



**2023 ANNUAL MSP FLEET MIX AND
NIGHTTIME OPERATIONS REPORT**
JANUARY 2024

COMMUNITY RELATIONS OFFICE

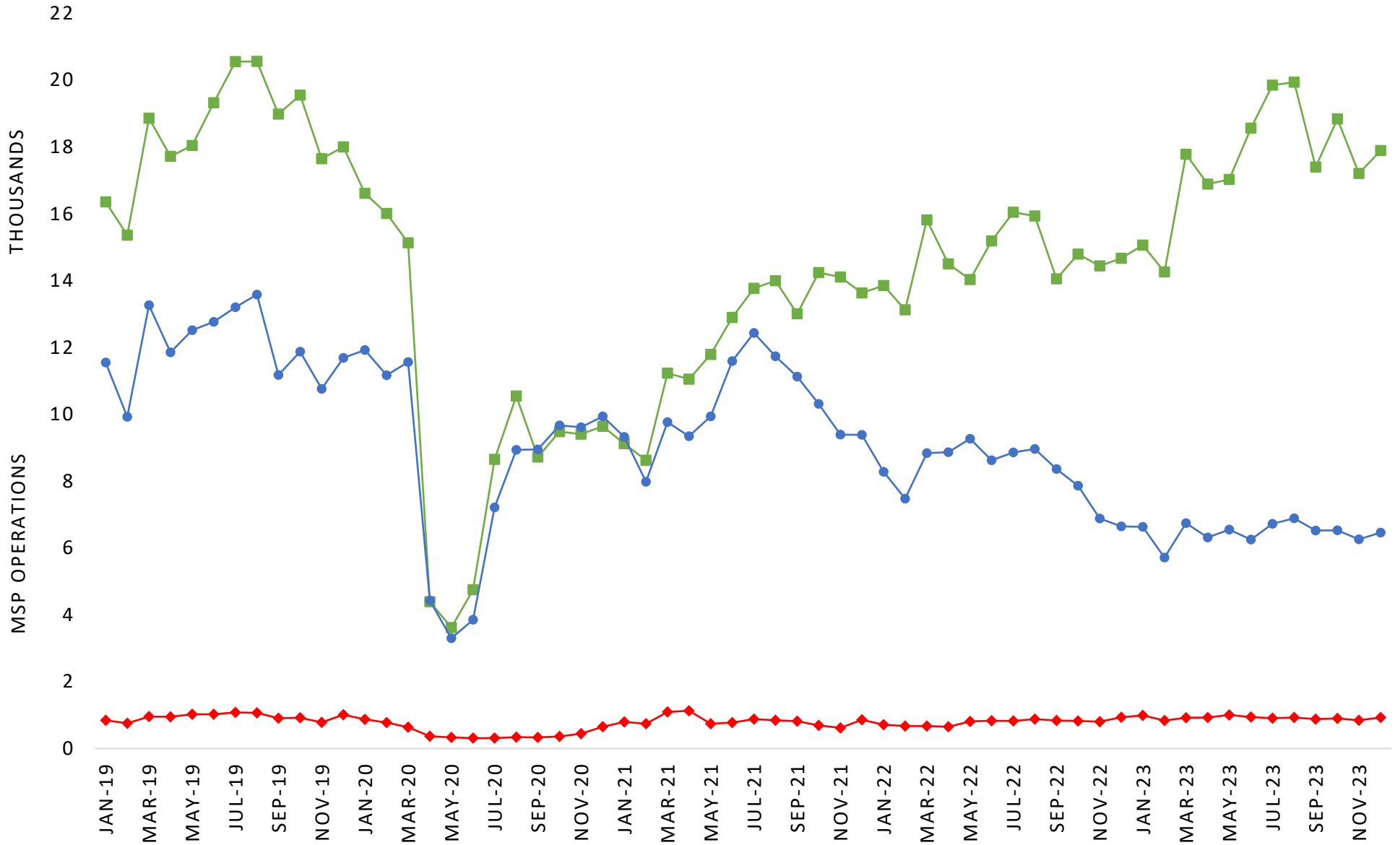
2023 ANNUAL MSP FLEET MIX AND NIGHTTIME OPERATIONS REPORT

TABLE OF CONTENTS	
MSP FLEET MIX REPORT	
Monthly Carrier Jet Counts by Type	2
Widebody Jet Activity	3
Narrowbody Jet Activity	4
Regional Jet Activity	5
Average Passengers per Flight	6
MSP Carrier Jet Usage with Cumulative Certificated Noise Levels	7
Average Altitude for Aircraft Arriving to MSP by Category	8
Average Altitude for Aircraft Departing from MSP by Category	9
MSP NIGHTTIME OPERATIONS REPORT	
Average Daily Nighttime Operations	10
Nighttime Operations by Runway	11
Nighttime Operations by Runway Map	12
Nighttime Operations by Airline	13
Nighttime Operations by Aircraft	14
Nighttime Operations by Origin and Destination	15
Nighttime Operations by Hour	16
Scheduled Versus Actual Operations	17

MSP FLEET MIX REPORT

MONTHLY CARRIER JET COUNTS BY TYPE

■ NARROWBODY ◆ WIDEBODY ● RJ



HUSHKIT BY YEAR: 2018 - 32, 2019 - 18, 2020 - 8, 2021 - 68, 2022 - 10

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WIDEBODY JET ACTIVITY



WIDEBODY	TYPE	2019	2020	2021	2022	2023
	A124	0.0%	0.0%	0.0%	0.0%	0.0%
	A300	0.2%	0.4%	0.1%	0.0%	0.3%
	A330	0.6%	0.3%	1.0%	1.2%	1.6%
	A340	0.0%	0.0%	0.0%	0.0%	0.0%
	A350	0.0%	0.1%	0.0%	0.1%	0.3%
	B742	0.0%	0.0%	0.0%	0.0%	0.0%
	B744	0.0%	0.0%	0.1%	0.1%	0.0%
	B748	0.0%	0.0%	0.1%	0.1%	0.0%
	B762	0.0%	0.0%	0.0%	0.0%	0.1%
	B763	1.1%	1.1%	1.8%	1.5%	0.9%
	B764	0.1%	0.0%	0.2%	0.1%	0.0%
	B767	0.0%	0.0%	0.0%	0.0%	0.0%
	B777	0.5%	0.1%	0.0%	0.1%	0.0%
	B7878	0.1%	0.0%	0.1%	0.0%	0.1%
	DC10	0.0%	0.1%	0.0%	0.0%	0.0%
MD11	0.2%	0.4%	0.2%	0.1%	0.4%	
Total	3.0%	2.6%	3.6%	3.3%	3.7%	

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NARROWBODY JET ACTIVITY



NARROWBODY	TYPE	2019	2020	2021	2022	2023
	A220	0.3%	0.9%	2.0%	1.9%	2.7%
	A319	6.7%	7.0%	6.6%	9.2%	6.8%
	A20N	0.0%	0.3%	0.5%	0.6%	0.9%
	A320	8.1%	5.7%	6.0%	6.2%	9.4%
	A21N	0.0%	0.0%	0.0%	0.1%	0.8%
	A321	6.6%	9.6%	10.4%	12.5%	10.5%
	B717	7.8%	2.4%	0.4%	2.4%	5.8%
	B72Q	0.0%	0.0%	0.0%	0.0%	0.0%
	B733	0.0%	0.0%	0.0%	0.0%	0.0%
	B734	0.0%	0.1%	0.1%	0.3%	0.1%
	B735	0.0%	0.0%	0.0%	0.0%	0.0%
	B7377	3.8%	2.6%	2.1%	2.5%	2.6%
	B738	11.3%	10.8%	11.1%	12.6%	15.4%
	B739	8.1%	8.0%	8.7%	9.4%	11.5%
	B38M	0.0%	0.0%	0.3%	0.5%	1.3%
	B73Q	0.0%	0.0%	0.0%	0.0%	0.0%
	B757	5.1%	5.0%	4.6%	3.8%	2.5%
	DC9Q	0.0%	0.0%	0.0%	0.0%	0.0%
	MD80	0.0%	0.0%	0.0%	0.0%	0.0%
MD90	0.6%	0.0%	0.0%	0.0%	0.0%	
TOTAL	58.7%	52.4%	52.7%	61.9%	70.4%	

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REGIONAL JET ACTIVITY



REGIONAL JET	TYPE	2019	2020	2021	2022	2023
	CRJ2	12.9%	10.8%	11.9%	8.5%	3.1%
	CRJ7	3.9%	2.9%	2.3%	1.7%	1.8%
	CRJ9	13.8%	20.2%	21.3%	12.4%	8.4%
	E135	0.0%	0.0%	0.0%	0.1%	0.0%
	E145	0.0%	0.4%	0.2%	0.3%	0.1%
	E170	7.3%	10.6%	7.3%	10.7%	11.8%
	E190	0.4%	0.1%	0.3%	0.4%	0.1%
	J328	0.0%	0.0%	0.4%	0.5%	0.6%
	TOTAL	38.3%	45.0%	43.7%	34.7%	25.9%

MSP FLEET MIX REPORT

AVERAGE PASSENGERS PER FLIGHT

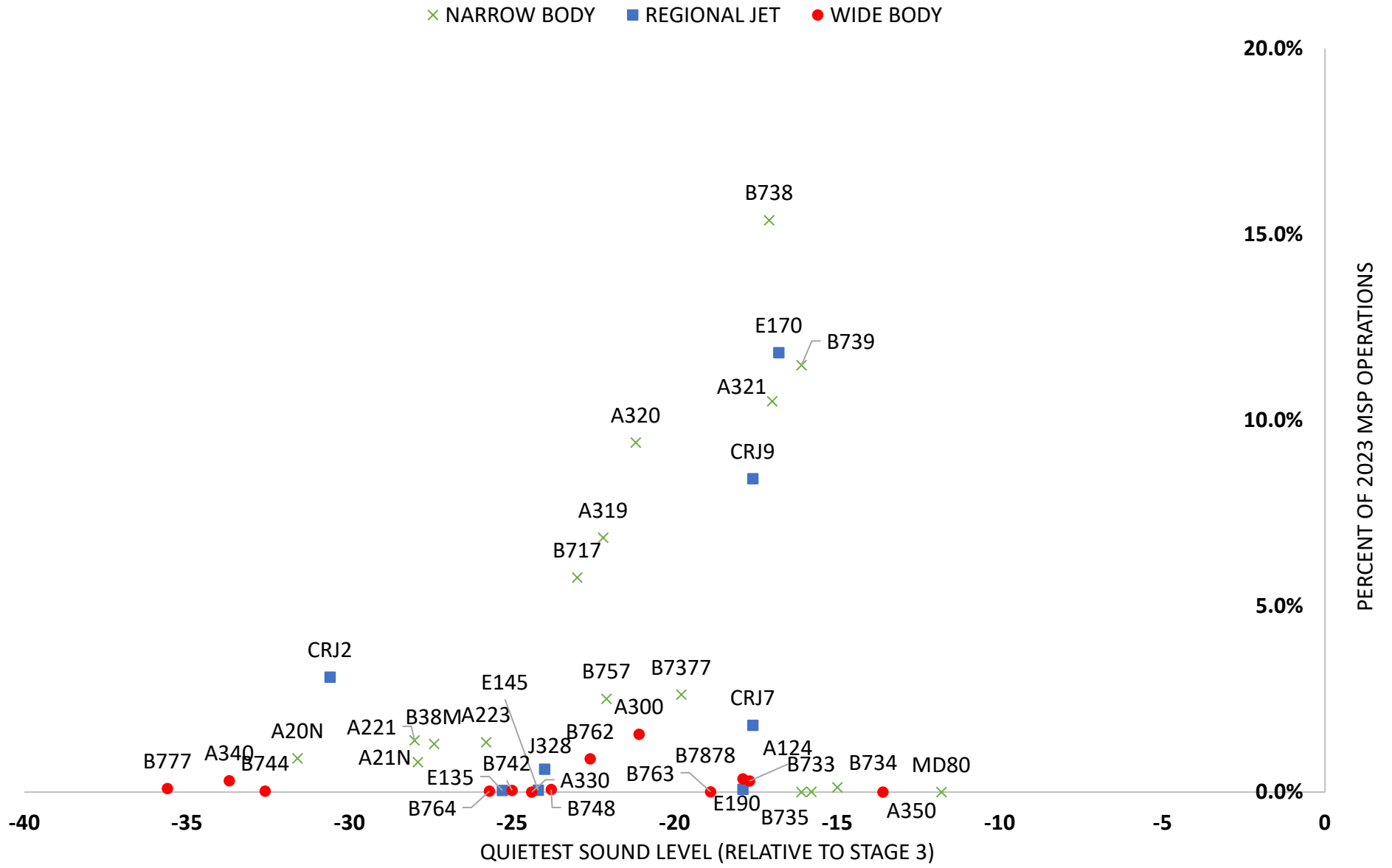
130
110
90
70
50
30
10

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2020	96.7	100.1	63.4	14.1	36.6	57.7	57.1	56.0	56.7	58.3	50.5	53.3
2021	56.5	63.8	78.2	78.0	92.3	96.7	105.8	100.5	93.4	99.2	100.1	98.9
2022	89.6	99.4	112.5	109.0	112.6	116.3	114.9	112.7	111.9	114.4	113.1	112.3
2023	105.8	108.5	119.6	115.5	115.9	126.2	123.8	120.2	114.3	113.9	113.6	

SOURCE: MSP MONTHLY OPERATIONS REPORTS

MSP FLEET MIX REPORT

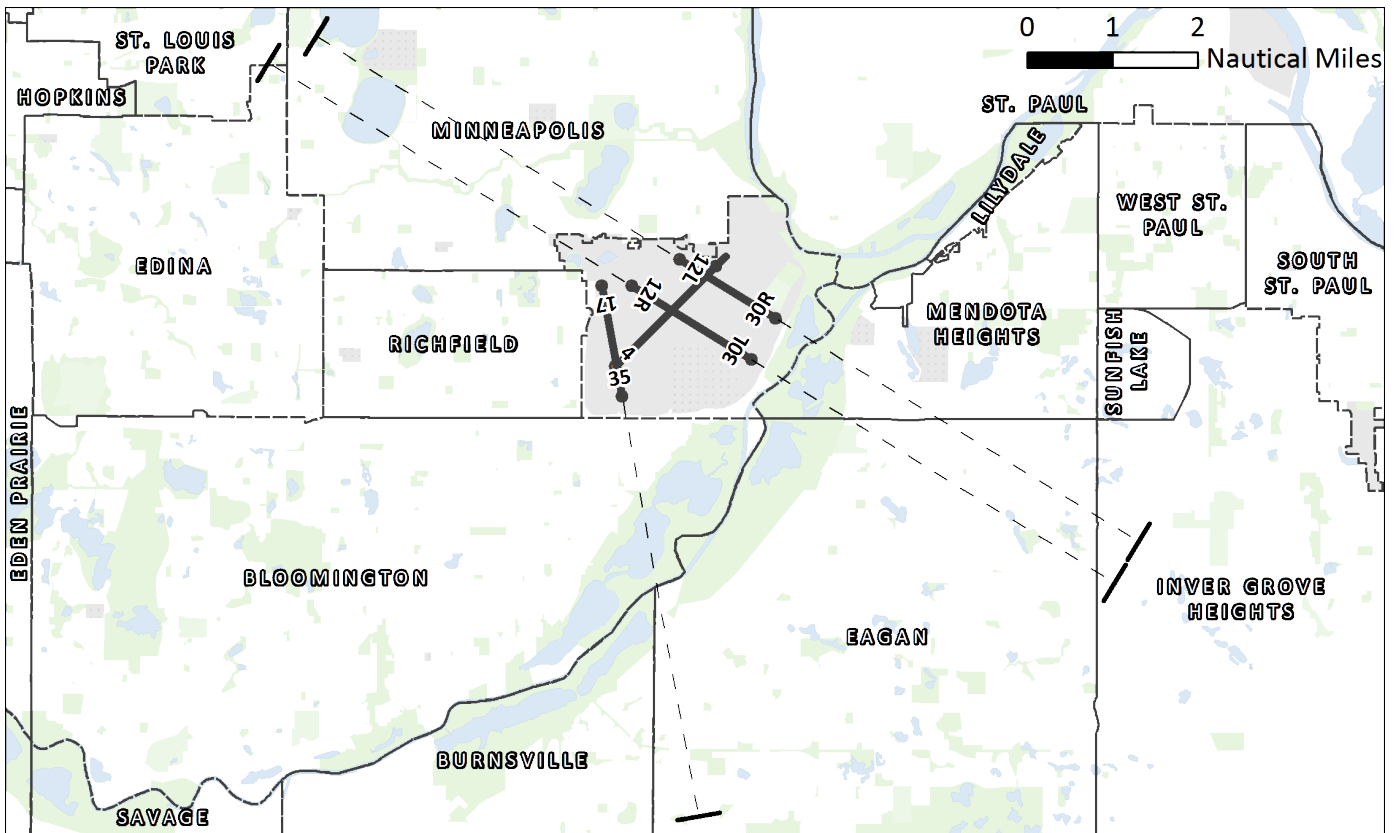
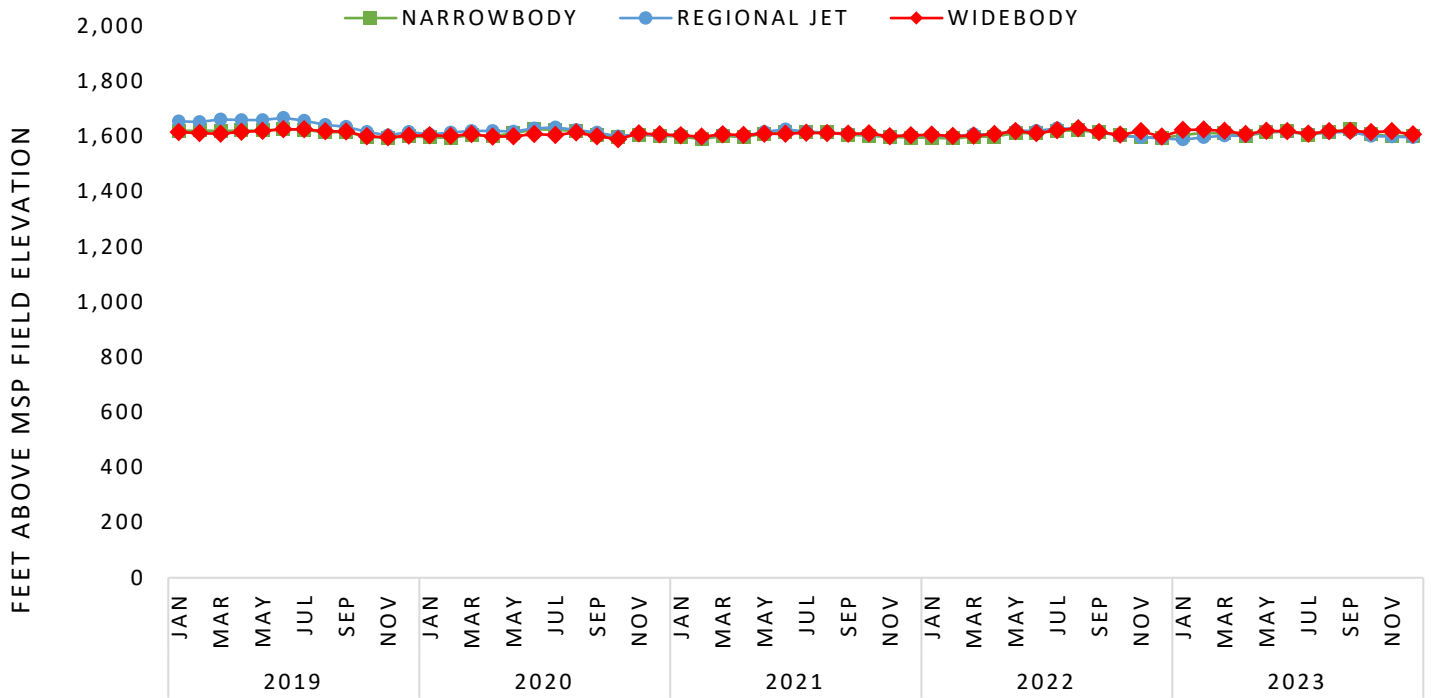
2023 MSP CARRIER JET USAGE WITH CUMULATIVE CERTIFICATED NOISE LEVELS



Source: USAGE DATA: MACNOMS; NOISE CERTIFICATION DATA: European Aviation Safety Agency

MSP FLEET MIX REPORT

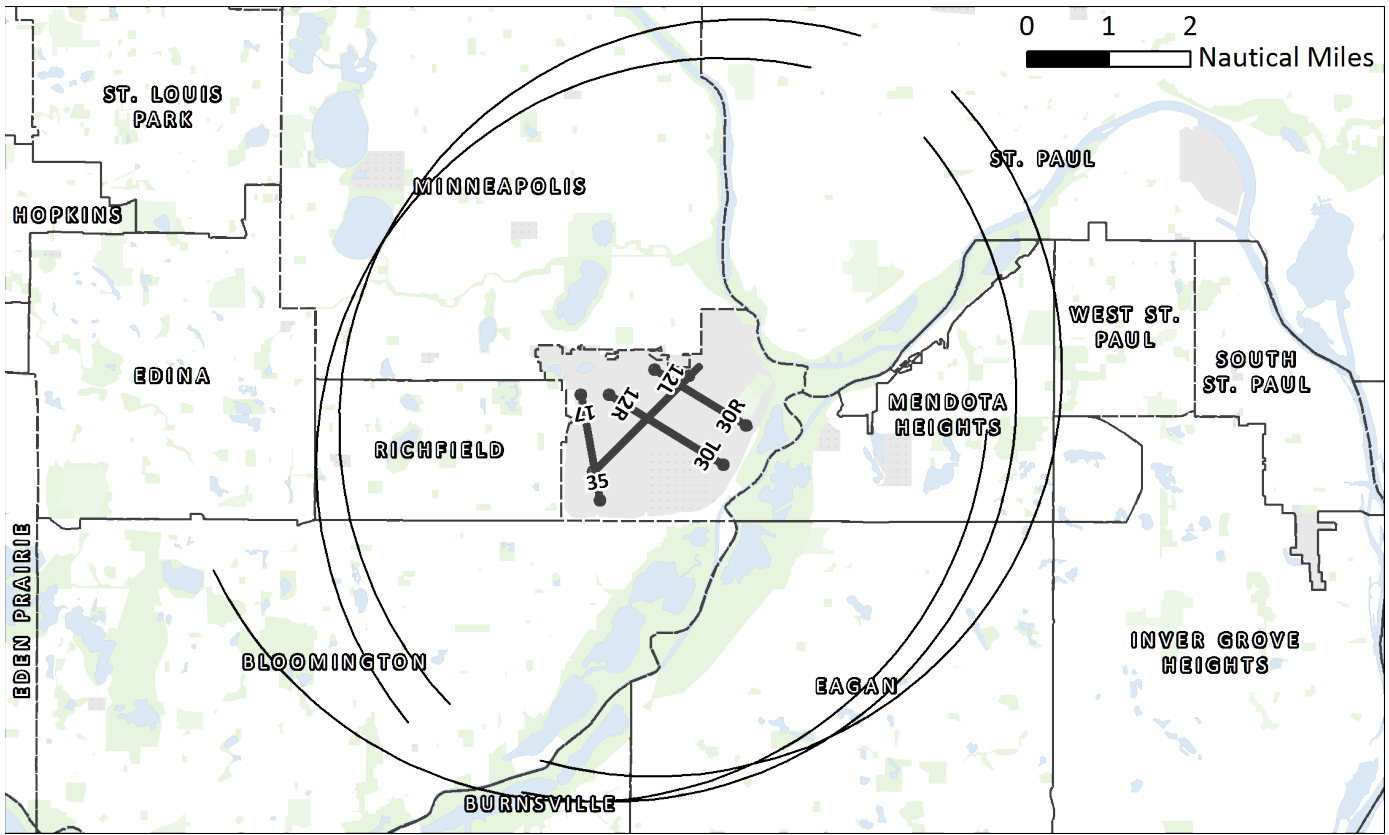
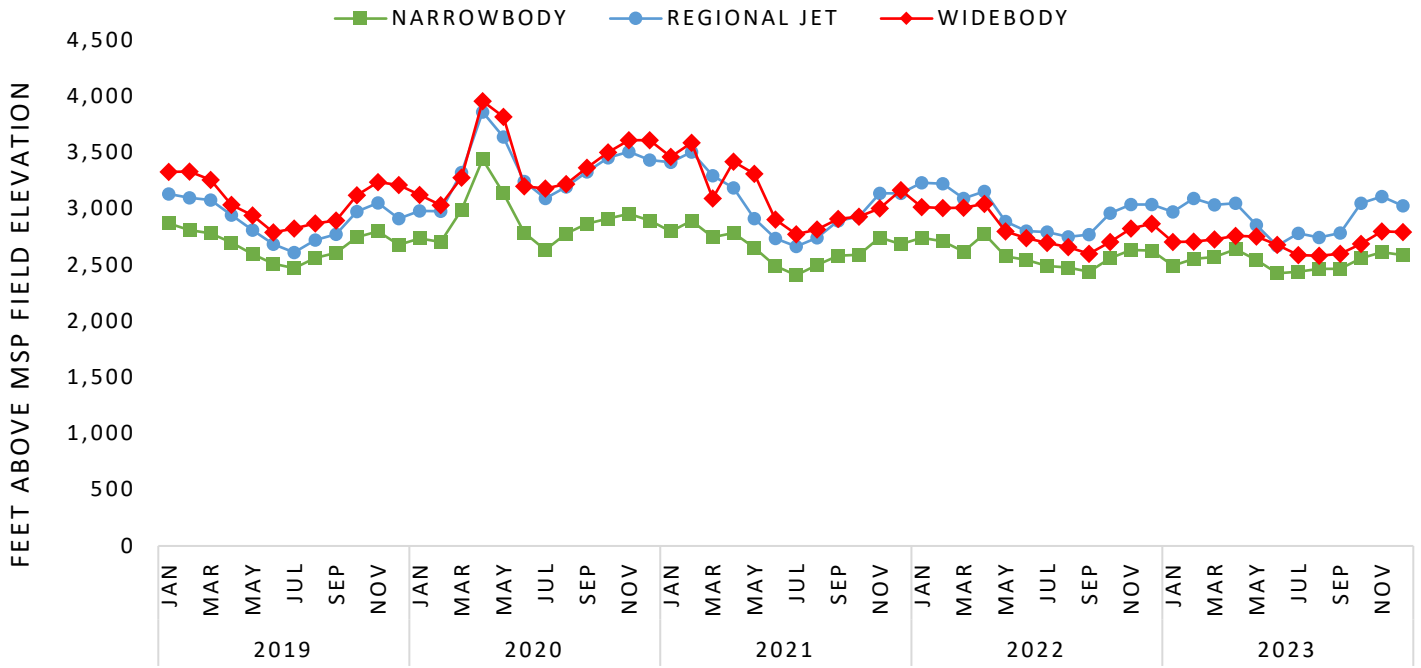
AVERAGE ALTITUDE FOR AIRCRAFT ARRIVING TO MSP



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

MSP FLEET MIX REPORT

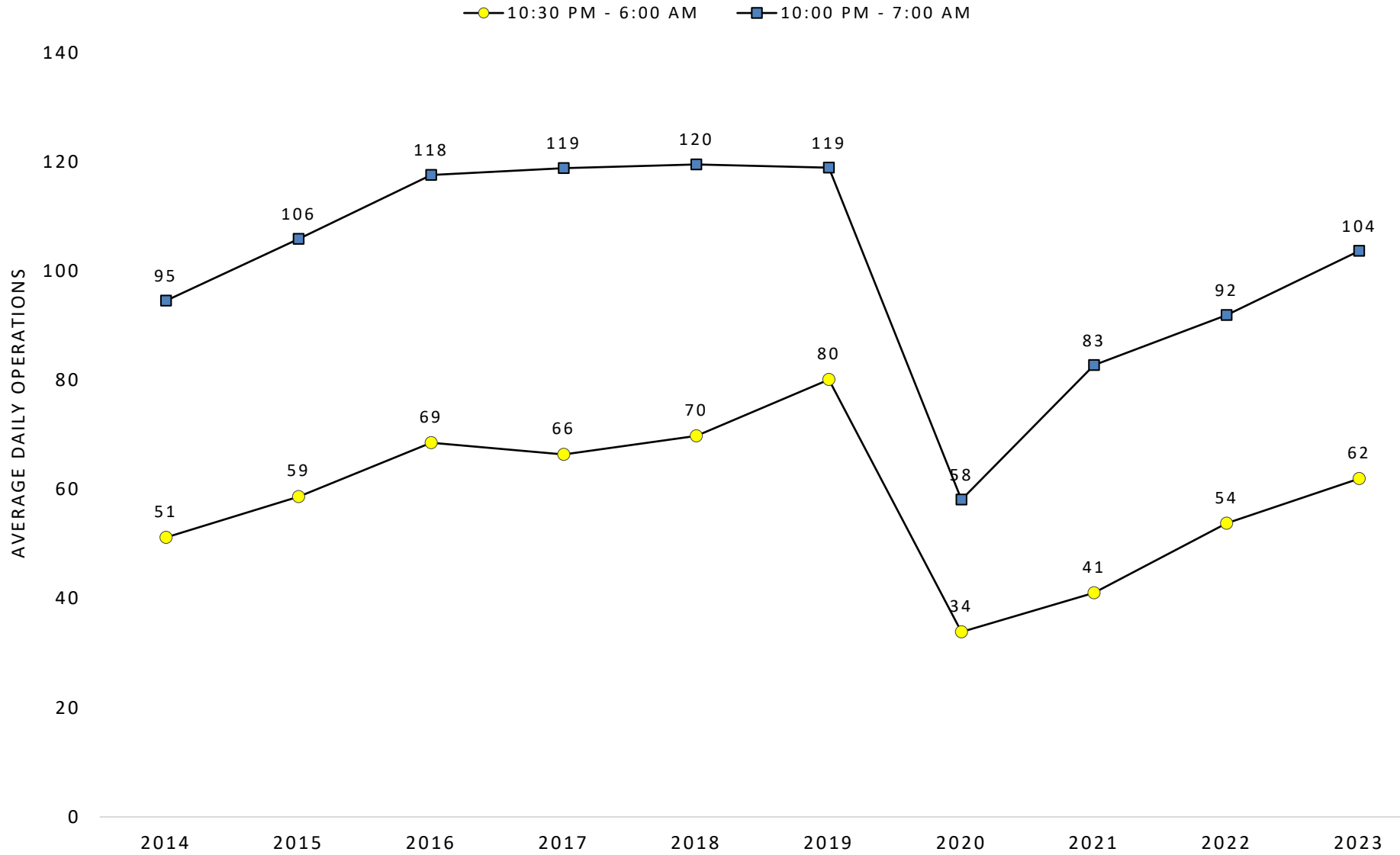
AVERAGE ALTITUDE FOR AIRCRAFT DEPARTING FROM MSP



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

MSP NIGHTTIME OPERATIONS REPORT

AVERAGE DAILY NIGHTTIME OPERATIONS



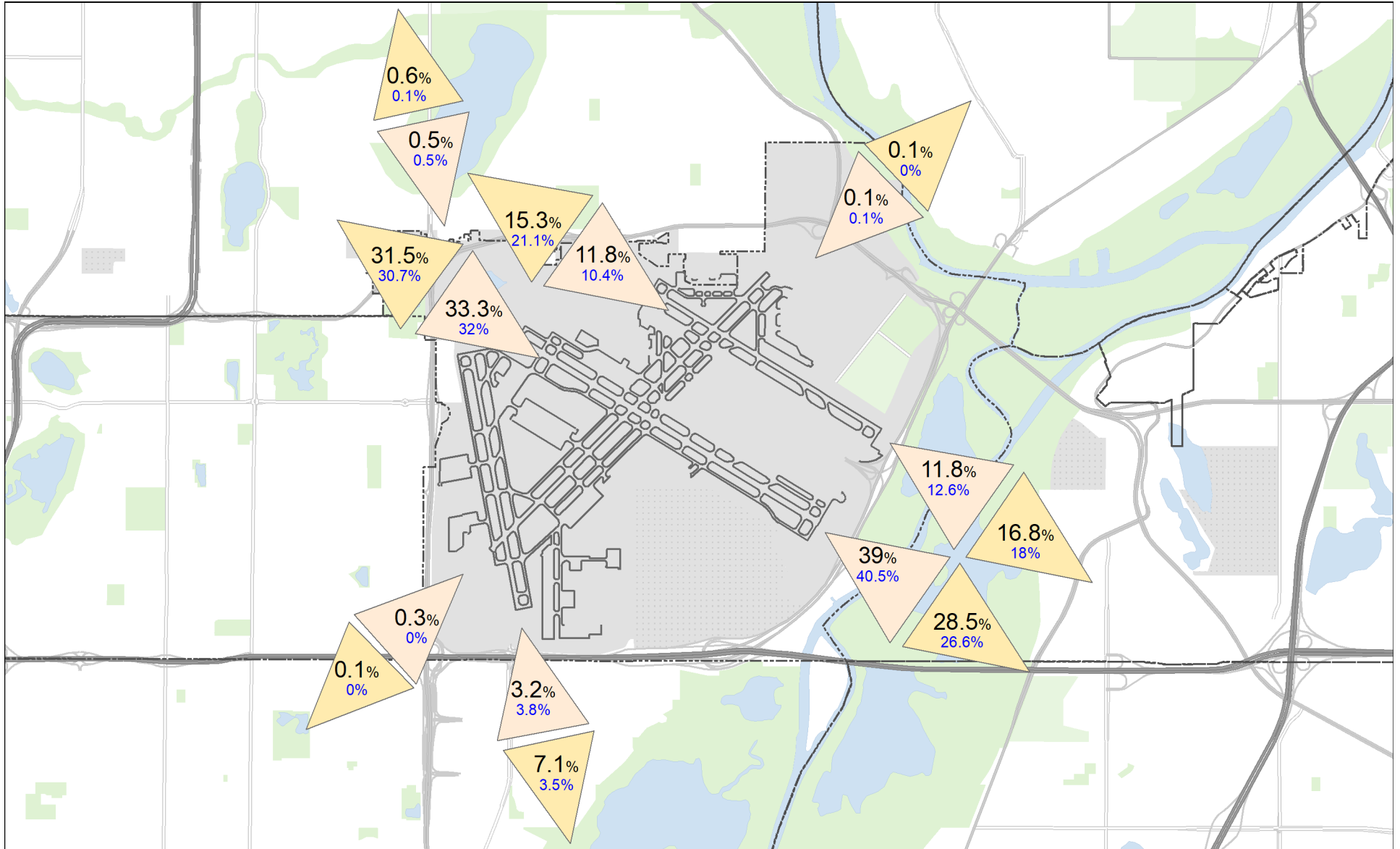
MSP NIGHTTIME OPERATIONS REPORT

2023 AND THREE-YEAR AVERAGE NIGHTTIME OPERATIONS BY RUNWAY
(10:30 PM – 6:00 AM)

RWY	ARR / DEP	OVERFLIGHT AREA	2023			2020 - 2022 AVERAGE		
			TOTAL NIGHT OPS	AVERAGE DAILY NIGHT OPS	%	TOTAL NIGHT OPS	AVERAGE DAILY NIGHT OPS	%
04	ARR	SO. RICHFIELD/BLOOMINGTON	54	0.1	0.3%	2	0.0	0.0%
12L	ARR	SO. MINNEAPOLIS/NO. RICHFIELD	1,818	5.0	11.8%	1,150	3.1	10.4%
12R	ARR	SO. MINNEAPOLIS/NO. RICHFIELD	5,132	14.1	33.3%	3,553	9.7	32.0%
17	ARR	SO. MINNEAPOLIS	71	0.2	0.5%	59	0.2	0.5%
22	ARR	ST. PAUL/HIGHLAND PARK	19	0.1	0.1%	13	0.0	0.1%
30L	ARR	EAGAN/MENDOTA HEIGHTS	6,021	16.5	39.0%	4,496	12.3	40.5%
30R	ARR	EAGAN/MENDOTA HEIGHTS	1,828	5.0	11.8%	1,404	3.8	12.6%
35	ARR	BLOOMINGTON/EAGAN	489	1.3	3.2%	424	1.2	3.8%
TOTAL NIGHTTIME ARRIVALS			15,432	42.3		11,101	30.3	
04	DEP	ST. PAUL/HIGHLAND PARK	8	0.0	0.1%	1	0.0	0.0%
12L	DEP	EAGAN/MENDOTA HEIGHTS	1,205	3.3	16.8%	825	2.3	18.0%
12R	DEP	EAGAN/MENDOTA HEIGHTS	2,049	5.6	28.5%	1,215	3.3	26.6%
17	DEP	BLOOMINGTON/EAGAN	511	1.4	7.1%	162	0.4	3.5%
22	DEP	SO. RICHFIELD/BLOOMINGTON	10	0.0	0.1%	2	0.0	0.0%
30L	DEP	SO. MINNEAPOLIS/NO. RICHFIELD	2,265	6.2	31.5%	1,402	3.8	30.7%
30R	DEP	SO. MINNEAPOLIS/NO. RICHFIELD	1,099	3.0	15.3%	963	2.6	21.1%
35	DEP	SO. MINNEAPOLIS	43	3.0	0.6%	3	0.0	0.1%
TOTAL NIGHTTIME DEPARTURES			7,190	22.5		4,573	12.4	
TOTAL NIGHTTIME OPERATIONS			22,622	64.8		15,674	42.7	

MSP NIGHTTIME OPERATIONS REPORT

**2023 AND THREE-YEAR AVERAGE NIGHTTIME OPERATIONS BY RUNWAY MAP
(10:30 PM – 6:00 AM)**



MSP NIGHTTIME OPERATIONS REPORT

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

2023	AIRLINE	ID	COUNT	PERCENT OF AIRLINE OPERATIONS OCCURRING AT NIGHT*	PERCENT OF CONTRIBUTION TO NIGHTTIME TOTAL [†]
	DELTA	DAL	8,263	5.7%	38.1%
	SUN COUNTRY	SCX	4,147	15.0%	19.1%
	SOUTHWEST	SWA	2,345	16.0%	10.8%
	UNITED	UAL	1,430	14.3%	6.6%
	AMERICAN	AAL	1,398	17.3%	6.4%
	SKYWEST AIRLINES	SKW	1,113	2.3%	5.1%
	UPS	UPS	877	33.4%	4.0%
	FEDEX	FDX	588	24.7%	2.7%
	FRONTIER AIRLINES	FFT	402	24.5%	1.9%
	GULF & CARIBBEAN CARGO	TSU	368	95.6%	1.7%
	ALASKA	ASA	266	19.0%	1.2%
	SPIRIT	NKS	213	6.8%	1.0%
	ENDEAVOR AIR	EDV	155	0.9%	0.7%
	REPUBLIC AIRLINES	RPA	64	2.5%	0.3%
AIR CANADA JAZZ	JZA	59	2.6%	0.3%	

2022	AIRLINE	ID	COUNT	PERCENT OF AIRLINE OPERATIONS OCCURRING AT NIGHT*	PERCENT OF CONTRIBUTION TO NIGHTTIME TOTAL [†]
	DELTA	DAL	5,823	4.9%	31.0%
	SUN COUNTRY	SCX	3,591	15.3%	19.1%
	SKYWEST AIRLINES	SKW	2,149	3.1%	11.4%
	SOUTHWEST	SWA	1,679	15.9%	8.9%
	AMERICAN	AAL	1,239	17.6%	6.6%
	UPS	UPS	1,119	33.6%	6.0%
	UNITED	UAL	781	9.7%	4.2%
	FEDEX	FDX	693	22.6%	3.7%
	GULF & CARIBBEAN CARGO	TSU	356	96.0%	1.9%
	JETBLUE AIRWAYS	JBU	350	18.4%	1.9%
	ALASKA	ASA	284	18.0%	1.5%
	FRONTIER AIRLINES	FFT	232	19.2%	1.2%
	SPIRIT	NKS	230	7.9%	1.2%
	ENDEAVOR AIR	EDV	163	0.9%	0.9%
SWIFT AIR (USA)	SWQ	85	16.4%	0.5%	

*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

**2023 NIGHTTIME OPERATIONS BY AIRCRAFT
(TOP 15 BY COUNT)**

AIRCRAFT CODE	DESCRIPTION	COUNT	NOISE LEVEL CERTIFICATION (EPNdB BELOW STAGE 3)
B738	BOEING 737-800	6,900	11.3 - 17.1
B739	BOEING 737-900	2,542	10.9 - 16.1
A321	AIRBUS INDUSTRIES A321	2,473	6.4 – 17.0
A320	AIRBUS INDUSTRIES A320	1,900	12.1 - 21.2
B757	BOEING 757-200	1,224	11.1 - 22.1
E170	EMBRAER 170	1,010	9.2 - 16.8
A319	AIRBUS INDUSTRIES A319	940	12.9 - 22.2
B38M	BOEING 737 MAX 8	845	24.3 - 27.4
B7377	BOEING 737-700	834	11.6 - 19.8
B717	BOEING 717	728	19.2 – 23.0
B763	BOEING 767-300	622	4.4 - 22.6
CRJ2	CANADAIR REGIONAL JET CRJ-200	455	26.5 - 30.6
A300	AIRBUS INDUSTRIES A300	308	4.3 - 17.7
MD11	MCDONNELL DOUGLAS MD11	270	12.8 - 17.9
CRJ9	CANADAIR REGIONAL JET CRJ-900	263	14.5 - 17.6

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

**2023 NIGHTTIME OPERATIONS BY ORIGIN AND DESTINATION
(TOP 15 BY COUNT)**

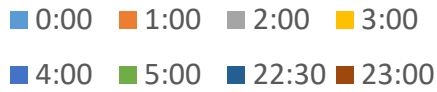
AIRPORT CODE	ORIGIN AIRPORT	COUNT
PHX	PHOENIX	1,169
DEN	DENVER	1,128
LAS	LAS VEGAS	959
LAX	LOS ANGELES	854
SEA	SEATTLE	758
SFO	SAN FRANCISCO	693
DFW	DALLAS FORT WORTH	509
MEM	MEMPHIS	454
SDF	LOUISVILLE	419
ATL	ATLANTA	416
ORD	CHICAGO O'HARE	406
PDX	PORTLAND	374
EWR	NEW YORK NEWARK	365
MCO	ORLANDO	365
IAH	HOUSTON	359

AIRPORT CODE	DESTINATION AIRPORT	COUNT
DEN	DENVER	711
LAS	LAS VEGAS	391
ATL	ATLANTA	370
STL	ST LOUIS	298
FSD	SIOUX FALLS	286
FAR	FARGO	284
BIS	BISMARCK	275
MDW	CHICAGO MIDWAY	273
PHX	PHOENIX	271
RST	ROCHESTER MN	266
GFK	GRAND FORKS	261
DLH	DULUTH	260
DFW	DALLAS FORT WORTH	211
ORD	CHICAGO O'HARE	208
MOT	MINOT	186

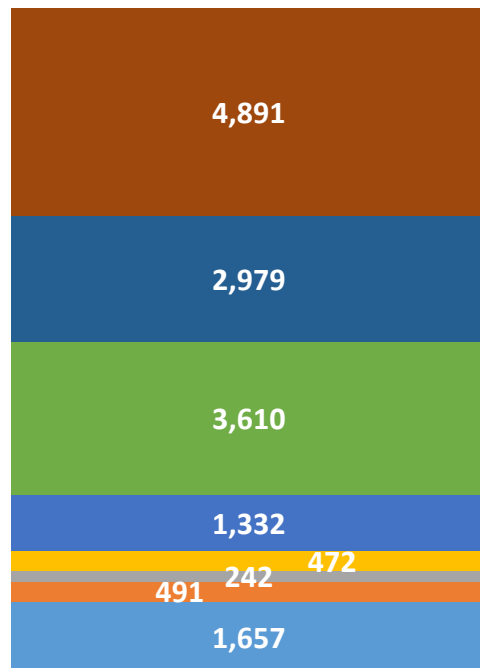
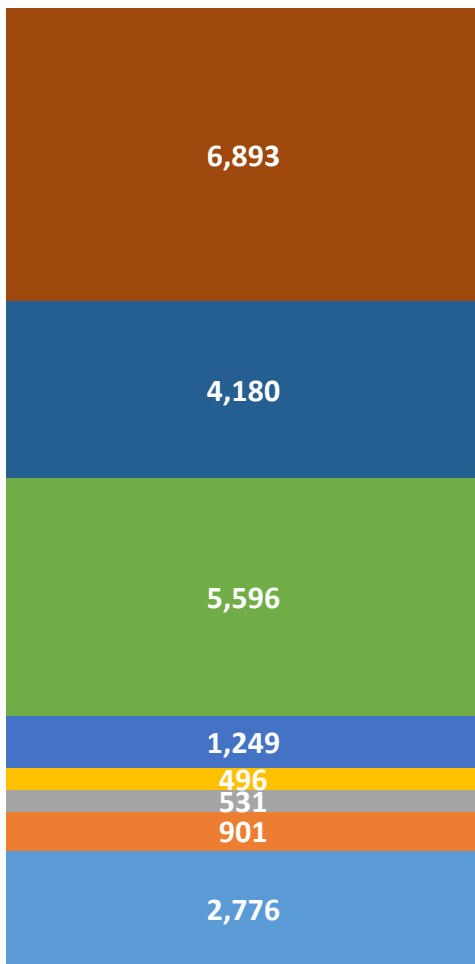
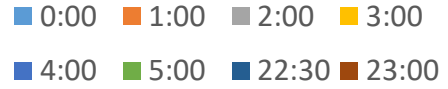
MSP NIGHTTIME OPERATIONS REPORT

NIGHTTIME OPERATIONS BY HOUR

2023



3-YEAR HISTORICAL AVERAGE



MSP NIGHTTIME OPERATIONS REPORT

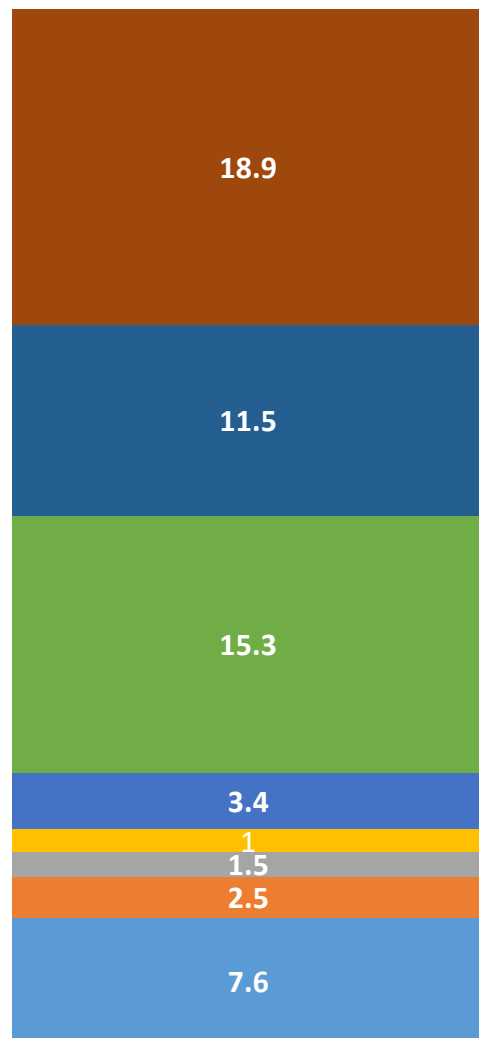
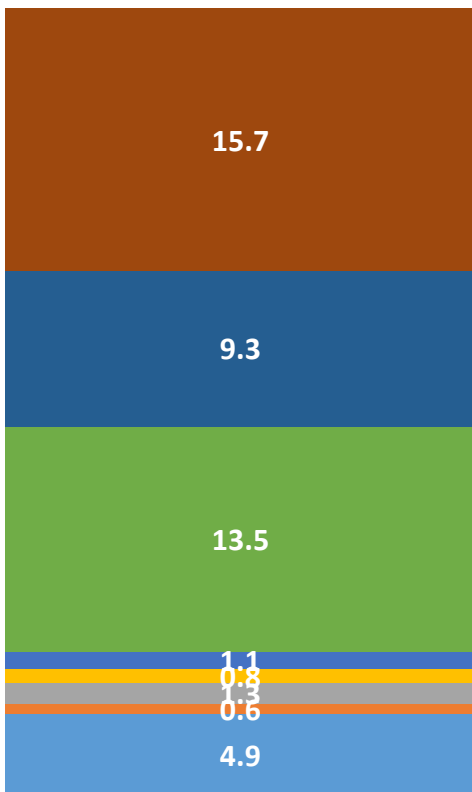
SCHEDULED VERSUS ACTUAL OPERATIONS
(AVERAGE BY HOUR)

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



Metropolitan Airports Commission

6040 28th Avenue South, Minneapolis, MN 55450

metroairports.org

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