
ACI ADVISORY BULLETIN

The impact of COVID-19 on the airport business

Two-fifths of passenger traffic and almost half of revenues wiped out in 2020

Existential threat to airport business requires proportionate response from governments

Montreal, 1 April 2020 – COVID-19 appeared first in Asia and spread across the globe. It was declared a pandemic by the World Health Organization (WHO) on 11 March 2020.

The outbreak resulted in an unprecedented disruption of global air transport. All major airports, and especially those handling international passengers, faced catastrophic declines in traffic volumes, and, in many instances, either near-total or complete closure of infrastructure to regular commercial operations of passenger airlines.

In the first two months of 2020, the reductions in passenger traffic volumes were mainly related to virus containment efforts in China and neighbouring countries in Asia-Pacific. For several weeks, there were flight cancellations and lower load factors on the remaining flights. The second week of March, however, turned out to be a major game-changer.

As the virus spread across Europe, the Middle East and North America - and later across Latin America-Caribbean and Africa - half of the globe introduced a quarantine for travellers of at least two weeks. During the second half of March, practically all major economies and significant air transport markets introduced strict travel restrictions.

This was accompanied by stringent travel restrictions and border shutdowns, either partial or complete. As such, air travel became practically impossible for the regular users of commercial air transport. By the end of March, both supply and demand for air transport recorded one of the largest year-over-year declines on record.

As a consequence, the global health crisis resulted in an existential threat to a number of industries, especially those dependent on open borders and regular consumer behaviour. The airport sector is therefore among the most severely affected industries from an economic standpoint.

On 10 March 2020, ACI released an [advisory bulletin](#) to its Members presenting a status update on the estimated impact of the COVID-19. This followed the [Advisory Bulletin: Transmission of Communicable Diseases](#) issued by ACI World in January which was intended as guidance for airports and national authorities to use to protect against communicable diseases that might pose a serious risk to public health.

ACI also issued [a statement](#) on the global economic policy response to COVID-19. As the economic policy response continues to be formulated, it is important to note that no measure or relief package should disproportionately benefit one sector at the expense of another. ACI World urges government to ensure the impact of the COVID-19 pandemic on the aviation ecosystem is borne equitably and that all solutions are fair and reasonable so as to give the industry the greatest chance to recover quickly.

This current advisory bulletin represents a revised impact assessment of COVID-19 on airport traffic and airport revenues. Due to the fast and radical shifts in the world and the air transport industry that occurred in March, the previous assessments are no longer relevant as they do not consider the scale of travel restrictions, global quarantine measures and other major events that had not have been foreseen.

Impact on passenger traffic

In 2019, passenger traffic posted positive growth. Based on preliminary data, traffic exceeded 9.1 billion passengers in 2019, representing +3.4% growth in total passenger traffic year-over-year.

ACI had forecasted that global passenger traffic would reach 9.5 billion passenger mark in 2020. However, the ongoing black swan event made this traffic volume unattainable as the industry was literally grounded as of the end of March.

The most recent traffic figures for January 2020 demonstrate that the COVID-19 impact on aviation was rapid: global passenger traffic grew by just +1.9% in January 2020, down from +4.9% a month prior. The Asia-Pacific region was already showing the impacts of the COVID-19 crisis in January, declining by -1.8% due to a significant shift in domestic traffic (-3.6%).

As compared to the business as usual forecasts, the reduction in global passenger traffic volumes as a result of the pandemic progressed from -6.9% in January to -22.9% in February and -53.1% in March, totaling a -28.3% decline for the first quarter of 2020, equivalent to a reduction of 620 million passengers.

The traffic estimates for the first quarter of 2020 portray a distressing picture. Airports in all regions will lose passenger traffic at double-digit rates. Asia-Pacific appears to be the most affected region with an estimated -38.9% loss in passenger traffic for the first three months of the year, followed by Europe (-23.9%) and North America (-20.7%).

The magnitude of losses intuitively follows the chronological order in which these major economic centers of gravity were affected.

On a global level, passenger traffic losses will amount to over one-quarter of what was previously forecasted based on the [World Airport Traffic Forecasts \(WATF\) 2019–2040](#) (see Table 1).

Table 1: Airport passenger traffic volumes for Q1 2020 by region: forecasted (pre-COVID-19) versus estimated (COVID-19) (million passengers)

	BAU Forecast*	Estimated (COVID-19)**	Reduction (million passengers)	% Change (Estimated 2020 / BAU Forecast Q1 2020)
Africa	55	49	-6	-11.2%
Asia-Pacific	867	530	-337	-38.9%
Europe	503	382	-121	-23.9%
Latin America-Caribbean	181	145	-36	-19.8%
Middle East	109	87	-22	-19.7%
North America	481	382	-100	-20.7%
World	2,195	1,575	-620	-28.3%

*The "pre-COVID-19" scenario based on World Airport Traffic Forecasts (WATF) 2019–2040

**Estimated passenger traffic volumes based on the Official Airline Guide (OAG) scheduled seat capacity

Since it became clear that the ongoing health crisis will also have far-reaching economic ramifications, the impact of COVID-19 will extend not only to the second quarter of 2020 but also the second half of the year. Most experts in the air transport industry agree that the prospective recovery may take a year and a half to reach the pre-crisis traffic levels.

In other words, we may not see pre-COVID-19 traffic volumes again before the end of 2021. In addition to the estimates produced for the first quarter, ACI estimated the impact of the ongoing health crisis on the full year figures for 2020.

Table 2: Airport passenger traffic volumes for YE 2020 by region: forecasted (pre-COVID-19) versus estimated (COVID-19) (million passengers)

	BAU Forecast*	Estimated (COVID-19)**	Reduction (million passengers)	% Change (Estimated 2020 / BAU Forecast 2020)
Africa	238	161	-77	-32.5%
Asia-Pacific	3,482	2,017	-1,465	-42.1%
Europe	2,554	1,660	-894	-35.0%
Latin America-Caribbean	716	472	-244	-34.0%
Middle East	430	273	-157	-36.5%
North America	2,097	1,307	-790	-37.7%
World	9,517	5,890	-3,627	-38.1%

*The "pre-COVID-19" scenario based on World Airport Traffic Forecasts (WATF) 2019–2040

**Estimated passenger traffic volumes based on the Official Airline Guide (OAG) scheduled seat capacity

Considering the totality of measures implemented by national governments across the globe, including, but not limited to travel restrictions in terms of bans for all foreign visitors, travel bans from various places with confirmed cases and the general lockdowns, both supply and demand for air transport are suppressed to marginal levels.

The few flights remaining in schedules for the next several weeks represent lifeline flights serving urgent humanitarian needs. Another portion of active flights are for the repatriation of various citizens to their respective home countries.

Predictions for the second quarter of 2020 are paralyzed with general uncertainty about air travel. For one, we are not able to foresee when the outbreak will be considered under control and wide-scale restart of air transportation would imply coordinated efforts of various national governments; we have no indication that this would happen.

It is reasonable to foresee faster recovery in domestic passenger traffic. In the case of international passenger traffic, however, the recovery will take longer, as any international flight implies reciprocal permissions but States will emerge from the current crisis at different times with varying pace of relaxation of the recently imposed restrictions.

Table 2 demonstrates that taking into account the one-quarter decline in passenger traffic in the first quarter and substantial traffic losses in the second quarter, global passenger traffic will lose close to two-fifths (38.1%) as compared to the forecasted figure, equivalent to 3.6 billion passengers in absolute terms.

Asia-Pacific, Middle East and Europe—the three markets relying most heavily on international traffic—will lose a substantial share of passengers, exceeding one-third in all three cases. Airports in the Americas, characterized by a significant share of domestic operations, are expected to lose over one-third of their total passenger throughput.

In absolute terms, the reduction in traffic by the end of 2020 may reach up to 1.5 billion passengers in Asia-Pacific, 0.8 billion passengers in North America and get close to 1 billion passengers in Europe. Latin America-Caribbean, Middle East and Africa may lose in the realm of 250, 160 and 80 million passengers respectively.

Impact on airport revenues

Airports are two-sided businesses, engaging in a commercial relationship with both airlines and passengers. They receive their revenues from two primary sources: aeronautical activities and non-aeronautical activities.

Both revenue streams are vital to support the operation and sustainable development of airports. They are used to recover the large capital costs incurred by airports—and these are significant as the airport industry is highly asset-intensive—as well as operating expenses and especially [personnel expenses](#).

Revenue channels are paralyzed by the unprecedented drops in aviation and commercial activity.

The shortfall in the number of passengers and the cancellation of flights has resulted in reduced revenues from airport charges (landing and parking charges paid by airlines for instance, and passenger service charges and security charges paid by passengers).

In a similar way, commercial activities are not generating revenues and are forced to shut down.

Airport revenues are contracting rapidly. Airports are, at the same time, taking all possible measures to preserve financial stability. While airports have high fixed and unavoidable costs, they are reducing, to a minimum, variable costs by closing portions of infrastructure, furloughing staff, and postponing capital expenditure. These are difficult decisions with serious impacts for the community. They are not taken lightly but are necessary in response to the crisis facing the industry.

Non-aeronautical sources of revenue usually provide diversification of airport income streams and serve as an additional cushion during economic downturns. Considering the ongoing large-scale lockdowns, however, commercial activities are equally damaged.

Table 3: Total airport revenues for Q1 2020 by region: forecasted (pre-COVID-19) versus estimated (COVID-19) (million USD)

	BAU Forecast*	Estimated (COVID-19)**	Reduction (million USD)	% Change (Estimated Q1 2020 / BAU Forecast Q1 2020)
Africa	1,000	800	-200	-20%
Asia-Pacific	12,400	6,800	-5,600	-45%
Europe	11,600	8,800	-2,800	-24%
Latin America-Caribbean	2,700	2,000	-700	-26%
Middle East	3,300	2,400	-900	-27%
North America	8,000	5,200	-2,800	-35%
World	39,000	26,000	-13,000	-33%

*The "pre-COVID-19" scenario based on World Airport Traffic Forecasts (WATF) 2019–2040 and constant unit revenues

**Revenues estimated based on traffic under COVID-19 and reduced unit revenues

ACI forecasted that, prior to the COVID-19 outbreak, global airport revenues for the first quarter of 2020 would reach close to \$39 billion (all figures in US Dollars).

Based on traffic trends under COVID-19 and the inevitable reduction in the overall commercial activity, ACI now estimates a -33% loss of revenues equivalent to an approximate revenue shortfall of \$13 billion.

In the context of the airport industry, this is equal to the total annual revenues of ten largest airports in Europe or Asia-Pacific.

While it is clear that the largest aviation markets of Asia-Pacific, Europe and North America will face multi-billion-dollar losses already in the first quarter of 2020, airports located in the Middle East, Latin America-Caribbean and Africa as well as Africa will also suffer substantial losses proportionate to their size and market position.

Table 4: Total airport revenues for YE 2020 by region: forecasted (pre-COVID-19) versus estimated (COVID-19) (million USD)

	BAU Forecast*	Estimated (COVID-19)**	Reduction (million USD)	% Change (Estimated 2020 / BAU Forecast 2020)
Africa	4,300	2,800	-1,500	-35%
Asia-Pacific	49,900	26,000	-23,900	-48%
Europe	59,200	34,600	-24,600	-42%
Latin America-Caribbean	10,600	6,600	-4,000	-38%
Middle East	13,200	7,500	-5,700	-43%
North America	34,600	17,700	-16,900	-49%
World	171,800	95,200	-76,600	-45%

*The "pre-COVID-19" scenario based on World Airport Traffic Forecasts (WATF) 2019–2040 and constant unit revenues

**Revenues estimated based on traffic under COVID-19 and reduced unit revenues

Based on the estimated traffic figures for the full year 2020, ACI also extended its revenue impact assessment (see Table 4). While the industry was expected to generate about \$172 billion at current market exchange rates and assuming flat evolution of unit revenues, it may lose about 45% or over \$76 billion by the end of this year in light of the ongoing crisis.

A drastic decline of such an unimaginable magnitude for the industry as a whole represents an existential threat.

Airports must also continue to meet their capital expenses obligations as they remain characterized by predominantly high fixed costs necessary for maintaining and operating the infrastructure components of the airport, such as runways, taxiways, aprons, parking stands and terminal buildings.

Despite the sharp reduction in passenger traffic, many airports and certainly large airports serving major cities remain open for [cargo operations](#). Continuity of the air cargo business is essential not only for a large number of households, communities, and industries, but also for the global economy at large and for fighting the ongoing pandemic.

Methodological note

ACI World estimated the impact of the coronavirus disease 2019 (COVID-19) on the airport industry in terms of potential losses in traffic and revenues based primarily on two key data elements: estimated traffic considering the latest COVID-19 statistics and unit revenues derived from the [ACI Airport Key Performance Indicators 2020](#), as total airport revenues are largely a function of traffic, while unit revenues have remained stable in the recent years.

Traffic estimates for Q1 2020 were generated using the scheduled seat capacity obtained from the Official Airline Guide (OAG), as there is a strong correlation between scheduled seat capacity and total passenger traffic volumes.

The impact has been measured as a difference between the “pre-COVID-19 scenario” under the previously published traffic forecast figures for the first quarter of 2020 as well as year-end 2020 and the “COVID-19 scenario” with estimated traffic and revenues for the first quarter of 2020 and year-end 2020, on a country-by-country basis, and then aggregated into regional figures.

The first quarter 2020 traffic, and hence the revenue figures, takes into account the seasonality patterns for the year 2019 calculated on a country-level basis.

In cases where monthly traffic data coverage was limited for a particular country, regional seasonality indicators were applied to estimate its traffic share in the first quarter of 2020.

The [ACI World Airport Traffic Forecasts \(WATF\) 2019–2040](#) was taken as a baseline for simulating the “business as usual scenario” and hence a least common denominator in understanding all potential discrepancies in traffic and airport revenues as a consequence of COVID-19.

The impact of COVID-19 on passenger traffic for year-end 2020 took into account various scenarios provided by ACI Regional offices.

The revenue per passenger indicators (unit revenues) were calculated for airports on a country-by-country basis. In cases where the indicators were unavailable, regional indicators were applied as an approximation for the country-level indicators.

The second impact assessment portrayed in this bulletin considers potential declines in airport unit revenues, which partially covers larger trends such as global economic downturn. However, given data limitation and the fast-changing nature of the ongoing crisis, additional impacts on the airport business may be foreseen, either completely unrelated to COVID-19 or induced by COVID-19.

Ends

Airports Council International (ACI), the trade association of the world’s airports, was founded in 1991 with the objective of fostering cooperation among its member airports and other partners in world aviation, including the International Civil Aviation Organization, the International Air Transport Association and the Civil Air Navigation Services Organization. In representing the best interests of airports during key phases of policy development, ACI makes a significant contribution toward ensuring a global air transport system that is safe, secure, customer-centric and environmentally sustainable. As of January 2020, ACI serves 668 members, operating 1979 airports in 176 countries.