



NOISE OVERSIGHT COMMITTEE

January 20, 2021

Audio recordings are made of this meeting

Recognition

- Congrats to Mary on her retirement from the Edina City Council



**NOISE OVERSIGHT COMMITTEE
JANUARY 20, 2021**

Recognition

- Congrats to Liz on her retirement from the Mendota Heights City Council



**NOISE OVERSIGHT COMMITTEE
JANUARY 20, 2021**

Agenda

1. Consent

1.1 – Approval of November 18, 2020 Meeting Minutes

1.2 – Reports

1.2.1 – Monthly Operations Reports: November and December 2020

2. Public Comment Period

3. Business

4. Information

4.1 – FAA Neighborhood Environmental Survey

4.2 – MSP Air Service Updates

4.3 – 2020 Complaint Data Assessment

4.4 – 2020 Fleet Mix and Nighttime Operations Assessment

5. Announcements

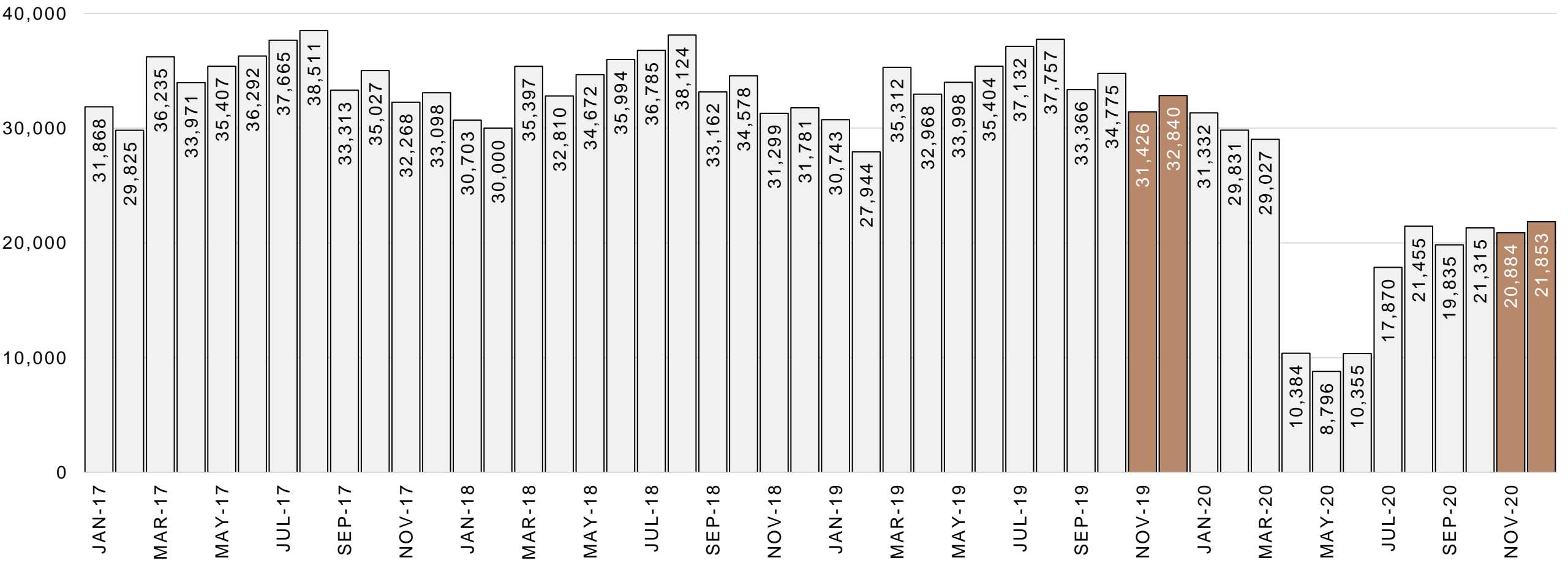
6. Adjourn



**NOISE OVERSIGHT COMMITTEE
JANUARY 20, 2021**

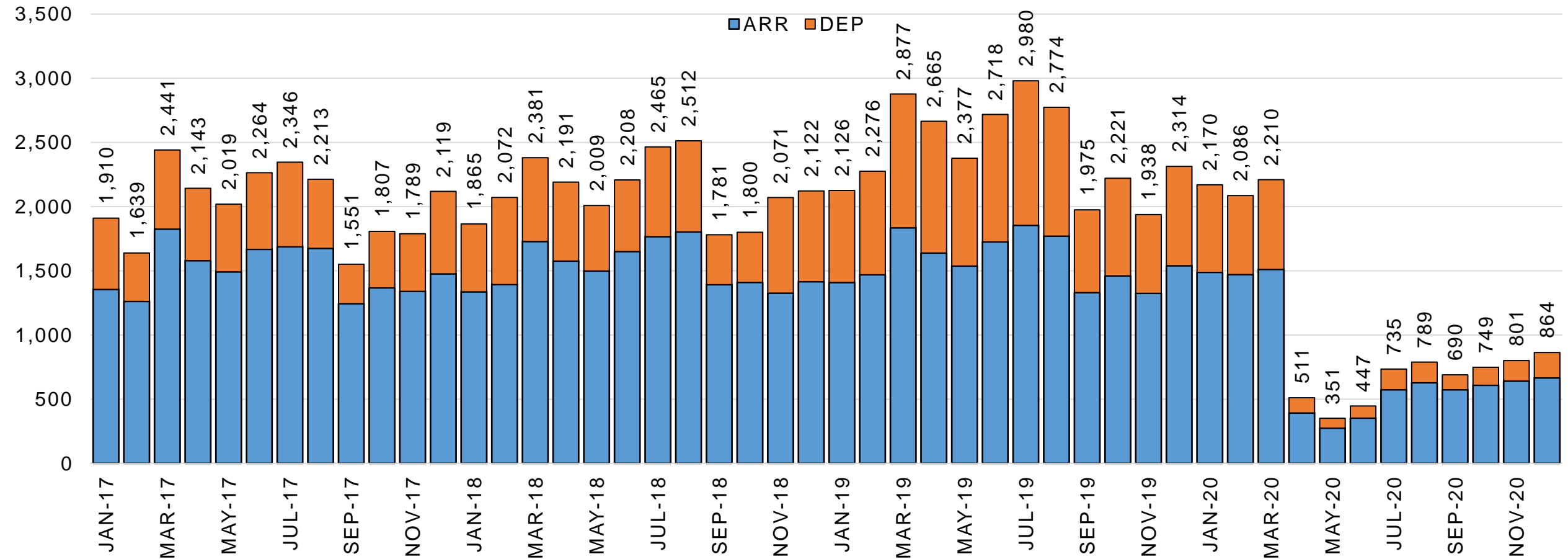
MSP OPERATIONS

NOV 2020		DEC 2020	
20,884	801	21,853	864
Operations	Nighttime Operations (10:30 PM – 6:00 AM)	Operations	Nighttime Operations (10:30 PM – 6:00 AM)



MSP OPERATIONS

NOV 2020		DEC 2020	
20,884	801	21,853	864
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RUNWAY USE

NOV 2020		
NORTH FLOWS	SOUTH FLOWS	MIXED FLOWS
53%	34%	2%

DEC 2020		
NORTH FLOWS	SOUTH FLOWS	MIXED FLOWS
51%	36%	3%

2019 JAN – DEC		
NORTH FLOWS	SOUTH FLOWS	MIXED FLOWS
36%	44%	13%

2020 JAN – DEC		
NORTH FLOWS	SOUTH FLOWS	MIXED FLOWS
44%	42%	5%

North Flow



South Flow



Mixed Flow



NOV – DEC RUNWAY USE

42,737
OPERATIONS IN NOV – DEC

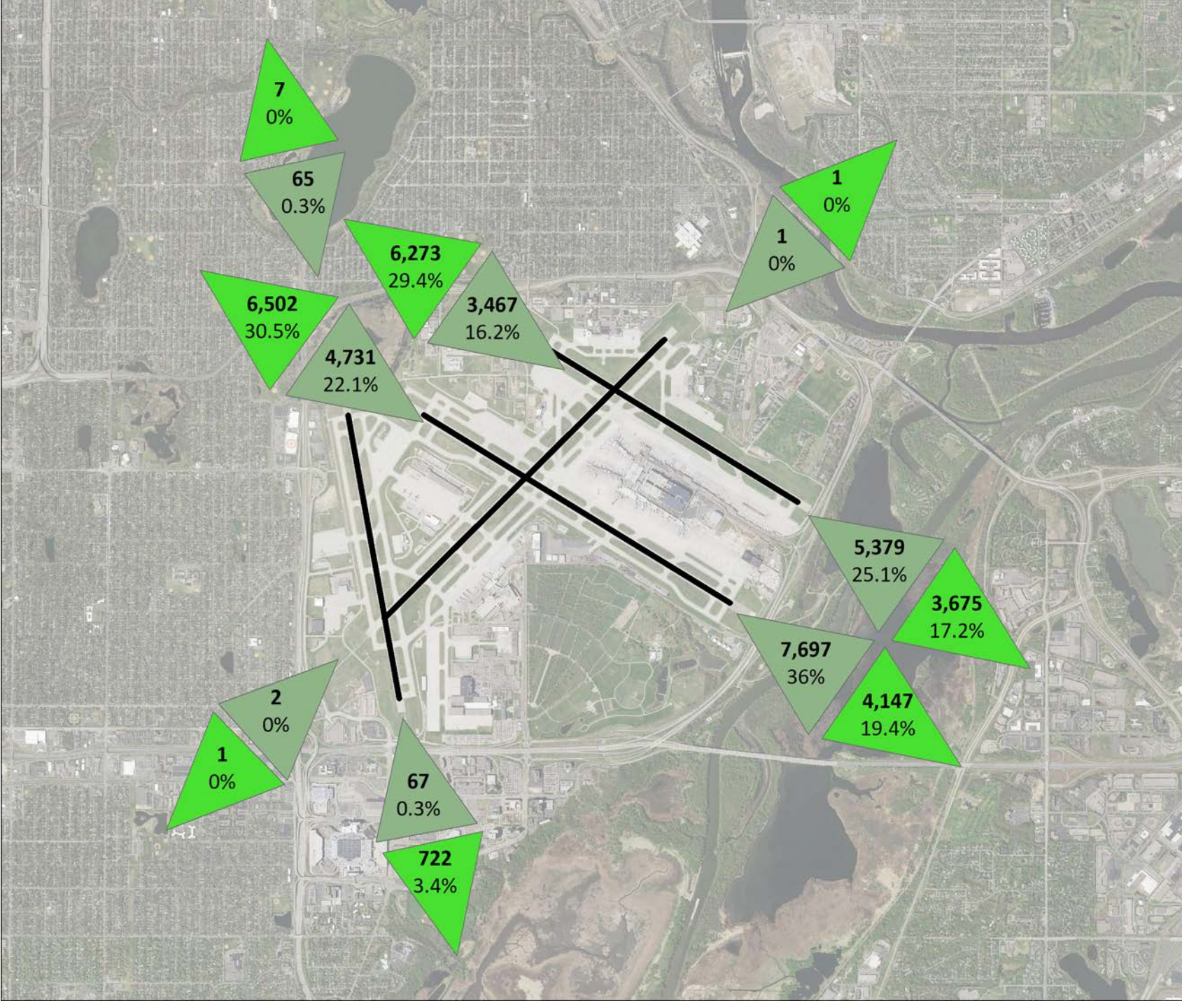
PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4
49%	2%	0%	49%

21,409
ARRIVALS

PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4
61%	0%	0%	38%

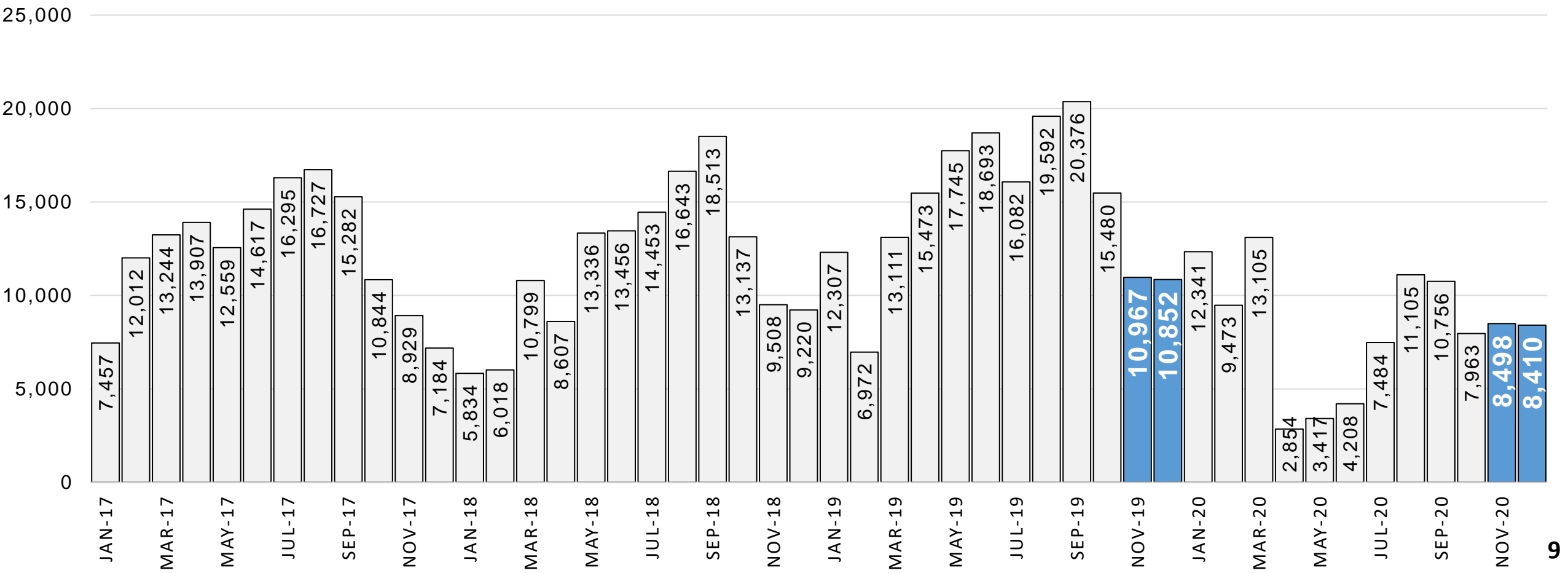
21,328
DEPARTURES

PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4
37%	3%	0%	60% 8



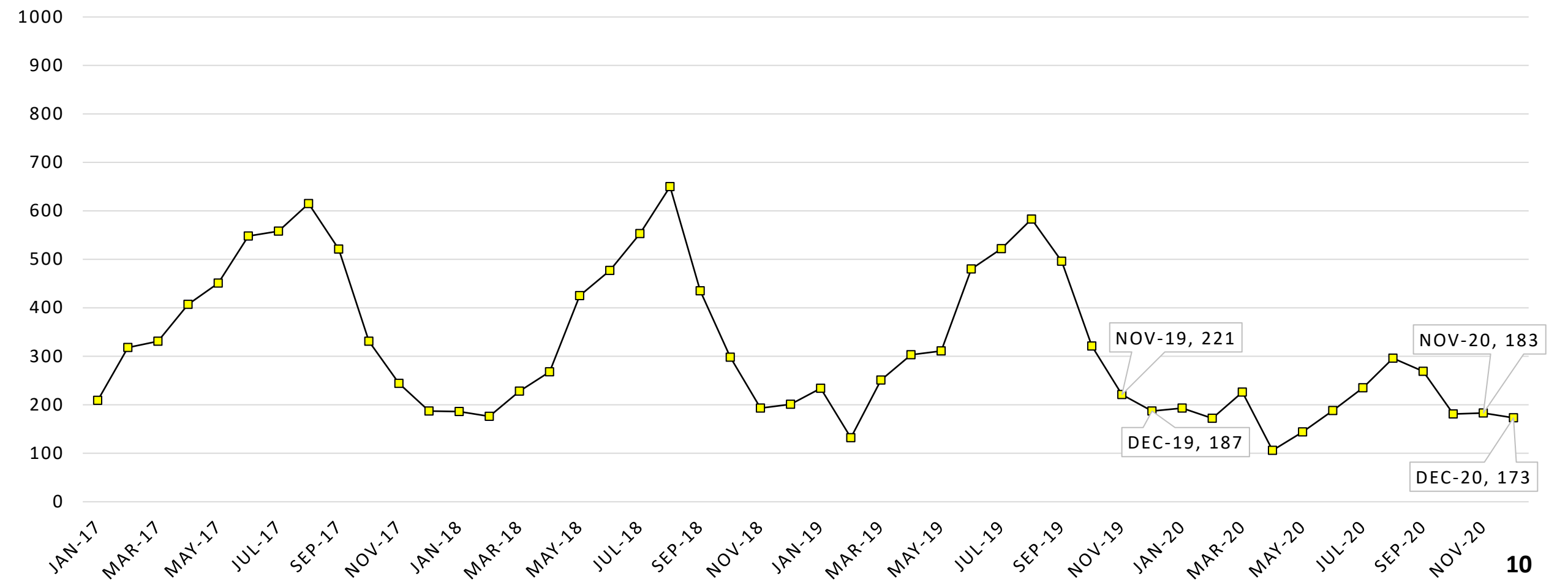
MSP COMPLAINTS

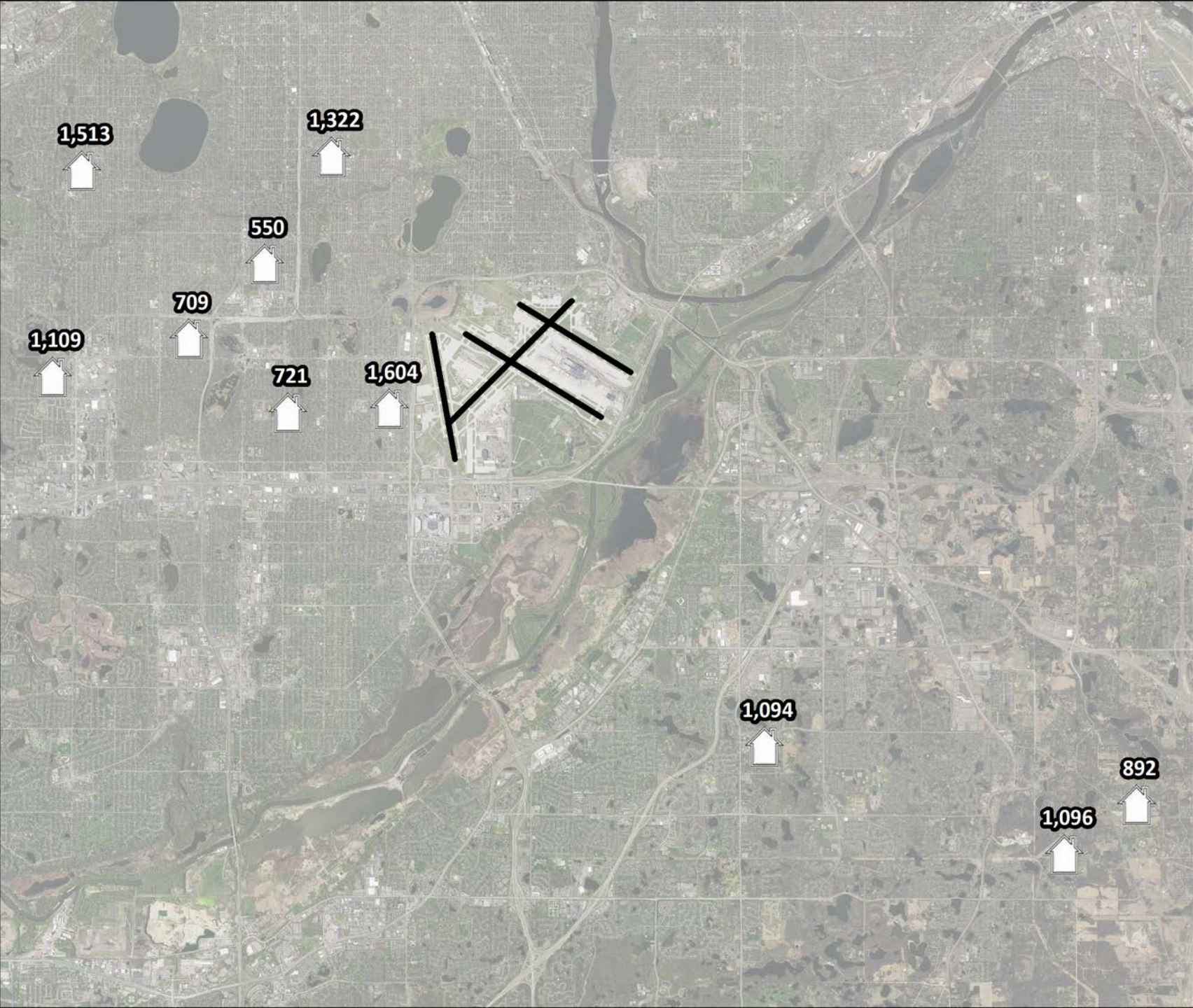
NOV 2020				DEC 2020			
COMPLAINTS	LOCATIONS			COMPLAINTS	LOCATIONS		
8,498	183			8,410	173		
Operations per Complaint	New Locations	Average	Median	Operations per Complaint	New Locations	Average	Median
2.5	24	46	3	2.6	17	49	5



MSP COMPLAINTS

NOV 2020				DEC 2020			
COMPLAINTS	LOCATIONS			COMPLAINTS	LOCATIONS		
8,498	183			8,410	173		
Operations per Complaint	New Locations	Average	Median	Operations per Complaint	New Locations	Average	Median
2.5	24	46	3	2.6	17	49	5





TOP 10 LOCATIONS

FILED
16,908
(63%)
COMPLAINTS DURING NOV & DEC

9 OF 10
HOUSEHOLDS WERE IN THE TOP 10
FOR SEPT – OCT

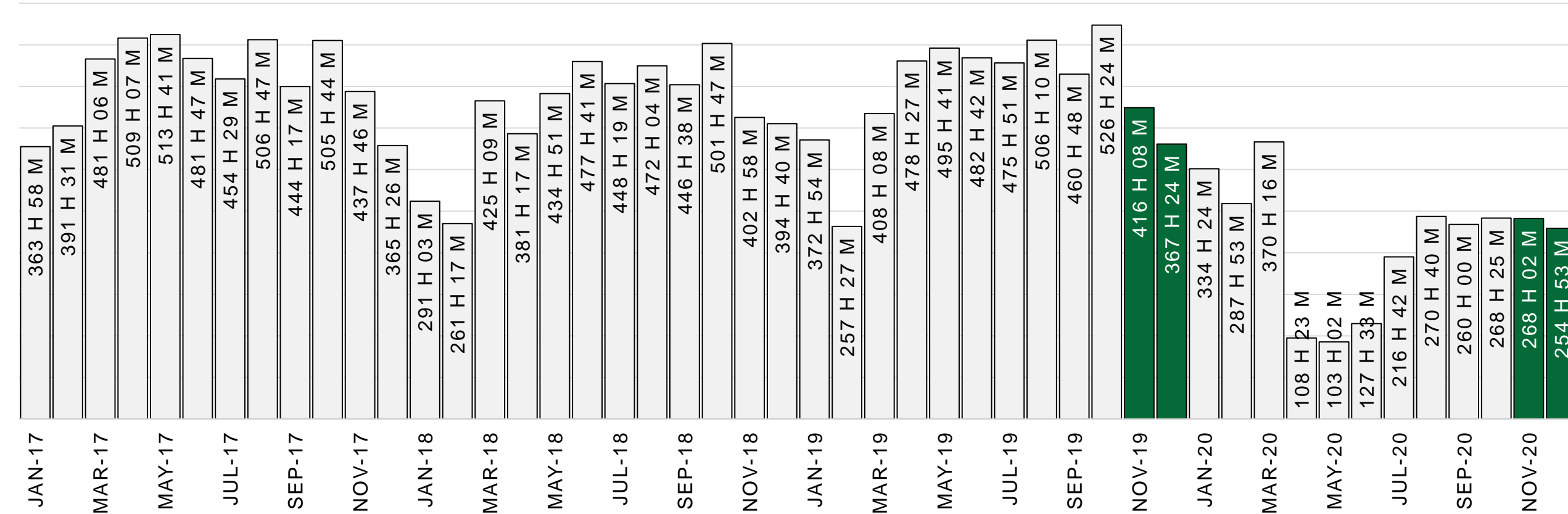
205
(65%)
HOUSEHOLDS FILED 10 OR FEWER
COMPLAINTS

TA⁶⁵ 2019: 5,248h 9m

SOUND MONITORING

TA⁶⁵ 2020: 2,870h 19m

NOV 2020			DEC 2020		
Time Above	46 _s TA ⁶⁵ per operation	268 _h 2 _s TA ⁶⁵	Time Above	42 _s TA ⁶⁵ per operation	254 _h 53 _m TA ⁶⁵
Count Above	2.54 N ⁶⁵ per operation	53,083 N ⁶⁵	Count Above	2.41 N ⁶⁵ per operation	53,543 N ⁶⁵

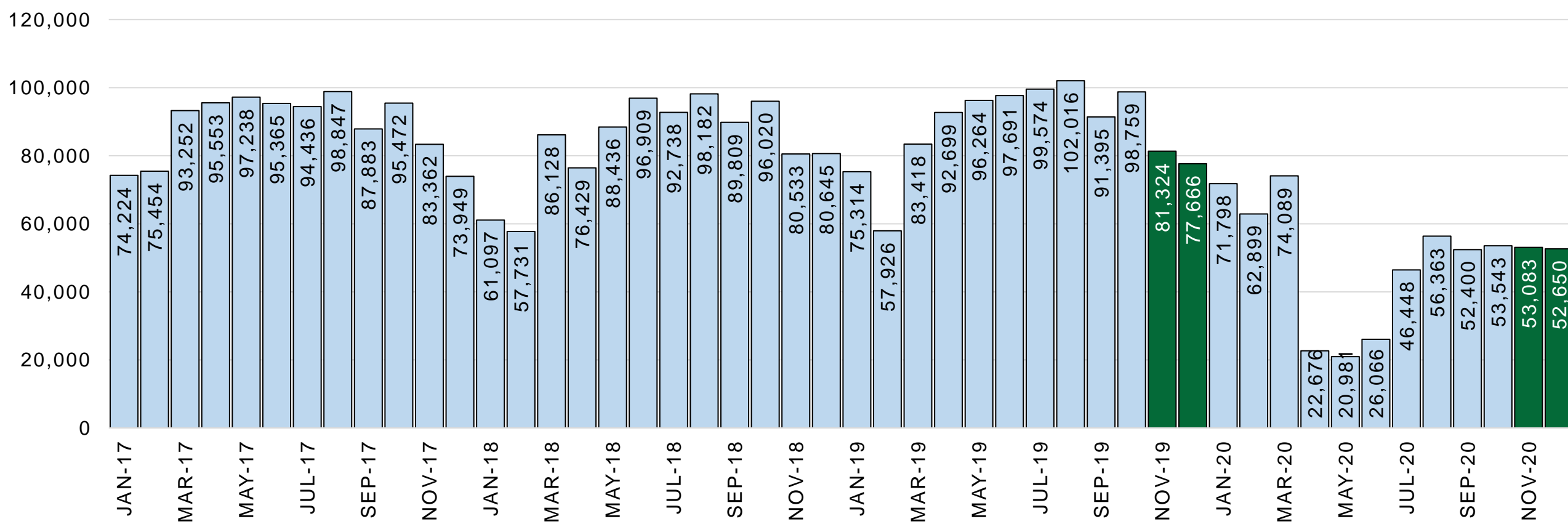


N⁶⁵ 2019: 1,054,046

SOUND MONITORING

N⁶⁵ 2020: 592,996

	NOV 2020			DEC 2020	
Time Above	46_s TA ⁶⁵ per operation	268_h 2_s TA ⁶⁵	Time Above	42_s TA ⁶⁵ per operation	254_h 53_m TA ⁶⁵
Count Above	2.54 N ⁶⁵ per operation	53,083 N ⁶⁵	Count Above	2.41 N ⁶⁵ per operation	52,650 N ⁶⁵



NOISE ABATEMENT

NOV 2020				DEC 2020			
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Runway 17	100%
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Runway 17	99.9%
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Corridor	94.3%
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Corridor	95.1%
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Cross Day	20.2%
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Cross Day	18%
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Cross Night	66.7%
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Cross Night	38.3%
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RUS	50.4%	Arrive – 62%	Depart – 49%	RUS	51.1%	Arrive – 61%	Depart – 41%
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2019 RUS	54.3%	2020 RUS	51.5%
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ITEM 2

PUBLIC COMMENT PERIOD



NOISE OVERSIGHT COMMITTEE
JANUARY 20, 2021

ITEM 2

PUBLIC COMMENT PERIOD

Speaking at a Meeting

- Each speaker will have one opportunity to speak and is allotted three (3) minutes.
- When called upon to speak, speak clearly, state your name and address. If you are affiliated with any organization, please state your affiliation.
- Commenters shall address their comments to the NOC and not to the audience.
- Use of profanity, personal attacks, or threats of violence will not be tolerated.



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4.1 – FAA NEIGHBORHOOD ENVIRONMENTAL SURVEY



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Comments Requested

FAA WANTS TO HEAR FROM YOU. WHAT DO YOU THINK ABOUT:



Factors that may be contributing to the **increase in annoyance** shown in the Survey results



Additional investigation or analysis on:

- Effects of Aircraft Noise on individuals and Communities
- Noise Modeling, Noise Metrics, and Environmental Data Visualization
- Reduction, Abatement, and Mitigation of Aviation Noise



Additional categories of **investigation, analysis, or research** that should be undertaken to inform FAA noise policy



View the **Federal Register Notice**, where you can provide your comments on the FAA's noise research program.

4.2 – MSP AIR SERVICE UPDATES

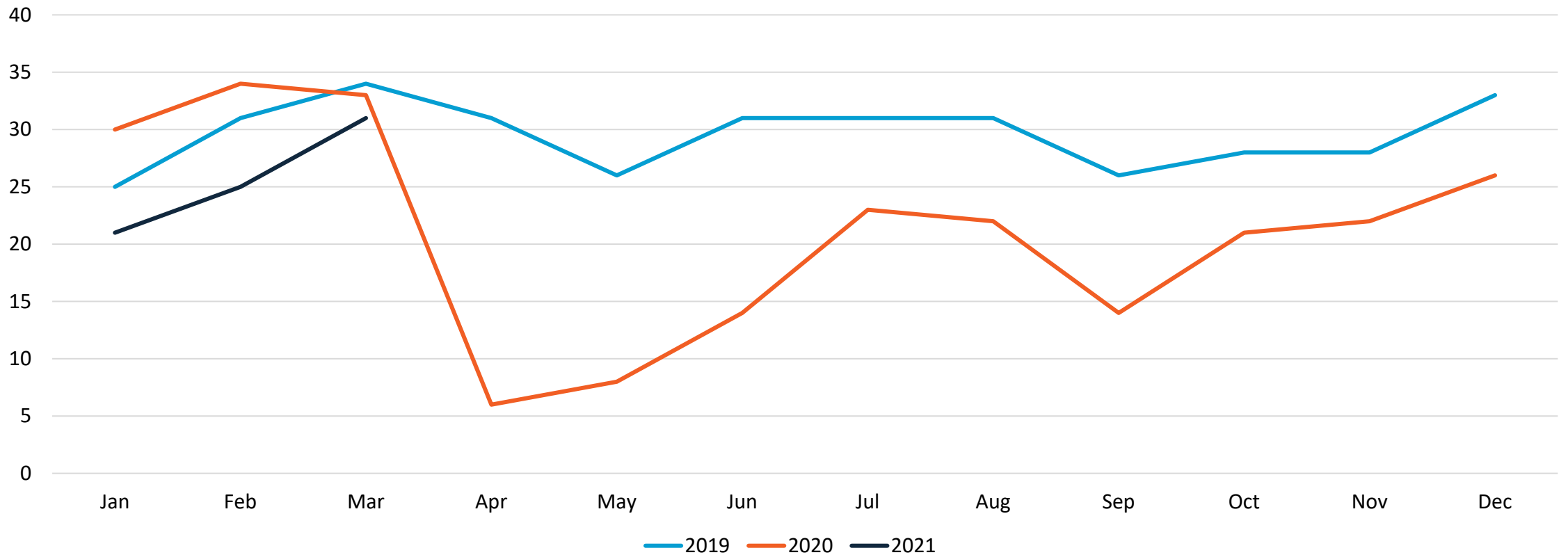


**NOISE OVERSIGHT COMMITTEE
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Sun Country Daily Departures

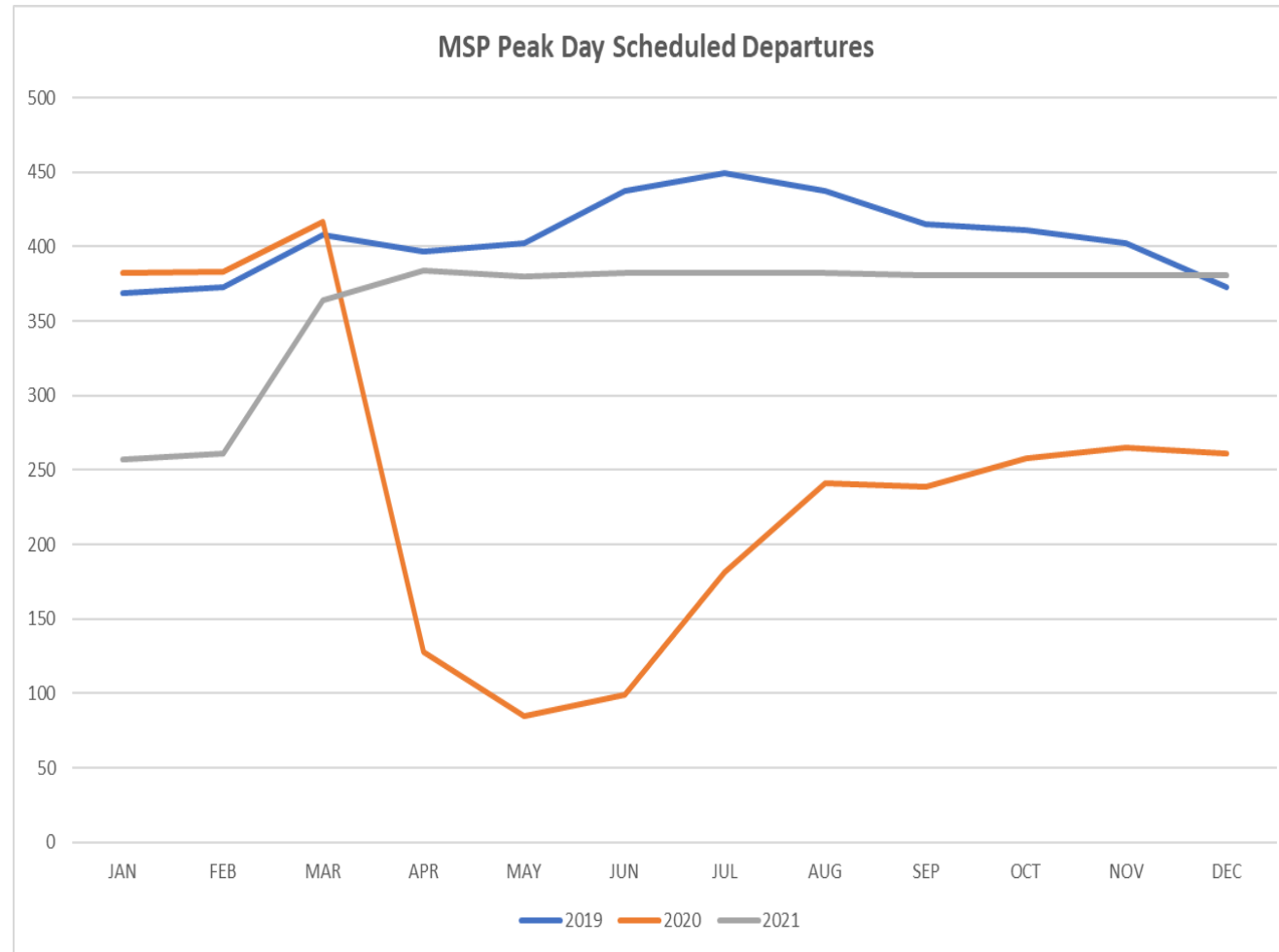


Sun Country Average Daily Departures



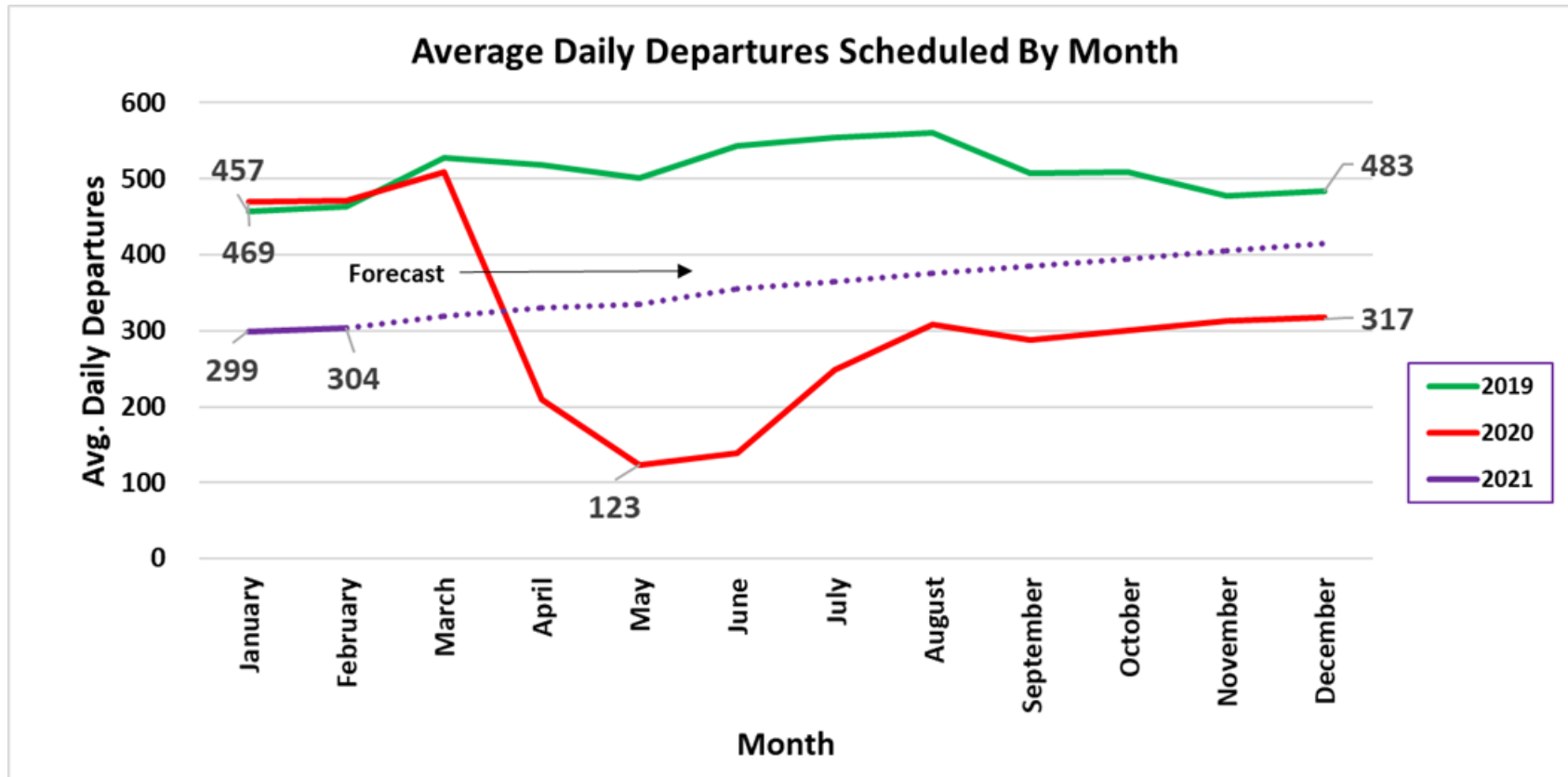
DL MSP Scheduled Operations – 2019-2021

Recovery of MSP service towards pre-COVID levels continues



- Data shown is for flights operated thru DEC20 and for flights available for sale JAN21-DEC21
- Actual 2021 operations are subject to change and are dependent on lifting of travel restrictions and distribution of vaccines
 - Post pandemic fleet mix eliminates noisiest MD88/MD90/B717 aircraft, replaced by quieter A220/A321

MSP Daily Departures

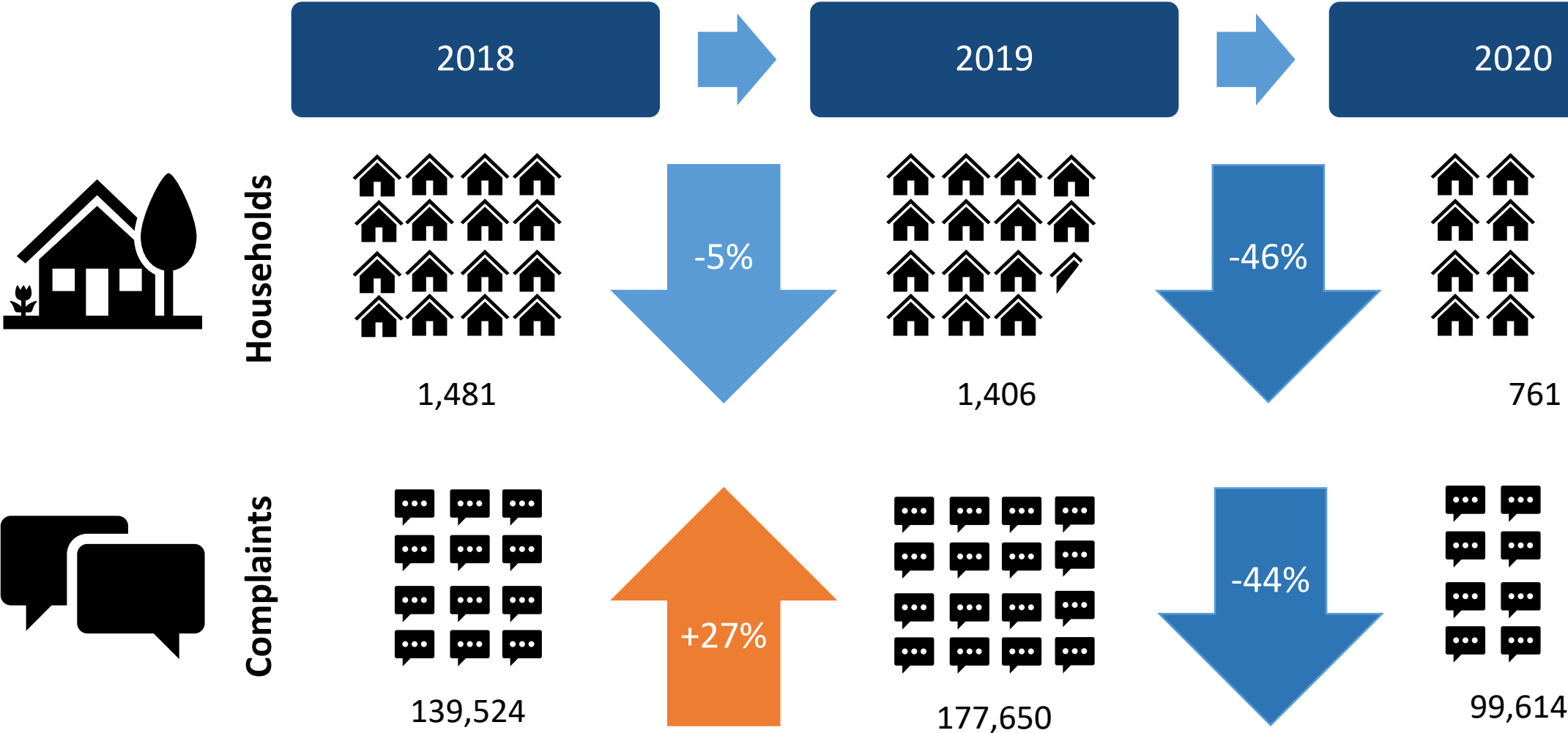


4.3 – 2020 COMPLAINT DATA ASSESSMENT



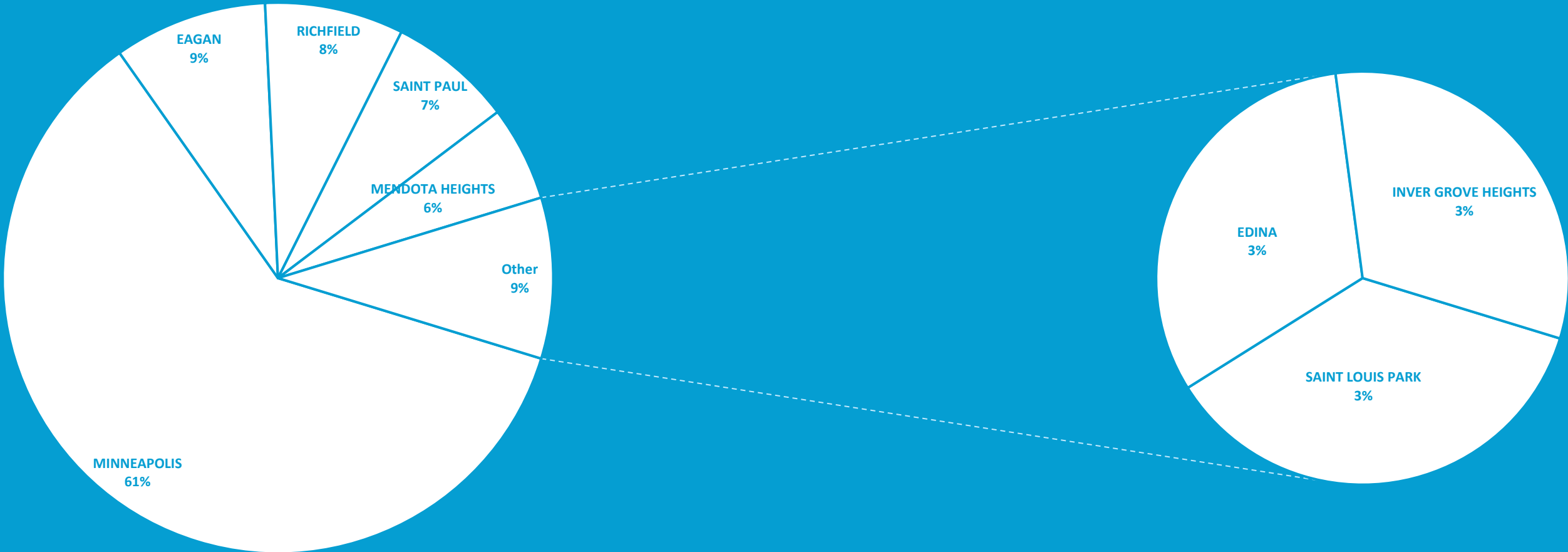
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Total Households and Total Complaints 2018-2020





New Households Filing Complaints 2020 By City



Note: Only includes cities with four or more new households filing complaints in 2020.



Change in Complaints By City

SAINT LOUIS PARK
2020 COMPLAINTS: 596
2019 COMPLAINTS: 992
CHANGE: -396

MINNEAPOLIS
2020 COMPLAINTS: 36,979
2019 COMPLAINTS: 74,436
CHANGE: -37,457

SAINT PAUL
2020 COMPLAINTS: 1,285
2019 COMPLAINTS: 487
CHANGE: 798

RICHFIELD
2020 COMPLAINTS: 11,370
2019 COMPLAINTS: 12,588
CHANGE: -1,218

MENDOTA HEIGHTS
2020 COMPLAINTS: 3,781
2019 COMPLAINTS: 3,749
CHANGE: 32

EDINA
2020 COMPLAINTS: 4,500
2019 COMPLAINTS: 4,007
CHANGE: 493

SUNFISH LAKE
2020 COMPLAINTS: 1,853
2019 COMPLAINTS: 249
CHANGE: 1,604

BLOOMINGTON
2020 COMPLAINTS: 766
2019 COMPLAINTS: 1,798
CHANGE: -1,032

INVER GROVE HEIGHTS
2020 COMPLAINTS: 10,776
2019 COMPLAINTS: 20,666
CHANGE: -9,890

BURNSVILLE
2020 COMPLAINTS: 1,231
2019 COMPLAINTS: 5,564
CHANGE: -4,333

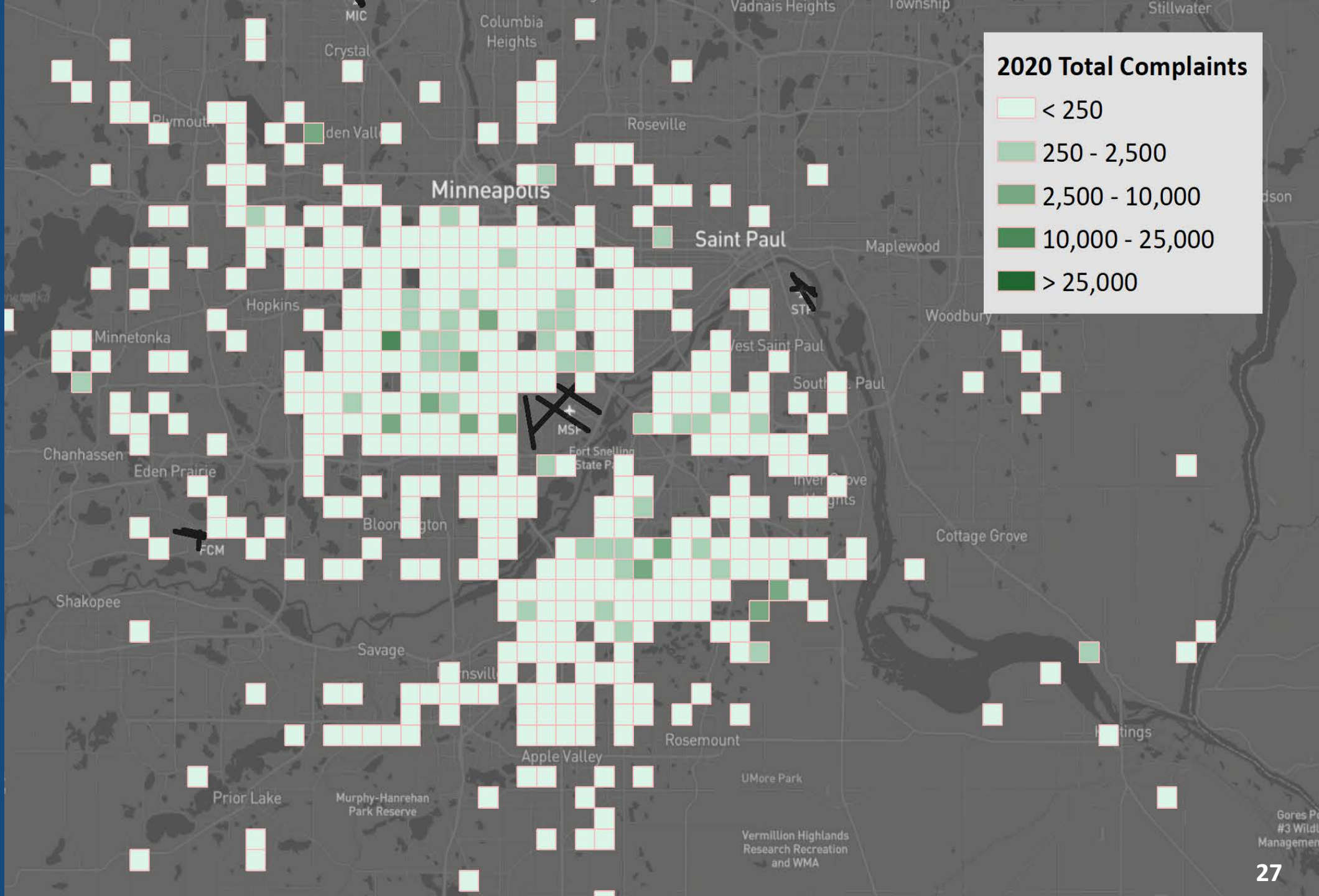
APPLE VALLEY
2020 COMPLAINTS: 199
2019 COMPLAINTS: 1,434
CHANGE: -1,235

EAGAN
2020 COMPLAINTS: 16,700
2019 COMPLAINTS: 33,784
CHANGE: -17,084



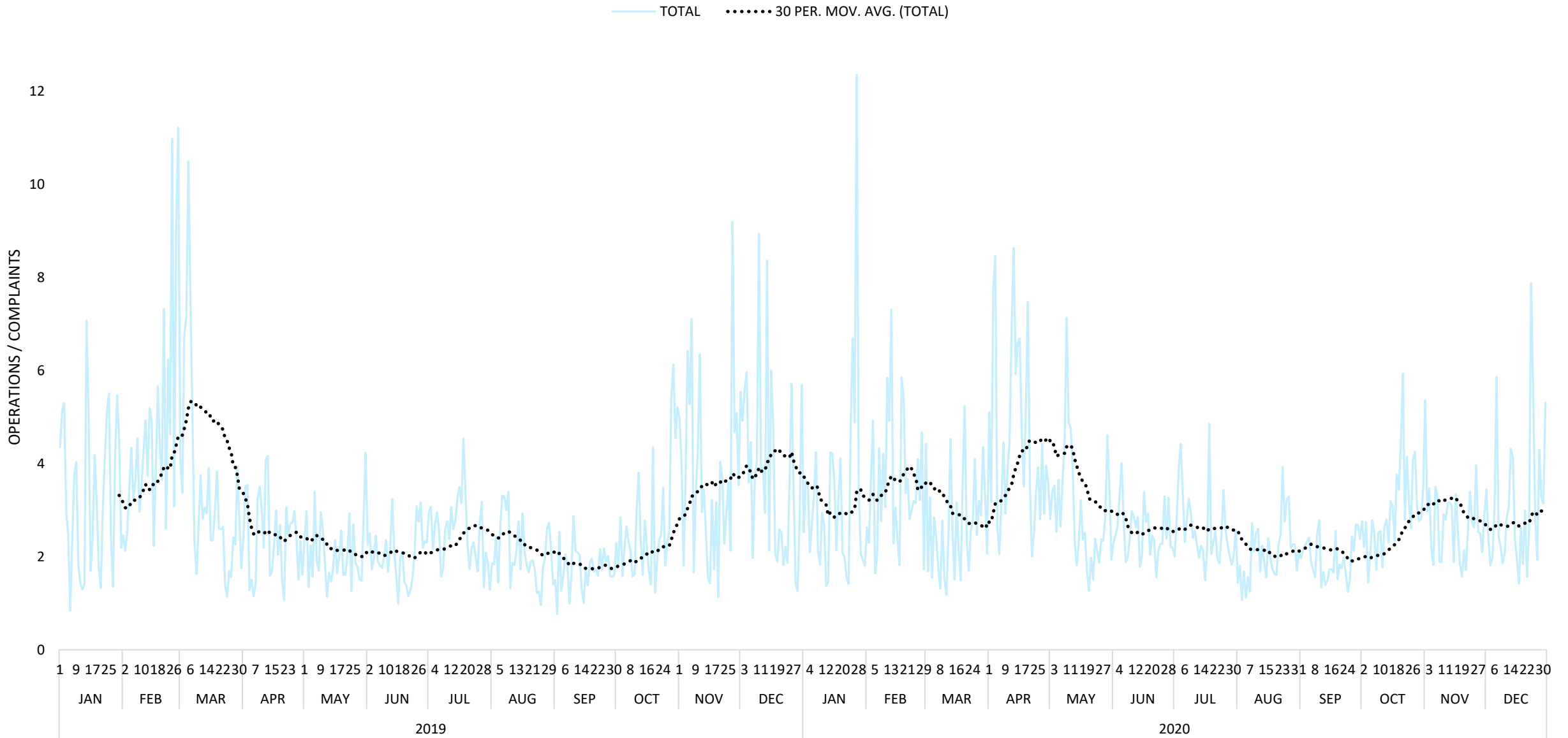
Total Complaints

2020



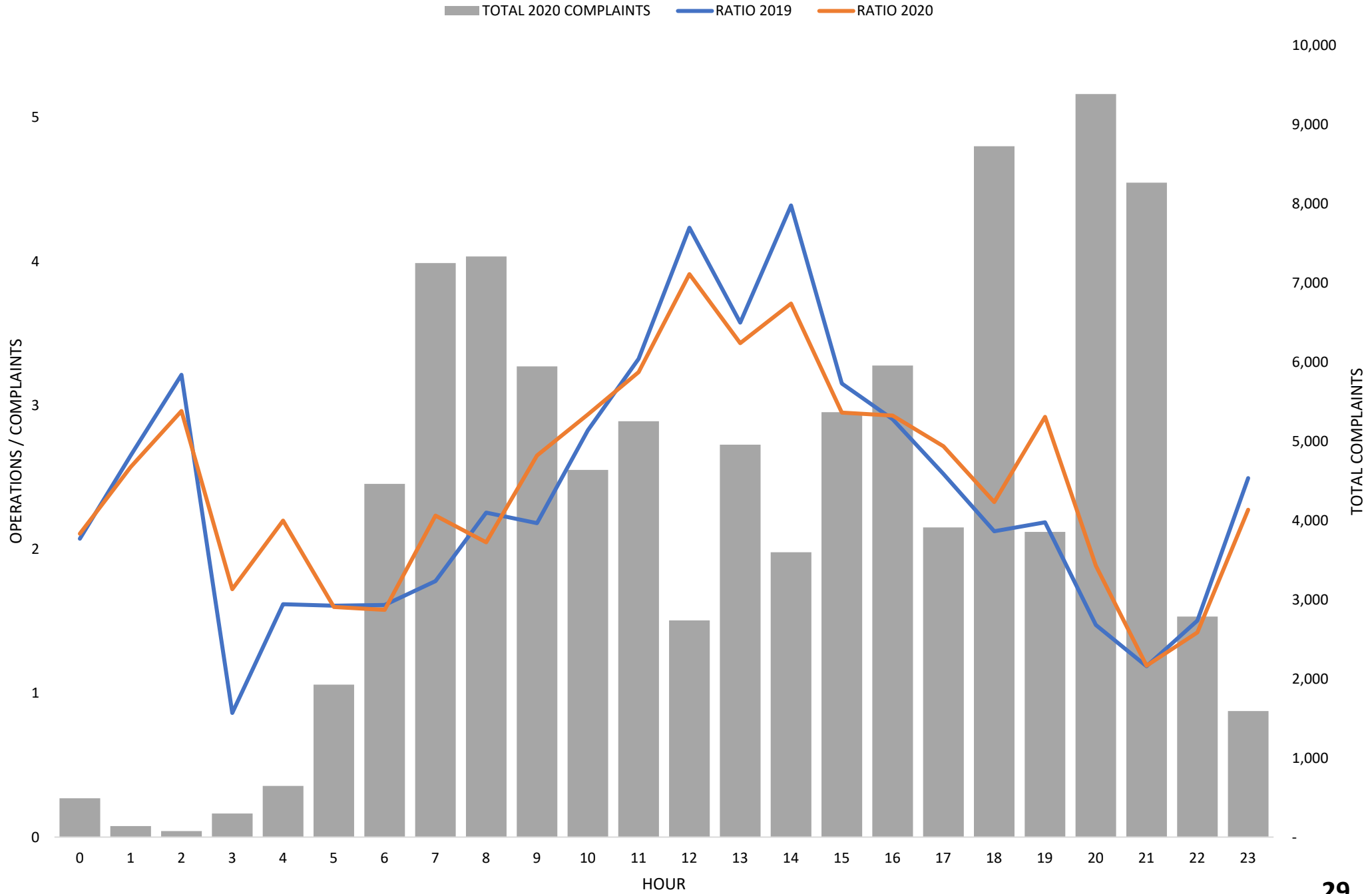


2019-2020 Operations to Complaints Ratio



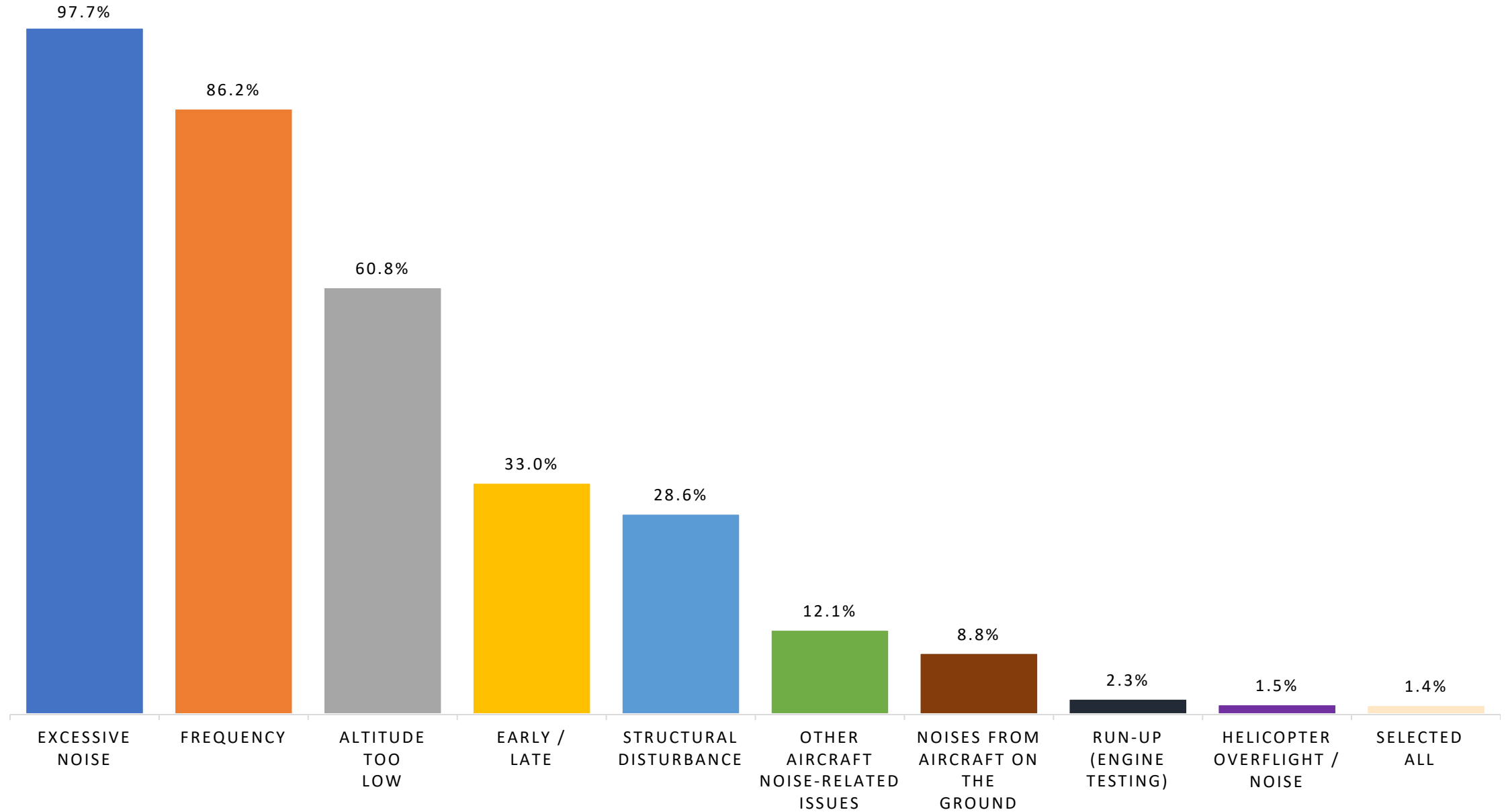


2019 & 2020 Complaints to Operations Ratio by Hour





2020 Complaints Filed By Complaint Reason





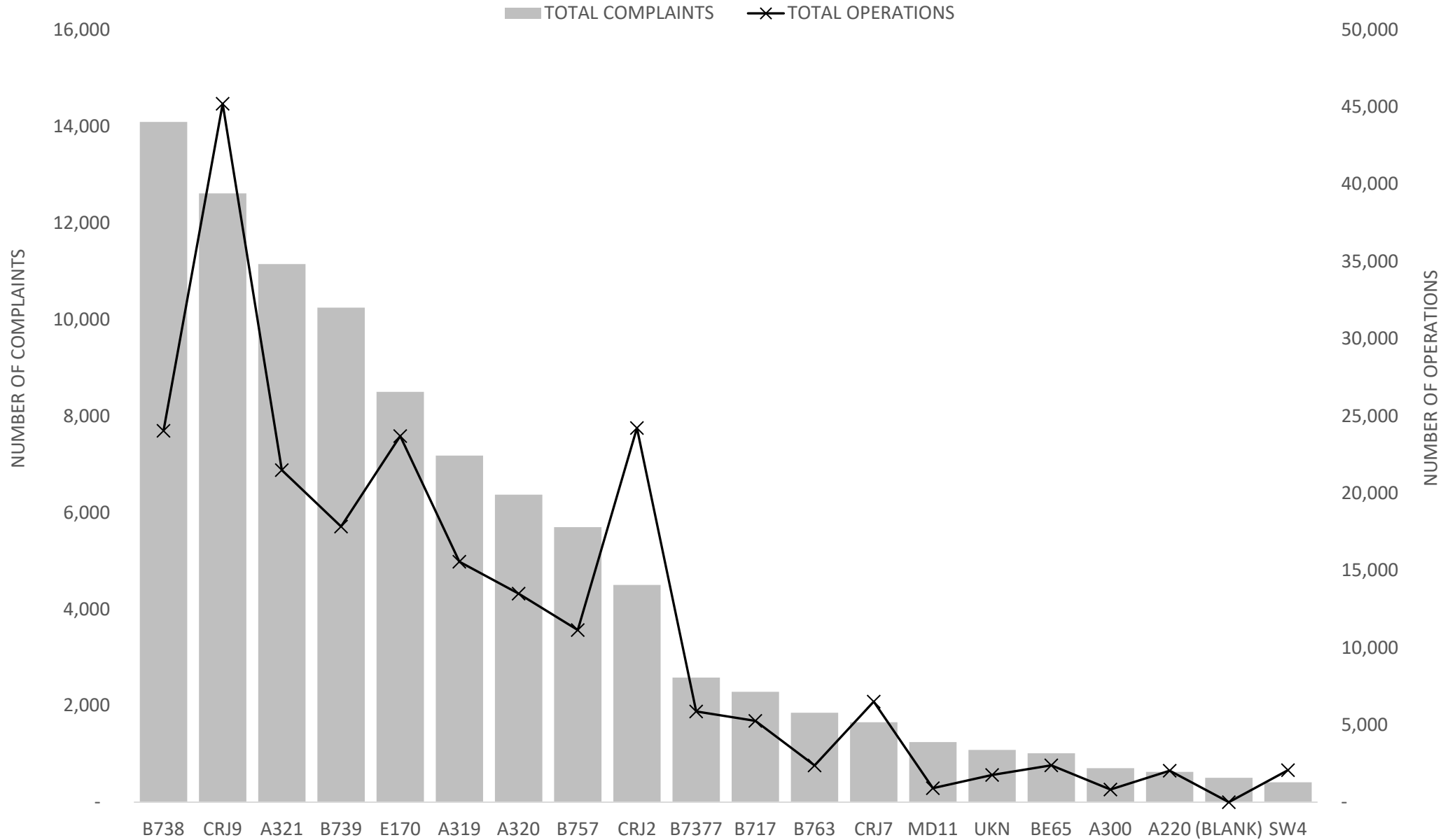
Operation Type	Total Operations	Total Complaints	Ratio
Commercial Jet	223,363	92,753	2.4
Propeller	2,727	1,846	1.5
Turboprop	7,643	1,763	4.3
Jet	7,144	1,478	4.8
Unknown	1,761	1,081	1.6
Helicopter	29	403	0.1
Military	270	142	1.9



2020
Complaints By
Aircraft Category



2020 Complaints By Aircraft Type



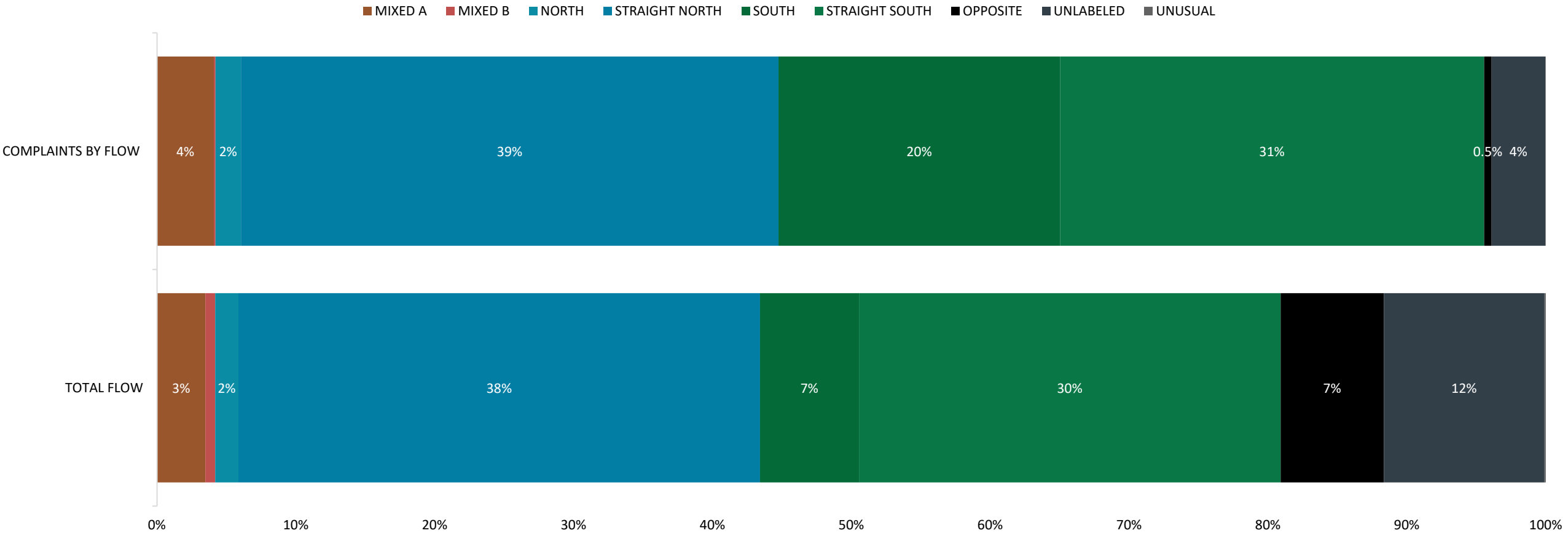


Operation Number	Aircraft Type	Flight ID	Date and Time	Number of Complaints	Number of Households
26204946	A124	ADB3613	11/16/2020 23:25	13	11
25960691	A321	DAL518	8/16/2020 20:21	11	9
25470418	B763	FDX1358	1/21/2020 21:46	8	8
25666139	MD11	UPS559	4/22/2020 21:51	9	8
26028951	MD11	UPS559	9/8/2020 21:51	15	8
25609500	MD11	UPS559	3/18/2020 21:47	10	8
25504130	B763	FDX1618	2/6/2020 21:53	9	8
25607165	A306	UPS555	3/17/2020 21:57	8	8
25607150	MD11	UPS559	3/17/2020 21:40	9	8
25728552	A124	ADB300F	5/27/2020 5:56	8	8

2020
Top 10 Flights
That Generated
Complaints

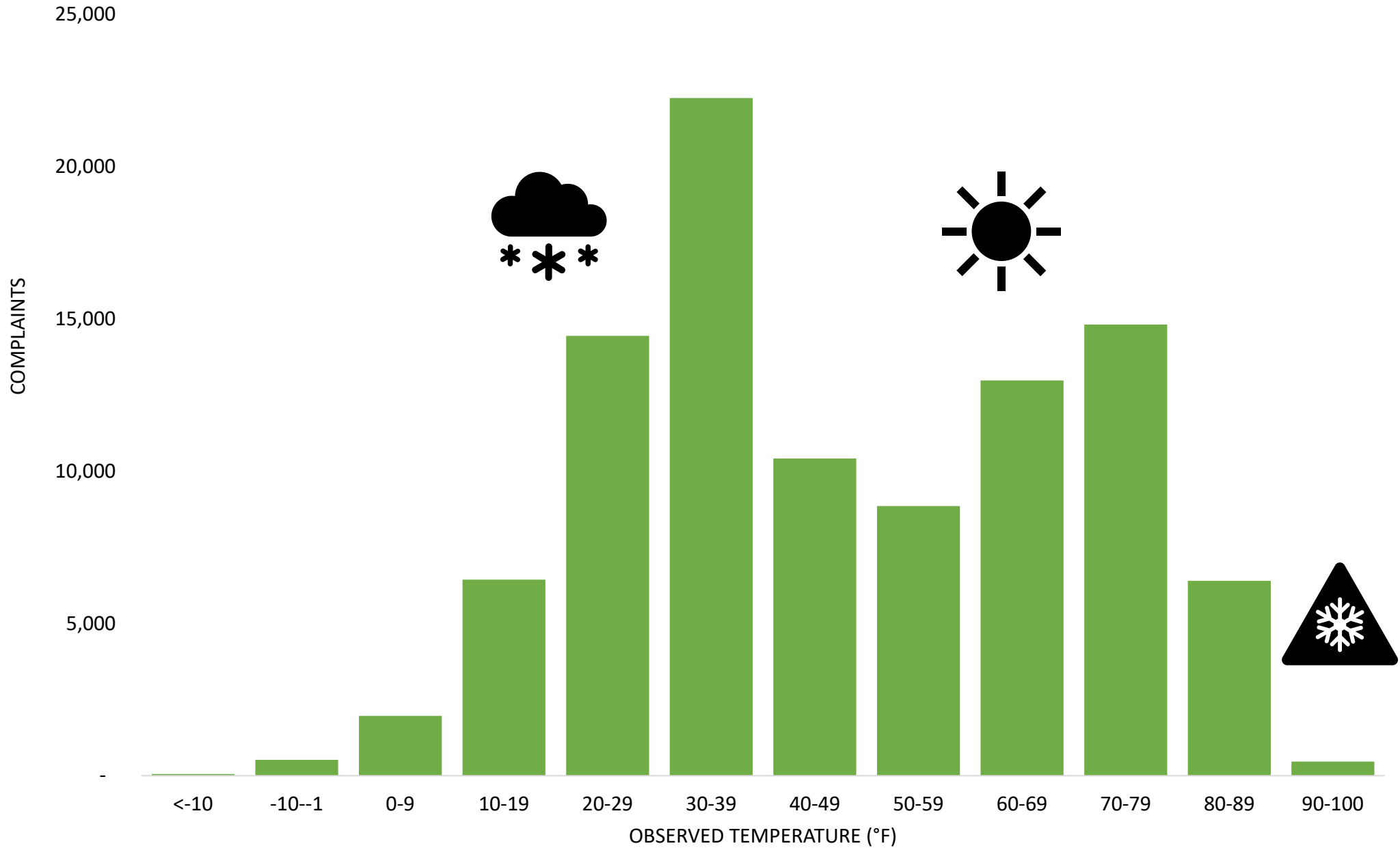


2020 Complaints By Flow





2020 Complaints By Temperature

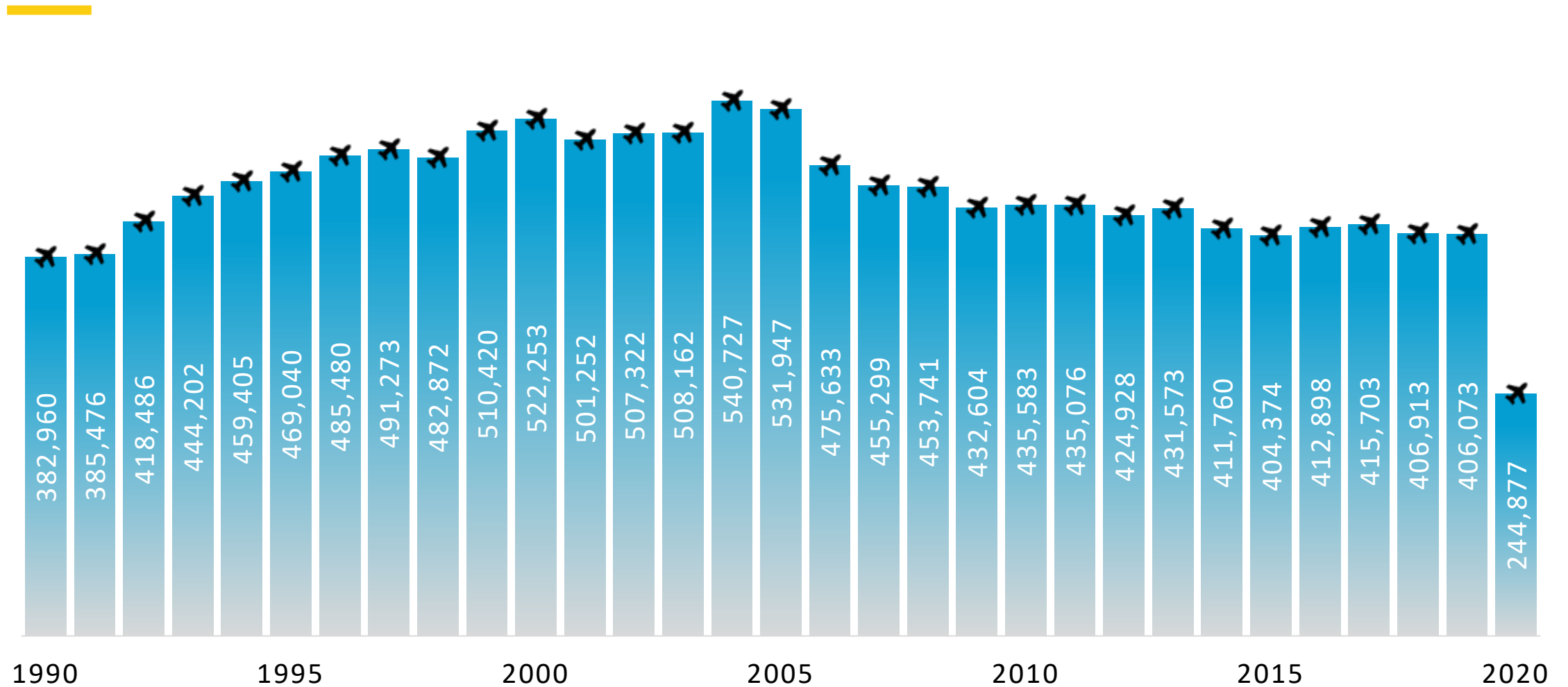


4.4 – 2020 FLEET MIX AND NIGHTTIME OPERATIONS ASSESSMENT

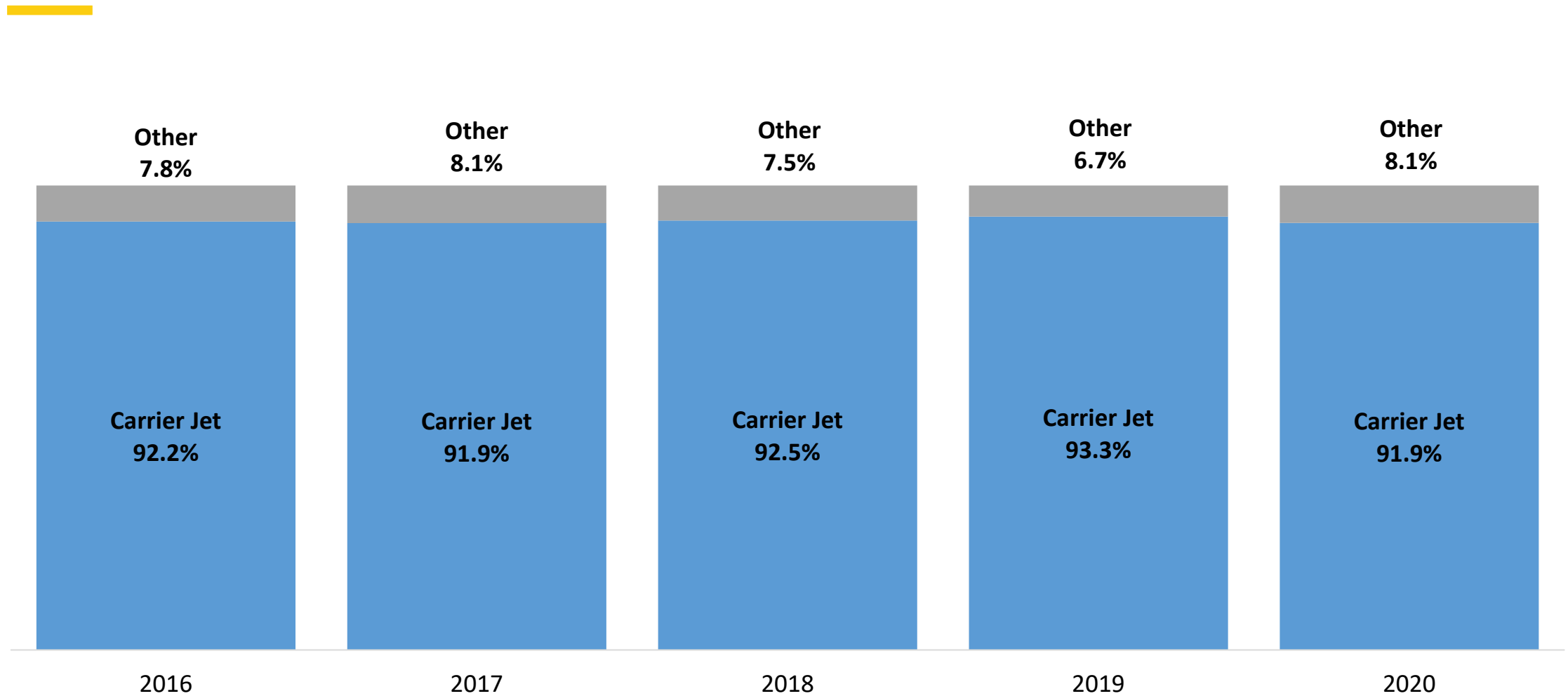


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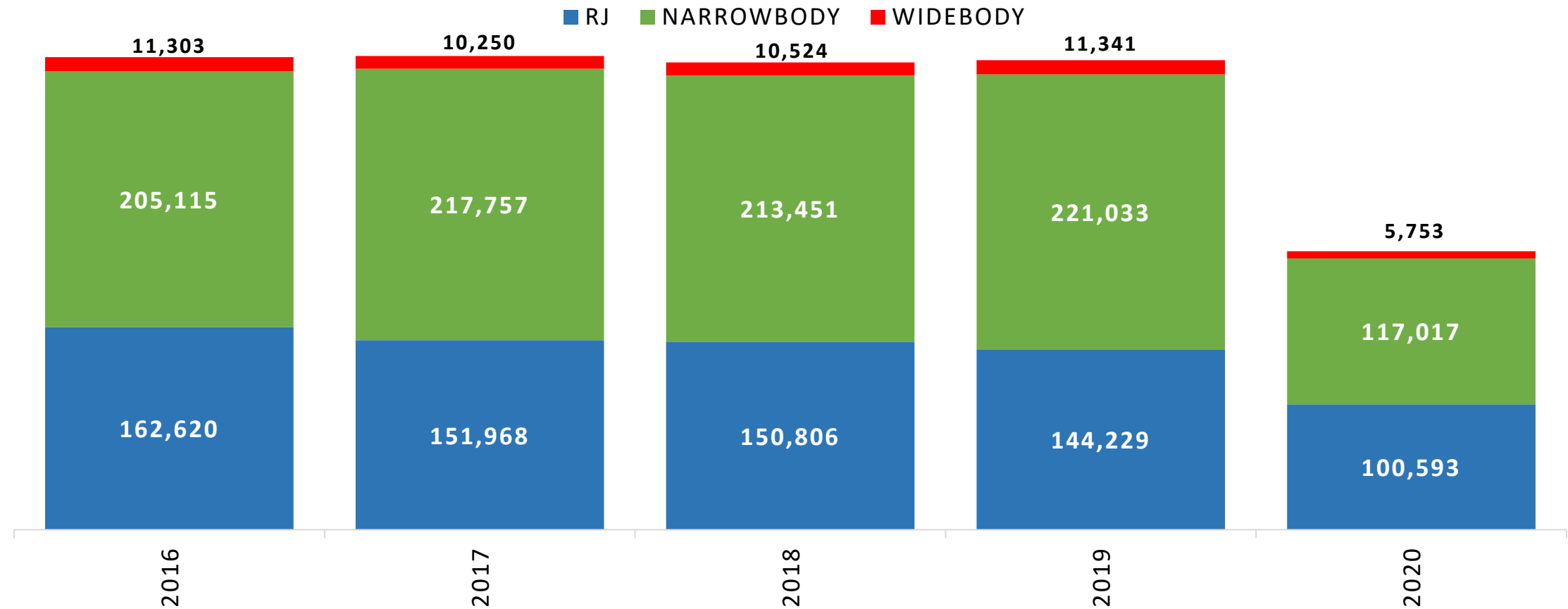
MSP Operations (FAA Opsnet)



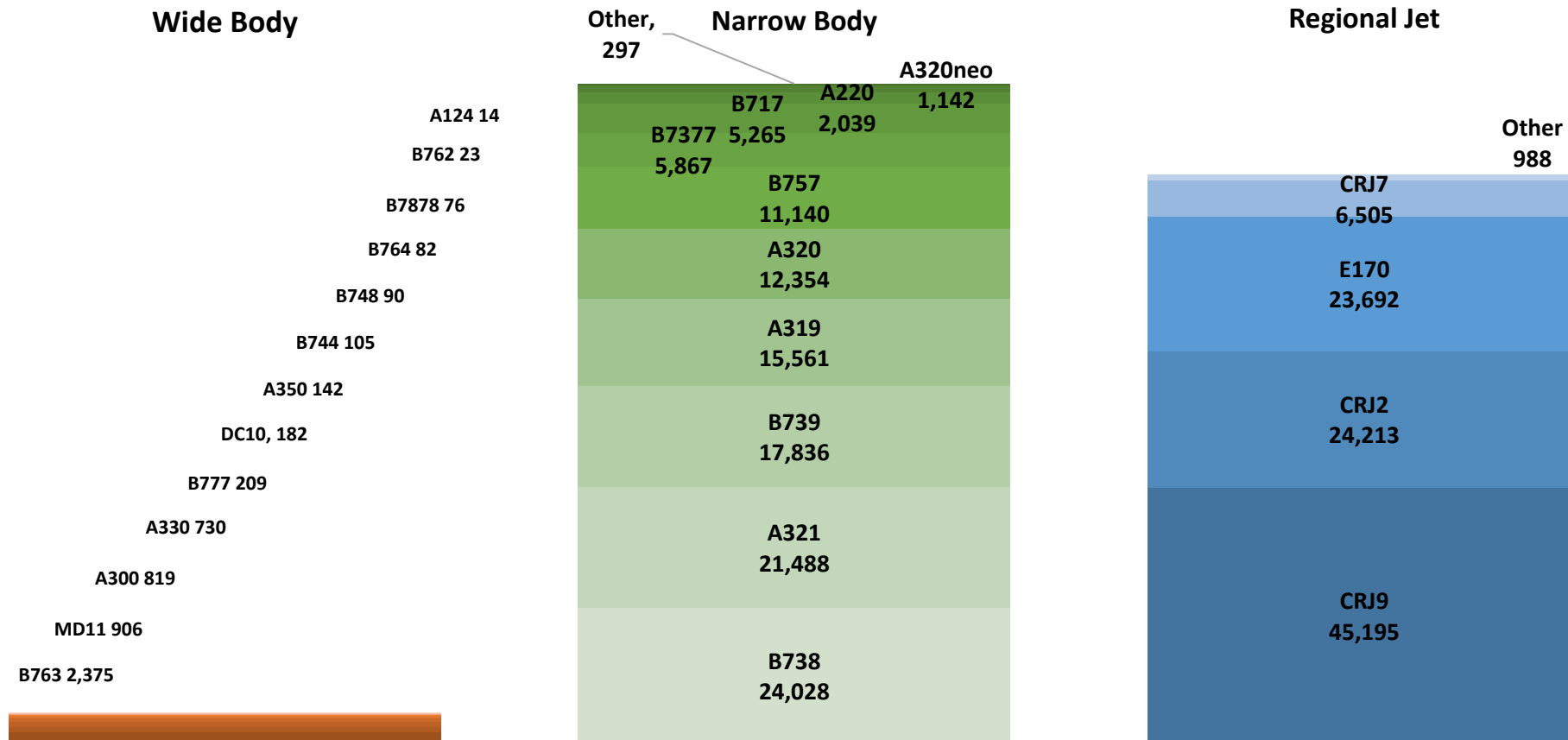
MSP Operations Fleet Mix



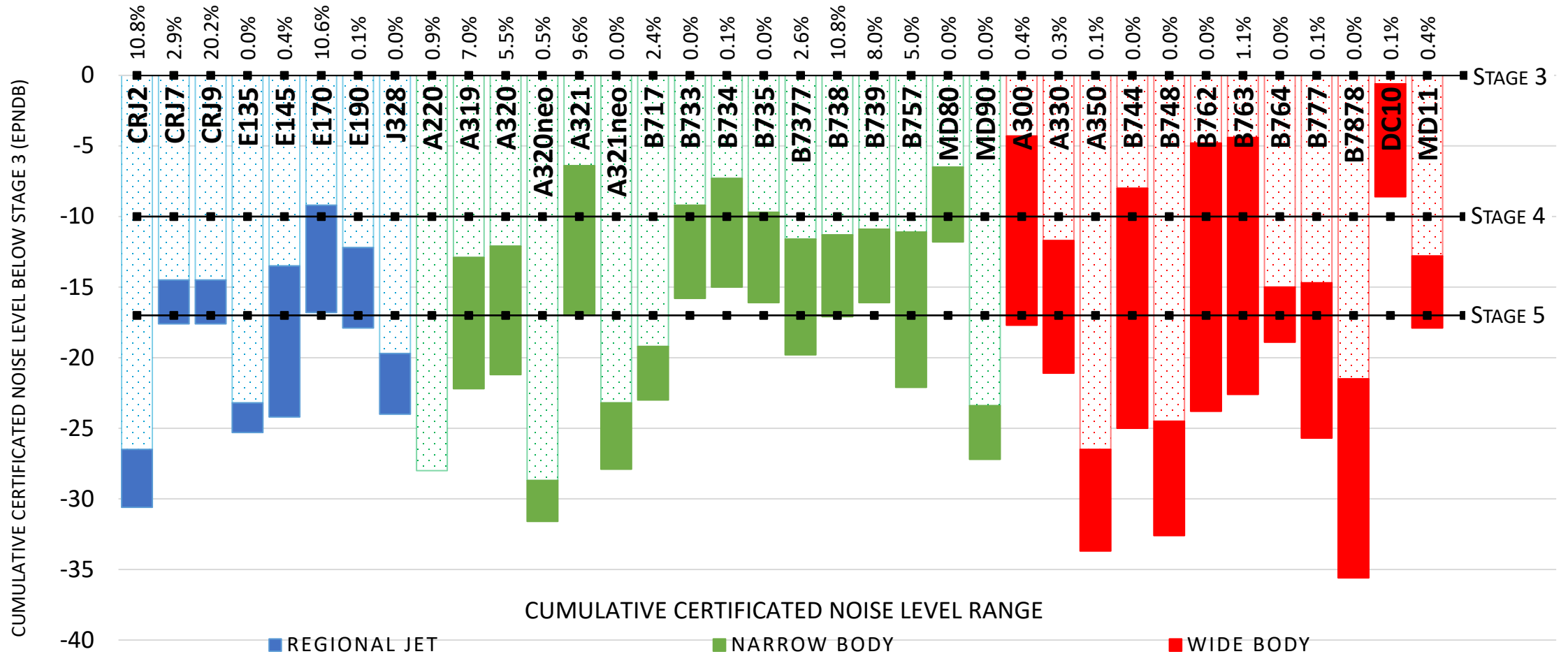
MSP Operations Fleet Mix



MSP Operations Fleet Mix



MSP Operations Fleet Mix with Certificated Noise Levels



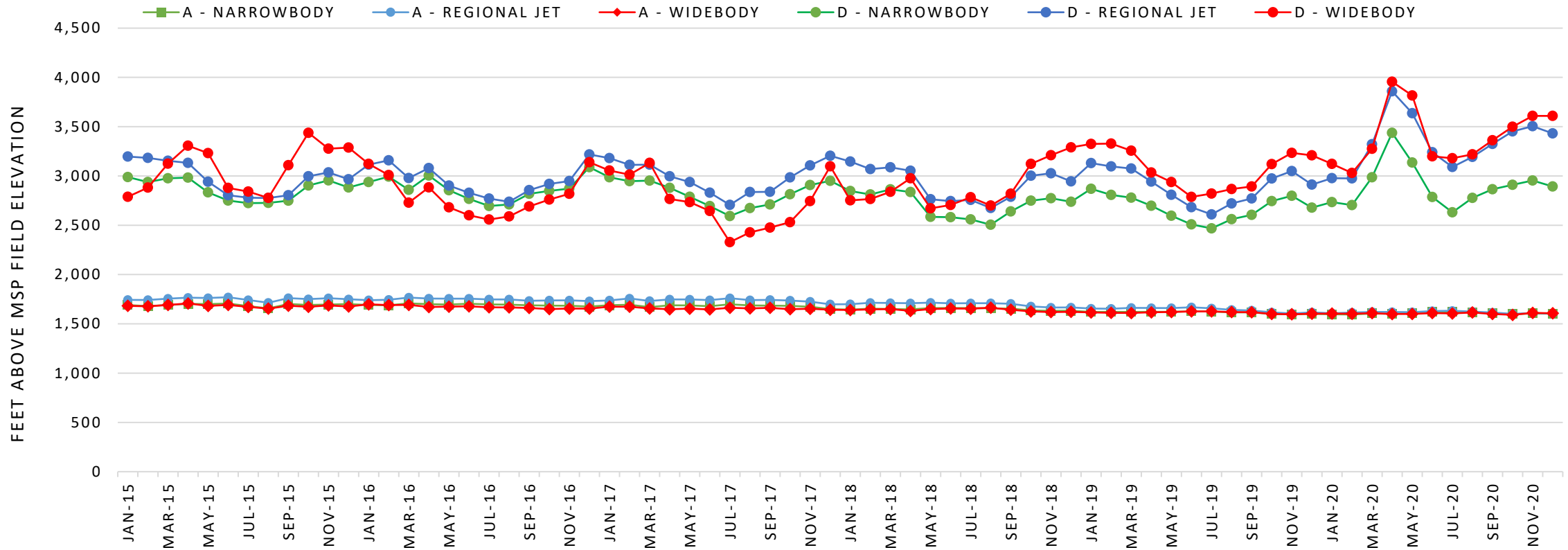
SOURCE: USAGE DATA: MACNOMS; NOISE CERTIFICATION DATA: EUROPEAN AVIATION SAFETY AGENCY

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

Average Altitude



AVERAGE ALTITUDE FOR AIRCRAFT AT MSP

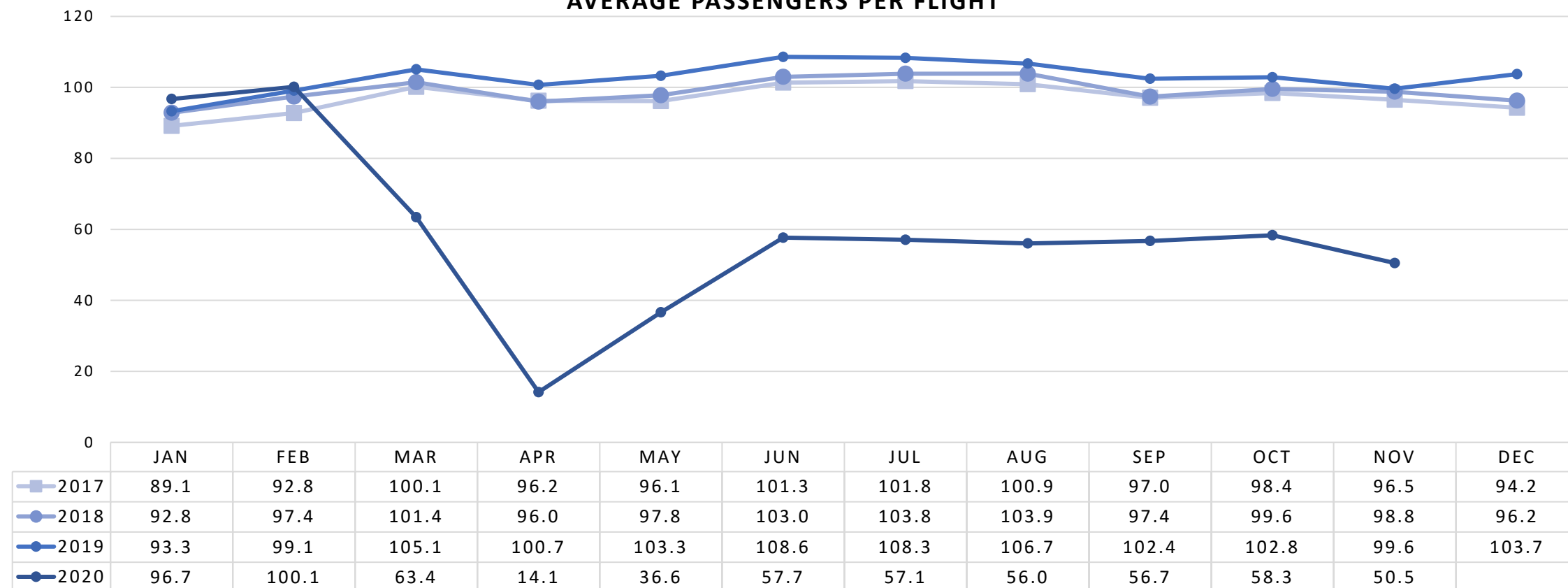




MSP Passengers per Flight

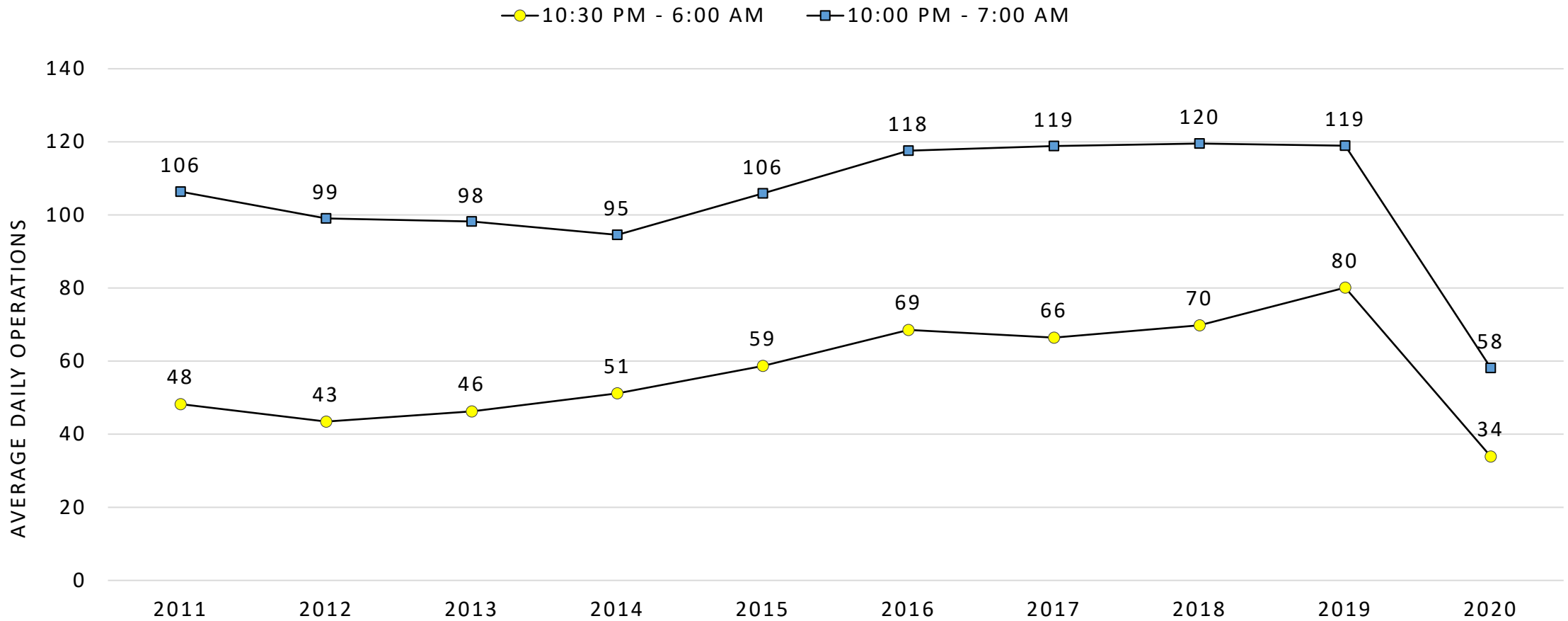


AVERAGE PASSENGERS PER FLIGHT

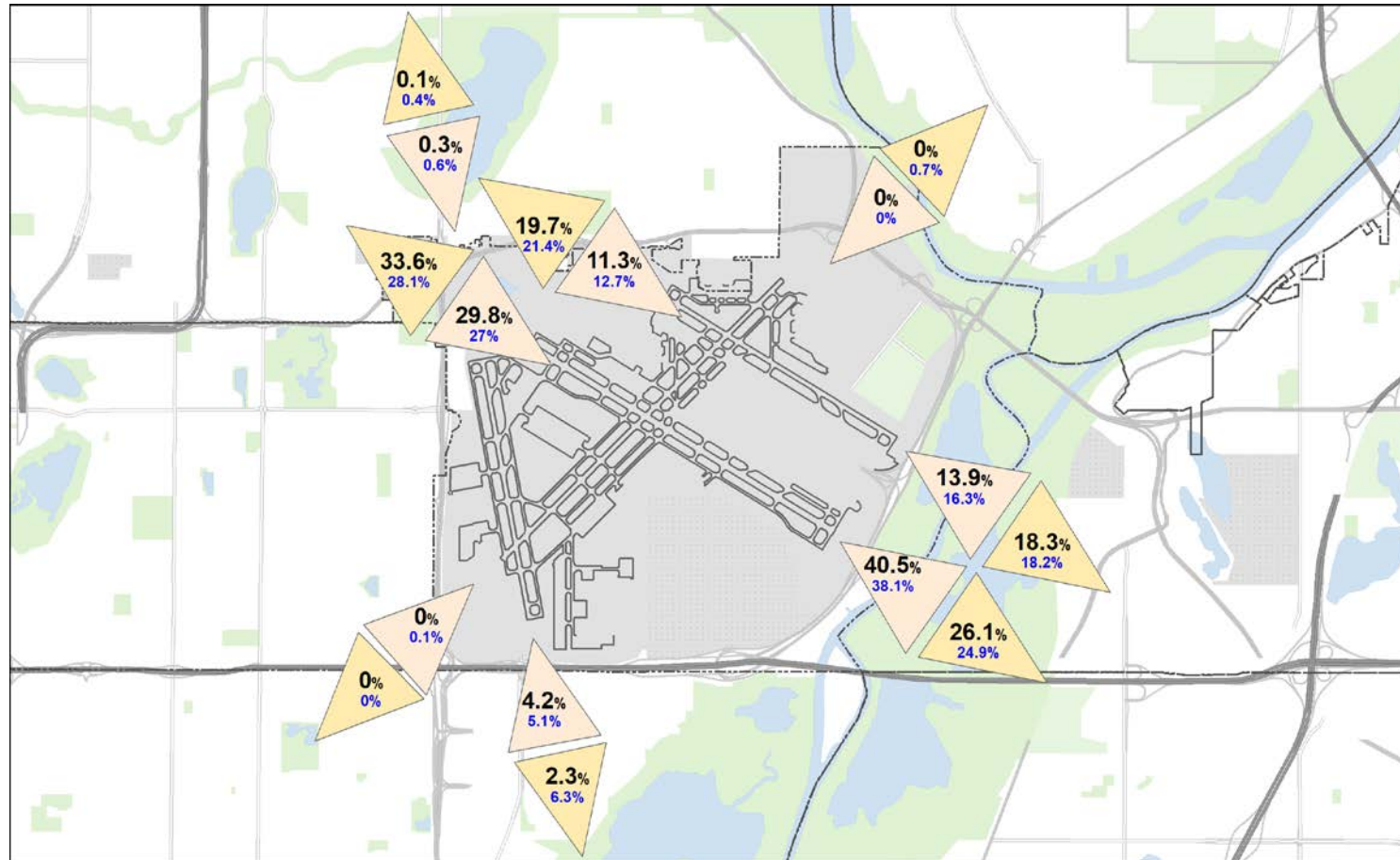


SOURCE: MSP MONTHLY OPERATIONS REPORTS

Average Daily Nighttime Operations



Nighttime Runway Use





Nighttime Operations by Airline and Aircraft

AIRLINE	ID	COUNT	PERCENT OF AIRLINE OPERATIONS' OCCURRING AT NIGHT	PERCENT OF CONTRIBUTION TO NIGHTTIME TOTAL
DELTA	DAL	2,688	3.60%	21.67%
SUN COUNTRY	SCX	2,355	16.00%	18.99%
UPS	UPS	1,359	38.80%	10.96%
SKYWEST AIRLINES	SKW	1,203	2.20%	9.70%
FEDEX	FDX	725	23.80%	5.85%
SOUTHWEST	SWA	577	6.90%	4.65%
AMERICAN	AAL	572	8.70%	4.61%
SPIRIT	NKS	492	14.10%	3.97%
GULF & CARIBBEAN CARGO	TSU	366	95.80%	2.95%
REPUBLIC AIRLINES	RPA	355	7.20%	2.86%
ALASKA	ASA	239	18.00%	1.93%
ATLAS AIR (USA)	GTI	223	76.60%	1.80%
FRONTIER AIRLINES	FFT	220	17.80%	1.77%
UNITED	UAL	191	6.40%	1.54%
ENDEAVOR AIR	EDV	130	0.40%	1.05%

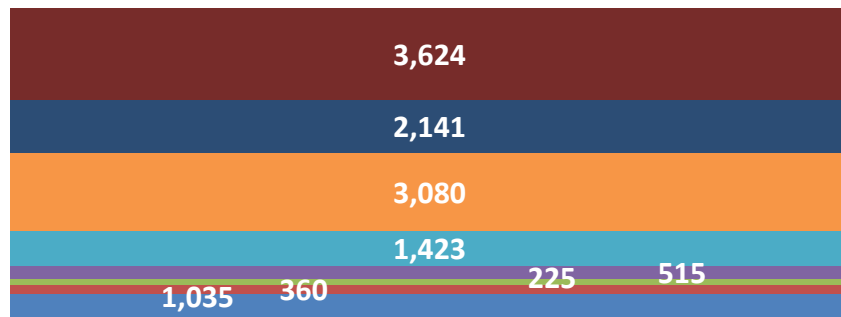
AIRCRAFT CODE	DESCRIPTION	COUNT	NOISE LEVEL CERTIFICATION (EPNdB BELOW STAGE 3)
B738	BOEING 737-800	2,890	11.3 - 17.1
B757	BOEING 757-200	1,825	11.1 - 22.1
A320	AIRBUS INDUSTRIES A320	1,243	12.1 - 21.2
A321	AIRBUS INDUSTRIES A321	919	6.4 - 17
CRJ2	CANADAIR REGIONAL JET CRJ-200	858	26.5 - 30.6
B739	BOEING 737-900	769	10.9 - 16.1
E170	EMBRAER 170	620	9.2 - 16.8
CRJ9	CANADAIR REGIONAL JET CRJ-900	551	14.5 - 17.6
B763	BOEING 767-300	515	4.4 - 22.6
B7377	BOEING 737-700	422	11.6 - 19.8
A300	AIRBUS INDUSTRIES A300	358	4.3 - 17.7
A319	AIRBUS INDUSTRIES A319	341	12.9 - 22.2
MD11	MCDONNELL DOUGLAS MD11	233	12.8 - 17.9
CRJ7	CANADAIR REGIONAL JET CRJ-700	159	14.5 - 17.6
B717	BOEING 717	94	19.2 - 23



Nighttime Operations by Hour

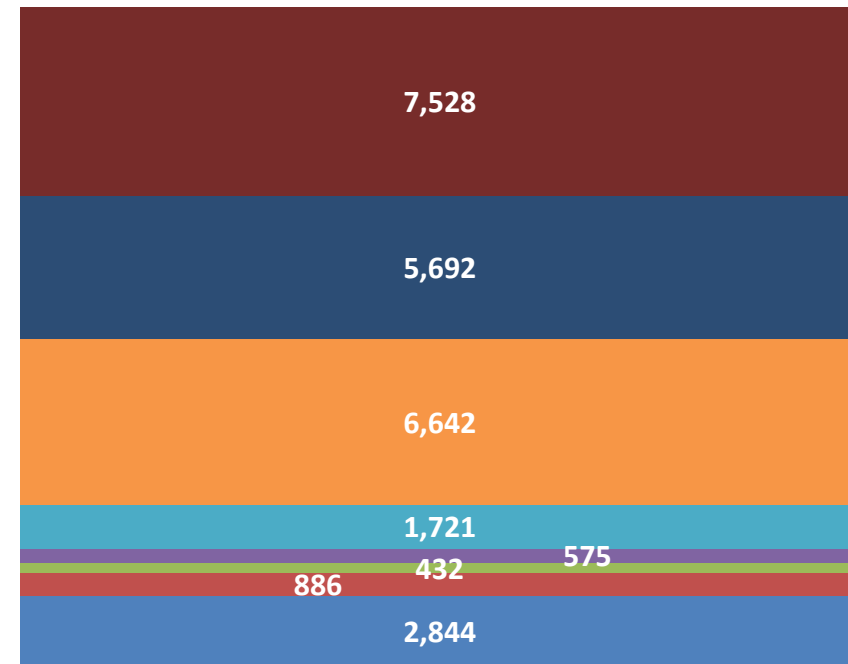
2020

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



2017-2019 AVERAGE

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



ITEM 5

ANNOUNCEMENTS

Winter Listening Session

Wednesday, January 27, 2021 @ 6 PM

Microsoft Teams Meeting

March NOC Meeting

Wednesday, March 17, 2021 @ 1:30 PM

Microsoft Teams Meeting



NOISE OVERSIGHT COMMITTEE
JANUARY 20, 2021