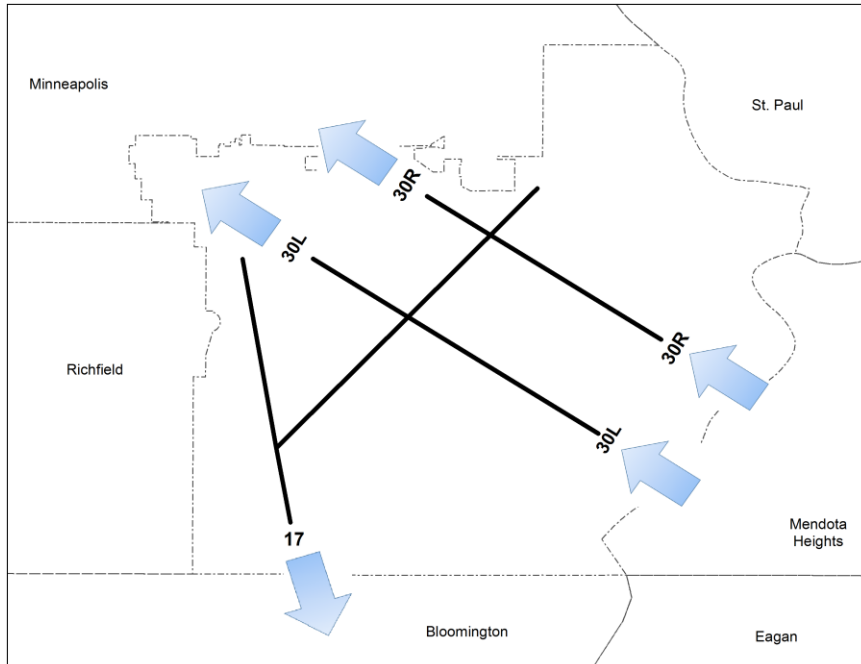
Straight South Flow (“Straight 12s”)



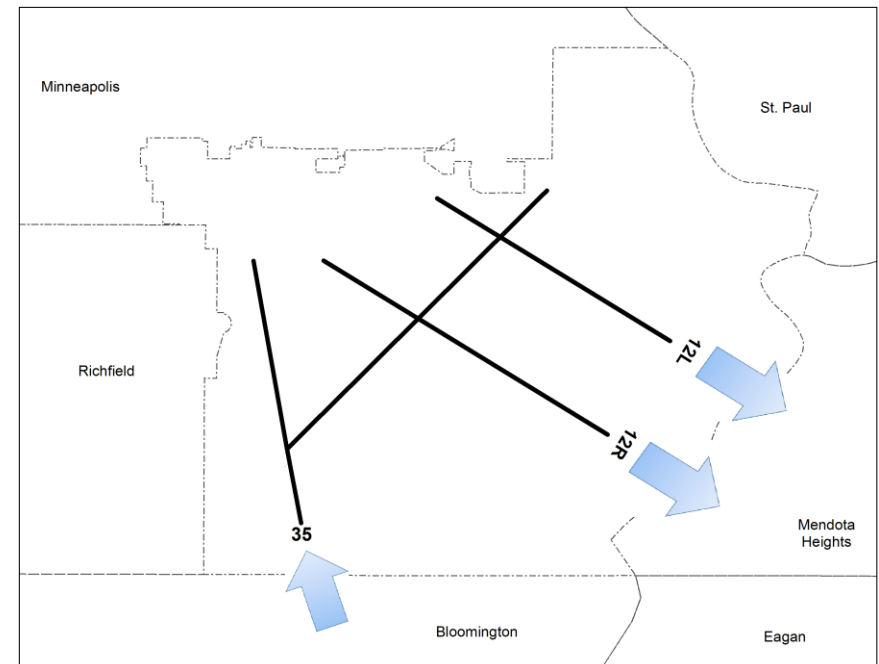
Item 5: Evaluate and Enhance the Reporting of the Runway Use System (RUS)

Airport Configurations – “Flows” – at MSP

Mixed Flow A
 (“30s, 17”)



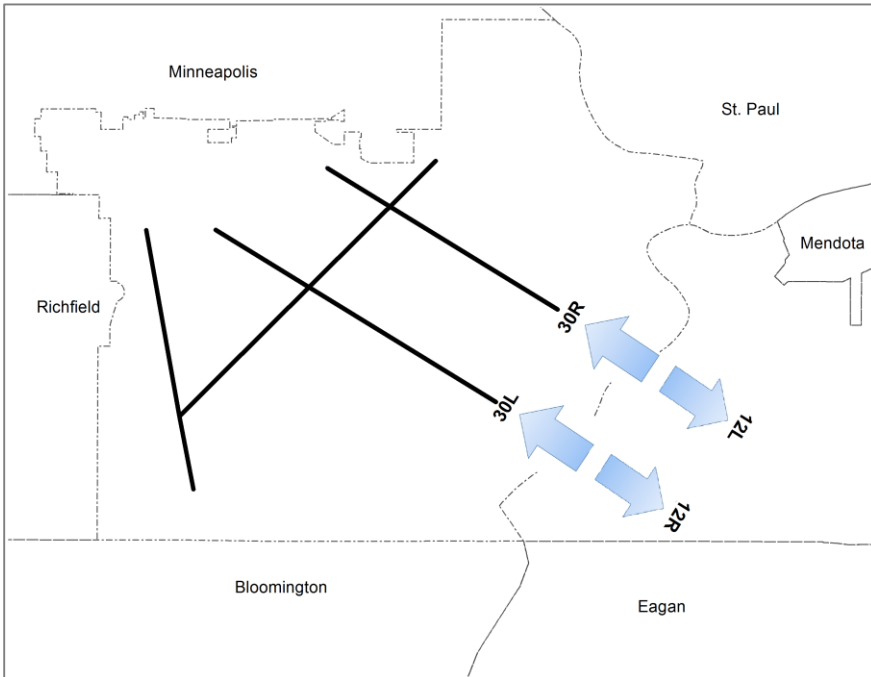
Mixed Flow B
 (“12s, 35”)



Item 5: Evaluate and Enhance the Reporting of the Runway Use System (RUS)

Airport Configurations – “Flows” – at MSP

Opposite
Direction





NOISE OVERSIGHT COMMITTEE
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Item 6: Investigate Noise-Reducing Landscaping Options



Amsterdam's Schiphol Airport

- Ridges created off one end of their newest runway to dampen low-frequency ground noise
- The airport sits on over 6,800 acres of land – 80 acres were converted to ridges
- Reduced ground noise by 2-3 dB



Source: worksthatwork.com/2/silent-airport

MSP Airport

- The airport sits on 3,400 acres of land
- Does not offer a feasible location for such landscaping techniques on airport property
- Land surrounding MSP is controlled and developed by municipalities
- Landscaping options do not reduce overflight noise; therefore, they must be located close to the airport to be effective





NOISE OVERSIGHT COMMITTEE SEPTEMBER 20, 2017

Item 7: Status of FAA Center of Excellence/ASCENT, TRB and FICAN Research Initiatives

A summary of the research projects that were completed, active, initiated, or anticipated in 2017 or 2018 conducted by

- Transportation Research Board - TRB (20 projects)
 - Airports Cooperative Research Program
- FAA's Centers of Excellence/ASCENT (21 projects)
- Federal Interagency Committee on Aviation Noise – FICAN
 - No published new findings or reports in 2016; however the reports and findings from 1997-2010 can be found here:
<https://fican.org/findings/>
- Recent studies concerning health-related effects of aircraft noise – conducted by various independent researchers – and published in 2017 were also included in the staff report





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9 residents attended the Summer Listening Session at the Apple Valley Municipal Center

Presentation slides from the meeting are available at www.macnoise.com/our-neighbors/msp-quarterly-listening-sessions

All questions were answered at the meeting, therefore staff will not be preparing written responses

Comments/questions from the residents focused on:

- Runway 17 departures and Runway 35 arrivals
- MSP nighttime operations
- Noise monitoring locations and data
- Runway Use System (RUS) prioritization
- Components of the Federal Environmental Impact Statement completed for the construction of Runway 17/35
- Converging Runway Operations and the effect on runway use

Item 8: Review of July 26, 2017 Listening Session

The next listening session will be **October 25, 2017 at 7:00 p.m.** at the MAC General Offices.





NOISE OVERSIGHT COMMITTEE
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Item 9: Public Comment Period





**NOISE OVERSIGHT COMMITTEE
SEPTEMBER 20, 2017**

Next NOC meeting
November 15, 2017 @ 1:30 PM
MAC General Offices
6040 28th Avenue South
Minneapolis, MN 55450

Item 10: Announcements

Fall Listening Session
October 25, 2017 @ 7:00 PM
MAC General Offices
6040 28th Avenue South
Minneapolis, MN 55450

