

Faster Indicators and Forward-Looking Data

UNECE Working Group on Transport StatisticsJune '22

Context

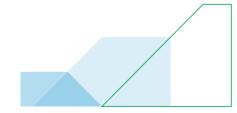
During the Covid-19 pandemic, there rapidly became a need for real-time data, both for internal and public usage.

Like many ministries, the Department for Transport had to rapidly develop its standard data collections, as well as exploring other sources to provide effective insight that met user needs – all whilst maintaining statistical integrity.

In doing this, statisticians and other analysts demonstrated an ability to provide excellent insight on key, topical issues – which has helped to encourage asks of us on other issues too.

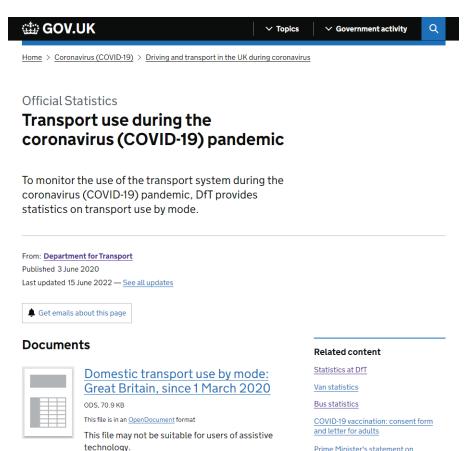
Some of the questions facing us now are:

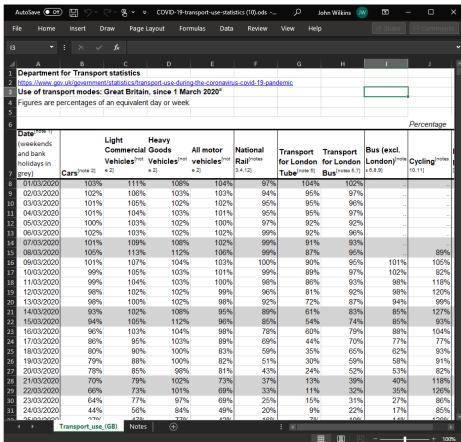
- What frequency is it appropriate to publish these data?
- What data are appropriate for publications?
- How can we best leverage other data sources for decision making?



Faster Indicators

UK Transport COVID Indicators





https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic

Prime Minister's statement on

coronavirus (COVID-19): 31 October



Request an accessible format.

UK Transport COVID Indicators

- Range of methods used, e.g. our existing automatic traffic counters and new data from a company providing ticket machines to local buses across the country
- Work has since become award winning, being awarded the Evaluation and Analysis Award at the prestigious UK Civil Service Awards 2021. We "transformed the data and insight available to decision makers across government and the public in a matter of days ... The consequence of this was providing real-time data to GOV.UK, 10 Downing Street, and SAGE, to inform decision makers and the public during the pandemic."



But Indicators Aren't Just for COVID

Developing faster indicators of transport activity

To monitor transport activity on a timelier basis for topical issues relating to transport, DfT has developed updates on the following:

Indicator	Frequency of update	Timing of update	Date first published
Road haulier coronavirus testing in Great Britain	Weekly	No longer published	11 March 2021
Large goods vehicle vocational testing in Great Britain	Monthly	Every second Wednesday	10 November 2021
Electric vehicle public charging devices available in the UK	Monthly	Every second Wednesday	7 December 2021

In special circumstances, the timing of updates might change for some indicators. Where applicable, the date of the next update will be added to the "Timing of update" field.

Some of the issues will be short term in nature, and the relevant updates will cease once the issue is no longer either in operation or of relevance.

- Non-COVID faster indicators have started to appear, in response to demand determined by "topical" events
- Currently developing new standards to give a clearer process when this happens, by asking our users:
- How they currently use our cross-modal statistical outputs
- How relevant the statistical outputs are for their needs
- What changes they would like to see to make the outputs more useful, such as publishing more frequently

https://www.gov.uk/government/organisations/department-for-transport/about/statistics#developing-faster-indicators-of-transport-activity

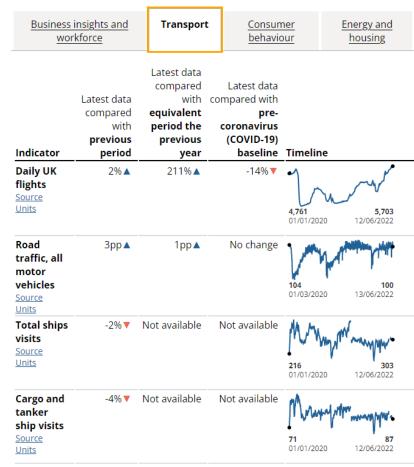


And Indicators Can Come from Many Sources

- In addition to the work of statisticians in the UK Department for Transport, the UK Office for National Statistics also compiles indicators
- They can draw on different technologies and data sources, allowing our work to complement each other

https://www.ons.gov.uk/economy/economicoutputand productivity/output/bulletins/economicactivityandsoci alchangeintheukrealtimeindicators/16june2022#latest -indicators-at-a-glance

2. Latest indicators at a glance



Source: Office for National Statistics

Real-Time Disruption Monitoring

Queues at Airports

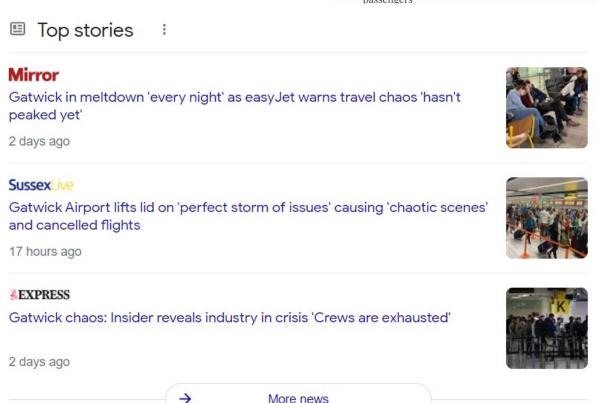
Evening Standard

VIDEO ON ES

Tearful grandmother left unable to board flight at Birmingham Airport

1 day ago





The Power (and limitations) of Social Media Data

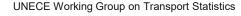
When we see headlines like these, it causes concern – both operationally but also emotionally from the human stories.

Lots of people use social media to report and complain about queues at airports, so with the help of data scientists at the Department for Transport, we looked in to the Twitter traffic around London Heathrow to compare with times of disruption.

Some findings:

- Level of disruption required; baselining
- Flagship airports have a lot of noise
- Reliability of data; self-reporting
- Buy-in





Monitoring Disruption

Due to this, we have taken action to work with other Ministries to access administrative and operational data in partnership with industry

Whilst Social Media has some uses, it felt like a fairly blunt tool that could detect the presence of a queue, but little else reliable.

As such, we have been working with other departments, and airports directly, to get a **common evidence base** from which we can report on and monitor disruption.

The benefits of this approach are:

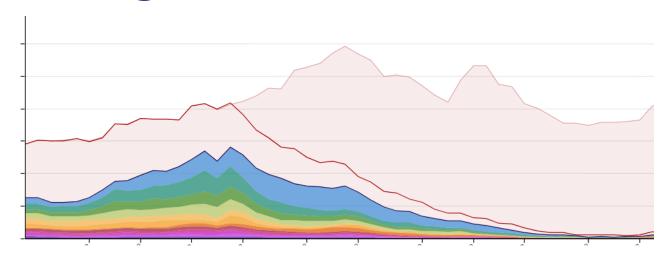
- Consistency across Government
- Building relationships with industry partners during difficult periods
- Re-assurance to users of our data

<u>But</u> by definition, monitoring and reporting happens after-the-fact, so the challenge becomes how can we use this data to improve transport for our users.



Forward **Looking Data**

How are passenger volumes recovering?



Post-pandemic, disruption is partially dictated by the ability of the sector to cope with recovering demand.

The challenge is to understand booking patterns of the travelling population, and how it will scale up to total volumes. Please get in touch if you have experience of this!

Understanding this enables us to ensure appropriate operational resourcing to **improve the experience of transport users**.

Working with industry partners

Sometimes, the transport sector experiences shocks and government data cannot provide all the answers.

As part of this, we have needed to understand where data does exist and understand from the holders of that data what is appropriate to use to estimate the intensity of future disruption.

- Hauliers
- Eurotunnel and Dover
- Aviation

Through working with industry partners, we have been able to use and share data collaboratively to better inform operational decisions that have allowed us to better understand the causes of disruption and what Government can do to mitigate it.

This also has its challenges, in particular around consistency of the data that is provided; the reliability of the data; and the voluntary nature of the collections.