National Airspace System Performance Review

SWAP Season 2023

Presenter: Kevin Hanson, AJR-G

Presented To: August Ops Summit

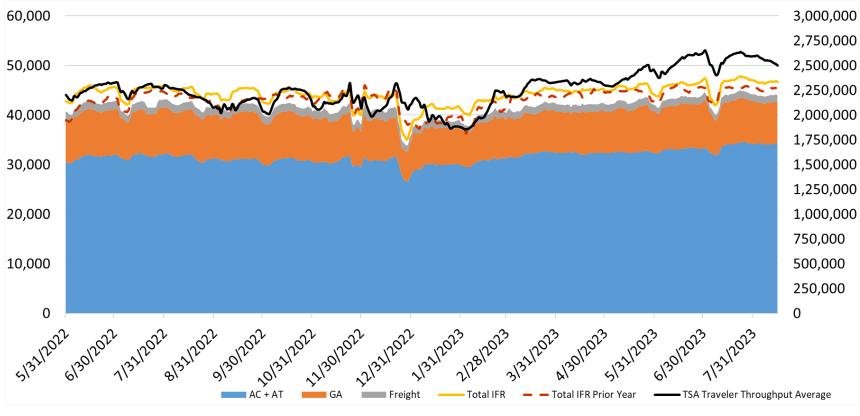
Date: August 24, 2023





IFR Flights vs. TSA Traveler Throughput June 2022 to August 15, 2023





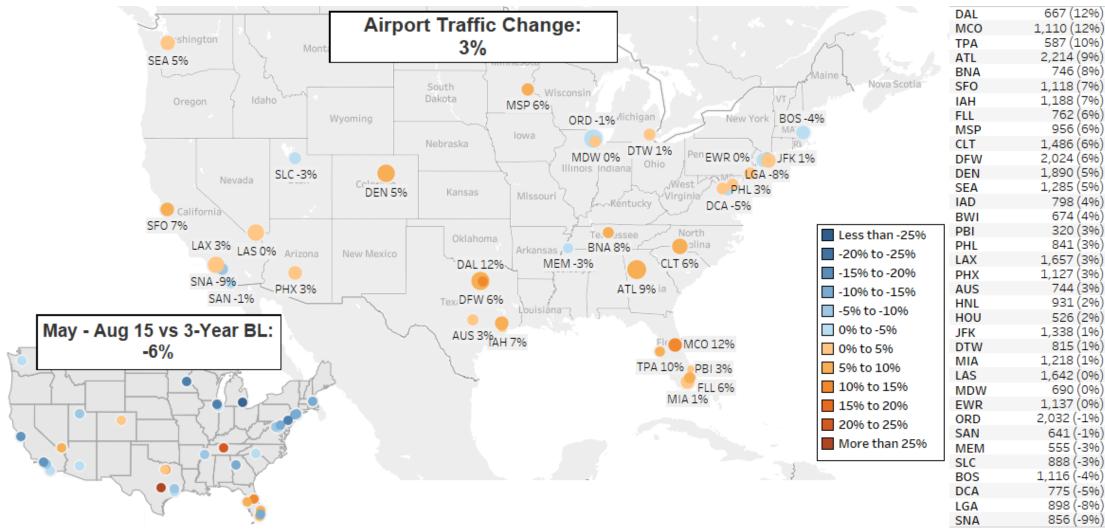
Category	May - August 15 2023 Daily Avg.	Change from Prior Year	Change from 3-Year
AC + AT	33,274	6%	-3%
GA	8,634	-4%	0%
Freight	1,427	-9%	-5%
Total IFR	46,031	3%	-3%
TSA	2.51M	12%	0%





PerformanceAnalysis ATOSysOps

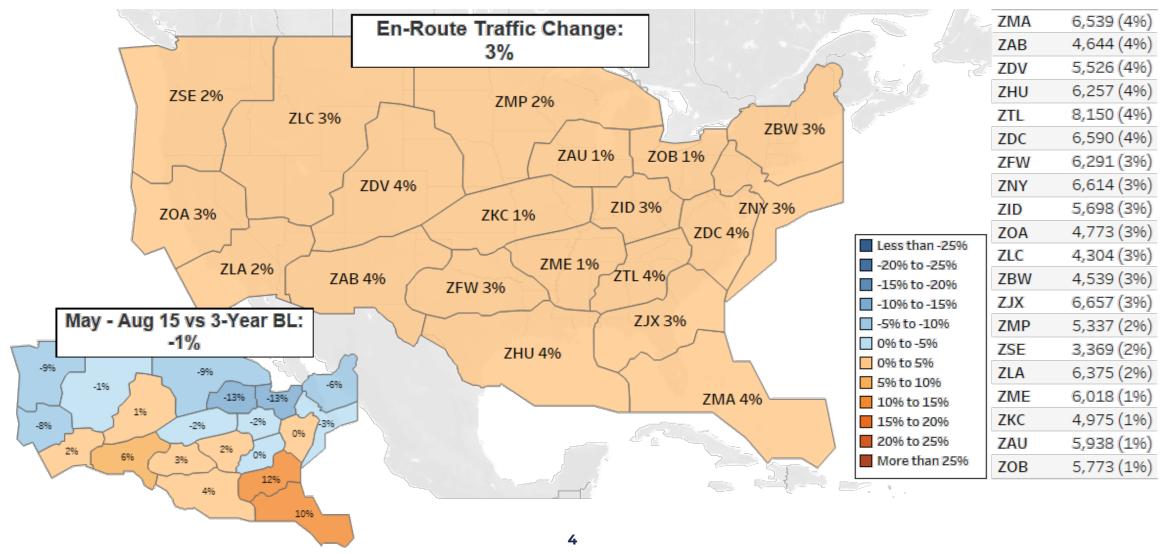
May - August 15, 2023 vs May - August 15, 2022





En Route Flight Activity

May - August 15, 2023 vs May - August 15, 2022

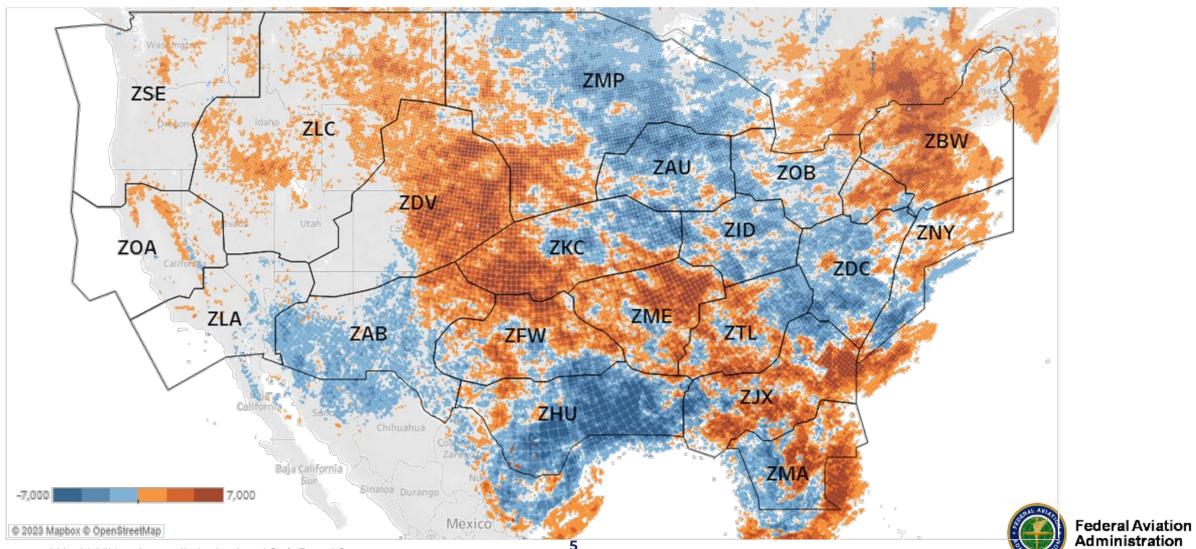




CIWS Convective Weather Intensity

PerformanceAnalysis ATOSysOps

May - August 15, 2023 vs. CY2020-2022



Vertically Integrated Liquid (VIL) estimates limited to Level 3, 4, 5, and 6. Baseline limited to same month 2020 - 2022.

Source: MITRE CIWS

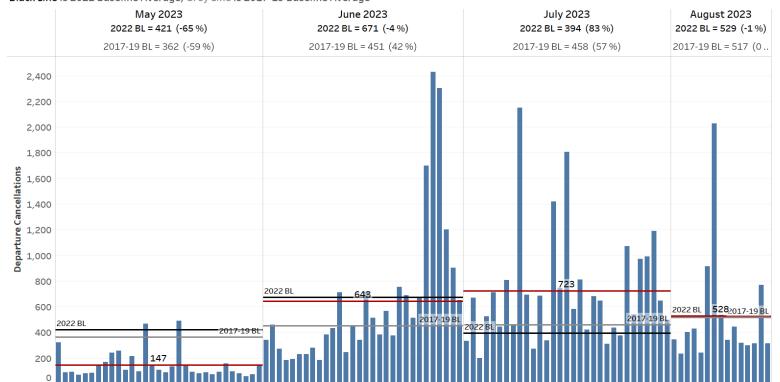




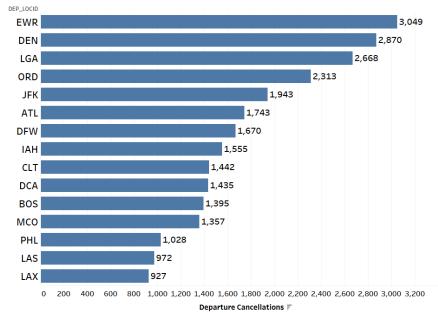
ALL NAS Departure Cancellations Trend

Red Line is Monthly Average

Black Line is 2022 Baseline Average, Grey Line is 2017-19 Baseline Average



May 1 - August 15, 2023 Departure Cancellations Totals (Top 15 Airports)



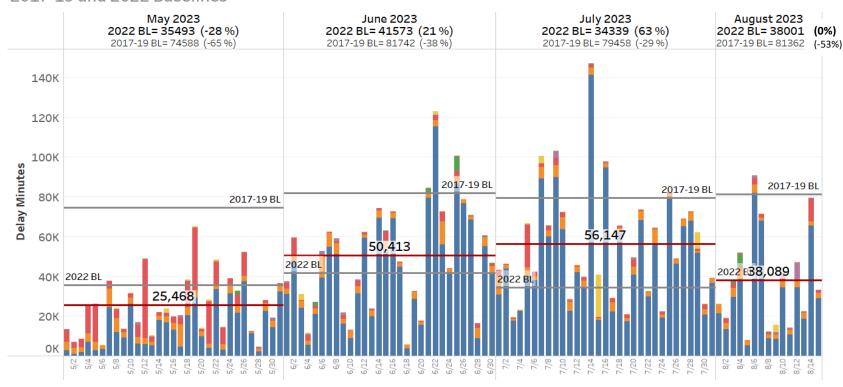


Source: ASPM





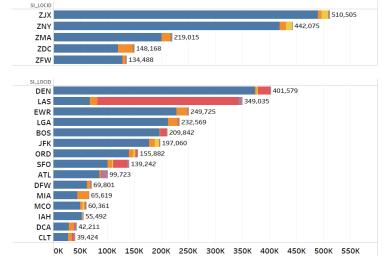
May 1 - July 15, 2023 ALL NAS OPSNET Delay Minutes Trend with Monthly Avg (Red Line) and Labeled 2017-19 and 2022 Baselines



7



May - August 15, 2023
Daily Delay Minute Totals (Top 5 ARTCC and Top 15 Airports)





Source: ASPM

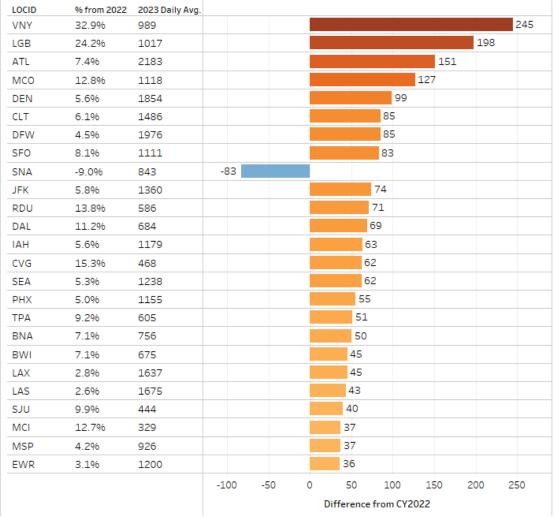


Top 25 Largest Changes in Daily Operations

May - August 15, 2023

Top 25 by Absolute Difference from 3 Year BL LOCID % from BL 2023 Daily Avg. ORD -21.0% 2033 -542 -388 ATL -15.1% 2183 1637 -350 LAX -17.6% DTW -28.4% 810 -322 314 VNY 46.5% 989 -264 PHL 837 -24.0% -263 MSP -22.1% 926 SFO -227 -17.0% 1111 210 LGB 26.0% 1017 177 AUS 30.4% 760 150 MCO 15.5% 1118 -150 PDX -21.496 550 BNA 22.1% 756 137 -131 IAH -10.0% 1179 126 LAS 8.1% 1675 -108 OAK -15.6% 584 9.5% 1226 106 MIA BOS 1154 -96 -7.796BWI -11.6% 675 -89 88 DEN 5.0% 1854 -88 SJC -16.1% 459 -86 SNA -9.3% 843 IND 17.7% 565 85 -83 CLT -5.3% 1486 -83 STL -15.1% 467 -600 -400 -200 200 400 Difference from 3Y BL

Top 25 by Absolute Difference from 2022





Slot Returns for Summer 2023

Nine carriers participated in the slot returns

Returns for Summer 2023 (May 15 - Sep 15)					
	DCA	EWR	JFK	LGA	NYC Total
Total Scheduled	104,580	144,179	151,606	107,254	403,039
Returned Ops	3,835	9,493	7,480	6,725	23,698
% Returned	3.7%	6.6%	4.9%	6.3%	5.9%
Based on schedule coordinated/facilitated hours at each airport					

Change in Scheduled Seats per Departure				
	EWR	JFK	LGA	Total
Current Schedule vs. 2022	6.0%	2.3%	2.6%	4.0%
Current Schedule vs. March 14 Schedule	2.4%	1.4%	0.7%	1.8%



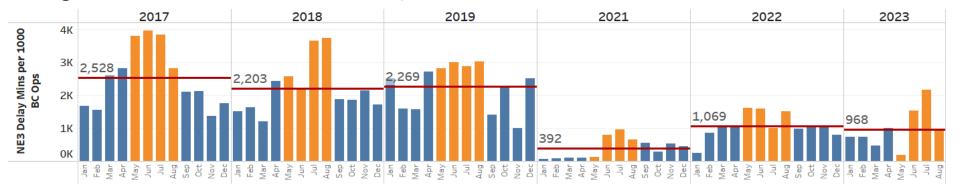


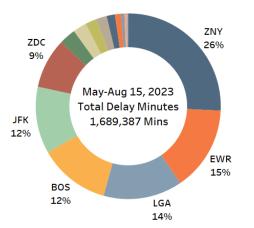
New York Airports Summer Forecast

NY3 Schedules by Month				
	Average Daily Current Schedule Current Sched			
Month	Departures 2023	vs. 2022 Schedule	vs. 2019 Schedule	
June	1,709	0.2%	-2.2%	
July	1,695	2.1%	-2.9%	
Aug	1,722	3.7%	-2.6%	
Total	1,709	2.0%	-2.5%	

June - August Schedules by Airport				
Airport	Average Daily Departures	Current Schedule vs. 2022 Schedule	Current Schedule vs. 2019 Schedule	
EWR	571	4.6%	-4.0%	
JFK	646	3.2%	1.9%	
LGA	492	-2.2%	-6.2%	
Total	570	2.0%	-2.5%	

NE Region - Includes ALL Facilities within ZBW, ZDC and ZNY ARTCCs











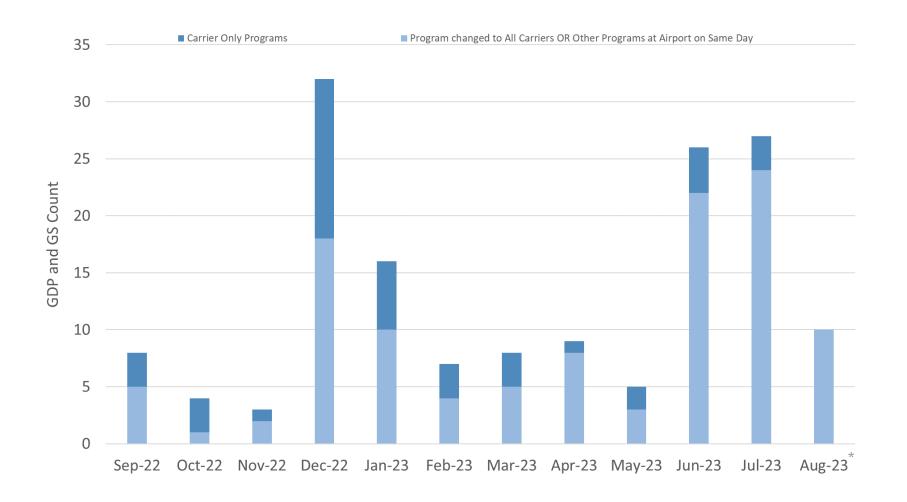




Carrier Requested Programs

PerformanceAnalysis ATOSysOps

September 1, 2022 - August 15, 2023



Of the 771 GDPs since September 2022, 34 (4%) were carrier-requested.

Of the 1,929 GSs since September 2022, 121 (6%) were carrier-requested.

72% of these programs either were later modified to include all carriers or were implemented on days where there were other GDPs or GSs implemented at the airport.





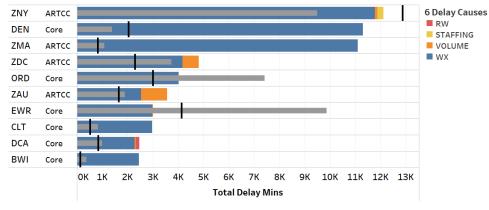
PerformanceAnalysis

July 28, 2023 Performance

NAS Wide OPSNET Delay, Arrival Completion, and Operations

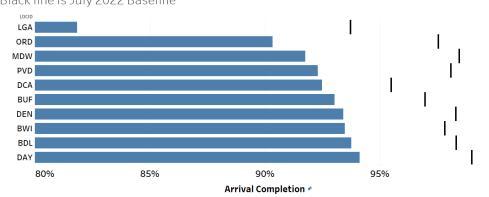
OPSNET Delay Minutes for 7/28/2023 (Top 10)

Black Line is the July 2022 Baseline Gray Bar is the July 2017-19 Baseline



Arrival Completion Rates for 7/28/2023 (Lowest 10)

Actual Arrivals / Scheduled Arrivals Black line is July 2022 Baseline



Friday July 28, 2023 is compared to the Period of May 1- Aug 15, 2023 (Includes 107 Days and 15 Fridays) for the following Performance Metrics:

The NAS experienced its 7th highest number of flights (48,993) for a Friday and New York Center also experienced its 10th Highest number of aircraft handled (6,765) for a Friday in the May 1 – August 15 period.

The NAS had its 14thth highest day of delay (72,857 minutes) with 93% of delay caused by Weather. New York facilities had their 24th highest delay day (16,895 minutes). Excluding the New York facilities, the NAS delay rank drops from 13th to 16th.

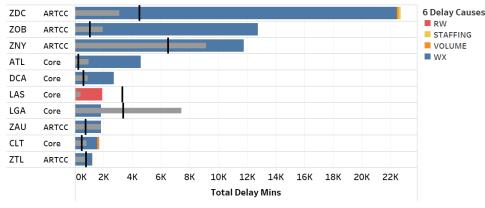
For the Arrival Completion Rate, the NAS had its 13th lowest day with a rate of 96%. New York facilities had their 22nd lowest day as well, with a rate of 92%. Excluding the New York facilities, the NAS rate improves from 13th to 12th.





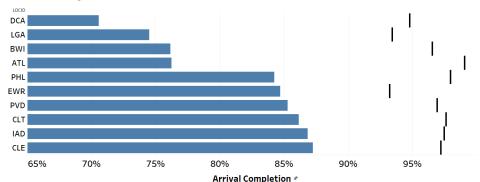
OPSNET Delay Minutes for 8/7/2023 (Top 10)

Black Line is the August 2022 Baseline Gray Bar is the August 2017-19 Baseline



Arrival Completion Rates for 8/7/2023 (Lowest 10)

Actual Arrivals / Scheduled Arrivals Black line is August 2022 Baseline



Monday August 7, 2023 is compared to the Period of May 1- Aug 15, 2023 (Includes 107 Days and 16 Mondays) for the following Performance Metrics:

The NAS experienced its 10th highest number of flights (45,840) for a Monday and New York Center also experienced its 15th Highest number of aircraft handled (5,613) for a Monday in the May 1 – August 15 period.

The NAS had its 18th highest day of delay (71,391 minutes) with 95% of delay caused by Weather. New York facilities had their 27th highest delay day (15,834 minutes). Excluding the New York facilities, the NAS delay rank drops from 18th to 17th.

For the Arrival Completion Rate, the NAS had its 4th lowest day with a rate of 93%. New York facilities had their 9th lowest day as well, with a rate of 83%. Excluding the New York facilities, the NAS rate improves from 4th to 2nd.



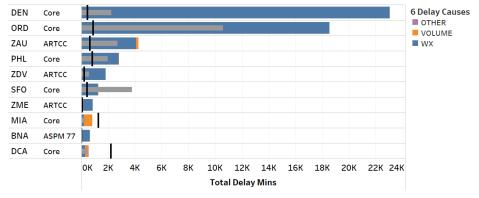
June 29, 2023 Performance (Busiest Day)



NAS Wide OPSNET Delay, Arrival Completion, and Operations

OPSNET Delay Minutes for 6/29/2023 (Top 10)

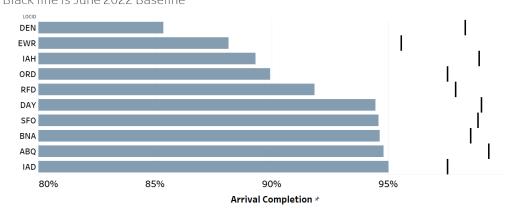
Black Line is the June 2022 Baseline Gray Bar is the June 2017-19 Baseline



Arrival Completion Rates for 6/29/2023 (Lowest 10)

Actual Arrivals / Scheduled Arrivals

Black line is June 2022 Baseline



Thursday June 29, 2023 is compared to the Period of May 1- July 15, 2023 (Includes 76 Days and 11 Thursdays) for the following Performance Metrics:

The NAS experienced its highest number of flights (52,999) for a Thursday, or any other day post pandemic.

The NAS had its 19th highest day of delay (1,201 Delays and 60,495 minutes) with 91% of delay caused by Weather.

For the Arrival Completion Rate (Actual / Scheduled Arrivals), the NAS had its 7th lowest day with a Rate of 96.6%.



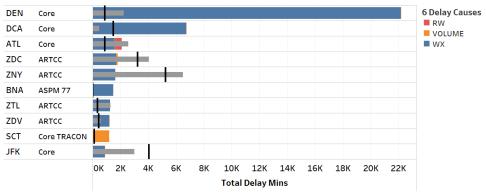
June 30, 2023 Performance (#2 Busiest Day)



NAS Wide OPSNET Delay, Arrival Completion, and Operations

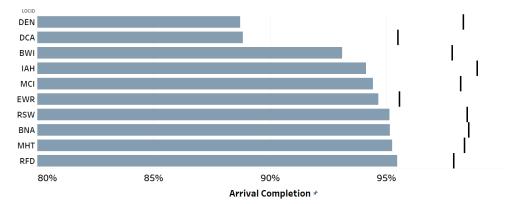
OPSNET Delay Minutes for 6/30/2023 (Top 10)

Black Line is the June 2022 Baseline Gray Bar is the June 2017-19 Baseline



Arrival Completion Rates for 6/30/2023 (Lowest 10)

Actual Arrivals / Scheduled Arrivals Black line is June 2022 Baseline



Friday June 30, 2023 is compared to the Period of May 1- July 15, 2023 (Includes 76 Days and 11 Fridays) for the following Performance Metrics:

The NAS experienced its highest number of flights (52,384) for a Friday and the 2nd highest of any other day post pandemic.

The NAS had its 27th highest day of delay (1,015 Delays and 47,029 minutes) with 88% of delay caused by Weather.

For the Arrival Completion Rate (Actual / Scheduled Arrivals), the NAS had its 18th lowest day with a Rate of 97.4%.