

The impact of COVID-19 on commercial aviation

Customer survey findings

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Foreword

Dear reader,

We are several weeks into a crisis of unimaginable proportions that has turned the world upside down. Aviation is no stranger to crises. We have overcome many, including the September 11 attacks, the 2003 SARS outbreak, and the 2008 financial crisis, and come back stronger than before. But, while our industry is nothing if not resilient, and our ability to bounce back is a testament to the crucial role we play in the global economy, each crisis has changed profoundly the shape of our business. Factors ranging from the speed of recovery or changes to fuel prices, to how governments and regulators respond to the crisis at hand and seek to avert future ones, impact where and how we fly.

We will get past COVID-19, and aviation will recover. However, we do not know what lasting impact this pandemic will have on global aviation, although we can be sure it will be significant.

The sooner we can narrow down outcome scenarios, the sooner we can plan for recovery. With this in mind, ICF has surveyed our customers across the aviation industry to understand their views on the timing of a recovery, and on how this crisis is likely to affect passenger behavior and industry practices. Importantly, this survey also informs the types of data and insights our clients need to navigate this crisis.

We thank you for taking the time to participate, and we hope you find the survey results informative.

Sincerely,

Carlos Ozores, Dan Galpin, Lewis Burroughs



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This is a time for aviation industry stakeholders to act proactively—and in sync—to avoid unilateral decisions in response to COVID-19. Stakeholders must ensure that any new health and sanitary regulations or practices that arise are effective, practical, and do not unduly burden the industry and penalize air traffic.

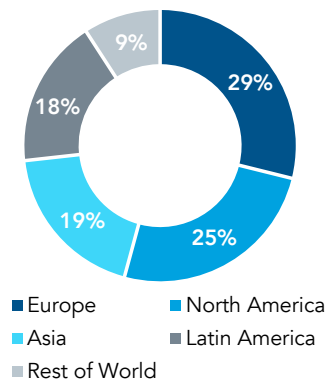
Executive summary

The survey, conducted in late March/early April 2020, captures the views of senior and mid-level executives from across the world and spans all parts of the commercial aviation value chain. The key findings are:

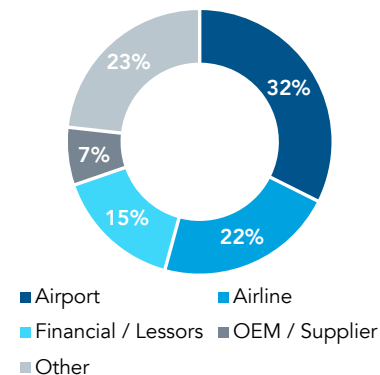
- **The COVID-19 crisis has resulted in a total or partial shutdown of their business.** Half of respondents expect this situation to last three or four months; one-third of respondents think it can last five to 12 months.
- **Respondents expect a slow recovery to pre-crisis activity levels.** One-third expect it to take six to 12 months; nearly half expect it to take up to two years. These views are comparable to previous—albeit far less impactful—pandemic scenarios (e.g., SARS, H1N1), but notably less than the recovery periods for the September 11 attacks or the 2008 financial crisis.
- **Nine out of 10 respondents expect passenger behavior to change, particularly with regards to the increased use of remote solutions for work and education.** However, respondents are split over the potential changes to passenger behavior, with about half expecting an increased preference for nonstop flights and a reduced demand for large events like conferences.
- **There is consensus among respondents on the long-term consequences of COVID-19 on industry practices.** New processes and regulations may affect everything from aircraft sanitary inspections to airport passenger screening. There may also be increased scrutiny placed on the health and sanitary conditions of individual countries that could impact air service and passenger demand.
- **Respondents appear overwhelmingly committed to their carbon reduction and sustainability goals.** This commitment comes despite the economic and financial pressures brought about by COVID-19, and is an encouraging sign for the environment.

Survey participant summary

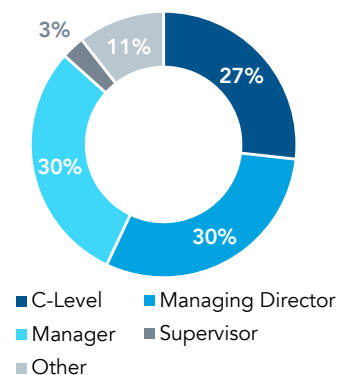
By Region



By Sector



By Function

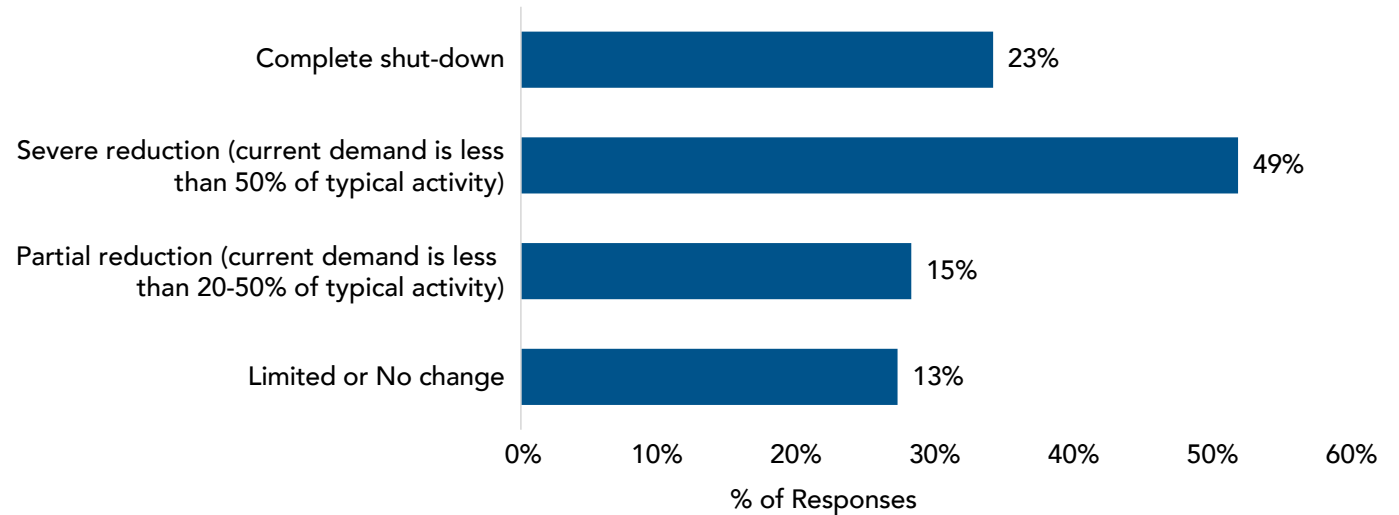


COVID-19 impact

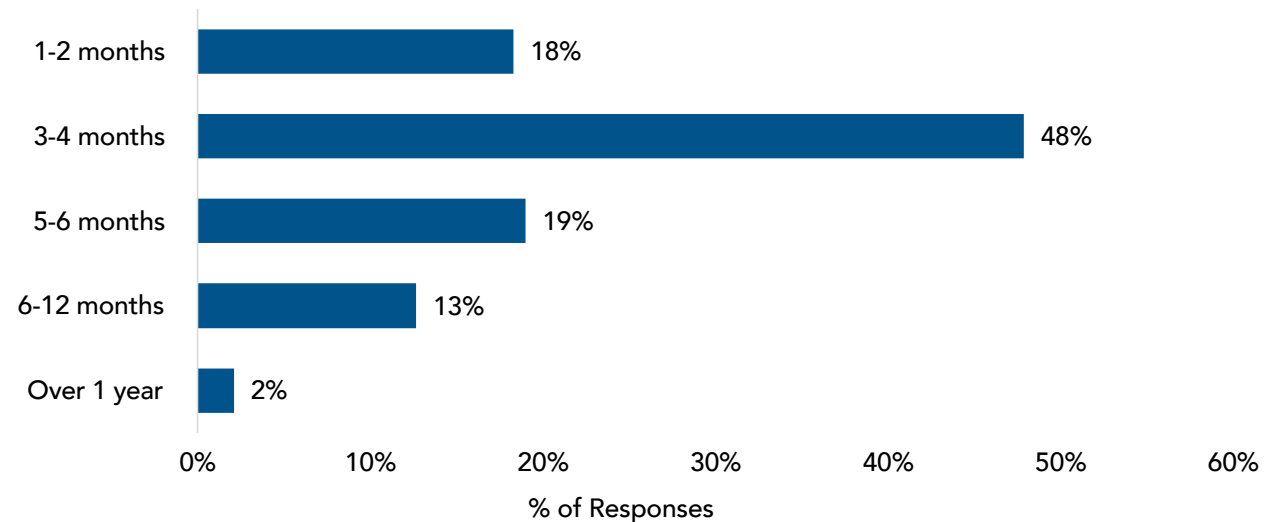
Unsurprisingly, most respondents indicated that business activity had severely contracted as a result of the pandemic, with a quarter of respondents indicating a total shut-down. Respondents who did not experience a notable reduction were primarily concentrated in the financial sector.

As to how long business activity will remain depressed, nearly half of respondents expect the slowdown to last three to four months. One-third of respondents, however, think it can last five months to one year.

How has COVID-19 impacted your business?



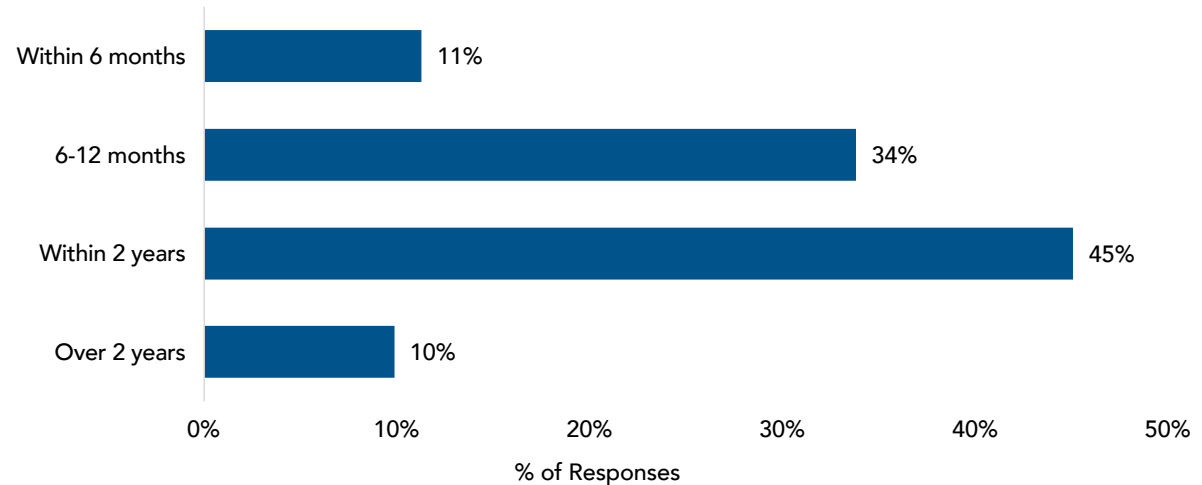
How long do you expect for passenger flight activity to be severely reduced (or stopped altogether)?



Recovery timing

Not only are we facing the most profound activity slowdown in aviation history, but respondents are also expecting a slow road to recovery. Just over one-third of respondents anticipate activity will return to pre-crisis levels in 6-12 months. In contrast, nearly half of respondents expect recovery will take up to two years.

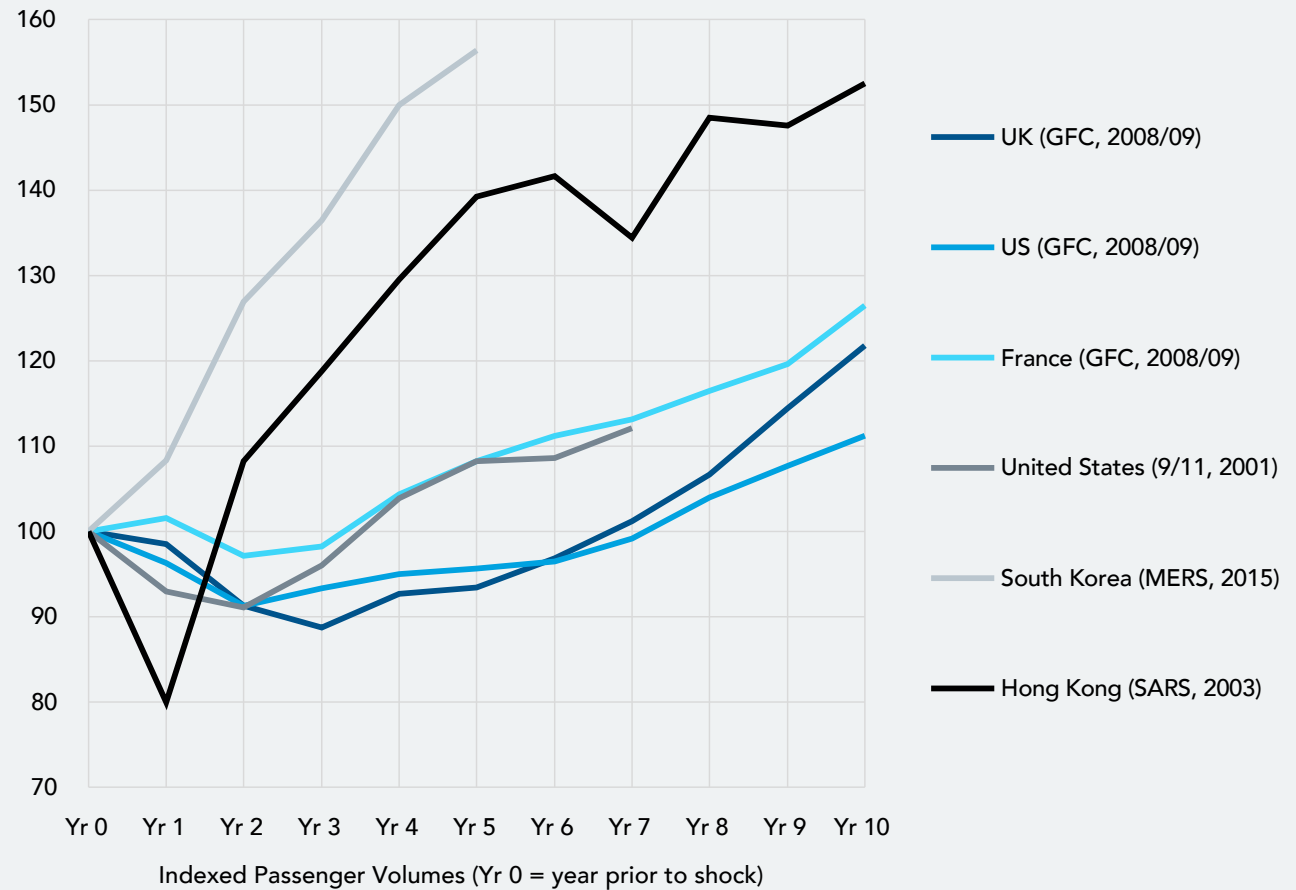
Once regular scheduled flights resume, how long do you expect to recover pre COVID-19 levels of business activity?



To put this in context, we have included below the traffic recovery periods for past economic-, health-, or terrorism-related crises. It took the United States nearly four years to recover to pre-September 11 traffic levels, whereas it took the United States and the United Kingdom nearly seven years to recover to traffic levels from before the 2008 financial crisis (GFC).

Given how deep the present crisis is, and the growing probability that it will trigger a global economic recession, we expect the recovery period to be significantly longer than our respondents' expectations. It is important to remember, however, that traffic has always come back.

Recovery Periods from Select Air Traffic Shocks

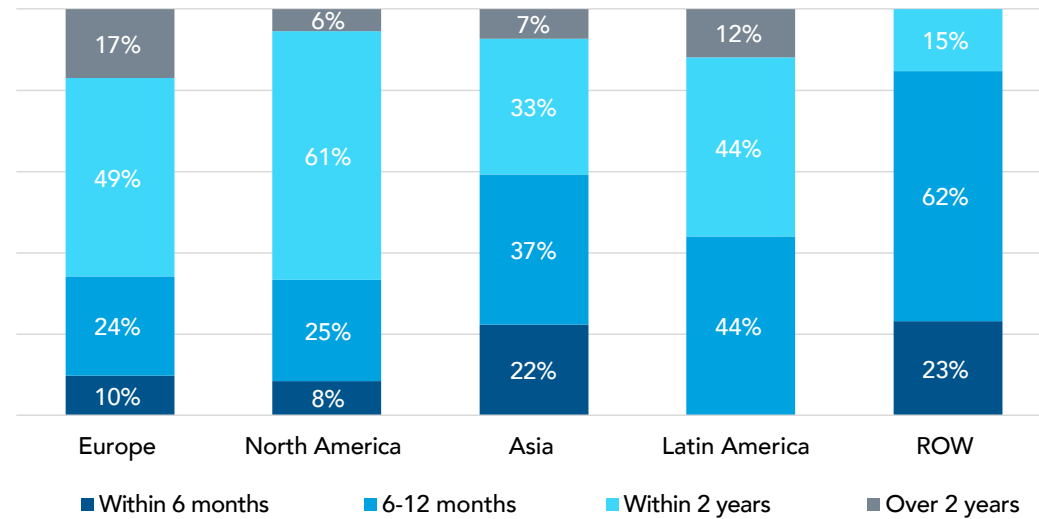


In terms of recovery timing, we observe regional differences in our respondents' views.

Respondents in Asia are the most optimistic about the future rebound in business activity, with almost 60% expecting a full recovery to pre COVID-19 levels in less than 12 months. This is related to the relative success many Far East countries appear to have had in containing the pandemic, and the fact that countries like South Korea and China are slowly returning to work.

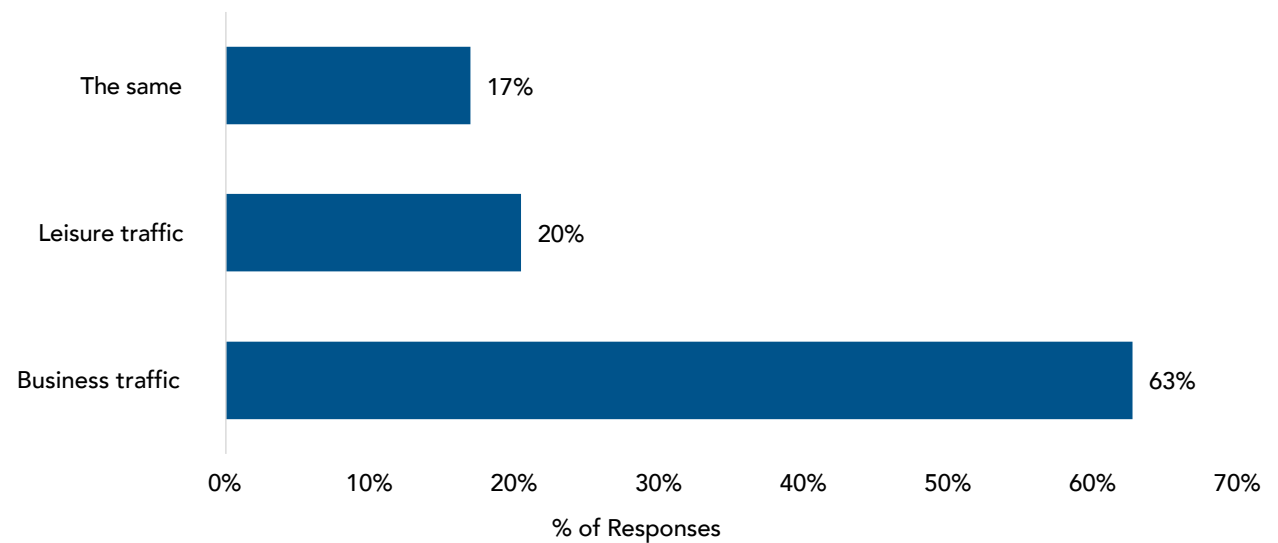
On the other hand, respondents in Europe and North America are the least optimistic, with two-thirds of respondents expecting the recovery to take up to two years or more.

Once regular scheduled flights resume, how long do you expect to recover pre COVID-19 levels of business activity?



In terms of which traffic recovers first, there is a strong view that business traffic will recover before leisure traffic. This is supported by two factors: **financial concerns**, as most households will need to put off discretionary spending, as the crisis depleted whatever savings or available credit they had; and ongoing **social distancing practices**, whether by personal choice or imposed by local laws, which would delay a return to normal of travel- and tourism-related activities.

Which traffic segment do you think will recover first?



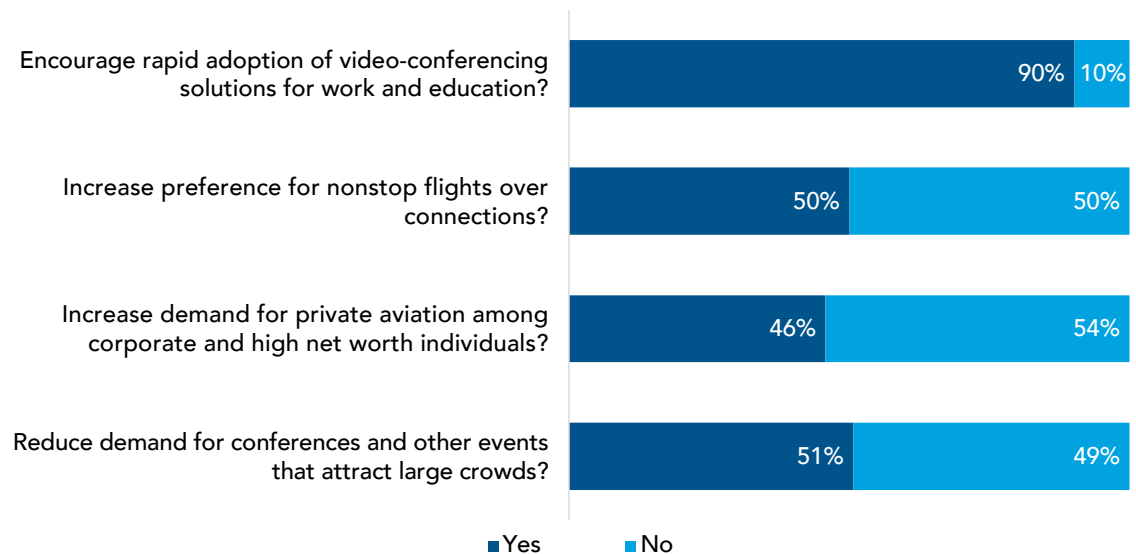
COVID-19 impact on passenger behavior

The COVID-19 pandemic has introduced new practices (such as social distancing and telecommuting), raised hygiene awareness, and increased the popularity of videoconferencing. One or two weeks in quarantine may not permanently change people’s behavior—but how about one or two months? We have never witnessed a social experiment of such magnitude and on such a wide scale, but it would be naïve to think the new normal will be identical to the one we knew before COVID-19 upended our lives.

Nine out of 10 respondents expect the widespread adoption of video-conferencing solutions for work and education, which would undoubtedly impact the demand for air travel. The implications for business travel, much of which is driven by intra-company meetings, could lead to reduced demand.

Among other customer behaviors we surveyed, the views were largely split. It is conceivable that, in an attempt to avoid crowds, some passengers will limit their attendance at large gatherings, will increasingly prefer nonstop flights to avoid exposure to crowds at connecting airports, or will prefer the exclusivity of private aviation (if they can afford it).

Passenger Behavior-related questions



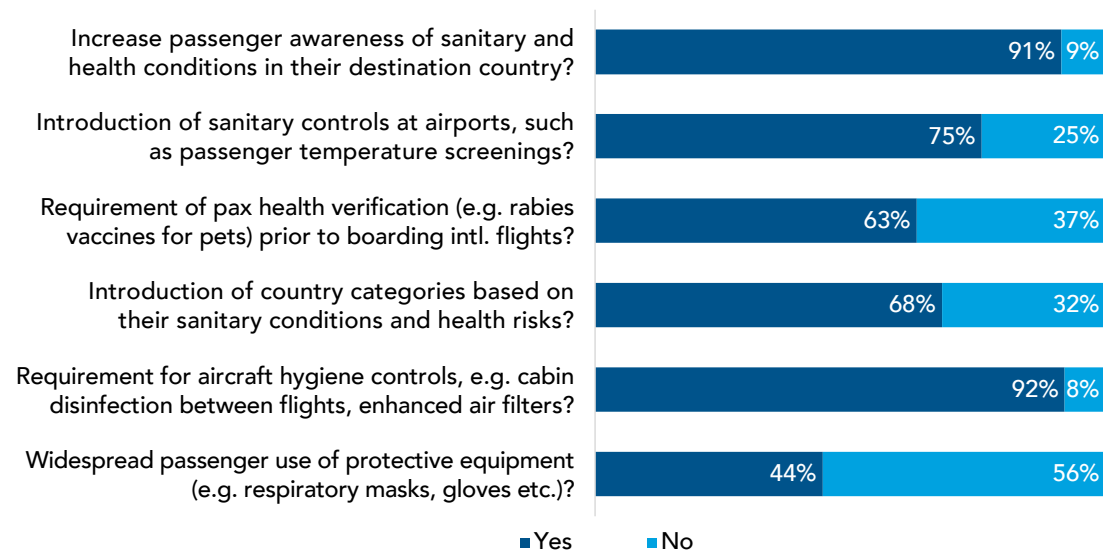
COVID-19 impact on industry practices

The terrorist attacks of September 11, along with subsequent acts of terrorism, forever changed industry safety practices, both in the air and on the ground. They also led to a multi-billion dollar spend on capital expenditures and ongoing safety and security costs (see box below). We can expect COVID-19 to have a similar impact on health-related safety and security, and our survey respondents agree.

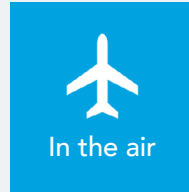
The changes we may expect to see are:

- **New measures on the ground.** These measures could include additional steps in aircraft cleaning (nine out of 10 respondents agree) or enhanced passenger health screening (three out of four respondents agree). Over half of respondents believe we may even see documentation requirements to certify passenger health prior to boarding.
- **New country categories based on their health conditions.** Over 90% of respondents expect passengers to consider health conditions when traveling, while two-thirds expect some form of country category to be instituted. In some regions, this could have adverse consequences for international travel.

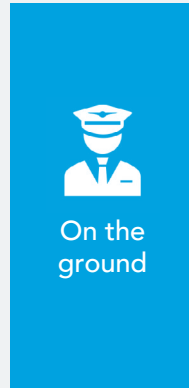
Government Regulation related questions



Changes to aviation industry practices brought about by September 11 and subsequent terrorism events



- Reinforced and bullet-proofed cockpit doors to prevent unauthorized access
- CCTV cameras for pilots to monitor the cabin activity
- Limited the volume of liquid allowed in the cabin
- Increased amount of air marshals on flights



- Improved training for airport security personnel to detect weapons and explosives
- Upgraded airport screening technology with more sensible detectors and full-body scanners
- Added screening systems for checking luggage
- Sterile airside in airports
- Restricted access from the general public to sensitive airport areas
- Valid, government-issued identification checks for passengers and staff members
- Passenger manifest verification prior to flight departure, including known-traveller database
- Accelerated development of e-passport, biometric screening, and similar technologies

Governments, airports, and airlines have multiplied their security expenses since 9/11

Source: ICF research

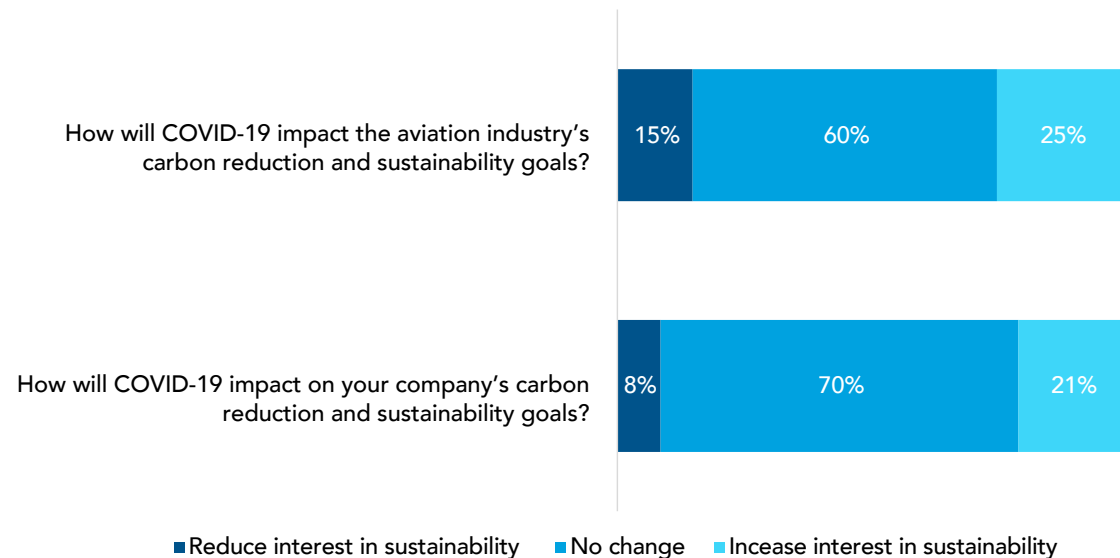
- U.S. government funding of the Transportation Security Agency (TSA) has increased significantly since its inception, growing from \$2.2 billion in 2002 to almost \$8 billion in 2013. In 2001, the year of the terrorist attacks, the US expense on security was about \$0.75 billion.
- Airports Council International (ACI) and the Association of European Airlines (AEA) presented a briefing on aviation security 10 years on from the 9/11 attacks. The two associations estimated that prior to the attacks, security accounted for 5-8% of operating costs for European airports, while in 2011 this increased to 29%.
- According to IATA, in 2011 airlines and governments had spent a cumulative total of more than \$100 billion on aviation security over the decade, with an annual security cost of \$7.4 billion for airlines and \$19 billion for airports.

COVID-19 impact on sustainability

The 2008 financial crisis derailed attempts to tackle aviation carbon emissions on a wide scale, as governments prioritized actions to spur economic growth. There is widespread concern that the COVID-19 crisis will have a similar impact on recent initiatives to curb emissions such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

While it is too soon to tell how COVID-19 will impact carbon reduction and sustainability goals in practice, we are encouraged by survey results that suggest an overwhelming commitment to achieving the aviation industry's goals. One in five respondents reported that, despite the economic uncertainty resulting from COVID-19, their company's commitment to environmental sustainability would increase.

Sustainability related questions



About the authors



Carlos Ozores – Principal, Aviation and Americas Consulting Lead

Carlos Ozores is an air transport specialist with more than 18 years of experience in aviation strategy and business planning. He advises senior management of airlines and airport operators on strategy development and supports investors with commercial due diligence of investment targets. Carlos offers clients a global perspective on solving local issues thanks to extensive work experience across all world regions.



Dan Galpin – Principal, Aviation

Daniel Galpin has expertise in a variety of different aspects of the aviation industry, advising both airports and airlines, drawing on his experience prior to ICF with NATS and Virgin Atlantic Airways. He has extensive experience in traffic forecasting, combining a strong background in complex data analysis and modeling, with an in-depth understanding of supply-side factors.



Lewis Burroughs – Head of Aviation, India

Lewis Burroughs leads ICF's dedicated aviation practice in Delhi which serves the Indian and broader Asian aviation markets. Lewis regularly advises aviation management on longer-term strategy opportunities related to traffic development, business planning, and transactions.

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Global contacts

Please contact us with any questions about this survey, or for more insights related to the impacts of COVID-19 on commercial aviation.

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