



**2019 ANNUAL MSP FLEET MIX AND  
NIGHTTIME OPERATIONS REPORT**  
JANUARY 2020

**COMMUNITY RELATIONS OFFICE**

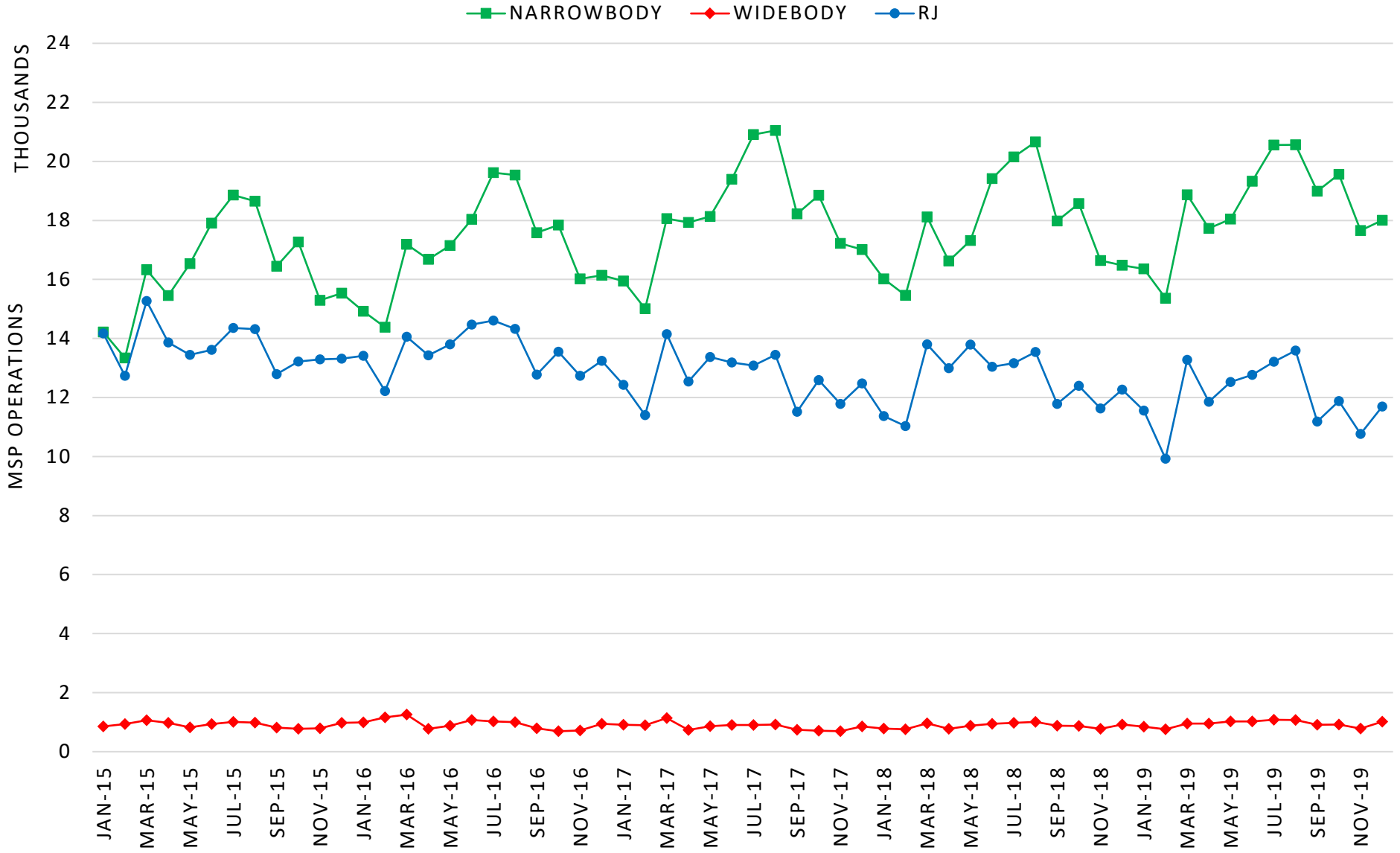
**METROPOLITAN AIRPORTS COMMISSION**  
6040 28TH AVENUE SOUTH, MINNEAPOLIS, MN 55450  
[WWW.MACNOISE.COM](http://WWW.MACNOISE.COM)

# 2019 ANNUAL MSP FLEET MIX AND NIGHTTIME OPERATIONS REPORT

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MSP FLEET MIX REPORT

**MONTHLY CARRIER JET COUNTS BY TYPE**



HUSHKIT BY YEAR: 2015 - 26, 2016 - 48, 2017 - 26, 2018 - 32, 2019 - 18

MSP FLEET MIX REPORT  
**WIDEBODY JET ACTIVITY**



WIDEBODY	TYPE	2015	2016	2017	2018	2019
	A124	0.00%	0.00%	0.00%	0.00%	0.00%
	A300	0.07%	0.03%	0.03%	0.15%	0.21%
	A310	0.02%	0.00%	0.00%	0.00%	0.00%
	A330	0.73%	0.68%	0.80%	0.72%	0.61%
	A340	0.07%	0.06%	0.07%	0.04%	0.00%
	A350	0.00%	0.00%	0.00%	0.00%	0.03%
	A380	0.00%	0.00%	0.00%	0.00%	0.00%
	B742	0.00%	0.00%	0.00%	0.00%	0.00%
	B744	0.03%	0.01%	0.01%	0.02%	0.04%
	B748	0.00%	0.00%	0.00%	0.00%	0.02%
	B762	0.14%	0.14%	0.15%	0.04%	0.01%
	B763	0.74%	0.90%	0.50%	0.79%	1.13%
	B764	0.22%	0.24%	0.01%	0.01%	0.08%
	B767	0.00%	0.00%	0.00%	0.00%	0.00%
	B777	0.17%	0.18%	0.38%	0.40%	0.54%
	B7878	0.00%	0.00%	0.01%	0.04%	0.07%
	DC10	0.24%	0.13%	0.27%	0.24%	0.01%
	MD11	0.51%	0.61%	0.46%	0.34%	0.25%
	<b>TOTAL</b>	<b>2.95%</b>	<b>2.98%</b>	<b>2.70%</b>	<b>2.81%</b>	<b>3.01%</b>

MSP FLEET MIX REPORT  
**NARROWBODY JET ACTIVITY**



NARROWBODY	TYPE	2015	2016	2017	2018	2019
	A220	0.00%	0.00%	0.00%	0.00%	0.32%
	A319	7.89%	7.20%	6.74%	6.38%	6.67%
	A320	9.04%	9.90%	7.10%	6.56%	7.44%
	A320neo	0.00%	0.03%	0.24%	0.37%	0.64%
	A321	0.84%	0.46%	0.53%	2.16%	6.60%
	B717	1.49%	2.36%	5.25%	5.86%	7.82%
	B72Q	0.00%	0.00%	0.00%	0.00%	0.00%
	B733	0.86%	0.67%	0.35%	0.01%	0.01%
	B734	0.03%	0.03%	0.03%	0.05%	0.04%
	B735	0.00%	0.00%	0.00%	0.00%	0.00%
	B7377	4.84%	4.84%	5.04%	4.65%	3.81%
	B738	6.78%	7.82%	9.77%	10.12%	11.34%
	B739	2.81%	3.78%	5.04%	7.47%	8.14%
	B38M	0.00%	0.00%	0.00%	0.08%	0.02%
	B73Q	0.00%	0.01%	0.00%	0.00%	0.00%
	B757	6.40%	5.81%	5.90%	6.08%	5.15%
	DC8Q	0.00%	0.00%	0.00%	0.00%	0.00%
	DC9Q	0.00%	0.00%	0.00%	0.00%	0.00%
	MD80	3.52%	3.59%	2.47%	0.29%	0.02%
MD90	8.27%	7.62%	8.84%	6.85%	0.65%	
<b>TOTAL</b>	<b>52.77%</b>	<b>54.11%</b>	<b>57.31%</b>	<b>56.95%</b>	<b>58.69%</b>	

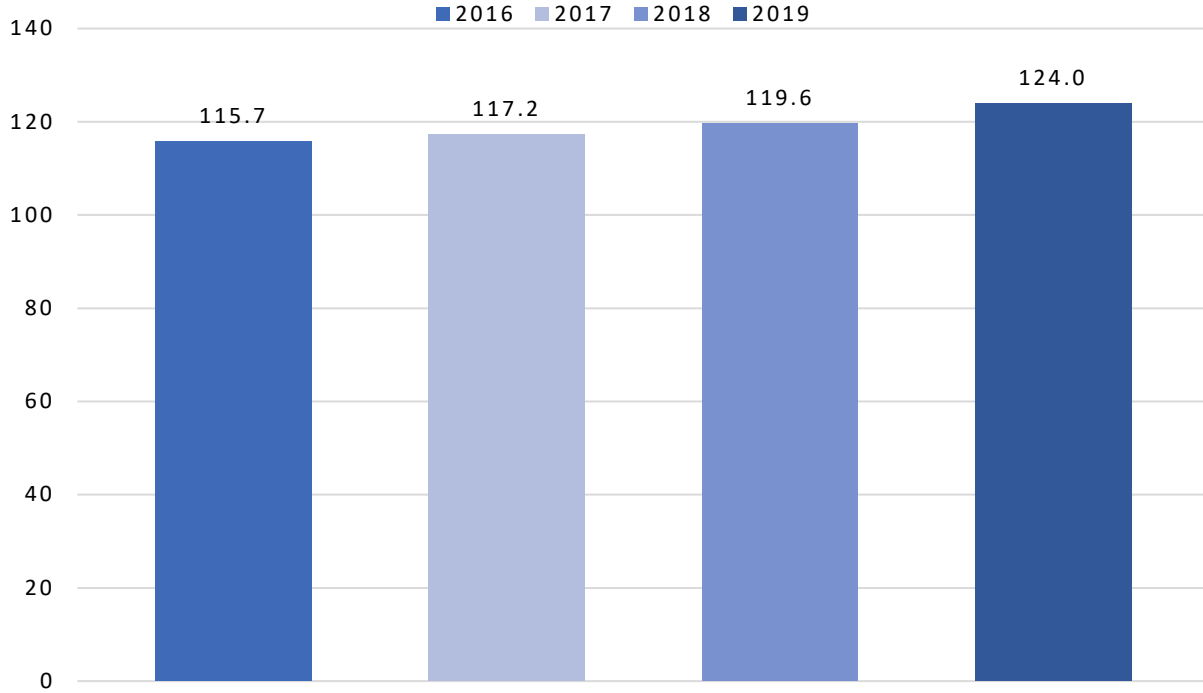
MSP FLEET MIX REPORT  
**REGIONAL JET ACTIVITY**



REGIONAL JET	TYPE	2015	2016	2017	2018	2019
	BA46	0.00%	0.00%	0.00%	0.00%	0.00%
	CRJ	0.00%	0.00%	0.00%	0.00%	0.00%
	CRJ1	0.00%	0.13%	0.06%	0.00%	0.00%
	CRJ2	17.24%	17.16%	16.18%	14.35%	12.89%
	CRJ7	3.40%	2.75%	4.83%	7.03%	3.85%
	CRJ9	14.73%	13.72%	11.31%	13.00%	13.77%
	E135	0.02%	0.04%	0.03%	0.03%	0.03%
	E145	1.24%	0.21%	0.06%	0.03%	0.04%
	E170	7.39%	8.68%	7.05%	5.52%	7.35%
	E175	0.00%	0.00%	0.00%	0.00%	0.00%
	E190	0.25%	0.20%	0.47%	0.27%	0.36%
	J328	0.02%	0.01%	0.01%	0.01%	0.00%
<b>TOTAL</b>	<b>44.29%</b>	<b>42.90%</b>	<b>39.99%</b>	<b>40.24%</b>	<b>38.30%</b>	

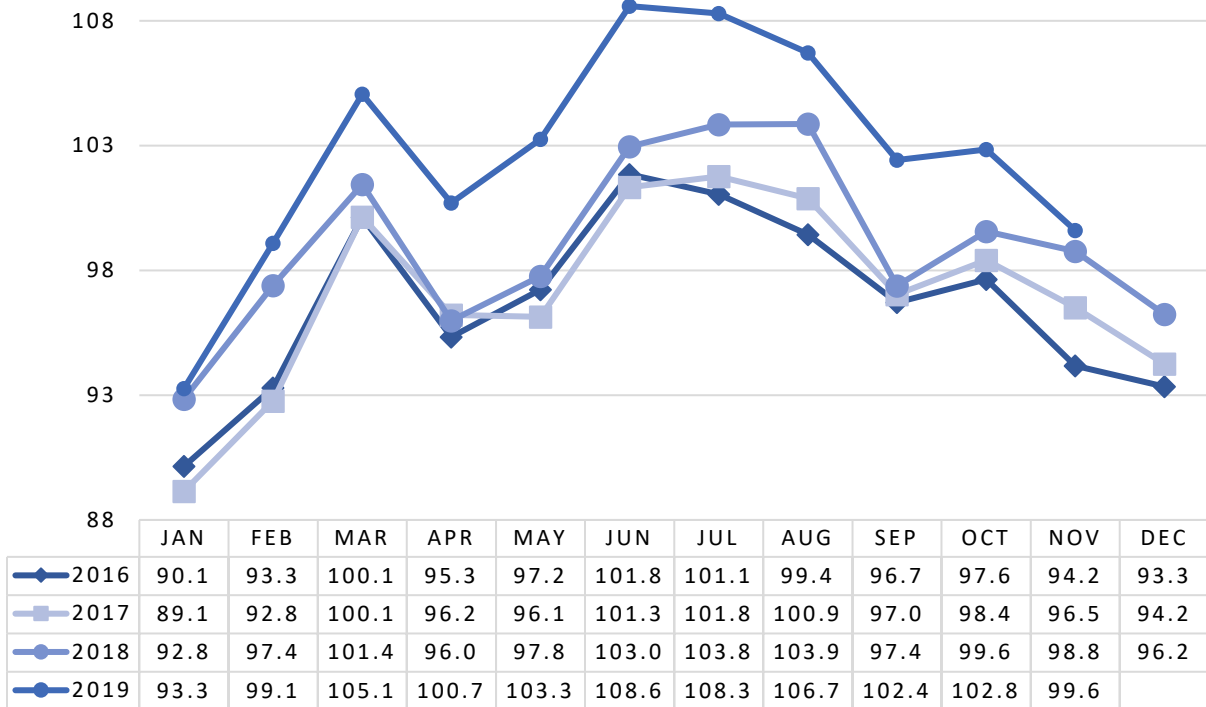
MSP FLEET MIX REPORT

**AVERAGE SCHEDULED SEATS PER FLIGHT**



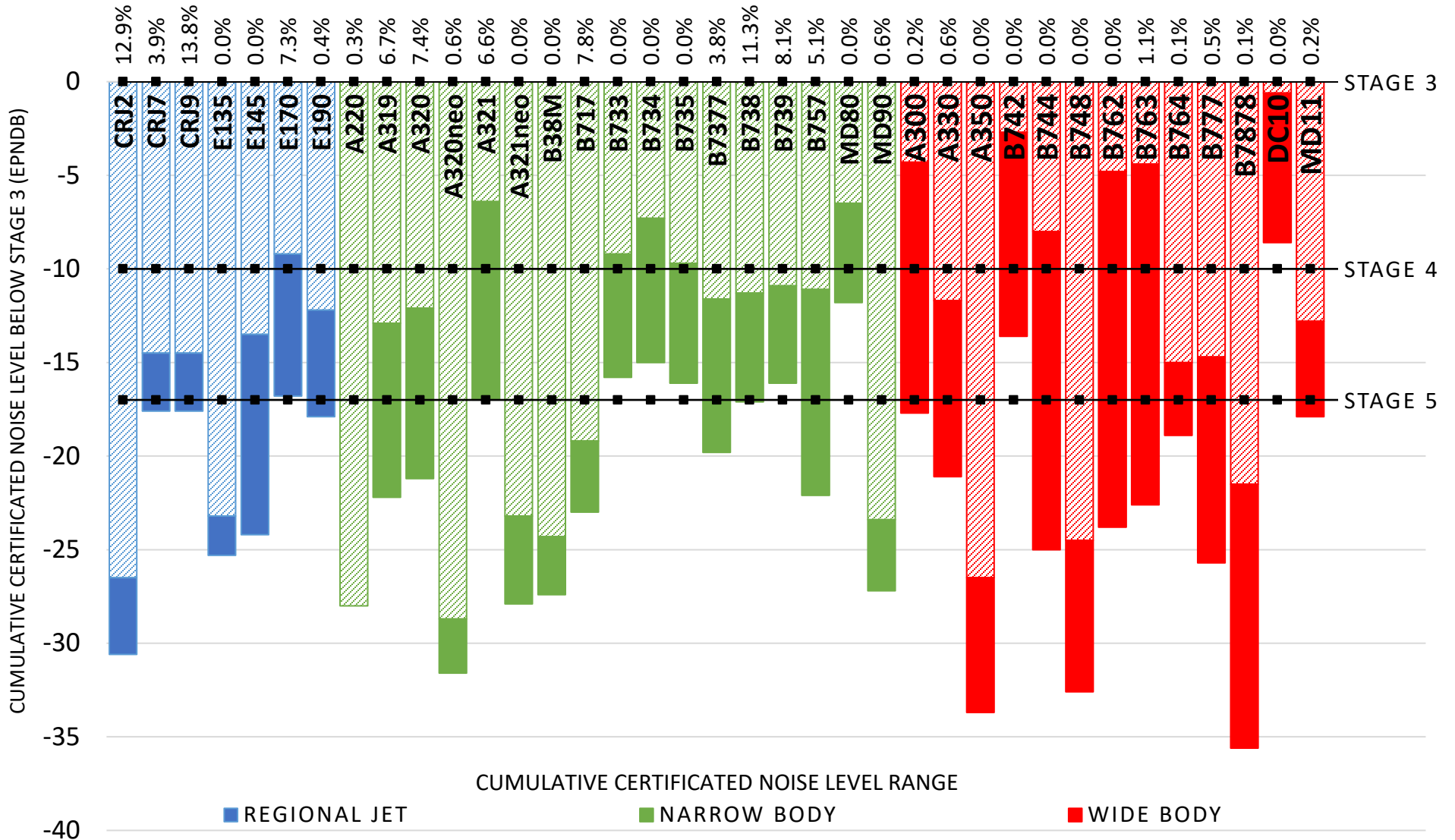
SOURCE: OAG

**AVERAGE PASSENGERS PER FLIGHT**



SOURCE: MSP MONTHLY OPERATIONS REPORTS

# 2019 MSP CARRIER JET USAGE WITH CUMULATIVE CERTIFICATED NOISE LEVELS



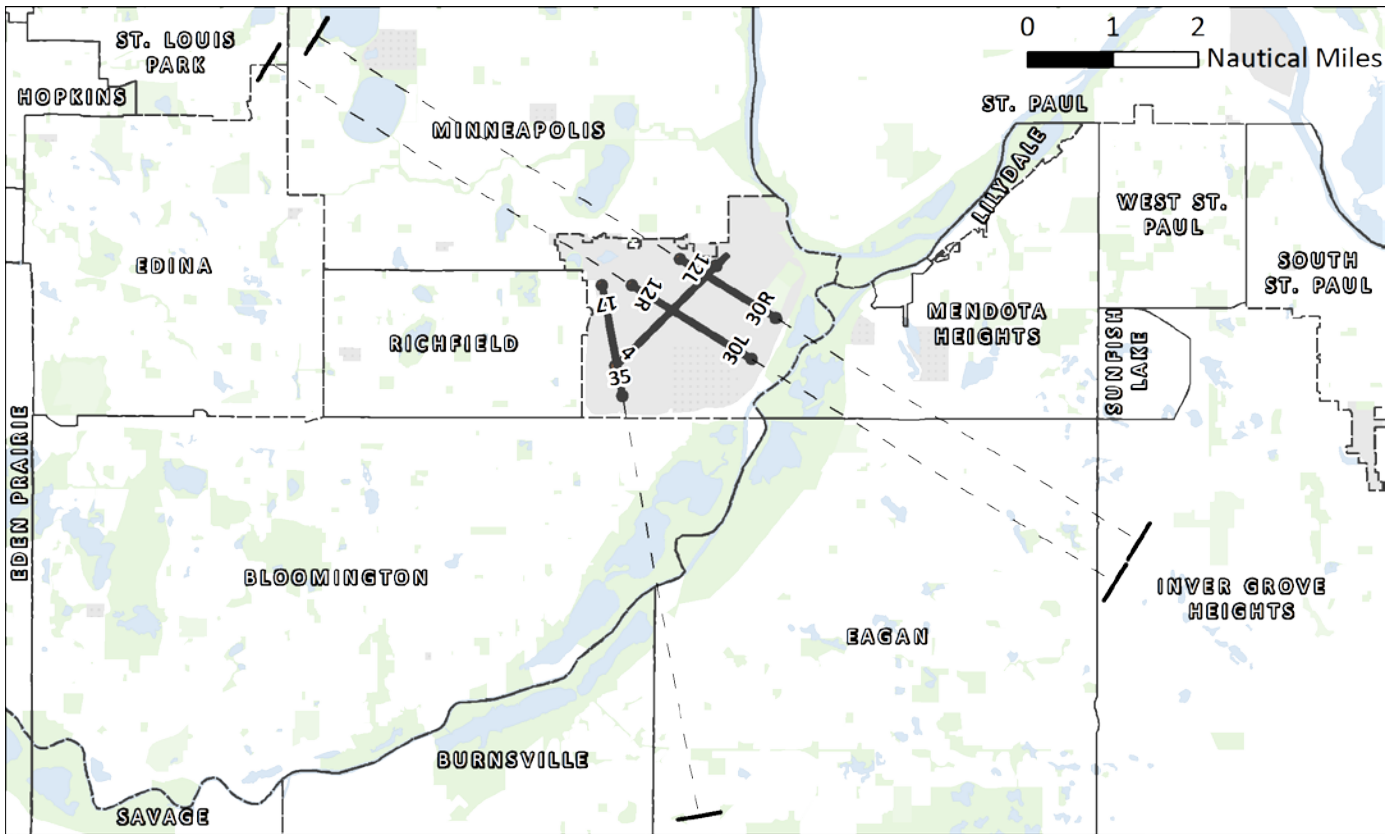
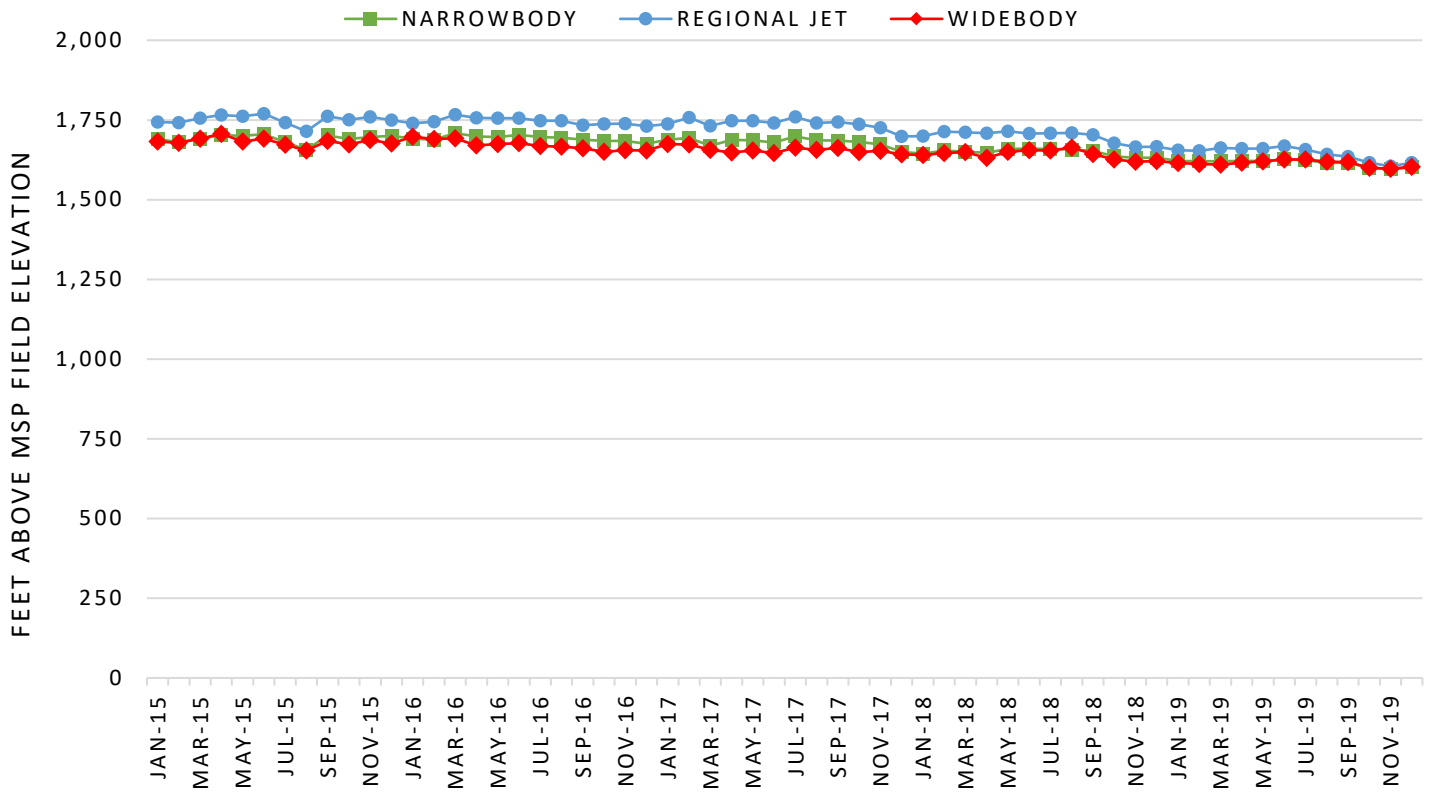
SOURCE: USAGE DATA: MACNOMS; NOISE CERTIFICATION DATA: EUROPEAN AVIATION SAFETY AGENCY

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



MSP FLEET MIX REPORT

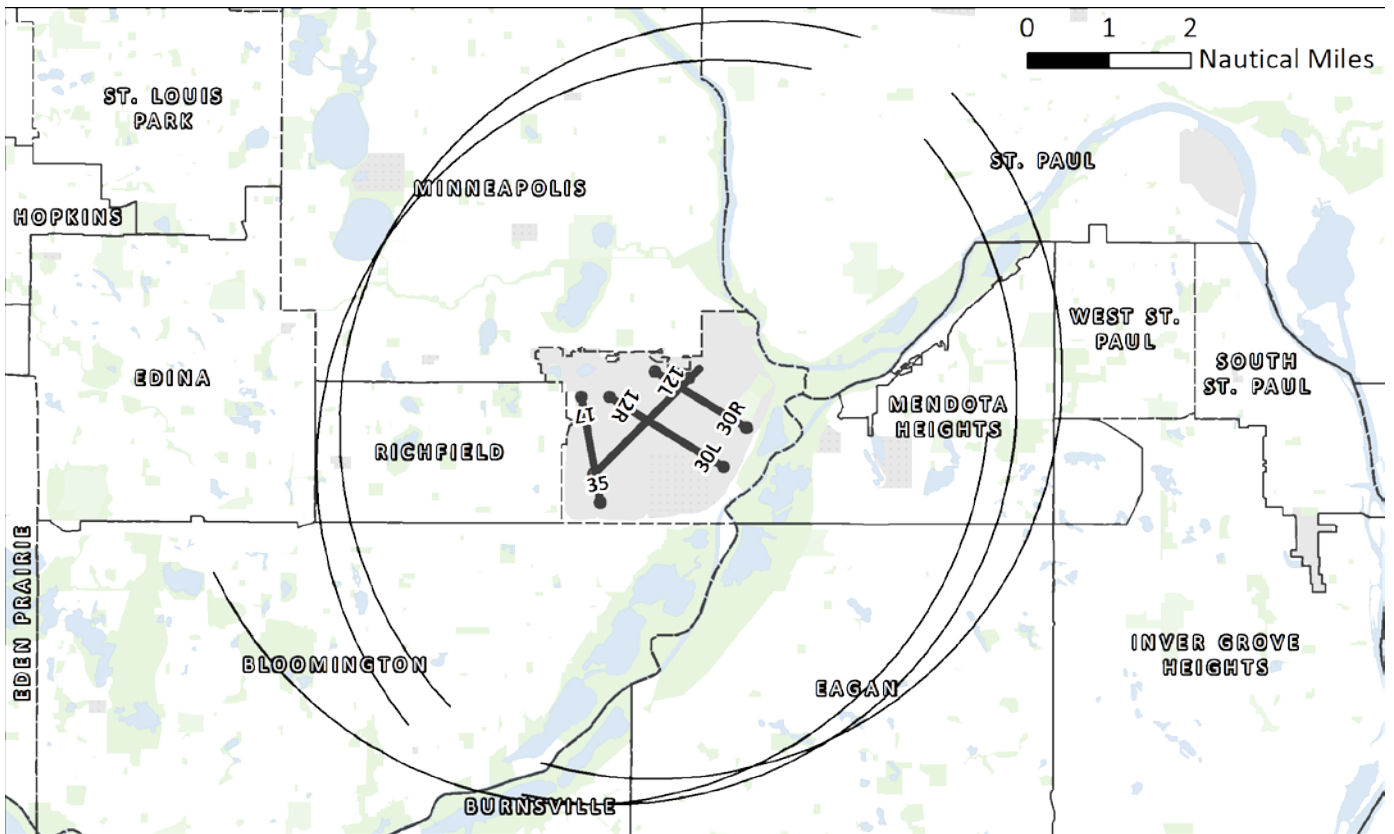
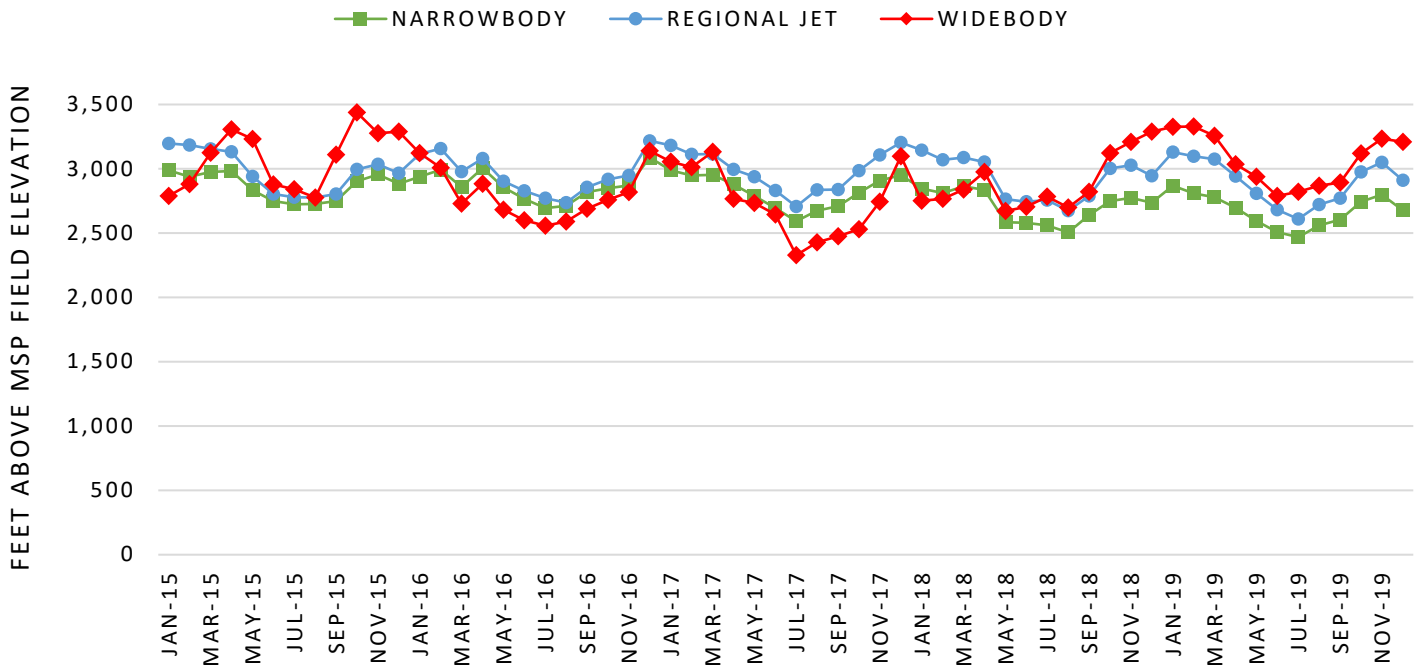
**AVERAGE ALTITUDE FOR AIRCRAFT ARRIVING TO MSP**



MEASUREMENT GATE IS FIVE NAUTICAL MILES FROM THE THRESHOLD OF THE ARRIVAL RUNWAY

MSP FLEET MIX REPORT

**AVERAGE ALTITUDE FOR AIRCRAFT DEPARTING FROM MSP**

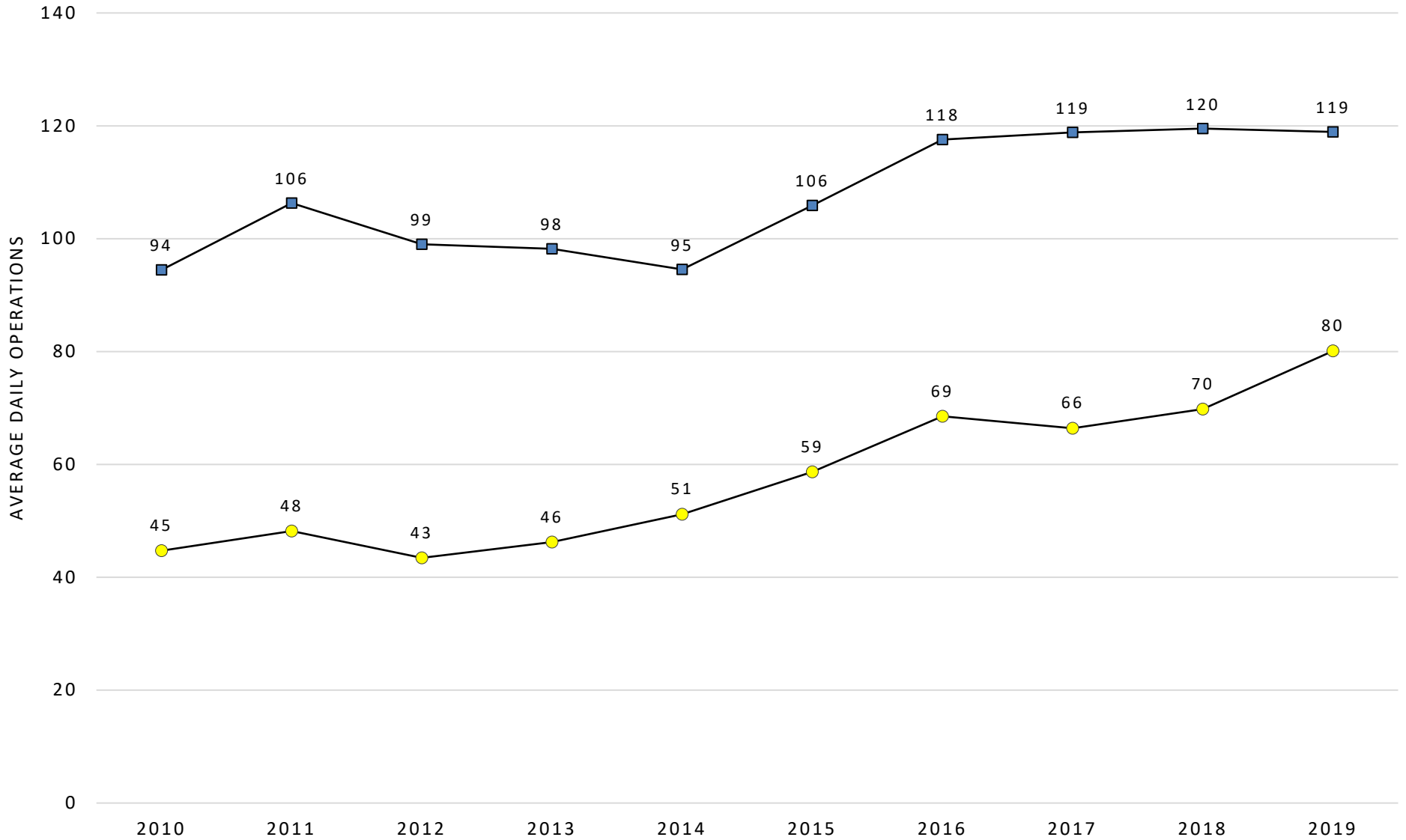


MEASUREMENT GATE IS AN ARC FIVE NAUTICAL MILES FROM THE START OF TAKEOFF ROLL

MSP NIGHTTIME OPERATIONS REPORT

**AVERAGE DAILY NIGHTTIME OPERATIONS**

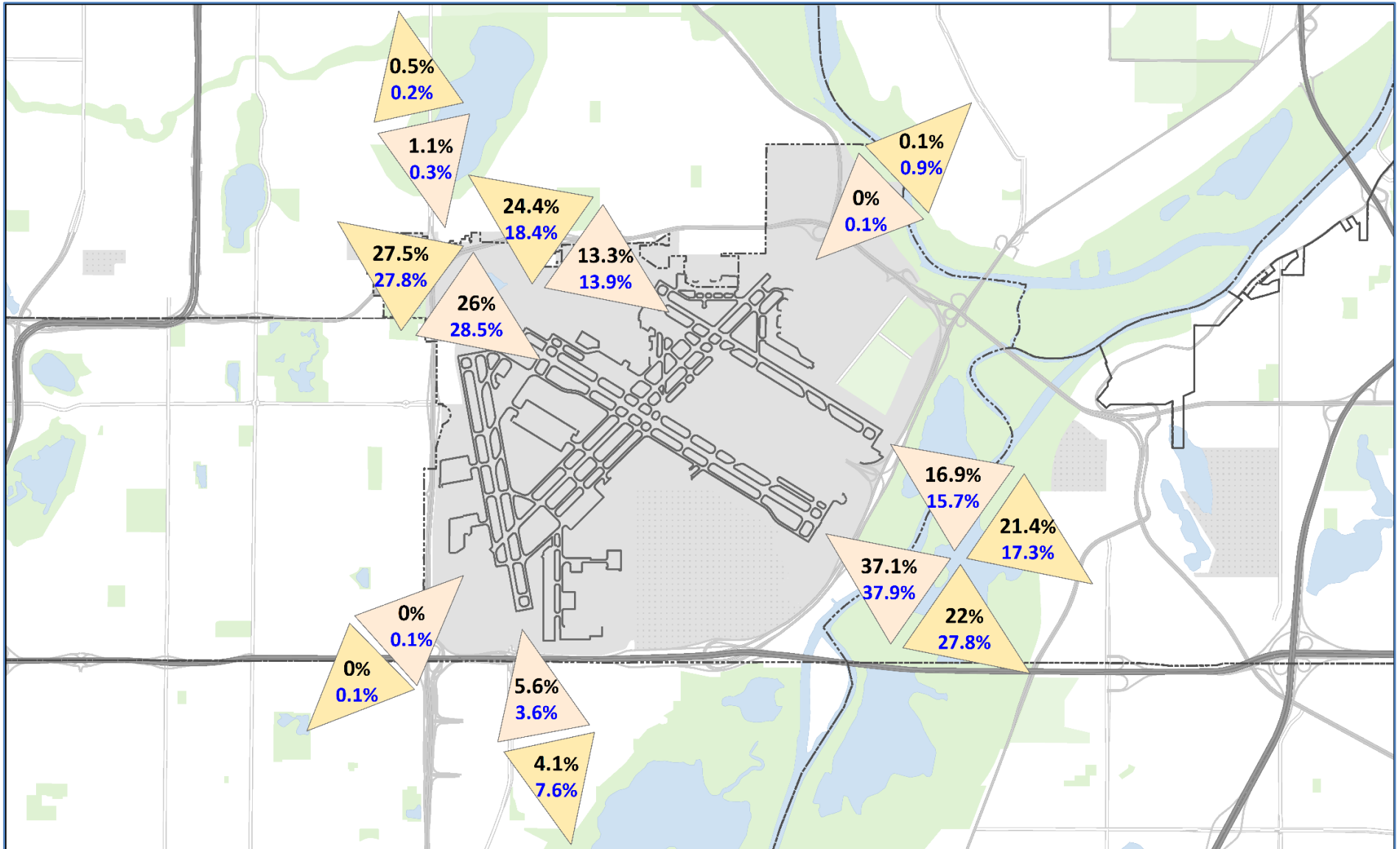
● 10:30 PM - 6:00 AM    ■ 10:00 PM - 7:00 AM



MSP NIGHTTIME OPERATIONS REPORT  
**NIGHTTIME OPERATIONS BY RUNWAY**  
(10:30 PM – 6:00 AM)

RWY	ARR / DEP	OVERFLIGHT AREA	2019			2016 - 2018 AVERAGE		
			TOTAL NIGHT OPS	AVERAGE DAILY NIGHT OPS	%	TOTAL NIGHT OPS	AVERAGE DAILY NIGHT OPS	%
04	ARR	SO. RICHFIELD/BLOOMINGTON	2	0.0	0.0%	26	0.1	0.1%
12L	ARR	SO. MINNEAPOLIS/NO. RICHFIELD	2,520	6.9	13.3%	2,499	6.8	13.9%
12R	ARR	SO. MINNEAPOLIS/NO. RICHFIELD	4,904	13.4	26.0%	5,135	14.1	28.5%
17	ARR	SO. MINNEAPOLIS	201	0.6	1.1%	47	0.1	0.3%
22	ARR	ST. PAUL/HIGHLAND PARK	1	0.0	0.0%	18	0.0	0.1%
30L	ARR	EAGAN/MENDOTA HEIGHTS	7,018	19.2	37.1%	6,833	18.7	37.9%
30R	ARR	EAGAN/MENDOTA HEIGHTS	3,194	8.8	16.9%	2,833	7.8	15.7%
35	ARR	BLOOMINGTON/EAGAN	1,054	2.9	5.6%	645	1.8	3.6%
<b>TOTAL NIGHTTIME ARRIVALS</b>			<b>18,894</b>	<b>51.8</b>		<b>18,036</b>	<b>49.4</b>	
04	DEP	ST. PAUL/HIGHLAND PARK	8	0.0	0.1%	62	0.2	0.9%
12L	DEP	EAGAN/MENDOTA HEIGHTS	2,219	6.1	21.4%	1,191	3.3	17.3%
12R	DEP	EAGAN/MENDOTA HEIGHTS	2,273	6.2	22.0%	1,921	5.3	27.8%
17	DEP	BLOOMINGTON/EAGAN	424	1.2	4.1%	523	1.4	7.6%
22	DEP	SO. RICHFIELD/BLOOMINGTON	1	0.0	0.0%	5	0.0	0.1%
30L	DEP	SO. MINNEAPOLIS/NO. RICHFIELD	2,841	7.8	27.5%	1,916	5.2	27.8%
30R	DEP	SO. MINNEAPOLIS/NO. RICHFIELD	2,527	6.9	24.4%	1,266	3.5	18.4%
35	DEP	SO. MINNEAPOLIS	53	0.1	0.5%	14	0.0	0.2%
<b>TOTAL NIGHTTIME DEPARTURES</b>			<b>10,346</b>	<b>28.3</b>		<b>6,898</b>	<b>18.9</b>	
<b>TOTAL NIGHTTIME OPERATIONS</b>			<b>29,240</b>	<b>80.1</b>		<b>24,934</b>	<b>68.3</b>	

MSP NIGHTTIME OPERATIONS REPORT  
**NIGHTTIME OPERATIONS BY RUNWAY MAP**  
 (10:30 PM – 6:00 AM)



MSP NIGHTTIME OPERATIONS REPORT  
**NIGHTTIME OPERATIONS BY AIRLINE**  
 (TOP 15 BY COUNT)

2019	AIRLINE	ID	COUNT	PERCENT OF AIRLINE OPERATIONS' OCCURRING AT NIGHT	PERCENT OF CONTRIBUTION TO NIGHTTIME TOTAL
	DELTA	DAL	8,370	5.60%	30.16%
	SKYWEST AIRLINES	SKW	4,541	4.70%	16.37%
	SUN COUNTRY	SCX	3,781	17.80%	13.63%
	SOUTHWEST	SWA	1,958	12.50%	7.06%
	AMERICAN	AAL	1,640	11.80%	5.91%
	UPS	UPS	1,254	37.20%	4.52%
	SPIRIT	NKS	1,093	14.20%	3.94%
	REPUBLIC AIRLINES	RPA	899	8.50%	3.24%
	UNITED	UAL	859	12.20%	3.10%
	FEDEX	FDX	855	27.30%	3.08%
	ATLAS AIR (USA)	GTI	590	77.00%	2.13%
	JETBLUE AIRWAYS	JBU	533	26.50%	1.92%
	FRONTIER AIRLINES	FFT	511	16.10%	1.84%
	ENDEAVOR AIR	EDV	487	1.80%	1.76%
GULF & CARIBBEAN CARGO	TSU	377	98.20%	1.36%	

2018	AIRLINE	ID	COUNT	PERCENT OF AIRLINE OPERATIONS OCCURRING AT NIGHT	PERCENT OF CONTRIBUTION TO NIGHTTIME TOTAL
	DELTA	DAL	6,933	4.80%	29.20%
	SUN COUNTRY	SCX	3,679	19.00%	15.49%
	SKYWEST AIRLINES	SKW	2,523	2.50%	10.63%
	SOUTHWEST	SWA	2,188	13.50%	9.21%
	AMERICAN	AAL	1,796	12.70%	7.56%
	SPIRIT	NKS	1,256	15.00%	5.29%
	UNITED	UAL	1,080	14.90%	4.55%
	REPUBLIC AIRLINES	RPA	1,028	10.20%	4.33%
	UPS	UPS	984	32.20%	4.14%
	FEDEX	FDX	726	23.60%	3.06%
	ATLAS AIR (USA)	GTI	356	63.70%	1.50%
	ALASKA	ASA	324	22.60%	1.36%
	ENDEAVOR AIR	EDV	308	1.20%	1.30%
	JETBLUE AIRWAYS	JBU	287	20.60%	1.21%
GULF & CARIBBEAN CARGO	TSU	276	94.20%	1.16%	

\*AIRLINE OPERATIONS OCCURRING AT NIGHT REPRESENTS THE PERCENTAGE OF RESPECTIVE AIRLINE SCHEDULE THAT OCCURS AT NIGHT

\*CONTRIBUTION TO TOTAL IS RESPECTIVE AIRLINE CONTRIBUTIONS TO OVERALL MSP NIGHT OPERATIONS

MSP NIGHTTIME OPERATIONS REPORT  
**2019 NIGHTTIME OPERATIONS BY AIRCRAFT**  
 (TOP 15 BY COUNT)

AIRCRAFT CODE	DESCRIPTION	COUNT	NOISE LEVEL CERTIFICATION (EPNdB BELOW STAGE 3)
B738	BOEING 737-800	5,780	11.3 - 17.1
A320	AIRBUS INDUSTRIES A320	2,840	12.1 - 21.2
B757	BOEING 757-200	2,648	11.1 - 22.1
CRJ2	CANADAIR REGIONAL JET CRJ-200	2,444	26.5 - 30.6
B739	BOEING 737-900	2,269	10.9 - 16.1
A321	AIRBUS INDUSTRIES A321	2,232	6.4 - 17
B7377	BOEING 737-700	1,814	11.6 - 19.8
E170	EMBRAER 170	1,743	9.2 - 16.8
CRJ9	CANADAIR REGIONAL JET CRJ-900	1,673	14.5 - 17.6
A319	AIRBUS INDUSTRIES A319	1,313	12.9 - 22.2
B763	BOEING 767-300	1,040	4.4 - 22.6
B717	BOEING 717	896	19.2 - 23
CRJ7	CANADAIR REGIONAL JET CRJ-700	776	14.5 - 17.6
A300	AIRBUS INDUSTRIES A300	318	4.3 - 17.7
MD11	MCDONNELL DOUGLAS MD11	235	12.8 - 17.9

*NOISE CERTIFICATION DATA SOURCE: EUROPEAN AVIATION SAFETY AGENCY*

*CUMULATIVE CERTIFICATED NOISE LEVELS REPRESENTED AS A RANGE BELOW STAGE 3 NOISE LEVELS TO ACCOUNT FOR MULTIPLE CERTIFICATION VARIABLES (WEIGHT, MODEL, ENGINE TYPE, AIRFRAME CONFIGURATION, ETC)*

MSP NIGHTTIME OPERATIONS REPORT  
**2019 NIGHTTIME OPERATIONS BY ORIGIN AND DESTINATION**  
 (TOP 15 BY COUNT)

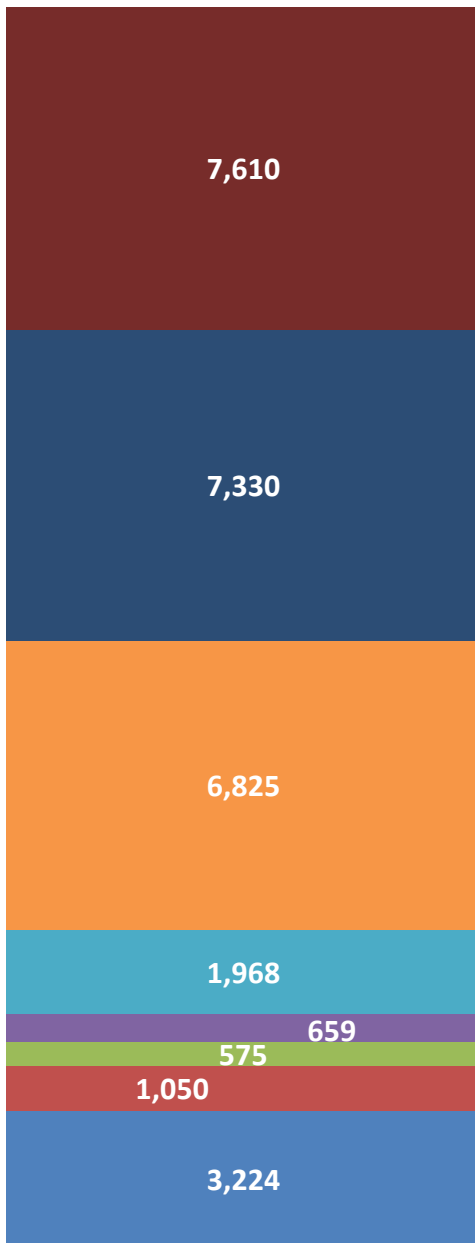
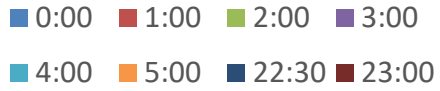
AIRPORT CODE	ORIGIN AIRPORT	COUNT
LAS	LAS VEGAS	1,226
DEN	DENVER	1,119
SEA	SEATTLE	1,047
LAX	LOS ANGELES	979
PHX	PHOENIX	914
ORD	CHICAGO O'HARE	837
SFO	SAN FRANCISCO	779
ATL	ATLANTA	729
DFW	DALLAS FORT WORTH	592
MEM	MEMPHIS	413
SDF	LOUISVILLE	409
MDW	CHICAGO MIDWAY	398
EWR	NEW YORK NEWARK	389
PHL	PHILADELPHIA	371
PANC	ANCHORAGE	358

AIRPORT CODE	DESTINATION AIRPORT	COUNT
ATL	ATLANTA	375
DEN	DENVER	342
BJI	BEMIDGI REGIONAL	323
RHI	RHINELANDER	318
ABR	ABERDEEN	314
FAR	FARGO	314
YWG	WINNIPEG	311
FSD	SIOUX FALLS	309
BIS	BISMARCK	293
GFK	GRAND FORKS	291
RST	ROCHESTER MN	281
DSM	DES MOINES	279
ORD	CHICAGO O'HARE	278
BRD	BRAINERD LAKES REGIONAL	277
MOT	MINOT	273

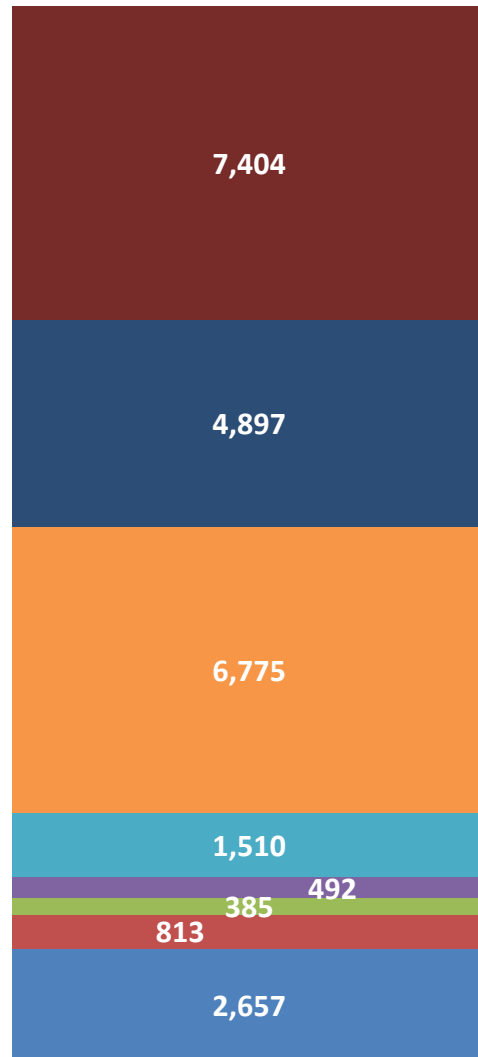
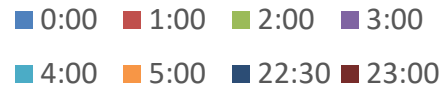


**NIGHTTIME OPERATIONS BY HOUR**

**2019**



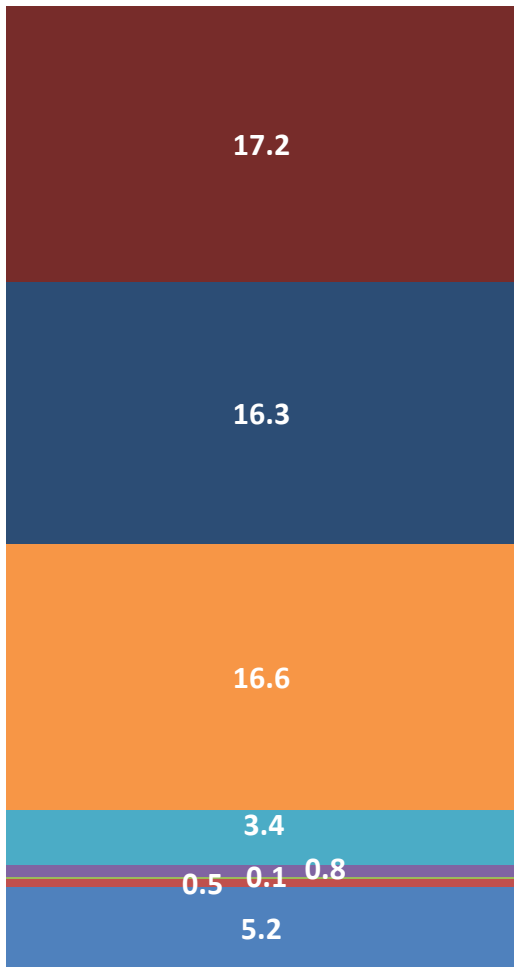
**3-YEAR HISTORICAL AVERAGE**



MSP NIGHTTIME OPERATIONS REPORT  
**SCHEDULED VERSUS ACTUAL OPERATIONS**  
 (AVERAGE BY HOUR)

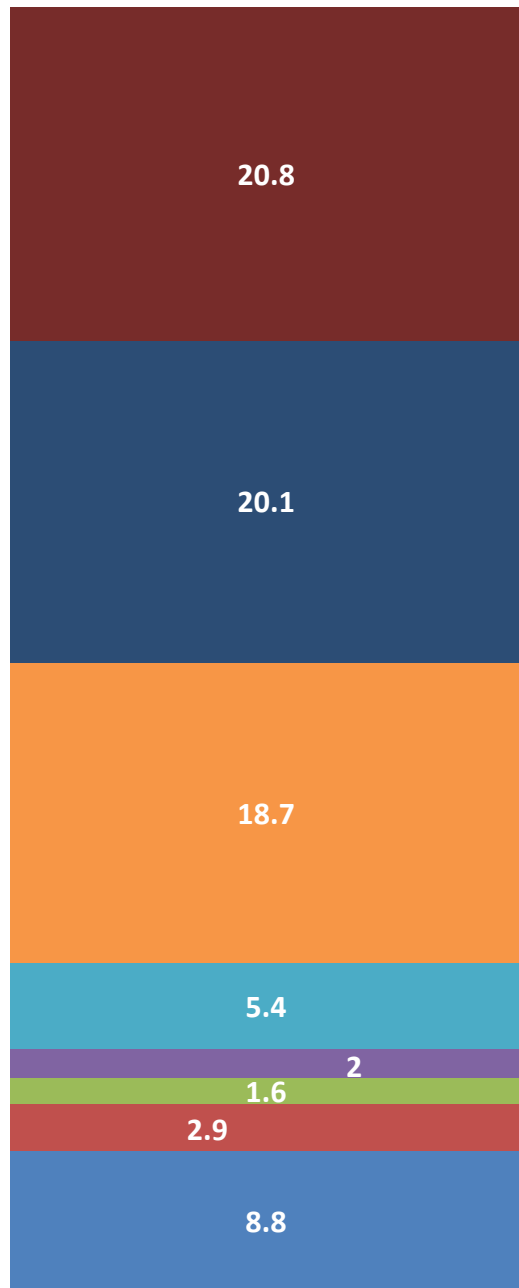
**DAILY SCHEDULED NIGHT OPERATIONS**

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



**DAILY ACTUAL NIGHT OPERATIONS**

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



GENERAL AVIATION AND CHARTER AIRCRAFT OPERATORS DO NOT REPORT SCHEDULED OPERATIONS