

TSUG

Transport Statistics Users Group

Monthly Review: June 2019

This month's review shows that satisfaction with the domestic travel industry as a whole in Sweden is at a 5-year low of 64.9: it was 70.6 in 2014. In Croatia, in the whole of 2018, 1% fewer passengers and 3% more goods were transported than in 2017. Canada recorded a 7% increase in rail accidents in 2018 compared with the previous year, but saw fewer fatalities. NS is now generating almost half of its turnover from international operations, According to RIA, a well-delivered simple electrification scheme should cost £750k - £1m/stk for OLE, power and associated costs. New York's MTA is launching a new initiative that will generate clean, emission free, solar electricity as well as begin to open up a new frontier of previously untapped revenue. Via Rail Canada reported an increase in ridership and revenue in 2018, marking the fourth consecutive year in which growth in traffic and turnover has been achieved. IndiGo has taken 44.3% of Indian airlines' domestic market share. Heightened public awareness of the serious safety risk posed by lasers reduced the total number of laser strikes for the second consecutive year in USA. JetBlue's revenue is at its lowest since Q1, 2018; RPMs were significantly down on Q2 and Q3 2018. In Singapore, Asia's first green-roofed buses have been fitted with a soilless roof system - instead of conventional soil. Handling 135.1 million tons of seaborne cargoes (down 1%), Germany's largest universal port can report a respectable result for 2018. We have Message from the Chairman, TSUG, Letter from the Editor, and also 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-19-Jun	TfL	Active Travel
Wed-17-Jul	TfL	Aviation Emissions
Wed-14-Aug	TfL	The Impact of Carbon Change
Wed-18-Sep	TfL	Trip Generation
Wed-16-Oct	TfL	Domestic Freight – Rail & Road
Wed-20-Nov	TfL	High Speed Rail
Wed-11-Dec	TfL	Fuel Use & Climate Change

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

Statistics Digest

STATISTICS DIGEST June 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	
9 May	Renewable Transport Fuel Obligation: Year 11 (2018) report 3 (15 April 2018 to 31 December 2018 supply) https://www.gov.uk/government/statistics/biofuel-statistics-year-11-2018-report-3
14 May	Road lengths in Great Britain: 2018 https://www.gov.uk/government/statistics/road-lengths-in-great-britain-2018
14 May	Road traffic estimates in Great Britain: 2018 https://www.gov.uk/government/statistics/road-traffic-estimates-in-great-britain-2018
16 May	Road goods vehicles travelling to Europe: April 2018 to March 2019 https://www.gov.uk/government/statistics/road-goods-vehicles-travelling-to-europe-april-2018-to-march-2019
29 May	National Travel Attitudes Study: January 2019 panel https://www.gov.uk/government/collections/statistics-on-public-attitudes-to-transport

Forthcoming releases from Department for Transport	
12 June	Search and rescue helicopter annual statistics: year ending March 2019 https://www.gov.uk/government/collections/search-and-rescue-helicopter-statistics
12 June	Statistical table update: UK officer cadets under the Support for Maritime Training (SMarT) scheme, 2018 to 2019 https://www.gov.uk/government/statistical-data-sets/seafarer-statistics-sfr#certificated-officers-and-trainees-sfr02
13 June	Travel time measures for the Strategic Road Network and local 'A' roads: April 2018 to March 2019 https://www.gov.uk/government/collections/road-congestion-and-reliability-statistics
13 June	Provisional road traffic estimates, Great Britain: April 2018 to March 2019 https://www.gov.uk/government/collections/road-traffic-statistics
19 June	Light rail and tram statistics: year ending March 2019

	https://www.gov.uk/government/collections/light-rail-and-tram-statistics
26 June	Vehicle speed compliance statistics for Great Britain: 2018
	https://www.gov.uk/government/collections/speeds-statistics
July	Reported road casualties Great Britain, main results: 2018
	https://www.gov.uk/government/collections/road-accidents-and-safety-statistics
July	Road freight statistics: 2018
	https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics
July	National Travel Survey 2018
	https://www.gov.uk/government/collections/national-travel-survey-statistics
July	Rail passenger numbers and crowding on weekdays in major cities in England and Wales: 2018
	https://www.gov.uk/government/collections/rail-statistics
August	Air passenger experience of security screening: 2018
	https://www.gov.uk/government/collections/aviation-statistics
August	Reported Road Casualties in Great Britain, final estimates involving illegal alcohol levels: 2017
	https://www.gov.uk/government/collections/road-accidents-and-safety-statistics
August	Walking and cycling statistics, England: 2018
	https://www.gov.uk/government/collections/walking-and-cycling-statistics
August	Road goods vehicles travelling to Europe: July 2018 to June 2019
	https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics
August	Renewable Transport Fuel Obligation: Year 11 (2018) report 4 (15 April 2018 to 31 December 2018 supply)
	https://www.gov.uk/government/collections/biofuels-statistics
August	Renewable Transport Fuel Obligation: Year 12 (2019) report 1 (1 January 2019 to 31 December 2019 supply)
	https://www.gov.uk/government/collections/biofuels-statistics
August	Domestic waterborne freight statistics: 2018
	https://www.gov.uk/government/collections/maritime-and-shipping-statistics
August	Port freight annual statistics: 2018
	https://www.gov.uk/government/collections/maritime-and-shipping-statistics

Recent releases from Office of Rail and Road

4 May	New performance measures Factsheet – on time, cancellations and severe disruption - Official Statistics Annual (2018-19)
	https://orr.gov.uk/statistics/publication-dates

Recent releases from Office of National Statistics

16 May	Variant household projections for England: 2016-based
	https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/articles/varianthouseholdprojectionsforengland/2016based

Recent releases from Eurostat

21 May	EU Transport in Figures 2018
	https://publications.europa.eu/en/publication-detail/-/publication/52f721ed-c6b8-11e8-9424-01aa75ed71a1

Seminar Write-up

TSUG SEMINAR ON SAFETY - 17 April 2019 – Q & A

Andrew Evans, Emeritus Professor Imperial College – Rail Safety

Robin Whittaker Has Professor Evans applied his method to other countries such as India?

Professor Evans Differences in safety performance between countries are influenced by culture.

Delphine Robineau What value of a life has Professor Evans used in his analyses?

Professor Evans The standard value from WebTAG, about £1.7 million

John Cartledge There seems to be a bit of a paradox in the rail safety data. The UK has one of the best rail safety records, and the accidents that do occur are mainly results of SPADS (Signals Passed at Danger) and overspeeding. The defence against these types of error is ATP (Automatic Train Protection), which was only used on two lines in Britain. Instead it put in an alternative system, TPWS (Train Protection and Warning System), which gives most of the benefits at a lower cost and could be implemented more quickly.

Andrew Sharp added that the UK is not only 4th in the list of countries for rail safety, but it is also 4th in overall passenger satisfaction.

Delphine Robineau, Head of Road Safety Statistics, Department for Transport – An update on road safety statistics

Steven Salmon What is the definition of a fatality in terms of how long after an accident the death occurs?

Delphine Robineau 30 days.

Peter Gordon How are contributory factors for cause of death established?

Delphine Robineau All deaths are considered accidents unless deemed a death from natural causes or a suicide by the decision of a coroner. Contributory factors are entered onto the STATS19 form on the basis of a judgement by the police officer recording the accident. Anecdotally, some factors tend not to be chosen because they could cause difficulties; implying crime or suicide, for example. DfT is looking at how other countries record accident's contributory factors, and is looking at STATS19 to make it easier to complete and the data from it more useful.

Questioner What are the guidelines for assessing the severity of injuries?

Delphine Robineau Until recently the severity of injuries recorded on STATS19 was based on police judgement, and there were indications of differences in practices between forces. In some systems (CRASH and COPA) there is now a list of injuries that police officers select which automatically maps to severity, but of course some injuries do not fit neatly into the list, some need better defining to ensure the classification is correct; this will be looked at in the Stats19 review.

John Cartledge To what extent are injuries to bus passengers included? Some occur during collisions, but the majority are due to falls when boarding or alighting, when moving within the bus, or while standing. Is DfT interested in these?

Delphine Robineau A person injured whilst aboard a bus or coach as a result of braking, a sudden manoeuvre or a collision, whether or not another vehicle is involved, is in the scope of STATS19. There is a specific STATS19 field indicating whether the bus passenger was boarding or alighting the bus.

Comment from the audience In the US, CCTV is reducing the number of fraudulent claims for bus passenger injuries.

Professor Evans Does DfT have an estimate of the number of road accidents that are suicides?

Delphine Robineau Currently there is no national estimate but the STATS19 review will look into formalising this. For suicides, the Department relies on decisions made by coroners.

David Sutanto Are the severity ratings used by CRASH and COPA consistent? Also, are accidents on level crossings included in both the rail safety statistics and STATS19, and does this lead to double counting?

Delphine Robineau CRASH and COPA use the same injury-based severity reporting approach, and the same list of injuries. If an accident involves a train at a level crossing (e.g. in collision with a pedestrian, or a motor vehicle) then this is not in the scope of STATS19. If the accident occurs at a level crossing but does not involve a train then it is in scope of STATS19. There is therefore no double counting between rail accidents and road accident statistics.

Kit Mitchell For a while STATS19 data were available online for users to define their own tables, but that has been withdrawn. Are there any plans to restore this capability?

Delphine Robineau DfT is looking at this as part of the review, and hope to make it easier for users to navigate the road safety tables. The issue is finding a tabulation system that is sufficiently easy for users who are not very familiar with the data.

Aviation Safety, Cengiz Turkoglu, Cranfield University

Peter Gordon (Transport Statistics Users Group) asked about “luck”. Some incidents appeared “lucky” not to be more serious whilst others were “unlucky” to be as serious as they were. He also wondered if tragedies had to happen for changes to occur. For example, a “rollback” had occurred to a Delta 777 before ice in a fuel line caused a BA 777 to crash short of Heathrow, fortunately without casualties.

Cengiz replied that there is a barrier effect called “luck”. For example the British Airways A319 that took off with both cowlings incorrectly closed was saved by good crew management and if it had crash landed on the Thames might have benefitted from good crashworthiness. The funding method can be questioned, the Civil Aviation Authority is paid for by the airlines. With publicity there is a “blood theory”. Do we need to spill blood to make changes? Civil aviation incident reporting is very good. However, the speaker noted that the US National Transportation Safety Board publish a “most wanted” list. Icing events have been included in many years and the risk is considered tolerable each time. Is the grounding of 737 Max due to the two

crashes being so close together? The Turkish Airlines 737 altimeter failure at Amsterdam was very similar to an earlier Channel Express (now Jet2) occurrence which was handled successfully by the pilots.

Kit Mitchell (TSUG) said that there was no longer any low hanging fruit in the same way that black spots on roads have been analysed and put right – roads are now graded. Cengiz replied that aviation has confidential reporting schemes such as CHIRPS and Airprox. European datasets, however, were no use as there are no details about causation – everything is about outcomes.

Andrew Sharp (International Air Rail Organisation) said that he was not sure that all low hanging fruit for road safety had been picked – what about the use of mobile phones and poor overtaking? The problem is if you make roads safer then drivers may take more risks.

Steven Salmon (Confederation of Public Transport, UK) said that the UK Government likes to recover the cost of regulation but that this is not common elsewhere. Cengiz said that he had attended some less than useful EASA sessions. There are different ways of funding for different countries.

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 address. 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 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

Satisfaction with Transport in Sweden



The 2019 survey of domestic travel – the 15th consecutive annual survey - by the Swedish Quality Index (SKI) was published recently.

Satisfaction with the domestic travel industry as a whole is at a 5-year low of 64.9: it was 70.6 in 2014. For buses, the rating has fluctuated – 70.2 in 2019, 75.5 in 2018, 70.5 in 2016 and 74.9 in 2014.

Satisfaction with flights is also at a low of

SAS Boeing 737-800 at Oslo Gardermoen Airport

66.8 in 2019, down from 70.6 in 2014. Rail travel satisfaction started at 59.7 in 2014 and climbed to 64.8 by 2017 before dropping to 62.4 then 61.2 in 2019.

Looking at individual companies in 2019, Nettbuss Bus4You scored 74.9, Nettbuss express 72.1, Braathens (domestic airline) 70.5, Mass Transit Rail Corporation (running open access trains in the south of the country) 70.0, SAS 69.7, Norwegian Airline 65.7, Snälltåget (open access trains Malmo – Stockholm and Berlin) 65.6, Flixbus 64.8 and SJ 55.9. Other bus companies, airlines and train companies are lumped together as three figures (all at the bottom end of the satisfaction scale).

A total of 2,222 people responded to the survey.

Transport in Croatia 2018 *Total-croatia-news.com*

In the whole of 2018, 1% fewer passengers and 3% more goods were transported than in 2017.

The number of passengers transported in January-December 2018 was 85 million, or 1% fewer than in 2017. The decrease was mostly due to a decline in road transport, of 3.7% to 47.7 million. At the same time, 20.2 million passengers were transported by rail, an increase of 2.1% year on year.

The amount of goods transported in January-December 2018 was 118.2 million tonnes, up 3% on 2017. Road transport increased by 2.3% to 74 million tonnes, rail transport rose by 10.4% to 13.4 million tonnes, pipeline transport increased by 5.9% to 10.8 million tonnes and internal waterways transport went up by 3% to 592,000 tonnes.

Rail

Canada: Rail Safety 2018

Progressive Railroading

Canada recorded a 7% increase in rail accidents in 2018 compared with the previous year, but saw fewer fatalities, according to a preliminary [report by the Transportation Safety Board](#) (TSB).

Rail transportation data for 2018 showed "mixed results," with 1,170 railway accidents reported to the TSB, up 7%. However, rail-related fatalities declined to 57, which was 19 fewer than in 2017 and well below the five-year average of 74.

Among the 2018 fatalities, 34 involved trespassers, compared with 53 in 2017. The five-year average for trespassing-related fatalities is 41. Crossing accident fatalities remained at 19 last year, the same as in 2017. However, the number of serious injuries due to crossing accidents nearly doubled last year — to 42 — compared with 22 in 2017.

Among all rail accidents reported to the TSB in 2018, 125 involved dangerous goods. That's higher than the 115 reported in 2017, but down slightly from the five-year average of 126. Six accidents last year resulted in the release of dangerous goods.

There were 285 rail incidents reported in 2018, a 21% increase from 2017 (235), but a 7% decrease from the five-year average (308). The decrease is partly due to the retroactive application of a June 2016 regulatory change by Transport Canada that revised the criteria for a dangerous goods leaker from a volume-based threshold to outcome-based consequences, resulting in the re-categorization of a number of occurrences. Consequently, the number of dangerous goods leak incidents between June 2016 and December 2018 fell from 78 to one. Almost half (137) of all rail incidents in 2018 were "movement exceeds limits of authority" incidents — 15 more than in 2017 and above the five-year average of 125. Forty-four accidents involved an "uncontrolled movement" and 15 involved "uncontrolled movement of rolling stock" incidents in 2018, compared to 48 and 14, respectively, in 2017.

NS in 2018

From IRJ



IC Direct Train at Brussels Noord

Netherlands Railways (NS) is now generating almost half of its turnover from international operations, according to the operator's 2018 financial results.

Overall group turnover increased 15.7% compared with 2017 to €5.926bn, including €2.824bn from international subsidiary Abellio, up from €1.989bn in 2017. Net profits for the holding reached €205m, compared with €47m in 2017.

The first full year of Britain's West Midlands franchise, which began in December 2017, accounts for much of the increase in turnover, while the consolidation of the Westfalenbahn contract added €86.3m to Abellio's revenues in Germany.

Abellio's British operations generated revenues of €2.467bn, but net profits dropped from €29.3m in 2017 to €26.2m last year. Abellio reports a significant slowdown in passenger growth in Britain over the last year.

In Germany, Abellio suffered a net loss of €5.7m, primarily due to costs stemming from preparations for the start of the new Rhine-Ruhr Express and Saxony-Anhalt Diesel Network contracts and other contracts scheduled to start in 2019-2020.

In the Dutch market, NS achieved a record customer satisfaction score of 86% while punctuality increased by 1% to 92.6% for peak trains (95.1% for off-peak services).

NS invested €898m last year, including €831m in the Netherlands. Much of this was spent on rolling stock modernisation and renewal, as well as the redevelopment of stations such as Rotterdam Alexander, Assen and Zaandam. Service improvements in 2018 included the successful introduction of 10-minute-interval Amsterdam – Utrecht – Eindhoven intercity services and the entry into service of the CAF New Generation Sprinter (SNG) EMUs.

Another success for NS in 2018 was the growth of last-mile services. Usage of the OV-Fiets bike rental service rose from 3.1 million to 4.2 million and NS added 6000 bikes to the fleet, which now stands at 22,500. NS added 500 car parking spaces at stations and around 5% of passengers now drive to stations. NS Zonetaxi, a cooperative venture between NS and local taxi companies, is now available at 377 Dutch stations.

Despite these successes, NS also faced challenges in 2018. The operation of IC Direct services on the HSL South high-speed line remains a major concern. Around a fifth of trains are delayed and technical problems with Traxx locomotives and ETCS have contributed to poor reliability. Punctuality dropped from 85.5% in 2017 to 82.5% last year.

However, passenger numbers on IC Direct services increased significantly in 2018. Amsterdam – Brussels IC Direct services were rerouted to use HSL South while domestic trains were lengthened with an additional coach and frequencies increased from four to five services an hour. A notable event on HSL South was the introduction of London – Amsterdam Eurostar services, which are run in partnership with NS using the Dutch operator's license.

RIA Electrification Cost Challenge



GWR Class 800 at Slough

This was published in mid-March by the Railway Industry Association (RIA). It reacted to the government's loss of confidence in railway electrification caused by the problems which arose when electrifying the Great Western Main Line (GWML).

It says that a well-delivered simple electrification scheme should cost £750k - £1m/single track kilometre (stk) for

overhead line equipment (OLE), power and associated costs. More complex schemes should not exceed £1.5m/stk (compared with three recent schemes – Midland Main Line, GWML and Cardiff – Swansea: these hit problems and were likely to end up costing between £2m and £2.5m/stk).

The report includes a good history of railway electrification in the UK generally and the GWML scheme in particular. There is also an analysis comparing a small number of unidentified international projects with recent UK projects and their cost/stk: three UK schemes came in below £750k/stk and three more between there and £1m/stk. Others 'which experienced delivery difficulties' came in well above this figure.

The report is well worth studying if you want to know what went wrong with the GWML scheme in particular.

Solar Power on New York's Subway

From Metro Magazine

New York's Metropolitan Transportation Authority (MTA) is launching a new initiative that will generate clean, emission free, solar electricity as well as begin to open up a new frontier of previously untapped revenue: the leasing of potentially millions of square feet of industrial roof space to companies interested in generating solar power. Thanks to a steady fall in capital costs of solar panel and non-roof penetrating installation technologies, it is increasingly commonplace for industrial and warehouse buildings in the New York metropolitan region to place solar panels on their rooftops. This practice has also spread to buildings in public-sector portfolios, including universities and City buildings.

The MTA, the largest public transportation agency in the US, has identified more than 100 bus depots, train yards, repair shops, and commuter lots across all MTA agencies — totalling more than 10 million square feet of industrial roof space — which would be suitable for solar development. Fully realized, these properties present an opportunity to develop more than 100 megawatts of emission-free electricity for New Yorkers — enough to power 18,000 households. The MTA hopes to achieve a significant new revenue stream from this activity, with little to no capital investment of its own, by way of leasing the valuable real estate to companies that would use it to install solar panels and generate clean electricity to sell back to the municipal grid.

A Request for Proposals went public on Earth Day 2019. It proposes the solar development of seven MTA properties, belonging to NYC Transit, LIRR and Metro-North Railroad, generating an estimated 6.5 megawatts of emissions-free electricity for thousands of New York households. This RFP includes locations uniquely chosen to serve as a representative combination of existing roofs and parking lots.

All locations were carefully selected in partnership between the MTA Department of Environmental Sustainability and Compliance, MTA Real Estate, and the individual operating agencies. Chosen rooftops and parking lots fit the necessary requirements of having new roofs/new pavement, large quantities of unobstructed roof space, and local energy demand.

Via Rail Canada Reports Growth for Fourth Consecutive Year

International Railway Journal

Canada's national passenger rail operator, Via Rail, reported an increase in ridership and revenue in 2018, marking the fourth consecutive year in which growth in traffic and turnover has been achieved.

Passenger traffic increased by 8% in 2018 to 4.74 million journeys, which is a 25% more than in 2014, while revenue rose by 7.4% to C\$392.6m representing a 40% increase since 2014.

Passenger-km increased by 4% from 1.5 billion in 2017 to 1.6 billion last year and has risen by 22.8% since 2014. As a result, the government subsidy/passenger-km has fallen by 15% since 2014 to 16.6 cents. The subsidy/passenger-km on the Quebec – Montreal – Toronto – Windsor corridor, which generates 96% of Via Rail's journeys, has dropped by 22% over the same period to 10.3 cents.

Via Rail's operating expenses increased by 5.4% in 2018 to C\$665.2m resulting in an operating loss of C\$272.6m, although this is still less than the operating loss of C\$317.1m recorded in 2014.

Capital expenditure was at a five-year high of C\$123.6m, compared with an average annual investment of C\$89.8m between 2014 and 2017. Via Rail awarded a C\$989m contract to Siemens in December 2018 for 32 trains to replace the existing fleet on the Quebec – Montreal – Toronto – Windsor corridor starting in 2022.

Indian Airlines' Domestic Market Share

From the FT, Reporting on the Collapse of Jet Airways



**Jet Airways Boeing 737-800
at Singapore Changi**

Airline	% market share (March 2019)
IndiGo	44.3
Spice Jet	13.6
Air India	12.7
Go Air	9.2
Jet Airways	8.9
Air Asia	5.5
Others	5.8

Laser Assaults on Aircraft in the US

Source: FAA

Heightened public awareness of the serious safety risk posed by lasers reduced the total number of laser strikes for the second consecutive year, according to the US Federal Aviation Administration (FAA).

The FAA reported 5,663 laser incidents in 2018, down from 6,754 in 2017 and 7,398 in 2016. However, the substantial number of reported incidents clearly shows that laser strikes on aircraft remain a serious threat to aviation safety.

In 2009, the figure was 1527: for four years it was in the 3000-4000 bracket before increasing to 7346 in 2015.

The FAA and law enforcement agencies are working hard to increase public awareness of the dangers posed by lasers.

Recent Airline Statistics

JetBlue recently announced its Q1, 2019 results.

Looking at these and previous quarters, they are not particularly good – revenue at its lowest since Q1, 2018; revenue passenger miles significantly down on Q2 and Q3 2018; available seat miles nearly the highest ever (implying a poor load factor) and passenger numbers the lowest since Q1, 2018.

However, four-quarter moving totals give a better picture (although quarter on quarter trends are important).

Revenue for the four quarters to Q1, 2019 is at its highest since my records began in the year to Q4, 2015. The same is true of revenue passenger miles, at 51,658m above 50,000m for the second time. Available seat miles (61294m) are above 60,000m for the first time: load factor is therefore 84% - not bad. Passenger numbers (42.4m) are also at a record high. Revenue/passenger (\$176) is also at a record high: revenue/passenger mile (\$0.145) is down a bit on the four quarters to Q4, 2018 – but that was a record high. Average length of haul at 1217 miles is also a record high.

The airline is considering a London service (from both Boston and New York City): the results will be interesting to watch.

Finnair's Q1 results were interesting, with some pluses and minuses.

Revenue for the four quarters to Q1, 2019, at €2716m, was the lowest since the year to Q1, 2018 (and, of course, because all figures are four-quarter totals, this cannot be affected by seasonality). Revenue passenger kilometres (RPK) were at a record high, over 35000m for the first time. When my series started in Q4, 2015, the figure was 25600m. Available seat kilometres (ASKs) and passenger numbers are also at record highs.

By contrast, revenue/passenger and revenue/passenger-kilometre are at record lows. The four quarters to Q1, 2019 show these at €203 and €0.0776 – the latter is below €0.08 for the first time. At the start of the series, figures were €219 and €0.0881. Average length of passenger journey, at 2609km, is hardly changed from the previous 4-quarter total and the lowest since the year to Q4, 2016. It was 2486 at the start of the series.

Road

Natural Bus Cooling System



In Singapore, Asia's first green-roofed buses have been fitted with a soilless roof system - instead of conventional soil, the plants are secured on a lightweight mat used for skyscraper greenery, according to GWS Living Art, Moove Media, National Parks Board (NParks), Singapore Green Building Council (SGBC) and Temasek Foundation in a joint press release.

This makes it cleaner, easier to maintain and

Bus in Singapore

more economical than other conventional green roof systems, which are primarily soil-based.

The aim of the three-month study is to confirm that the green roof will lead to a drop in temperature inside the buses, and a reduction in the fuel consumption used for air-conditioning.

Read more at <https://www.channelnewsasia.com/news/singapore/buses-sbs-transit-rooftop-garden-ply-singapore-roads-orchard-cbd-11505144>

Water

Ferry Operations in California

The Mineta Transportation Institute in San Jose State University produced a report for the California Department of Transportation on ferry operations in the state. It is available on http://www.dot.ca.gov/hq/research/researchreports/reports/2019/CA19-3505_FinalReport.pdf.

The 92 page report started by compiling a list of all operations, and as a result of this, classified them as commuter operations (operating between two points and providing essential transport services), non-commuter services (scheduled fixed-route services mainly for recreation and leisure passengers) and water taxis (for on-demand short distance trips). During the research, other purely recreational water services were found. These provided services like lake cruises, whale watching expeditions and sport fishing and were not researched further.

They collected information on the type of service, the locality, the number of segments and the length of each, the fares and regulatory authority, hours of operation, number of vessels and seating capacity, capacity for cars and bikes, daily trip numbers and boarding numbers, and ownership and contact details.

For each area and for each operator within each area, maps and full details are given.

An impressive piece of work.

The Port of Hamburg in 2018

Source: Port of Hamburg

Handling 135.1 million tons of seaborne cargoes (down 1%), Germany's largest universal port can report a respectable result for 2018. Hamburg successfully asserted itself in a difficult environment, achieving a distinct advance on railborne seaport-hinterland transport. In 2018, this category accounted for totals of 46.8 million tons – up 2.7% – and 2.44 million TEU – up 4.7%. More than 60,000 trains with around 1.6 million wagons were handled during 2018 on the Port Railway network alone. This beat the record total set in 2016 and extended Hamburg's position as Europe's leading rail port.

To a large extent this strong position is based on the large number - over 100 - liner services linking Hamburg with the majority of the 1,000 seaports worldwide.

In container transport with China, along with the ocean-going vessel as the main carrier, a distinct increase is occurring in transport by rail. China again remained the Port of Hamburg's largest trading partner in 2018. One in three of all containers handled in the port are for, or from, China.

Complementing the excellent seaborne services, more than 235 connections by rail are now offered from Hamburg along the New Silk Road. These handled around 4.8 million TEU to or from China. Hamburg is the central freight handling hub for transport along both the maritime and overland Silk Road.

The port and its handling terminals are already clearing mega-carriers with capacities of over 21,000 TEU and, looking to the future, are preparing to clear arrivals and departures by even larger vessels.

Seaborne Cargo Throughput in the Port of Hamburg, January – December 2018

Seaborne cargo throughput (million tons)		Change on previous year	
Total	135.1	-1,0 %	
Of which: Imports	79.7	+1.7 %	
Exports	55.4	-4.6 %	
General cargoes	90.9	-0.9 %	
Of which: Containerized		-1.0	%
Of which: Conventional	89.4	+5.8 %	
	1.5		
Bulk cargoes	44.2	-1.2 %	
Seaborne cargo throughput (million TEU)		Change on previous year	
Total	8.7	-1.0 %	
Of which: Loaded containers	7.6	0.0	%
Of which: Import	4.6	-0.6 %	
Exports	4.2	-1.5 %	

Source: HPA

Hamburg as cruise port: Record totals for ship calls and passengers

Calls by ships		Change on previous year
2019 (anticipated)	216	+ 1.9 %
2018	212	+ 7.1 %
Passenger totals		
		Change on previous year
2018	900,562	+ 10.8 %

Source: Cruise Gate Hamburg