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AGENDA ITEM 6: ECONOMIC DEVELOPMENT OF AIR TRANSPORT

THE IMPACT OF COVID-19 ON THE AIRPORT BUSINESS AND THE PATH TO RECOVERY

Presented by Airports Council International (ACI) Asia-Pacific

INFORMATION PAPER

SUMMARY

This information paper highlights key impacts of the COVID-19 pandemic on airport traffic and revenues. It further comments on the response provided by airports to meet their customers' needs during the crisis and transformative effect of the pandemic onto the airport industry.

THE IMPACT OF COVID-19 ON THE AIRPORT BUSINESS AND THE PATH TO RECOVERY

1. INTRODUCTION

1.1 On 11 March 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic. Since then, daily life across the globe has changed. The ongoing COVID-19 pandemic has resulted in a full-scale global transportation crisis, and air transport has remained one of the hardest-hit global industries. It became quickly evident that it would evolve in a crisis like no others, bringing the air transport industry into survival mode, impaired by the loss of traffic and revenues.

2. AN UNPRECEDENTED CRISIS FOR THE AIRPORT INDUSTRY

2.1 At an early stage of the COVID-19 pandemic, governments around the globe put in place various restrictions on passenger air travel, including the complete or partial closing of borders to overseas travelers and the suspension of flights to some or all destinations (including domestic air travel in some cases). As of July 2022, two years and a half since the beginning of the pandemic, restrictions on international air travel are easing, but remain in place in several markets across Asia-Pacific.

2.2 The impact on passenger traffic at airports has been severe and unprecedented across all parts of the globe including Asia-Pacific. Global passenger travel declined 61 per cent in 2020 relative to 2019 (a loss of 5.6 billion passengers) with the worst impacted regions being Europe (69% decline), Middle East (67%) and Africa (66%). Asia Pacific experienced the smallest decline (54%) largely due to recovery in the sizable Chinese domestic market. As for the second year of the pandemic – 2021 – passenger volumes remained under considerable stress. For the full year 2021, the crisis has removed 5.4 billion passengers compared to the projected baseline (the pre-COVID-19 forecast for 2021), representing a loss of 55% of global passenger traffic. Over the first two years of the pandemic, the COVID-19 outbreak reduced the number of passengers at the world's airports by 11.3 billion.

2.3 Following an early start of a recovery, Asia-Pacific experienced a slower than expected first quarter in 2021 as well as a sharp decline in domestic traffic in the third quarter, after travel restrictions were reinstated in some countries. The region ended the year with an estimated traffic loss of 62.7% compared to the projected baseline (-59.5% compared to 2019 level), a loss of more than 17 percentage points compared to our projection of July 2021.

2.4 Despite a projected reopening of most Asia-Pacific countries to international passengers in the second half of 2022, the region is expected to have the slowest recovery with a decrease of 48.9% in total passenger traffic compared to the projected baseline (down 42.2% compared to 2019 levels). The region's traffic momentum was weakened in the second half of 2021 by the resurgence of the pandemic resulting in Asia-Pacific recording the worst performance of all regions. Many countries in the region also have some of the most stringent travel restrictions on international travel. Due to the sheer size of the Asia-Pacific market, the region is also expected to record the highest traffic loss among all regions in 2022, seeing 1.87 billion fewer passengers than the projected baseline number.

2.5 Unsurprisingly, the impact has been devastating to airport finances. Global airport revenues in 2020 declined 64%, a reduction of USD 115 billion as compared to 2019. The largest percentage declines were in Europe, the Middle East, and Africa, while the largest dollar declines were in Europe, Asia-Pacific, and North America due to the larger air markets in these regions.

2.6 The first post-pandemic assessment of airports' economic and financial performance based on data for the financial year 2020 suggest that in Asia-Pacific, airports recorded 48% revenue decline in 2020, equivalent of USD 20 billion. While aeronautical revenues decline by 53%, non-aeronautical revenues were slightly more resilient and recorded a decline of 45% as compared to 2019. 2.7 Asia-Pacific remained the most affected major region in relative terms with a 60.9% decline in passenger traffic in 2021 compared to the projected baseline (-57.5% compared to 2019 levels), with a commensurate decline in revenues of about 60%.

2.8 Despite a projected reopening of most Asia-Pacific countries to international passengers in the second half of 2022, the region is expected to have the slowest recovery with a decrease of 48.9% in total passenger traffic compared to the projected baseline (down 42.2% compared to 2019 levels).

2.9 In addition to the ongoing crisis in the air transport ecosystem due to administrative travel restrictions, the general economic conjuncture in Asia-Pacific became increasingly challenging since the beginning of the pandemic. The growth outlook has been downgraded more than in any other region, with regional GDP forecast to slide from 5% to 4.5% in the next five years on a year-over-year basis. The downside economic risks only intensified in 2022 in light of the geopolitical tensions and looming crises in energy and food markets as well as global supply chains and transportation at large. The airport industry is not immune to these circumstances, and these should be duly recognized by the aviation authorities of the Asia-Pacific community.

AIRPORTS HAVE RESPONDED WITH RELIEF MEASURES TO AIRPORT USERS

2.10 A global survey of ACI member airports on their response to COVID-19 in terms of their aeronautical charges indicates that a vast majority of airports (68%) have implemented some form of discount or incentive to their airport charges specifically to address the COVID-19 impacts and recovery. The majority of airports across the globe have implemented discount and incentive programmes. This form of discounting has been preferred to wholesale reduction in the airport charges, which only 25 per cent of airports have implemented (and another 21% have considered). The discounts and incentives are flexible and more targeted. None of the respondents have implemented blanket increases in charges other than some North American airports, some of whom were required to raise airport charges to meet debt covenant requirements (e.g., Canadian airports). In Asia-Pacific, airport operators were particularly supportive of their airline customers with significant discounts and incentives.

2.11 Surveyed airports were asked to describe the most pressing issues around airport charges regulation that arise from the COVID-19 pandemic. Key concerns across all regions were the lack of flexibility to adjust prices rapidly, lack of clarity as to how losses could be recovered in the future and impacts of financing future investments. Those airports subject to regulation were asked if they were able to recover COVID-19 related losses, and only 34% indicated that they were.

2.12 Further findings, evidence and analyses can be found in IP/2: Modernizing Global Policy Frameworks on Airport Charges: Ensuring the Efficient Use of Infrastructure for the Benefits of the Travelling Public.

3. THE PERCEIVED RISK PROFILE OF AIRPORTS HAS CHANGED

3.1 The impact of the COVID-19 pandemic on airport traffic and revenues has caused investors and creditors to re-evaluate the risk profile of airports. Airport balance sheets are strained, and debt burden has increased significantly. Airports are now considered a riskier proposition for equity investors. Cash conservation remains a key challenge and reducing spending on capital investment is the most immediate way of conserving cash. However, this has long term consequences which jeopardizes infrastructure development to meet future passenger demand and the resultant socio-economic benefits that are also linked to the Sustainable Development Goals adopted by all United Nations Member States in 2015. Failure to address capacity needs to realize projected 2040 passenger demand will have real socio-economic consequences. This is especially the case for the Asia-Pacific Region with a CAPEX need estimated to be about 54% of the global need by 2040. Based on the relationship between passenger travel and socio-economic outcomes, for every 1,000,000 foregone passengers due to airport capacity constraints in 2040, the global air transport industry would support 10,500 fewer jobs and US\$346 million less in GDP

3.2 The impact of the COVID-19 pandemic on airport traffic has caused investors to reevaluate the risk assessment of airports. There remains considerable uncertainty around short-term and long-term impacts of the pandemic on airport businesses regarding the timing and extent of traffic recovery, changes in the structure and composition of travel demand (e.g., slower and possibly permanently reduced business demand), and changes in market structure and general economic conditions.

3.3 As a result, a number of airports have had their credit ratings downgraded following the COVID-19 pandemic, including those in Asia Pacific.

3.4 There is evidence that asset betas (a measure of market risk) of listed airport companies are showing a marked increase since the start of the pandemic. An increase in asset betas did not occur with regulated utilities.

3.5 The dramatic impact of COVID-19 on airport financials has implications for airport investment and the economic regulation of airports, both in terms of the immediate response and the need for adaptation in the long term. Airports have faced considerable losses, as previously documented, and future planned airport development has had to be massively revised due to uncertain traffic developments and the unknown timeline for recovery.

3.6 Consideration needs to be given to risk-sharing during shock events. There is a clear tradeoff between the degree of risk borne by the airport and the cost of capacity that debt and equity providers will require. As demonstrated in previous sections, the risk profile of airports is being re-evaluated in light of the COVID-19 pandemic and if airports are not able to recover COVID-19 related losses in future charges, it is very likely that investors will require higher returns (higher cost of debt, higher equity returns) to mitigate this risk.

4. ACTION BY THE CONFERENCE

4.1 The Conference is invited to note the information contained in this Paper.

— END —



The **VOICE** of the world's **airports**

ACI ADVISORY BULLETIN

The impact of COVID-19 on the airport business—and the path to recovery Delayed recovery, persisting financial challenges but renewed optimism and momentum

Montreal, 24 February 2022 – Airports Council International (ACI) World has published its ninth quarterly assessment analyzing the economic impact of the COVID-19 pandemic, its effects on the global airport business, and the path to recovery.

It has been almost two years since the World Health Organization (WHO) declared the COVID-19 outbreak a global pandemic. Since then, there have been major impacts to daily life across the globe. However, we have now reached a potential turning point. Despite the more than 400 million infections across the globe and significant death toll, 10.5 billion shots of the vaccine have been administered worldwide in more than 180 countries. This unprecedented vaccination effort is now starting to bear fruits despite some setbacks from the recent Omicron wave. According to the WHO Director General, if we can achieve a 70% rate of vaccination for the world's population by June or July 2022, we could be out of the acute phase of the pandemic this year, potentially fueling the global economic recovery, and air transport demand.

The crisis has resulted in a dramatic impact to the global economy, trade, and mobility. Just over two years after the first reported case of COVID-19, many countries are laying plans to return to some normality, lifting many health measures, relaxing travel restrictions, and reopening borders. In Europe, Switzerland recently followed in the footsteps of the Netherlands, Norway, and Denmark on this path. Australia has reopened its borders to all vaccinated visa holders at the end of February, after nearly two years since its border was closed to non-citizens. Other Asia-Pacific countries like Thailand, the Philippines, Vietnam, Indonesia and Singapore are also slowly reopening to vaccinated travellers. In the US, a growing number of states and cities have lifted restrictions or announced plans to relax them.

The momentum created by the plan to reopen will certainly have a positive impact on the global economic recovery. The performance of the global economy has accelerated in the last months of 2021 as more pandemic restrictions were removed, facilitating the trade in goods, and enabling the manufacturing and services sectors to grow.

The International Monetary Fund (IMF) however warns that the recovery faces multiple headwinds ranging from new potential variants, high crude oil prices, higher inflation, or supply chain disruptions. According to the IMF, global growth is expected to moderate

from 5.9% in 2021 to 4.4% in 20221. High inflation levels are probably the most pressing downside risk that governments will target. Consumer inflation in the United States reached 7.1% in December, the highest rate in 40 years, forcing the Federal Reserve to announce its intention to raise interest rates; thereby placing the brakes on major economies. The success of those measures to control inflation will be a key determinant in the possibility that the economic momentum of 2021 could carry over into 2022. What's more, armed conflict and increased international tensions could also dampen the speed and magnitude of the recovery.

On the vaccine front, the pace of vaccination has accelerated in core emerging markets in the past few months. However, many countries continue to fall well short of the commonly recognized threshold for herd immunity. Low vaccination rates mean that emerging and developing nations are more exposed to the virus and its variants, which increases the risk of new waves that could undermine the progress made until now.

In this overall context, this document seeks to highlight some key figures in terms of the impacts of the COVID-19 pandemic on airport traffic and revenues and explore pathways to recovery.

1. COVID-19's effect on airport traffic: delayed recovery but renewed optimism

The devastating and unprecedented impacts of the global COVID-19 pandemic and the subsequent travel restrictions on the airport industry and the entire air transport ecosystem are now well-known. After a decade of consistent and robust growth in global passenger traffic, the pandemic virtually halted activity at airports around the world in the second quarter of 2020. As a result, the total number of passengers for the year fell dramatically from 2019, to a level the world's airports had not seen since 1997.

COVID-19 remains an existential crisis for airports, airlines and their commercial partners. Even with massive vaccination efforts, the global travel market remains significantly below pre-COVID-19 levels. The speed of the recovery continues to depend substantially on several stakeholders and the level of coordination pursued by national governments worldwide. While the global international travel market is still mostly depressed, a growing number of countries are moving towards the gradual reopening of their borders to vaccinated travelers—sparking some optimism and a potential real path to recovery.

Nonetheless, the recovery is uneven. Domestic markets are recovering at a much greater speed than international passenger markets. The recovery is also regionally uneven. The early momentum of the Asia-Pacific region, fuelled by the rapid recovery of the Chinese domestic passenger market, was severely dampened in the second half of 2021 by a resurgence of COVID-19 and the re-establishment of travel restrictions in the region. While some countries in Asia-Pacific are starting to reopen to vaccinated travelers, the international passenger market is not expected to see significant improvement before the second half of 2022.

Despite a delayed recovery as compared to earlier forecasts and the setback caused by the Omicron wave, the trend towards gradual reopening and relaxation of travel restrictions brings a renewed optimism. Air travel could see an uptick in the second half of 2022, moving the industry closer to its recovery.

In this context, using the latest data from ACI World's monthly traffic data collections in 2021, new estimates of the impact of the crisis on passenger traffic are presented.

¹ International Monetary Fund. World Economic Outlook Update. Rising caseloads, a disrupted recovery, and higher inflation. January 2022

Looking back at 2021

- Passenger volumes remained under considerable stress due to the lasting adverse impact of the COVID-19 crisis. For the full year 2021, the crisis is forecast to have removed 5.4 billion passengers compared to the projected baseline (the pre-COVID-19 forecast for 2021), representing a loss of 55% of global passenger traffic (see Table 1). Over the first two years of the pandemic, the COVID-19 outbreak reduced the number of passengers at the world's airports by 11.3 billion.
- **Global passenger traffic in 2021** is expected to reach less than half of what it was in 2019, with traffic for 2021 totalling only 4.4 billion (48.3%) of the 9.2 billion passengers served two years ago.
- Fueled by a fast-recovering US domestic market and a high overall vaccination rate, **North America**'s performance has improved significantly in 2021 following a weak first quarter. As a result, the region outperformed all other regions to end the year with its traffic down **37.3%** compared to the projected baseline (down 33.6% compared to the 2019 level).
- The Latin America-Caribbean region had a strong second half of 2021, bringing the region to report a decline of **43.1%** compared to the projected baseline (down 39.1% compared to 2019 level). The domestic passenger recovery of country-markets like Mexico helped the region to record the second-best regional performance.
- Africa recorded some significant gains, especially in the last quarter of 2021, which helped the region to end 2021 with a decline of **56.3%** compared to the projected baseline (down 49.2% compared to 2019 level), the third best performance of all regions for 2021.
- Despite some improvement in the second half of 2021, the **Middle East** remained the most impacted region in 2021, losing **65.9%** of its passenger traffic for the year compared to the projected baseline (down 62% from 2019 level). This is due to the region's high dependence on international travel and connectivity, both of which are recovering much more slowly than domestic travel.
- Following an early start of a recovery, **Asia-Pacific** experienced a slower than expected first quarter in 2021 as well as a sharp decline in domestic traffic in the third quarter, after travel restrictions were reinstated in some countries. The region ended the year with an **estimated traffic loss of 62.7%** compared to the projected baseline (-59.5% compared to 2019 level), a loss of more than 17 percentage points compared to our projection of July 2021.
- While Europe recorded significant improvement in the third and fourth quarters of 2021, the region ended the year 60.1% below the projected baseline and down 58% of its 2019 level. However, the positive trend should carry over to 2022.

- International passenger traffic remained weak in the first half of 2021, and signs pointing toward a surge in air travel demand for the second half of the year did not materialize, despite an increasing number of people getting vaccinated. The Omicron wave at the end of 2021 also contributed to weaker than expected volume. International passenger traffic volume lagged significantly behind domestic traffic recovery in 2021 and is estimated to total only 1.05 billion passengers for the year, or 27.8% of the 2019 level. This is more than a 10 percentage points decrease from our October 2021 assessment (see Chart 4 for more details).
- **Domestic passenger traffic** recovered faster than international traffic. Major domestic markets began recovering in 2020 and the pace of recovery accelerated in 2021—especially in the US, the world's largest domestic market. However, large domestic markets in Asia-Pacific have seen some setbacks resulting from the re-establishment of travel restrictions. Globally, domestic traffic continued to increase in 2021 and reached close to **3.4 billion passengers** corresponding to **63.4% of 2019 levels**, an increase of 5 percentage points from our October 2021 assessment (see Chart 4 for more details).

2022 projections

- In 2022, the COVID-19 crisis is expected to remove close to 3.7 billion passengers during the year compared to the projected baseline, representing a 36.1% decline in global passenger traffic (see Table 1). Compared to 2019 levels, this would represent a 28.9% decrease.
- Despite being hit hard by the Omicron wave, **North America** will continue to outperform other regions in 2022, reaching 88.5% of its 2019 level by year end. Passenger traffic in the region for 2022 is forecast to be only **18.7%** lower than that projected for the baseline.
- The Latin America-Caribbean region is expected to continue seeing a positive uptick in 2022. The increase in leisure travel is forecast to bring the region to a decline of only 25.3% by year end compared to the projected baseline (down 17% from 2019 level).
- Africa is expected to continue to recover in 2022 despite the vaccination challenges it faces. The region is expected to reach 75% of its 2019 level by year end, a decline of 40.6% compared to the projected baseline, the fourth best performance of the six regions.
- Despite a projected reopening of most Asia-Pacific countries to international passengers in the second half of 2022, the region is expected to have the slowest recovery with a decrease of 48.9% in total passenger traffic compared to the projected baseline (down 42.2% compared to 2019 levels). The region's traffic momentum was weakened in the second half of 2021 by the resurgence of the pandemic—resulting in Asia-Pacific recording the worst performance of all regions. Many countries in the region also have some of the most stringent travel restrictions on international travel. Due to the sheer size of the Asia-Pacific market, the region is also expected to record the highest traffic loss among all

regions in 2022, seeing **1.87 billion fewer passengers** than the projected baseline number.

- Due to its dependence on international traffic, the Middle East and Africa will remain highly impacted regions in 2022. Passenger traffic in 2022 is expected to be respectively 42.9% and 40.6% lower than that of the projected baseline (-33.2% and -25% respectively compared to 2019 levels).
- **Domestic passenger traffic** volume was helped by the early recovery of major domestic markets such as those of the United States and Russia. Domestic traffic volume will continue to recover faster in 2022 than international passenger traffic, reaching a total of 4.46 billion passengers in 2022, or 84% of the 2019 volume (see Chart 4 for more details).
- International passenger traffic will remain weaker than domestic passenger traffic in 2022. While some improvements are expected, especially in the second half of 2022, international passenger volume is forecast to be only slightly above 2 billion passengers for the year (0.3 billion less than our previous estimate of October 2021), corresponding to 53.8% of the 2019 volume (see Chart 4 for more details).
- Find more details, and regional breakdowns, in **Table 1**, **Table 2**, **Chart 1**, and **Chart 2** below.

Region	2021					2022				
	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL
	Estimated under COVID-19*					Estimated under COVID-19*				
Africa	20	22	33	42	117	33	38	49	52	172
Asia-Pacific	338	381	316	333	1,368	310	350	602	691	1,952
Europe	94	171	431	324	1,020	272	422	594	459	1,747
Latin America-Caribbean	80	87	119	132	418	124	130	149	167	570
Middle East	29	34	47	45	154	41	55	88	88	272
North America	191	334	402	416	1,344	373	464	502	454	1,793
World	753	1,030	1,347	1,291	4,421	1,152	1,459	1,984	1,910	6,506
	Estimated traffic loss (compared to projected baseline**)					Estimated traffic loss (compared to projected baseline**)				
Africa	-41	-41	-42	-26	-150	-33	-30	-32	-22	-117
Asia-Pacific	-563	-517	-618	-601	-2,300	-630	-587	-371	-282	-1,871
Europe	-412	-506	-364	-253	-1,536	-247	-272	-221	-133	-872
Latin America-Caribbean	-104	-89	-69	-56	-317	-67	-53	-46	-27	-194
Middle East	-81	-77	-76	-65	-299	-75	-62	-40	-27	-204
North America	-298	-222	-165	-115	-800	-130	-108	-81	-93	-413
World	-1,499	-1,452	-1,334	-1,116	-5,401	-1,182	-1,113	-791	-584	-3,671
	Estimated traffic loss (% compared to projected baseline**)					Estimated traffic loss (% compared to projected baseline**)				
Africa	-67%	-65%	-56%	-39%	-56.3%	-50%	-44%	-40%	-30%	-40.6%
Asia-Pacific	-63%	-58%	-66%	-64%	-62.7%	-67%	-63%	-38%	-29%	-48.9%
Europe	-81%	-75%	-46%	-44%	-60.1%	-48%	-39%	-27%	-22%	-33.3%
Latin America-Caribbean	-56%	-50%	-37%	-30%	-43.1%	-35%	-29%	-24%	-14%	-25.3%
Middle East	-73%	-70%	-62%	-59%	-65.9%	-65%	-53%	-31%	-23%	-42.9%
North America	-61%	-40%	-29%	-22%	-37.3%	-26%	-19%	-14%	-17%	-18.7%
World	-67%	-59%	-50%	-46%	-55.0%	-51%	-43%	-28%	-23%	-36.1%

Table 1: The impact of the COVID-19 crisis on quarterly passenger traffic by region(2021 and 2022, rounded to nearest million passengers)

* Estimated passenger traffic volumes are based on a broad range of inputs provided by ACI Regional offices and industry experts. ** The projected baseline (pre-COVID-19) scenario is based on a standard time-series forecast generated using the most up-to-date and complete historical data to December 2019. It also makes use of an adjusted World Airport Traffic Forecasts (WATF) 2019–2040 and considers the latest insights provided by ACI Regional offices and other inputs. Source: ACI World

Table 2: The impact of the COVID-19 crisis on quarterly passenger traffic by region (2021 and 2022, rounded to nearest million passengers, percentage compared to 2019)

Region	Q1	Q2	Q3	Q4	TOTAL		Q1	Q2	Q3	Q4	TOTAL
			2019								
Africa	52	55	64	58	229	1					
Asia-Pacific	837	824	860	856	3,376						
Europe	476	649	752	550	2,428						
Latin America-Caribbean	172	164	176	175	687						
Middle East	97	100	111	99	407	1					
North America	461	527	534	503	2,025						
World	2,096	2,319	2,498	2,240	9,153						
		Estimate	ed under CC	OVID-19*			(Compared t	o 2019 (% o	f 2019 leve)
			2021			1 6			2021		
Africa	20	22	33	42	117	1	38%	41%	51%	72%	50.8%
Asia-Pacific	338	381	316	333	1,368		40%	46%	37%	39%	40.5%
Europe	94	171	431	324	1,020		20%	26%	57%	59%	42.0%
Latin America-Caribbean	80	87	119	132	418		47%	53%	68%	75%	60.9%
Middle East	29	34	47	45	154		30%	34%	42%	45%	38.0%
North America	191	334	402	416	1,344		42%	63%	75%	83%	66.4%
World	753	1,030	1,347	1,291	4,421		36%	44%	54%	58%	48.3%
	2022					2022					
Africa	33	38	49	52	172	1 Г	63%	70%	76%	89%	75.0%
Asia-Pacific	310	350	602	691	1,952		37%	42%	70%	81%	57.8%
Europe	272	422	594	459	1,747		57%	65%	79%	83%	71.9%
Latin America-Caribbean	124	130	149	167	570		72%	79%	85%	95%	83.0%
Middle East	41	55	88	88	272		42%	55%	79%	89%	66.8%
North America	373	464	502	454	1,793		81%	88%	94%	90%	88.5%
World	1,152	1,459	1,984	1,910	6,506		55%	63%	79%	85%	71.1%

*Estimated passenger traffic volumes are based on a broad range of inputs provided by ACI Regional offices and industry experts. Source: ACI World

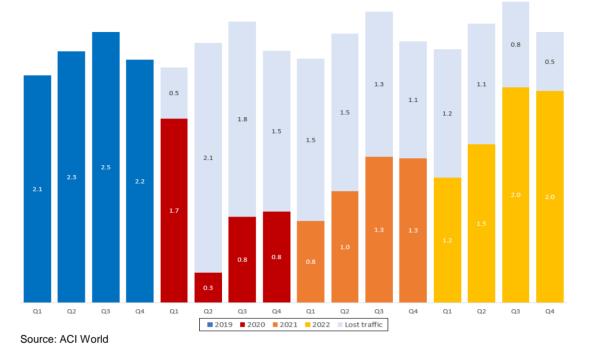
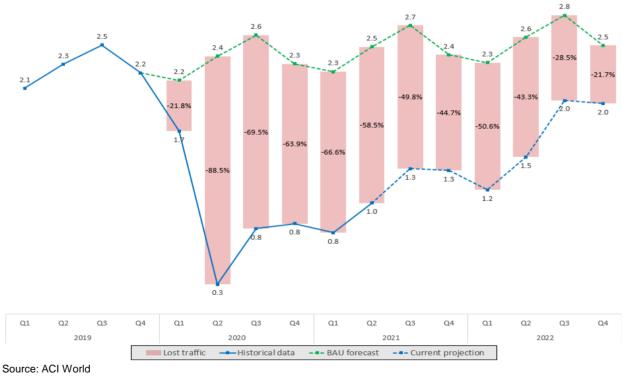


Chart 1: Projected global quarterly passenger losses due to the COVID-19 crisis (2019–2022, in billions of passengers)





2. COVID-19's effect on airport revenues: progressive improvement but financial challenges persist

Airports and the aviation sector serve as economic engines. The industry's global economic impact—direct, indirect, induced, and catalytic—contributes trillions of dollars to the global gross domestic product, supports millions of jobs, and fosters sustainable development. Furthermore, the aviation sector plays a critical role in the recovery of economies following the COVID-19 pandemic.

Airports play a pivotal role in this ecosystem. The economic value driven by airports cannot be understated when it comes to facilitating business and leisure travel, trade, and the subsequent GDP, jobs, taxes, and associated social benefits.

Air traffic is the lifeblood of the airport business. Practically all aeronautical revenues are a direct function of traffic and include passenger-related charges and aircraft-related charges levied from aircraft operators. As traffic declines, revenues from charges decrease proportionally. Non-aeronautical revenues, which include such streams as retail concessions, duty free, car parking and food and beverage, are also very much linked to passenger traffic and throughput. As airports have little flexibility in operating expenditures but also have capital costs that are largely fixed, the current crisis represents an unprecedented challenge for the airport industry's financial viability. Compared to the projected baseline, the global airport annual revenue shortfall is projected to be **US\$83.1 billion** in 2021 and an additional **US\$60.8 billion** in 20222.

Looking back at 2021

- The COVID-19 crisis and its impacts continued to severely affect airport revenues in 2021. It is now estimated that, globally, airports have lost more than US\$83.1 billion in revenues in 2021. The crisis is expected to cut by half (48.9%) airport revenue expectations for 2021 compared to the projected baseline (the pre-COVID-19 revenue forecast). Compared to 2019, airport revenues will be reduced by 45.2%. See Table 3.
- The **Middle East** and **Asia-Pacific** remained the regions most affected in relative terms, respectively seeing **69.7%** and **60.9%** declines in 2021 compared to the projected baseline (-66.3% and -57.5% compared to 2019 levels).
- Europe, the most impacted region in absolute terms, lost more than US\$32.3 billion in revenues by year end 2021 compared to the projected baseline (US\$29.4 billion compared to 2019).

² This new bulletin shows an improved expected annual financial performance of the world's airports compared with estimates published in 2021. For each bulletin, ACI uses the most up to date traffic and financial figures. For this bulletin, the 2020 revenue figures were used following the collection of financial data for the 2020 fiscal year of more than 1,000 airports. The figures presented in this bulletin use calendar year and not fiscal year. Certain jurisdictions have a significant proportion of their airports not using calendar year in their financial statements (e.g., fiscal year may straddle July 2019 to June 2020). For more details, please see the Methodology section of the ACI 2022 Key Performance Indicators.

- Africa's revenue performance was slightly better than the global figure in 2021, recording a decline of **46.1%** of its revenues compared to the projected baseline (down 37.3% from 2019 level), or an absolute loss of close to US\$2 billion.
- North America and Latin America-Caribbean recovered quicker than the other regions in 2021. These regions recorded **18.9%** and **34.8%** decreases in 2021 respectively compared to the projected baseline (down 14.2% and 30.2% compared to 2019).
- Find more details and regional breakdowns in **Table 3** below.

2022 projections

- Prior to the COVID-19 outbreak, the airport industry was expected to generate more than US\$175.8 billion in revenues in 2022. However, the impacts of the COVID-19 crisis on airport revenues will continue in 2022, reducing them by an additional US\$60.8 billion, or 34.6%, compared to the projected baseline. Airport revenues in 2022 are only forecast to reach 72.6% of 2019 levels. See Tables 3.
- All regions are expected to reach more than half of their projected baseline revenues for 2022. Asia-Pacific and the Middle East will remain the two most impacted regions, with 2022 revenues decreasing by 48.8% and 43.2% compared to the projected baseline respectively. In absolute terms, Asia-Pacific and Europe will record the largest losses among the regions in 2022, ceding US\$23.1 billion and US\$19.5 billion respectively—despite a significant recovery by Europe during the year.
- Africa is expected to continue to record above average revenue performance in 2022. By year end, the region is forecast to post a decline of **39%** of its revenues compared to the projected baseline (down 23.1% from 2019 level).
- North America and Latin America-Caribbean are expected to continue to perform better than any other region in 2022. They are forecast to see **18.0%** and **24.6%** shortfalls respectively compared to the projected baseline (down 10.7% and 16.2% compared to 2019).
- Find more details and regional breakdowns in **Table 3** below.

Table 3: Impact of the COVID-19 crisis on airport revenues* by region (2021 and 2022, rounded to nearest million USD)

Region	2021	2022	2021	2022		
	Estimated und	ler COVID-19**				
Africa	2,258	2,770				
Asia-Pacific	17,757	24,228				
Europe	26,054	40,224				
Latin America-Caribbean	6,697	8,043				
Middle East	4,690	9,220				
North America	29,352	30,553				
World	86,809	115,038				
		evenue loss jected baseline***)	Difference compared to 2019 levels			
Africa	-1,931	-1,774	-1,342	-830		
Asia-Pacific	-27,643	-23,106	-24,043	-17,572		
Europe	-32,259	-19,543	-29,346	-15,176		
Latin America-Caribbean	-3,576	-2,627	-2,903	-1,557		
Middle East	-10,795	-7,018	-9,210	-4,680		
North America	-6,861	-6,693	-4,848	-3,647		
World	-83,065	-60,761	-71,691	-43,462		
		evenue loss ojected baseline***)	% difference compared to 2019 levels			
Africa	-46.1%	-39.0%	-37.3%	-23.1%		
Asia-Pacific	-60.9%	-48.8%	-57.5%	-42.0%		
Europe	-55.3%	-32.7%	-53.0%	-27.4%		
Latin America-Caribbean	-34.8%	-24.6%	-30.2%	-16.2%		
Middle East	-69.7%	-43.2%	-66.3%	-33.7%		
North America	-18.9%	-18.0%	-14.2%	-10.7%		
World	-48.9%	-34.6%	-45.2%	-27.4%		

* Revenues are estimated using passenger volumes and key figures from the ACI's 2022 Airport Key Performance Indicators, as well as input from ACI Regional offices. Financial figures are rounded for ease of reading. Percentages of change use exact figures. Estimates are updated between each release as more information and data become available.

** Estimated based in part on passenger traffic volumes and a broad range of inputs provided by ACI Regional offices and industry

experts. *** The projected baseline (pre-COVID-19) scenario is based on a standard time-series forecast generated using the most up-to-date and complete historical data to December 2019. It also makes use of an adjusted World Airport Traffic Forecasts (WATF) 2019–2040 and considers the latest insights provided by ACI Regional offices and other inputs. Source: ACI World

3. The road to recovery

Much uncertainty still surrounds the recovery of the aviation industry. Projecting the path to recovery at this point is still an exercise requiring prudence. Although the largest vaccination campaign in history is well underway, a large proportion of the world's population—mainly in emerging and developing countries—remains unvaccinated. As we saw with the Omicron wave, a less virulent but highly contagious variant can still have a significant impact on daily life and the aviation industry by disrupting supply chains, straining healthcare systems, and contributing to major flight cancellations. While the propensity for such disruptions diminishes as populations become fully vaccinated, there is always the possibility that the recovery could be halted by the emergence of a new variant of the COVID-19 virus that makes vaccines less effectivereturning the industry, and the world, back to or close to square one.

Despite the downside risks, the industry remains confident that the potential for a recovery to 2019 levels within two or three years is foreseeable despite the setback from the Omicron wave. There is no doubt that many travellers are eager to resume travelling. With the combination of "vacation deprivation" and an upsurge in confidence in air travel provided by increased vaccination rates and safety measures, the relaxation of travel restrictions will help boost the propensity for air travel and fuel the industry's recovery. With more and more countries taking steps towards the return to a certain normality, lifting almost all the health measures and travel restrictions, we see a potential surge in air travel demand in the second half of 2022.

Two scenarios in assessing the potential recovery trajectory were considered, using the following assumptions.

Current scenario:

- It assumes effective vaccine distribution and adoption in emerging and developing countries in 2022.
- The scenario takes into account the impact of Omicron in late 2021 and Q1 2022.
- This projection also assumes growing consumer confidence in the resumption of travel in 2022, a reasonable airline fleet recovery, and ongoing relaxation of international travel restrictions.
- It posits that additional infection waves are possible in 2022 but they would be either contained and limited to specific regions or have less impact on air travel demand as the world is increasingly learning to "live with COVID-19."

Pessimistic scenario:

- This scenario considers weaker vaccine distribution in 2022, especially in many emerging and developing countries with limited vaccine supply.
- It assumes that fear of travelling is still present among passengers in certain markets, that economic weakness is exacerbated, and that airline fleet recovery is slow.
- It posits that additional waves of infections are likely and could spread to multiple regions, and difficulties would exist in containing the spread of new variants. New waves of infection would affect both vaccinated and unvaccinated populations.

Under those assumptions, ACI World forecasts the following, regarding the recovery of airport passenger traffic:

• Under the current projection, accounting for the slower than expected fourth quarter of 2021 and the Omicron wave, global passenger traffic is still expected to recover to 2019 levels in early 2024. The overall recovery will mainly be driven by the recovery of domestic passenger traffic but will be hampered by a slower recovery in international travel (globally, domestic traffic accounted for 58% of total passenger traffic in 2019). Global passenger levels should reach 91.7% of 2019 levels in 2023 and surpass 2019 levels by 5% in 2024 (see Chart 3).

- Global domestic passenger traffic is still expected to reach 2019 levels in late 2023 with full-year 2023 traffic at par with 2019 levels. However, global international passenger traffic will require one more year to recover and will reach 2019 levels only by the fourth quarter of 2024. Full-year recovery to 2019 levels will only happen in 2025 for international passenger traffic.
- At the country-market level, markets having significant domestic traffic are expected to recover to pre-COVID-19 levels in mid-2023 to late-2023. Markets with significant shares of international traffic are unlikely to return to 2019 levels until 2024, some having even to wait until 2025. Due to the uneven availability of vaccines and worsening two-track economic recovery, some emerging and developing country-markets will probably not reach 2019 passenger levels before 2025 or 2026, especially those markets reliant on international traffic.
- The pessimistic scenario calls for a delayed recovery, resulting from the appearance of additional waves of infections affecting both vaccinated and unvaccinated populations, and new variants of the virus. These will result in governments introducing more restrictive measures, potentially creating new lockdowns, and travel restrictions. Under this scenario, passenger volumes will remain weak, with the industry only achieving 60.1% of its 2019 levels in 2022 and 81.6% of the 2019 levels in 2023. Global recovery to the 2019 levels will occur in late 2024 and full year recovery only in 2025.
- In the long-term, the most likely scenario predicts that global air traffic will see a structural change preventing it from ever returning to levels that were forecast before the COVID-19 pandemic. The COVID-19 crisis is predicted to delay the long-term growth curve by 2 to 5 years depending on the country-market.

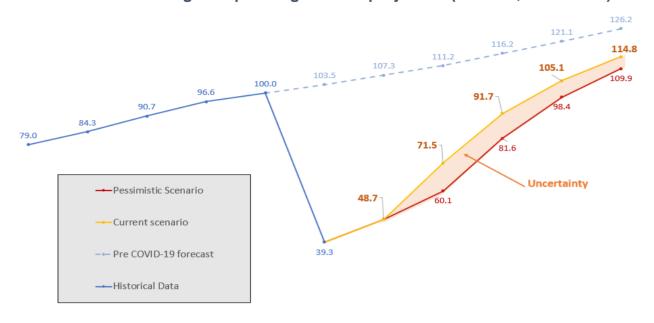
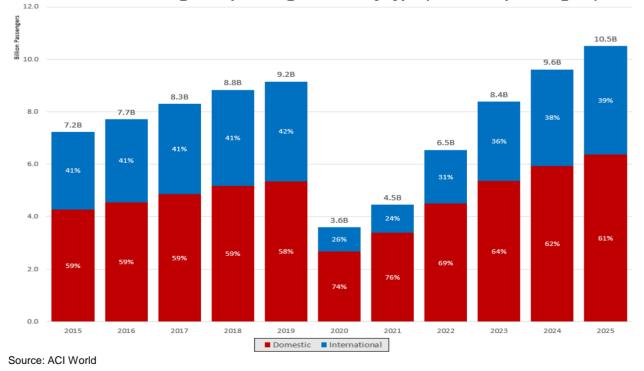


Chart 3: Medium-term global passenger traffic projection (indexed, 2019 = 100)

20152016201720182019202020212022202320242025* The pre-COVID-19 forecast scenario is based on a standard time-series forecast generated using the most up-to-date and complete
historical data to December 2019. It also makes use of an adjusted World Airport Traffic Forecasts (WATF) 2019–2040 and considers
the latest insights provided by ACI Regional offices and other inputs.**Estimated passenger traffic volumes scenarios (current projection and pessimistic) are based on a broad range of inputs provided

** Estimated passenger traffic volumes scenarios (current projection and pessimistic) are based on a broad range of inputs provided by ACI Regional offices and industry experts.

Source: ACI World



— END —

Chart 4: Medium-term global passenger traffic by type (in million passengers)

<u>Airports Council International (ACI)</u>, 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, efficient, and environmentally sustainable. As of January 2022, ACI serves 717 members, operating 1950 airports in 185 countries.