

Community Noise Forum
Monday, January 27, 2025
Agenda

- I. Call to Order: 6:00 PM
- II. Approval of November 25, 2024 Meeting Notes
- III. LRAA Board Member Report
- IV. CNF Charter Review
- V. Active Noise Cancellation Update
- VI. Noise Exposure Map Update
- VII. Part 150 NCP
 - a. Noise Insulation Program
 - b. Contraflow Exceptions
- VIII. Current Noise Concerns
 - a. Noise Concerns/Complaints
 - b. Runway Utilization
 - c. Construction and Maintenance Activity
- IX. Guest Comments
- X. Announcements
- XI. Next Meeting: March 24, 2025
- XII. Adjournment

COMMUNITY NOISE FORUM (CNF)
Monday, November 25, 2024

Members

Mary Rose Evans, ANA
John Sistarenik, LRAA Board
Tom Foote, Airline Affairs
Jeff Kozak, UPS
Patricia Gould, Northeast

Bob Slattery, LRAA
Brian Sinnwell, LRAA
Doug Black, Southwest
Rebecca Katz, Metro Louisville

Guests

Wendy Harrower, QHP
Kathleen Bolin, Old Louisville
Edward Mansfield, Merriwether

Dorn Crawford, Audubon
Rose Nett, Old Louisville
Emma Mason, LRAA

- I. **Call to Order:** The meeting was called to order at 6:00 p.m. by Mary Rose Evans.
- II. **Approval of the September 23, 2024, Minutes:** The meeting notes for September were approved with no changes.
- III. **LRAA Board Member Report:** John Sistarenik reported there were no comments about airport noise at the November 20, 2024, LRAA Board meeting.
- IV. **CNF Charter Review:** Some changes to the charter were discussed, to accommodate routine business. The proposed change would define a quorum as a majority of appointed members, rather than a majority of all members who could potentially be appointed. The forum's vacancies were questioned, followed by suggestions on filling these positions or eliminating them. Scheduling quarterly meetings instead of bi-monthly meetings for the CNF was suggested. It was decided that a Charter Working Group should be formed to discuss these issues in greater detail and report back to the full CNF.
- V. **Active Noise Cancellation Update:** The off-site testing in Virginia was completed on September 25, 2024. They think the test went well and are reviewing the results to gather information and determine potential software updates. After the review, the date for on-site testing at SDF will be determined. The estimated test date will be in January 2025.
- VI. **Southwest Quadrant Working Group:** No Report.
- VII. **Noise Exposure Map Update:** Bob gave an update on the Noise Exposure Map's progress. The comment period ended on Saturday, November 23, 2024. Seven comments were received. The comments are being compiled and categorized to be included in the report to the FAA, which is planned to be submitted by the end of December 2024. Mary Rose Evans

said she was aware of concerns from people regarding the Noise Exposure Maps and opened the floor to anyone that wanted to talk about their comments. Doug Black said he had a concern regarding the noise signature of each aircraft. He asked if several items were kicked back from the FAA and what those may have been. Bob Slattery replied that he is not aware of anything that was kicked back from the FAA on the draft report. There was back and forth with the FAA on the forecast and non-standard profiles memo however, those items were addressed and received FAA approval prior to development of the contours and the workshop. Mr. Black asked why not use the standard profiles. Bob replied that our goal was to model the flights as accurately as possible. A long discussion followed regarding the use of non-standard flight profiles and alternative sources of potential mitigation funding and assistance.

VIII. **Part 150 NCP:**

A. Noise Insulation Program: Residential: 793 families have received sound insulation as of November 1, 2024.

B. Contraflow Exceptions: Contraflow for September and October are listed in the handout.

IX. **Current Noise Concerns:**

A. Noise Concerns/Complaints: Comment locations and summary for September and October are contained in the handout.

B. Runway Utilization: Runway utilization and tower comments for September and October are contained in the handout.

C. Construction and Maintenance Activity: No report

X. **Guest Comments:** Kathleen Bolin asked if DNL was an average of the cargo, or passenger aircraft. She lives between the 60 and 65 DNL contour and gets awoken between 4:30 and 5:00 a.m. on bad weather days and sleeps with earplugs and noise machine. She pointed out that it may be more effective to just focus on cargo flights since those are the ones that wake her up. Bob explained all the operations are included not one or the other. Mary Rose pointed out that there is also a 10 dB nighttime penalty for the operations she describes. Edward Mansfield had concerns regarding data collection and verification of the Aviation Environmental Design Tool (AEDT) noise model. There was a lengthy discussion about the data collection and noise models used for the NEM.

XI. **Announcements:** None

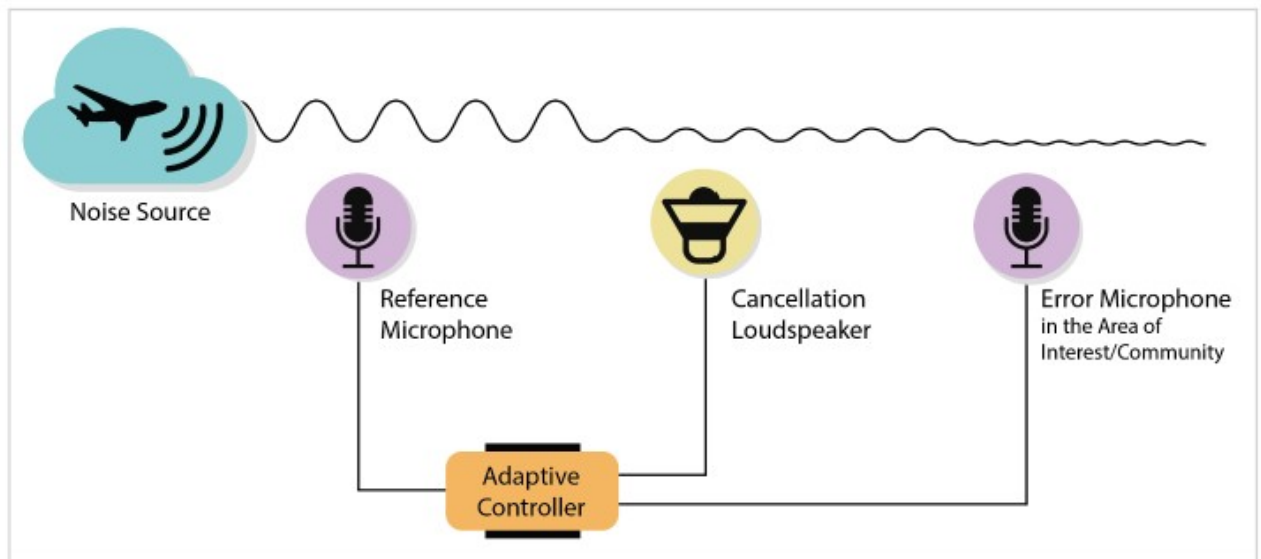
XII. **Next Meeting:** January 27, 2025

XIII. **Adjournment:** A motion was made to adjourn the meeting at 7:40 p.m.

Active Noise Control

Project Overview

This project includes the design, installation, optimization, and maintenance of an active noise control system to help reduce noise in the adjacent communities exposed to aircraft noise from the start-of-takeoff roll on departure at Louisville Muhammad Ali International Airport (SDF). System setup and shakedown, tests of ANC system performance were successfully executed outdoors over 4 hours of the afternoon of September 25, 2024, near the National Institute of Aerospace's facility in Hampton, Virginia. Currently reviewing test results and potential software improvements. On-site testing at SDF planned for late March early April 2025.



Residential Sound Insulation

QuieterHome Program began in 2008

Funding is 90% FAA, with the remaining 10% from the Airport Authority

542 families completed by 2015 along Preston Hwy corridor

549 additional families potentially eligible as of 2021 in new program area, north-east of SDF

793 Families completed as of January 1, 2025

New program Area Status

Package 6 - 34 Families

Began: December 2023

Completed: April 2024

Package 7 - 30

Began: May 2024

Completed: July 2024

Package 8 - 29 (March 2024 Board)

Began: August 2024

Completed: October 2024

Package 9 - 31 (September 2024 Board)

Began: February 2025 (est)

Completed: April 2025 (est)



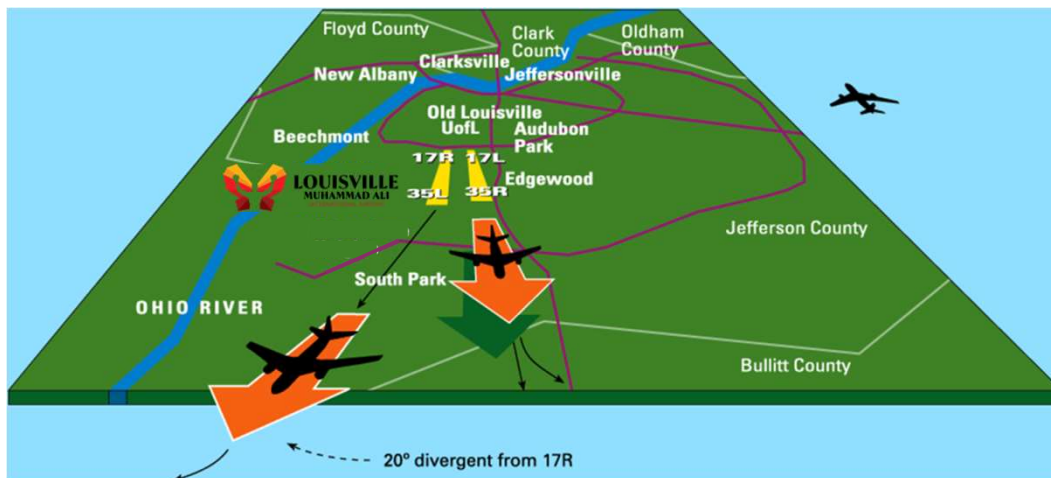
CONTRAFLOW

Between the hours of 10:00 p.m. and 7:00 a.m., the Airport operates from the south and to the south (contraflow) whenever wind, weather, and demand allow. Contraflow procedures require aircraft to arrive on Runways 35R and 35L and depart on Runways 17R and 17L in order to direct aircraft operations south of the Airport over areas which are less densely populated than areas north of the Airport.

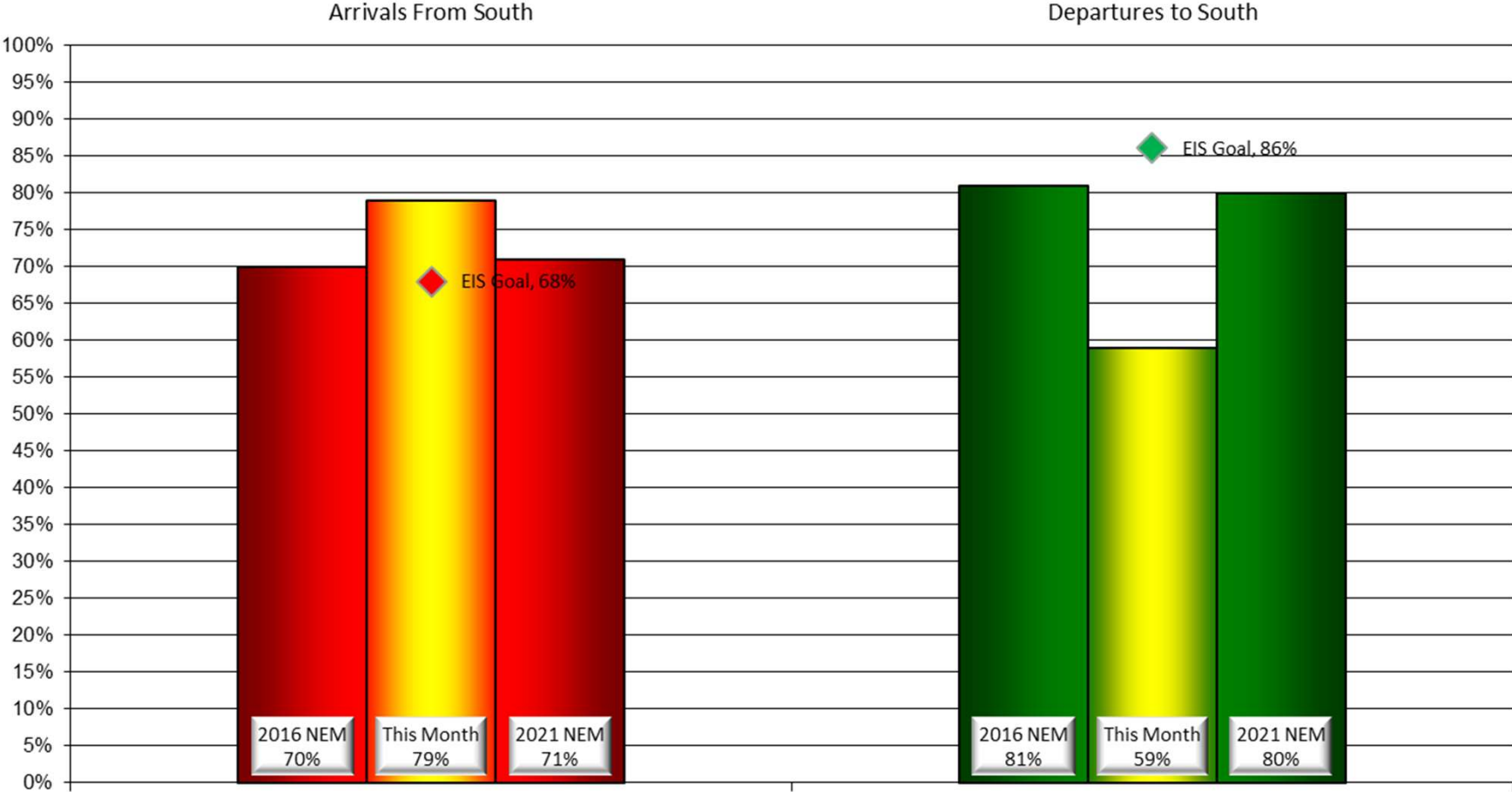
Inbound



Outbound



Monthly Contraflow November 1-30, 2024



Nightly Runway Use Summary – November 2024

(from 10:00 PM date list in first column to 7:00 AM the following morning)

		% of all arrivals from the south									% of all departures to the south										
Date	Day	* in compliance	Runway#						Unknown Runway Use	Notes / Comments	** in compliance	Runway#						Unknown Runway Use	Notes / Comments		
			11	17L	17R	29	35L	35R				11	17L	17R	29	35L	35R				
11-01-24	Fri	95%		2	3			59	36	0		96%		38	58			3	1	0	
11-02-24	Sat																				
11-03-24	Sun																				
11-04-24	Mon	0%		36	64					0	160-180@10-15g23	100%		36	64					0	
11-05-24	Tue	0%		42	58					0	180-190@11-15,g21,ra	100%		40	60					0	
11-06-24	Wed	100%						59	41	0		0%					57	43	0	360-020@10-11,ra	
11-07-24	Thu	99%			1			57	42	0		88%		32	56		8	4	0		
11-08-24	Fri	97%			3			62	35	0		97%		35	62		2	1	0		
11-09-24	Sat																				
11-10-24	Sun																				
11-11-24	Mon	100%						59	41	0		0%					57	43	0	360-030@5-10	
11-12-24	Tue	99%			1			55	44	0		89%		36	53		7	4	0		
11-13-24	Wed	0%		39	61					0	110-160@7-11,ra	99%		40	59			1	0		
11-14-24	Thu	100%						61	39	0		0%					63	37	0	260-310@5-13,ra	
11-15-24	Fri	97%			3			64	33	0		94%		31	63		5	1	0		
11-16-24	Sat																				
11-17-24	Sun																				
11-18-24	Mon	0%		42	58					0	130-160@8-10,	100%		37	63					0	
11-19-24	Tue	100%						56	44	0		0%					59	41	0	090-110@3-5, fg	
11-20-24	Wed	95%		2	3			59	36	0		91%		39	52		6	3	0		
11-21-24	Thu	100%						58	42	0		0%					46	54	0	310-340@8-16,g21,ra	
11-22-24	Fri	96%			4			58	38	0		93%		38	55		4	3	0		
11-23-24	Sat																				
11-24-24	Sun																				
11-25-24	Mon	100%						60	40	0		0%					59	41	0	310-330@9-12,g19	
11-26-24	Tue	95%		2	3			54	41	0		89%		35	54		8	3	0		
11-27-24	Wed	100%						58	42	0		0%					69	31	0	330-360@10-13,g20,ra	
11-28-24	Thu	100%						74	26	0		0%					69	31	0	260-300@7-12,g19,sn	
11-29-24	Fri	93%		1	6			53	40	0		96%		40	56		3	1	0		

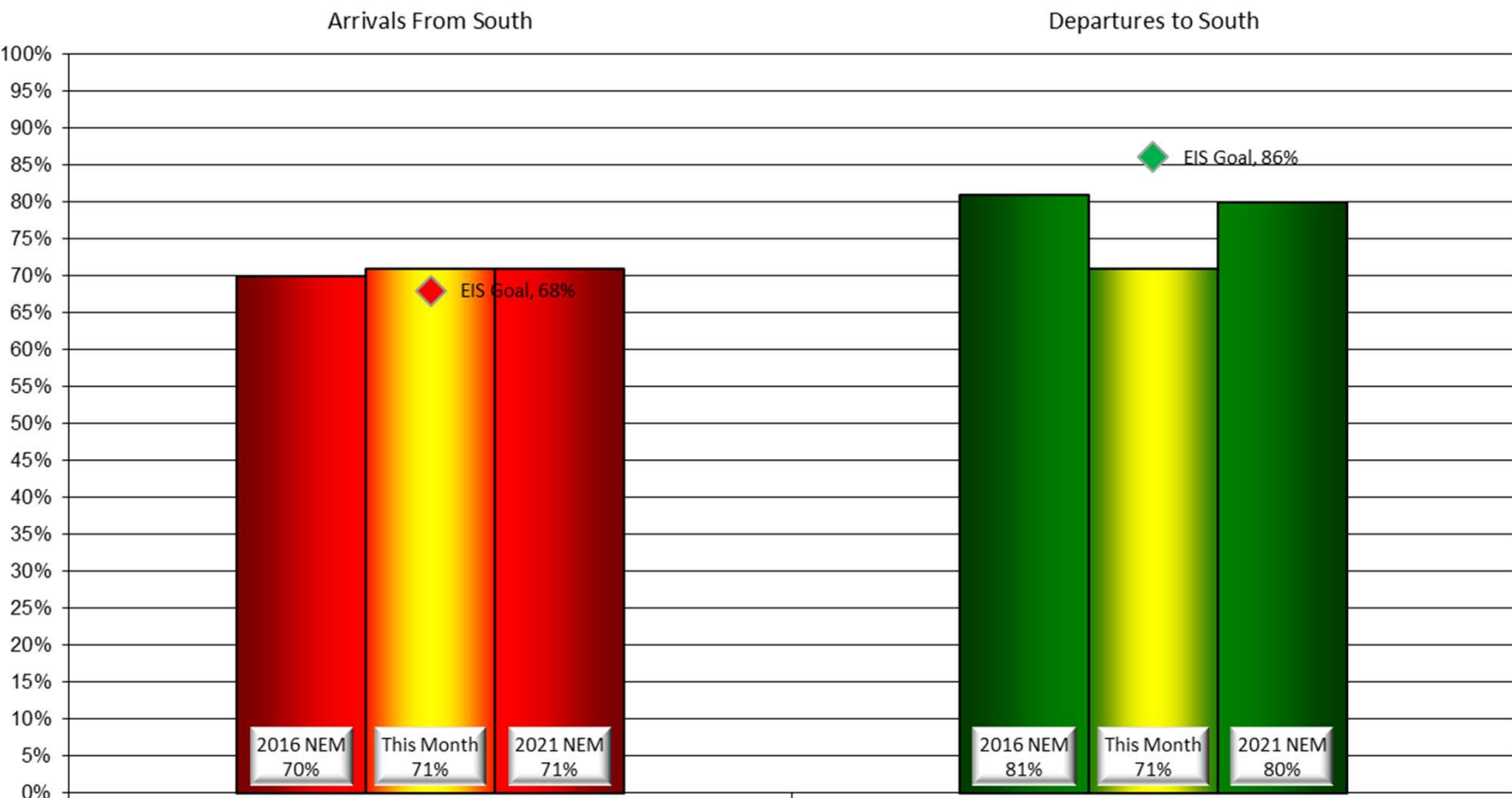
Preferred Flow

DATIS Reported Conditions Indicate Support for Non-Preferred Flow

DATIS Reported Conditions Do Not Indicate Support for Non-Preferred Flow



Monthly Contraflow December 1-31, 2024



Nightly Runway Use Summary – December 2024

(from 10:00 PM date list in first column to 7:00 AM the following morning)

		% of all arrivals from the south										% of all departures to the south									
Date	Day	* in compliance	Runway#							Unknown Runway Use	Notes / Comments	** in compliance	Runway#							Unknown Runway Use	Notes / Comments
			11	17L	17R	29	35L	35R	Use				11	17L	17R	29	35L	35R	Use		
12-02-24	Mon	100%						56	44	0		0%						63	37	0	300-360@5-9kts,sn
12-03-24	Tue	0%		41	59					0	160-210@6-11	100%		40	60					0	
12-04-24	Wed	62%		7	10	21	36	26		0		0%				10	58	32		0	300-320@17-20kts,g36
12-05-24	Thu	96%		1	3		56	40		0		83%		31	52		10	7		0	
12-06-24	Fri	94%		2	4		53	41		0		93%		36	57		4	3		0	
12-07-24	Sat																				
12-08-24	Sun																				
12-09-24	Mon	95%			5		57	38		0		87%		33	54		9	4		0	
12-10-24	Tue	100%					59	41		0		0%					59	41		0	270-330@5-11kts,sn
12-11-24	Wed	97%		1	2		60	37		0		84%		35	49		11	5		0	
12-12-24	Thu	96%		1	3		53	43		0		87%		35	52		7	6		0	
12-13-24	Fri	94%		1	5		58	36		0		95%		41	54		3	2		0	
12-14-24	Sat																				
12-15-24	Sun																				
12-16-24	Mon	92%		1	7		55	37		0		84%		30	54		11	5		0	
12-17-24	Tue	52%		18	30		31	21		0		91%		42	49		4	5		0	
12-18-24	Wed	96%		1	3		56	40		0		81%		36	45		14	5		0	
12-19-24	Thu	94%		6			33	61		0		90%		29	61		6	4		0	
12-20-24	Fri	100%					36	64		0		0%					58	42		0	340-010@8-12kts
12-21-24	Sat																				
12-22-24	Sun																				
12-23-24	Mon	0%		80	20					0	200-240@7-13,g19	100%		41	59					0	
12-24-24	Tue	100%					50	50		0		88%		20	68		5	5		2	
12-25-24	Wed	0%			100					0	070-100@3-7kts	100%		33	67					0	
12-26-24	Thu	90%		7	3		24	66		0		88%		33	55		9	3		0	
12-27-24	Fri	0%		41	59					0	180-190@7-11kts	100%		37	63					0	
12-28-24	Sat																				
12-29-24	Sun																				
12-30-24	Mon	0%		70	30					0	100-140@9-10kts	100%		36	64					0	
12-31-24	Tue	100%					50	50		0		0%					52	48		0	290-320@9-15kts,ra

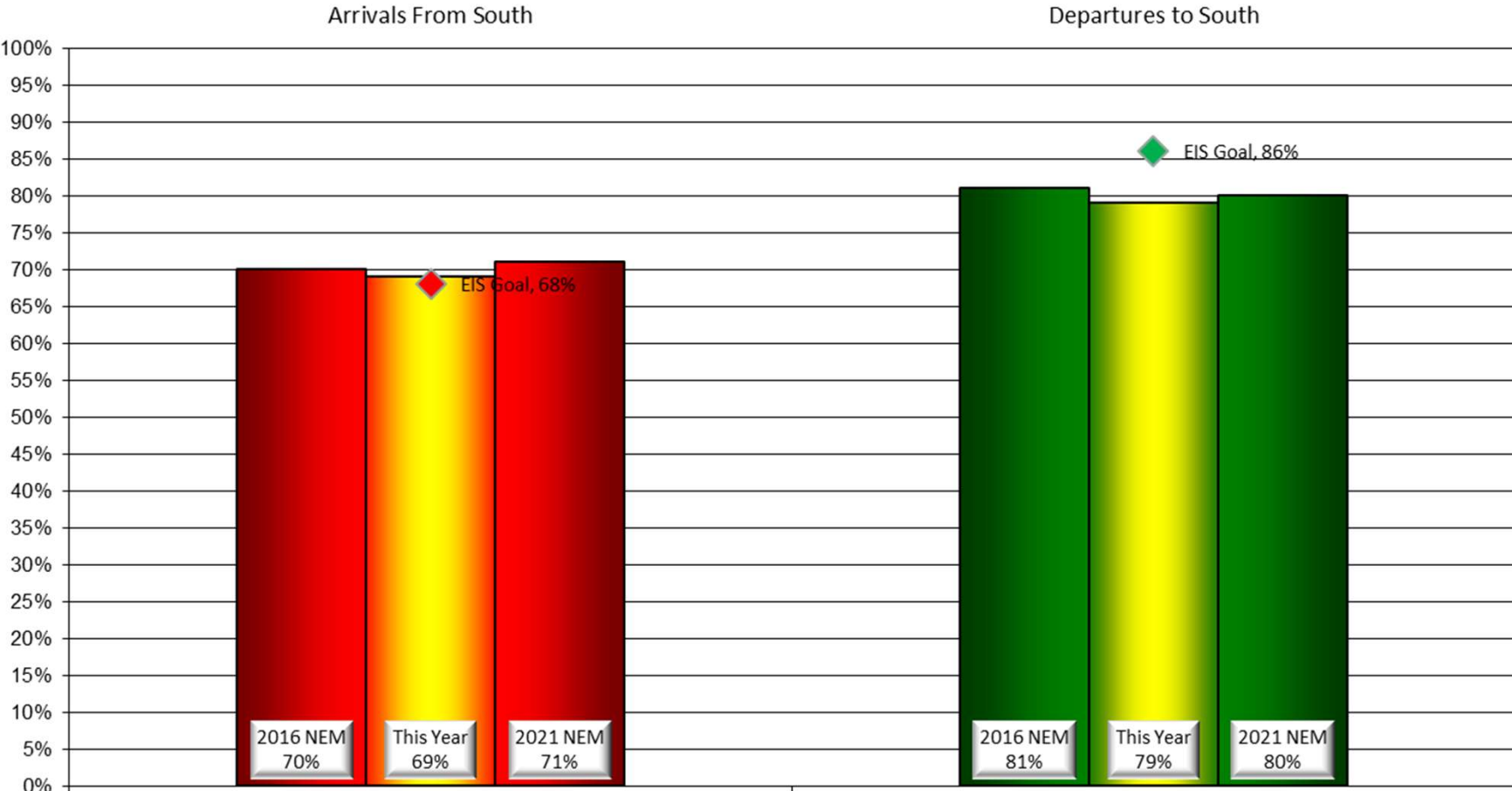
Preferred Flow

DATIS Reported Conditions Indicate Support for Non-Preferred Flow

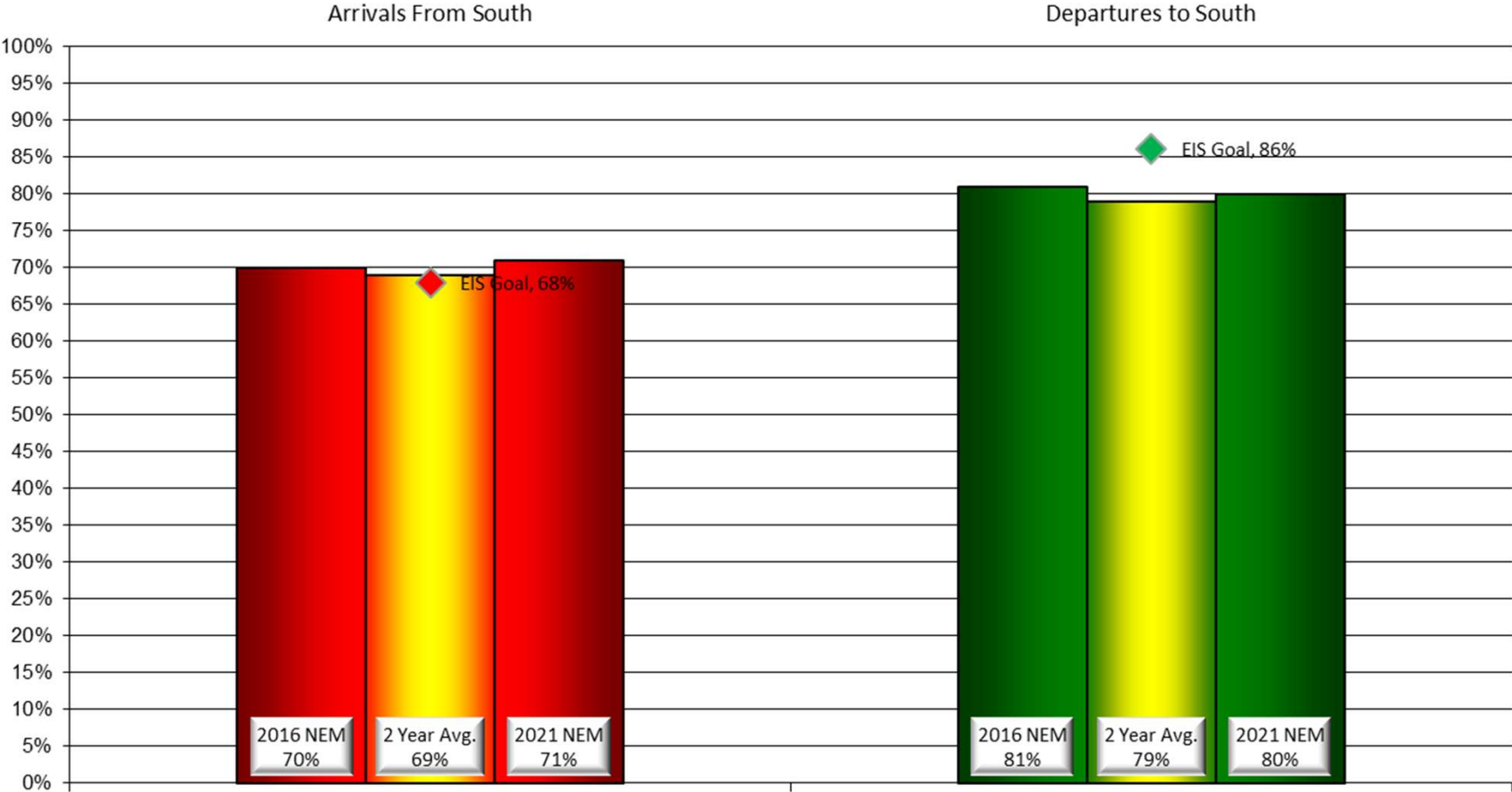
DATIS Reported Conditions Do Not Indicate Support for Non-Preferred Flow



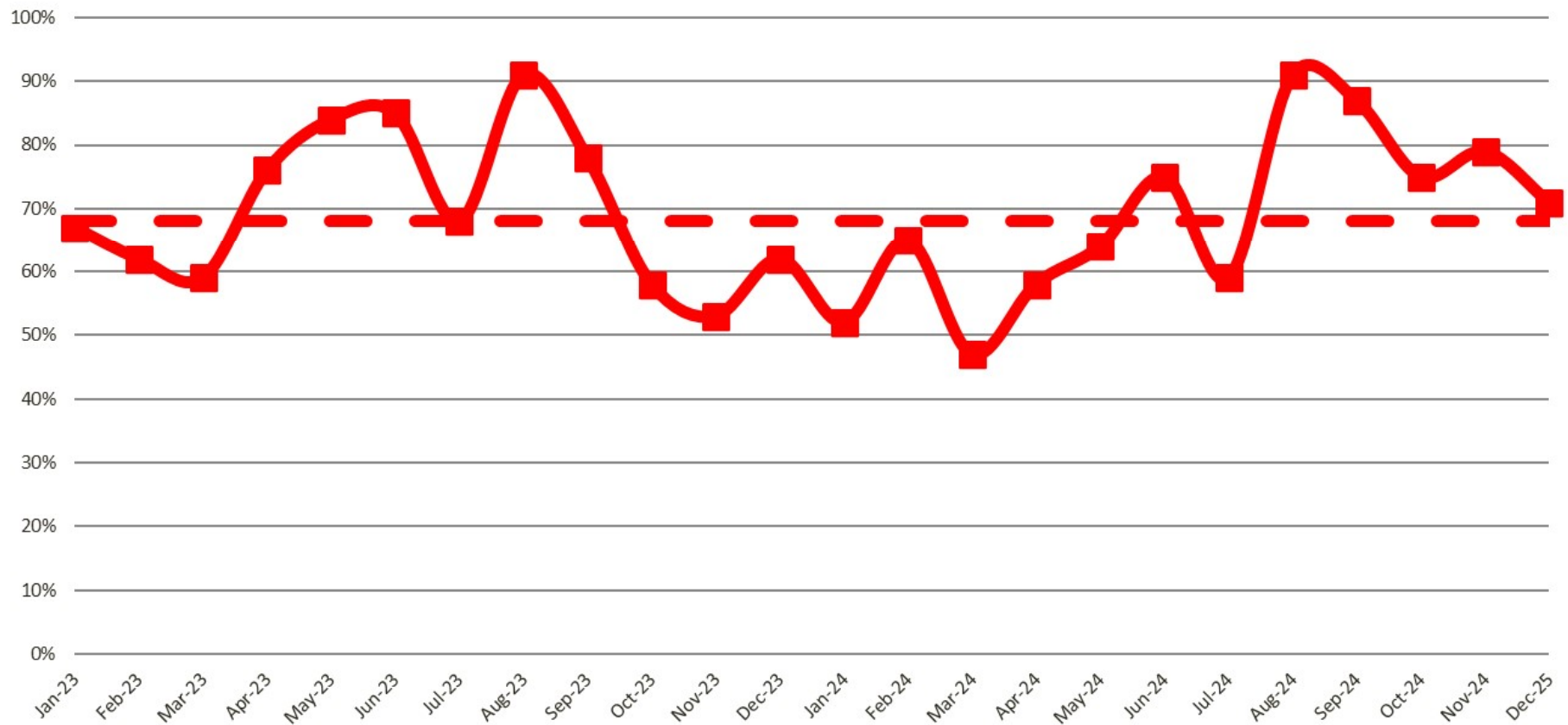
**Contraflow This Year
As of December 31, 2024**



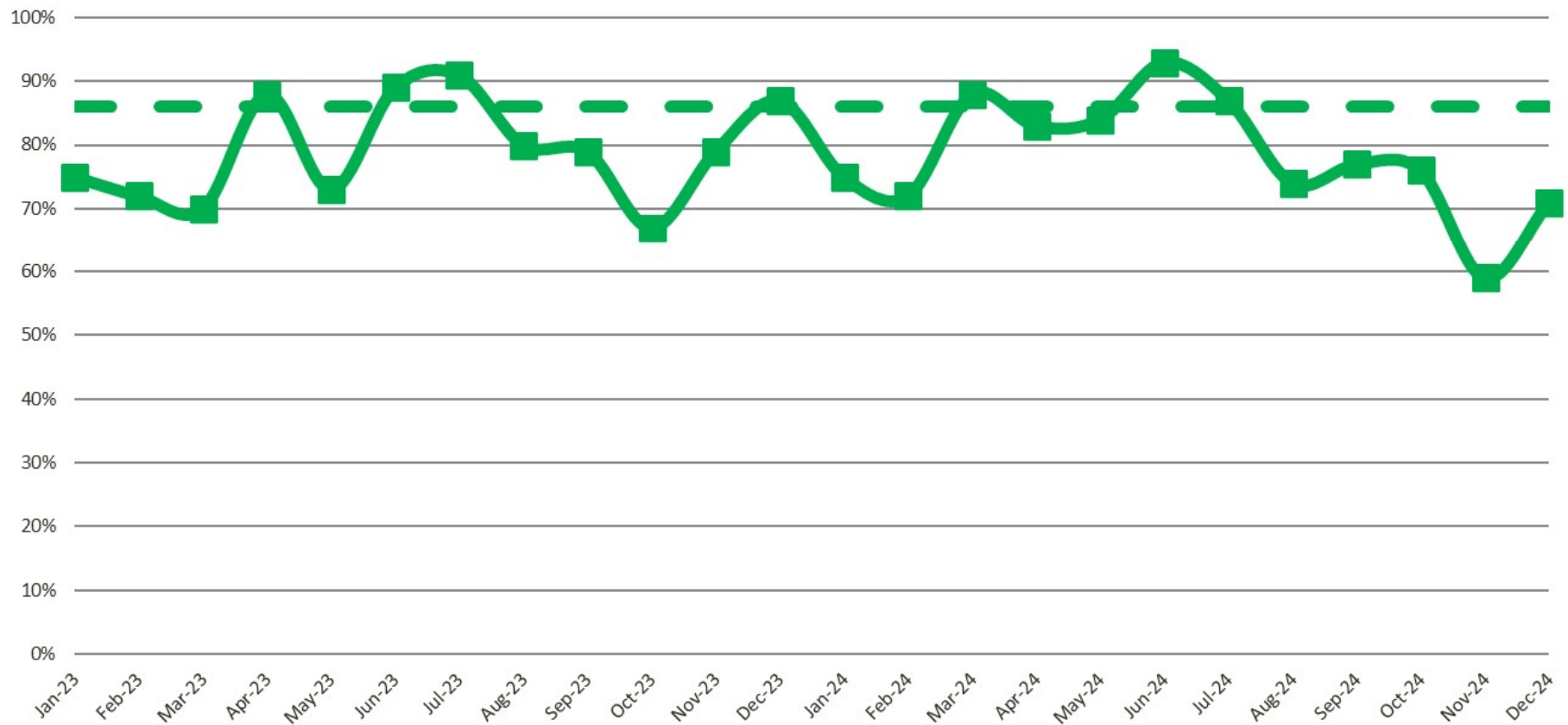
Contraflow 2 Year Average January 2023- December 2024



**Arrivals From The South
January 2023 through December 2024
(10:00 pm to 7:00 am)
(68% is Goal)**



Departures To The South
January 2023 through December 2024
(10:00 pm to 7:00 am)
(86% is Goal)



Year-to-Year by Month Percent* Contraflow

Arrivals From the South (Goal 68%)										Departures to the South (Goal 86%)									
	2017	2018	2019	2020	2021	2022	2023	2024	Avg		2017	2018	2019	2020	2021	2022	2023	2024	Avg
Jan	65%	60%	75%	56%	71%	78%	67%	52%	66%		61%	72%	69%	82%	71%	65%	75%	79%	72%
Feb	58%	67%	78%	78%	87%	67%	62%	65%	70%		77%	70%	57%	43%	45%	56%	72%	72%	62%
Mar	79%	84%	82%	65%	51%	62%	59%	47%	66%		62%	61%	89%	64%	77%	77%	70%	88%	74%
Apr	56%	73%	65%	71%	62%	64%	76%	58%	66%		80%	72%	82%	69%	75%	82%	88%	83%	79%
May	75%	43%	65%	71%	71%	51%	84%	64%	66%		80%	89%	90%	90%	63%	83%	73%	84%	82%
Jun	74%	74%	50%	69%	65%	67%	85%	75%	70%		93%	91%	91%	88%	84%	70%	89%	93%	87%
Jul	85%	90%	75%	72%	70%	55%	68%	59%	72%		85%	77%	87%	91%	76%	95%	91%	87%	86%
Aug	79%	72%	88%	82%	74%	78%	91%	91%	82%		90%	88%	89%	87%	88%	89%	82%	74%	86%
Sep	85%	80%	83%	83%	63%	91%	78%	87%	81%		31%	87%	77%	85%	90%	75%	79%	77%	75%
Oct	81%	77%	79%	71%	69%	68%	58%	75%	73%		82%	76%	78%	72%	76%	78%	67%	76%	76%
Nov	69%	76%	70%	51%	61%	60%	53%	79%	65%		75%	54%	72%	78%	81%	86%	79%	59%	73%
Dec	74%	72%	76%	67%	56%	53%	62%	71%	66%		74%	61%	72%	69%	80%	88%	87%	71%	75%
Avg	73%	72%	74%	70%	67%	66%	70%	69%			74%	75%	79%	77%	76%	79%	79%	79%	

NOISE COMMENT REPORT

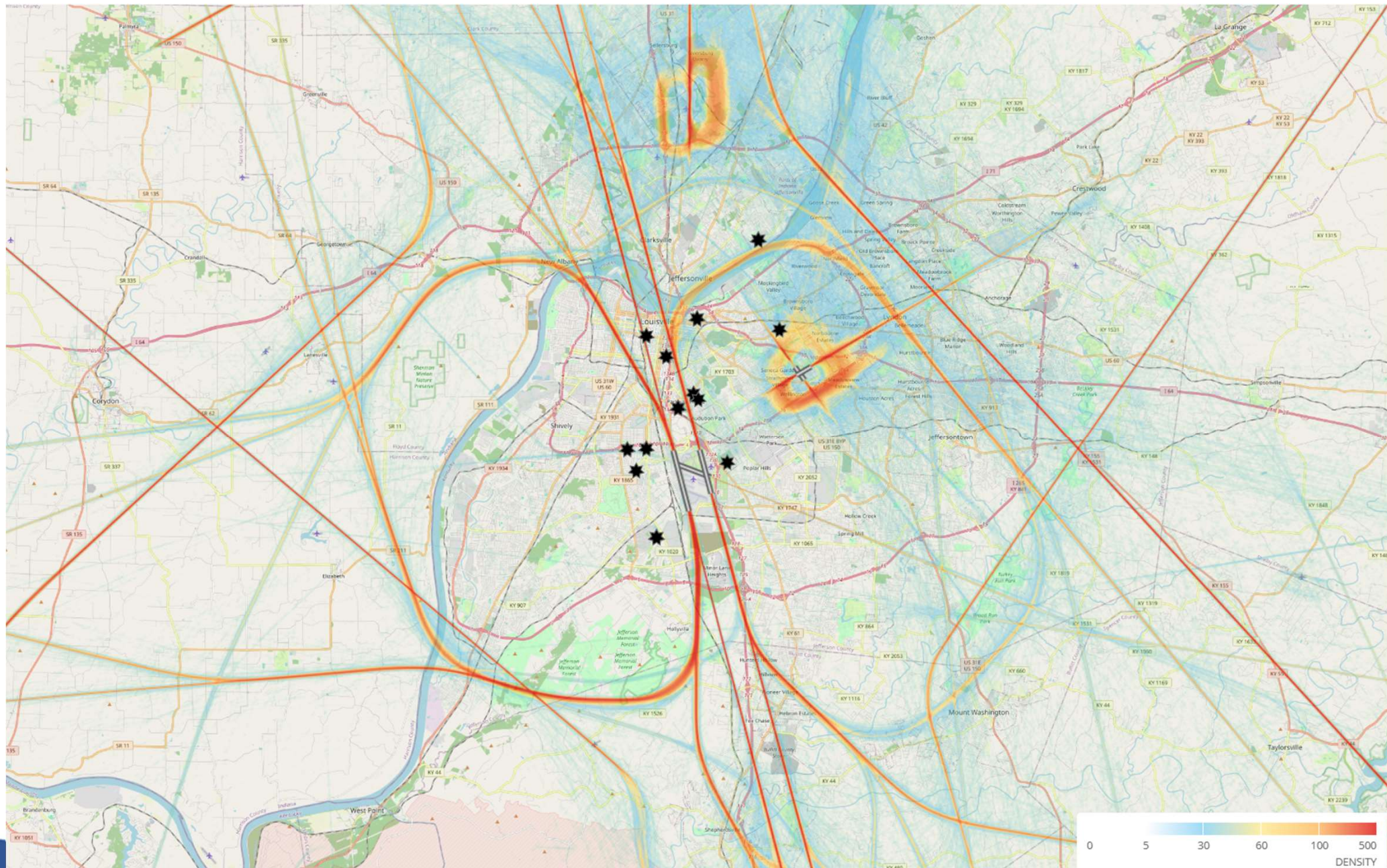
LOUISVILLE

REGIONAL AIRPORT AUTHORITY



November 2024

Flight Track Density / Comment Location November 2024 (SDF/LOU)



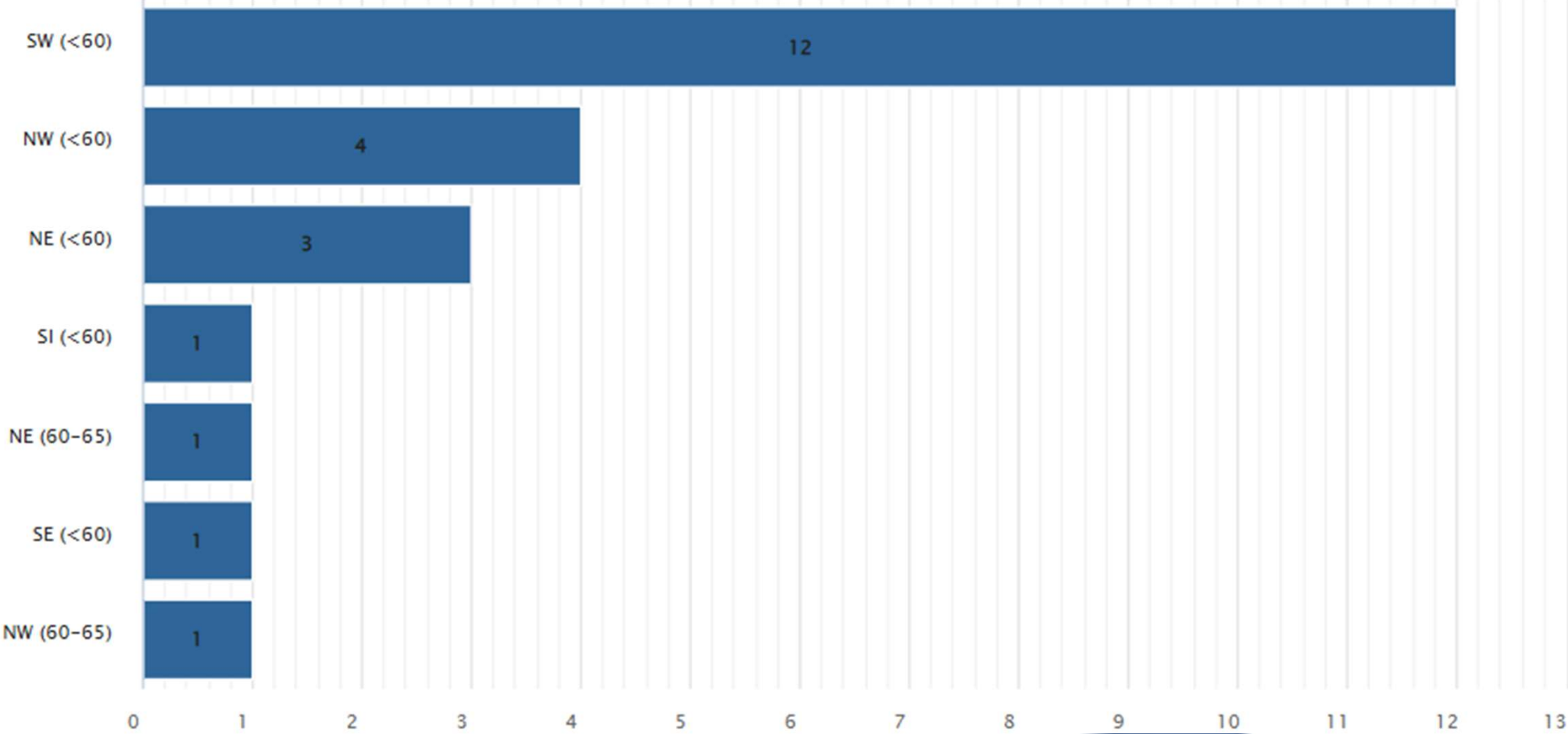
Comment Summary

November 2024 (SDF/LOU)

Airport	Street	City	Date	Time	Cause
KSDF	Bluebird Av	Louisville	2024-11-01	15:01:00	Other
KSDF	Southern Parkway	Louisville	2024-11-03	07:40:00	Too Loud
KSDF	Southern Parkway	Louisville	2024-11-03	08:13:00	Too Loud
KSDF	South Brook Street	Louisville	2024-11-04	23:00:00	Too Loud
KSDF	South Brook Street	Louisville	2024-11-06	00:30:00	Vibration
KSDF	York River RD	Louisville	2024-11-06	01:30:00	Too Loud
KSDF	Franklin Street	Louisville	2024-11-07	04:00:00	Too Loud
KSDF	York River Road	Louisville	2024-11-07	04:30:00	Too Loud
KSDF	Southern Pkwy	Louisville	2024-11-12	02:00:00	Too Loud
KSDF	York River Road	Louisville	2024-11-12	05:49:00	Too Loud
KSDF	Seelbach Ave	Louisville	2024-11-13	03:30:00	Too Loud
KSDF	York River Road	Louisville	2024-11-13	05:46:00	Too Loud
KSDF	Carlotta Drive	Jeffersonville	2024-11-15	03:30:00	Too Loud
KSDF	Clarks Lane	Louisville	2024-11-15	04:22:00	Too Loud
KSDF	Maylawn Ave	Louisville	2024-11-15	10:00:00	Other
KSDF	Meadow Lark Ave	Louisville	2024-11-17	10:30:00	Too Loud
KSDF	York River Road	Louisville	2024-11-17	14:00:00	Too Loud
KSDF	York River Road	Louisville	2024-11-17	17:11:27	Too Low
KSDF	Greenup Road	Louisville	2024-11-18	10:32:00	Vibration
KSDF	York River Road	Louisville	2024-11-19	07:00:00	Too Loud
KSDF	York River Road	Louisville	2024-11-20	05:00:00	Too Loud
KSDF	South Brook Street	Louisville	2024-11-22	04:30:00	Too Loud
KLOU	Lexington Rd	Louisville	2024-11-26	14:30:00	Too Many

Comment Locations

November 2024 (SDF/LOU)



NOISE COMMENT REPORT

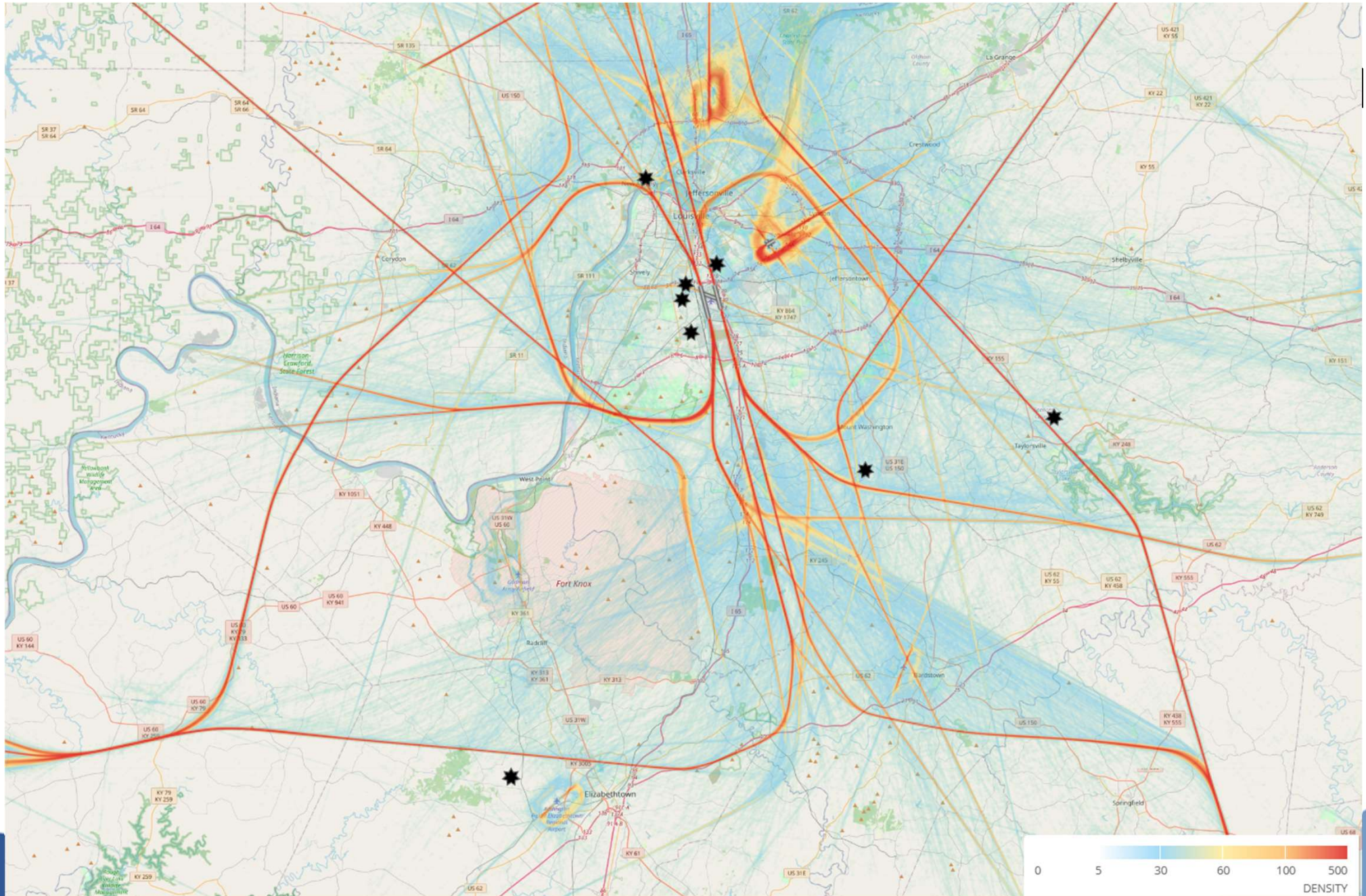
LOUISVILLE

REGIONAL AIRPORT AUTHORITY



December 2024

Flight Track Density / Comment Location December 2024 (SDF/LOU)



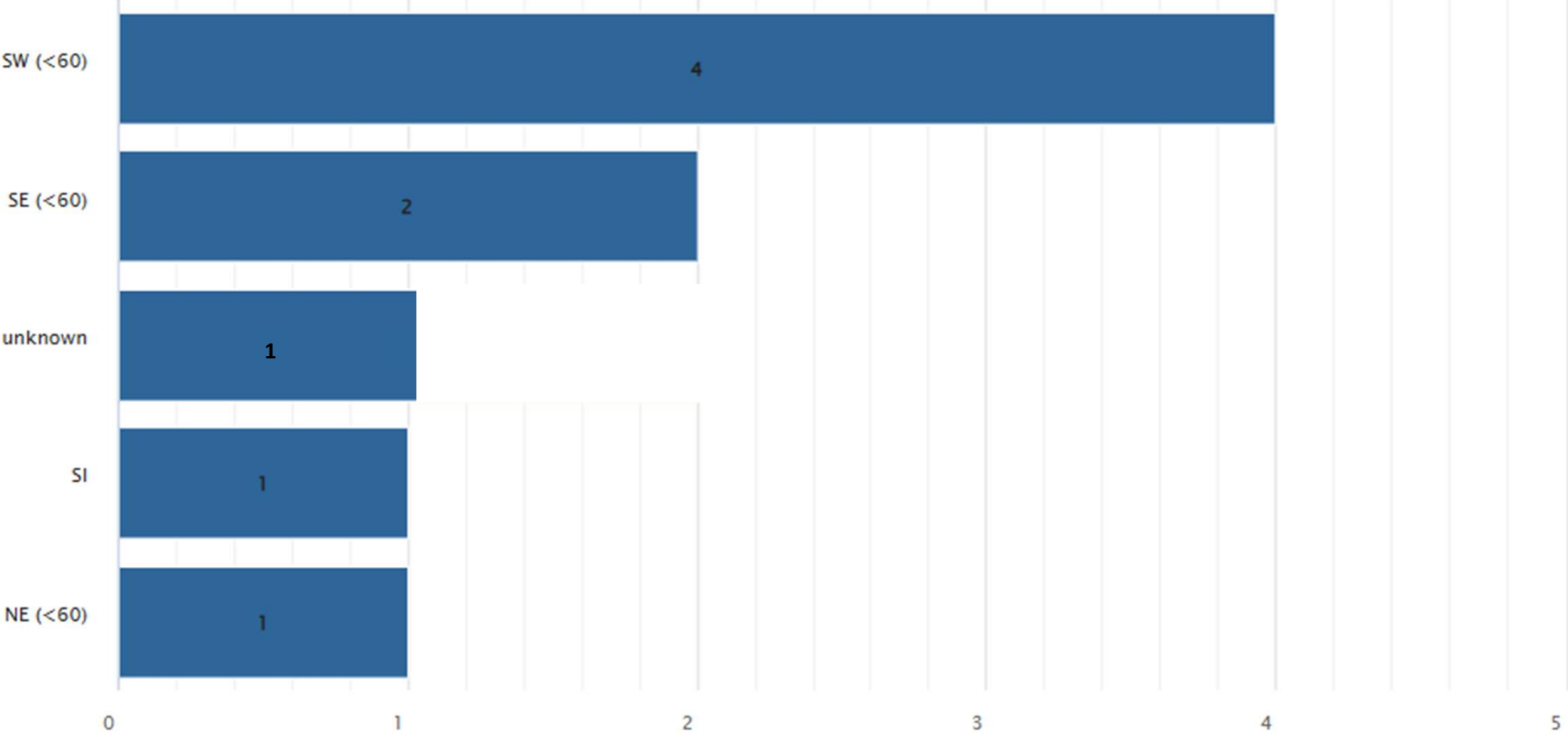
Comment Summary

November 2024 (SDF/LOU)

Airport	Street	City	Date	Time	Cause
KSDF	E. Oak St.	New Albany	2024-12-03	04:30:00	Too Many
KSDF	York River Road	Louisville	2024-12-03	05:30:00	Too Loud
KSDF	York River Road	Louisville	2024-12-05	05:40:00	Vibration
KSDF	Brashears Point Road	Taylorsville	2024-12-06	10:32:00	Too Many
KSDF	Greenwell Ford Road	Mount Washington	2024-12-18	23:58:00	Too Many
KSDF	Sante Fe Trail	Elizabethtown	2024-12-26	10:08:00	Too Many
KSDF	Forum Avenue	Louisville	2024-12-29	17:56:00	Too Loud
KSDF	Chickadee	Louisville	2024-12-30	11:41:00	Vibration
KSDF	Southern Pkwy	Louisville	2024-12-31	17:00:00	Too Loud

Comment Locations

December 2024 (SDF/LOU)



Runway Use and Aircraft Types

LOUISVILLE

REGIONAL AIRPORT AUTHORITY

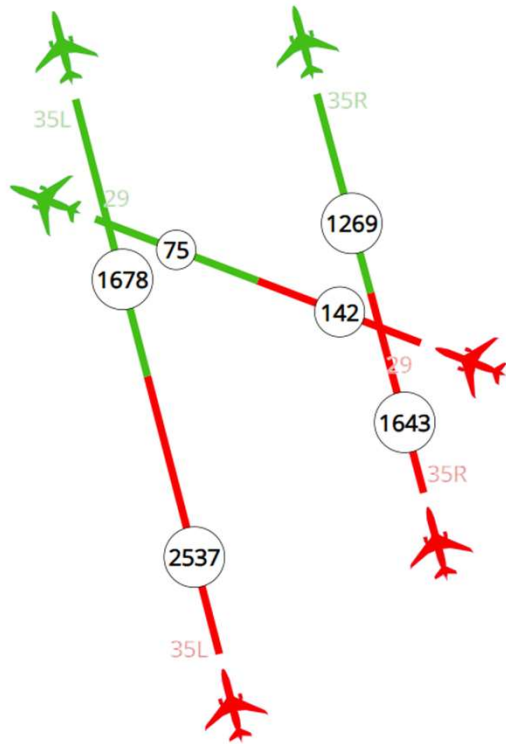


LOUISVILLE
MUHAMMAD ALI
INTERNATIONAL AIRPORT

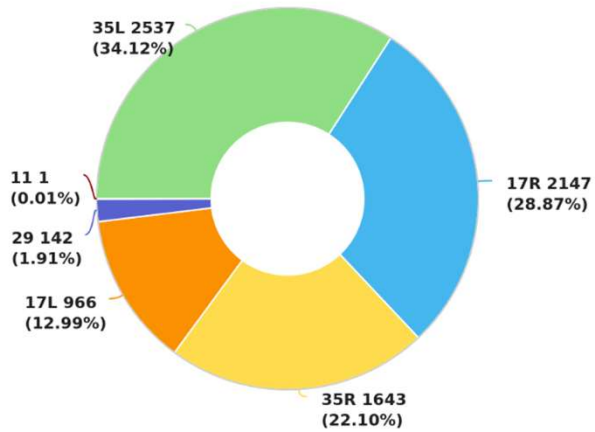
November 2024

Arrivals/Departures November 2024 (SDF)

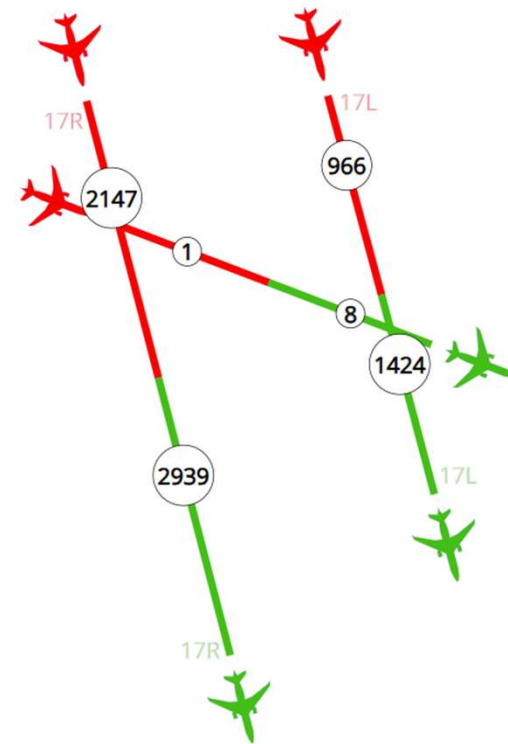
NORTH FLOW RUNWAY UTILIZATION



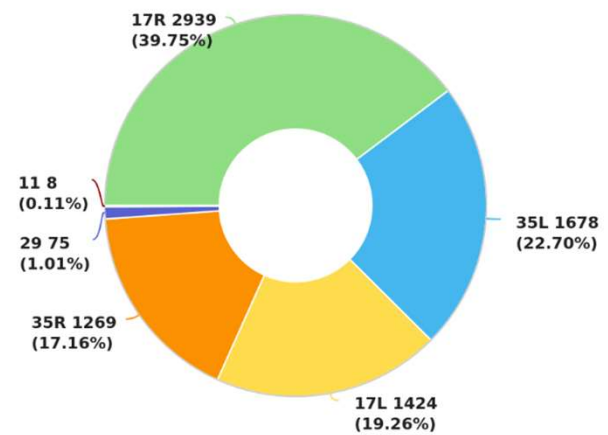
ARRIVALS PER RUNWAY



SOUTH FLOW RUNWAY UTILIZATION

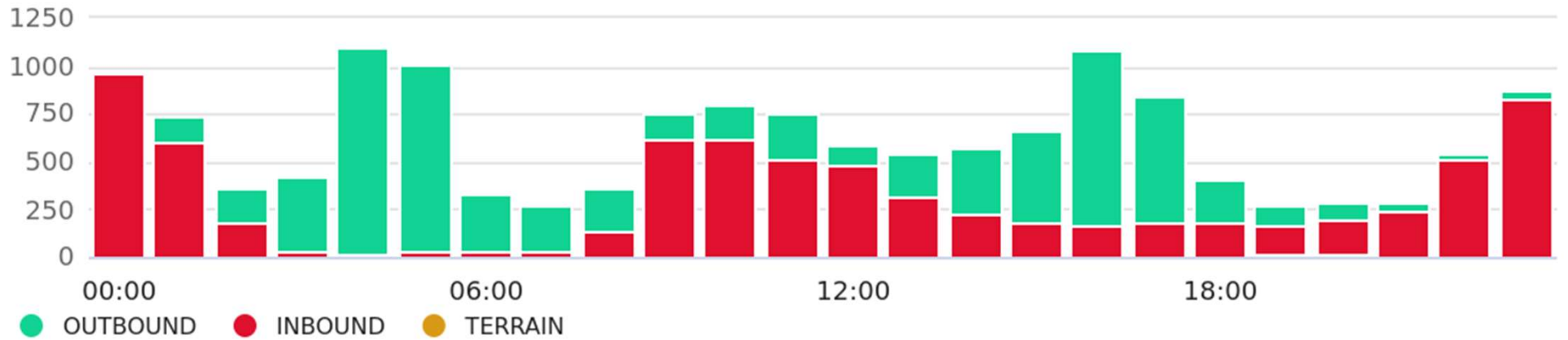


DEPARTURES PER RUNWAY

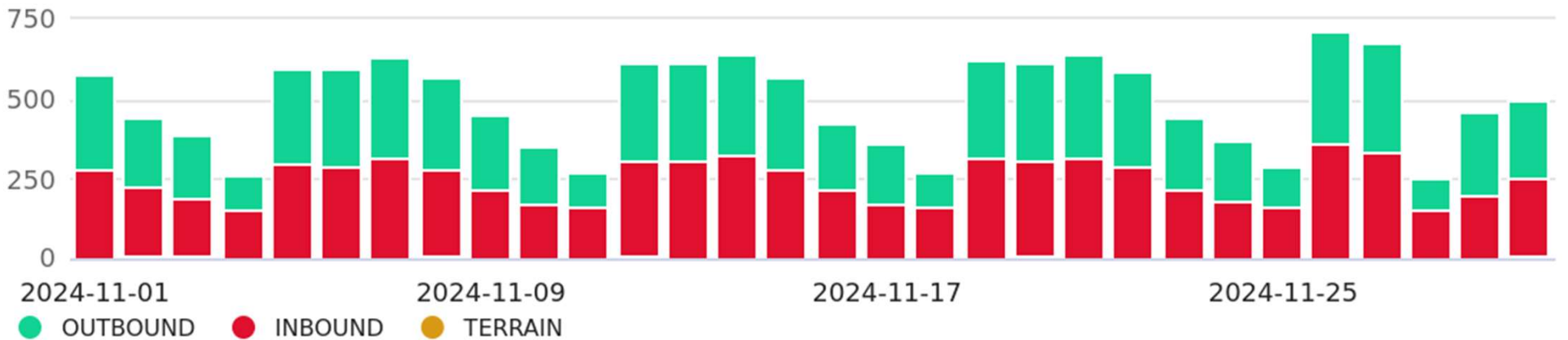


Arrivals/Departures November 2024 (SDF)

FLIGHTS PER HOUR



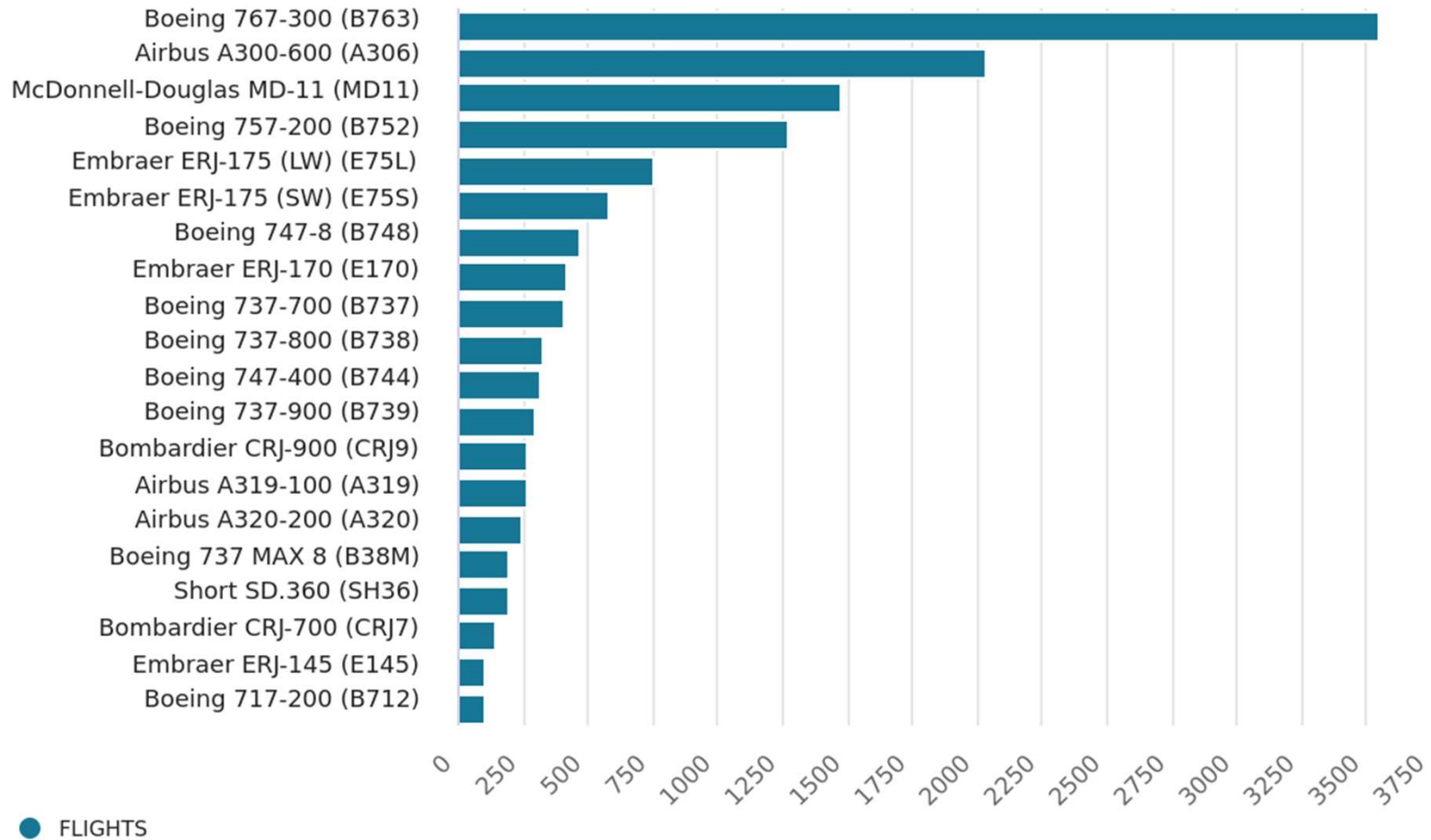
FLIGHTS PER DAY



Aircraft Types

November 2024 (SDF)

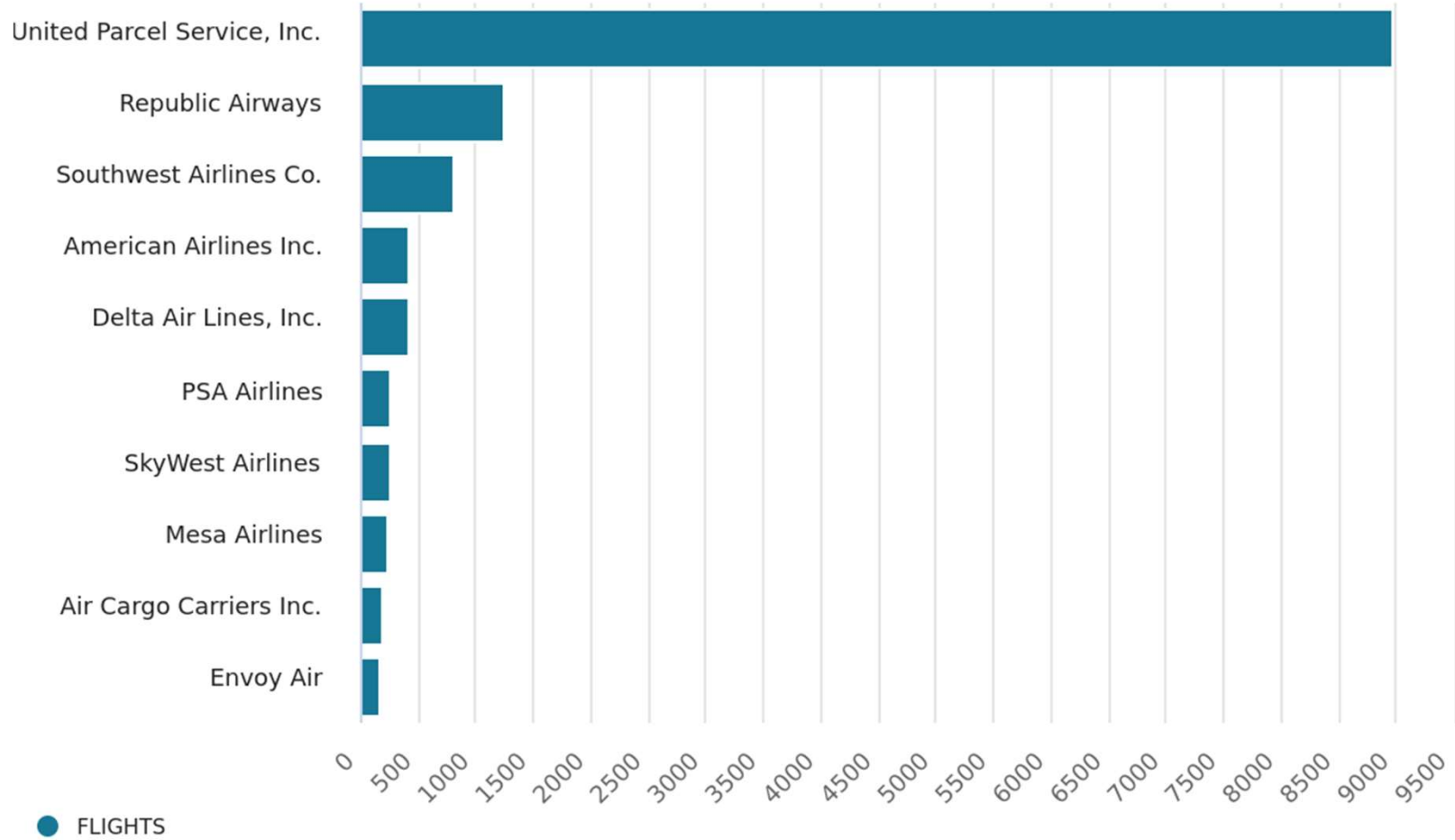
FLIGHTS PER AIRCRAFT TYPE



Airline Operations

November 2024 (SDF)

FLIGHTS PER AIRLINE



Runway Use and Aircraft Types

LOUISVILLE

REGIONAL AIRPORT AUTHORITY



LOUISVILLE
MUHAMMAD ALI
INTERNATIONAL AIRPORT

December 2024

Daily Runway December 2024 (SDF)

Flow	Time UTC	Time Local	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Time Local
			12-1	12-2	12-3	12-4	12-5	12-6	12-7	12-8	12-9	12-10	12-11	12-12	12-13	12-14	12-15	12-16	12-17	12-18	12-19	12-20	12-21	12-22	12-23	12-24	12-25	12-26	12-27	12-28	12-29	12-30	12-31	Time Local
North Flow	0400	0:00																																0:00
	0430	0:30																																0:30
	0500	1:00																																1:00
	0530	1:30																																1:30
	0600	2:00																																2:00
	0630	2:30																																2:30
South Flow	0700	3:00																															3:00	
	0730	3:30																															3:30	
	0800	4:00																															4:00	
	0830	4:30			X																												4:30	
	0900	5:00																															5:00	
	0930	5:30			X		X																										5:30	
	1000	6:00																															6:00	
	1030	6:30																																6:30
	1100	7:00																																7:00
	1130	7:30																																7:30
	1200	8:00																																8:00
	1230	8:30																																8:30
	North Flow	1300	9:00																															9:00
1330		9:30																															9:30	
1400		10:00																															10:00	
1430		10:30																															10:30	
1500		11:00																															11:00	
1530		11:30																															11:30	
1600		12:00																															12:00	
1630		12:30																																12:30
1700		13:00																																13:00
1730		13:30																																13:30
South Flow	1800	14:00																															14:00	
	1830	14:30																															14:30	
	1900	15:00																															15:00	
	1930	15:30																															15:30	
	2000	16:00																															16:00	
	2030	16:30																															16:30	
	2100	17:00																															17:00	
	2130	17:30																																17:30
	2200	18:00																																18:00
	2230	18:30																																18:30
	2300	19:00																																19:00
	2330	19:30																																19:30
	2400	20:00																																20:00
0030	20:30																																20:30	
0100	21:00																																21:00	
0130	21:30																																21:30	
North Flow	0200	22:00																															22:00	
	0230	22:30																															22:30	
	0300	23:00																															23:00	
	0330	23:30																															23:30	
	0400	0:00																															0:00	

- Preferred Flow
- DATIS Reported Conditions Indicate Support for Non-Preferred Flow
- DATIS Reported Conditions Do Not Indicate Support for Non-Preferred Flow
- South Flow is Preferred Flow from 09:00 Saturday - 09:00 Monday
- X Complaint

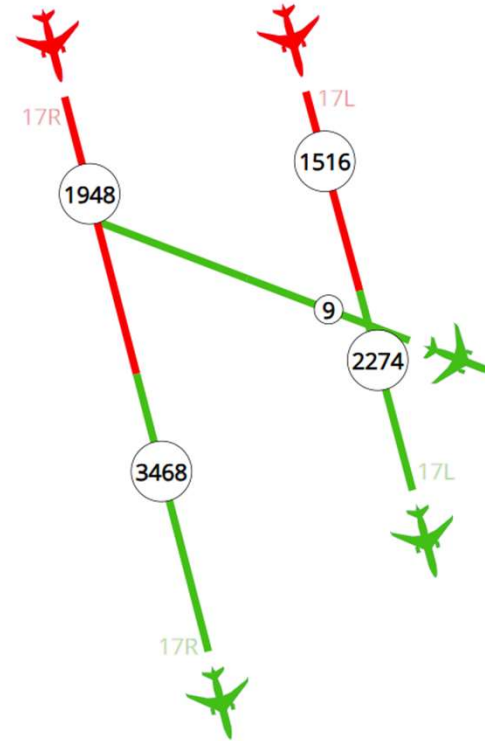
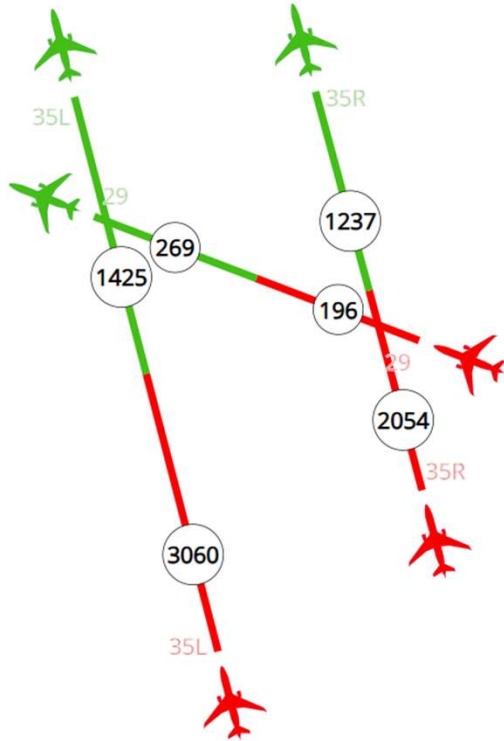
Daily Runway December 2024 (SDF)

Date	Day	Time	Zulu Time	Comment
01-Dec-24	Sun	0530-0700	1030-1200	Forecasted wind and wet runways
01-Dec-24	Sun	0800-2000	1300-0100	Forecasted wind and wet runways
01-Dec-24	Sun	2300-0000	0400-0500	Strong winds out of northwest
02-Dec-24	Mon	0230-0900	0730-1400	Strong winds out of northwest
03-Dec-24	Tue	0700-0900	1200-1400	Strong winds out of north (340@10)
03-Dec-24	Tue	1400-1500	1900-2000	Late runway change due to peak inbound traffic
05-Dec-24	Thu	1600-2000	2100-0100	Remained north due to gusting winds (320@10G17)
05-Dec-24	Thu	2100-2200	0200-0300	Airport was configured north due to earlier gusting winds, remained north for inbound
06-Dec-24	Fri	0900-1230	1400-1730	South flow due to Flight Check for ILS RWY 17L
06-Dec-24	Fri	2000-2200	0100-0200	Switched early for volume
09-Dec-24	Mon	1400-1500	1900-2000	Late runway change (1445 local/1945Z) due to volume
10-Dec-24	Tue	1400-1530	1900-2030	Wet runways
10-Dec-24	Tue	1600-1800	2100-2300	Forecasted wind and wet runways
10-Dec-24	Tue	1900-2100	0000-0200	Forecasted wind and wet runways
11-Dec-24	Wed	1830-2200	2330-0300	Gusty winds out of northwest (280@13G23)
12-Dec-24	Thu	2030-2200	0130-0300	Switched early for volume
13-Dec-24	Fri	1930-2200	0030-0300	Switched early for volume
21-Dec-24	Sat	1000-1300	1500-1800	Remained north due to wind and forecasted wind
21-Dec-24	Sat	1500-1630	2000-2130	Gusty winds out of north (360@11G21)
21-Dec-24	Sat	1800-0000	2300-0500	Super weekend, north for inbound
22-Dec-24	Sun	0000-0230	0500-0730	Super weekend, north for inbound
24-Dec-24	Tue	1400-1530	1900-2030	Late runway change to due to inbound volume
24-Dec-24	Tue	2000-2200	0100-0200	Early change for peak volume
25-Dec-24	Wed	0900-1400	1400-1900	Christmas day, no traffic, did not change runways
25-Dec-24	Wed	2200-0000	0300-0500	Christmas day, no traffic, did not change runways
26-Dec-24	Thu	0000-0300	0500-0800	Christmas day, no traffic, did not change runways
26-Dec-24	Thu	1400-2200	1900-0300	Reason not documented
27-Dec-24	Fri	0900-1000	1400-1500	Wet runways
30-Dec-24	Mon	0900-1030	1400-1530	Reason not documented
30-Dec-24	Mon	1400-1500	1900-2000	Late runway change (1430 local/1930z) due to volume

Arrivals/Departures December 2024 (SDF)

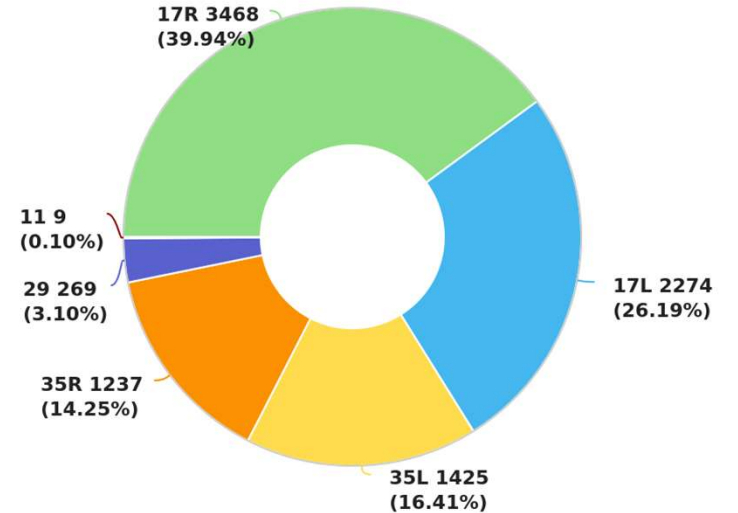
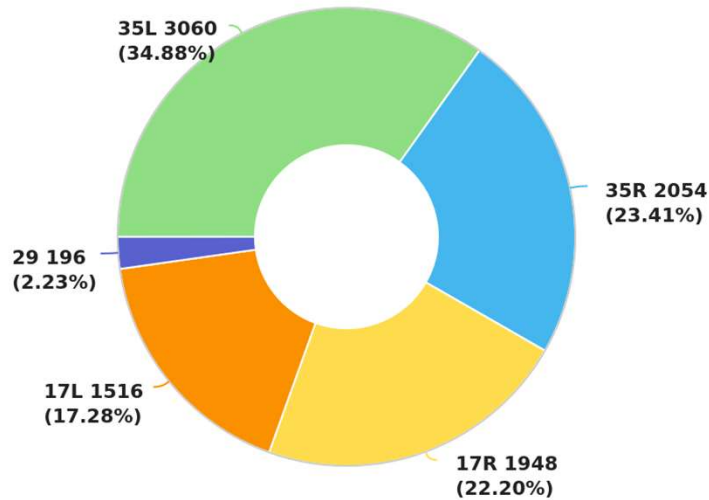
NORTH FLOW RUNWAY UTILIZATION

SOUTH FLOW RUNWAY UTILIZATION



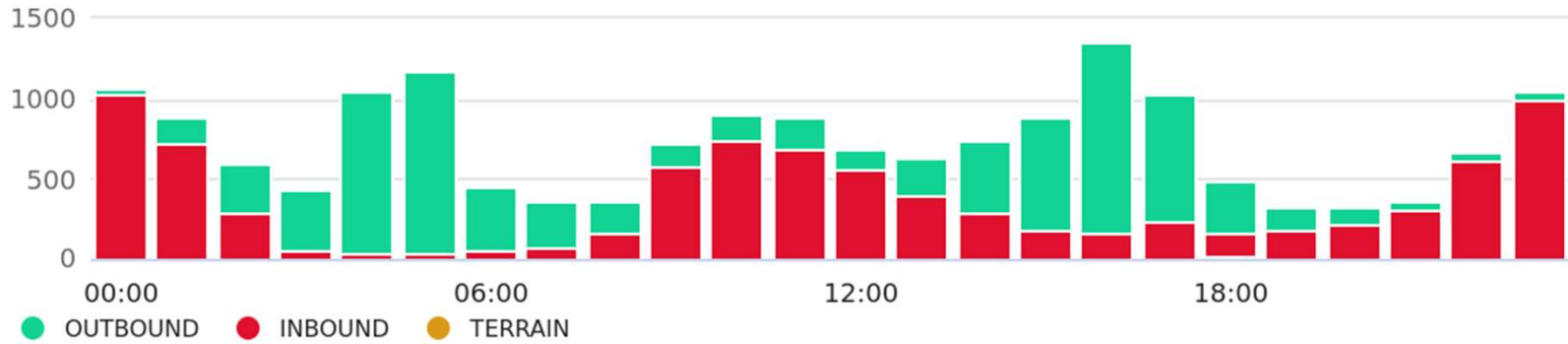
ARRIVALS PER RUNWAY

DEPARTURES PER RUNWAY

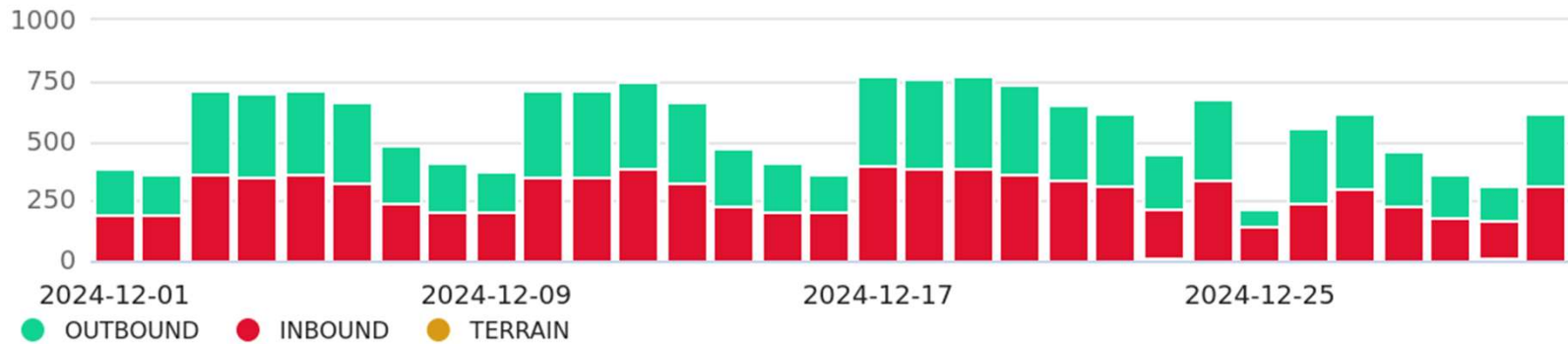


Arrivals/Departures December 2024 (SDF)

FLIGHTS PER HOUR



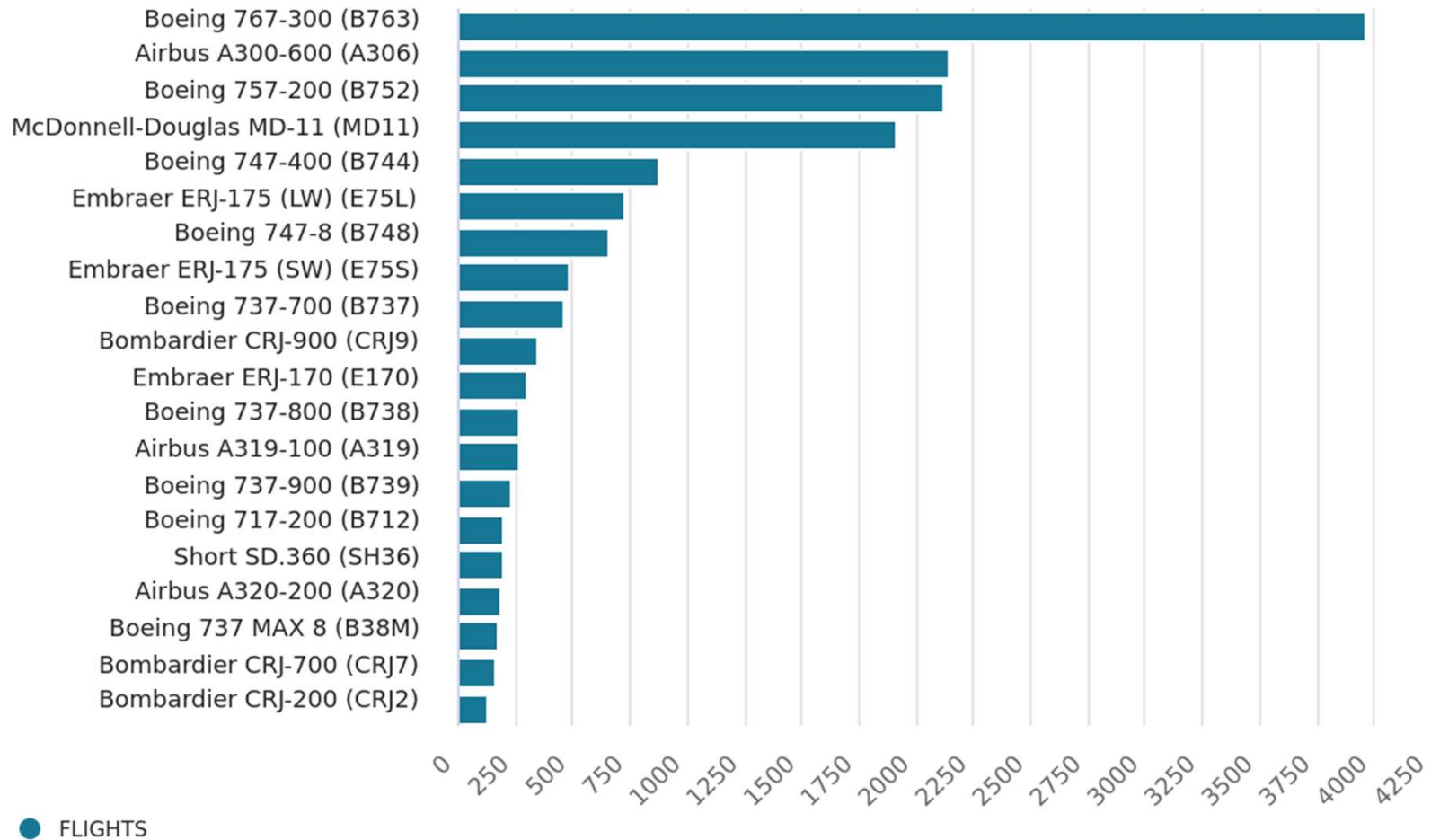
FLIGHTS PER DAY



Aircraft Types

December 2024 (SDF)

FLIGHTS PER AIRCRAFT TYPE



Airline Operations

December 2024 (SDF)

FLIGHTS PER AIRLINE

