

What's the delay in the USA?

OPSGROUP Team

9 April, 2021

| Destination | Time | Flight | Gate | Status |
|------------------|---------|--------|------|---------|
| Dallas Ft. Worth | 10:42am | 5156 | F21 | On time |
| Dallas Ft. Worth | 1:15pm | 9081 | F8 | On time |
| Denver | 9:09am | 5070 | E11 | 10:06am |
| Denver | 10:30am | 5252 | E11 | On time |
| Denver | 12:35pm | 5438 | F11 | On time |
| Denver | 2:19pm | 9056 | F16 | 4:00pm |
| Denver | 4:00pm | 8350 | E13 | On time |
| Detroit | 10:40am | 2363 | E4 | On time |
| Edmonton | 12:00pm | 8744 | G3 | On time |
| Eugene | 11:52am | 5530 | F8 | On time |
| Eugene | 4:07pm | 9399 | F3A | On time |
| Eureka | 4:10pm | 9319 | F15L | On time |
| Everett | 11:01am | 5871 | F7 | On time |

We took a look at the stats the FAA publish about on-time performance to find out what the most common causes of delays are, which airports are worst affected, and what we can do to manage it.

On your marks...

First up, what counts as a delay? Your airline or operator might be a bit stricter on this, but the FAA consider a flight delayed if it arrives more than **15 minutes late**. Which is probably what your passengers really care about as well.

The FAA gather their info from a bunch of carriers, and break it all down into five basic categories of delay:

- **Air Carrier:** This is something under the airline's control like crewing, maintenance type issues. So that time you wanted a Starbucks coffee and the queue was really long and you held the flight up.
- **Extreme Weather:** We are talking the big, bad stuff like hurricanes, blizzards, tornadoes... the things that shut airports for hours.
- **National Aviation System:** This is pretty broad and covers ATC, airport ops, high traffic volume sorts of situations. They also throw general weather into this (the stuff that airplanes and ATC should be able to deal with).
- **Late-arriving aircraft:** A knock on effect from a previous flight delay.
- **Security:** Broken X-ray machines, long queues because of that passenger who thought he could sneak a tiger on in his hand luggage type scenarios.



Security is surprisingly the least to blame for delays

Pick a month

Here come the statistics...

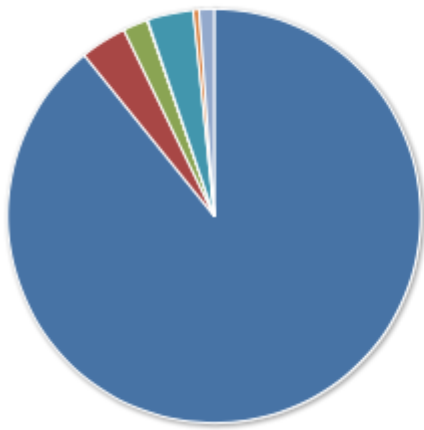
In January 2021, **89.16% of flights were on time** – which ain't bad, but ain't great. So, of the remaining 10.84%, what were the reasons for the delay?

Air Carrier Delays are the big offender, checking in at **3.63%**. The airlines only have themselves to blame...

Although, **NAS** came in a close second with **3.6%**.

Then there was the knock-on effect of **one late flight making the next flight late**. This accounted for **1.94%** of delays, with 1.17% because of previous cancellations and diversions.

Extreme weather came in at just **0.46%**, while **security delays** only resulted in **0.04%** (probably because those passengers were just left behind).



The Stats for Jan

Weathering the delays

Weather only accounts for 4% of delays, which might seem low, but remember we are talking 'extreme weather'. Non-extreme weather should be manageable which is why "normal weather" causing delays falls under NAS.

If we dig a bit deeper and take a snapshot look at a random month (we picked May 2019 because everything was fairly normal back then), then weather was the reason for **65.62% of NAS delays**. That is a whopping 27,864 delayed flights or 1,822,469 minutes.

Which airport is the worst?

Let's take a look at the airports to look out for.

KDFW/Dallas Fort Worth in Texas. A check of all the 29 major US airports in Jan 2021, and Dallas was the only one coming in with an on time performance **below 80%**.

10.48% of KDFW's delays were down to NAS. But let's not be too quick to tell off ATC yet. Just under **21% was due to high volumes of traffic**. Just under 31% was because of runway closures and a whopping **45% was** due to nasty weather (major winter storms).

The runners-up for worst delays were **KORD/Chicago** and **KFLL/Fort Lauderdale** which came in at 84.58% and 86.44% respectively. Fort Lauderdale's NAS accounted for just over 6% and 8% was because of traffic volume problems.



Dallas Fort Worth was hit by some major snow storms in early 2021

Stop boring me with statistics

OK, that is enough facts and figures. What are we really talking here? Well, the two biggies are the **Air Carrier delays** and **delays from NAS** (most of which seem to boil down to weather).

Bad weather means a backlog of traffic, often a lot of detour requests to manage, or diversions to support and this means a **much higher workload** for our ATC colleagues to try and deal with. Even when it is “just” rain, or a windy day, this leads to delays. We can’t change the weather, but we can plan for it.

Delays are not just a cost and customer service issue - they are also a big fuel consideration...

So what can we do about them?

- **Check the forecasts.** Planning for those delays in advance is a good idea because chances are they are going to result in some long holds, and long holds need fuel. Don’t just think about your destination weather - have a look at the alternates as well because when one airport shuts because of weather, others nearby probably will as well. If they don’t, then they are going to fill up fairly fast with diverting traffic.
- **Check the peak times.** If you are not a scheduled carrier then try to plan your flights to head in at non-peak times to avoid high traffic volume delays.
- **En-route stuff.** If you are delayed out of somewhere then you can try and make that time up en-route. Speeding up might seem like a good plan, but in reality unless you’re talking a mega long flight this probably isn’t going to make a huge difference to your time (but probably will to your fuel burn). Asking for directs however, is a good way to chop the time down.

- **Check the schedule.** If you depart late then check your schedule time. With a decent tailwind you might find your flight time still brings you in early in which you don't want to go speeding up and then find yourself having to wait for a parking spot
- **Winter planning.** Winter (de-icing) is probably the biggest cause of delays out so get those calls in early if you need to de-ice and plan ahead.

On-time performance is great, but sometimes delays are just unavoidable. So while we can all **“think on time”** a bit more, thinking about safety (and not rushing) is still the best mentality any pilot can have.