

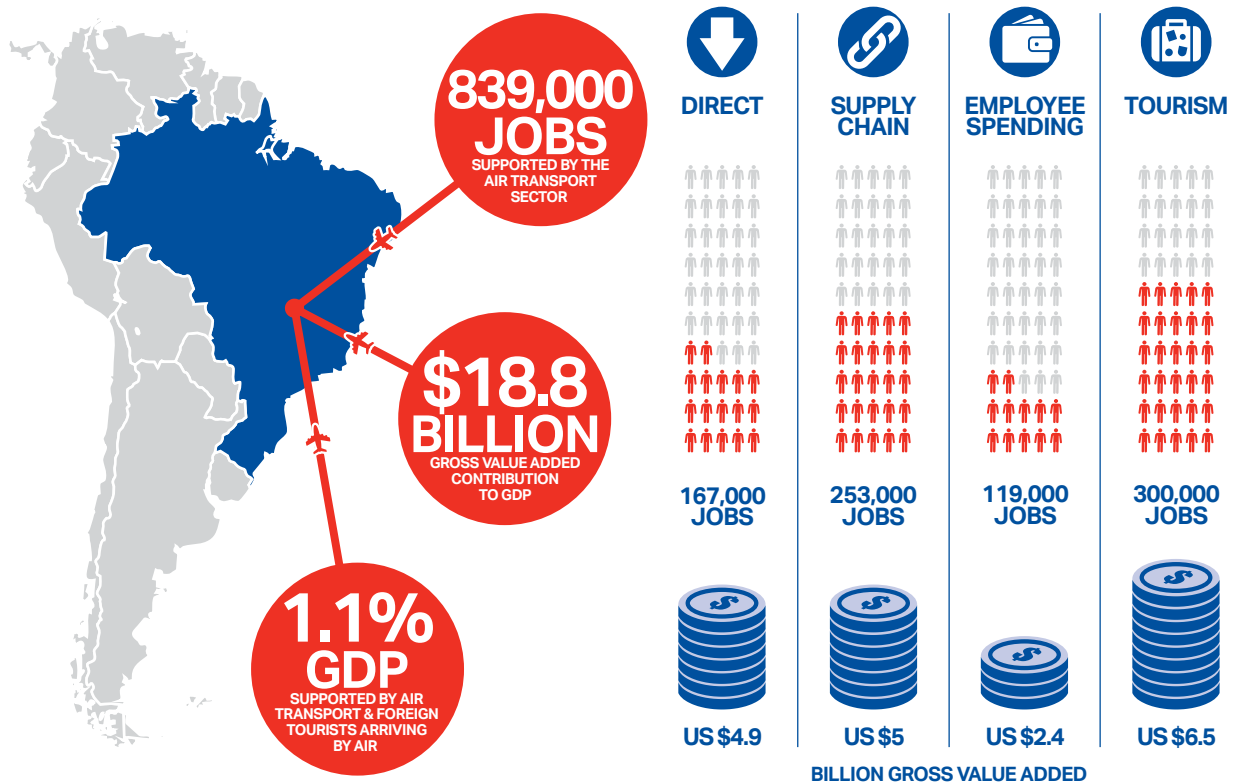


THE IMPORTANCE OF AIR TRANSPORT TO BRAZIL



The air transport sector makes a major contribution to Brazil's economy

There are different ways of measuring air transport's impact on an economy. We look at three: the jobs and spending generated by airlines and their supply chain, the flows of trade, tourism and investment resulting from users of all airlines serving the country, and the city pair connections that make these flows possible. All provide a different but illuminating perspective on the importance of air transport.



Source: Oxford Economics¹

The air transport sector supports jobs...

Airlines, airport operators, airport on-site enterprises (restaurants and retail), aircraft manufacturers, and air navigation service providers employ 167,000 people in Brazil. In addition, by buying goods and services from local suppliers the sector supported another 253,000 jobs. On top of this, the sector is estimated to support a further 119,000 jobs through the wages it pays its employees, some or all of

which are subsequently spent on consumer goods and services. Foreign tourists arriving by air to Brazil, who spend their money in the local economy, are estimated to support an additional 300,000 jobs. In total 839,000 jobs are supported by air transport and tourists arriving by air.

...and spending

The air transport industry, including airlines, and its supply chain, are estimated to support US \$12.3 billion of GDP in Brazil.

Spending by foreign tourists supports a further US \$6.5 billion of the country's GDP, totaling to US \$18.8 billion. In total, 1.1 percent of the country's GDP is supported by inputs to the air transport sector and foreign tourists arriving by air.

For forecasts of the industry's GDP and jobs contribution over the next 20 years see page 4

Air transport facilitates flows of goods, investment and people



Note: Data relate to all modes of transport. FDI figure represents inward stock.
Source: UNWTO, UNCTAD and World Bank²

The most important benefits from air transport go to passengers and shippers and the spillover impacts on their businesses. The value to passengers, shippers

and the economy can be seen from the spending of foreign tourists and the value of exports (though note these figures include all modes of transport). A key

economic flow, stimulated by good air transport connections, is foreign direct investment, creating productive assets that will generate a long-term flow of GDP.

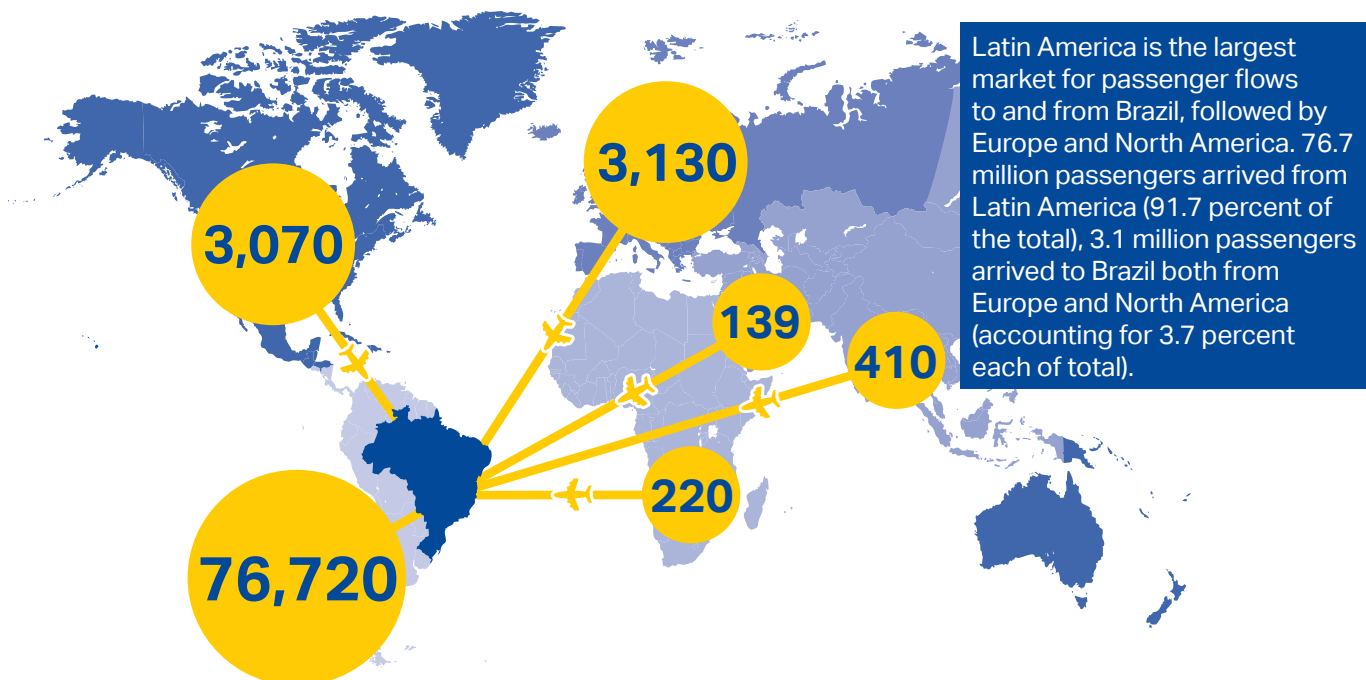
- Top five international tourist arrivals (all modes of transport) by country of residence³**
1. Argentina
 2. United States
 3. Chile
 4. Paraguay
 5. Uruguay

- Top five busiest direct flights arrivals**
1. Argentina
 2. United States
 3. Chile
 4. Panama
 5. Portugal

- Top five busiest air cargo routes**
1. United States
 2. Chile
 3. Germany
 4. Portugal
 5. Peru

Source: UNWTO and IATA²

Annual passenger flows by region (origin-destination, '000s)

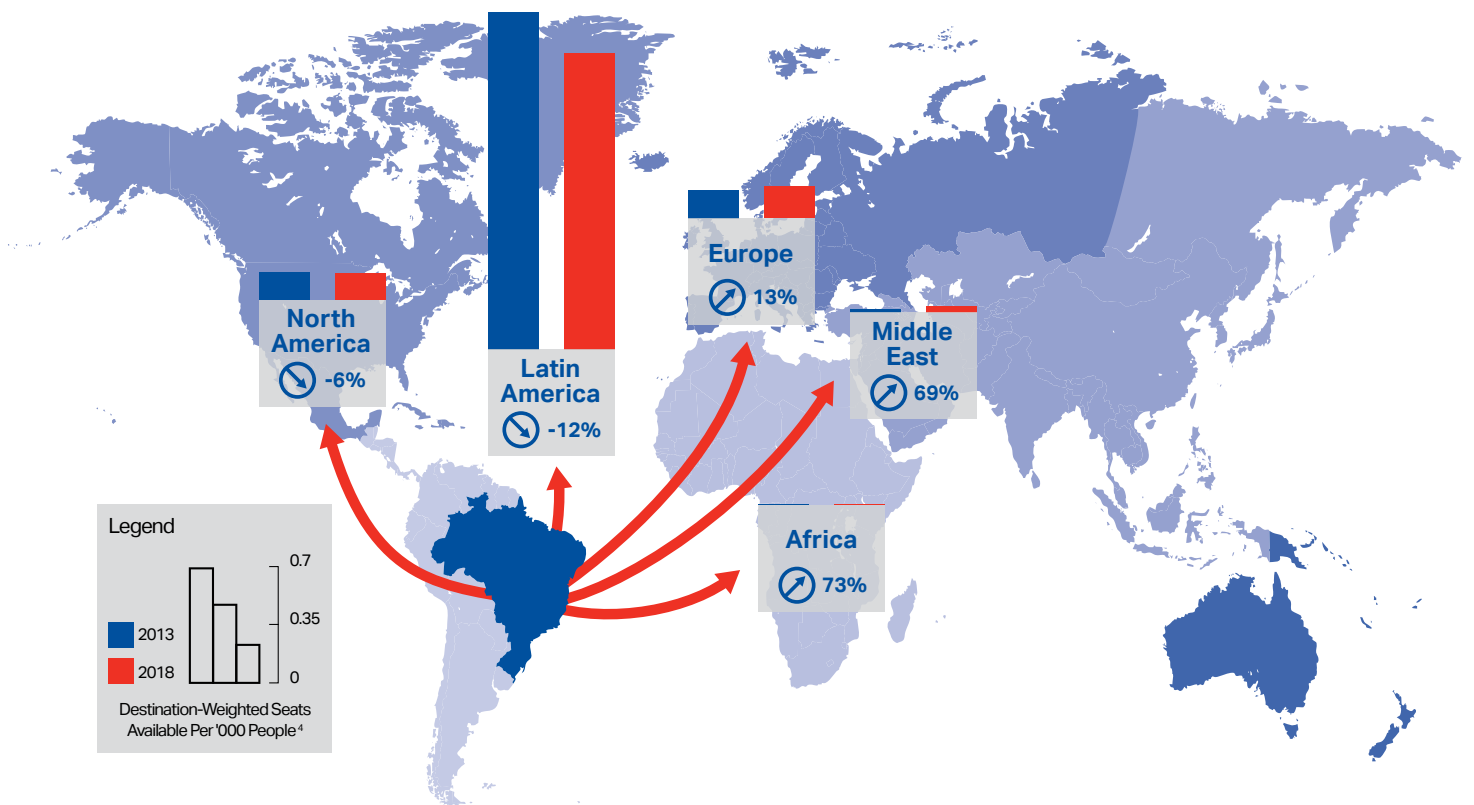


Source: IATA Direct Data Solutions

Air transport connects Brazil to cities around the world

Air transport generates benefits to consumers and the wider economy by providing speedy connections between cities. These virtual bridges in the air enable the economic flows of goods, investments, people and ideas that are the fundamental drivers of economic growth.

Map of Brazil's air connectivity, by its largest markets (segment basis)⁴

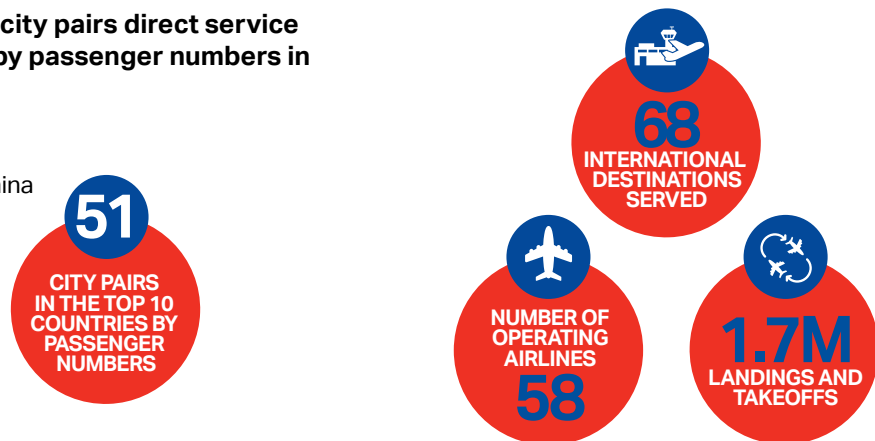


IATA's measure of how well a country is connected to economically important cities around the world is shown above. The map shows Brazil's connectivity at a regional level and how it has evolved.

Brazil's connections to Africa and the Middle East have grown the fastest, admittedly from a low base, over the last five years.

Number of international city pairs direct service in the top ten countries by passenger numbers in the world

- 34 United States
- 0 People's Republic of China
- 0 Japan
- 2 United Kingdom
- 0 India
- 0 Indonesia
- 5 Spain
- 6 Germany
- Brazil
- 4 France



Source: IATA, Aviation Benefits Beyond Borders 2018 report

⁴ The air connectivity scores reported are total destination weighted seats per 1000 people. IATA developed the Air Connectivity Indicator calculated based on the total route capacity (in terms of seats available) weighted by the destination airport's relative capacity (calculated as the ratio of seats available at that airport relative to the capacity at the airport with most available seats) divided by the population size of the country with a 0.15% of connectivity threshold in 2013.

Ease of travel, visa openness, and trade facilitation are vitally important

If air transport's unique contribution is the bridges it creates between cities, then the flows of goods, people, investment and ideas that stimulate economic development must flow unimpeded to maximise their contribution to consumers and the wider economy. Here we measure how freely goods and people flow across borders.

Passenger facilitation and visa openness

Brazil's passenger facilitation (4.8/10) scores slightly above the Latin American average (4.1/10). On the World Economic Forum's Travel & Tourism Competitiveness Index, the country ranks 108th for visa openness. In all these scores higher is better.



Measures of air cargo trade facilitation

Brazil's facilitation of air cargo through its customs' and borders' regulations ranks 52nd out of 135 countries in terms of the eFreight Friendliness Index (EFFI) globally⁷.



Forecast scenarios for passenger traffic, jobs and GDP footprint⁸

Air transport market in Brazil is forecast under the "current trends" scenario to grow by 105% in the next 20 years. This would result in an additional 106 million passenger journeys by 2037. If met, this increased demand would support approximately US \$38.7 billion of GDP and almost 1.4 million jobs.

	PASSENGERS	US \$ GDP	JOBS
2017	101 m	\$18.8 bn	838,652
2037	Current Trends	\$38.7 bn	1.4 m
	Upside	\$88.2 bn	3.2 m
	Downside	\$28.6 bn	1 m

¹ Source: Aviation Benefits Beyond Borders 2018 report (all currency is in the United States dollars at 2016 prices).
² Data relates to 2017 or most recent.
³ Arrivals of non-resident tourists at national borders or in all types of accommodation establishments, by country of residence.
⁵ Passenger facilitation, one of the Air Transport Regulatory Competitiveness Indicators developed by IATA in 2018, looks at the ease of people moving around the globe and how the governments facilitate this process. It assesses the performance of economies on implementation of open skies agreements, advance passenger information and automatic border control systems and visa requirements.
⁶ Entry visa requirements for a tourism visit from worldwide source markets (10 = no visa required for visitors from all source markets, 0 = traditional visa required for visitors from every source market). Source: WEF, Travel & Tourism Competitiveness Report 2017.
⁷ The IATA Air Trade Facilitation index (ATFI) measures the extent to which a country facilitates air cargo through its customs and borders processes and regulations. The IATA E-freight Friendliness Index (EFFI) assesses the actual penetration of electronic transactions and documents in air cargo shipments (Value of Air Cargo 2016 report).
⁸ Passengers are counted as departures, including connections. The passenger forecasts are based on the IATA 20-year passenger forecast (October 2018). Data on GDP and jobs 2017 are from Oxford Economics. GDP and jobs forecasts are from IATA Economics.
 * All data relates to 2018 or most recent unless stated otherwise.