



THE VALUE OF AIR TRANSPORT TO LUXEMBOURG

Air transport significantly contributes to Luxembourg's economy

Total economic impact of aviation in Luxembourg



7.0

USD billion contribution to GDP







35

thousand jobs

There are different ways of measuring air transport's impact on an economy. Two key indicators are the number of jobs and the contribution to gross domestic product (GDP) generated by the aviation sector, including airlines, airport operators and onsite businesses, air navigation service providers (ANSPs), and manufacturers ("direct" aviation players). In Luxembourg, 8,500 people are directly employed in aviation, generating USD 1.7 billion of economic output, equal to 1.9% of total GDP.

Additional benefits are generated by the wider supply chain, employee spending, and tourism activities contributing a total of USD 7.0 billion to GDP and 34,900 jobs.

Tourism supported by aviation contributes USD 3.2 billion to the country's GDP and employs 15,000 people. International tourists to Luxembourg are estimated to contribute USD 5.4 billion annually² to the economy through the purchase of goods and services from local businesses.

Source: Oxford Economics, 2023¹

GDP contribution and employment within the aviation industry and tourism in Luxembourg



| Airlines | Airports, ANSPs, civil manufacturing | Tourism supported by aviation | |
|------------|--------------------------------------|-------------------------------|--|
| USD 1.2 bn | USD 472.4 mn | USD 3.2 bn | |
| 5,300 jobs | 3,200 jobs | 15,000 jobs | |

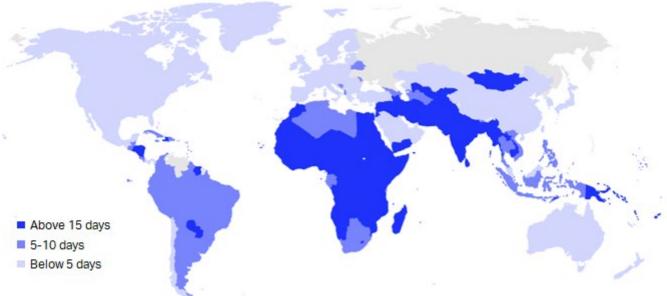


Aviation delivers substantial and widespread social benefits

Aviation creates a range of social benefits and contributes significantly to the United Nations Sustainable Development Goals (SDGs).⁴ Air transport enhances access to education, connects friends and families, facilitates cultural exchange, and drives socio-economic development. Acting together, these forces enable a country to expand its productive potential, delivering long-term economic growth and supporting the reduction in poverty and improvement in living standards for all of the nation's citizens.

The cost of flying impacts the magnitude of the benefits that can be generated by air travel. In the past 50 years, flight costs have decreased by 70% globally,⁵ making air transport more accessible. The average real airfare in Luxembourg decreased by 51%⁶ between 2011 and 2023, with the local population now needing to work 0.4 days⁷ to afford a plane ticket. Overall, 3,642 flights per 1,000 population⁸ were taken in 2023.

The number of days of work required to be able to afford a plane ticket in 2023



Source: IATA Sustainability & Economics based on data from IATA Direct Data Solutions (DDS) and World Bank⁹

Air transport facilitates the flow of goods, investment, and trade

Aviation stimulates global trade and investment, enables labor and capital productivity improvements, boosts innovation, and fosters knowledge exchange. The movement of goods, enabled by the air transport industry, brings about improved economic outcomes via catalytic collaboration, specialization, and more efficient allocation of resources across all sectors of the local and world economy.

Aviation plays a crucial role in, for example, enabling the development of dynamic and efficient supply chains, and in driving the growth in e-commerce. In times of crisis, the world relies on air cargo to provide humanitarian aid and emergency relief.

799,000 tonnes of air cargo were transported through Luxembourg in 2023, supporting the country's total import and export volumes.



Largest air cargo market

Largest trade market

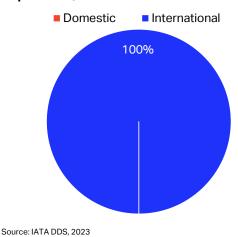
Source: Luxembourg Airport, 2023 (cargo data); World Bank, 2023 (trade data)



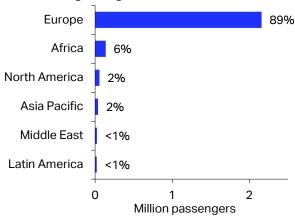
A well-developed aviation network transforms lives and communities

By swiftly and safely connecting people in different cities, air transport generates benefits to consumers and the wider economy. It makes the world smaller, enriching lives and enhancing cultural diversity. In rural and remote areas, air transport provides an essential lifeline for the community, safeguarding access to healthcare, education, and often employment.

Domestic and international O-D passenger departures, % share



International O-D passenger departures from Luxembourg to regions



Source: IATA DDS, 2023

Note: Latin America includes South and Central America & the Caribbean.

International air traffic accounted for 100% of total origin-destination (O-D) departures for Luxembourg in 2023, equal to 2.4 million passenger departures. Europe is the largest international market for passenger flows from Luxembourg, followed by Africa and North America. Almost 2.2 million passengers departed from Luxembourg to another country in Europe (89% of the total), 136,800 to Africa (6% of the total), and 56,100 to North America (2% of the total).

Top 10 most popular city destinations from Luxembourg

| Porto | 1 | 246,100 pax 10.1% | |
|---------------------------------------|---|---------------------------------|--|
| 202,100 pax 8.3% | 2 | London | |
| Lisbon | 3 | 149,400 pax 6.1% | |
| 132,100 pax 5.4% | 4 | Milan | |
| Palma de Mallorca | 5 | 89,100 pax 3.7% | |
| 04 500 | | | |
| 81,500 pax 3.3% | 6 | Barcelona | |
| · · · · · · · · · · · · · · · · · · · | 7 | Barcelona 75,200 pax 3.1% | |
| 3.3% | | 75,200 pax | |
| 3.3% Nice 64,400 pax | 7 | 75,200 pax 3.1% | |

Source: IATA DDS, 2023

Note: Ranking based on international O-D traffic from Luxembourg, measured in terms of the total number of departing passengers, and as a share of total passengers in 2023.



passengers departed internationally

86th largest

departures +91.6%

cumulative growth over the last decade



of global international passenger traffic



market by passenger

of regional international passenger traffic

Source: IATA DDS, 2023 Note: Measured by O-D international passenger departures.



Connectivity is vital to economic development

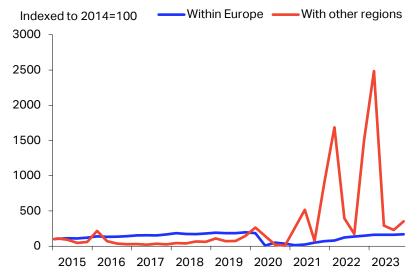
Air connectivity is fundamental to unlocking a country's economic growth potential and prosperity; it enables industries across all regions within the country to engage in dynamic business activity. The extent of domestic and international connectivity is an enabler and an accelerator of both the generation and distribution of economic benefits.

Air connectivity indicators for Luxembourg

| 1 | 105 | 31 | 71 | 34 | 15 |
|---|---|---|--|--|-------------------------------------|
| airport with commercial scheduled flights Source: OAG, 2023 | international airports directly connected | countries connected by direct flights | outbound international flights a day | new international routes in the last 5 years | operating airlines ¹⁰ |

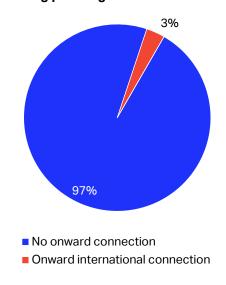
Since 2014, Luxembourg's international air connectivity index has increased by 64% within the Europe region and by 559% with all other regions. Understanding the nature of that connectivity is also important. For Luxembourg, 97% of passengers either finished their journey at the point of entry to the country or continued traveling using a different mode of transport. 3% of all passengers arriving in Luxembourg from abroad continued their journey to a destination in another country.

International air connectivity of Luxembourg



Source: IATA Sustainability & Economics based on data from OAG, 2023 $^{\rm 11}$

Arriving passenger onward air travel



Source: IATA DDS, 202312

Endnotes

- ¹ Air Transport Action Group, 2024. *Aviation Benefits Beyond Borders* report based on data from Oxford Economics.
- $^{\rm 2}$ World Trade and Tourism Council, 2023. Tourism Data and Statistics.
- ³ Air Transport Action Group, 2024. *Aviation Benefits Beyond Borders* report based on data from Oxford Economics.
- ⁴ Air Transport Action Group, n.d. *Sustainable Development Goals and Aviation*.
- Fransport Action Group, 2020. Aviation Benefits Beyond Borders report.
- ⁶ Real airfares refers to the average fare for O-D trips to/from/within country adjusted by inflation. Calculated based on data from IATA Direct Data Solutions (2023) and International Monetary Fund (2023).
- ⁷ The number of days that the local population needs to work to afford a flight is estimated based on the average fare for travel and GDP per capita in 2023. Calculated based on data from IATA Direct Data Solutions (2023) and World Bank (2023).
- ⁸ The number of flights per capita is estimated based on the O-D passenger traffic and the population in 2023. Calculated based on data from IATA Direct Data Solutions (2023) and World Bank (2023).
- ⁹ The number of days that the local population needs to work to afford a flight is estimated based on the average airfare for travel and GDP per capita in 2023. Calculated based on data from IATA Direct Data Solutions (2023) and World Bank (2023).
- ¹⁰ A threshold of at least one scheduled flight a week is applied.
- 11 IATA Connectivity Index is calculated as the total route capacity (in terms of seats available) weighted by the destination airport's capacity. The Connectivity Index is calculated based on data from OAG (2023).
- ¹² Refers to international passengers arriving in the country and their onward connections. For example, if a passenger arrives in the country but does not connect either domestically or internationally by air, they are categorized as "No onward connection". A passenger connecting within a country is categorized as "Onward domestic connection" and an arriving passenger connecting to an international flight is categorized as "Onward international connection".