Air Transport Competitivity Index in Latin America and the Caribbean

START HERE

CONTENTS

ALTA | amadeus

INTRODUCTION

We are convinced that travel is a powerful tool for development. Air travel brings families together, enables companies to reach new markets, contributes to personal growth, and accelerates trade. It provides direct, indirect, and induced employment to millions of people and, by connecting remote and urban areas, travel fosters social mobility, inclusion and accessibility to essential services and cultural exchange. In a region as rich and diverse as Latin America and the Caribbean, travel is not just an option, it is an essential service, and millions of people from all walks of life will benefit if travel continues to grow.

It is no wonder that Latin America and the Caribbean are among the fastest growing regions in the world for air travel. More than 70% of tourists arriving in the region arrive by air, and in the decade before the pandemic, increased tourism activity, infrastructure investments and new air routes contributed to passenger numbers growing at a rate of 5.6% per year.

The pandemic caused a drastic stop, but the aviation industry in Latin America and the Caribbean has recovered to 2019 levels and has even resumed a growth path despite adversity: an estimated 306 million passengers flew with Latin American airlines in 2023, according to ALTA estimates based on data from Amadeus Travel Intelligence – Market Insight. In fact, Latin America and the Caribbean have outperformed all other regions with the highest passenger recovery worldwide, an impressive achievement considering it received no financial assistance during the pandemic.

So, what are the conditions that can foster further growth in air travel? How can Latin American and Caribbean countries make the most of these opportunities? And how can the travel industry find a path to growth that is truly sustainable, cooperative, and fair, so that all Latin American and Caribbean citizens, and their local, national, and regional economies can benefit from it?

Since 2019, ALTA (Latin American and Caribbean Air Transport Association) and Amadeus have partnered to answer these questions with the Latin American and Caribbean Air Transport Competitiveness Index.

To make the best decisions, industry stakeholders, policy makers and industry leaders need access to the best and latest industry data and analysis. Our Competitiveness Index was designed with this in mind. By providing a detailed view of the strengths, challenges and opportunities of the Latin American and Caribbean air transport industry, Amadeus and ALTA aim to provide the information regional leaders need to design strategies that orchestrate a successful and sustainable path for growth, increased collaboration, and improved competitiveness.
Ultimately, we believe that if more people can make use of air travel, the countries and citizens of the region will benefit from the income and jobs generated directly and indirectly by the tourism industry. To that end, this report outlines steps that can be taken to generate more attractive conditions to attract investment and facilitate tourism.

While this report delves into a lot of data on the influence of all sorts of factors, from infrastructure to fuel prices, airport quality, passenger taxes, ground transportation, etc., there are some overarching themes that we know have a major influence on the success of the tourism industry, not only in Latin America and the Caribbean, but around the world:

Collaboration: The potential of aviation and the travel and tourism industry should be recognized by local and regional governments. It is essential that it be considered as part of State Agendas to foster appropriate contexts for development. Collaboration will help to enhance these efforts more quickly and efficiently.

Technology as an enabler: The transformative power of technology will continue to have a dramatic impact on the success and growth of aviation in the region. Technology and innovation can enhance safety, improve sustainability, increase efficiency, and improve the overall passenger experience. With travel-centric retail, technology cannot be overlooked as an essential tool for the growth and prosperity of the travel industry in Latin America and beyond.

Amadeus and ALTA firmly believe that the travel industry is a positive force. By working together and sharing this data and our findings with all our industry partners, we hope to contribute to a future in which the travel industry brings development and prosperity to all, while fostering social inclusion, diversity, and sustainability.

We look forward to hearing your views,

José Ricardo Botelho
Executive Director and CEO of ALTA

Victoria Gorzio
Vice President Airlines Latin America, Amadeus

ALTA | amadeus

Historic traffic growth and prospects

The air transport industry in Latin America and the Caribbean (LAC) is a fundamental pillar of the region's economic vitality and social progress, not only facilitating the movement of goods and people, but also serving as a catalyst for investment and international cooperation.

The contribution of air transport to Latin America goes beyond connectivity. It is a tool for economic growth and social development, and the sector's importance can be understood through several key dimensions:

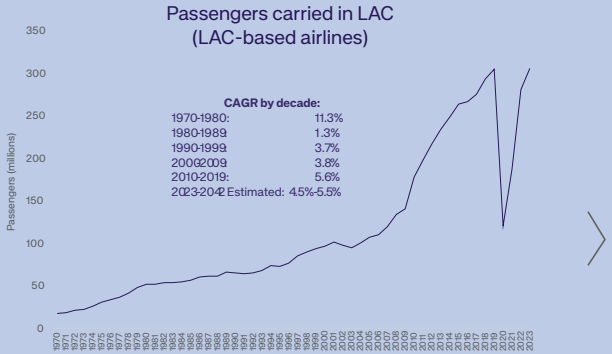
Economic growth: Air transport enables companies to reach new markets, enhances the tourism industry and accelerates trade.

Employment and skills development: Provides direct and indirect employment, fostering skills and expertise in diverse fields such as engineering, logistics and customer service.

Social cohesion and accessibility: By connecting remote and urban areas, air transport fosters social inclusion, accessibility to essential services and cultural exchange.

Innovation and investment: The continuing need for technological advances drives innovation and attracts investment in research, development, and infrastructure.

Environmental leadership: The industry's focus on sustainability offers a model for balancing growth with environmental responsibility.



Source: ALTA Analysis

The growth of the air transport sector in Latin America and the Caribbean (LAC) over the last fifty years has reflected the region's changing circumstances. In the 1970s, passenger numbers increased at a compound annual growth rate (CAGR) of 11.3% due to political transitions to democracies, which boosted trade and investment. The 1980s, often referred to as the "Lost Decade," witnessed stagnation, with modest passenger growth of 1.3% annually due to economic problems, high inflation, and debt.

The 1990s revitalized the sector and passenger numbers rose from 65.2 million to 93.6 million. Economic reforms, the emergence of new airlines, the tourism boom and investments in aviation infrastructure were the main drivers. Technological advances in this decade played a transformative role. The introduction of computerized reservation systems streamlined ticketing processes, allowing airlines to reach a wider audience and simplify bookings. In addition, the emergence of digital communication tools and the Internet began to reshape the way airlines interacted with their passengers and managed their operations. There were challenges, such as the financial crisis of 2007-2008, but they were effectively overcome.

Between 2010 and 2019, the number of passengers grew from 178.4 million to 305.1 million, an annual growth of 5.6%. Increased tourism activity, infrastructure investments and new air routes drove this growth. However, 2020 was a difficult year due to COVID-19, which caused a decline to 121 million passengers. However, thanks to the resilience of airlines and government collaboration on security measures, the industry demonstrated resilience, paving the way for a rapid recovery.

Today, the aviation sector in Latin America has fully recovered to pre-pandemic levels, with an estimated 306 million passengers carried by LAC airlines by the end of 2023, according to ALTA estimates. An analysis of the data reveals significant room for growth; current per capita travel stands at 0.6, representing a significant growth opportunity in the region. For sustainable expansion, it is imperative that countries streamline policies and frameworks, fostering a more competitive landscape for industry.

Upon conclusion of this historical review, the importance of this Competitiveness Report is evident. Through a detailed assessment of the seven identified pillars, this study provides a holistic perspective of the strengths and vulnerabilities of the Latin American and Caribbean aviation sectors. It is vital to identify areas of excellence and potential improvement. Armed with this analysis, countries can formulate specific strategies, capitalize on their strong points, and strengthen areas of concern. This in-depth knowledge will contribute to a stronger and more resilient air transport landscape in the region.

Objective, scope, and methodology

Through this study, we aim to provide a detailed and comprehensive view of the strengths, challenges, and opportunities of the air transport sector in Latin America and the Caribbean. Our goal is to provide information for stakeholders, policy makers and industry leaders to design strategies for sustainable growth, increased collaboration, and improved competitiveness.

This report analyzes the competitiveness of the air transport industry in 20 Latin American countries, focusing on 7 key pillars.

Data collection: Data is sourced from reliable industry reports, official databases and specific ALTA and Amadeus calculations. The Amadeus Travel Intelligence – Market Insight platform, in particular the Schedule Analytics and Traffic Analytics modules, were the main sources of traffic and capacity related data.

Weighting of the pillars: Each pillar and sub-pillar is weighted according to its importance for the competitiveness of the air transport sector.

In assessing the competitiveness of aviation in Latin America and the Caribbean, greater relevance has been given to the first three pillars: air infrastructure, operating costs, and fees and taxes. The emphasis on these pillars is justified by the ability of a robust air infrastructure to meet growing demand in a region with significant growth potential, where air transport is often the only viable option due to its challenging geography and long distances between destinations. Competitive operating costs are essential, as efficiencies achieved by airlines have a proven track record of being passed on to passengers in the form of lower fares. Finally, the structure of fees and taxes is critical, as they should not represent a barrier that makes the cost of air travel more expensive for passengers, especially in a highly price-sensitive market. Therefore, these three pillars together make up 75% of the final score of this study, underlining their importance in the formation of a competitive and accessible aviation environment in the region.

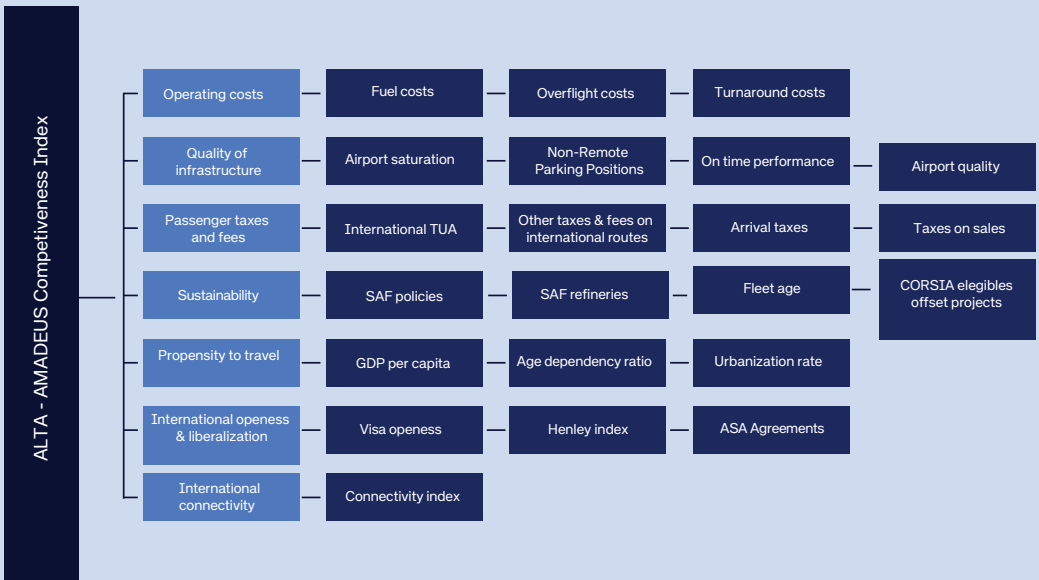
Scoring system: Countries receive scores between 0 and 1 for each pillar. A score of 1 indicates the best performance, while 0 is the lowest. The final country score is the weighted average of all pillars.

Normalization: Scores are adjusted to the range 0-1. For most metrics, higher values get scores close to 1. But for factors where less is better, such as fuel price, lower values get higher scores. Thus, the scores for the different pillars are consistent and directly comparable. When there are multiple data points for the same pillar (such as fuel price, which differs between airports in the same country), a country-specific value was calculated using a weighted average based on the number of passengers each airport handles relative to the total number of passengers.

$$Xnorm = \frac{X\text{-}Xmin}{Xmax\text{-}Xmin} \qquad Inverse\ Xnorm = 1 - \frac{X\text{-}Xmin}{Xmax\text{-}Xmin}$$

Index Pillars

The following 7 pillars have been examined, which provide an overall view of the sector:



Main Results

	Country /Pilar	Operational costs	Quality of infrastructure	Taxes and fees	Sustainability	Willingness to travel	International openness and liberalization	International connectivity	Total
1	Panama	0.75	0.90	0.77	0.48	0.74	0.61	0.24	7.34
2	Chile	0.55	0.90	0.93	0.20	0.68	0.69	0.12	6.89
3	Brazil	0.54	0.44	1.00	0.98	0.61	0.72	0.34	6.77
4	Trinidad Tobago	0.66	0.82	0.82	0.35	0.56	0.53	0.04	6.63
5	Guatemala	0.66	0.86	0.85	-	0.56	0.46	0.08	6.49
6	Costa Rica	0.65	0.73	0.77	0.34	0.64	0.59	0.16	6.40
7	El Salvador	0.61	0.82	0.82	0.09	0.52	0.44	0.09	6.26
8	Venezuela	0.77	0.82	0.69	0.01	0.53	0.43	0.04	6.22
9	Aruba	0.71	0.75	0.75	0.07	0.64	0.37	0.21	6.21
10	Colombia	0.58	0.61	0.55	0.59	0.61	0.56	0.39	5.73
11	Bahamas	0.54	0.77	0.62	0.03	0.82	0.62	0.31	5.72
12	Mexico	0.61	0.61	0.55	0.19	0.65	0.58	0.94	5.68
13	Dominican Republic	0.40	0.73	0.55	0.29	0.68	0.67	0.42	5.38
14	Ecuador	0.34	0.86	0.67	0.06	0.52	0.57	0.10	5.31
15	Bolivia	0.44	0.77	0.64	0.04	0.61	0.56	0.03	5.26
16	Belize	0.54	0.61	0.73	0.03	0.54	0.39	0.05	5.21
17	Peru	0.55	0.44	0.77	0.07	0.57	0.53	0.15	5.08
18	Argentina	0.46	0.80	0.43	0.07	0.66	0.66	0.17	5.03
19	Jamaica	0.37	0.82	0.46	0.12	0.52	0.56	0.21	4.89
20	Cuba	0.23	0.37	0.67	0.03	0.47	0.16	0.16	3.60

After reviewing data from the air transport sector in Latin America and the Caribbean, countries in the region have different strengths and challenges. Some are leaders in certain areas, while others need more attention and support. The detailed rankings provide a better understanding of where each country stands and what can be done to improve.

Overall ranking: Panama leads the Air Transport Competitiveness Index for Latin America and the Caribbean 2023, with a score of 7.34, ahead of second-ranked Chile, which scored 6.89. Brazil rounds out the top 3 most competitive markets with a score of 6.77. Cuba is the market with the most room for improvement, with a score of 3.60.

Operating costs: Venezuela leads the way with a score of 0.77, while Cuba has the most room for improvement with 0.23.

Infrastructure quality: Panama and Chile are the countries with the best air infrastructures in the region, both with a score of 0.90. Cuba, Peru, and Brazil have ample room for improvement in their air transport infrastructure.

Taxes and fees: Brazil leads this category, with a score of 1, and Argentina has the lowest score of 0.43.

Sustainability: Brazil leads in this category with a score of 0.98. Venezuela is the country with the most room for improvement, with a score of 0.01.

Willingness to travel: The Bahamas has the highest score in this pillar with 0.82. Cuba, on the other hand, has the lowest score of 0.47.

International openness: Brazil leads with a score of 0.72, while Cuba has the greatest opportunities for improvement with 0.16.

Connectivity: Mexico is the best-connected country in the region with a score of 0.94, outperforming other countries. Venezuela, Trinidad and Tobago and Bolivia are the least connected countries in the region with a score of 0.04.

In conclusion, the Latin American and Caribbean air transport sector shows a diverse picture of strengths and areas requiring attention. Panama emerges as a leader in overall competitiveness, infrastructure quality and operational efficiency, while Brazil leads in sustainability and taxes/fees. However, it is essential to recognize that each country has its unique potential and challenges. Addressing the areas of improvement highlighted, especially in countries such as Argentina and Venezuela, can pave the way for a more cohesive and robust regional air transport network. As stakeholders in this vital sector, continued collaboration, knowledge sharing, and strategic investments are imperative to elevate the region's global position and ensure sustainable growth for the future.

Pillar 1. Operating Costs

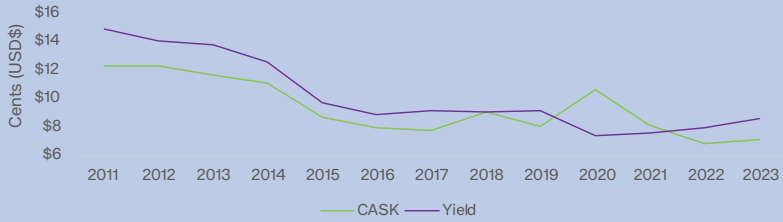
The air transport industry is dependent on airport and air navigation services, which include aviation fuel supply, maintenance, landing fees, en route overflight fees, ground handling fees, etc.

There is a positive correlation between operating costs and the price of airline tickets, which undoubtedly has an impact on airline profitability. Throughout history, the industry has been complemented by new technologies, more modern fleets and more efficient operations that have managed to reduce operating costs and, in turn, the price of airline tickets, which has allowed it to attract more passengers. However, operating costs are constantly in flux, linked to external situations such as currency depreciation, inflation, or political crises.

The global aviation industry is a capital-intensive sector, requiring significant investments in both fixed and variable costs. Airlines face a very competitive environment, with demand highly sensitive to price variations, and often operate with narrow profit margins. Given these challenges, there is a common assumption that the costs associated with air travel are high; however, a closer look at the data presents a different perspective.

Considering these low margins and strong competition, the aviation industry in Latin America and the Caribbean has struggled to pass savings and improvements directly to passengers. Since 2011, LAC airlines have reduced their Cost per Available Seat Kilometer (CASK) by 42.6%. At the same time, the Yield, which represents revenue per passenger-kilometer, has decreased by 42.7% in real terms.

Evolution of CASK (cost per available seat-km) and Yield (revenue per passenger-km) of LAC airlines. (Inflation-adjusted values)

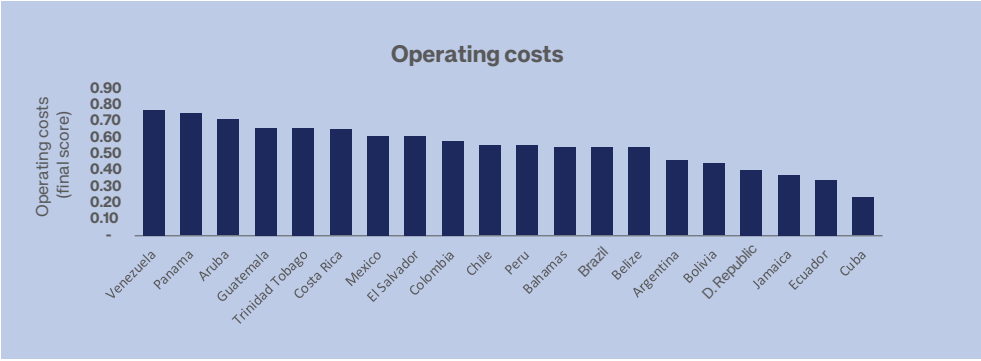


Source: ALTA analysis based on airlines' financial statements.

This progress is due to the ongoing efforts of the region's airlines, which have increased their efficiency, adopted best practices, and managed to reduce costs and improve operations. As a result, flights have become more affordable for passengers in the region.

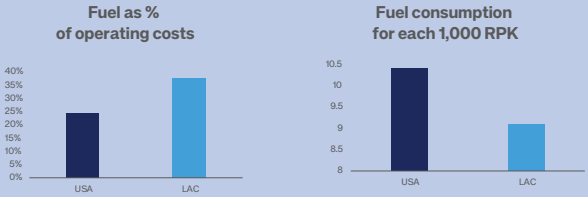
It is for these reasons that in Pillar 1 we analyze and compare across countries the top 3 operating expenses that account for more than 60% of total airline operating costs in the region, including:

- Fuel costs
- Turnaround costs (including landing fees)
- Overflight costs

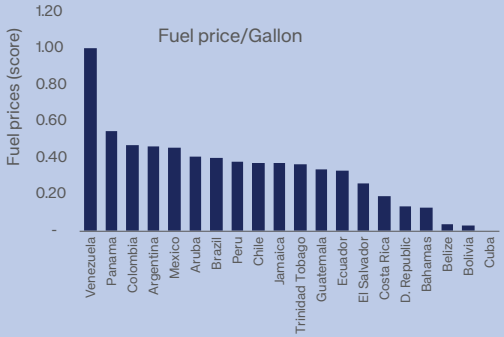


1.1 Fuel Prices

Fuel is the largest component of airline operating costs, representing between 34% and 40% in 2023, with an average of 37.4% for airlines based in Latin America and the Caribbean. Even though the vast majority of Latin American and Caribbean countries are producers of oil and petroleum products, the region faces higher fuel prices compared to the United States, where this cost constitutes 24.4% of airline operating expenses. Even though Latin American and Caribbean airlines are more fuel efficient per 1,000 Revenue Passenger Kilometers (RPKs) than their U.S. counterparts, they face higher costs, as illustrated in the graph below.



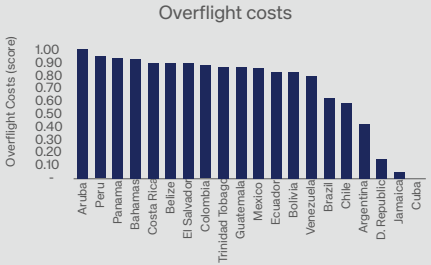
Source: ALTA Analysis



Country	Fuel price/Gallon (average Dec 23 - Feb 24)	Index
Venezuela	1.82	1.00
Panama	2.72	0.55
Colombia	2.87	0.47
Argentina	2.90	0.46
Mexico	2.90	0.46
Aruba	3.00	0.41
Brazil	3.02	0.40
Peru	3.05	0.38
Chile	3.07	0.37
Jamaica	3.07	0.37
Trinidad Tobago	3.08	0.37
Guatemala	3.14	0.34
Ecuador	3.15	0.33
El Salvador	3.29	0.26
Costa Rica	3.43	0.19
D. Republic	3.55	0.13
Bahamas	3.55	0.13
Belize	3.74	0.04
Bolivia	3.75	0.03
Cuba	3.81	-

1.2 Overflight Costs

Airlines pay overflight charges to the governments of each country when they fly over its airspace, even if they do not land in its territory. These costs are intended to cover the use of air traffic control and other air navigation services, such as weather forecasting and communications. The amount of the fee is usually based on the weight of the aircraft and the distance flown in the country's airspace. Overflight charges can be a significant cost to airlines, especially those flying long-haul routes.



Source: ALTA Analysis based on airline data

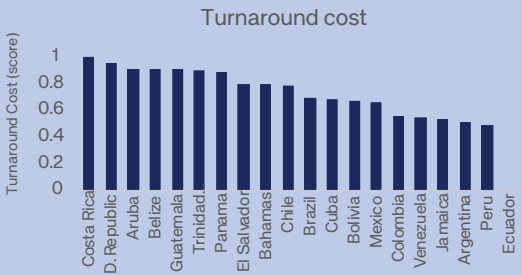
Country	Cost/100 Km	Index
Aruba	$ 18.12	1.00
Peru	$ 28.32	0.94
Panama	$ 30.00	0.93
Bahamas	$ 32.33	0.92
Costa Rica	$ 37.25	0.89
Belize	$ 37.25	0.89
El Salvador	$ 37.25	0.89
Colombia	$ 37.25	0.87
Trinidad Tobago	$ 39.85	0.86
Guatemala	$ 42.00	0.86
Mexico	$ 44.67	0.85
Ecuador	$ 49.34	0.82
Bolivia	$ 50.07	0.82
Venezuela	$ 55.00	0.79
Brazil	$ 83.70	0.62
Chile	$ 91.40	0.58
Argentina	$ 119.00	0.42
D. Republic	$ 165.00	0.15
Jamaica	$ 182.00	0.05
Cuba	$ 191.21	-

Turnaround costs

Aircraft turnaround costs are the expenses incurred between arrival and departure. Airlines try to minimize them to reduce costs and improve efficiency. Factors influencing costs include aircraft size, airport fare structure and airline procedures. This section analyzes the three main costs incurred by airlines when arriving and departing from an airport, which are landing fees, parking fees, and jet bridge fees. The calculations are based on the following assumptions:

- Aircraft type: A320 with MTOW of 78 tons
- Type of flight: International
- Hours of operation: Daytime (non-peak hours)
- Turnaround time: 2 hours

Country	Cost for 2 hour turnaround	Index
Costa Rica	$155	1
D. Republic	$223	0.95
Aruba	$274	0.91
Belize	$280	0.91
Guatemala	$295	0.9
Trinidad Tobagc	$300	0.89
Panama	$322	0.88
El Salvador	$440	0.79
Bahamas	$443	0.79
Chile	$450	0.78
Brazil	$579	0.69
Cuba	$585	0.68
Bolivia	$600	0.67
Mexico	$635	0.65
Colombia	$774	0.55
Venezuela	$785	0.54
Jamaica	$802	0.53
Argentina	$825	0.51
Peru	$866	0.48
Ecuador	$1,519	-



Source: ALTA Analysis based on public information

Pillar 2. Infrastructure Quality

2. Infrastructure Quality

The quality of aviation infrastructure is a determining factor for the competitiveness of air transport. An efficient and modern infrastructure not only ensures operational efficiency, but also improves the overall passenger experience. In addition, anticipating and accommodating future growth is very important; as air transport continues to expand, it is essential to have infrastructures that can seamlessly accommodate the growing demand for passengers and cargo. The condition and efficiency of an airport's infrastructure directly influences a country's ability to attract both business and leisure travelers.

To assess infrastructure quality, we have broken down this pillar into four specific factors. Each of these factors contributes uniquely to the overall assessment of infrastructure quality:

Airport congestion: Using data from the World Airport Coordinators Group (WWACG), we measure airport congestion levels. An airport's congestion level gives an idea of its capacity, efficiency in managing peak hours and ability to accommodate growth without causing significant congestion or delays. A high level of congestion can discourage airlines from adding new routes and lengthen the operation times between entering and leaving the airport. This factor has a 40% weight in the infrastructure pillar.

Non-Remote Parking Positions: We looked at the number of boarding bridges available per flight during peak hours. The availability of boarding bridges can reduce turnaround times and increase airline efficiency, while offering passengers a more comfortable boarding experience compared to remote stands. This factor has a 20% weight in the infrastructure pillar.

Punctuality: Data from OAG's OTP database provides insight into the timeliness of flight departures and arrivals. It is a reliable measure of the airport's ability to maintain on-time operations. This factor has a weight of 20% in the infrastructure pillar.

Airport quality: This aims to measure the level of service (LoS) of airports using a qualitative approach. The data comes from the Skytrax 2023 ranking and reflects passenger satisfaction at various touch points of their airport experience. This factor is weighted at 20% in the infrastructure pillar.

To ensure an accurate and representative assessment of airport infrastructure quality at the country level, the methodology for calculating each country's final score is based on a detailed and nuanced analysis. This approach recognizes the variability in importance and traffic volume between airports in each country, implementing a weighted average system that adequately reflects the impact of each airport on the national airport infrastructure.

The calculation of the final score for each factor is done through a weighted average, considering the percentage of passengers and the number of flights handled by the airports. This system ensures that those airports with a higher volume of traffic, which are more relevant to the country's airport infrastructure, have a proportionally greater influence on the final evaluation. For countries where most of the traffic is concentrated at a single airport, as is the case in Panama, only the main airport is considered for the evaluation.

For the selection of airports that form part of the evaluation, we have established clear and objective criteria focused on the 'top 5' airports in each country, based on the number of passengers and flights. This approach allows us to identify those airports that:

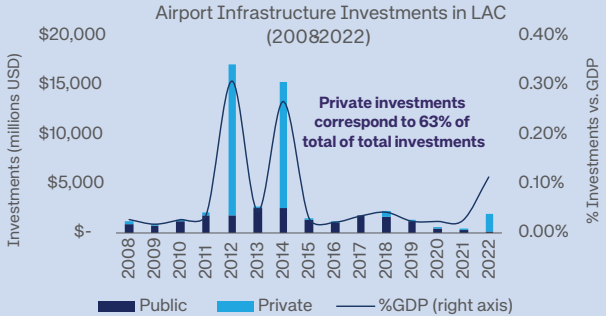
- Handle the highest volume of passenger and flight traffic, reflecting their strategic importance within the country.
- Are crucial for international and domestic connectivity and play a significant role in the national economy and logistics.

These aspects ensure that our assessment focuses on the airports that truly drive and reflect the capacity and quality of airport infrastructure in each country. By applying this method, our assessment provides a fair comparison between countries, adjusted for variability in the size and importance of their most critical airports. Through this weighted average approach, we ensure that our assessment of airport infrastructure quality accurately represents user experience and operational efficiency at the national level.

A sound aviation infrastructure goes beyond merely facilitating the movement of passengers and cargo. It demonstrates a country's commitment to strengthening its air transport sector, and adequate investment can significantly elevate the country's position in the global air transport landscape.

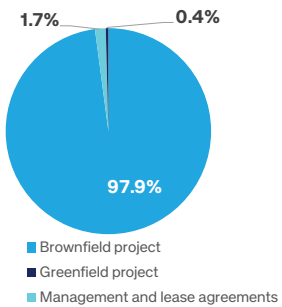
Below is a summary of private and public investment in airport infrastructure in Latin America and the Caribbean over the past 15 years, according to an analysis done by ALTA based on data from INFRALATAM and the World Bank's PPI (Private Participation in Infrastructure) database. On average, only 0.07% of the region's GDP was invested in airport infrastructure during the period 2008-2022.

Current traffic growth forecasts up to 2040 are between 3.5% and 5.5%, so there is an urgent need to continue investing in airport infrastructure in the region to meet growing demand. According to an analysis by CAF, approximately US$40 billion of additional investment is needed in the region to meet future demand, given current growth projections.

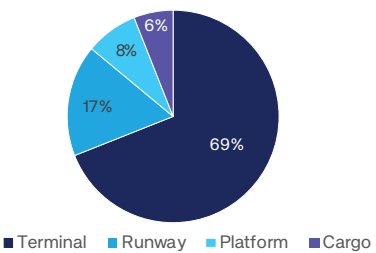


Future airport investment needs

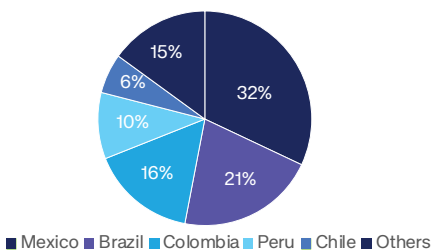
Private investments by type



By Category



By Country

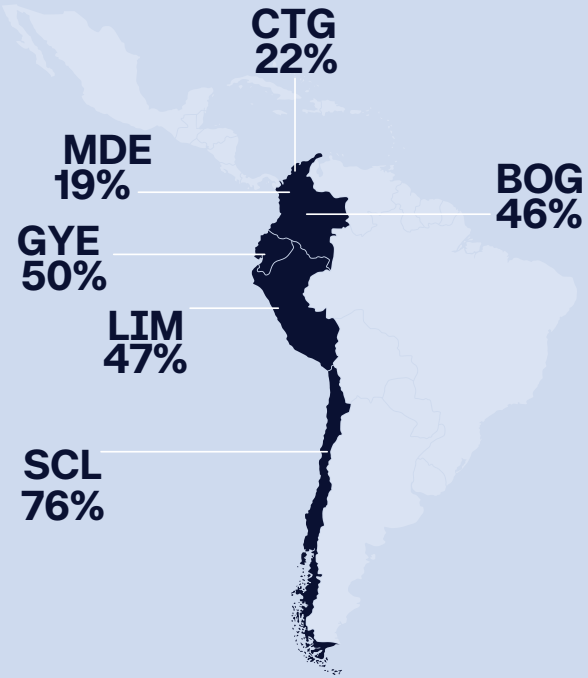


Source: Development Bank CAF

Source: World Bank, INFRALATAM

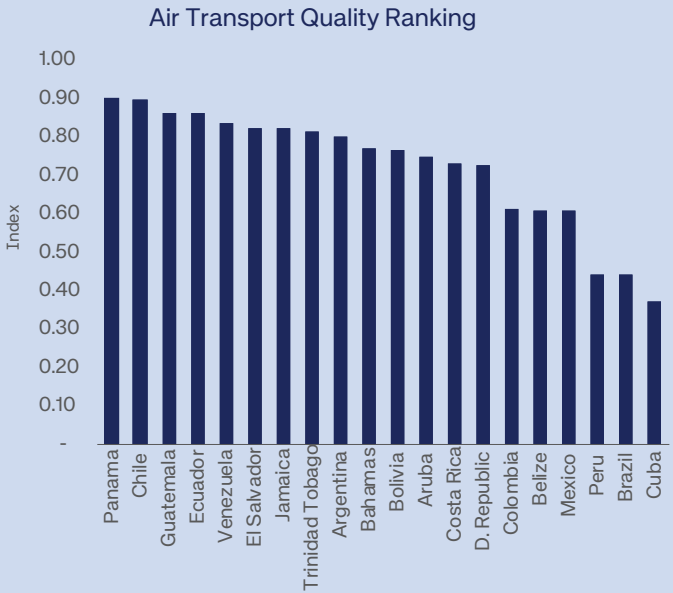
Recent airport privatizations in Latin America have improved terminals and capacity. However, high concession fees set by governments put a strain on airport operators, passing the costs on to passengers and airlines. Privatization should prioritize service efficiency and infrastructure needs, and not simply increase fees without improving services. Such practices could increase ticket prices and slow the growth of aviation in the region. In accordance with ICAO policies, charges should reflect the cost of services provided, ensuring that airlines and passengers are not harmed by unfair costs, such as rents and concession fees for which they receive no service in return.

Percentage of total airport revenues going to the government in selected airport concessions



Source: Development Bank CAF

Panama leads the infrastructure pillar with a score of 0.904, reflecting its strong aviation infrastructure. It is closely followed by Chile with a score of 0.898, demonstrating a comparable commitment and development in its airport sector. Ecuador, with a score of 0.862, also stands out for its airport infrastructure. Countries such as Jamaica and Argentina, with scores of 0.823 and 0.803 respectively, as well as El Salvador with 0.825, show positive progress towards strengthening their airport capacities. On the other hand, larger economies such as Mexico and Colombia, with scores of 0.609 and 0.611, and Brazil with 0.441, are ranked lower, suggesting that a larger market size does not necessarily guarantee a high-quality airport infrastructure. These results indicate a variety of approaches and levels of investment in aviation infrastructure in Latin America, highlighting opportunities for growth in various economies in the region.



2.1 Airport Congestion

The level of congestion at an airport provides an indicator of its capacity and operational efficiency. As the volume of air travel increases, it is essential to know the level of congestion. A high level of congestion can lead to overcrowding, delays and discourage airlines from introducing new routes. Assessing this factor provides information about an airport's ability to handle peak hours and accommodate future growth without significant disruption. Although certain coordinated airports show acceptable levels of punctuality, the focus of our assessment leans toward their ability to expand operations, vital given the 0.6 per capita travel index in Latin America and the Caribbean, which underlines significant growth potential when compared to per capita travel in markets such as the USA or Europe (>2). This prioritization reflects the importance of preparing for an increase in air demand, beyond current performance metrics.

The "airport congestion" factor has a significant impact, representing 40% within the infrastructure pillar, due to its critical influence on airport capacity and operational efficiency. Congestion levels directly affect the airport's ability to handle peak hours and accommodate growth, thus being a key factor in determining the quality and efficiency of the aviation infrastructure. Considering that 50% of flights in the region take off or land at congested airports, it is essential to promote investments in the expansion of existing airports or the development of new ones to alleviate this problem.

The Worldwide Slot Guidelines (WASG) establish comprehensive policies and principles for slot allocation at congested airports. These guidelines are managed by the World Airport Slot Board (WASB), a conglomerate of airport, airline, and slot coordinator experts charged with promoting best practices globally. The WASG ensures the impartial updating of these guidelines, allowing any interested party to propose modifications. In addition, airports are classified into three levels, depending on their degree of congestion, to facilitate more effective slot management:

Level 1 (adequate capacity)

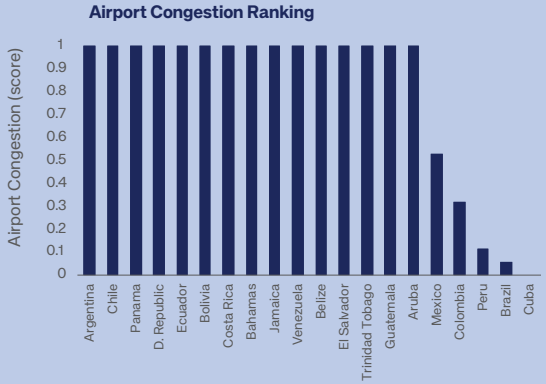
Level 2 (potential congestion solved with schedule adjustments)

Level 3 (inadequate infrastructure or imposed restrictions requiring slot coordination).

Airports that do not appear on the WASG list receive the WASG value 1.

Many Latin American countries consistently show a Level 1 status for airport congestion, indicating balanced airport capacity. However, the most important markets (in terms of passenger demand) such as Mexico, Colombia, Peru, and Brazil show signs of increasing congestion. This highlights the need for airport infrastructure development and investment.

Country	Weighted Average WASG Level	Index
Argentina	1.00	1.00
Chile	1.00	1.00
Panama	1.00	1.00
D. Republic	1.00	1.00
Ecuador	1.00	1.00
Bolivia	1.00	1.00
Costa Rica	1.00	1.00
Bahamas	1.00	1.00
Jamaica	1.00	1.00
Venezuela	1.00	1.00
Belize	1.00	1.00
El Salvador	1.00	1.00
Trinidad Tobago	1.00	1.00
Guatemala	1.00	1.00
Aruba	1.00	1.00
Mexico	1.81	0.53
Colombia	2.16	0.32
Peru	2.51	0.12
Brazil	2.61	0.06
Cuba	2.70	-



Source: ALTA Analysis based on the WWACG list

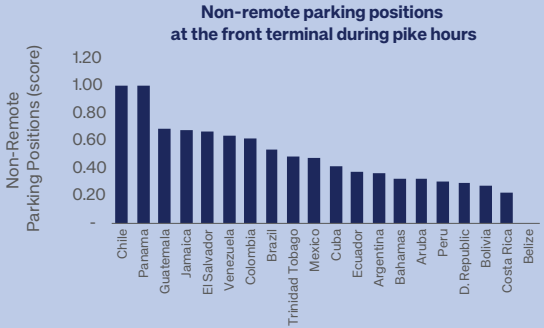
2.2 Non-Remote Parking Positions

Non-remote parking positions play a critical role in determining the operational efficiency of an airport during boarding and deplaning procedures. By analyzing the number of non-remote parking positions per flight during peak hours, we gain insight into the potential for quick and smooth passenger transitions between the aircraft and the terminal. While boarding bridges are critical to operational efficiency in many contexts, they are not universally necessary or desirable at all airports. For airports with low traffic levels or a fleet mix that does not benefit from their use, implementing boarding bridges at all gates could unnecessarily raise costs, counteracting the competitiveness objective. However, the evaluation methodology and criteria focus on the top 5 airports in each country, characterized by high levels of traffic and flights, where the presence of boarding bridges is indicative of advanced aviation infrastructure and contributes significantly to operational efficiency.

For major airports with high traffic levels, but which due to their original design do not have boarding bridges, as is the case of Cartagena airport or Bogotá's T2, the proximity of the parking positions to the terminal building is considered. In these cases, the number of parking positions in front of the terminal building is evaluated and given a value equivalent to that of the boarding bridges, recognizing their contribution to operational efficiency. What is crucial is to minimize the use of remote positions that require passengers to be bussed to and from the aircraft, as this can introduce delays and detract from the passenger experience.

In this regard, the focus of our assessment goes beyond the mere number of boarding bridges, seeking to underscore the importance of maintaining optimal operational efficiency, facilitating fast and smooth transitions for passengers without compromising the overall experience, especially at those airports that handle a significant volume of air traffic. A more detailed analysis of hourly operations and fleet mix at the region's major airports is provided in Annex 2.

Country	Non-remote parking posi- per flight @ peak hours (weighted average)	Index
Chile	1.67	1.00
Panama	1.66	1.00
Guatemala	1.14	0.69
Jamaica	1.13	0.68
El Salvador	1.12	0.67
Venezuela	1.06	0.63
Colombia	1.02	0.61
Brazil	0.90	0.54
Trinidad Tobago	0.81	0.49
Mexico	0.79	0.47
Cuba	0.70	0.42
Ecuador	0.63	0.38
Argentina	0.61	0.37
Bahamas	0.55	0.33
Aruba	0.55	0.33
Peru	0.51	0.31
D. Republic	0.48	0.29
Bolivia	0.46	0.28
Costa Rica	0.38	0.23



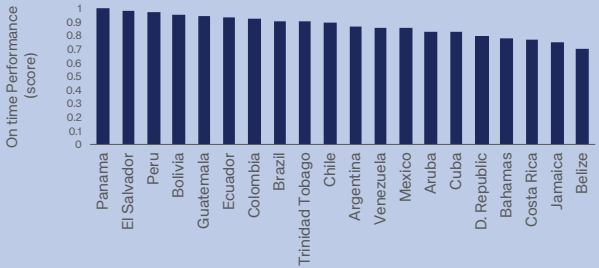
Source: ALTA Analysis based in public information

2.3 Punctuality

Punctuality is a reliable measure to assess the efficiency and reliability of an airport. By measuring the punctuality of flight departures and arrivals, this metric provides information on the coordination, efficiency, and robustness of airport operations. For this analysis we have used the on-time performance published by OAG, and the calculation is based on the average OTP (On Time Performance) during the year 2023. This indicator has a weight of 20% in the infrastructure pillar.

Country	Pondered Average of OTP (5 TOP Airports)	Index
Panama	91%	1.00
El Salvador	88%	0.98
Peru	88%	0.97
Bolivia	86%	0.95
Guatemala	85%	0.94
Ecuador	85%	0.93
Colombia	84%	0.92
Brazil	82%	0.90
Trinidad Tobago	81%	0.90
Chile	81%	0.89
Argentina	79%	0.87
Venezuela	77%	0.85
Mexico	77%	0.85
Aruba	75%	0.83
Cuba	75%	0.83
D. Republic	72%	0.80
Bahamas	71%	0.78
Costa Rica	69%	0.76
Jamaica	68%	0.75
Belize	64%	0.70

Punctuality Ranking



Source: ALTA Analysis based in the OAG OTP Ranking
*Note: OTP is the average of Jan-Dec 2023 period

2.4 Airport Quality

To holistically assess the efficiency of the airport infrastructure, it is crucial to evaluate the Level of Service (LoS) of the various airport subsystems. The ideal methodology would consist of a quantitative analysis of waiting times during peak hours in all crucial subsystems: check-in, security, passport control and baggage claim. However, despite efforts at several airports to obtain this quantitative data, the response rate was insufficient. This posed a challenge in using a purely quantitative approach to assess responsiveness. To fill this gap and ensure that this vital element was not overlooked, an alternative approach was adopted.

Recognizing the importance of user experience in airport operations, qualitative data from the reputable Skytrax rating was integrated. Specific sections of the Skytrax results were selected to qualitatively recreate the quality and efficiency of each airport subsystem. This qualitative approach, although not the original intent, brings its own merit. Qualitative insights, often based on the opinions and experiences of travelers, offer valuable insight into operational efficiency, and can reflect reality to some extent, offering a genuine sense of what passengers' experience.

While recognizing that this qualitative method may not provide the granular accuracy of quantitative wait times, it presents a viable and informative alternative. This approach ensures that the assessment remains comprehensive and insightful, capturing the essence of the airport system's service levels from the passenger's point of view.

Methodology:

Billing subsystem evaluation:

To evaluate the check-in subsystem, we use the scores from the following Skytrax categories:

Congestion around check-in
Quality of queuing systems

Assessment of the security subsystem:

For the security subsystem, we relied on scores from these Skytrax categories:

Waiting times
Service efficiency

Passport control/immigration service assessment:

To gauge the effectiveness of passport control or immigration service, we considered these Skytrax metrics:

Waiting time - arrivals
Waiting time - departures

Evaluation of the baggage claim subsystem:

To evaluate the baggage claim subsystem, we incorporated the scores from these Skytrax categories:

Baggage hall facilities
Baggage turnaround times

This methodology, based on qualitative data from Skytrax, ensures that our assessment of the baggage claim subsystem is based on the following Skytrax qualitative data, ensures that our assessment covers a broad spectrum of passenger spectrum of the passenger experience, from check-in through to baggage check-in to baggage claim, effectively capturing their journey through the effectively capturing their journey through the airport

Country	Average of Skytrax Ranking	Index
Ecuador	4.20	1.00
Bahamas	4.00	0.95
Colombia	3.65	0.87
Guatemala	3.50	0.83
Argentina	3.27	0.78
Brazil	3.19	0.76
Jamaica	3.00	0.71
Peru	2.91	0.69
Mexico	2.78	0.66
Costa Rica	2.75	0.66
Venezuela	2.63	0.63
Cuba	2.56	0.61
Chile	2.50	0.60
Panama	2.19	0.52
El Salvador	2.00	0.48

Source: ALTA Analysis based on Skytrax Ranking
*Note: This does not include countries with-out classified airports

Pillar 3: Taxes and Fees for Passengers

3. Passenger taxes and fees

The structure of taxes and fees has a significant impact on the final ticket price for passengers, sometimes double the initial fare. These charges, usually collected by the airlines, go to different entities such as airports, specific government agencies, and general government funds. The diversity in international air transport regulations and charges, derived from the sovereignty of each country, adds to the complexity of airline operations. Clearly, lower taxes can increase accessibility to air services and stimulate travel demand.

To capture the complexity and variety of these charges more accurately and representatively, we have decided to divide this pillar into four distinct sections:

- **International TUA:** The Airport User Charge (TUA) for international flights is assessed by considering the passenger charges at the five airports with the highest international passenger traffic in each country. The international SUT score is calculated as a weighted average of these airports, reflecting the proportionality of their passenger traffic.

- **Other International Fees and Taxes:** This section examines the additional fees, including security, infrastructure development and ticketing taxes, among others, paid by passengers at the top five international airports in each country. To determine the value of these fees and taxes by country, a weighted average is used, based on the relevance of each airport, taking into account its volume of international passengers.

- **Arrival fees and taxes:** Focuses on the specific charges that non-resident passengers must pay upon arrival in a country, such as tourism taxes.

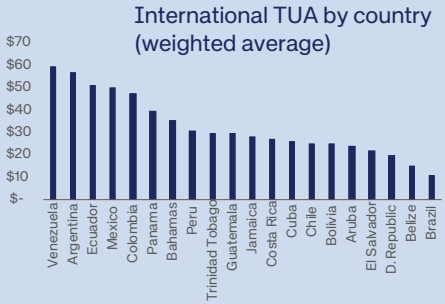
- **Sales and other taxes:** This section addresses the analysis of Value Added Tax (VAT) and other similar taxes that are levied directly on the base fare of airline tickets in those countries that impose them. These taxes, calculated as a percentage of the base fare, directly affect the final cost of the ticket to passengers. The assessment covers both VAT and any other national taxes levied on the selling price of airline tickets, providing insight into the fiscal impact on the cost of air travel and its effect on the competitiveness of air transport.

For each section, after calculating the taxes and fees paid on the selected routes, a normalization from 0 to 1 is performed, where the country with the lowest fees and taxes receives the highest score. This normalization allows a fair comparison of the different tax regimes and their impact on the cost of air travel, highlighting those countries that offer more competitive conditions for travelers and airlines.

This approach helps to identify areas where countries are more or less competitive, highlighting specific aspects that contribute to air accessibility and travel demand, and provides a sound basis for policies aimed at improving air transport competitiveness. The final tax and fee score for each country will be determined by the average of the scores obtained in each of the four categories analyzed, ensuring a balanced and comprehensive assessment of the fiscal and tax impact on air transport.

	Country	Intl. TUA	Other intl. fees	Arrival taxes	Intl Sales Taxes	Total
1	Brazil	1.00	1.00	1.00	1.00	1.00
2	Chile	0.71	1.00	1.00	1.00	0.93
3	Guatemala	0.61	0.96	1.00	0.83	0.85
4	El Salvador	0.77	0.71	1.00	0.82	0.82
5	Trinidad Tobago	0.61	0.83	1.00	0.83	0.82
6	Panama	0.40	0.78	1.00	0.90	0.77
7	Costa Rica	0.67	0.74	0.73	0.93	0.77
8	Peru	0.59	1.00	0.73	0.75	0.77
9	Aruba	0.73	0.46	0.82	1.00	0.75
10	Belize	0.92	-	1.00	1.00	0.73
11	Venezuela	-	0.86	1.00	0.89	0.69
12	Cuba	0.69	1.00	-	1.00	0.67
13	Ecuador	0.17	0.84	0.90	0.76	0.67
14	Bolivia	0.71	0.07	1.00	0.79	0.64
15	Bahamas	0.49	0.16	0.98	0.83	0.62
16	D. Republic	0.81	0.40	0.25	0.75	0.55
17	Colombia	0.25	0.47	0.73	0.74	0.55
18	Mexico	0.19	0.81	0.24	0.94	0.55
19	Jamaica	0.65	0.00	0.20	1.00	0.46
20	Argentina	0.05	0.67	1.00	-	0.43

3.1 International Airport Use Charge (TUA): The Airport Use Charge (TUA) is a charge that passengers must pay for the use of airport facilities and services. It is charged at the time an airline ticket is purchased and varies by airport. The following are the TUA rates by country using the weighted average methodology described above.



Country	International Internacional	Index
Brazil	$ 11.00	1.00
Belize	$ 15.00	0.92
D. Republic	$ 20.00	0.81
El Salvador	$ 22.13	0.77
Aruba	$ 24.00	0.73
Chile	$ 25.00	0.71
Bolivia	$ 25.00	0.71
Cuba	$ 26.00	0.69
Costa Rica	$ 27.00	0.67
Jamaica	$ 28.09	0.65
Trinidad Tobago	$ 30.00	0.61
Guatemala	$ 30.00	0.61
Peru	$ 30.78	0.59
Bahamas	$ 35.64	0.49
Panama	$ 39.72	0.40
Colombia	$ 47.19	0.25
Mexico	$ 50.16	0.19
Ecuador	$ 51.23	0.17
Argentina	$ 57.00	0.05
Venezuela	$ 59.27	-

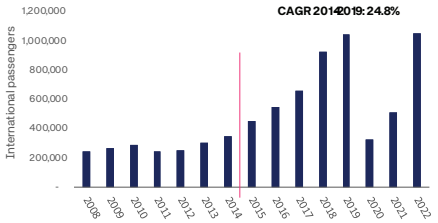
Case Study:

Potential Benefits of Reducing Passenger Facility Charges (PFCs): Chile and Cartagena

.

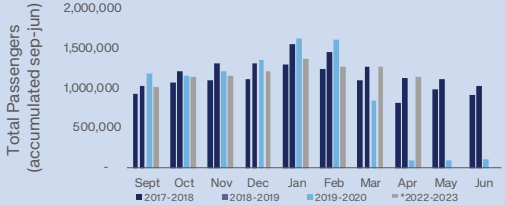
In 2014, CTG had one of the highest airport charges in the Region.

Since the reduction of the airport tax at CTG, international traffic has tripled.



And international tourist arrivals to Cartagena had doubled before the pandemic.

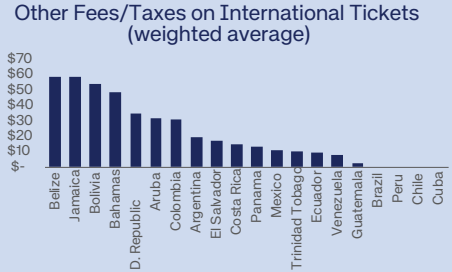
Since the first reduction of airport taxes in Chile, traffic had grown by an average of 18% in the 10 months accumulated.



Source: ALTA calculations with data from MINCITUR, Aero civil Colombia and JAC Chile.

3.2 Other international taxes and fees

This section focuses on the analysis of additional charges imposed on passengers on international flights, which go beyond airport usage fees. These include, but are not limited to, security fees, migration fees, infrastructure development, ticketing taxes, as well as country-specific taxes such as the stamp tax in Colombia. These charges, whether applied directly to the base fare or included in the final ticket price, have an impact on the total cost of travel for passengers. Each of these taxes and fees reflects a fiscal policy of the country of origin, intended to finance airport security, infrastructure improvements or other initiatives. In this section, a weighted average of these additional costs at the top five international airports in each country is calculated, based on their relevance and volume of international passengers, to estimate how they contribute to the total cost of airline tickets and to assess their effect on the competitiveness of international air travel.



Country	Other fees and taxes	Index
Brazil	$-	1.00
Peru	$-	1.00
Chile	$-	1.00
Cuba	$-	1.00
Guatemala	$2.60	0.96
Venezuela	$8.05	0.86
Ecuador	$9.55	0.84
Trinidad Tobago	$10.00	0.83
Mexico	$10.89	0.81
Panama	$12.91	0.78
Costa Rica	$15.10	0.74
El Salvador	$17.00	0.71
Argentina	$19.40	0.67
Colombia	$31.00	0.47
Aruba	$31.60	0.46
D. Republic	$35.00	0.40
Bahamas	$49.04	0.16
Bolivia	$54.20	0.07
Jamaica	$58.34	0.00
Belize	$58.50	-

3.3 Arrival taxes and fees

This section focuses on the arrival taxes and fees that foreigners or foreign residents pay when entering a country, included in the airline ticket. These charges may include tourist taxes or other categories. For example, Ecuador applies the 'Impuesto Potencia Turística', a 5% tax on the net fare with a maximum of 10 USD. To calculate the value of this tax for Ecuador, a weighted average of the base fare of the top ten international routes was used, with fares based on a 30-day advance purchase and a 7-day stay. This approach allows estimating the additional cost for international travelers.

Country	Arrival Taxes	Index
Brazil	$-	1.00
Argentina	$-	1.00
Chile	$-	1.00
Panama	$-	1.00
Bolivia	$-	1.00
Venezuela	$-	1.00
Belize	$-	1.00
El Salvador	$-	1.00
Trinidad Tobago	$-	1.00
Guatemala	$-	1.00
Bahamas	$1.00	0.98
Ecuador	$5.70	0.90
Aruba	$10.00	0.82
Colombia	$15.00	0.73
Peru	$15.00	0.73
Costa Rica	$15.00	0.73
D. Republic	$41.30	0.25
Mexico	$42.00	0.24
Jamaica	$44.00	0.20
Cuba	$55.00	-

3.4 Taxes levied on ticket sales

This section analyzes Value Added Tax (VAT) and other taxes levied as a percentage of the base fare on airline ticket sales. Special attention is paid to those countries that impose a significant tax burden on tickets, directly affecting cost competitiveness for travelers.

Argentina stands out for having the highest tax burden in the region on ticket sales, totaling 72% of the final ticket price. This burden includes the tax (AFIP) of 30%, the inclusion and solidarity tax (PAIS) of 30%, the tourism tax (Dirección Nacional de Turismo) of 7%, and the income withholding tax of 5%. It is important to note that the AFIP and PAIS taxes apply exclusively to tickets purchased in Argentina and paid in pesos.

In contrast, countries such as Brazil and Chile do not apply VAT to tickets for international flights, which reflects a more favorable policy towards the promotion of international air transportation and a follow up of ICAO recommendations, which in its document 8632 recommends that international air transportation and related services should not be subject to VAT, highlighting the importance of maintaining the competitiveness and accessibility of air transportation at a global level.

The variability in the taxation of airline tickets demonstrates the different fiscal policies of each country and their impact on the airline industry. While some states choose to significantly tax ticket sales, others recognize the importance of keeping costs low to promote tourism and international connectivity.

Country	Taxes over base fare	Index
Brazil	0%	1.00
Chile	0%	1.00
Cuba	0%	1.00
Jamaica	0%	1.00
Belize	0%	1.00
Aruba	0%	1.00
Mexico	4%	0.94
Costa Rica	5%	0.93
Panama	7%	0.90
Venezuela	8%	0.89
Bahamas	12%	0.83
Guatemala	12%	0.83
Trinidad Tobago	13%	0.83
El Salvador	13%	0.82
Bolivia	15%	0.79
Ecuador	17%	0.76
Peru	18%	0.75
D. Republic	18%	0.75
Colombia	19%	0.74
Argentina	72%	-

The structure of fees and taxes in air transport is a fundamental component that has a direct impact on the competitiveness of aviation in Latin America and the Caribbean. The sensitivity of the air market to prices is such that even small increases in fees can trigger a significant decrease in travel demand. This price-demand relationship not only affects travelers' decisions, but also has a direct impact on the economic and tourism development of countries, where an increase in costs can curb the flow of visitors and investment in the region.

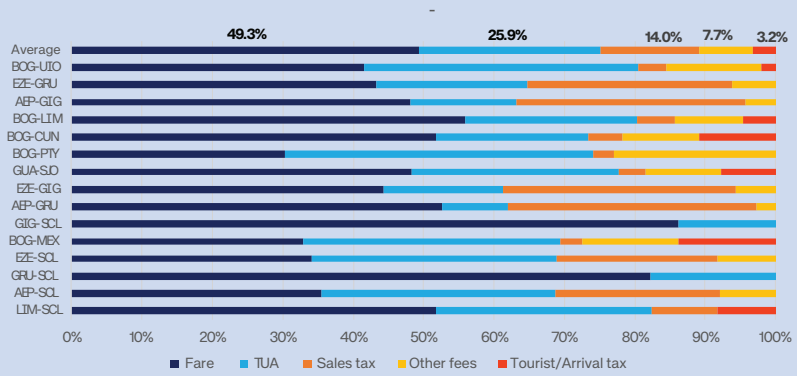
Taxes, fees, and charges, as they constitute a considerable part of the total cost of the ticket, should not be evaluated in isolation. Their cumulative impact is a decisive factor in airline strategy when selecting routes and markets to operate and can lead to a redistribution of air traffic flows to regions with lower tax burdens. Consequently, the decline in travel demand not only represents a problem for airlines, but also translates into lower-than-expected tax revenues for governments, which see travel and consumption diverted to other jurisdictions.

The relevance of taxes and charges in the airline industry is clear in the analysis of the top 15 intra-regional routes in Latin America. The data shows that, on many of these routes, taxes and fees account for more than half of the final cost paid by passengers, with the base fare being less than half of the total price. The graph below shows the % of each item (transport fare, TUA, fees, taxes and contributions over the final fare on the top 15 intra-regional international routes in Latin America and the Caribbean. The analysis is based on the basic fare (without extras and baggage) for each route with a 30-day advance purchase and a 7-day stay for the months of March and April 2024. On average, the basic transportation fare represents 49.3% of the final fare and fees, taxes and contributions represent 51.7% of the final fare.

The variability in the taxation of airline tickets demonstrates the different fiscal policies of each country and their impact on the airline industry. While some states choose to significantly tax ticket sales, others recognize the importance of keeping costs down to promote tourism and international connectivity.

This fiscal and tax landscape underscores the critical need for a comprehensive consideration of fees and taxes in aviation policymaking. It is imperative that governments and aviation regulators carefully weigh the balance between revenue generation and the promotion of a healthy and accessible aviation sector.

% of base fare, fees, contributions and taxes on the final price (15 intra-regional international routes in Latin America and the Caribbean)



This fiscal and tax landscape underscores the critical need for comprehensive consideration of rates and taxes in the formulation of policies. It is imperative that governments and regulators carefully weigh the balance between generating income and promoting a healthy and affordable airline sector.

Source: ALTA Analysis

Pillar 4. Sustainability

The recent adoption by the ICAO Assembly of the zero net emissions target recognized the key role of cleaner aviation fuels, such as SAF, in reducing aviation CO2 emissions. According to a Committee on Aviation Environmental Protection (CAEP) study, the substitution of traditional fuels with SAF could drastically reduce the CO2 footprint, laying the groundwork for significant reductions by 2050.

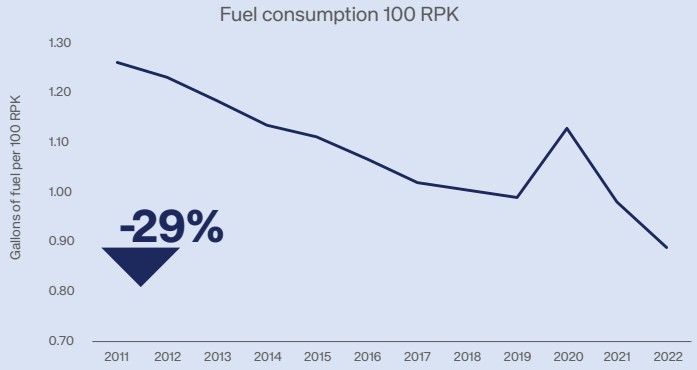
Across this pillar, we survey the status of SAF policies and the SAF refineries planned for construction as a measure and assessment of each country's commitment to sustainable aviation. While there are aspirations around the world, the pace and scale of adoption of SAF differs from country to country. The objective of this pillar is to provide an overview of the SAF landscape by identifying the key players in SAF production, the policies in place to promote its use, and upcoming infrastructure projects that signal a nation's commitment to greener aviation. By analyzing the strategies and commitments of different countries, we can compare progress and highlight best practices.

In addition, we assess the average age of aircraft fleets by country, noting that newer aircraft tend to be more fuel efficient and produce fewer emissions.

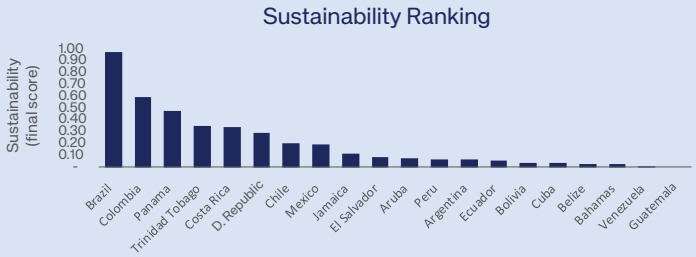
Finally, we include a factor that evaluates and identifies CORSIA-eligible offset projects in the region. This is another important element that complements the other key pillars, aiming to reduce CO2 emissions, which cannot be implemented directly through improved technologies and increased efficiency of operations, as through the use and production of sustainable aviation fuels.

In summary, the pillar provides a comprehensive examination of aviation's path to sustainability.

Through operational improvements, fleet renewal, technological innovation and strong commitment, the aviation industry in Latin America has managed to mitigate its carbon footprint over the last decade. As seen in the graph below, from 2011 to 2022, fuel consumption per 100 RPK has decreased by 29%, with an average annual efficiency rate of over 2%.



Although all these operational and technological improvements have enabled the sector to reduce its emissions, there is a limit to the reduction in total emissions. The aviation sector in the region already has one of the most modern fleets, using the latest and most efficient technologies. It is therefore crucial to develop a sustainable aviation fuel industry that will enable an energy transition in the sector. According to ICAO's Feasibility Report on a Long-Term Aspirational Goal for International Civil Aviation CO2 Emissions Reduction (LTAG), large-scale production of sustainable fuels has the greatest potential to reduce aviation emissions.



4.1 SAF policies

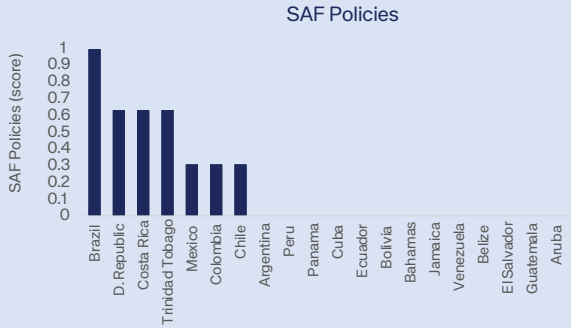
The goal of zero net emissions by 2050 requires a combination of several strategies to reduce and eliminate emissions at source, and according to several sources and different scenarios, SAF could contribute around 60%-70% of the total emissions reduction. However, reaching this target requires enormous support from governments and stakeholders, especially when, according to IATA, SAF production in 2022 represented only 0.1% to 0.15% of total jet fuel demand. The challenges are manifold: limited political support, varied SAF accounting methods, insufficient distribution infrastructure, confusion about its benefits, raw material shortages, limited investments, and competition from other sectors.

Clear and consistent policies are essential for effective adoption of SAF. Such policies should be harmonized across countries, prioritize research, and comply with international standards. Pricing plays a key role. If SAF becomes more affordable, consumption is likely to increase. However, strict mandates that do not make SAF more accessible or affordable could deter new entrants to the market and stifle innovation in SAF production.

Finally, the overall financial approach needs to be reevaluated. Currently, a larger share of financing is allocated to conventional fuels than to renewable sources such as SAF. This paradigm needs to shift. All stakeholders, from governments to airlines, must work together to promote the adoption of SAF and contribute to a more sustainable aviation future.

In this section we analyze and rank Latin American countries according to government policies supporting the production of SAF. Scores are awarded based on the following criteria:

- **If a country has a SAF legal framework ready and implemented, it receives 1 point.**
- **If a country has a SAF legal framework pending government approval, it receives 0.8 points.**
- **If a country has completed SAF feasibility studies, it receives 0.5 points.**
- **If a country has created working groups to study the feasibility of SAF, it receives 0.25 points.**



Country	SAF policies ranking	Index
Brazil	0.80	1.00
D. Republic	0.50	0.63
Costa Rica	0.50	0.63
Trinidad Tobago	0.50	0.63
Mexico	0.25	0.31
Colombia	0.25	0.31
Chile	0.25	0.31
Argentina	-	-
Peru	-	-
Panama		-
Cuba	-	-
Ecuador	-	-
Bolivia	-	-
Bahamas	-	-
Jamaica	-	-
Venezuela	-	-
Belize	-	-
El Salvador	-	-
Guatemala	-	-
Aruba	-	-

Source: ALTA Analysis

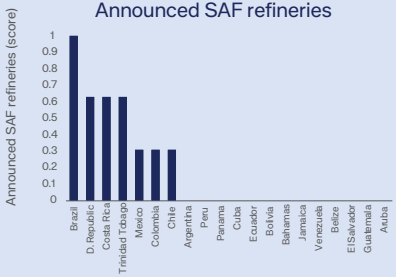
4.2 SAF Refineries

The sustainable aviation fuel (SAF) boom is transforming the aviation landscape. Leading countries in the production of SAF are positioning themselves to lead the global market. Cost-competitive domestic production of SAF is increasingly seen as a key element of a country's aviation competitiveness.

According to various sources, including ICAO, Argus, S&P Global and Boeing, several countries have announced SAF refinery projects, underscoring their strategic commitment to the sustainable future of aviation. Those countries capable of producing SAF efficiently can attract more aviation operations, positioning their aviation hubs as potential SAF exporters. In this section, countries that have announced the construction of SAF refineries receive 1 point.

In addition, according to Air Transport Action Group's (ATAG) "Fueling Net Zero" study, between 620 and 850 SAF refineries will be needed in Latin America and the Caribbean by 2050 to reach the Net Zero target. Each of these refineries will need to produce an average of 22 million gallons of SAF per year. So far, only 5 refineries have been announced for the period up to 2030 (2 in Brazil, 1 in Paraguay, 1 in Panama and 1 in Colombia). It is therefore important to concentrate all efforts on achieving this goal. The projected cost for the construction and start-up of these refineries is between US$142 billion and US$183 billion, which underlines the need for government support in this transition. By 2050, Latin America and the Caribbean will have the potential to produce around 13% of the industry's FAE needs, given the feedstock available in the region.

This supply will be more than sufficient for regional fuel demands; however, the implementation of adequate public policies is crucial. Without such supportive policies, regional airlines may be forced to import SAF from other areas.

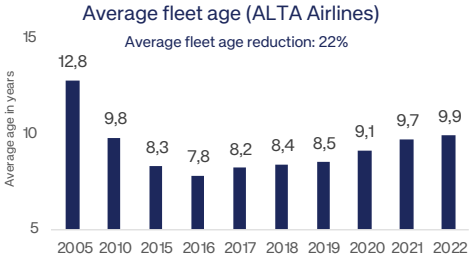


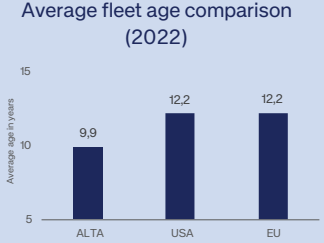
Country	Announced SAF refineries ranking	Index
Brazil	1.00	1.00
Panama	1.00	1.00
Mexico	-	-
Colombia	1.00	1.00
Argentina	-	-
Peru	-	-
Chile	-	-
D. Republic	-	-
Cuba	-	-
Ecuador	-	-
Bolivia	-	-
Costa Rica	-	-
Bahamas	-	-
Jamaica	-	-
Venezuela	-	-
Belize	-	-
El Salvador	-	-
Trinidad Tobago	-	-
Guatemala	-	-
Aruba	-	-

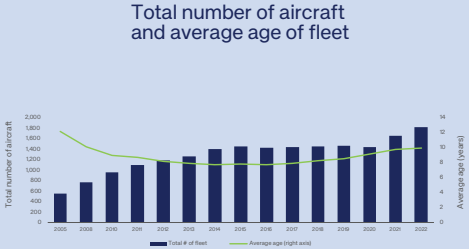
Source: ALTA Analysis

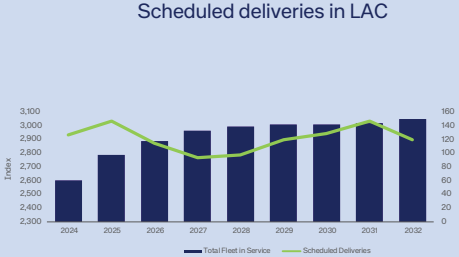
4.3 Average fleet age

Modern aircraft consume less fuel than older models, which translates into lower emissions and lower operating costs. The latest generation of aircraft consumes 15-20% less fuel than the oldest fleet, which in turn emits less CO2. Advances in fleet modernization are likely to continue along this path, with more fuel-efficient engines, lighter materials, lower operating costs, and even advanced systems such as the introduction of all-electric aircraft.







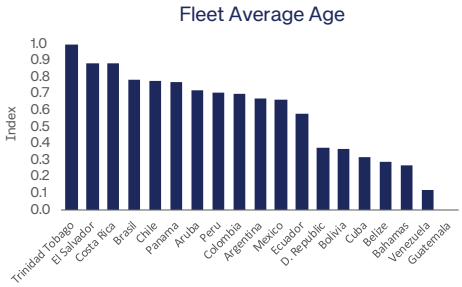


ALTA airlines have placed more than 1,269 new-generation aircraft into service since 2005, with an approximate market value of more than $90 billion.

Source: ALTA Analysis based on Cirium Fleet Analyzer

Trinidad and Tobago stands out as the country with the most modern fleet, with an average age of 5.1 years.

Source: ALTA Analysis Based on Cirium Fleet Analyzer



Country	Average Age	Index
Trinidad Tobago	5.1	1
El Salvador	8.3	0.88
Costa Rica	8.4	0.88
Brazil	11.0	0.79
Chile	11.3	0.78
Panama	11.6	0.77
Aruba	12.8	0.72
Peru	13.2	0.71
Colombia	13.5	0.70
Argentina	14.2	0.67
Mexico	14.3	0.67
Ecuador	16.8	0.58
D. Republic	22.4	0.38
Bolivia	22.7	0.37
Cuba	24.0	0.32
Belize	24.7	0.29
Bahamas	25.4	0.27
Venezuela	29.6	0.12
Guatemala	32.8	0.00

4.4 Eligible offset projects for CORSIA

As mentioned, aviation is committed to making advances in technology, operations, and infrastructure to further reduce its carbon emissions, and offsetting is intended to be an additional element in efforts to achieve this commitment. Through CORSIA, the sector can be assisted in achieving its short- and medium-term climate goals by complementing the initiatives mentioned above.

As defined by ICAO, "CORSIA is the first global market-based measure for any sector and represents a cooperative approach that moves away from a 'patchwork' of national or regional regulatory initiatives. It offers a harmonized way to reduce emissions from international aviation, minimizing market distortion while respecting the special circumstances and respective capabilities of ICAO Member States."

There are 2 eligible CORSIA projects in the region, both located in Brazil. The first is a clustered project consisting of the implementation and operation of renewable energy power plants in Brazil. The first is a wind power complex called Complejo Ventos do Piauí consisting of 7 wind power plants. On the other hand, VTRM Energias Renováveis is a project consisting of the implementation and operation of wind power plants (WPP) in Brazil. All WPPs will supply clean electricity to the Brazilian National Interconnected System (SIN). Both projects will reduce greenhouse gas (GHG) emissions by avoiding the generation of electricity from fossil fuel sources.

To assign a score, the criterion used was whether a country has eligible CORSIA offset projects, so if so, a score of 1 is assigned.

Country	Eligible offset projects for CORSIA	Index
Brazil	1.0	1.0
Mexico	-	-
Colombia	-	-
Argentina	-	-
Peru	-	-
Chile	-	-
Panama	-	-
D. Republic	-	-
Cuba	-	-
Ecuador	-	-
Bolivia	-	-
Costa Rica	-	-
Bahamas	-	-
Jamaica	-	-
Venezuela	-	-
Belize	-	-
El Salvador	-	-
Trinidad Tobago	-	-
Guatemala	-	-
Aruba	-	-

Source: ALTA Analysis

Pillar 5. Willingness to travel

The disparity between Latin America's 0.6 trips per capita and the 2+ trips of mature markets such as the U.S. and Europe highlights a significant gap and shows that there is significant potential in the region's aviation sector. To harness this potential and drive competitiveness, it is important to understand the most important factors that can drive the propensity to travel.

GDP per capita (PPP): Adjusted for purchasing power parity, this parameter reflects the economic well-being of the population. Higher GDP per capita usually indicates that citizens have more income available for discretionary spending, including travel. In the Latin American context, tracking this metric is crucial to observe the growth of the emerging middle class, which tends to travel more as their disposable income increases.

Age Dependency Ratio: This demographic metric gives an idea of the size of the working-age population compared to the non-working age group. A lower ratio suggests a larger working-age population, which is often associated with greater economic activity, urban mobility and, consequently, air travel. Latin America's large youth population could lead to increased demand for air travel as this group becomes economically active.

Urbanization rate: As people move to cities in search of better opportunities, they often find themselves closer to transportation hubs, including airports. A rising urbanization rate indicates an increase in travel demand and underscores the importance of urban infrastructure and air connectivity.

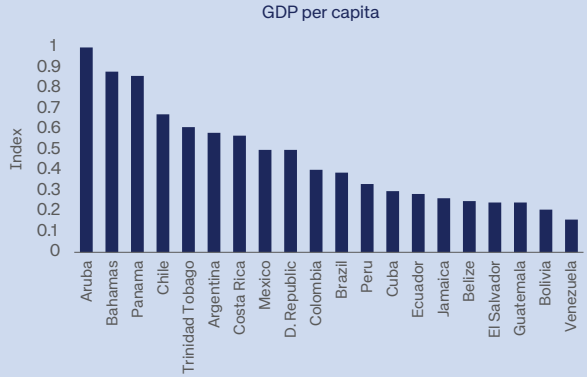
Taken together, these factors provide a global perspective on Latin America's aviation prospects.

Aruba has the highest GDP per capita on the list, suggesting that its residents are more financially able to travel. In contrast, Bolivia, although with a lower GDP, has the lowest Age Dependency Ratio, suggesting a younger population. Urbanization, which makes travel more accessible due to proximity to major airports, is higher in Argentina. The Bahamas, Panama and Chile consistently rank highest on all factors, indicating strong travel demand. For airlines and the travel industry, these indicators highlight potential areas of market growth in Latin America.

Source: ALTA Analysis

GDP per capita, when adjusted for purchasing power parity (PPP), serves as a reliable indicator of the economic health of a country's citizens. Higher GDP per capita implies that individuals have more discretionary income to spend, which often includes spending on travel. When people have more purchasing power, they are more likely to travel, whether for leisure or business.

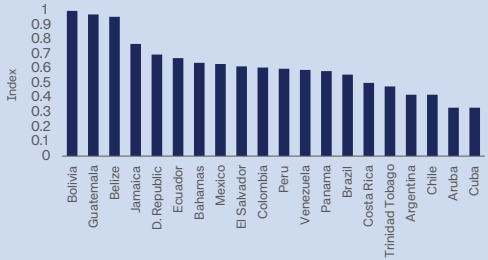
Country	GDP per capita, PPP (constant international 2017 USD)	Index
Aruba	$38,866	1.00
Bahamas	$34,197	0.88
Panama	$33,266	0.86
Chile	$25,886	0.67
Trinidad Tobago	$23,526	0.61
Argentina	$22,447	0.58
Costa Rica	$21,987	0.57
Mexico	$19,547	0.50
D. Republic	$19,338	0.50
Colombia	$15,652	0.40
Brazil	$15,093	0.39
Peru	$12,744	0.33
Cuba	$11,510	0.30
Ecuador	$10,859	0.28
Jamaica	$10,012	0.26
Belize	$9,698	0.25
El Salvador	$9,397	0.24
Guatemala	$9,162	0.24
Bolivia	$8,201	0.21
Venezuela	$6,106	0.16



Source: ALTA analysis based on World Bank data.

The Age Dependency Ratio measures the ratio of dependents (under 15 or over 64) to the working age population (typically between 15 and 64). A lower ratio indicates that a higher proportion of the population is of working age, potentially with more disposable income and a greater likelihood of travel. Conversely, a higher ratio indicates that a larger proportion of the population is dependent, which can put economic pressure on the productive segment, possibly reducing discretionary spending on items such as travel. For a country, understanding this ratio is key, as it can influence travel trends. A balanced age distribution with a sizeable working population can be a positive sign for increased travel activity.

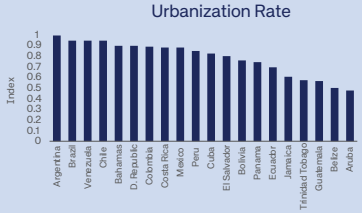
Age Dependency Ratio



Country	Age dependency ratio	Index
Bolivia	7.68	1.00
Guatemala	7.88	0.97
Belize	8.00	0.96
Jamaica	9.99	0.77
D. Republic	10.95	0.70
Ecuador	11.53	0.67
Bahamas	11.93	0.64
Mexico	12.16	0.63
El Salvador	12.33	0.62
Colombia	12.51	0.61
Peru	12.73	0.60
Venezuela	13.00	0.59
Panama	13.17	0.58
Brazil	13.71	0.56
Costa Rica	15.28	0.50
Trinidad Tobago	15.95	0.48
Argentina	18.24	0.42
Chile	18.42	0.42
Aruba	22.97	0.33
Cuba	23.00	0.33

Source: ALTA analysis based on World Bank data.

Urbanization Rate refers to the percentage of the total population living in urban areas. As cities grow and develop, they tend to offer more employment opportunities, better infrastructure and better access to amenities and services. This urban concentration often translates into higher disposable income and greater exposure to diverse cultures and global trends, which fosters a greater desire to travel. For countries, an increasing rate of urbanization can mean greater potential for foreign travel, which impacts their global competitiveness.



Country	Urbanization rate	Index
Argentina	92.23	1.00
Brazil	88.00	0.95
Venezuela	88.00	0.95
Chile	87.82	0.95
Bahamas	83.37	0.90
D. Republic	83.21	0.90
Colombia	81.74	0.89
Costa Rica	81.43	0.88
Mexico	81.02	0.88
Peru	78.50	0.85
Cuba	77.00	0.83
El Salvador	74.12	0.80
Bolivia	70.48	0.76
Panama	68.78	0.75
Ecuador	64.36	0.70
Jamaica	56.65	0.61
Trinidad Tobago	53.27	0.58
Guatemala	52.25	0.57
Belize	46.20	0.50
Aruba	43.87	0.48

Source: ALTA analysis based on World Bank data.

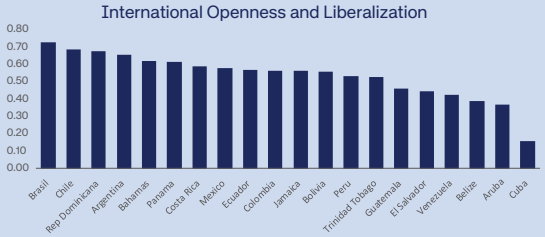
Pillar 6. International openness and liberalization

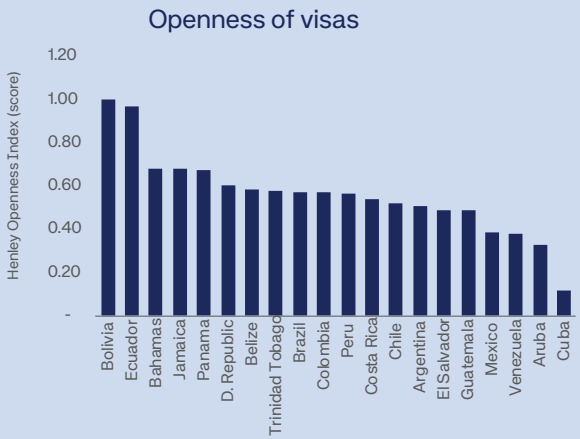
Open borders and strong international connectivity are key indicators of a country's integration into the global economy. In Pillar 6, we delve into the metrics that determine such openness: the Henley Passport Index, the Henley Openness Index, and the number of Bilateral Air Services Agreements.

The Henley Openness Index (HOI) provides information on the number of countries to which a particular country allows visa-free entry, reflecting its overall openness to travelers. Its counterpart, the Henley Passport Index (HPI), derived from Henley & Partners research, shows the number of destinations that passport holders can access without a visa, serving as an indicator of a passport's overall strength.

Air Service Agreements (ASAs) are critical to a country's competitive positioning in the global travel market. They determine how many flights and which airlines can operate between two countries. More of these agreements, especially those that are fully liberalized, allow for greater air connectivity, encouraging more tourism, trade, and business exchanges. More ASAs usually result in lower airfares due to competition, increased flight frequencies offering better options for travelers and greater economic benefits for the countries involved. To quantify the liberalization of each country's air market, we use the same methodology used in the World Economic Forum's Travel & Tourism Competitiveness Index. This metric analyzes the number and nature of ASAs maintained by an economy, with weights assigned according to their level of liberalization: traditional agreements, 0.5; transitional agreements, 0.75; and fully liberalized markets, 1.0. In Pillar 6, we use these weights to quantify the liberalization of each country's air market.

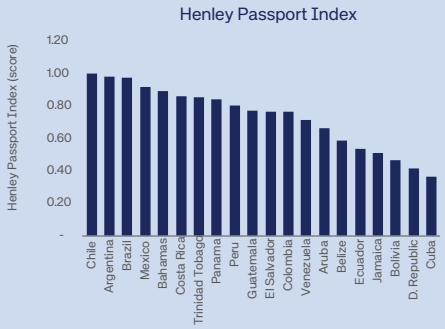
In Pillar 6, we use these specific metrics to get a clear picture of how well connected a country is to the international travel and tourism scene. Being open to more nations and having strong air connections can go a long way in helping a country compete on the global stage. When a country's borders are open to many others and it has numerous air service agreements, it usually means more tourists, more trade, and more opportunities for growth.





Country	# of origin markets not requiring visas	Index
Bolivia	178	1.00
Ecuador	172	0.97
Bahamas	121	0.68
Jamaica	121	0.68
Panama	120	0.67
D. Republic	107	0.60
Belize	104	0.58
Trinidad Tobago	103	0.58
Brazil	102	0.57
Colombia	102	0.57
Peru	100	0.56
Costa Rica	96	0.54
Chile	92	0.52
Argentina	90	0.51
El Salvador	87	0.49
Guatemala	87	0.49
Mexico	68	0.38
Venezuela	67	0.38
Aruba	58	0.33
Cuba	21	0.12

Source: ALTA analysis based on Henley & Partners



Country	# of destination not requiring a visa	Index
Chile	177	1.00
Argentina	174	0.98
Brazil	173	0.98
Mexico	162	0.92
Bahamas	158	0.89
Costa Rica	152	0.86
Trinidad Tobago	151	0.85
Panama	149	0.84
Peru	142	0.80
Guatemala	137	0.77
El Salvador	136	0.77
Colombia	135	0.76
Venezuela	126	0.71
Aruba	117	0.66
Belize	104	0.59
Ecuador	95	0.54
Jamaica	90	0.51
Bolivia	82	0.46
D. Republic	74	0.42
Cuba	64	0.36

Source: ALTA analysis based on Henley & Partners

Source: WEF T&T indices

Country	Number of bilateral air services agreements by liberalization level	Index
D. Republic	48.8	1.00
Brazil	30.3	0.62
Chile	26.3	0.54
Jamaica	24	0.49
Argentina	23.5	0.48
Mexico	21.3	0.44
Costa Rica	17.8	0.36
Colombia	17	0.35
Panama	15.5	0.32
Bahamas	14	0.29
Peru	11.3	0.23
Bolivia	10.5	0.22
Ecuador	9.5	0.19
Venezuela	9.3	0.19
Trinidad Tobago	7.5	0.15
Guatemala	6	0.12
Aruba	6	0.12
El Salvador	3.8	0.08

Case study: Potential benefits of visa liberalization and market opening.

Recent studies and experiences show that the removal of visa requirements and the opening of air markets can generate more tourists, better trade, and higher economic growth for countries.

As of November 9, 2012, the Mexican government eliminated the visa requirement for Peruvians and Colombians traveling to Mexico. This generated benefits for both tourism and air passenger volume between Mexico and both countries. In 2022, 921,000 more Colombians and Peruvians visited Mexico compared to 2012, bringing an additional US$499 million to the Mexican economy, based on average spending per tourist of US$542 per visit.

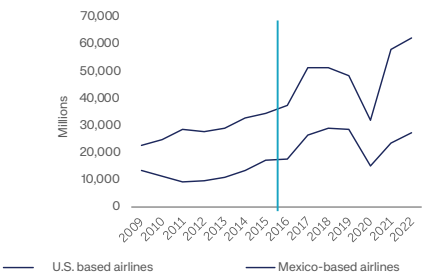
Source: ALTA analysis based on DATATUR

Market stimulation caused by visa exemption (O&D Pax)

Route	PAX 2012	PAX 2022	CAGR
BOG MEX	247,655	608,016	9.3%
BOG - CUN	32,791	472,916	30.2%
MDE- MEX	18,765	195,242	24.6%
MDE- CUN	1,081	214,620	59.5%
LIM-CUN	90,259	272,255	11.5%

	2012		2023	
Route	Operating airlines	Weekly flights	Operating airlines	Weekly flights
BOG-MEX	3	35	4	56
BOG-CUN	2	4	4	39
MDE- MEX	0	0	2	14
MDE-CUN	0	0	2	10
CUN-LIM	2	9	3	31

Historical annual commercial available seats per kilometer (ASKs) between MX and the U.S.



The U.S.-Mexico open skies agreement has greatly boosted international traffic

As of August 2016, the United States and Mexico signed the MX-US Open Skies agreements. UU. and opened their air markets to their airlines. And since then, U.S. and Mexican airlines can fly any route they want between the two countries, with no frequency limit (except from MEX which still limits the numbers of operations). The agreement has allowed both countries to further strengthen their dynamic commercial and economic relationship and offer better options to travelers. Since the agreement came into effect, more than 20 new routes have been launched and passenger traffic has experienced very positive growth.

*** There have been +20 new routes launched between the two countries since 2016.**

Pillar 7: International Connectivity

7. International connectivity

Air connectivity reflects how well connected a country is with cities around the world. Increasing and accessing greater air connectivity is essential for a country to develop economic linkages. Air connectivity drives the development of value chains, global trade, and international mobility, enabling companies to compete to attract tourism and foreign investment. Therefore, the more air connections a country has, the greater its ability to deliver economic benefits to communities.

7.1. Connectivity index

Given the importance of connectivity and its relationship to economic development, for this section we have calculated international and intra-regional connectivity to measure and quantify how well connected a country is to the global air transport network. The index, based on methodologies used by other renowned organizations such as IATA, is calculated by measuring the number of destinations served and seats available from each country's main airports. In other words, the connectivity indicator considers the number of seats available for each of the destinations served during a specific year, in this case 2023. The number of total seats available for each destination is weighted according to the size of the destination airport, such weighting is given in terms of the total seat capacity for the year and the number of destinations served from that airport. The average of these two indicators is the metric by which each airport is weighted or assigned a weight. The weighting of each destination gives an indication of the economic importance of the destination airport and the number of indirect connections it can provide.

For example, Dubai Airport (DXB), being the airport with the largest international capacity, has a weighting of 1, while London Heathrow (LHR), which provides 84.3% of the number of seats and 88% of the destinations offered by DXB, has a weighting of 0.86. Therefore, if an airport has 100 flights available to DXB, it is assigned a weighted total of 100. But if it also has 100 flights available to LHR, it will be assigned a weighted value of 86. The sum of all weighted totals for each destination served will determine the final absolute connectivity indicator. The index has been calculated as follows:

$$\textit{Connectivty Index} = \sum_{n=0}^{n} \textit{(Frequencies}$$

** connectivity coefficient of the destination airport)*

Therefore, a given country with a higher number of destinations and total seats will have a higher connectivity index score. For more details on the global connectivity index score, please refer to Annex 3.

The absolute connectivity index score does not necessarily guarantee the best measure of quality in connectivity, as countries are in different situations, contexts and locations that directly impact their air connectivity. Countries with larger economies and larger populations have more destinations and seats available, leading to greater connectivity. For this reason, two adjustments were made to the absolute connectivity score, obtaining a final score by means of a weighted average, assigning the greatest weight to the absolute international connectivity measure.

- Adjustment considering per capita travel.
- Adjustment for travel per capita and GDP per capita.

The following section evaluates absolute international air connectivity by country and airport, as well as connectivity adjusted for the two parameters explained above. The analysis presented compares data and scores to 2019, as air traffic and connections decreased in 2020 and 2021 due to the pandemic. This provides a better understanding of the progress and recovery of air connectivity in the region and globally. A similar analysis is also presented for intra-regional connectivity.

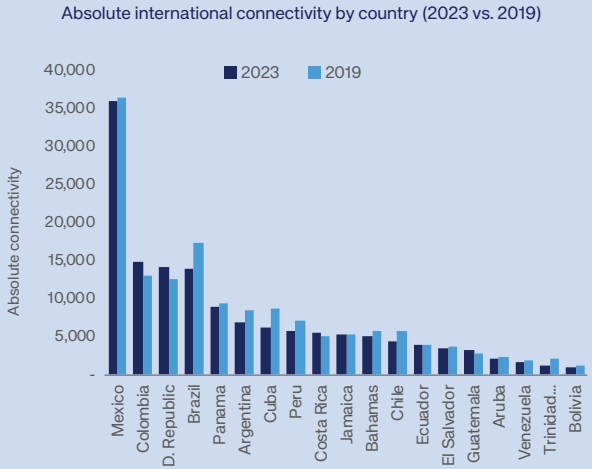
The Pandemic's Impact on LAC Connectivity

The impact of the pandemic and the restrictive measures imposed by governments on international travel to contain the spread of the virus led to a prolonged and near-total shutdown of international aviation, resulting in significant disruption of connectivity worldwide. The number of connected airport pairs was significantly reduced.

With the slow lifting of restrictions on international passengers, connectivity in the region has been fully restored. Regionally, during 2019 there were 2,713 connected airport pairs, while in 2023 there were 2,743, or 1% above pre-pandemic levels.

Absolute International Connectivity

Country	Connectivity Index 2023	Connectivity Index 2019	Global Ranking 2023	Global Ranking 2019	Growth 2023 vs 2019
México	35,980	36,314	24	35	-1%
Colombia	14,690	13,046	50	57	13%
República Dom.	14,047	12,448	54	61	13%
Brazil	13,870	17,236	55	50	-20%
Panamá	8,925	9,451	68	68	-6%
Argentina	6,812	8,437	75	76	-19%
Costa Rica	5,518	5,143	86	94	7%
Perú	5,809	7,038	84	82	-17%
Jamaica	5,244	5,221	87	91	0%
Bahamas	4,926	5,602	88	90	-12%
Cuba	6,271	8,698	81	73	-28%
Chile	4,399	5,666	90	88	-22%
Ecuador	3,861	3,892	93	101	-1%
El Salvador	3,454	3,672	97	103	-6%
Guatemala	3,152	2,786	103	109	13%
Aruba	2,057	2,369	111	116	-13%
Venezuela	1,685	1,803	120	126	-7%
Trinidad and Tobago	1,280	1,990	132	122	-36%
Bolivia	1,007	1,267	143	140	-21%



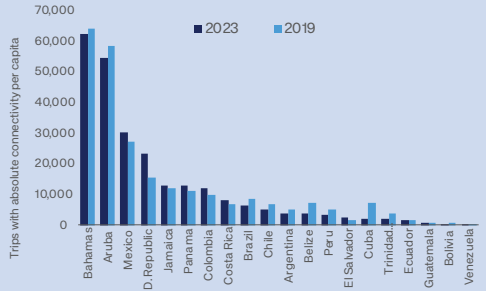
Source: ALTA analysis based on Amadeus Travel Intelligence – Market Insight.

In terms of absolute connectivity for the countries studied in this competitiveness index, Mexico scored the best in international connectivity in 2023, and remains only 1% below 2019. It was followed by Colombia, the country that showed the highest growth in connectivity relative to pre-pandemic levels (+13%) and the Dominican Republic, which also performed well with 13% growth. It is important to note that in 2019, Brazil reached second place after Mexico, however, in 2023 it ranked fourth, being 20% below pre-pandemic levels. These results are not surprising given that these three countries were the first to recover their international traffic volumes in April 2022.

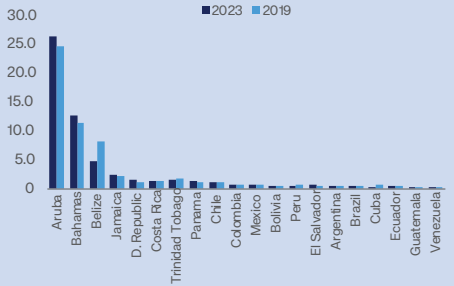
Adjustment relative to per capita travel

In terms of relative connectivity adjusted to per capita travel per country, the Bahamas presents the highest levels of connectivity in contrast to Mexico, which while remaining within the top positions, drops to third place, despite having the highest absolute connectivity of the countries included in the study. The first two positions correspond to two small Caribbean islands that rely heavily on inbound tourism and which, in 2023, had the highest number of trips per capita in the region, Aruba with 26.4 and Bahamas with 12.6. Aruba experienced a decline in connectivity with respect to 2019 of 7%, while Bahamas only reaches 2% of pre-pandemic levels. Dominican Republic, meanwhile, stands out as the country with the highest growth in international connectivity (+49% vs 2019).

International connectivity adjusted by number of trips per capi



Number of air trips per capita (2023 vs. 2019).

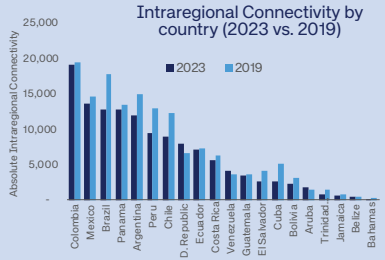


Source: ALTA analysis based on Amadeus Travel Intelligence¬ ~ Market Insight and World Bank

Intraregional connectivity

An indicator derived from international connectivity is intraregional connectivity, which measures air connectivity within a region. The intraregional connectivity index measures and quantifies how well connected a country is to the air transport network of Latin America and the Caribbean. The index is calculated similarly to the global connectivity index, measuring the number of destinations in the region and seats available from a country's main airports. The 2023 scores for the countries studied are shown below. For more details on the scores for each of the countries in Latin America and the Caribbean, see **Annex 3.1.**

Country	Intraregional Connectivity Index	Intraregional Connectivity Index 2019	Ranking	Ranking 2019	Growth vs 2019
Colombia	19,162	19,434	1	1	-1%
Mexico	13,552	14,564	2	4	-7%
Brasil	12,850	17,736	3	2	-28%
Panama	12,762	13,387	4	5	-5%
Argentina	12,021	14,933	5	3	-20%
Peru	9,411	12,960	6	6	-27%
Chile	8,899	12,245	7	7	-27%
D. Republic	7,942	6,663	8	9	19%
Ecuador	7,125	7,365	9	8	-3%
CostaRica	5,596	6,379	10	10	-12%
Venezuela	4,131	3,717	11	13	11 %
Guatemala	3,449	3,627	12	14	-5%
El Salvador	2,691	4,212	14	12	-36%
Cuba	2,672	5,139	15	11	-48%
Bolivia	2,307	3,166	18	18	-27%
Aruba	1,855	1,454	21	26	28%
Trinidad Tobago	805	1,398	28	27	-42%
Jamaica	724	769	30	35	-6%
Belize	430	443	34	43	-3%
Bahamas	196	302	46	44	-35%

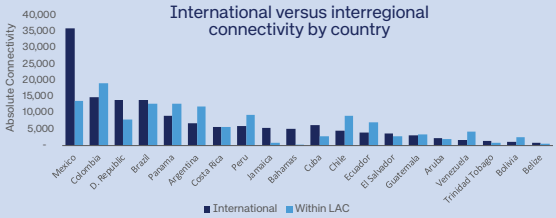


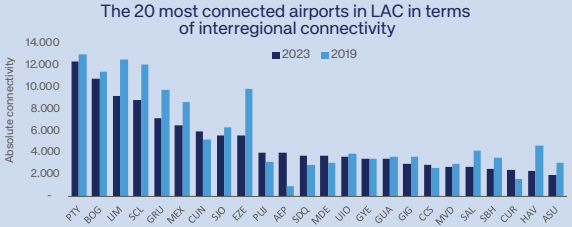
Source: ALTA analysis based on Amadeus Travel Intelligence – Market Insight.

Colombia ranked first in the interregional ranking for 2023 and is only 1.4% away from reaching its 2019 levels. Second place went to Mexico, which made very positive progress as it ranked #4 in 2019. However, this represented a 7% drop compared to 2019. Brazil ranked #4 after being in second place in 2019. Venezuela stood out as one of the countries with the highest growth (+11% vs 2019) and moving up two places compared to 2019. Conversely, one of the countries with the lowest growth in connectivity was Cuba, which had a decrease of almost 50% compared to 2019.

Intraregional connectivity for the top 25 LAC airports

In the interregional connectivity index by airport, Panama (PTY) led the ranking as it did in 2019, albeit with a 5% decrease compared to the same year. It was followed by Bogota (BOG), which ranked 4th in 2019 and had a 6% decrease.
In the city of Buenos Aires specifically, Aeroparque Airport (AEP) experienced an impressive 388% growth versus 2019. On the other hand, other airports highlighted for their significant growth were Santo Domingo in the Dominican Republic (SDQ) with 29% and Medellin (MDE) with 21%.





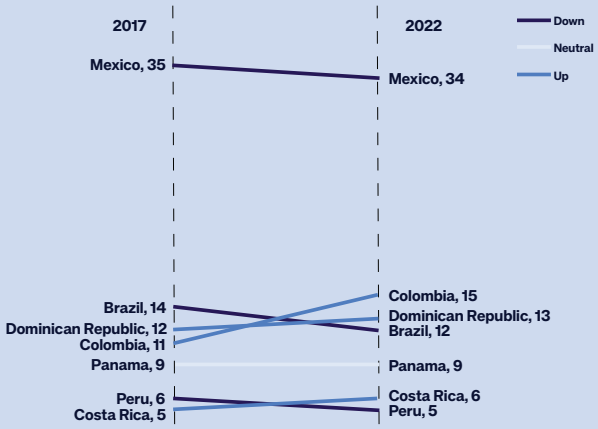
Source: ALTA analysis based on Amadeus Travel Intelligence – Market Insight.

Case study: The increase of connectivity in Colombia and its benefits in the international passenger market.

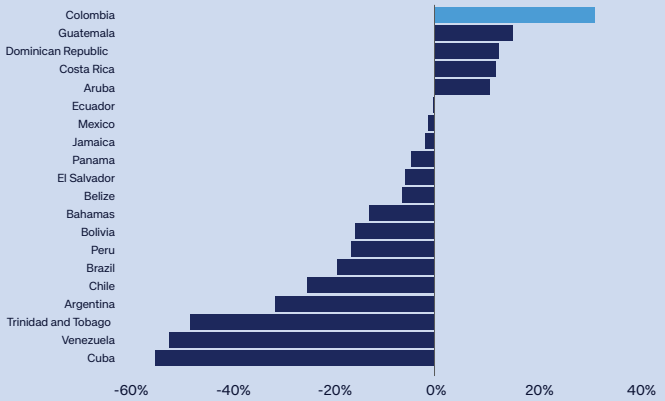
International connectivity in Colombia has shown outstanding performance in the last 5 years, with a growth of 31% compared to 2017, moving from 60th place in the world ranking to 39th and from 4th place in the region in 2017, to 2nd in 2022.

It is also worth noting that despite the impact of the COVID-19 pandemic, international connectivity in Colombia has been resilient and has managed to recover formidably, being one of only 2 countries in the region along with the Dominican Republic that surpassed its 2019 levels with a 7% increase.

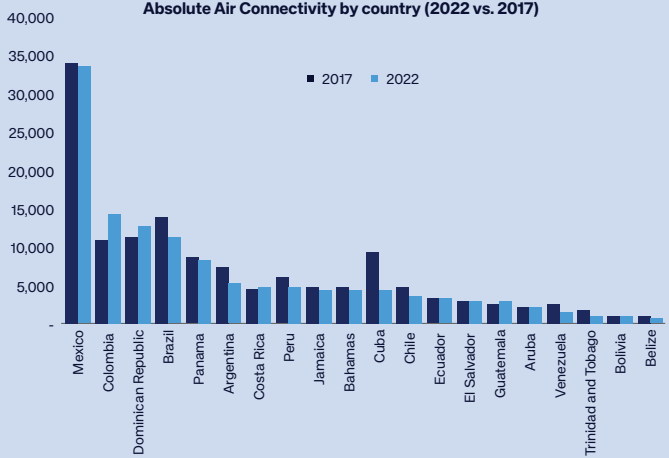
Air connectivity Absolute Score (thousands) Selected Countries in LAC



Absolute Connectivity Growth by Country (2022 vs. 2017)



Absolute Air Connectivity by country (2022 vs. 2017)

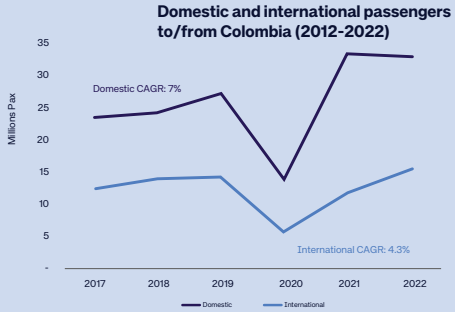


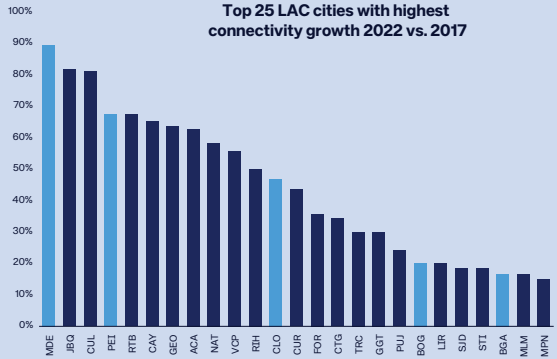
Source: ALTA analysis based on Amadeus Travel Intelligence – Market Insight.

This growth in absolute connectivity has contributed to Colombia's air transport market growing significantly over the last 5 years. From having a total of 35.6 million passengers (12.3 international) in 2017 to 47.9 million (15.2 international) in 2022, i.e. 1.3 more passengers traveling to and from Colombia, with a CAGR of 6.1% (for more information on the performance of some key metrics and statistics of Colombia's air transport, refer to Annex 1: Country Profiles, Colombia).

On the other hand, Colombian cities have had an outstanding performance with a significant increase in their connectivity levels. Bogota went from being the fifth most connected city in LAC to the third in 2022, an increase of 20%, growing more than Cancun or Mexico City, two leading cities in connectivity in the region. Medellin was one of the cities that presented the greatest increase in international connectivity with a significant growth of 88%, followed by Pereira with 67%, Cali with 37% and Cartagena with 34% more.

Of the 10 international routes with the highest growth in number of passengers and which at least doubled their annual traffic, have as origin or destination, some of the cities with the highest growth in connectivity, especially Bogota and Medellin.





Source: ALTA analysis based on Aerocivil

The increase in connectivity has brought important benefits, in addition to the growth of international traffic. The main indicators of the aviation market in Colombia have shown growth, for example, the number of airlines operating international flights has grown by 31%, or, on the other hand, the number of international trips per capita went from 0.25 to 0.28, representing an increase of 12%.

Route	2017 passengers	2022 passengers	Growth
CTG – PTY	132,717	274,990	107%
BOG – PUJ	87,490	213,117	144%
CTG – MIA	83,626	177,801	113%
BOG – YYZ	75,727	232,672	207%
JFK – MDE	63,478	135,459	113%
MDE – MEX	59,526	178,140	199%
LIM – MDE	54,089	117,008	116%
BOG – SDQ	45,255	157,269	248%
CUN – MDE	40,852	180,493	342%
BOG – CUR	37,081	75,825	104%

Main international indicators by market	2017	2022	Growth
International passengers (millions)	12.3	15.2	24%
International seats (millions)	17	21.3	25%
International frequencies	107,518	122,077	14%
International airlines operating	29	38	31%
International city pairs	96	116	21%
Average distance on international routes (kms)	2,518	2,692	7%
International travel per capita	0.25	0.28	12%
International tourists (millions)	3.9	4.6	18%

Fuente: Análisis ALTA basado en Amadeus Travel Intelligence y Aero civil

Annex 1: Country Profiles

Panama

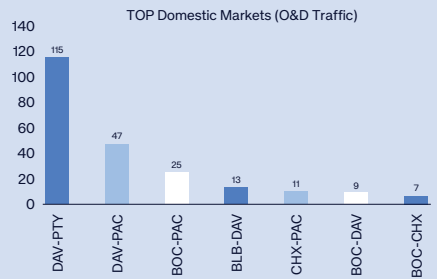
Panama (1st/20)
Total points: 7.34

Main airlines (2023)

	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
CopaAirlines	15.69	41,600	18.14	115,392
wingo	0.47	426	0.61	3,263
UNITED	0.36	1,292	0.42	2,321
TURKISH AIRLINES	0.28	2,582	0.36	1,062
KLM	0.23	2,202	0.25	708
AIRFRANCE	0.16	1,574	0.18	548
American Airlines	0.16	342	0.18	1,388
Avianca	0.15	162	0.21	1,199
AirEuropa	0.15	1,297	0.16	524
IBERIA	0.14	1,450	0.18	616

Main indicators (2023)

Passenger Traffic	18.3 million
Total Seating Capacity	21.4 million
International Routes	101
Domestic Routes	9
No. of airlines operating	27
No. of airports with commercial traffic	7
Total fleet	104
International tourists (2022)	1.5 million
Travel & tourism % of GDP	9.2%
Travel per capita	1.4



Source: Amadeus Travel Intelligence - Market Insight

Chile

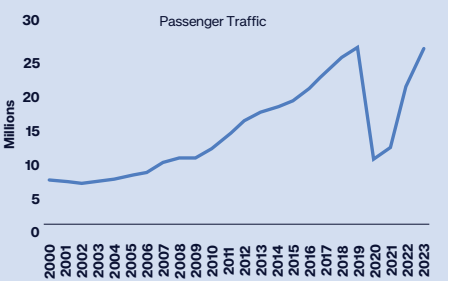
Chile (2nd/20)
Total points: 6.89

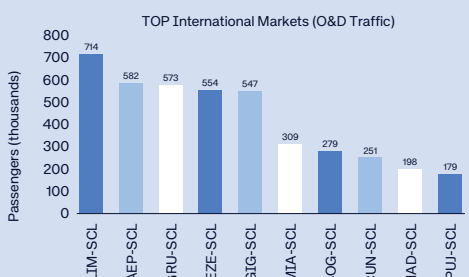
Main airlines (2023)

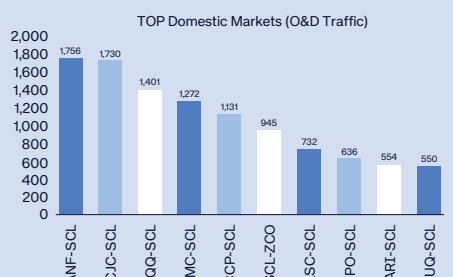
	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
LATAM	13.66	32,392	16.05	79,072
SKY	5.60	8,090	6.60	34,214
JetSMART	3.49	5,630	4.19	20,580
Copa Airlines	0.55	2,896	0.60	3,678
Avianca	0.35	1,782	0.42	2,334
Aerolíneas Argentinas	0.34	439	0.39	2,414
IBERIA	0.32	3,922	0.36	1,069
American Airlines	0.25	2,106	0.30	1,214
AIRFRANCE	0.22	2,761	0.24	730
DELTA	0.19	1,770	0.23	730

Main indicators (2023)

Passenger Traffic	25.7 million
Total Seating Capacity	30.3 million
International Routes	51
Domestic Routes	42
No. of airlines operating	25
No. of airports with commercial traffic	20
Total fleet	145
International tourists (2022)	2 million
Travel & tourism % of GDP	9.7%
Travel per capita	1.16







Source: Amadeus Travel Intelligence - Market Insight

Brazil

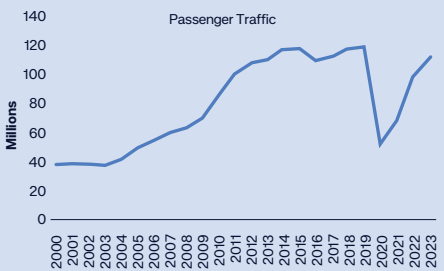
Brazil (3rd/20)
Total points: 6.77

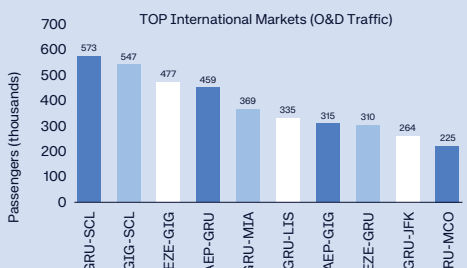
Main airlines (2023)

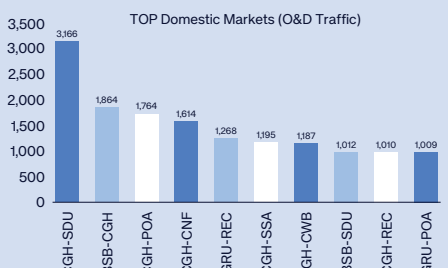
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
LATAM	37.8	83,133	49.8	267,964
GOL	30.3	42,317	38.9	217,229
Azul	29.2	43,551	37.9	304,977
TAP	1.9	16,267	2.3	8,332
CopaAirlines	1.1	6,201	1.3	7,636
	1.1	2,320	1.2	7,578
American Airlines	0.9	7,669	1.1	3,868
	0.8	626	1.3	19,069
UNITED	0.8	7,119	0.9	3,479
AIRFRANCE	0.7	7,271	0.8	2,570

Main indicators (2023)

Passenger Traffic	111.5 million
Total Seating Capacity	143.8 million
International Routes	194
Domestic Routes	487
No. of airlines operating	41
No. of airports with commercial traffic	167
Total fleet	515
International tourists (2022)	3.6 million
Travel & tourism % of GDP	7.6%
Travel per capita	0.44







Source: Amadeus Travel Intelligence - Market Insight

Trinidad and Tobago

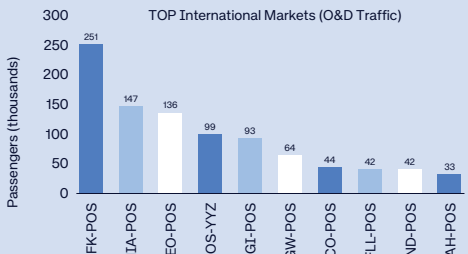
Trinidad and tobago (4 /20)
Total points: 6.63

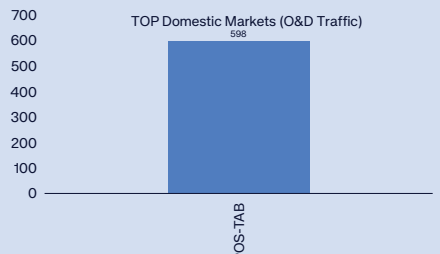
Main airlines (2023)

Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
LATAM	1.72	2,299	42.07	21,456
GOL	0.14	407	0.16	906
Azul	0.14	589	0.17	959
TAP	0.12	603	0.18	532
CopaAirlines	0.10	510	0.12	727
	0.10	198	0.10	688
American Airlines	0.07	364	0.09	332
	0.01	53	0.01	50
UNITED	0.00	2	0.00	14
AIRFRANCE	0.00	1	0.00	4

Main indicators (2023)

Passenger Traffic	2.4 million
Total Seating Capacity	2.9 million
International Routes	30
Domestic Routes	1
No. of airlines operating	11
No. of airports with commercial traffic	2
Total fleet	17
International tourists (2022)	0.22 million
Travel & tourism % of GDP	7.6%
Travel per capita	1.4





Source: Amadeus Travel Intelligence - Market Insight

Guatemala

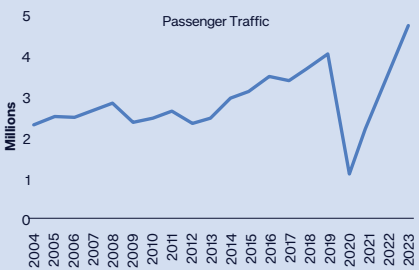
Guatemala (5 /20)
Total points: 6.49

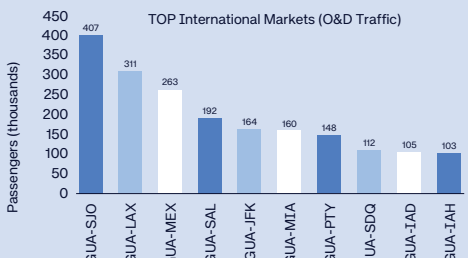
Main airlines (2023)

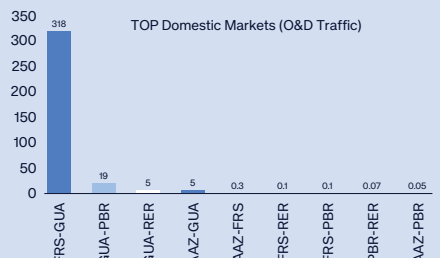
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
Avianca	0.95	21,634	1.21	6,802
CopaAirlines	0.53	713	0.58	3,714
TagAirlines	0.48	189	0.56	10,962
American Airlines	0.45	985	0.54	3,156
UNITED	0.44	1,194	0.53	3,206
volaris	0.41	879	0.53	3,249
AEROMEXICO	0.27	325	0.31	1,849
spirit	0.23	527	0.31	1,866
DELTA	0.20	592	0.22	1,112
IBERIA	0.15	896	0.20	698

Main indicators (2023)

Passenger Traffic	4.7 million
Total Seating Capacity	5.7 million
International Routes	29
Domestic Routes	4
No. of airlines operating	19
No. of airports with commercial traffic	5
Total fleet	19
International tourists (2022)	1.8 million
Travel & tourism % of GDP	5.1%
Travel per capita	0.24







Source: Amadeus Travel Intelligence - Market Insight

Costa Rica

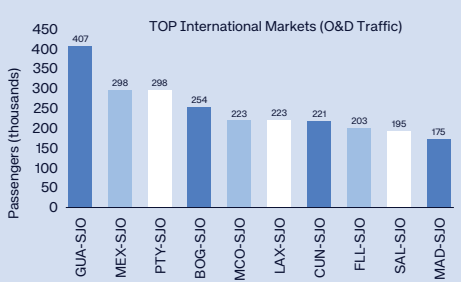
Costa Rica (6 /20)
Total points: 6.40

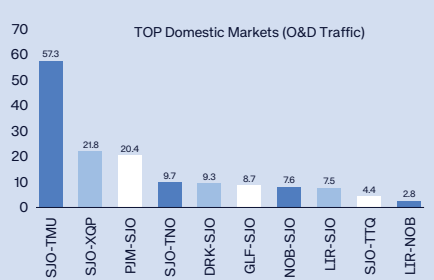
Main airlines (2023)

Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
Avianca	1.17	1,627	1.47	8,298
American Airlines	0.94	2,410	1.08	6,319
CopaAirlines	0.93	586	1.03	6,590
UNITED	0.83	2,869	0.97	5,740
volaris	0.49	859	0.69	4,307
jetBlue	0.42	1,378	0.51	3,042
DELTA	0.38	1,287	0.43	2,201
spirit	0.35	897	0.47	2,123
Southwest	0.25	728	0.27	1,726
Alaska	0.24	1,157	0.27	1,562

Main indicators (2023)

Passenger Traffic	7.9 million
Total Seating Capacity	9.7 million
International Routes	61
Domestic Routes	16
No. of airlines operating	33
No. of airports with commercial traffic	14
Total fleet	7
International tourists (2022)	2.3 million
Travel & tourism % of GDP	9.5%
Travel per capita	1.46





Source: Amadeus Travel Intelligence - Market Insight

El Salvador

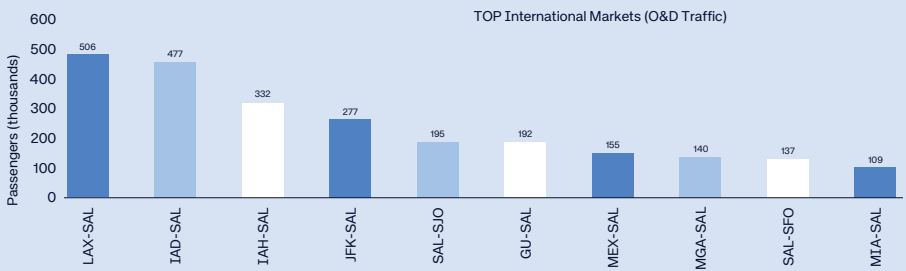
El Salvador (7/20)
Total points: 6.49

Main airlines (2023)

Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
Avianca	2.74	8,266	3.56	19,754
volaris	0.56	1,860	0.79	4,258
UNITED	0.42	1,184	0.49	2,756
Avianca	0.38	162	0.47	2,626
American Airlines	0.29	670	0.36	2,066
CopaAirlines	0.18	234	0.20	1,271
DELTA	0.17	543	0.19	1,089
spirit	0.16	425	0.23	1,418
volaris	0.14	356	0.18	1,199
IBERIA	0.12	891	0.20	698

Main indicators (2023)

Passenger Traffic	5.4 million
Total Seating Capacity	7 million
International Routes	28
Domestic Routes	-
No. of airlines operating	19
No. of airports with commercial traffic	1
Total fleet	21
International tourists (2022)	2.7 million
Travel & tourism % of GDP	12.3%
Travel per capita	0.7



*Note: In the Top Carriers table (2023) the airline in the first position refers to Avianca Colombia with IATA code AV and in the fourth position is Avianca El Salvador with code TA. On the other hand, the second position corresponds to Volaris El Salvador with IATA code N3, while the airline in the ninth position of the ranking is Volaris Costa Rica with code Q6.

Source: Amadeus Travel Intelligence - Market Insight

Venezuela

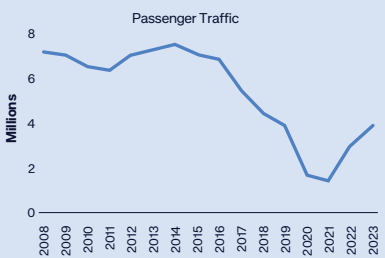
Venezuela (8/20)
Total points: 6.22

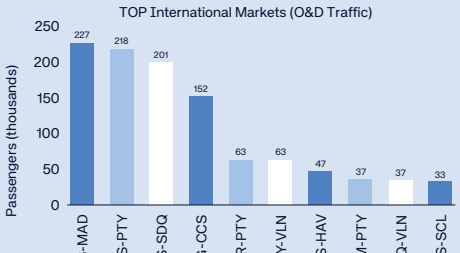
Main airlines (2023)

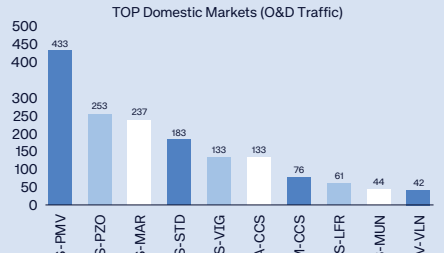
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
LASER Airlines	0.73	8723	1.16	7,043
CopaAirlines	0.56	795	0.61	3,865
conviasa	0.48	931	0.72	10,764
Avior	0.38	307	0.65	4,513
Rutaca	0.32	317	0.56	3,770
	0.30	283	0.43	3,195
Aerolíneas Estelar	0.29	352	0.47	3,638
TURKISH AIRLINES	0.18	1,786	0.22	740
	0.14	170	0.21	1,305
PLUSULTRA	0.13	1,035	0.15	523

Main indicators (2023)

Passenger Traffic	3.9 million
Total Seating Capacity	5.7 million
International Routes	40
Domestic Routes	43
No. of airlines operating	20
No. of airports with commercial traffic	26
Total fleet	92
International tourists (2022)	0.6 million
Travel & tourism % of GDP	10.1%
Travel per capita	0.14







Source: Amadeus Travel Intelligence - Market Insight

Aruba

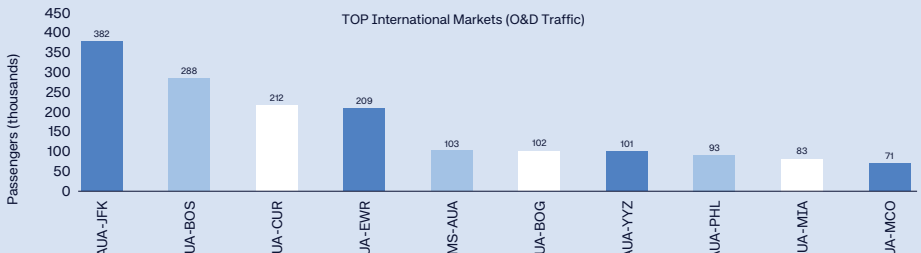
Aruba (9/20)
Total points: 6.21

Main airlines (2023)

Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
LASER Airlines	0.59	2,114	10.66	3,628
CopaAirlines	0.56	1,575	0.63	3,563
conviasa	0.32	1,149	0.36	2,012
Avior	0.27	941	0.31	1,720
Rutaca	0.19	884	0.22	716
Aerolineas Estelar	0.14	177	0.18	1,064
TURKISH AIRLINES	0.12	300	0.13	896
turpial airlines	0.12	143	0.13	846
PLUSULTRA	0.09	112	0.11	618
	0.09	13	0.11	5,912

Main indicators (2023)

Passenger Traffic	3 million
Total Seating Capacity	3.5 million
International Routes	32
Domestic Routes	-
No. of airlines operating	29
No. of airports with commercial traffic	1
Total fleet	3
International tourists (2022)	1.1 million
Travel & tourism % of GDP	73.8%
Travel per capita	27



Source: Amadeus Travel Intelligence - Market Insight

Colombia

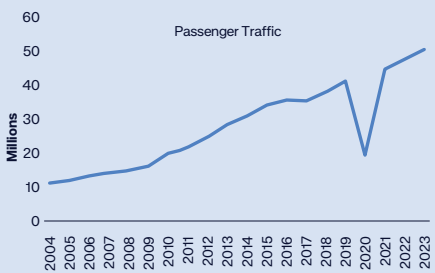
Colombia (10/20)
Total points: 5.73

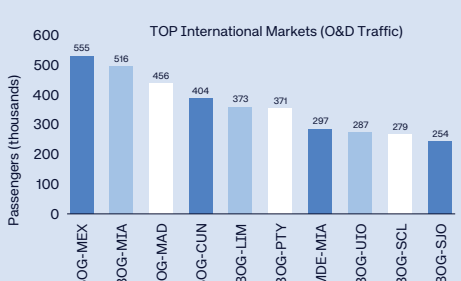
Main airlines (2023)

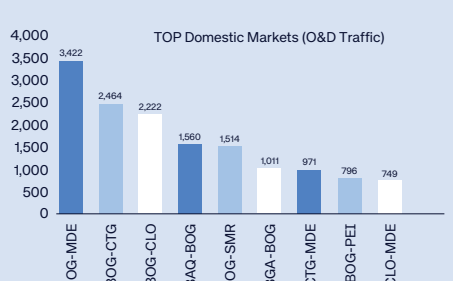
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
Avianca	25.20	42,905	32.02	178,189
LATAM	10.56	10,125	13.55	78,596
wingo	2.48	2,710	3.16	16,994
CopaAirlines	2.35	1,667	2.65	17,814
EASYFLY	1.29	486	2.03	28,956
American Airlines	1.17	3,091	1.33	8,713
SATENA	0.93	346	1.04	22,732
spirit	0.92	2,567	1.12	6,196
IBERIA	0.45	4,449	0.55	1,751
AeroMexico	0.38	1,433	0.46	2,749

Main indicators (2023)

Passenger Traffic	51.1 million
Total Seating Capacity	64.6 million
International Routes	132
Domestic Routes	119
No. of airlines operating	40
No. of airports with commercial traffic	51
Total fleet	269
International tourists (2022)	4.6 million
Travel & tourism % of GDP	4.8%
Travel per capita	0.85







Source: Amadeus Travel Intelligence - Market Insight

Bahamas

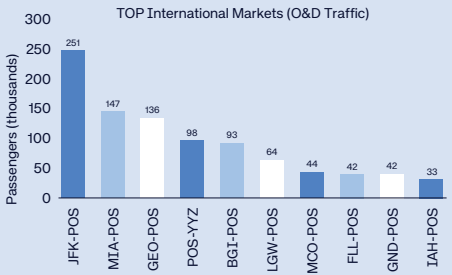
Bahamas (11/20)
Total points: 5.72

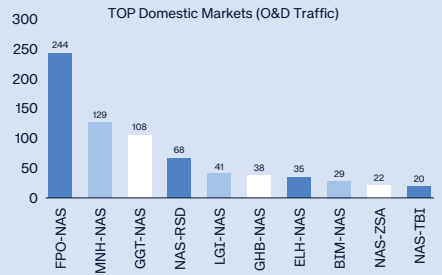
Main airlines (2023)

Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
American Airlines	1.22	1,202	1.51	12,862
	0.97	402	1.32	16,535
jetBlue	0.59	807	0.74	4,786
DELTA	0.55	838	0.64	4,393
WESTJET	0.33	89	0.44	8,776
UNITED	0.30	675	0.36	2,390
BRITISH AIRWAYS	0.27	1,292	0.34	1,392
	0.13	27	0.16	8,648
PLUSULTRA	0.13	84	0.23	3,890
AIR CANADA	0.12	288	0.13	815

Main indicators (2023)

Passenger Traffic	5.1 million
Total Seating Capacity	6.7 million
International Routes	79
Domestic Routes	26
No. of airlines operating	23
No. of airports with commercial traffic	24
Total fleet	30
International tourists (2022)	6.8 million
Travel & tourism % of GDP	38.4%
Travel per capita	11.6





Source: Amadeus Travel Intelligence - Market Insight

Mexico

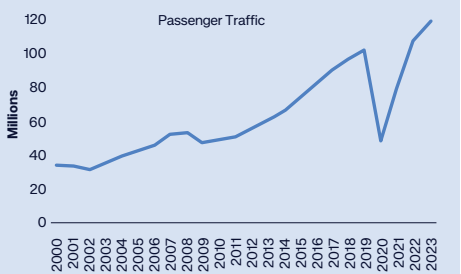
Mexico (12/20)
Total points: 5.68

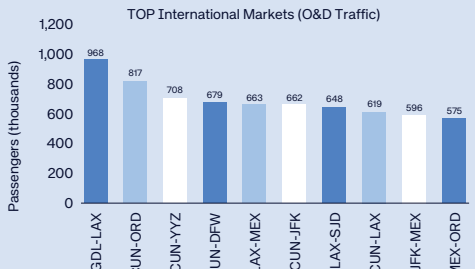
Main airlines (2023)

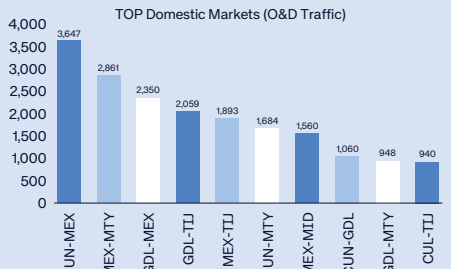
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
volaris	030.24	60,605	38.47	193,238
AeroMexico	25.05	53,534	30.12	204,749
viva	22.85	34,081	29.11	140,914
American Airlines	8.03	16,292	9.75	63,268
UNITED	6.08	14,305	7.21	50,989
DELTA	4.10	11,184	4.67	26,476
Southwest	2.35	4,777	2.72	18,082
Alaska	2.03	5,612	2.37	13,686
WESTJET	1.42	6,402	1.80	9,645
jetBlue	1.41	3,728	1.72	10,050

Main indicators (2023)

Passenger Traffic	118.4 million
Total Seating Capacity	147.9 million
International Routes	381
Domestic Routes	280
No. of airlines operating	65
No. of airports with commercial traffic	57
Total fleet	327
International tourists (2022)	38.3 million
Travel & tourism % of GDP	14.9%
Travel per capita	0.87







Source: Amadeus Travel Intelligence - Market Insight

Dominican Republic

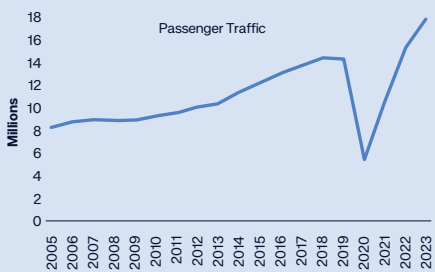
Dominican Republic (13/20)
Total points: 5.38

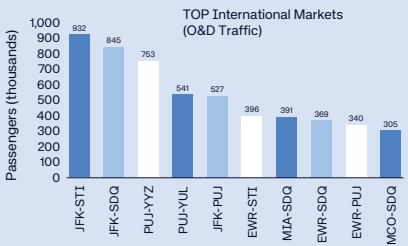
Main airlines (2023)

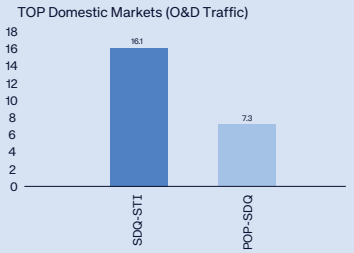
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
jetBlue	3.47	8,617	4.20	24,080
American Airlines	1.90	3,878	2.15	12,366
DELTA	1.37	3,757	1.52	8,438
UNITED	1.23	3,562	1.39	7,803
CopaAirlines	0.97	1,908	1.23	7,917
transat	0.89	2,989	1.00	4,063
spirit	0.77	1,524	0.99	5,276
arajet	0.74	1,966	1.00	5,391
FRONTIER	0.62	1,507	0.81	3,896
sunwing	0.48	1,661	0.54	2,859

Main indicators (2023)

Passenger Traffic	18.1 million
Total Seating Capacity	21.7 million
International Routes	177
Domestic Routes	2
No. of airlines operating	64
No. of airports with commercial traffic	7
Total fleet	41
International tourists (2022)	8.5 million
Travel & tourism % of GDP	15.3%
Travel per capita	1.59







Source: Amadeus Travel Intelligence - Market Insight

Ecuador

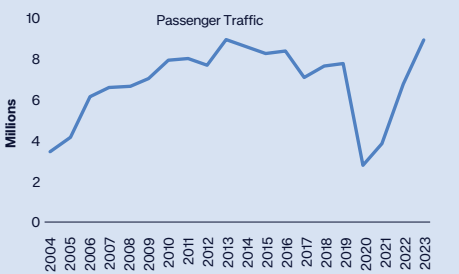
Ecuador (14/20)
Total points: 5.31

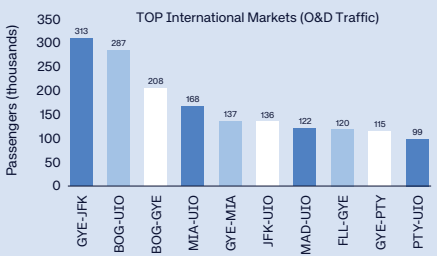
Main airlines (2023)

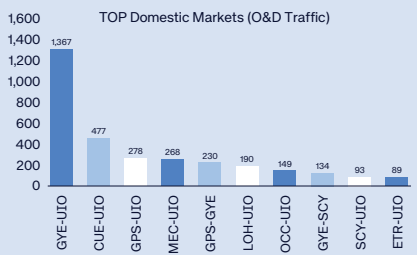
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
Avianca	2.53	3,357	3.25	18,614
LATAM	2.30	2,360	2.93	20,227
CopaAirlines	0.96	1,236	1.07	6,794
American Airlines	0.43	1,498	0.50	2,904
jetBlue	0.33	1,620	0.42	2,348
IBERIA	0.26	2,782	0.32	962
KLM	0.24	2,001	0.31	954
AirEuropa	0.16	1,160	0.19	646
DELTA	0.13	571	0.15	730

Main indicators (2023)

Passenger Traffic	8.9 million
Total Seating Capacity	10.9 million
International Routes	35
Domestic Routes	13
No. of airlines operating	20
No. of airports with commercial traffic	10
Total fleet	25
International tourists (2022)	1.1 million
Travel & tourism % of GDP	4.4%
Travel per capita	0.44

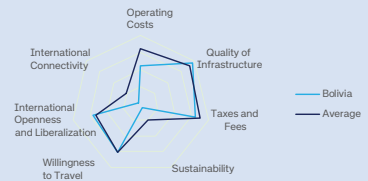






Source: Amadeus Travel Intelligence - Market Insight

Bolivia



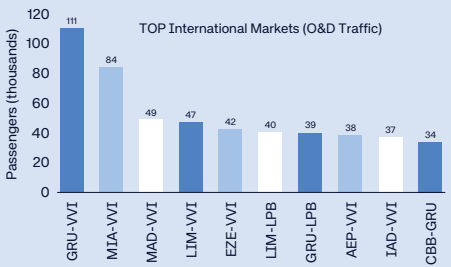
Bolivia (15/20)
Total points: 5.26

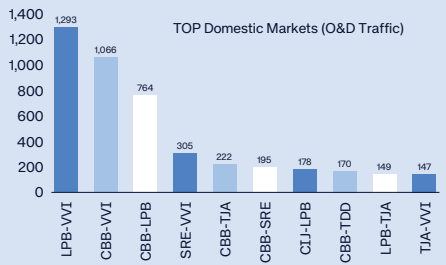
Main airlines (2023)

Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
BoA	25.42	4,970	6.30	42,879
Amaszonas	0.47	293	0.61	6,105
ecojet	0.29	163	0.41	4,427
Avianca	0.21	666	0.26	1,532
LATAM	0.19	389	0.27	1,573
CopaAirlines	0.17	634	0.18	1,146
AirEuropa	0.12	1,205	0.14	424
GOL	0.09	225	0.12	656
Aerolíneas Argentinas	0.06	132	0.07	707
silkway west airlines	0.03	28	0.03	544

Main indicators (2023)

Passenger Traffic	7.2 million
Total Seating Capacity	8.6 million
International Routes	20
Domestic Routes	27
No. of airlines operating	12
No. of airports with commercial traffic	12
Total fleet	59
International tourists (2022)	2 million
Travel & tourism % of GDP	5%
Travel per capita	0.52





Source: Amadeus Travel Intelligence - Market Insight

Belize

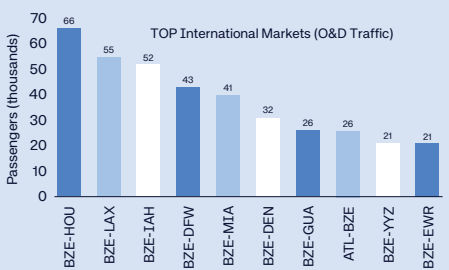
Belize (16/20)
Total points: 5.21

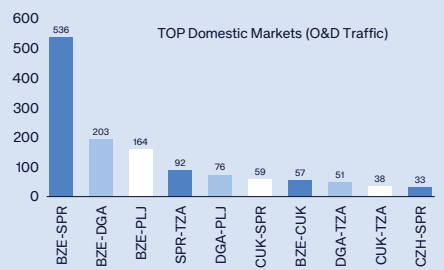
Main airlines (2023)

Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
TROPIC AIR	0.98	83	1.23	43,032
MAYA	0.47	52	0.77	64,330
American Airlines	0.27	495	0.31	1,824
UNITED	0.21	458	0.25	1,494
DELTA	0.11	222	0.12	734
Southwest	0.09	175	0.10	684
Alaska	0.05	215	0.06	338
TagAirlines	0.03	14	0.03	748
WESTJET	0.03	104	0.03	174
CopaAirlines	0.01	19	0.01	112

Main indicators (2023)

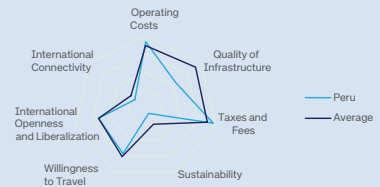
Passenger Traffic	2.3 million
Total Seating Capacity	2.9 million
International Routes	21
Domestic Routes	19
No. of airlines operating	13
No. of airports with commercial traffic	11
Total fleet	26
International tourists (2022)	0.37 million
Travel & tourism % of GDP	29.4%
Travel per capita	5.43





Source: Amadeus Travel Intelligence - Market Insight

Peru



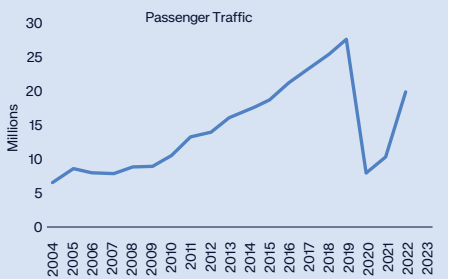
Peru (17/20)
Total points: 5.08

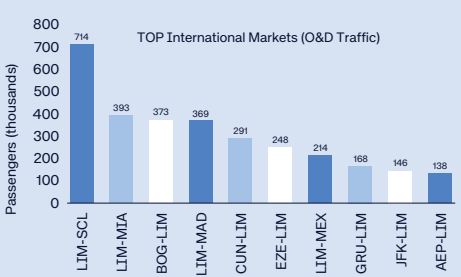
Main airlines (2023)

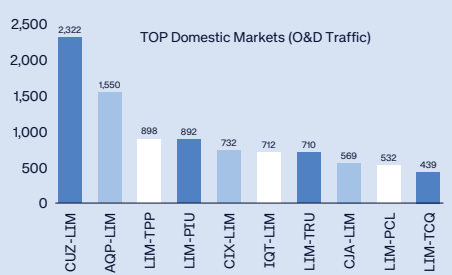
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
LATAM AIRLINES	12.81	26,536	16.00	92,974
SKY	3.11	4,786	4.11	21,839
StarPeru	0.99	682	1.29	10,034
JetSMART	0.97	1,353	1.30	6,901
JetSMART	0.62	672	0.87	4,696
CopaAirlines	0.54	1,696	0.73	4,578
Avianca	0.40	968	0.53	3,069
American Airlines	0.33	1,710	0.41	2,068
IBERIA	0.26	3,066	0.32	1,047
AirEuropa	0.22	2,322	0.24	730

Main indicators (2023)

Passenger Traffic	22.3 million
Total Seating Capacity	28.4 million
International Routes	50
Domestic Routes	31
No. of airlines operating	34
No. of airports with commercial traffic	23
Total fleet	82
International tourists (2022)	2 million
Travel & tourism % of GDP	6.9%
Travel per capita	0.55







Source: Amadeus Travel Intelligence - Market Insight

Argentina

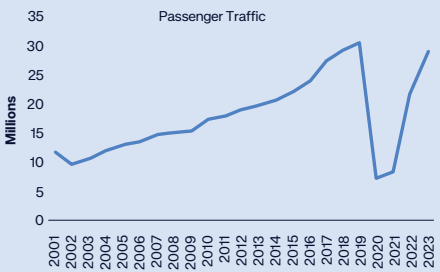
Argentina (18/20)
Total points: 5.03

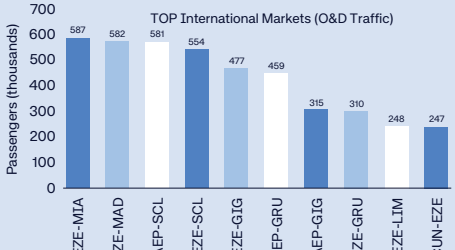
Main airlines (2023)

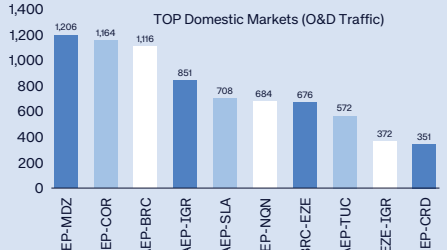
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
Aerolíneas Argentinas	14.29	27,075	16.58	114,757
flybondi	3.44	4,923	4.25	22,472
JETSMART	2.83	4,178	3.42	18,361
LATAM AIRLINES	1.90	4,058	2.30	13,349
CopaAirlines	0.73	4,364	0.85	5,173
GOL	0.67	1,720	0.86	4,654
American Airlines	0.65	5,656	0.73	2,783
IBERIA	0.58	6,566	0.64	2,087
SKY	0.51	799	0.66	3,416
Avianca	0.37	1,929	0.42	1,876

Main indicators (2023)

Passenger Traffic	28,8 million
Total Seating Capacity	34.3 million
International Routes	74
Domestic Routes	111
No. of airlines operating	32
No. of airports with commercial traffic	40
Total fleet	130
International tourists (2022)	7.2 million
Travel & tourism % of GDP	8.9%
Travel per capita	0.59

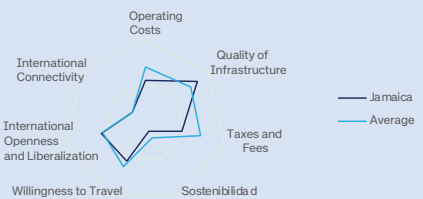






Source: Amadeus Travel Intelligence - Market Insight

Jamaica



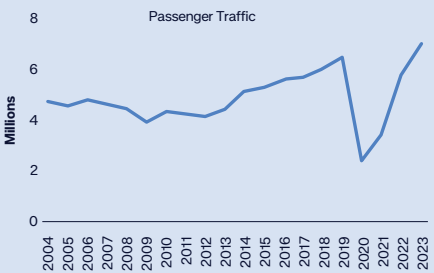
Jamaica (19/20)
Total points: 4.89

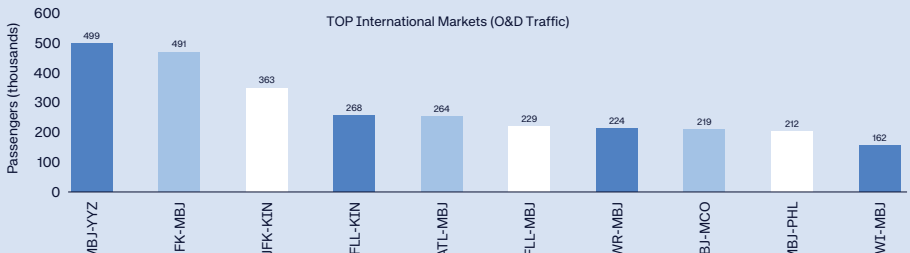
Main airlines (2023)

Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
American Airlines	1.46	2,985	1.75	9,826
jetBlue	1.32	2,983	1.63	9,499
DELTA	0.66	1,582	0.76	4,152
Southwest	0.55	1,078	0.60	3,540
UNITED	0.38	1,084	0.44	2,440
spirit	0.32	542	0.44	2,290
AIR CANADA	0.26	795	0.28	1,392
Caribbean Airlines	0.23	616	0.31	1,950
TUI	0.22	#N/A	#N/A	#N/A
FRONTIER AIRLINES	0.21	630	0.34	1,764

Main indicators (2023)

Passenger Traffic	7 million
Total Seating Capacity	8.2 million
International Routes	71
Domestic Routes	-
No. of airlines operating	35
No. of airports with commercial traffic	3
Total fleet	
International tourists (2022)	3.7 million
Travel & tourism % of GDP	30.1%
Travel per capita	2.44





Source: Amadeus Travel Intelligence - Market Insight

Cuba

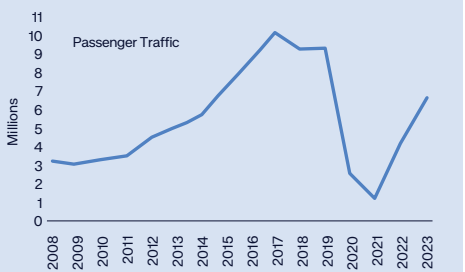
Cuba (20/20)
Total points: 3.60

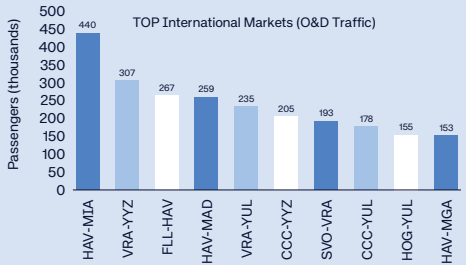
Main airlines (2023)

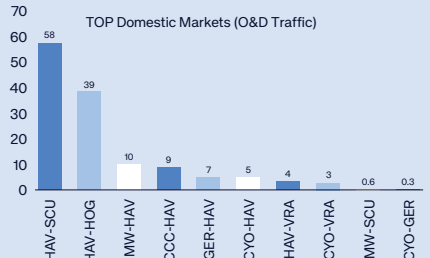
Carrier	Passengers (millions)	ASKs (millions)	Seats (millions)	Flights
American Airlines	1.10	3,263	11.3	6,634
jetBlue	0.94	694	1.6	9,788
DELTA	0.54	1,536	0.6	2,671
Southwest	0.36	711	0.5	2,848
UNITED	0.33	239	0.5	3,024
spirit	0.28	605	0.5	2,682
AIR CANADA	0.24	2,848	0.3	621
Caribbean Airlines	0.22	596	0.3	1,566
TUI	0.20	1,680	0.2	730
FRONTIER	0.18	523	0.2	1,330

Main indicators (2023)

Passenger Traffic	4.1 million
Total Seating Capacity	5.9 million
International Routes	115
Domestic Routes	14
No. of airlines operating	45
No. of airports with commercial traffic	10
Total fleet	22
International tourists (2022)	1.6 million
Travel & tourism % of GDP	7.1%
Travel per capita	0.58



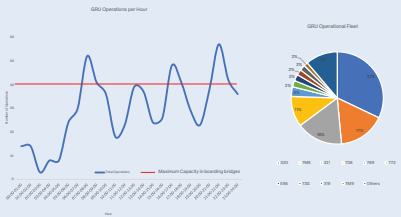


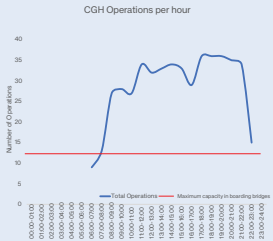


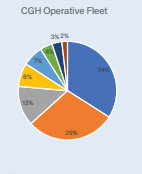
Source: Amadeus Travel Intelligence - Market Insight

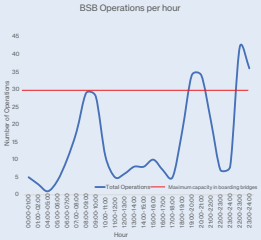
Annex 2: Availability of Non-Remote Parking Positions and Fleet Mix (Selected Airports)

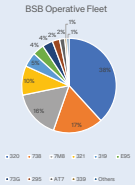
Annex 2: Gateway availability and fleet mix (selected airports)

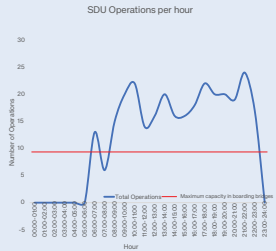


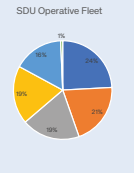




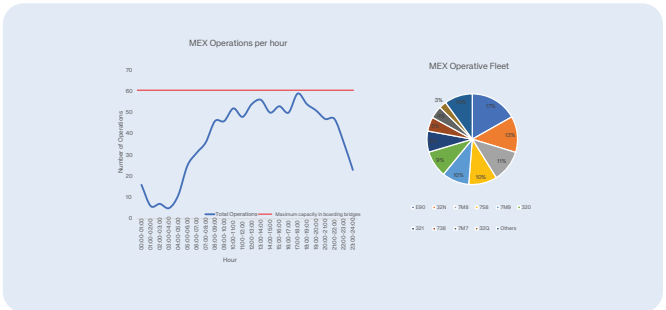


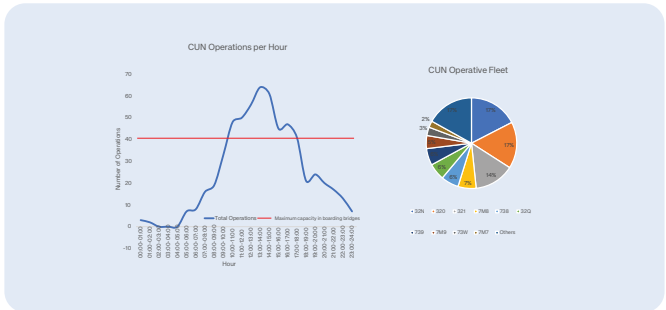


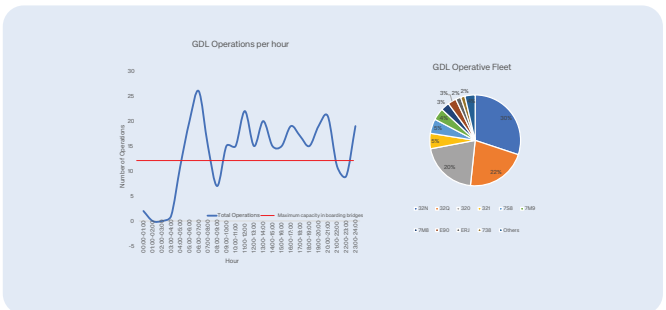


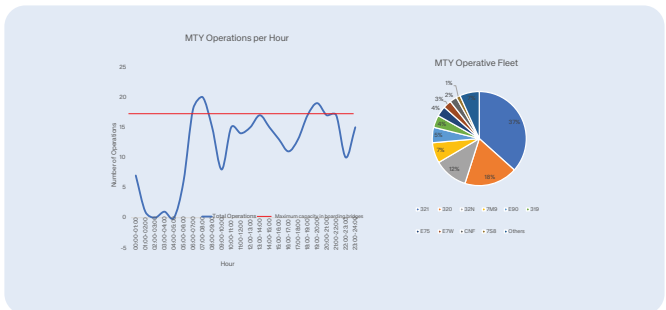


Annex 2: Gateway availability and fleet mix (selected airports)

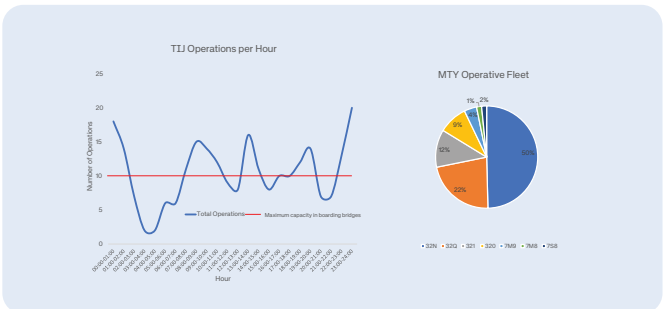


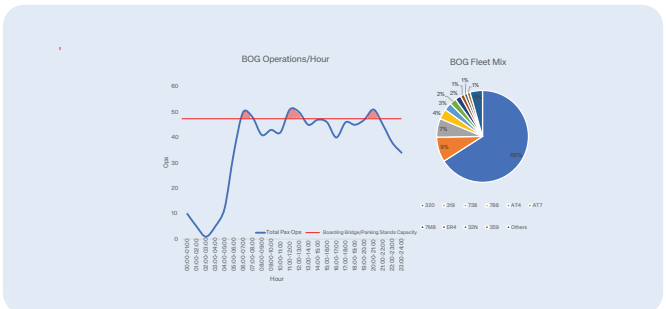


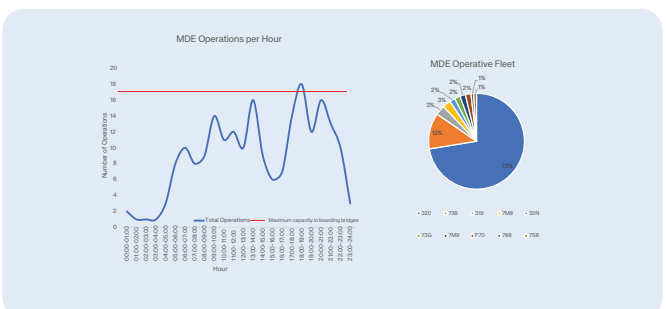


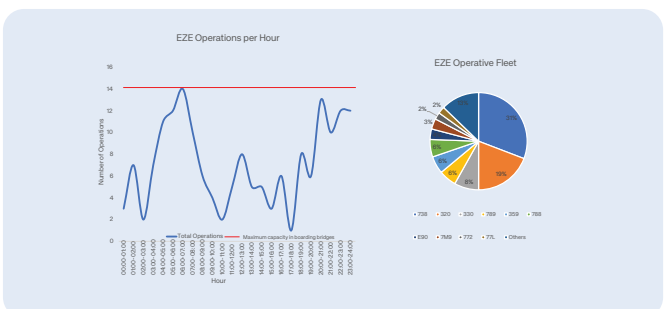


Annex 2: Gateway availability and fleet mix (selected airports)

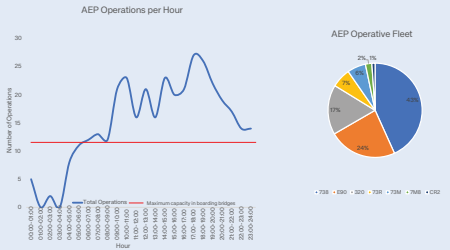


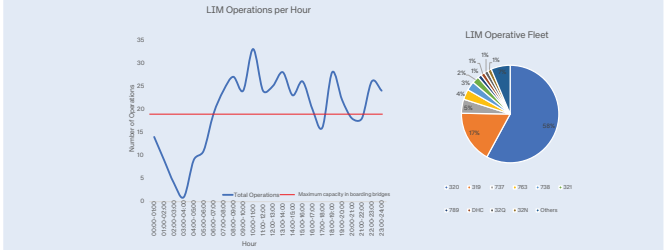


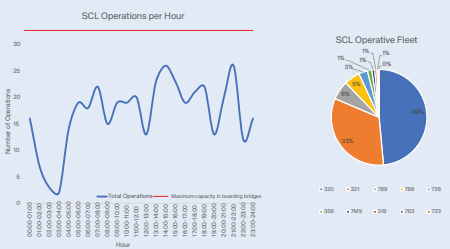


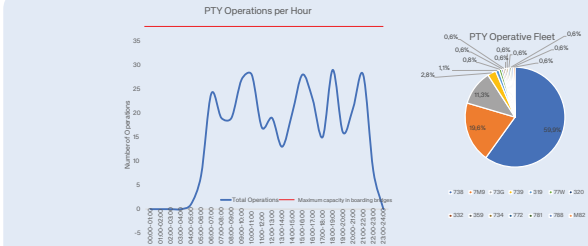


Annex 2: Gateway availability and fleet mix (selected airports)

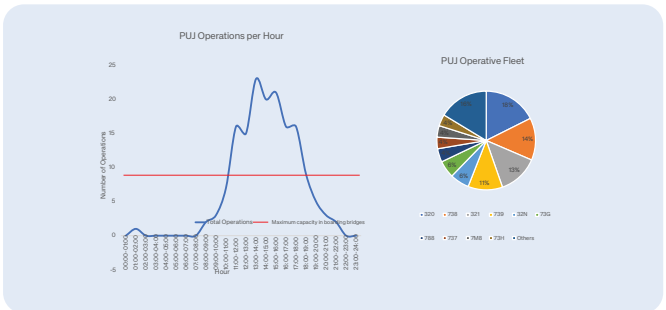


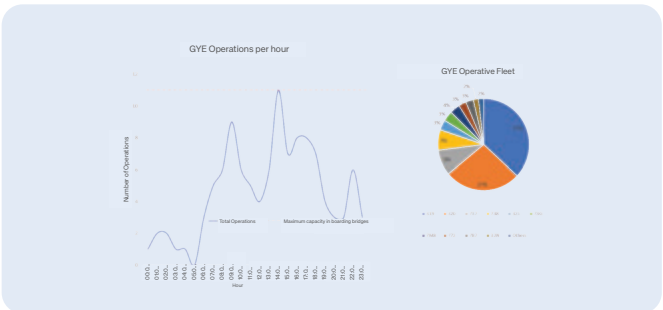


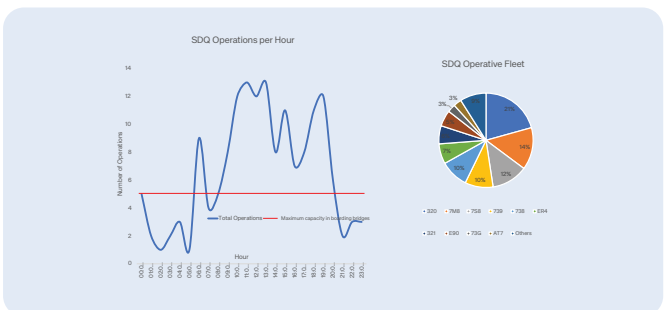


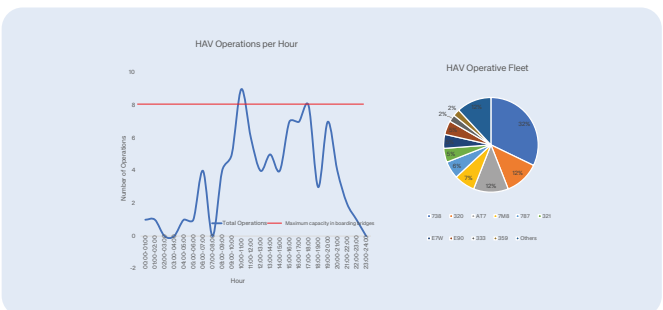


Annex 2: Gateway availability and fleet mix (selected airports)

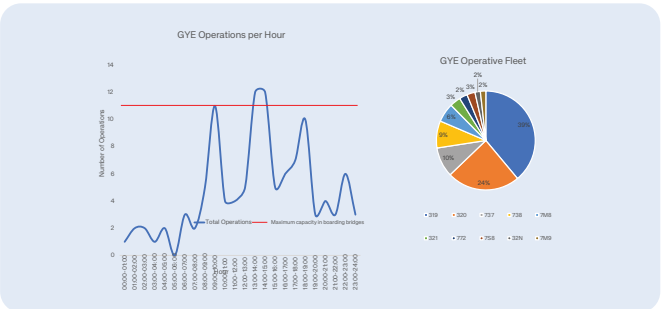








Annex 2: Gateway availability and fleet mix (selected airports)



Anexo 3: Conectividad internacional

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
United Kingdom	231,032	266,190	1	1	-13%
United States of America	219,224	239,077	2	3	-8%
Spain	194,440	203,435	4	4	-4%
Germany	194,698	247,261	3	2	-21%
Italy	166,363	185,329	5	5	-10%
France	150,833	169,298	6	7	-11%
Turkey	92,693	78,755	7	11	18%
India	70,766	80,829	9	10	-12%
India	84,274	83,105	8	9	1%
Portugal	65,124	60,844	13	16	7%
Switzerland	66,682	77,074	11	12	-13%
Emirates	68,526	62,021	10	15	10%
Greece	56,318	49,625	16	23	13%
Saudi Arabia	61,115	42,413	15	31	44%
Poland	50,670	56,443	17	18	-10%
Irland	47,121	49,392	19	24	-5%
Denmark	43,796	50,206	22	22	-13%
Austria	45,137	55,854	21	19	-19%
Canada	48,160	54,777	18	21	-12%
Mexico	35,980	36,314	24	35	-1%
Sweden	35,815	47,871	25	27	-25%
Norway	34,716	40,185	28	33	-14%
Belgium	33,978	41,169	29	32	-17%
Egypt	38,755	27,995	23	38	38%
Morocco	29,565	27,131	34	43	9%
Romania	25,832	27,756	38	40	-7%

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
Qatar	29,980	27,299	33	42	10%
Israel	24,381	26,253	40	44	-7%
Russia	28,377	67,473	35	14	-58%
Finland	21,333	29,616	43	37	-28%
Pakistan	22,127	17,608	42	49	26%
Thailand	45,932	74,064	20	13	-38%
Singapore	34,883	47,849	27	28	-27%
Croatia	17,427	18,980	47	47	-8%
Japan	62,785	106,214	14	8	-41%
Hungary	18,256	22,396	46	45	-18%
Czech Republic	19,072	27,624	45	41	-31%
Kuwait	19,916	19,011	44	46	5%
Colombia	14,690	13,046	50	57	13%
Malaysia	32,864	48,103	31	25	-32%
Dominican Republic	14,047	12,448	54	61	13%
Iran	14,418	12,397	52	62	16%
Cyprus	14,847	13,714	49	54	8%
Jordan	13,700	12,852	56	58	7%
Australia	22,561	31,828	41	36	-29%
Indonesia	32,482	47,907	32	26	-32%
Brazil	13,870	17,236	55	50	-20%
Philippines	25,646	38,650	39	34	-34%
Bahrain	14,067	13,083	53	56	8%
Vietnam	33,760	47,149	30	30	-28%
South Korea	35,788	58,868	26	17	-39%
Iraq	11,639	12,108	61	64	-4%

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
Tunisia	12,915	11,553	59	65	12%
Bulgaria	11,659	13,813	60	53	-16%
Lebanon	11,199	12,705	62	60	-12%
Serbia and Montenegro	13,019	11,134	57	67	17%
Luxembourg	10,329	12,269	64	63	-16%
Oman	14,492	18,133	51	48	-20%
Bangladesh	11,062	8,868	63	72	25%
Algeria	14,858	14,430	48	51	3%
Panama	8,925	9,451	68	68	-6%
Latvia	9,276	13,171	66	55	-30%
Iceland	9,592	8,629	65	75	11%
Taiwan	26,483	47,563	36	29	-44%
Malta	8,617	9,218	70	69	-7%
Puerto Rico	1,010	7,002	141	83	-86%
South Africa	8,979	11,168	67	66	-20%
Kazakhstan	8,841	8,637	69	74	2%
Lithuania	6,800	8,154	76	78	-17%
Hong Kong	26,148	55,361	37	20	-53%
Albania	7,353	4,621	72	97	59%
Ethiopia	7,754	7,753	71	80	0%
Sudan	3,553	3,502	96	104	1%
China	65,840	178,451	12	6	-63%
Maldives	6,091	4,950	82	96	23%
Azerbaijan	6,677	6,571	79	86	2%
Argentina	6,812	8,437	75	76	-19%
Sri Lanka	7,150	9,119	73	70	-22%

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
North Macedonia	3,237	<	100	113	28%
Mauritania	2,812	2,895	106	107	-3%
Aruba	2,057	2,369	111	116	-13%
Senegal	2,324	2,072	109	121	12%
New Zealand	5,677	7,806	85	79	-27%
Uganda	2,168	2,105	110	119	3%
US Virgin Islands	397	2,317	175	117	-83%
Curacao	1,313	1,514	131	132	-13%
Belarus	1,900	6,921	114	84	-73%
Honduras	1,765	1,689	118	127	5%
Barbados	1,852	1,840	116	124	1%
Slovakia	1,644	2,605	124	111	-37%
Rwanda	1,932	1,836	113	125	5%
Sint Maarten	1,453	1,678	130	128	-13%
Green Cape	1,810	1,931	117	123	-6%
Guernsey	1,705	2,415	119	114	-29%
Guadeloupe	449	1,203	172	147	-63%
Reunion	1,463	1,254	129	142	17%
Côte d'Ivoire	1,468	1,408	127	135	4%
Myanmar	3,295	8,371	99	77	-61%
Isle of Man	1,675	2,099	122	120	-20%
Tajikistan	1,531	1,485	126	134	3%
Seychelles	1,265	1,558	133	130	-19%
Martinique	355	1,069	179	152	-67%
Venezuela	1,685	1,803	120	126	-7%
Turks & Caicos Islands	1,115	1,250	137	143	-11%

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
Angola	1,464	1,516	128	131	-3%
Somalia	1,645	896	123	159	84%
Cameroon	1,182	1,237	135	145	-4%
Saint Barthélemy	1,005	1,369	144	136	-27%
Trinidad and Tobago	1,280	1,990	132	122	-36%
Afghanistan	1,262	2,675	134	110	-53%
Antigua and Barbuda	908	1,134	146	149	-20%
Bolivia	1,007	1,267	143	140	-21%
St. Lucia	869	1,130	151	150	-23%
Gibraltar	935	1,042	145	153	-10%
Uruguay	1,121	1,247	136	144	-10%
Belize	793	874	153	161	-9%
Cayman Islands	1,007	1,300	142	138	-23%
Mali	864	889	152	160	-3%
Guyana	871	606	150	170	44%
British Virgin Islands	688	1,140	161	148	-40%
Syria	733	679	155	165	8%
Namibia	1,066	1,306	139	137	-18%
Guam	1,897	3,914	115	100	-52%
Bermuda	903	1,206	147	146	-25%
Mozambique	886	974	148	156	-9%
Mongolia	1,682	1,644	121	129	2%
Brunei	1,586	3,216	125	106	-51%
Benín	717	668	156	166	7%
Burkina Faso	582	652	168	168	-11%
Haití	606	1,261	166	141	-52%

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
Guinea	562	525	170	178	7%
Nicaragua	1,032	915	140	157	13%
Togo	717	545	157	175	32%
Paraguay	691	997	160	155	-31%
Djibouti	618	903	165	158	-32%
Faroe Islands	643	770	163	163	-16%
Eritrea	696	689	159	164	1%
Mauritania	576	599	169	171	-4%
Gabon	634	609	164	169	4%
Botswana	712	1,020	158	154	-30%
Fiji	878	1,123	149	151	-22%
Yemen	746	21	154	217	3521%
Laos	1,954	4,431	112	98	-56%
Bonaire, Sint Eustatius and Saba	662	661	162	167	0%
Suriname	457	569	171	173	-20%
Congo	417	495	174	179	-16%
Níger	315	591	183	172	-47%
Gambia	388	357	176	183	8%
Madagascar	605	774	167	162	-22%
Macao	3,183	8,967	102	71	-65%
French Guyana	305	228	185	192	34%
Granada	442	480	173	180	-8%
French Guyana	254	357	191	184	-29%
Sierra Leona	290	354	187	185	-18%
Chad	363	362	177	182	0%
Malawi	345	538	180	177	-36%

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
French Polynesia	323	338	181	186	-4%
Mayotte	295	263	186	190	12%
Saint Kitts and Nevis	313	558	184	174	-44%
Burundi	226	212	193	194	7%
Anguilla	225	222	194	193	1%
Papúa New Guinea	358	545	178	176	-34%
Dominica	181	187	196	198	-3%
Greenland	258	188	189	197	38%
Turkmenistan	1,066	1,490	138	133	-28%
Equatorial Guinea	259	331	188	187	-22%
Guinea-Bissau	318	315	182	188	1%
Swaziland	256	202	190	195	27%
Saint Vincent and the Grenadines	228	256	192	191	-11%
Saint Martin	109	151	201	204	-28%
Bhutan	224	429	195	181	-48%
Liberia	89	134	208	207	-34%
Comoros	99	180	205	201	-45%
Central African Republic	97	166	206	203	-42%
Lesotho	149	192	197	196	-23%
Saint Thomas and Prince	90	67	207	211	35%
Svalbard and Jan Mayen	74	126	210	208	-42%
Cook Island	100	146	204	205	-31%
Vanuatu	124	186	200	199	-33%
Timor-Leste	102	176	203	202	-42%
Saint Pierre and Miquelon	39	41	213	214	-4%

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
Samoa	104	181	202	200	-43%
Palau Islands	85	291	209	189	-71%
Montserrat	26	59	216	212	-57%
Norfolk Islands	43	40	212	215	9%
Tonga	73	103	211	210	-29%
Solomon Islands	35	56	214	213	-37%
Nauru	19	16	217	220	17%
Micronesia	13	22	218	216	-42%
Marshall Islands	34	18	215	218	87%
Niue	8	15	220	221	-47%
American Samoa	7	9	221	222	-21%
Cocos (Keeling) Islands	0	3	225	225	-91%
Kiribati	12	16	219	219	-26%
Christmas Island	5	3	223	224	48%
Wallis and Futuna	5	6	222	223	-8%
Tuvalu	0	1	224	227	-72%
St. Helena	0	1	226	228	-73%

Annex 3.1.: Interregional Connectivity

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
Colombia	19,162	19,434	1	42	-1%
Mexico	13,552	14,564	2	44	-7%
Brazil	12,850	13,387	3	14	-4%
Panama	12,762	17,736	4	37	-28%
Argentina	12,021	14,933	5	49	-20%
Peru	9,411	12,960	6	13	-27%
Chile	8,899	12,245	7	28	-27%
Dominican Republic	7,942	6,663	8	47	19%
Ecuador	7,125	7,365	9	8	-3%
Costa Rica	5,596	6,379	10	45	-12%
Venezuela	4,131	3,717	11	41	11%
Guatemala	3,449	3,627	12	46	-5%
Uruguay	2,861	3,512	13	57	-19%
El Salvador	2,691	3,173	14	25	-15%
Cuba	2,672	5,139	15	61	-48%
Saint Bartholome	2,499	4,212	16	62	-41%
Curaçao	2,459	3,602	17	54	-32%
Bolivia	2,307	3,166	18	58	-27%
Puerto Rico	2,038	3,048	19	36	-33%
Paraguay	1,990	1,587	20	26	25%
Aruba	1,855	1,454	21	50	28%
Bonaire, Sint Eustatius and Saba	1,653	1,964	22	34	-16%
Honduras	1,589	2,205	23	56	-28%
British Virgin Islands	1,500	1,355	24	30	11%
Sint Maarten	1,383	2,193	25	17	-37%
Nicaragua	1,247	1,601	26	64	-22%

Absolute connectivity scores by country (vs. 2019)

Country	Connectivity Index	Connectivity Index 2019	Global Ranking	Global Ranking 2019	Growth vs. 2019
US Virgin Islands	845	1,162	27	29	27%
Trinidad and Tobago	805	2,327	28	20	-65%
Guadeloupe	737	946	29	30	-22%
Jamaica	724	769	30	35	-6%
Martinique	612	1,398	31	27	-56%
Guyana	601	840	32	33	-28%
Barbados	562	865	33	32	-35%
Belize	430	443	34	43	-3%
Antigua and Barbuda	426	887	35	31	-52%
Turks and Caicos Islands	356	507	36	40	-30%
Saint Martin	326	523	37	38	-38%
Anguila	325	273	38	45	19%
Saint Kitts and Nevis	322	302	39	44	7%
Dominica	296	498	40	41	-41%
Saint Vincent and the Grenadines	284	577	42	36	-51%
Granada	234	541	43	37	-57%
Suriname	222	273	44	46	-19%
Haití	210	786	45	34	-73%
Bahamas	196	452	46	42	-57%
Cayman Islands	156	115	47	48	35%
Montserrat	78	176	48	47	-55%
French Guyana	59	75	49	49	-21%


ALTA
amadeus