

TSUG

Transport Statistics Users Group

Monthly Review: March 2018

This month's review has shown that Transit ridership – in the US generally, in California and in the SCAG region – had increased since 2000, but had declined since 2007. The number of international visitors to the US fell by 4% in the first seven months of 2017. Italo-NTV achieved a 24.8% jump in operating revenue in 2017. Metro Transit's annual ridership exceeded 81.9 million. 58% of frequent rail users believe that rail travel is quicker than most other forms of transport, but only 25% of non-users do. In the year 2016-17, the cost of running the UK railway was £19.5bn, 2.7% up on the previous year. China's urban rail track length exceeded 5000km at the end of 2017, IATA's 'Airlines International' showed that between 2012 and 2016, on average 3000 new routes were started by airlines and 2500 routes were closed. The highest number of Electric Car sales in 2017 is 600,000 is in China. According to DfT, there were 37.99m vehicles registered in Great Britain in Q3, 2017 – 1.7% up from the previous quarter. In 2016, 1.99 million tourists arrived at Japanese ports by cruise ship, up 78.5% from the previous year. The Port of Savannah handled more than 4 million TEUs in 2017, an 11% increase and the port's highest annual volume ever. Please note the Correction and Apology. Also we have got Kit Mitchell's Statistics Digest

Dr Shanta Bir Singh Tuladhar and Andrew Sharp

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Dates of the next TSUG seminars

Date	Venue	Topic
Wed-21-Mar	TfL	EU Wide Comparative Statistics
Wed-11-Apr	TfL	Trade Data: International Sea and Air Links, and Connections with Domestic Flows
Wed-16-May	TfL	Transport Staffing: Supply, Demand and Changing Labour Market
Wed-20-Jun	TfL	Low Cost Airlines
Wed-11-Jul	TfL	Transport Appraisal

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

Statistics Digest

STATISTICS DIGEST March 2018

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	
1 February	Renewable Transport Fuel Obligation: Year 9 (2016 to 2017) report 6 https://www.gov.uk/government/statistics/biofuel-statistics-year-9-2016-to-2017-report-6
1 February	Renewable Transport Fuel Obligation: Year 10 (2017 to 2018) report 2 https://www.gov.uk/government/statistics/biofuel-statistics-year-10-2017-to-2018-report-2
8 Feb 2018	Reported Road Casualties in Great Britain, provisional estimates for accidents involving illegal alcohol levels: 2016 https://www.gov.uk/government/statistics/reported-road-casualties-in-great-britain-estimates-involving-illegal-alcohol-levels-2016
15 February	Blue badge scheme statistics: 2017 https://www.gov.uk/government/statistics/blue-badge-scheme-statistics-2017
21 February	Sea passenger statistics 2017: Short sea routes (provisional) https://www.gov.uk/government/statistics/sea-passenger-statistics-2017-short-sea-routes-provisional
28 February	Travel time measures for the Strategic Road Network and local 'A' roads: January 2017 to December 2017 https://www.gov.uk/government/collections/road-congestion-and-reliability-statistics

Forthcoming releases from Department for Transport

22 March	Road freight statistics: July 2016 to June 2017 https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics
28	Shipping fleet statistics: 2017

March		https://www.gov.uk/government/collections/maritime-and-shipping-statistics
March	National Travel Survey factsheet	https://www.gov.uk/government/collections/national-travel-survey-statistics
April	Road traffic estimates in Great Britain: 2017	https://www.gov.uk/government/collections/road-traffic-statistics
April	Road lengths in Great Britain: 2017	https://www.gov.uk/government/collections/road-network-size-and-condition
April	Journey time statistics	https://www.gov.uk/government/collections/journey-time-statistics
April	Road freight statistics: October 2016 to September 2017	https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics
3 May	Renewable Transport Fuel Obligation: Year 10 (2017 to 2018) report 3 (15 April 2017 to 14 April 2018 supply)	https://www.gov.uk/government/collections/biofuels-statistics
May	Travel time measures for the Strategic Road Network and local 'A' roads: April 2017 to March 2018	https://www.gov.uk/government/collections/road-congestion-and-reliability-statistics
May	Provisional road traffic estimates, Great Britain: April 2017 to March 2018	https://www.gov.uk/government/collections/road-traffic-statistics
May	Seafarer statistics 2017	https://www.gov.uk/government/collections/maritime-and-shipping-statistics

Release from Office for National Statistics

31 January Low Carbon and Renewable Energy Survey, 2016

<https://www.ons.gov.uk/releases/lowcarbonandrenewableenergysurvey2016>

Seminar Write-up

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

Seminar on 21st February 2018

The topic of the seminar was **Strategic Transport Plan for the Northern Powerhouse**. The speaker was Tim Foster, Head of Economic Advice at Transport for the North. Tim covered the following issues: The Northern Powerhouse – what it is, what it means and why improving connectivity across the North is central to improving economic performance, raising productivity and re-balancing the UK economy; The role of Transport for the North as the first sub-national transport body, and its work to define the long term transport investment plans for the next 30 years, including plans for Northern Powerhouse Rail; and The evidence, models and data being developed to ensure that TfN and its partners are able to make a robust and coherent case for investment, bringing together economic analysis, travel demand modelling, insight, transport and appraisal. This was followed by a panel discussion which discussed issues around the Northern Powerhouse and compared and contrasted transport patterns in the north of England with London and similar regions overseas such as the Randstad.

General News

Correction and Apology

In the last issue (February 2018), we incorrectly reported the yield in articles on airline statistics.

The figure we published was the revenue/passenger, and not the revenue/passenger-km (the correct definition of yield).

Our apologies.

Capital Expenditure on Transport

At the end of last year, the UK's National Infrastructure Commission produced a consultation report entitled "Congestion, capacity, carbon: priorities for national infrastructure".

On page 183 they summarise capital expenditure on transport (in £m).

	2012/3	2013/4	2014/5	2015/6	2016/7
National roads	1020	1370	1890	1950	2090
Local roads	2370	2680	3330	3450	3450
Local public transport	290	200	220	250	240
Railways	7950	9830	9510	10220	10820
Other transport	100	280	380	690	1090
Total transport	11720	14370	15330	16560	17700

Trans-European Network – Transport (TEN-T) Coordinators' Report

The seven high-level coordinators of the TEN-T Corridors have run a series of TEN-T days. The report of the one held in 2016, "TEN-T Corridors: forerunners of a forward-looking European transport system" contained notes from each coordinator, each one with a list of recommendations.

The first report was on "Enabling multi-modality and efficient freight logistics" and the first recommendation concerned transport statistics.

"In spite of an existing and evolving framework for modal transport statistics, there is a need for more national and cross-border multimodal transport statistics (per modal combinations, loading units and transshipment terminals, volumes, performance, lengths, costs, origin/destination etc.)

The second report was on "Boosting new technologies and innovation" and noted **that the Rapid Charge Network Project, co-financed by TEN-T funds, deployed 74 rapid charging points for electric vehicles in 64 locations along the TEN-T route in the UK (Stranraer and Holyhead to Hull and Felixtowe - see www.rapidchargenetwork.com).**

TNC Use

From Metro Magazine

A new study by the Shared-Use Mobility Center (SUMC) for the Transit Cooperative Research Program (TCRP) finds that peak use of transportation network companies (TNCs) like Uber and Lyft comes on weekends and evenings, not during rush hours

when public transit use is highest. SUMC's findings were based on one of the first uses of origin-destination trip data provided by a major TNC. This finding was presented in TCRP Report 195, "Broadening Understanding of the Interplay between Public Transit, Shared Mobility, and Personal Automobiles."

"Public transit is the backbone of any urban transportation system," said Sharon Feigon, SUMC's executive director. "Having this data and doing this study gave us a lot of new insights. In a congested environment, generally nothing is more efficient at moving lots of people than public transit. But we can see where TNCs fit into the gaps where the transit systems don't work as well. People want flexibility and frequency and services like Uber and Lyft are filling in the gaps. We want to create an ecosystem of choices to create a multimodal system that can work for all."

The study synthesized origin-destination data for TNC trips for five U.S. metro areas; a 10,000-person survey of transit and shared-mobility users conducted by SUMC; and rider surveys supplied by four large public transit agencies.

Other key findings included:

- **There is no clear relationship between the level of rush-hour TNC use and longer-term changes in public transit usage.** The study looked at TNC trip data from Seattle, Nashville, Los Angeles, Chicago, and Washington DC, as well as similar modelled data from San Francisco. From 2010 to 2016 transit ridership declined during rush hour in some of the study areas and increased in others. The data showed that in some of these regions TNC use was high during rush hours and in others it was low. But there was no relationship between the changes in transit ridership and the levels of TNC usage during rush hour.
- **TNC usage takes place in communities of all income levels.** The TNC trip data shows that individual TNC trips were widespread across each of the study regions, suggesting that TNCs are used to some degree by people in communities across the socioeconomic spectrum. While urban core areas had the highest volume, TNC trips started and ended in nearly every part of the central counties of the study regions.
- **Most TNC trips in the study regions are short and concentrated in downtown core neighbourhoods or to and from airports.** Peak-hour TNC usage was concentrated primarily in urban cores, along relatively short, contiguous corridors between dense neighbourhoods — often taking place within a single zip code. The only notable exceptions were airports, which were the highest non-core areas of TNC activity in most of the study regions.

SUMC's researchers also found a correlation between frequent TNC usage and lower rates of car ownership among many of those surveyed. A small net attrition in vehicle ownership was found that outstripped any car purchases spurred by people aspiring to become drivers for ride-hailing services.

"While we're still in the infancy of the changes that TNCs have unleashed, the data we analyzed suggest that transit remains resilient during times of day when it provides core services and moves the greatest number of people most efficiently," said Colin Murphy, director of research and consulting at SUMC. "Although we're seeing some reductions in total transit usage that is probably attributable to a shift to ride-hailing, use of TNCs still mostly takes place during off-peak hours. Rail and bus service remain central to the commutes of most urban dwellers who aren't driving alone, and TNCs don't appear to be changing that big picture in the cities we looked at."

The study expands upon research SUMC conducted and TRB published in 2016 that found that TNCs have a complementary relationship to transit, attracting their highest volume of users during hours when urban bus and light rail service is most infrequent. (TCRP Report 188, Shared Mobility and the Transformation of Public Transit.)

As cities and public transit administrators acclimate to the changing travel habits spurred by TNCs, the report's authors offered the following guidance, tailored to cities of different sizes:

- Transit agencies in large urban areas should continue to prioritize rail, bus rapid transit, bus-only lanes, and other transit-centered approaches that move large numbers of people efficiently and effectively. Recommendations for transit agencies seeking to coordinate with TNCs include designating curbside space or other specific locations for TNC pick up/drop offs to minimize conflict near transit stops or stations, and pursuing cost savings through public-private partnerships on late night, call-and-ride, and paratransit services.
- Transit agencies in mid-sized urban areas may want to explore first/last mile partnership opportunities with TNCs to help attract new riders and increase the accessibility of public transit in lower-density areas. They may also be able to find ways to work with both TNCs and large employers on behaviour change efforts to encourage residents to leave cars at home and make alternative transportation choices. Components of such efforts can include carpooling/guaranteed ride home programs, parking policy changes and other transportation demand management strategies.
- Transit agencies in smaller urban areas often have challenges beyond the fare box when it comes to providing frequent and full coverage of their service areas, and thus may be interested in partnering with TNCs to provide alternatives to unproductive routes or provide service across greater time spans or geographic areas. These efforts should focus on allowing transit agencies to concentrate their resources on key routes while also bringing new riders to transit through explicit linkages to service gaps in time or geography, such as late nights, weekends, and unserved areas.

“While the evidence in this study suggests that the demand for peak-time transit capacity is stable, this is not cause for complacency,” Feigon said. “Transit systems will need to adapt and evolve along with TNCs, and look at what TNCs are doing right that makes them so attractive to customers.”

Transit Ridership Trends in the SCAG

This research was done for the Southern California Association of Governments (SCAG) by the University College of Los Angeles (UCLA).

Transit ridership – in the US, in California and in the SCAG region – had increased since 2000, but had declined since 2007 (and declined a lot since 2014).

A few people make most of the trips: a few neighbourhoods generate most of the trips. 2% of residents make around 45 trips/month, 20% ride occasionally (12 trips/month) and 78% very little or not at all.

Average fare/mile travelled has remained constant since 2002.

Most TNC users are not core transit users: most TNC trips are not core transit trips.

In the 1990s, there were 1.8m new residents and 456,000 new household vehicles – 0.25 vehicles/new resident. Between 2000 and 2015, there were 2.3 new residents and 2.1m new vehicles – 0.95 vehicles/new resident.

Predictors of transit use are having no driving licence, Afro-American, zero vehicles in household, and recent immigrant.

Increased vehicle access has had a big impact on transit use. There are fewer heavy-use transit-dependent people: there are more choice riders with access to a car.

Travel to the US down

From Travelandtourworld

The number of international visitors to the US fell by 4% in the first seven months of 2017 – a fall blamed on President Trump.

The trend occurred across all regions, with Africa and the Middle East reporting some of the most dramatic declines. The drop in the tourism in the US is in contrast to the rising global tourism trend.

Some have dubbed the fall in the US a “Trump slump”, pointing to the president’s America First rhetoric and anti-immigrant comments, as well as tighter visa rules for some countries and other restrictions. The general perception is probably that the people think it is too much trouble to visit the US.

International travel to the US peaked in 2015 at 77.5 million visitors. In 2016, the number of travellers fell about 2%, a fall which then accelerated in the first seven months of 2017 (<http://tinet.ita.doc.gov/view/m-2017-l-001/index.asp>). Visitors from Canada – typically the source of the greatest number of foreign travellers – increased by 4.6% year-on-year to July, but visits from the next two major tourist markets – Mexico and the UK – slipped in the period. Travellers from China accounted for the fifth highest number of visitors but also saw a fall.

David Tarsh, a spokesman for ForwardKeys, a Spain-based company that analyses travel patterns, said that the weaker pound is probably dissuading visitors. However, speaking broadly, the dollar’s value has fallen sharply this year, making it cheaper for most foreigners to travel in the US than it was in 2016. The firm also expects that the long-haul bookings to the US to continue to lag the rest of the world in 2018.

The United Nations reported recently that the international tourist arrivals increased by 7% last year. In the report, Spain is on track to replace the US as the number two travel destination, after France. Between 2015 and 2017, just two of the top 12 global destinations – the US and Turkey – experienced declines in long-haul travel, according to the Visit US coalition, a collection of travel industry groups which is drawing attention to the fall.

Rail

Chinese Metros

There is a useful spreadsheet on Chinese metros at <https://docs.google.com/spreadsheets/d/e/2PACX-1vTv1btJ-tfv4bcmeer4eDgdJn9lj0ssf5MsK8G41MzTY6YDEH7VoO3VvaFTap5B9->

[3JxPhJX1Xjufkr/pubhtml](https://www.3JxPhJX1Xjufkr/pubhtml). It shows, city by city, the length of each line and the date or dates it was opened.

Metro Line Colours of the World

Someone with nothing better to do has analysed the colour coding of 72 metro systems round the world - what they call and code the individual lines. This is on https://twitter.com/cblatts/status/956377188336635904?utm_source=citylab-daily&silverid=MzEwMTkyMzI5MTI4S0.

Red and blue are the most popular colours, followed by yellow, orange and green.

Wow.

Italo-NTV Growth

From International Railway Journal



Italy's open-access high-speed operator Italo-NTV achieved a 24.8% jump in operating revenue in 2017. Partly because of a 15.3% in traffic (from 11.1 million passengers in 2016 to 12.8 million last year), revenue grew from €364.4m to €454.9m.

Earnings before tax (EBT) increased by 13.3% from

Italo Train near Turin

€48m in 2016 to €54.4m last year. "EBT includes net financial expenses, including interest income and expense, of €58.1m in 2017, an increase of 303.4% compared with €14.4m in 2016, mainly due to one-off charges of €42.3m connected with the refinancing of our debt," Italo-NTV says. After-tax profit for 2017 was €33.8m compared with €32.7m in 2016

As a result, the Italo-NTV Board has proposed a dividend of €30m payable in July.

Revenue increased from €265m in 2014 to €311m in 2015.

Minneapolis – St Paul Transit Ridership

From Metro Transit



A record number of light rail and commuter rail rides were taken in 2017 as Metro Transit's annual ridership exceeded 81.9 million.

Metro Transit has provided more than 80 million rides in each of the past seven years, the highest ridership the agency has seen in three decades. Average weekday ridership in 2017 was 264,347.

On light rail, the 2017 ridership total

Metro Transit Train at the Mall of the Americas

includes a record 13.1 million rides on the [METRO Green Line](#), which has seen ridership grow every year since its 2014 opening and had its [highest single-day ridership ever](#) on August 31, 2017. Nearly 10.7 million rides were taken on the Blue Line, breaking the previous record set in 2015. Ridership on the Green Line increased about 3.5% compared to 2016, while [Blue Line](#) ridership increased nearly 4%.

Nearly 794,000 rides were provided on the [Northstar Commuter Rail Line](#), almost 12% up on 2016. Last year's Northstar ridership broke a record set in 2013.

Metro Transit provided more than 57.3 million bus rides in 2017. Total bus ridership declined about 2%. The decline mirrors a national trend attributed in part to low gas prices. Ridership losses were greatest during off-peak hours and on routes that were detoured away from Nicollet Mall during construction work.

Perceptions

From a report in Modern Railways about a presentation to the Railway Study Association

Non-users consistently have a 25% worse impression of rail than users. 58% of frequent rail users believe that rail travel is quicker than most other forms of transport, but only 25% of non-users do. 56% of regular users believe it is safe in personal security terms: only 30% of non-users do.

Where they come closest was in the belief that the media are overly negative in the way they portray the rail industry – 35% of users and 19% of non-users agreed. Increasing the number of rail journeys made by infrequent or non users is the best way to remove negative impressions.

UK Rail Industry Financial Information 2016-17



ORR published this report on 18 January: it summarises cash flows in the rail industry.

In the year 2016-17, the cost of running the railway was £19.5bn, 2.7% up on the previous year. About 59% of this was incurred by train operating companies (TOCs), 35% by Network Rail and 7% by freight, High Speed 1 and other components of the industry. Income from

Paddington Station Concourse

passenger fares was £9.7bn, up 1.1% on the previous year. Average fare was £5.48/journey or 14p/km travelled.

The government contributed £3.4bn, 0.7% down on the previous year; and lent Network Rail £6.1bn.

Franchised train operator costs of £12.6bn comprised staff costs (£2.9bn), rolling stock (£1.8bn), payments to DfT (£3.2bn) and Other (£4.7bn).

The increase in fare income was partly due to more journeys (+0.8% - to, the report says, £1.7bn!) and partly to higher fares (+0.4%). Average journey length increased 1.2% to 37.8km.

TOCs received £2.5bn from the government and paid £3.2bn to government. On average, government funding was £1.53/passenger journey in England, £6.08 in Scotland and £8.82 in Wales.

Schedule 8 compensation from Network Rail to TOCs increased by 73% to £0.2bn, reflecting poor operational performance especially on the Sussex route (see TSUG Review for December).

Over the past 5 years, fares income has increased by 18.2%, passenger journeys have increased by 18.4% and the average fare has gone down by 1p to £5.48. Net government funding has gone down by 21.1%.

GB franchised train operators expenditure went on staffing (23%, £2.9bn), fuel (3%, £0.4bn), rolling stock (14%, £1.8bn), payments to government (26%, £3.2bn), corporation tax (1%, £0.1bn) and other operating expenditure (33%, £4.1bn).

Urban rail in China in 2017

From International Railway Journal



Shenzhen Metro

China's urban rail track length exceeded 5000km at the end of 2017, according to statistics published by the China Urban Rail Transit Association.

Following a flurry of openings in the final week of the year, a total of 5021.7km of urban rail lines was operational in 34 cities on December 31.

Chinese cities opened 33 new lines totalling 868.9km in 2017, a 62.5% increase compared with 2016, when 534.8km of new lines were completed.

Cities opening their first metro lines in 2017 included Shijiazhuang, Zhuhai, Guiyang, and Xiamen.

Metro accounts for 77.3% of urban rail lines in China, with 3881.8km in operation at the end of 2017. There is also 476.8km of light rail and tramway (9.4% of the total), 98.5km of monorail (2%), and 58.8km of maglev lines (1.2%).

Air

Air Routes and Airports

An article in a recent issue of IATA's 'Airlines International' quoted some interesting research by Oxera published last year.

This shows that between 2012 and 2016, on average 3000 new routes were started by airlines and 2500 routes were closed. This tends to be a response to passenger demand rather than the impact of competition between airports. Most of the switching tends to be by point-to-point airlines (rather than by network carriers). Many changes involve start-up routes at smaller airports: switching is much less widespread at larger airports and on established routes, so route openings and closures are rare at European airports with over 40m passengers/year.

The same article cited research by Frontier Economics. This showed that for every 1% increase in distance to a different airport, the likelihood of passengers using it decreases on average by 4%. As the time to an alternative airport approaches 120 minutes, the probability of passengers using it approaches zero.

How much does an Airbus cost?

From businessstraveller.com



Airbus has published the average list prices for its range of passenger aircraft for 2018, which have been increased by 2% across the product line. They are in US\$m.

Air Transat A330 at Gatwick

A318	77.4
A319	92.3
A320	101.0
A319neo	101.5
A320neo	110.6
A321	118.3
A321neo	129.5
A330-200	238.5
A330-300	264.2
A330-800neo	259.9
A350-800	280.6
A330-900neo	296.4
A350-900	317.4
A350-1000	366.5
A380	445.6

Few airlines will pay the list price.

Queue Psychology

At Heathrow Terminal 5, passengers waiting to board short-haul BA flights have three aisles to wait in – Group 1, Groups 2 & 3 and Groups 4 & 5. Group 1 passengers are travelling in First or Business Class, with Executive Club Gold or OneWorld Emerald status. Group 2 is for slightly lower priority groups – OneWorld Sapphire or BA Silver status.

I noticed on a recent flight that the queues form differently in each aisle. Group 1 attracted the longest queue, then groups 4 & 5, and groups 2 & 3 had the shortest until they were actually called to join.

Curious – those in Group 1 would be very frequent fliers who ought to know that they would have to stand in that queue for quite a while before boarding – and who presumably had more overhead bin space than economy class passengers. I did wonder if some were bucking the system – waiting in that line regardless of the

boarding group on their ticket – but from the few boarding passes I managed to see this wasn't the case.

Curious passenger psychology.

Recent Airline Statistics



JetBlue reported Q4 figures recently.

Looking at moving annual total of the last four quarters, revenue (\$6.288bn) is the highest since I started keeping records in Q4, 2015. Revenue passenger miles (RPM) are above 47bn for the first time: in the 4 quarters to Q4, 2015 the figure was 41.7bn. The available seat miles – ASMs – figure (56bn) was also a record, and passenger numbers were above 40m for the first time

Southwest 737 at Washington Dulles

(having climbed from 35m at the start of the series). Revenue/passenger and revenue passenger miles/passenger (journey length) have been declining recently, but the four quarters to Q4, 2017 saw a slight upward trend in both.

Southwest, the pioneer low-cost carrier, also reported good figures. Revenue was \$19.1bn for the last four quarters – the highest it has been since my records began. RPMs and ASMs at 129bn and 154bn were too. Passenger numbers (150m) are up on the previous two four-quarter moving totals, but lower than the 152.7m recorded in the 4 quarters to Q1, 2017. Revenue/passenger and journey length are both down slightly on the last 4-quarter total.

American Airlines published its Q4 results recently too. Revenue was above \$29bn for the first time since my time series started. Revenue passenger miles, at 201,351m, were the highest since my series started – but only just. Available seat miles were significantly higher than previous figures, at 243,806 – which implies a lower load factor. Passenger numbers are static at around 145m, but revenue/passenger is above \$200 for the first time. Average journey length (1389 miles) is high by historic 4-quarter periods, but slightly down on the last four-quarter total.

The Busiest Air Routes in the Americas

From Routesonline.com

	Route	Passengers	Average base fare (\$)	Distance (km)
1	Sao Paulo Congonhas (CGH) - Rio de Janeiro Santos Dumont (SDU)	4066904	93.47	378
2	Mexico City Juarez (MEX) - Cancun (CUN)	3682028	72.22	1294
3	Los Angeles International (LAX) - New York JFK (JFK)	2873316	337.66	3982
4	Mexico City Juarez (MEX) - Monterrey (MTY)	2559902	84.3	729
5	Lima (LIM) - Cuzco (CUZ)	2471790	54.43	583
6	Bogota (BOG) - Medellin Jose Maria Cordova (MDE)	2434613	51.02	239
7	New York LaGuardia (LGA) - Chicago O'Hare (ORD)	2362480	147.55	1177
8	San Francisco (SFO) - Los Angeles International (LAX)	2238043	111.66	541
9	Guadalajara (GDL) - Mexico City Juarez (MEX)	2201280	74.77	466
10	Los Angeles International (LAX) - Seattle-Tacoma (SEA)	1990802	104.63	1540
11	Sao Paulo Congonhas (CGH) - Brasilia (BSB)	1874963	149.76	882
12	San Francisco (SFO) - New York JFK (JFK)	1844864	327.2	4162
13	Bogota (BOG) - Cartagena (CTG)	1836433	55.14	673
14	New York LaGuardia (LGA) - Atlanta Hartsfield-Jackson (ATL)	1783435	201.53	1238
15	Bogota (BOG) - Cali (CLO)	1780187	51.14	287
16	Honolulu (HNL) - Kahului (OGG)	1735978	65.76	169
17	Orlando International (MCO) - Newark Liberty International (EWR)	1696296	125.48	1520
18	Los Angeles International (LAX) - Chicago O'Hare (ORD)	1679118	169.03	2811
19	Mexico City Juarez (MEX) - Tijuana (TIJ)	1651414	104.96	2314
20	Quito (UIO) - Guayaquil (GYE)	1624497	51.63	278

Passenger numbers are for the 12 months to October 2017

Autonomous Vehicle Performance

A recent report in the Financial Times summarised findings from California's transport regulator showing the mileage driven and the number of 'interventions' by autonomous vehicles. An 'intervention' is where a human has to take over – because of software failure, location failure, other reckless drivers or the vehicle behaving unexpectedly.

Waymo, the Alphabet (Google) subsidiary, performed best, with its cars doing 352,545 miles and needing 63 interventions (5,596 miles/intervention).

General Motors' Cruise drove 127,516 miles and needed 105 disengagements (1,214 miles/intervention). GM reported more accidents, because it tested its vehicles in a more urban environment.

Nissan came third, with 5,007 miles and 24 interventions – one every 209 miles.

Electric Car Sales

A chart in the FT recently showed that sales of electric vehicles vary considerably by country. Figures (in thousands of vehicles) have been read from a histogram, and are therefore not particularly accurate.

	2016	2017
China	350	600
Europe	210	300
US	150	190
Japan	20	50
Other	15	50

Half of all electric cars sold in 2017 were compact (30%) or small (20%). 20% were small family cars, 21% mid-size, 5% executive and 4% other.

Vehicles Registered in Great Britain

DfT released table VEH0101 in early February

This showed that there were 37.99m vehicles registered in Great Britain in Q3, 2017 – 1.7% up from the previous quarter. Of these, 31.34m were cars, 1.33m motorbikes, 3.91m light goods vehicles, 0.5m heavy goods, 0.16m buses and coaches and 0.75m other.

The number of cars has been increasing steadily. The motorbike fleet fluctuates: it has been higher than Q3 2017's figure in two earlier quarters. The goods vehicle fleet is at its highest: bus and coach numbers are down from a peak of 0.18m in the middle of the last decade. The 'other' component is also at an all-time high since the table started in 1994.

Cruise Liner Traffic in Japan

Source: Japan Times

In 2016, 1.99 million tourists arrived at Japanese ports by cruise ship, up 78.5% from the previous year. The government plans to increase that figure to 5 million in 2020, according to the transport ministry.

Kyushu is the most popular stop-off point for ships from abroad. In 2016, cruise ships made 715 port calls there, a sixfold increase from 2013. Around 1.94 million tourists entered Japan through Kyushu ports in the year, more than arrived through airports, the Kyushu Regional Development Bureau said. The majority of cruise passengers were from China. To accommodate the cruise ships, Kyushu ports have enlarged quays and built new terminals.

Another popular destination is Yokohama. The port of Hakata in Fukuoka Prefecture rose to the top of the list in 2015 and 2016, but Yokohama bounced back with a new record in 2017. The municipal government attributed the port's popularity to a service dubbed "Fly & Cruise," where tourists fly to nearby Haneda airport and then board a cruise ship from Yokohama. The port in the city, which opened in 1859 as Japan's first modern international trading port, boasts the most port calls by domestic ships.

A new service in 2016 featuring "inter-porting," which offers a regular cruise to ports along the Sea of Japan coast, is also popular. The tour connects the ports of Hakata, Maizuru in Kyoto and Kanazawa in Ishikawa Prefecture with South Korea's Busan, and allows passengers to board and disembark at each port.

At the port in Kanazawa, a service dubbed "rail and cruise" — a combination of travel on the Hokuriku Shinkansen that links Tokyo with areas on the Sea of Japan coast, and a ship voyage — has attracted foreign and domestic tourists alike.

Record Year for Georgia Ports

From Progressive Railroading

The Port of Savannah handled more than 4 million 20-foot equivalent units (TEUs) in 2017, an 11% increase and the port's highest annual volume ever, the [Georgia Ports Authority](#) (GPA) reported recently.

In December, the GPA handled 323,000 TEUs, up 10.6% compared with a year ago and the busiest December in the authority's history.

Total trade for 2017 reached a record 35 million tons of cargo, an increase of 3.8 million tons or 12%.

Intermodal business at Garden City Terminal rose 18.8% in December, reaching nearly 65,000 TEUs moved by rail.

The GPA is scheduled to break ground on the Mason Mega Rail terminal in early spring. The project will double Garden City Terminal's rail lift capacity to 1 million containers/year, and is expected to be completed by the end of 2020.