TSUG

Transport Statistics Users Group

Monthly Review: March 2019

This month's review shows that response rates in National Travel Survey were around 60% until around 2015, then dropped to 58% in 2016 and 53% in 2017. PANYNJ last week announced its airports, seaport, PATH subway system, bridge and bus terminal handled record or near-record volumes in 2018. In 2018 Eurotunnel carried 51,300 coaches: in 2016 it was 53,600. In the NPRS autumn wave, Heathrow Express came top at 96% (its highest score since the Spring 2017 wave, when it was 97). The four largest station car parks on the PATCO network in southern New Jersey with 10,000 spaces are to be roofed with 50,000 solar panels. This will halve the agency's electricity bill, as well as sheltering cars from the elements. UK broke its annual air traffic record by 0.3%, with 2,557,780 flights in 2018 compared with 2,550,102 flights in 2007. The top three European airlines by passenger numbers in 2018 are Lufthansa, Ryanair and IAG. The busiest air route in America in 2018 is MEX – CUN ROUTE with 4,869,800 passengers. There was a high confidence (74%) among consumers in the safety of UK airports and airlines. California's topmost airport in 2015 is Los Angeles with 36.4m passengers. 50% of UK residents take no flights and a further 23% take just one a year. Norwegian Air Shuttle's passenger numbers (at 37.35m for the year to Q4, 2018) were at record levels. In the year to Q4, 2016, the figure was 29.3m. There has been a reduction in private car journeys to London's airports between 2012 and 2016. The largest fleet of wide-bodied aircraft is the Boeing 777 with 1,269 in service. The number of journeys on concessionary passes in the West Midlands was 55m (well down on previous years): London dominated, with nearly 273m journeys. In France, as bus replaced train, average journey times increased from 80 to 112 minutes. Road deaths are the 8th leading cause of death worldwide, and the largest cause for the 5-29 year old population. In EU in 2017, there is a target of halving of road traffic fatalities from 31500 in 2010 to 15750 in 2020: the figure was 54900 in 2001. The fatality rate on Texas roadways in 2017 was 1.36 deaths/100m VMT. This is 2.86% down on 2016. In 2018, UK produced 1.52m cars, the lowest level in five years. Motor vehicle deaths in US in 2018 totalled 40,000. This figure is down 1% from the final 2017 count. Readers may be excited to note that April Seminar will be on Safety. We have Message from the Chairman, TSUG, Letter to the Editor, Letter from the Editor, Notice on March Seminar and also Kit Mitchell's Statistics Digest.

Dr Shanta Bir Singh Tuladhar and Andrew Sharp

Contents

Dates of the next TSUG seminars

Date	Venue	Topic
Wed-20-Mar	London UG	Rail Statistics
Wed-17-Apr	TfL	Transport Safety
Wed-22-May	TfL	Traffic Calming – Does It Work ?

The seminars can be booked through the TSUG website at www.tsug.org.uk/seminars.php

Statistics Digest

STATISTICS DIGEST March 2019

This digest lists major sets of statistics that have been released recently or which are due to be released. Regular monthly and quarterly releases are not included. The web links given allow free downloads of the documents cited.

Recent releases from Department for Transport

Recent releases from Department for Transport	
7 Feb	Seatbelt and mobile phone use surveys: 2017
https://www.gov.uk/government/statistics/seatbelt-and-mobile-phone-use-surveys-2017	
14 Feb	Road goods vehicles travelling to Europe: January to December 2018
https://www.gov.uk/government/statistics/road-goods-vehicles-travelling-to-europe-2018	
14 Feb	Reported Road Casualties in Great Britain, estimates involving illegal alcohol levels: 2017
https://www.gov.uk/government/statistics/reported-road-casualties-in-great-britain-provisional-estimates-involving-illegal-alcohol-levels-2017	
20 Feb	Sea passenger statistics 2018: Short sea routes (provisional)
https://www.gov.uk/government/statistics/sea-passenger-statistics-2018-short-sea-routes-provisional	
28 Feb	Travel time measures for the Strategic Road Network and local 'A' roads: January to December 2018
https://www.gov.uk/government/collections/road-congestion-and-reliability-statistics	
28 Feb	Public attitudes towards train services: results from the February 2018 Opinions and Lifestyle Survey
https://www.gov.uk/government/collections/statistics-on-public-attitudes-to-transport	

Forthcoming releases from Department for Transport	
1 March	Renewable Transport Fuel Obligation: Year 10 (2017 to 2018) report 6 (15 April 2017 to 14 April 2018 supply)
https://www.gov.uk/government/collections/biofuels-statistics	
1 March	Renewable Transport Fuel Obligation: Year 11 (2018) report 2 (15 April 2018 to 31 December 2018 supply)
https://www.gov.uk/government/collections/biofuels-statistics	
13 March	Shipping fleet statistics: 2018
https://www.gov.uk/government/collections/maritime-and-shipping-statistics	
April	Vehicle licensing statistics: 2018
https://www.gov.uk/government/collections/vehicles-statistics	
April	Road lengths in Great Britain: 2018
https://www.gov.uk/government/collections/road-network-size-and-condition	
April	Road freight statistics: October 2017 to September 2018
https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics	
May	Road traffic estimates in Great Britain: 2018
https://www.gov.uk/government/collections/road-traffic-statistics	
May	Road goods vehicles travelling to Europe: April 2018 to March 2019
https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics	

Recent release from Office of Road and Rail	
28 Feb	Regional Rail Usage 2017-18
https://orr.gov.uk/statistics/published-stats/statistical-releases	

Other recent releases	
	Trends in the Netherlands 2018
https://longreads.cbs.nl/trends18-eng/economy/figures/transport/	
	IFT Transport Outlook 2017 Summary
https://www.oecd-ilibrary.org/docserver/e979b24d-en.pdf?expires=1550767745&id=id&accname=guest&checksum=58B5084A7EA11DE633463F0	

7779541AE	
	OECD Passenger transport statistics to 2017
https://data.oecd.org/transport/passenger-transport.htm	

Members can find past seminar slides here: http://www.tsug.org.uk/past_seminars.php

Members' Forum

Message from the Chairman, TSUG

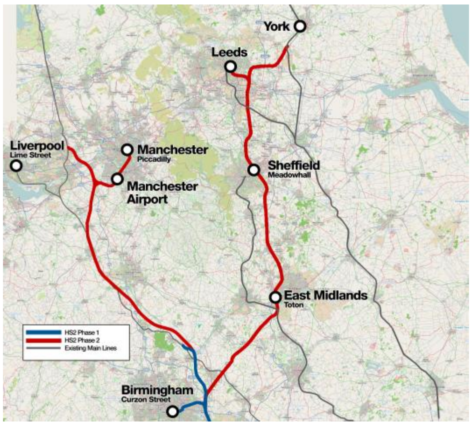
We have added the presentations of most of the recent meetings to the website. They are available by visiting our website at http://www.tsug.org.uk/index.php. You will need to log in using your e-mail. Please contact us if you have any problems. Select the Seminar tab (the third from the left) and click on 'You can view a list of past seminars'. A few are missing either because the speaker did not wish us to use them or because they are not available.

Peter Gordon

Letter to the Editor

Dear Editor

May I offer a note of correction to one item in TSUG's February 2019 newsletter? Contrary to your assertion, the PWC report on benchmarking high-speed railways does not claim that 42% of HS2 would run within 1 km of a conurbation. This statistic is actually used by PWC (as a factor contributing to higher costs of construction) with reference solely to Phase 2 of the project, shown by the red lines on this map:



Unfortunately the authors do not attempt to define a conurbation. But if the term is taken to equate to the five former metropolitan counties of Greater Manchester, Merseyside, South Yorkshire, the West Midlands and West Yorkshire, their assertion might just be correct - though why being "within 1 km" of any of them should be significant, unless the route closely parallels their boundaries, seems odd.

It should be remembered, however, that the two Yorkshires and Greater Manchester all contain substantial tracts of relatively open countryside. If "conurbation" is used in its conventional - i.e. non-administrative - sense as meaning a large continuously built-up area usually formed by the coalescence of a number of previously separate urban centres, then 42% seems on the high side.

Yours
John Cartledge

Thanks, John. We can only speculate, but two possible reasons come to mind. First, land within 1km of a conurbation might be more valuable and therefore more expensive than land further away. And second, there might be more need for sub-surface construction or noise barriers. Ed

Letter from the Editor

TSUG Review

The editors would like to encourage more people to write articles for the Review. At the moment, this work falls on a small number of people, and of course reflects their interests. Both of these reduce the comprehensiveness of our coverage.

YOU could easily write once a year about some statistics you have seen: please do so, and send them to the Editors.

Editor, TSUG Newsletter

Notice on March Seminar

Venue: London Underground Ltd
55 Broadway, London
*** Please note the change from the usual venue ***

General News

National Travel Survey: Attempts to Increase Response Rates

A report has recently been released giving interim results of options tested to increase response rates to the National Travel Survey. Response rates were around 60% until around 2015, then dropped to 58% in 2016 and 53% in 2017.

The advance letter notifying people that they have been selected to participate was redesigned, based on the EAST (Easy, Attractive, Social and Timely) principles developed by the Behavioural Insights Team, alongside findings from qualitative research run on advance communications for the English Housing Survey and the Health Survey for England. Key changes to the advance letter included using simpler language, clearer use of heading and visual features for key points, giving a greater sense of 'social exchange' within the text (for example 'by helping us this will benefit you'), and making the letter more authoritative by designing it as if it comes from the DfT (using the DfT logo, official colour and a senior signatory). To explore whether this re-design had an impact on response or sample quality in 2018 half the sample were sent the existing letter and half were sent the re-designed letter.

Conditional and unconditional incentives have also been tried – either rewarding each member of each household where a full survey was completed, or just sending out a book of six first class stamps to each household selected for interview.

The results were disappointing – none of these increased the response rate at all. However, the redesigned letter will continue to be used.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/775068/nts-2019-incentive-experiment-and-advance-letter-experiment-interim-report.pdf

PANYNJ News

From Progressive Railroading

The Port Authority of New York and New Jersey (PANYNJ) last week announced its airports, seaport, Port Authority Trans-Hudson (PATH) subway system, bridge and bus terminal handled record or near-record volumes in 2018.

The authority logged 7.2 million 20-foot equivalent units, surpassing seven million for the first time in its history, which dates back to the 1950s. The port maintained its position as the busiest on the East Coast and the third-busiest in the nation after Los Angeles and Long Beach. The cargo growth was driven by an 8.2% increase in imported goods, including clothing, furniture, electronics and consumer goods. The port handled one-third of all containers on the East Coast, increasing its market share by 2.8% from 2017's level.

Cargo handled by rail last year also set a new record at 645,760 containers, up 13.8% over the previous record set in 2017. Last month, PANYNJ announced a major expansion of its rail network, which will enable the authority to expand rail capacity for cargo destined for outside the region. The expansion will reduce congestion and emissions.

Meanwhile, PATH handled 81.73 million passengers in 2018, the second-highest annual ridership on record. The 2018 passenger levels would have been a new record had it not been for the anomaly of 1.2 million New Jersey Transit ticket holders who were allowed to ride on PATH during the 2017 summertime track shutdowns to accommodate emergency repairs at New York's Penn Station.

Rail

Commuter Rail Statistics for California

Caltrain at Millbrae Station

The 2018 California State Rail Plan listed its four commuter rail operators and their passenger carryings between 2005 and 2016.

The table below is an extract from this, showing 2005, 2010 and 2016 data in millions.

Years are State Fiscal Years

	2005	2010	2016
Altamount Corridor Express	.94	.68	1.30
Caltrain	9.45	12.00	19.23
Coaster	1.43	1.27	1.56
Metrolink	9.95	11.33	10.90
Total	21.78	25.24	32.99

2010 was clearly the low year – following the Great Recession.

For comparison, London Waterloo sees 22m passengers a year.

Getlink in 2018

Getlink (formerly Groupe Eurotunnel) released 2018 data on 22 January

Eurostar Approaching Brussels

Lorries carried amounted to 1,693,500 – the highest number I record in my (incomplete) database. Cars (2,660,000) were also a record high while coach traffic continues to drop. In 2018 Eurotunnel carried 51,300: in 2016 it was 53,600. In 2013 it was 64,500 and in 2004, 77,300.

Freight train tonnage is not published in the release, but train numbers are climbing after a drop. In 2018, 2077 freight trains passed through the tunnel: it was 1797 in 2016 and 2900 in 2014.

Eurostar passenger numbers are the highest I record, at 10.97m: in 2016 they were 10.01m, down from 10.4m in both 2014 and 2015. 2013 was the first year when carryings exceeded 10m.

NRPS Autumn 2018

The Autumn wave of National Rail Passenger Survey (NRPS) results was published at the end of January, showing customer satisfaction overall and with 40 attributes (two new this year) of their journey on 26 train operators.

NRPS is published twice a year: normally Heathrow Express, Hull Trains and Grand Central fight it out for top position in terms of overall customer satisfaction. In the autumn wave, Heathrow Express came top at 96% (its highest score since the Spring 2017 wave, when it was 97).

40 attributes times 26 train operators gives 1040 individual scores. On average over the last seven NRPS surveys, on the entire railway in Great Britain there were 10.4 ‘satisfied’ scores above 94%. Heathrow Express’s average of these very high scores in the last seven surveys is 4.9. On average Heathrow Express has scored nearly half of the very high scores recorded on the entire GB rail network. This time it did

better – there were nine scores over 94% and Heathrow Express scored seven of them! The other two were on Merseyrail.

The trains, their reliability and their speed were particularly commended. Value for money (53% satisfied) was five percentage points up on the Spring 2018 survey: this is a record high, the same as in Autumn 2015.

Gatwick Express's overall satisfaction score is a record high of 88%, the same as in Spring 2017. Satisfaction with the overall condition of the station, ticket buying and information are all up on the Spring 2018 survey (69% to 76%, 62% to 79% and 75% to 84% satisfied). Helpfulness of staff at stations is up (74% to 80%): provision of shelter at stations is up from 65% to 75% without, as far as I am aware, any physical change at all. Satisfaction with the availability of wifi at stations is up from 36% to 60%.

Satisfaction with the frequency of trains is down (90% to 84%) – presumably reflecting the May-July timetable disruption. Satisfaction with value for money is significantly up (28% to a record 43%: this is the first time it's been over 40%). Satisfaction with the gap between train and platform is down (72% to 61%). Satisfaction with the availability of wifi on trains is up (44% to 57%) as is satisfaction with the availability of power sockets (85% to 90%).

Comparing the two dedicated airport operators, Heathrow Express is rated higher – in many cases significantly higher – than Gatwick Express for everything except the availability of power sockets on trains (90% satisfaction on Gatwick Express, 85% on Heathrow Express) and availability of toilet facilities on trains (71% Gatwick Express, 68% on Heathrow Express). There is one toilet on each set in Heathrow Express trains and, unlike Gatwick Express trains, you cannot move between sets. The two are equal on 'Connections with other forms of transport' (87%) and 'Choice of shops, eating and drinking facilities nearby' (both 68%). Probably the biggest difference in ratings is 'Availability of seating at stations' – 77% Heathrow Express, 37% Gatwick Express.

Looking at satisfaction with value for money generally, there are four TOCs scoring between 30% and 39% satisfied, seven between 40% and 49%, eight between 50% and 59%, five between 60% and 69% and one – Grand Central – scoring 77%. So despite media complaints about premium fares on airport services, passengers seem to accept this: value for money scores are 53% on Heathrow Express and 43% on Gatwick Express, very much on a par with the rest of the railway.

Solar Panels over New Jersey Station Car Parks

The four largest station car parks on the PATCO network in southern New Jersey with 10,000 spaces are to be roofed with 50,000 solar panels. This will halve the agency's electricity bill, as well as sheltering cars from the elements.

The panels will be provided at Ashland, Ferry Avenue, Lindenwold (the biggest, with 3337 spaces) and Woodcrest stations.

The contractor will install the 22mw system at no cost to the operator: a California-based energy company will operate the system and provide power to the transit agency.

https://eu.courierpostonline.com/story/news/local/south-jersey/2019/02/11/patco-nj-covered-parking-lots-solar-panel-green-energy/2802919002/

Air

2018 – a Record Year for UK ATMs
Source: NATS

According to NATS (formerly National Air Traffic Services), the UK broke its annual air traffic record by 0.3%, with 2,557,780 flights in 2018 compared with 2,550,102 flights in 2007, marking six consecutive years of growth since traffic started to increase again after the global financial crisis.

The summer months in particular saw many previous flight records broken as travel in May, June and July exceeded previous peaks. A high of 8,854 flights handled by NATS controllers on a single day in the UK was recorded on 25 May 2018.

Despite increased traffic levels, NATS delay figures have improved with an average delay/flight of 12.5 seconds in 2018, compared with 26.8 seconds in 2007. This represents a 60% reduction in delay, attributable in part to the introduction of new technology.

Air traffic in 2019 is forecast to increase by 1% in the UK Flight Information Region (FIR), with a 2% increase expected in 2020.

Air Freight Exports

The recent aviation policy consultation ("Aviation 2050: the future of UK aviation" Cm9714) gave some interesting statistics on air freight exports to non-EU countries from Manchester, East Midlands, Heathrow and Stansted in 2017. These were as follows (in tonnes).

	Manchester	East Midlands	Heathrow	Stansted
Paper in rolls or in square or rectangular sheets	6340			
Packaged substances for medical treatments	2432		7363	
Milk and cream	2254			
Other milk and cream products	1250			
Surface cleaning products	1216			
Parts and accessories for large motor vehicles		790	7870	607
Electrical apparatus		668		
Printed books and brochures		505	27468	726
Appliances for pipes		476		
Telephone sets and other transmission apparatus		396		
Fresh or chilled fish			46677	
Turbojets and other gas turbines			5999	1121
Printed pictures and photographs				826
Retail packaged items for dental hygiene				599

Top European Airlines by Passenger Numbers

From CAPA

Lufthansa Airbus A330 at Toronto

Airline	Passengers (m) 2018	Airline	Passengers (m) 2018
Lufthansa	142	S7	16
Ryanair	139	TAP Air Portugal	16
IAG	113	Aegean	14
Air France/KLM	101	Finnair	13
easyJet	92	Jet2	12
Turkish	75	Air Europa	12
Aeroflot	56	Flybe	9.5
Norwegian	37	Ural	9
Wizz Air	34	LOT	8.8
SAS	30	Ukraine	8
Pegasus	30	UTAir	8
YUI	23	Volotea	6.6
Alitalia	21		
Thomas Cook	20		

Busiest Air Routes in the Americas

From Routes online

The top ten busiest passenger routes in the Americas in 2018 are:

Rank	Route	Passengers (2018)	% change vs 2017	Distance (km)
1	Mexico City (MEX) - Cancun (CUN)	4869800	4.6%	1284
2	Rio De Janeiro (SDU) - Sao Paulo (CGH)	3907132	-4.6%	365
3	Bogota (BOG) - Medellin (MDE)	3889337	17.0%	216

Rank	Route	Passengers (2018)	% change vs 2017	Distance (km)
4	Los Angeles (LAX) - San Francisco (SFO)	3655907	4.2%	541
5	Los Angeles (LAX) - New York JFK (JFK)	3596808	1.8%	3973
6	Mexico City (MEX) - Monterrey (MTY)	3442624	7.5%	713
7	Chicago (ORD) - New York LaGuardia (LGA)	3264833	4.7%	1176
8	Lima (LIM) - Cuzco (CUZ)	3142913	4.7%	583
9	Guadalajara (GDL) - Mexico City (MEX)	3091137	3.1%	459
10	Las Vegas (LAS) - Los Angeles (LAX)	3067626	8.6%	380

I thought it was interesting that only four of the top 10 are in the US.

CAA: UK Aviation Consumer Survey October 2018

Manchester Airport, with the Jodrell Bank Radio Telescopes Just Visible on the Horizon

This was published at the end of December: it can be found on https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Analysis_reports/ComRes_CAA_UKACR_Wave%206_full%20report%20FINAL.pdf.

There was a high confidence (74%) among consumers in the safety of UK airports and airlines, and also confidence that passengers will get the service they pay for (60%) and that the balance between security screening and convenience to the passenger is about right (60%). 56% of respondents enjoy travelling by air – a figure which has been much the same over the last five surveys (which are conducted every six months). 30% consider the impact on the environment (up from 22% in the October 2016 and both 2017 surveys): 29% would pay more to reduce the environmental impact of flying (again, up from 22% in October 2016 and March 2017).

54% of UK adults have flown from a UK airport within the last 12 months: 6% have never flown. 17% last flew 1-4 years ago, 10% 4-10 years ago and 12% over 10 years ago. The rest were 'don't know' or 'never flown'.

Of those who hadn't flown in the last 12 months, 20% had no reason to, 11% had not flown for health or disability reasons making it difficult to manage at the airport, 10% from fear of flying and 10% for health or disability reasons on the flight. 7% dislike airports or the flight experience.

15% had used Manchester, and 14% either Gatwick or Heathrow. 23% used easyJet, 18% BA and 14% Ryanair.

39% were very satisfied with travelling to or from the UK airport. 6% were fairly or very dissatisfied. The 84% very or fairly satisfied with this aspect has been constant over the last six surveys.

Overall satisfaction with the last flight has declined from 90% in March 2016 to 84% in October 2018: the decline has been steady.

20% of those flying within the last 12 months experienced long queues or crowding at the airport: 13% experienced delay taking off.

Of those experiencing a travel issue who didn't formally complain, 14% said they thought nothing would change if they did and 13% thought they'd get nothing out of it.

27% of respondents had a disability or health condition: of those, 57% said this would cause them difficulty in accessing or using airports or flying.

California's Top Ten Airports

San Jose Airport Bus Station

The 2018 California State Rail Plan listed the top 10 airports in the state, and recorded enplanements over the years 2011-2015 (and note that these will be about half the total passenger traffic, which is enplanements + deplanements). I have only shown figures in millions for the first and last years – 2011 and 2015 – but all intervening years are in the document.

	2011	2015	% change
Los Angeles	30.5	36.4	19.1
San Francisco	20.1	24.2	20.6
San Diego	8.5	10.0	18.0
Oakland	4.6	5.5	21.0
Santa Ana	4.2	4.9	16.4
San Jose	4.1	4.8	17.4
Sacramento	4.4	4.7	7.9

Ontario	2.3	2.1	-8.0
Burbank	2.1	2.0	-8.0
Long Beach	1.5	1.2	-19.3
Palm Springs	.8	.9	24.8
Total	83.0	96.7	16.5

Points I noted were that the rankings did not change during that period, and that the big growth was at the big airports while the big drops (generally) were at the small airports.

Essential Air Services

In mid December, the US Congressional Research Service produced an update of its report on Essential Air Services (EAS). These are services supported by a PSO-type of subsidy.

The programme started in 1978 and was then expected to expire in 10 years. Despite interventions and changes to the qualifications for a subsidised service, costs have increased. In 2000, for example, EASs were no longer supplied if the subsidy/passenger exceeded $200 (unless the community was more than 210 miles from the nearest large or medium hub airport). In 2011, subsidies/passenger in excess of $1000 were prohibited.

The programme is funded partly by direct grant (discretionary appropriation) and partly by fees paid to fly over (but not land in) the US. Funding over the last few years has increased as follows (in millions of 2018 dollars).

Fiscal Year	Discretionary Appropriation	Overflight Ffees	Total
2012	143	50	193
2013	135	98	233
2014	149	119	268
2015	155	108	263
2016	175	108	283
2017	150	122	272
2018	155	133	288

Among the issues is the fact that carriers may, for their own operational reasons, use planes larger than necessary for the numbers of passengers expected. As a result, while the average load factor on all domestic flights in 2014 was 83%, on EAS flights it was 49%.

Carriers have no incentive to maximise the number of passengers on each flight. Once the subsidy is agreed, the carrier can charge what it likes – so it may decide to charge high fares to a few people rather than low fares to many.

National Travel Survey One-off Data

NTS has released the datasets produced on request by a number of individuals or organisations.

One table (NTSA19022) covers the number of flights taken by UK residents – generally, 50% take no flights and a further 23% take just one. These numbers have been reasonably constant across the years, although there was a peak of 57% taking no flights in 2011 and 2012. I'd be interested to have these data by age group – as we get older, do we fly less? And what impact does an ageing population have on the number of flights taken and therefore the need for airport capacity?

Curiously, the British Social Attitudes Survey data covering the number of flights taken (NTSA19024) consistently records about five percentage points fewer people taking no flights in any year.

NTSA19027 records flights by journey purpose – 48% business, 43% leisure and 9% other.

These and others are on https://www.gov.uk/government/statistical-data-sets/ad-hoc-national-travel-survey-analysis?utm_source=f1cf8d22-37fa-445e-a410-93a8f8ee96f3&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate

Recent Airline Statistics

Norwegian Air Shuttle's 2018 results were the subject of much speculation in the media – had they over-reached themselves particularly in their long-haul low-cost endeavours? The statistics I gather (and cumulate over the last four quarters) don't show this.

Passenger numbers (at 37.35m for the year to Q4, 2018) were at record levels. In the year to Q4, 2016, the figure was 29.3m.

Revenue was 40,266m NOK (the kronor is worth around 10p). This was the first time revenue has been over 40bn NOK.

Revenue passenger kilometres (RPK) totalled 85,124m – the first time it's been over 85bn. In the year to Q4, 2017 it was 63,32m. Available seat kilometres (ASKs) were 99,220m – over 95bn for the first time.

Revenue/passenger was a record high 1078 NOK.

Revenue/passenger kilometre has fluctuated – 0.53 NOK in the year to Q4, 2015, 0.51 a year later, 0.49 in Q4, 2017 and a low of just below 0.47 in Q2, 2018. It climbed to 0.4755 in Q3, 2018 and then dropped a little to 0.473 in the year to Q4, 2018.

Air Canada's data seemed to be generally good.

Revenue for the four quarters to Q4, 2018 was C$18065m, the first time it's been over C$18bn. In the four quarters to Q4, 2015 it was under C$14bn.

Passenger miles (RPM) were a record 92,360m, only the second time it's been over 90bn. Available seat miles (ASM) were a record 110866m, the first time it's topped 110bn. They carried 50.814m passengers, the second time the 50m level has been broken. The figure for 2015 was just over 41m.

Revenue/passenger is a record C$356. Revenue/passenger mile is C$0.1956, the highest since the four quarters to Q2, 2016. It hit C$0.1899 in the year to Q2, 2017 and has climbed back steadily since then. And average distance flown is a record 1817 miles.

Singapore Airlines' Planes at Changi Airport

Singapore Airlines only publish revenue at Group level, rather than at airline level, so data for Singapore Airlines are limited (and they also use a financial year ending March, so these figures are for Q3 2018/19). What is published looks good.

RPK were 100,492m for the four quarters to December 2018: this is the first time they have exceeded 100,000m. ASKs were 121,000m: again, a record.

They carried 20.37m passengers – the second time that figure has been over 20m – and average journey length was 4933km. It was 4954km in the four quarters ending Q4, 2015, but then dropped to just under 4890km in the year to Q3, 2016. Since then, it has climbed steadily to the present level.

Spirit Airlines, a Florida-based low-cost carrier famous for its dependence on ancillary income, has recently been added to my database (with statistics going back to the four quarters to 2017).

Passenger revenue at $3260m is at a high – up from $2573m at the start of the series. Revenue passenger miles at 30,623m are above 30,000m for the first time. Available seat miles, at 36,503m, are also at a high.

Passenger numbers (or passenger flight segments, as the airline calls them, implying that, as usual with low-cost carriers, passengers wishing to travel on more than one segment have to book each one separately and self-connect) are at a high of 29.3m.

Revenue/passenger mile is $0.106: it has been $0.103 - $0.104 for the time I have been monitoring it.

Finally, average length of haul is 1045 miles – down on the previous four quarter total but that was the highest I record.

The Canadian low-cost carrier **Westjet** has also reported its Q4, 2018 data.

Revenue is a record high C$4733m. RPMs were 27587m, down from the record for the year to Q2, 2018 (2786m). However, ASMs are a record high at 3294m: for these to diverge, implying a low load factor, is not good.

Passenger numbers are a record high at nearly 25m. Revenue/passenger is C$186: revenue/passenger mile at C$0.172 is the highest it’s been since the year to Q2, 2016. Average length of passenger journey was 1082 miles – up on the previous four quarters, but down from the peak of 1148 in the year to Q4, 2016.

Which Way to Go?

London Travelwatch produced a report, 'Way to Go', in mid January. The accompanying press release commented that, "*Way to go"* shows that there has been a reduction in private car journeys to London's airports between 2012 and 2016. However, the share of passengers using public transport to get to Heathrow, Gatwick and Luton Airports has actually fallen over this period from 41%, 44% and 33% in 2012 to 39.1%, 43,6% and 31.4% respectively in 2016." The release was headed, "Despite big investment, fewer people are using public transport to get to London's airports."
Readers will know that there are two ways of measuring mode share for airport access – mode of arrival, and main mode. The Civil Aviation Authority (CAA) use the former: the Department for Transport (DfT) and probably Transport Statistics Great Britain (TSGB) use the latter.

That said, our records do not wholly back up London Travelwatch (and it is somewhat curious that their report, produced in January, did not use 2017 statistics published by CAA in April 2018).

Percentage of passengers using public transport to access airports.

	"Way to Go"		CAA
	2012	2016	2017
Heathrow	41	39.1	38.5
Gatwick	44	43.6	42.5
Luton	33	31.4	30.6

There has fairly unambiguously been a slight drop at Heathrow – the TSGB statistics for 2017 say 39% (18% tube, 9% Heathrow Express and 12% bus). There was a drop of two percentage points in the Heathrow Express share: a possible cause is Crossrail-related disruption. Or, as the press release might have said, because of big investment, fewer people are using public transport to get to Heathrow.

At Gatwick, TSGB 2012 figures for public transport are 42% - 36% rail and 8% bus. So on this count there has been a slight increase to 42.5% in 2017.
For Luton, TSGB says bus and rail figures for 2012, 2016 and 2017 are virtually identical – bus 17% in 2012 and 16% in the other two years, rail 16% in 2012 and 2016, 17% in 2017. Effectively, no change in the public transport share. That said, CAA 2017 statistics say 13.3% and 17.3% (which is the 30.6%).

A confounding factor is rail station usage. Data are not available for Heathrow, but below are the Office of Rail and Road station usage statistics, CAA air passenger numbers and the ratio of one to the other for Gatwick and Luton. You could argue that this is wildly inaccurate – the rail passenger figures include airport employees and people parking at the airport station and taking a train to London; and the air passenger numbers include those changing planes. That said, there is at least consistency.

	2012			2016		
	Air passengers (m)	Rail passengers (m)	Rail/air (%)	Air passengers (m)	Rail passengers (m)	Rail/air (%)
Gatwick	34	15.4	45	43	19.4	45
Luton	10	2.5	25	15	3.8	25

The ratio of rail passengers to air passengers has been constant – 45% at Gatwick and 25% at Luton. Interestingly, very similar to CAA's survey-based data!

PS: Readers' thoughts welcome.

Wide-bodied Passenger Aircraft

According to the FT, the current fleet of wide-bodied aircraft is as follows.

Boeing 747	170
Boeing 777	1269
Boeing 787	738
Airbus A380	230
Airbus A350	230

At the peak of its popularity in the late 1990s, there were 715 Boeing 747s flying.

Road

Bus Pass Data

DfT recently released table BUS0823, concessionary bus statistics for England.

This gives for each local authority the number of journeys on concessionary passes, and also the number of journeys/pass. Data are for fiscal years from 2010/1, although much earlier information is absent.

Big numbers of journeys appear in the north and north east – in 2017/8 nearly 34m in Tyne & Wear, 41m in Greater Manchester, 35m in Merseyside, 29m in South Yorkshire and nearly 40m in West Yorkshire. The West Midlands saw 55m (well down on previous years). London dominated, with nearly 273m journeys.

Hertfordshire saw 10m journeys as did Brighton & Hove, with West Sussex reporting 9.5m. West Berkshire saw 0.6m.

Looking at journeys/pass, a few areas record over 200 and a few more over 150. Nottingham topped the table with 244: Brighton & Hove saw 236. London saw 227. Leicester, Middlesbrough and Hull were all over 150. Lowest usage is in Rutland at 18.

Bustitution?

Railway Gazette International

The French transport lobby group FNAUT commissioned a study from the consultancy Trans-Missions to assess the effect of running buses instead of trains in rural areas.

They focused on seven secondary lines which had closed since the 1980s: of these, five subsequently got back their train service.

As bus replaced train, average journey times increased from 80 to 112 minutes.

Replacing trains with buses led to a net decline in ridership of 53%, despite an increase in frequency from three to five trips/day.

Of the five routes which reverted back to rail, the average gain in ridership was 65% with two (Nantes – Pornic and Nantes – Croix de Vie) increasing by more than 100%.

Global Road Safety

The World Health Organisation (WHO) recently published its "Global status report on road safety 2018". Key points I picked up are as follows
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In 2016, road traffic deaths amounted to 1.35m. This trend is slowly rising (from 1.15m in 2000) although the rate (fatalities/100,000 people) is dropping, from 18.8 in 2000 to 18.2 in 2016. Road deaths are the 8th leading cause of death, and the largest cause for the 5-29 year old population.

The effects tend to be felt by low income populations. The table below compares percentages of population, road traffic deaths and vehicle ownership among high-, middle- and low-income countries (as defined by the World Bank). It also shows the number of countries in each income bracket with an increase of more than 2% in traffic deaths since 2013.

Income	Population	Road traffic deaths	Vehicles	Countries with an increase >2% in road traffic deaths since 2013
High	15	7	40	17
Middle	9	13	1	60
Low	76	80	59	27

Road traffic fatalities/100,000 population in each WHO region for 2016 are as follows: Africa 26.6, Americas 15.6, Eastern Mediterranean 18.0, Europe 9.3, South East Asia 20.7, Western Pacific 16.9, World 18.2.

More than half of all road traffic deaths are among vulnerable road users.

Finally, the report notes progress towards better road safety – mandatory speed limits, seat belts and the like.

Road Safety in the EU in 2017

The European Commission published this recently. It highlights progress towards a halving of road traffic fatalities from 31500 in 2010 to 15750 in 2020: the figure was 54900 in 2001.

The UK reduced its fatalities by 3% between 2010 and 2017, but this was probably because we had the second smallest number of fatalities/million inhabitants (28, compared with an EU average of 49). Sweden, with the smallest number of fatalities, also had a small reduction (5%) between 2010 and 2017.

We were about middle of the pack when looking at the percentage of vulnerable road user fatalities in urban areas – we were on the EU average of 70.

Looking at percentages of fatalities by means of transport, 46% were in a car, 26% on a two-wheeled vehicle, 21% on foot and 7% other. 8% of fatalities were on motorways (and 12% of these were pedestrians): 54% were on rural roads and 38% in built-up areas. 28% of the total and 38% of those in built up areas were over 65.

Texas – Road Casualties 2017

The fatality rate on Texas roadways in calendar year 2017 was 1.36 deaths/100m vehicle miles travelled (VMT). This is 2.86% down on 2016. The death toll was 3721, 1.92% down on 2016. VMT totalled 274.58 bn, up 1.22% on 2016.

Over a third of deaths (1313) were single vehicle run-off the road crashes. 761 people were killed at intersections and 552 in head-on collisions. There were no days with no fatalities on Texas's roads: on 17 November 26 people died in traffic crashes.

501 motorcyclists died in 2017: 52% of them were not wearing helmets. 614 pedestrians were killed – 9.7% less than 2016.

1024 people were killed in crashes where a driver was under the influence of alcohol: this is 28% of the total number of people killed in crashes. 449 people were killed in crashes involving distracted driving, 2% down on 2016.

UK Car Manufacture

Financial Times

In 2018, this country produced 1.52m cars, the lowest level in five years.

Of these, Jaguar Land Rover produced 449,304, Nissan 442,254, Mini (BMW) 234,183, Toyota 129,070, Honda 160,676, Vauxhall 77,481 and others, 26,472.

1.24m were exported – 52.6% elsewhere in the EU, 17.9% to the US, 6.1% to China, 3.3% to Japan, 2.3% to Turkey and 17.8% to other countries.

US Road Traffic Deaths 2018

From the National Safety Council

Motor vehicle deaths in 2018 totalled 40,000. This figure is down 1% from the final 2017 count. The 2018 fatality estimate is also down 1% from the final 2016 count. The estimated annual population death rate is 12.19 deaths/100,000 population, down 1% from the 2017 rate. The estimated annual mileage death rate is 1.24 deaths/100 million vehicle miles travelled, down 1% from the 2017 rate.

A medically consulted injury is an injury serious enough that a medical professional was consulted. Based on the current medically consulted injury-to-death ratio of 114:1, and rounded to the nearest hundred, the estimated number of nonfatal medically consulted injuries resulting from crashes in 2018 was 4,560,000. This represents a 1% decrease from 2017.

The estimated cost of motor vehicle deaths, injuries and property damage in 2018 was $412.8 billion.

The National Center for Health Statistics (NCHS) reports the official mortality estimates for the United States and is used as a comparison to judge the accuracy of NSC preliminary estimates. The publication of NCHS final mortality estimates generally lags about one year. All of NSC preliminary estimates are updated several months following the release of the preliminary estimate with new state provided fatality counts.