TSUG

Transport Statistics Users Group

Monthly Review: January 2019

This month's review shows that in Mongolia, in the first 11 months of 2018, 23.4 million tonnes of freight and 2.4 million passengers were carried by rail. In Great Britain, 2017 saw 808 bn passenger kilometres over all modes – the highest volume ever recorded. In Washington, DC Streetcar has served three million passengers since opening in February 2016. 14 countries have high speed railways and the network has expanded by 20% since 2015 to 42,000km today (presumably end 2017). There were nearly 40 million public transit boardings last month in metro Vancouver, British Columbia, breaking the October record set several years ago. 2017 was the second lowest year since 2012 for rail accident victim numbers recorded by UIC (2265 in 2012, 1660 in 2015, 1724 in 2017). In 2017, there were 182 metros around the world carrying 53,768m passengers. Ridership has grown steadily each year since 2013 (44,264m). End of November 2018 shows a 5.4% increase in global air passenger traffic year-on-year in July. American Airlines' revenue for the latest four quarters totalled $42,236m, which is down on the last three 4-quarter totals and RPMs are the highest the record at 205,258m. Norwegian's revenue for the last four quarters was 38,452m NOK – the first time it's been above 36,000m - and RPKs were 80,863m, the first time they've exceeded 80,000m. Finnair's revenue was a record €2797m and RPKs a record 34,324m, JetBlue's revenue was $7055m, the first time it's exceeded $7bn and RPMs are a record 49,798m. According to IATA's APMA for October 2018, annual growth in industry-wide RPKs recovered to 6.3% in October, having slowed to an eight-month low of 5.5% in September. 'Young people' between the ages of 17 and 29 showed a trend of reduced driving licence holding. Maersk Line, the world's largest container shipping company, which carries 20% of the world's seaborne container traffic, has pledged to reduce its net carbon emissions to zero by 2050 without buying carbon offsets. We have Letter to the Editor, Letter from the Editor 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-16-Jan	TfL	Vans and Urban Freight: Drivers of Demand, Impacts of this Traffic and Future Innovations in Last Mile Delivery

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

Statistics Digest

STATISTICS DIGEST January 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	
4 Dec	Rail factsheets: 2018
https://www.gov.uk/government/statistics/rail-factsheet-2018	
6 Dec	Transport Statistics Great Britain: 2018
https://www.gov.uk/government/statistics/transport-statistics-great-britain-2018	
12 Dec	Seafarers in the UK Shipping Industry: 2018
https://www.gov.uk/government/statistics/seafarers-in-the-uk-shipping-industry-2018	
13 Dec	Provisional road traffic estimates, Great Britain: October 2017 to September 2018
https://www.gov.uk/government/statistics/provisional-road-traffic-estimates-great-britain-october-2017-to-september-2018	
13 Dec	Travel time measures for the Strategic Road Network and local 'A' roads: October 2017 to September 2018
https://www.gov.uk/government/statistics/travel-time-measures-for-the-strategic-road-network-and-local-a-roads-october-2017-to-september-2018	
13 Dec	Electric Chargepoint Analysis 2017: Local Authority Rapids (revised)
https://www.gov.uk/government/statistics/electric-chargepoint-analysis-2017-local-authority-rapids	
13 Dec	Electric Chargepoint Analysis 2017: Public Sector Fasts
https://www.gov.uk/government/statistics/electric-chargepoint-analysis-2017-public-sector-fasts	
13 Dec	Electric Chargepoint Analysis 2017: Domestics
https://www.gov.uk/government/statistics/electric-chargepoint-analysis-2017-domestics	

Forthcoming releases from Department for Transport	
24 Jan	Road freight statistics: July 2017 to June 2018
https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics	
Jan 2019	Road conditions in England: 2018
https://www.gov.uk/government/collections/road-network-size-and-condition	
Jan 2019	Annual bus statistics: year ending, March 2018
https://www.gov.uk/government/collections/bus-statistics	
Jan 2019	Concessionary travel statistics: year ending, March 2018
https://www.gov.uk/government/collections/bus-statistics	
Jan 2019	National Travel Survey factsheet
https://www.gov.uk/government/collections/national-travel-survey-statistics	
14 Feb	Road goods vehicles travelling to Europe: January to December 2018
https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics	
Feb 2019	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	
Feb 2019	Renewable Transport Fuel Obligation: Year 11 (2018 to 2019) report 2 (15 April 2018 to 14 April 2019 supply)
https://www.gov.uk/government/collections/biofuels-statistics	
Feb 2019	Reported Road Casualties in Great Britain, estimates involving illegal alcohol levels: 2017
https://www.gov.uk/government/collections/road-accidents-and-safety-statistics	
Feb 2019	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	
Feb 2019	Sea passenger statistics 2018: Short sea routes (provisional)
https://www.gov.uk/government/collections/maritime-and-shipping-statistics	

Releases from Office of Road and Rail	
4 December	Rail Statistics Compendium Great Britain 2017-18 Annual
http://orr.gov.uk/statistics/published-stats/statistical-releases	
11 December	Estimates of Station Usage - Official Statistics 2017-18
http://orr.gov.uk/statistics/published-stats/statistical-releases	

FoForthcoming release from Office of Road and Rail	
Feb 2019	Regional Rail Usage
http://orr.gov.uk/statistics/publication-dates	

Recent release from Office for National Statistics	
3 December	Household projections for England - household type projections: 2016-based
https://www.ons.gov.uk/releases/householdprojectionsforenglandhouseholdtypeprojections2016based	

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

Members' Forum

Greetings from TSUG Committee

Chairman and Members of TSUG Committee and Editors of TSUG Newsletter wish all Members of TSUG and Readers of TSUG Newsletter

Merry Christmas and Happy New Year 2019

Letter to the Editor

Thanks for the newsletter - the usual fascinating miscellany!

You ask for suggestions as to why the aggregate number of trespasser and level crossing fatalities in the USA exceeded the reported total of people killed on the rail network last year. The source of these data (the National Transportation Safety Board) could no doubt assist, but prima facie it is possible for a victim to be placed in both categories, if they were deemed to be trespassing at a crossing (i.e. venturing onto the track when the crossing was closed to road or path users).

Such double counting is not unknown in Britain. In some recent years the largest category of fatalities suffered by rail employees has been those killed in road accidents while travelling in the course of work. They are classified as road casualties, because these deaths occur on the highway network. But they also appear in rail safety statistics, because the victims are employees engaged on railway business.

Oh ... and there's another one-change routeing option from Kings Cross St Pancras to Waterloo: Circle line to Embankment and then by Southeastern from Charing Cross to Waterloo East (though it might be quicker, and possibly healthier, just to walk across Hungerford Bridge).

Regards
John Cartledge

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

General News

Passenger Mode Share to Airports

TfL Rail Class 360 at Paddington

Two sets of data have been published recently – by the DfT in TSGB, and by the CAA in its Passenger Survey Report for 2017.

There are intriguing differences between the two, which we are following up and will report on in due course.

Oddities include disparities between the private car figures (not wholly accounted for by a possible classification of hire car as taxi in one set) and the rail and tube figures at Heathrow (possibly by one authority recording Heathrow Connect/TfL Rail as rail and the other as tube).

Meanwhile, be aware of the differences if you are using these data!

Transport in Mongolia

From montsame.gov.mn

In the first 11 months of 2018, 23.4 million tonnes of freight and 2.4 million passengers were carried by rail. The volume of freight increased by 2.8 million tonnes (13.5%), and the number of passengers decreased by 3.2% or 78,200. In November 2018, 2.3 million tonnes of freight and 194.4 thousand passengers were carried by rail. Freight volume decreased by 136.4 thousand tonnes (5.7%), and the number of passengers decreased by 21.2 thousand (9.9%) compared to the previous month.

In the first 11 months of 2018, 39.7% of the total rail freight was domestic, 36.0% was export, 11.1% was import and 13.2% was transit. Export and import freights increased by 1.0 points and 0.9 points, while domestic freight and transit freight decreased by 1.7 points and 0.3 points from the same period of the previous year respectively.

In the first 11 months of 2018, the revenue from railway transport reached MNT 561.2 billion, up MNT 80.6 billion (16.8%) compared to the same period of previous year. (There are around 3300 tughrik to the pound).
In the first 11 months of 2018, 2.9 thousand tonnes of freight and 867.5 thousand passengers were carried by air. The freight volume increased by 73.8 tonnes (2.6%) and the number of passengers increased by 97.6 thousand (12.7%) compared to the same period of previous year. In November 2018, 240.5 tonnes of freight and 71.1 thousand people travelled by air. Freight volume decreased by 63.4 tonnes (20.9%), and the number of passengers decreased 7.2 by thousand (9.2%) from the previous month.

In the first 11 months of 2018, the total number of domestic air passengers reached 325.5 thousand (37.5%) showing a rise of 36.6 thousand passengers (12.7%) from the same period of previous year. The number of international passengers reached 542.0 thousand (62.5%), an increase of 61.0 thousand passengers (12.7%) compared with the same period of previous year.

The revenue from air transport reached MNT 395.9 billion. It increased by MNT 37.9 billion (10.6%) compared to the same period of previous year. In November 2018, revenue from air transport reached MNT 24.0 billion, down MNT 2.1 billion (8.0%) compared to the previous month.

TSGB 2018

The 2018 issue of Transport Statistics Great Britain was published recently. I have just looked at some of the tables, and the 30 page report summary which highlights the main points.

2017 saw 808 bn passenger kilometres – the highest volume ever recorded. 83% were by car, van or taxi. There were 8.3bn passenger journeys by rail and 4.9bn by local bus – 62% down on 1950.

Usual mode of travel to work was car/van 68%, rail 11%, walk 10%, bus 7% and other 5%.
Of the 72.8m visits abroad by UK residents 85% were by air, 9% by sea and 6% by Channel Tunnel.

There were 2.2m air transport movements (ATMs), 2% more than in 2016 but 5% less than the 2007 peak. There were 284m terminal passengers (starting or ending their journey in the UK) – 6% up on 2016. 60% of passengers, 50% of ATMs and 78% of freight (presumably by value) came through the five main London airports – Gatwick, Heathrow, Luton, Stansted and London City.

The transport sector was responsible for 27% of UK greenhouse gas emissions, followed by energy (26%), business (17%) and residential (15%). Looking at absolute volumes of emissions (in million tonnes of CO_2e) in 2016, 70 came from passenger cars, 34 from international aviation (twice the 1990 level), 20 from HGVs, 19 from vans, 9 from international shipping, 6 from domestic shipping, 3 from buses, 2 from rail and 1 from domestic aviation.

I looked at the table TSGB0306 for a more accurate presentation of the last few figures: buses are responsible for 3.46m, rail 2.02m, and domestic aviation 1.47m. Dividing tonnes of CO2e by passenger kilometres to get emissions/passenger kilometre (and converting to grammes) comes out at 163 for domestic aviation, 104 for car, 91 for bus and 25 for rail.
Of the 1793 road user fatalities, 787 (44%) were car drivers or passengers, 470 (26%) pedestrians, 349 (19%) motorcyclists, 101 (6%) pedal cyclists and 86 (5%) other. Of the 298 fatalities in the rail system, 84% were suicides, 12% trespassers, 2% at level crossings and 2% other.

Finally, page 29 describes an interesting organisation – the Transport Statistics User Group!

Rail

DC Streetcar Reaches 3m Passengers

From Metro Magazine

Washington DC's District Department of Transportation (DDOT) announced that the DC Streetcar has served three million passengers since opening in February 2016.

As the DC Streetcar nears the third anniversary of passenger service along the H/Benning corridor, plans to expand the 4km system continue to move forward.

DC Streetcar at its Union Station Terminus

Expansion of the DC Streetcar system is currently in the planning and design stages. The route of Washington DC's only tram runs eastwards along H Street from a point north of Union Station.

High Speed Rail Statistics

Shanghai Hongqiao Station
CRH380B High Speed Train

Figures quoted by the UIC earlier this year (2018) show that 14 countries have high speed railways and the network has expanded by 20% since 2015 to 42,000km today (presumably end 2017). Of this, 26,869km is in China. 15,115km of high speed rail is under construction, including 10,738km in China: 4000km is due to open by the end of 2018.

High speed passenger traffic has increased from 248.2bn passenger kilometres in 2010 to 715.7bn in 2016: in China the increase has been from 46.3bn to 461.1bn.
RENFE says that 34% of Spanish high speed traffic is new to rail. On the lines from Madrid to Seville, Malaga and Valencia, rail now has 80% of the rail + air market: between Madrid and Barcelona rail has 60%.

On the Milan – Rome line, capacity has increased from 2m train km in 2009 to 33m in 2017 (provided by two operators). Over the same period, traffic has increased from 25m to 40m passengers. 41% of the traffic has switched from car and plane, 13% from conventional rail and 46% is induced demand.

Translink Record

From Progressive Railroading

Skytrain at Edmonds Station

TransLink recorded nearly 40 million public transit boardings last month in metro Vancouver, British Columbia, breaking the October record it set several years ago and establishing a new monthly high. Officially, there were 39.6 million boardings recorded by TransLink's SkyTrain, West Coast Express commuter-rail, bus, SeaBus and HandyDART systems, up 9.3% compared with October 2017's total.

While ridership has been growing every month, Translink has only now surpassed the previous stand-alone record of 39.2 million boardings in February 2010, when Vancouver welcomed the world for the Winter Olympics.

On the commuter rail service West Coast Express, boardings were up 12.6% year over year to 240,000, the highest monthly total since October 2014. On the SkyTrain subway system, the Expo/Millennium Line saw boardings up by 7.7% to 10.04 million — surpassing 10 million for the first time — while on Canada Line, boardings rose 7% to 4.26 million.

Ridership growth continues to be driven by high gas prices, high employment and increases to transit services.

The region's transit ridership has hit record levels over the past two years. In 2017, ridership exceeded 407 million boardings, a 5.7% year-over-year increase and the largest growth of any major Canadian or U.S. city.

UIC Safety Report 2018

This report, subtitled "Significant accidents 2017 public report" was published by the UIC in October. It now covers 25 networks, including (for the first time) TCDD (Turkey), RAI (Iran) and CIE (Ireland).

A significant accident involves at least one rail vehicle in motion, resulting in at least one person killed or seriously injured, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. It excludes accidents in workshops, warehouses and depots.

Significant accident numbers (at 1785) were much the same as in the two previous years (1780 and 1846): the decline seen over the last decade appears to have levelled out

.

Fatalities over the last two years were as follows.

	2016	2017	Change
Individual falling from or hit by train	732	666	-66
Level crossing accidents	275	282	+7
Other accidents	91	24	-67
Total	1098	972	-126

The number of staff fatalities decreased from 106 in 2012 to 62 in 2015, but then climbed to 63 in 2016 and 77 in 2017.

2017 was the second lowest year since 2012 for accident victim numbers (2265 in 2012, 1660 in 2015, 1724 in 2017).

22.4% of all accidents were trains colliding with an obstruction: 16.4% were at a level crossing. 62.9% were individuals hit by trains: 8.2% were at level crossings. 50.7% of accidents were caused by trespassers, 16% by vehicles at level crossings.

Over 80% of accidents had external causes – third parties, weather and the environment. External causes are responsible for 88% of victims and 94% of fatalities. The number of accidents with external causes dropped by 15% between 2012 and 2017. 62% of accidents with external causes are caused by trespassers: 30% were at level crossings. The number of level crossing accidents decreased by 25% between 2012 and 2017. 64 accidents involved passenger victims: the lowest figure ever observed.

The number of significant accidents/million train-km has gone down from 0.52 in 2012 to 0.41 in 2017: the number of victims/million train-km went down from 0.54 to 0.39. Fatalities/million train-km went down from 0.27 to 0.22 over the same period.
7% of all accident victims were passengers. 95% of fatalities and 78% of serious injuries were among third parties. Half of all significant accidents resulted in fatalities.
In 2017, there were 10 passenger fatalities, 36 to staff and 926 to third parties. Of the passenger fatalities, 8 were caused by falling from a train. Most staff victims were hit by a train, in particular during shunting operations.

World Metro Figures 2018

Zhangjiang Station, Shanghai Metro Line 2

This statistics brief was published by UITP in September.

In 2017, there were 182 metros around the world carrying 53,768m passengers. Ridership has grown steadily each year since 2013 (44,264m).

In North America, Canada and the New York system (far and away the largest in North America) grew significantly, whilst other US metros showed declines.

About half of the total ridership (26,690m) is in the Asia-Pacific region, and about a fifth (10,747m) in Europe. The busiest systems are as follows.

Rank (by Ridership)	City	Annual Ridership (m)	Length (km)
1	Tokyo	3463	382
2	Moscow	2369	348
3	Shanghai	2044	639
4	Beijing	1988	590
5	Seoul	1885	466
6	New York City	1806	401
7	New Delhi	1789	220
8	Guangzhou	1730	371
9	Mexico City	1678	226
10	Hong Kong	1600	
	London		436
	Madrid		295
	Shenzhen		286

Five others exceed 200km – Singapore (265), Chongqing (260), Tehran (221), Paris (215) and Wuhan (204)

Eurasia (effectively most of the former Soviet Union) had the most trips/head/year, at 117: Europe was next at 95.

There were 30 new systems in the decade 2000-2009, and 44 in 2010-2019 – both numbers were records.

Total operational fleet was over 114,000 carriages. The length of fully automated metro lines (Grade of Automation 4 – no staff on board) exceeded 1000km for the first time.

Air

ACI Traffic Analysis

Data analysed and published by Airports Council International (ACI) World at the end of November shows a 5.4% increase in global passenger traffic year-on-year in July. ACI collects and analyses data from a significant sample of airports providing regular reports on passenger and freight statistics; this forms part of the world's most comprehensive source for airport data.

Year-to-date growth for the industry's passenger market reached 6.4% during the period, down from 6.6% in June. Year-to-date growth for the global industry reached 4.5% during the period, from 4.8% at the end of the second quarter of this year.

Passenger traffic grew, with the international market reaching 5.8% and domestic, 5.1%. Year-to-date figures stood at 7% and 5.8% respectively by the end of July. The major markets of Asia-Pacific, Europe and North America all recorded comparable figures for total passenger traffic during the period, increasing by 5.9%, 5.1% and 5% respectively.

North America's performance remained robust given its mature market status. The region's slight slow-down was driven almost entirely by its international passenger market, which dropped from a 7.3% growth figure in June to 4% in July. The Middle

East's passenger market, seemingly heading for an annual decline up to June, has been picking up speed since then. The region posted a 6.9% increase in July, after a surprisingly high 8.5% one month prior. The two strong months boosted its year-to-date growth to 1.7% by the end of the month, from -0.8% in May. Finally, Latin America's momentum recovered in July with growth of 4.8% year-on-year, after a fairly slow month of June (2.7%).

International freight has continued its slow-down to 3.9% growth year-to-date, from 4.4% in June. At the same time, domestic freight performed relatively well during the period, gaining 7% year-on-year and increasing its year-to-date figure to 5.8%. This partially balanced the slow-down in international trade, but in the long-run could not fully offset the economic impacts of a declining international freight market, which represents roughly twice the size of the domestic segment. Of the three major regional markets, North America's total freight volumes fared the best in July (4.1%), followed by Europe (2.9%) and Asia-Pacific (2.5%). Year-to-date figures for all three markets have been slowly decreasing since Q1. North America stood at 5.4% at the end of the period, with Asia-Pacific reaching 4.1% and Europe 3.5%.

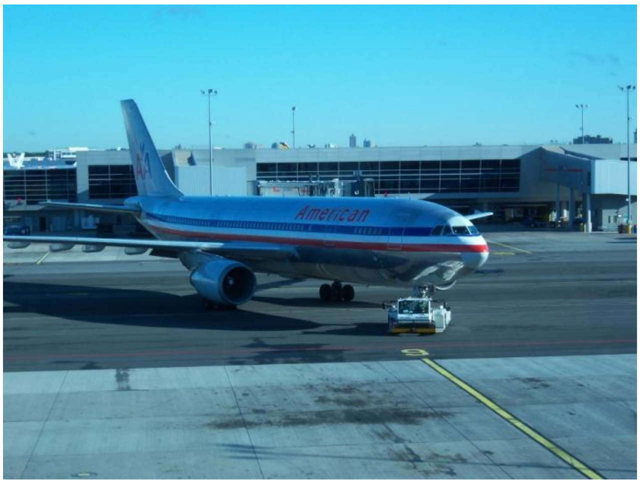
After a sharp drop to 1.7% growth in June, North America recorded a 4.1% increase in July. As could be expected given the current state of international trade relations, the entire upswing was driven by growth in domestic freight, which increased by 7.7% during the month year-on-year.

International freight, on the other hand, declined by 1%. Turkey's recovering market (+12.9%) and Belgium's cargo industry (+14.6%) remained the main drivers of Europe's growth in July, while other major markets sustained subdued or even negative growth year-to-date. In line with its passenger traffic, the Middle East's freight market rebounded in July, after a decline of 1.2% in June. Year-on-year growth reached 3.2%, keeping the region's year-to-date figure above the zero percent mark, at 0.7%. It had reached 0.2% in June. As has been the case since the start of the year, the region's outlook remained uncertain by the end of July.

Recent Airline Statistics

In these articles, I look at key data for major airlines, and to smooth out the seasonal effects, add together the figures for the latest four quarters

.



American Airlines Aircraft at New York JFK

American Airlines reported Q3, 2018 data which could politely be called mixed.

Revenue for the latest four quarters totalled $42,236m. This is down on the last three 4-quarter totals, but up on those I record before: in the year to Q4, 2015 when my series starts, it was $29,037m and only topped $40,000m a year later.

Revenue passenger miles are the

highest I record at 205,258m, but they have been at that kind of level since the start of the series. Available seat miles are also a record high at 247,850m – the first year in which they have topped 247,000m. Passenger numbers are the highest I record, but only just – 147,682,000 compared with 147,410,000 in the four quarters to Q1, 2016.

Revenue/passenger grew steadily from $198 at the start of the series to $294 in the four quarters to Q1, 2018, but has since dropped back to $286. Revenue/passenger mile shows the same trend – from $0.146 up to $0.212, then down to $0.206. Finally, average length of journey has bumped along in the high 1300s – 1359 at the start, 1391 in Q3, 2017 and 1390 now.

Norwegian continues its growth, with almost every figure showing an increase to a record.

Revenue for the last four quarters was 38,452m NOK – the first time it's been above 36,000m. Revenue passenger kilometres (RPKs) were 80,863m, the first time they've exceeded 80,000m and a contrast to the 42,284m when my series started in the year to Q4, 2015. Available seat kilometres (ASKs) were above 90,000m for the first time, at 92,866m.

They carried a record 36.38m passengers, with an average fare above 1000 NOK for the first time at 1057 (the Norwegian kronor is worth around 10p). Revenue/passenger km is the only figure not stratospheric: at 0.4755 NOK it was above that for the previous four quarters (0.4692) but below earlier figures – 0.5319 at the start of the series. Finally, average journey length (propelled by the airline's ventures into long haul low cost) was a record 2223 km: it was 1642 in the year to Q4, 2015.

Finnair has shown a similar trend.

Revenue was a record €2797m, RPKs a record 34,324m, ASKs a record 41,520m and passenger numbers a record 13,082,000 (10,293,000 in the year to Q4, 2015).

Revenue/passenger was low at €214, although it has never been above €220 or below €210. Revenue/passenger-km was a record low of €0.0815. Average passenger journey length is down on the previous 4-quarter total - 2624 compared with 2628 – but that 2628 was the highest recorded.

JetBlue also reported record numbers. Revenue was $7055m, the first time it's exceeded $7bn. Revenue passenger miles are a record 49,798m: available seat miles are also at a record 58,590m. Passenger numbers at 41,641,000 are above 41m for the first time.
Revenue/passenger is a record $169: revenue/passenger mile is just at a record of $0.1417. At the start of my series it was $0.1413, but it dropped to $0.13001 in Q1, 2017. Average journey length is also just at a record – 1195.889 miles, compared with 1195.494 in the year to Q2, 2016. It was 1178.82 in the year to Q3, 2017.

Recent IATA Statistics

In early December, IATA published its Air Passenger Market Analysis for October. Key points were as follows.

Annual growth in industry-wide revenue passenger kilometres (RPKs) recovered to 6.3% in October, having slowed to an eight-month low of 5.5% in September. However, the upward traffic trend has slowed over the past six months.

The industry-wide load factor was broadly unchanged in annual terms in October, at a record high for the month (81.1%). Nonetheless, passenger capacity is now currently trending upwards slightly faster than demand.

European airlines posted the fastest international RPK growth rate for the first time since June 2017.

Some recovery had been expected in the annual RPK growth rate in October following the temporary weather-related disruption that affected the September data. This included Typhoon Jebi in Japan, which caused the complete closure of Kansai airport for a number of days.

While the bounceback in year-on-year growth in October was bigger than can be explained just by the weather impacts alone, the bigger picture is that the rate has only recovered to where it stood in August.

In any case, the key point is that the seasonally adjusted upward trend in RPKs has moderated in recent months. Passenger volumes have risen at around a 6% annualized pace over the past six months – down from closer to 9% earlier in the year.

Road

Young People's Travel – What's Changed and Why?

This report by Chatterjee and colleagues was published by the UWE and University of Oxford in January 2018.

'Young people' were defined as being between 17 and 29.

A trend of reduced driving licence holding can be traced back to the early 1990s. Peak licence holding for 17-20 year old men was in 1992/94 at 55%: it fell to 29% by 2004 and rose to 41% by 2007 before falling to 34% by 2014. For women, the decline was from 42% in 1992/94 to 25% in 2014.

The table below shows changes between 1995-1999 and 2000-2004.

There was a substantial reduction in the proportion of young adults able to drive a household car. In 1995-1999, 46% of 17-20 year olds had a licence and a car in their household: this dropped to 33% in 2010-2014. For the 21-24 year old cohort, the figures were 63% to 51%: for the 25-29 year old population, 71% to 60%. Over the same time, there was a decrease from 33% to 23% of 17-20 year olds who reported driving a car in the previous week,

Age group	17-20		21-24		25-29	
	1995-1999	2010-2014	1995-1999	2010-2014	1995-1999	2010-2014
Licence and car in household	46%	33%	63%	51%	71%	60%
Drove car in previous week	33%	23%	44%	36%	54%	47%

Generally, there has been a drop in the number of trips made, especially among young adults (26% between 1995-99 and 2010-14). Car driver trips fell by 36% over the same period. Walking trips have decreased substantially (from 312 in 1995/7 to 213 in 2101, among those aged 21-29).

Two pieces of research were published in 2005 drawing attention to the decline in licence holding among young people in the UK. It was hypothesised that the causes included a more difficult driving test, the increased cost of learning to drive, young people choosing not to drive, they have less need to drive and some are driving but without a licence. The same trend was noted in the US, Norway, Sweden and large cities in Finland.

Young people asked in the National Travel Survey why they are not learning to drive cited costs (especially among lower income groups) and lack of need. Those learning to drive later in life tend to drive less than those of a similar age who learned earlier.

The percentage of workers aged 25-34 commuting by car decreased by 6.2 percentage points between 2001 and 2011 (56.1% - 49.9%): the proportion commuting by public transport increased by 9.4 percentage points (13.7% - 23.1%). Changes were larger in more densely populated areas, and much larger for those living in London.

Becoming employed, living with children and living in a multi-car household increase the likelihood of acquiring a licence. Moving to live with a partner also influences car driving. Taking up employment, forming relationships and having children have all occurred later among today's young people than in the past – an indication of a cause of lower licence holding.

However it is a multiplicity of trends which is likely to have led to the present situation, rather than one specific cause.

Sea

Maersk – Zero Carbon by 2015

From the Financial Times

Maersk Line is the world's largest container shipping company: it carries 20% of the world's seaborne container traffic. It has pledged to reduce its net carbon emissions to zero by 2050 without buying carbon offsets.

This is a big step – the shipping industry is a major polluter, and carries about 80% of global trade by weight. It currently uses bunker fuel, a cheap but dirty residue from refining crude oil which is more polluting than diesel or petrol. This contributes 3% of the world's emissions. Bunker fuel with high levels of sulphur is to be phased out in 2020.

Maersk is responsible for 36m tonnes of CO_2, with its container ships responsible for 98% of that. The amount of emissions has been stable for a decade, despite a major growth in trade.

Maersk wants to re-think how containers are moved and to get the industry to come up with carbon-free ships by 2050.