

An Analysis of Mandated Flight Reductions at Orlando International Airport

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Background

The federal government experienced a lapse in funding on September 30th, 2025, after the Senate failed to reach the supermajority necessary to end cloture and vote on a spending package or continuing resolution. The lapse, referred to as a “government shutdown,” left most of the federal workforce to work without pay until after the lapse concluded. During this time, this included Air Traffic Controllers, who were already short-staffed even before the shutdown. This put stress on the already fragile air traffic control system, exacerbating existing staffing shortages and raising concerns about controller fatigue, operational safety, and growing delays throughout the National Airspace System.

On November 6th, 2025, the Department of Transportation (DOT) and Federal Aviation Administration (FAA) invoked the National Environmental Policy Act (42 U.S.C. §§ 4321, et seq.) to issue an emergency order mandating schedule reductions by 10%. The order was structured in phases to give air carriers time to adapt while addressing the strain that the shutdown imposed on the National Airspace System.

Rather than mandating 10% reductions immediately, the order imposed schedule reductions in phases over 7 days at 40 high-density airports. Carriers were required to achieve a 4% reduction in operations by 6:00 a.m. EST on November 7, 2025, a 6% reduction by November 11, an 8% reduction by November 13, and the full 10% reduction by 6:00 a.m. EST on November 14, 2025. Airlines were directed to submit their planned reductions to the FAA daily, leaving carriers little advance notice to consolidate frequencies and re-time operations in order to comply with the mandate.

On November 12th, on the eve of the government re-opening and just shy of the 10% cancellation mandate, the FAA issued revised guidance freezing schedule reductions to only 6%. Two days later, on November 14th, the FAA cut the mandate to 2%, and then finally on November 16th, 2025, the FAA announced the elimination of the mandate all together and called on air carriers to return to normal operations.

Orlando International Airport (MCO) is the ninth busiest airport in the United States and busiest in Florida, serving well over 57 million passengers annually to over 170 non-stop domestic and

international destinations. Up until 2007, it also served as a hub for Delta Air Lines and still operates a significant number of non-hub-to-hub (H2H) trips through MCO. It also serves as an operating base for Breeze Airways, Frontier Airlines, Southwest Airlines and Spirit Airlines, a focus city for JetBlue, and a maintenance base for United Airlines. Besides the tourism market from the nearby city of Orlando propelling passenger traffic through MCO, several airlines run connecting itineraries through MCO (especially Southwest). MCO was one of the 40 high-density airports identified by the FAA's flight reduction mandate.

Objective

This report evaluates the operational impact of the FAA's November 2025 emergency schedule reduction order by analyzing cancellations to and from MCO. MCO was selected as a case study because it is a major non-hub connecting airport with high leisure demand and service from every large U.S. carrier, making it a sensitive indicator of system-wide operational stress, and because it was selected as one of the 40 high-density airports in the order. The analysis quantifies the scale and timing of cancellations, identifies which airlines and routes absorbed the greatest reductions, and estimates the number of passenger seats removed from the system during the mandate period.

Data Collection and Methods

Flight cancellation data for Orlando International Airport (MCO) was sourced from the official Greater Orlando Aviation Authority (GOAA) flight information API used by flymco.com's departure and arrival board. A rolling 72-hour ingest window was implemented: every three minutes, the application queried the endpoint

`https://api.goaa.aero/flights?scheduledTimestamp={start_epoch}..{end_epoch}`

with {start_epoch} and {end_epoch} set to cover all flights scheduled within the current three-day window. Because this feed is operated by GOAA, the data are treated as an authoritative source for flight schedules and status at MCO.

All returned flight records were normalized and stored in a SQLite database stored on my server. Each polling cycle upserted records so that status changes (e.g., from "scheduled" to

“cancelled”) were captured over time. For analysis purposes, cancellations were treated as irreversible events: once a flight was observed as cancelled, it was retained as cancelled in the dataset indefinitely. The SQLite database then served as the backend for computing live metrics and driving real-time charts and tables on the web dashboard.

The web dashboard and data pipeline were written entirely in Python. NiceGUI was used to generate the live web interface, while Matplotlib and pandas powered all data visualizations. The application was served as a lightweight containerized web service and hosted on a Linux-based virtual private server (VPS), where it continuously ingested data, updated the SQLite database through SQL statements, and rendered real-time cancellation metrics accessible via a browser. The dashboard was embedded in my static website underneath an article I had written about the topic. (Image 1)

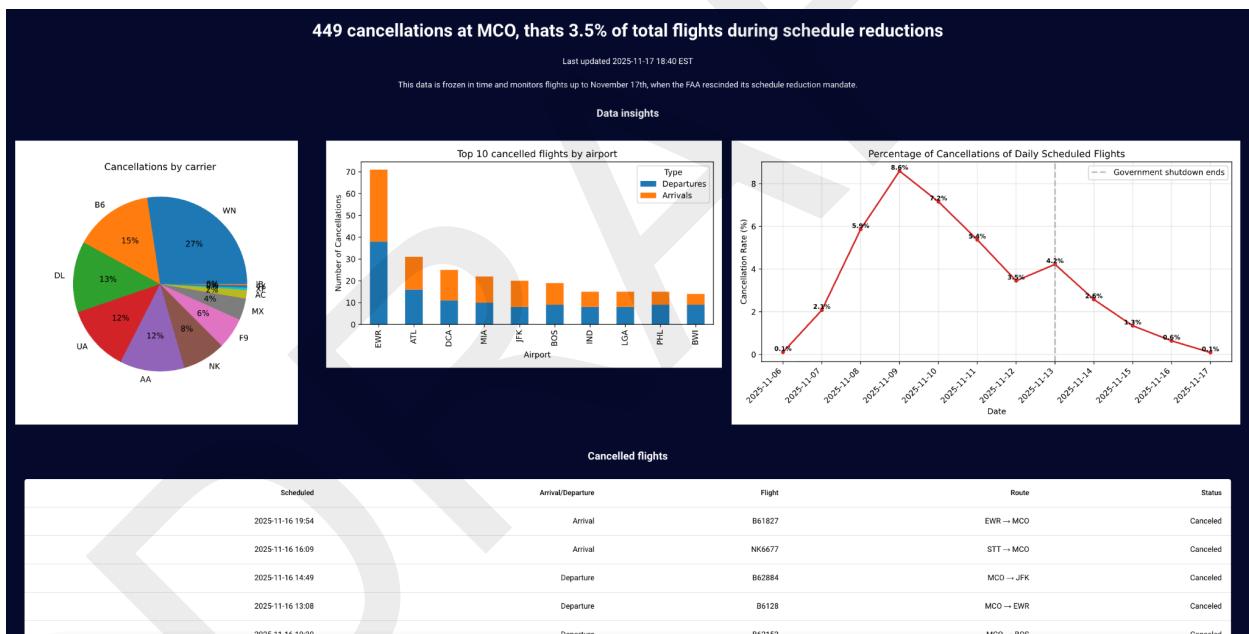


Image 1

To quantify the passenger impact of disruptions, additional enrichment of the data was performed using FlightAware's AeroAPI to identify aircraft types that were supposed to fly each cancelled flight. If a flight wasn't cancelled, this data was not collected. These aircraft types were matched to seat configuration data from seatmaps.com. When multiple seat configurations existed for a given airline, the variant with the smallest seat count was used for the core calculations, and the dataset also records minimum and maximum possible seat counts for sensitivity analysis.

The final dataset and codebook, including all ingested flights (cancelled and uncancelled), cancellation flags, seat cancellation estimates, and various pivot tables, is made available for download at <https://github.com/cruzdariel/faa-schedule-mandate-report/>.

Findings and Discussion

Overall cancellation volume

Between the analysis period November 6, the first day of schedule reductions, and November 17, 2025, the last day of schedule reductions, a total of 449 flights to and from (MCO) were observed to be "cancelled." This represents 3.5% of all scheduled flights during the analysis period. Because the dataset counts both arrivals and departures, each cancellation reflects a lost airport movement at MCO.

- 229 of those cancellations were flights to MCO (arrivals). This represents 3.3% of all scheduled arrivals during the analysis period.
- 220 of those cancellations were flights from MCO (departures). This represents 3.2% of all scheduled departures during the analysis period.

Cancellations were uneven over the period. They started near zero on November 6, the first day of the mandate (0.1%), then climbed rapidly to a peak of 8.6% on November 9. Rates then declined steadily, dropping to 3.5% by November 12, 2.6% on November 14, and returning to baseline levels (~0.1%) by November 17. (Figure 1)

It's important to note that on November 13th, the government re-opened. Despite the government re-opening, airlines were still subject to a revised mandate from the FAA to reduce

at least 6% of their schedules until November 16th, when the agency abruptly rescinded their order. Airlines were notably hesitant to cancel flights post-government shutdown, and gradually wind down their flight reduction operations on average by 1.03% per day across the 4 day post-shutdown period.

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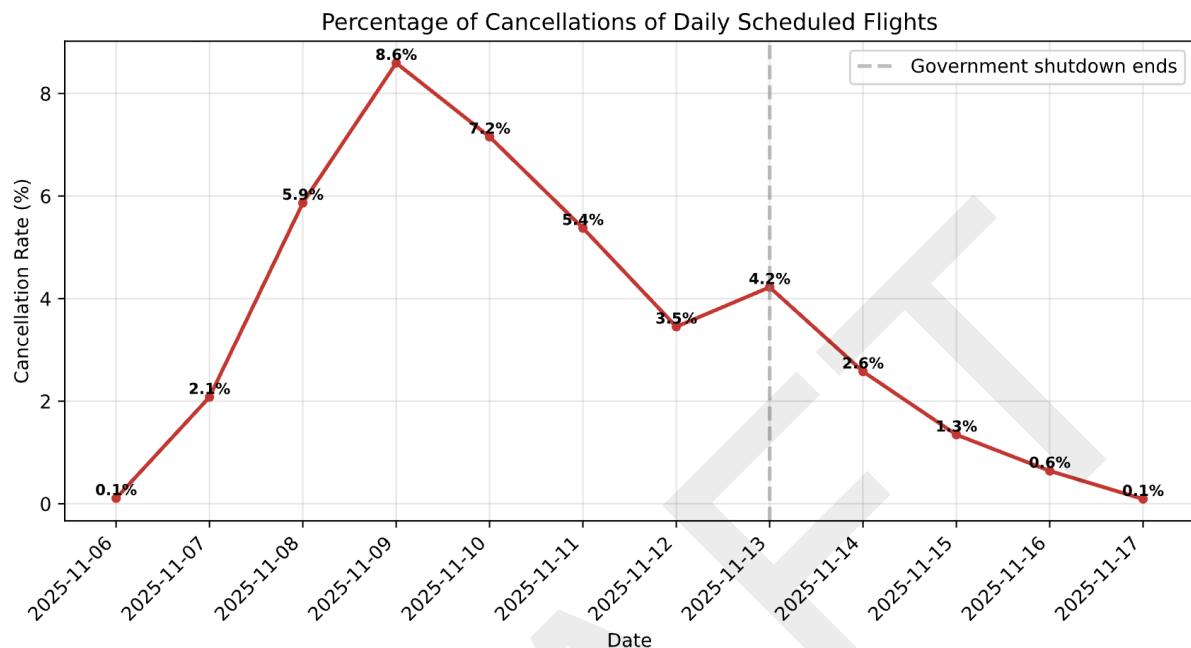


Figure 1

Cancellations by carrier

The distribution of cancellations was heavily concentrated among the largest operators at MCO, but it was not evenly distributed by carrier. Southwest Airlines (WN) alone accounted for 123 cancellations, 27% of all disruptions. JetBlue (66), Delta (59), United (55), and American (54) formed the next tier, bringing the total share of the five largest U.S. carriers to 82% of all cancellations at MCO.

This distribution very closely mirrors market share at the airport. However, the magnitude of Southwest's cancellations especially stands out. Southwest operates a point-to-point network with high aircraft utilization (multiple legs a day). This means that at MCO (a focus city for WN), individual cancellations cascade more quickly across the network. Unlike network carriers that can re-bank hubs and consolidate flights, Southwest must cancel whole rotations to preserve schedule integrity. This structural characteristic makes WN more vulnerable during systemwide strain such as reduced ATC staffing. The widespread WN cancellations are reminiscent of their SkySolver meltdown in December 2022. Though the schedule reduction mandates did not arise to the severity of that meltdown, the instability of their flight scheduling model is all the same apparent.

JetBlue's second-highest cancellation count reflects a different dynamic. Although smaller than Delta, United, or American at MCO, JetBlue operates a high proportion of transcontinental and Northeast-originating flights, many of which route through dense, slot-controlled airspace (EWR, JFK, BOS). Because the Northeast experienced the greatest operational pressure during the shutdown period, JetBlue's exposure translated directly into outsized cancellations relative to its station size.

Analyzing cancellations by carrier more granularly, Southwest held the most amount of cancelled flights and cancelled seats, the likely amount of seats on an aircraft that could have flown a passenger had the flight not been cancelled. Southwest had 18,728 cancelled seats, almost double of its runner up JetBlue, which acquired 9,912 cancelled seats. (Figure 2)

Cancelled Seats		Flight Type		
Carrier		Departure	Arrival	Grand Total
WN		9482	9246	18728
B6		4956	4956	9912
UA		4700	4960	9660
DL		4547	4522	9069
AA		3856	3856	7712
NK		2746	3961	6707
F9		2502	3348	5850
MX		1134	1134	2268
AC		607	438	1045
4Y		283	283	566
XP		189	189	378
IB		292		292
Grand Total		35294	36893	72187

Figure 2

Cancellations by airport

The disruption was highly concentrated along specific route pairs. Newark Liberty International Airport (EWR) alone accounts for 16% of all cancellations, driven by combined ATC staffing constraints in the Northeast and carrier operational decision-making.

Interestingly however, despite EWR serving as a major hub for United Airlines, the 71 cancellations to and from EWR were not exclusively, or even overwhelmingly for that matter, United's. Of these 71 cancelled flights, United accounts for 37 (52%), but JetBlue accounts for 20 (\approx 28%) and Spirit for 14 (\approx 20%). In other words, nearly half of the cancellations on the MCO–EWR city pairing came from non-hub carriers.

This mix is important for interpretation. If cancellations in the MCO-EWR city pairing were significantly caused by United, it would make sense to infer that United was prioritizing reductions in their hub flights of which they run multiple daily. However, the presence of a substantial B6 and NK input suggests that the constraint is at the airport-level, not airline-level. All three airlines rely on the slot-controlled EWR, and terminal resources have become scarce as of recent times due to staffing shortages. As a result, all faced pressure during the FAA mandate to reduce their schedules to EWR.

Additionally, it's noteworthy to mention that 7 out of the top 10 airports (EWR, DCA, JFK, BOS, LGA, PHL, BWI) ranked by cancelled flights to and from MCO are located in the Northeast. This geographic clustering reinforces that the surge in cancellations at MCO reflects broader constraints in the New York–Washington–Boston corridor—where chronic congestion, slot controls, and reduced controller staffing interact. (Figure 3)

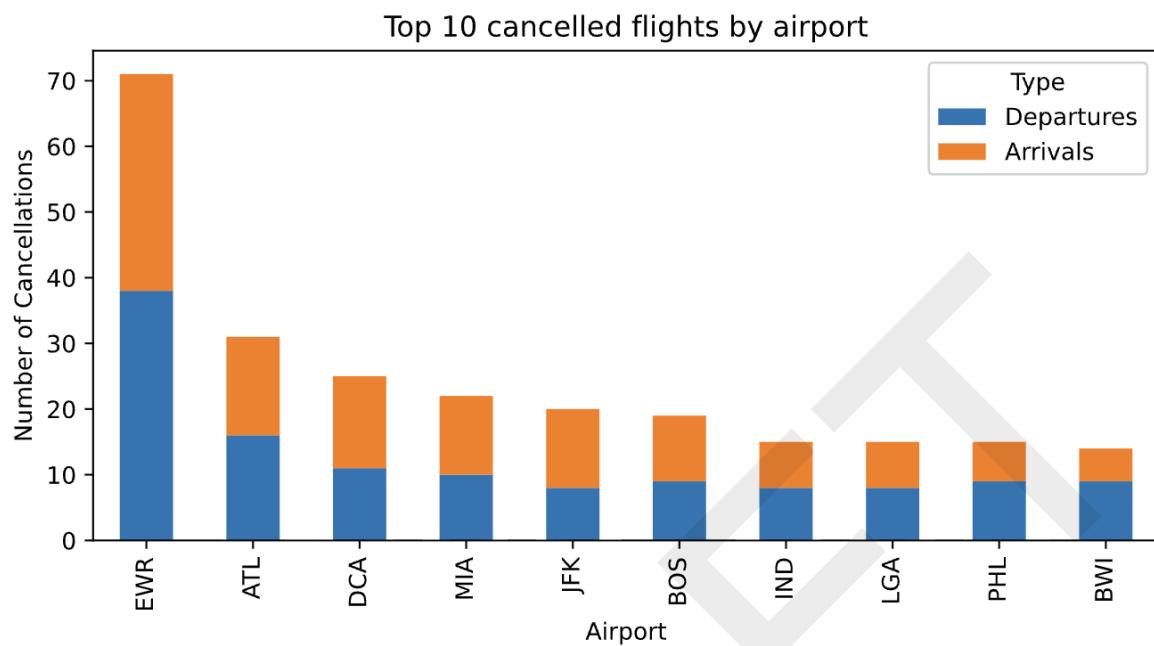


Figure 3

Conclusion

The phased schedule reductions were effective in temporarily lowering the volume of flights in the National Airspace System to and from MCO during the period of strain on air traffic control. Cancellations at MCO closely follow the timeline of the mandate, rising rapidly as they took effect, peaked at the height of the shutdown, and declined linearly after the government re-opened up to the point of the FAA rescinding its mandate all together.

Despite the controlled nature of the cancellations, it appears as if some carriers did not comply with the FAA's mandate. The agency itself said in a November 16th, 2025 news release "the FAA is aware of reports of non-compliance by carriers over the course of the emergency order." This is worthy of analysis on a broader scale, but at MCO we can identify at least some trends that are unusual. For example, Southwest consistently kept the cancellation rate between 4-6% of their arrivals and departures at MCO despite it serving as a focus city (that is, many flights in its network go through MCO) while legacy carriers American and Delta spiked as high as cancelling 15% of their scheduled flights at MCO at one point. Despite the interesting findings, it is impossible however, to imply non-compliance of a nationwide order with an analysis only covering one of the 40 airports. (Figure 4)

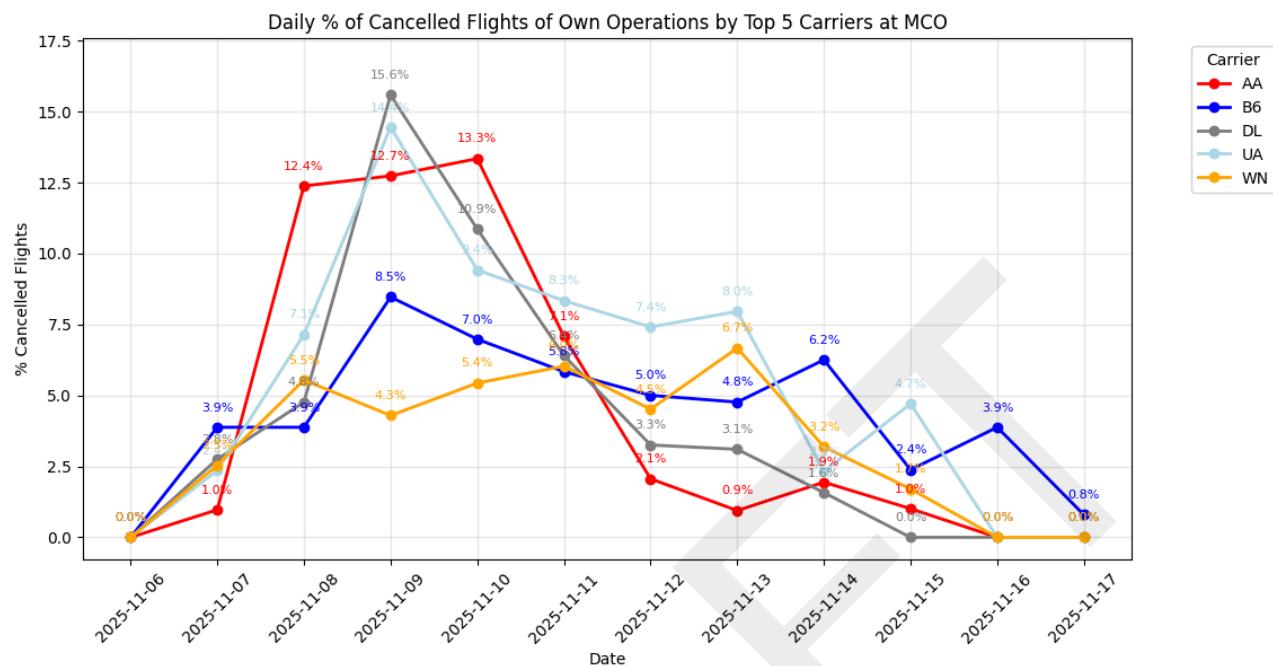


Figure 4

Adding to compliance, airlines did not comply uniformly at MCO. Instead, reductions were distributed according to network structure, business models, and geographic exposure. Southwest absorbed the largest share of cancellations and seat losses, consistent with the vulnerability of its high-utilization point-to-point network and large-scale operation at MCO. Meanwhile, legacy carriers with hub-bank flexibility were able to spread reductions across multiple frequencies, resulting in cancellation counts that were more proportionate to their market share over time.

Finally, the geographic structure of the disruptions makes clear that MCO's cancellation rate was not caused by local conditions. Seven of the ten most affected origin-destination airports were in the Northeast Corridor, and nearly half of cancellations on the most disrupted route (MCO–EWR) came from non-hub carriers. This pattern is consistent with a national ATC capacity crisis that propagated through MCO out of the Northeast. As soon as nationwide staffing and regulatory pressure eased, cancellations at MCO collapsed back to baseline, confirming the former.

The MCO case illustrates how a major non-hub airport can function as an indicator of national airspace stress, revealing where capacity pressure is truly located even if they were local.