

THE WORLD'S LEADING AIRPORTS MAGAZINE – COVERING THE INDUSTRY SINCE 1968

**AIRPORTS**  
INTERNATIONAL



# HEALTHY AND SAFER AIRPORTS:

## The Path to Smart Airports

What the future holds for airports during a time of uncertainty

**HITACHI**  
Inspire the Next

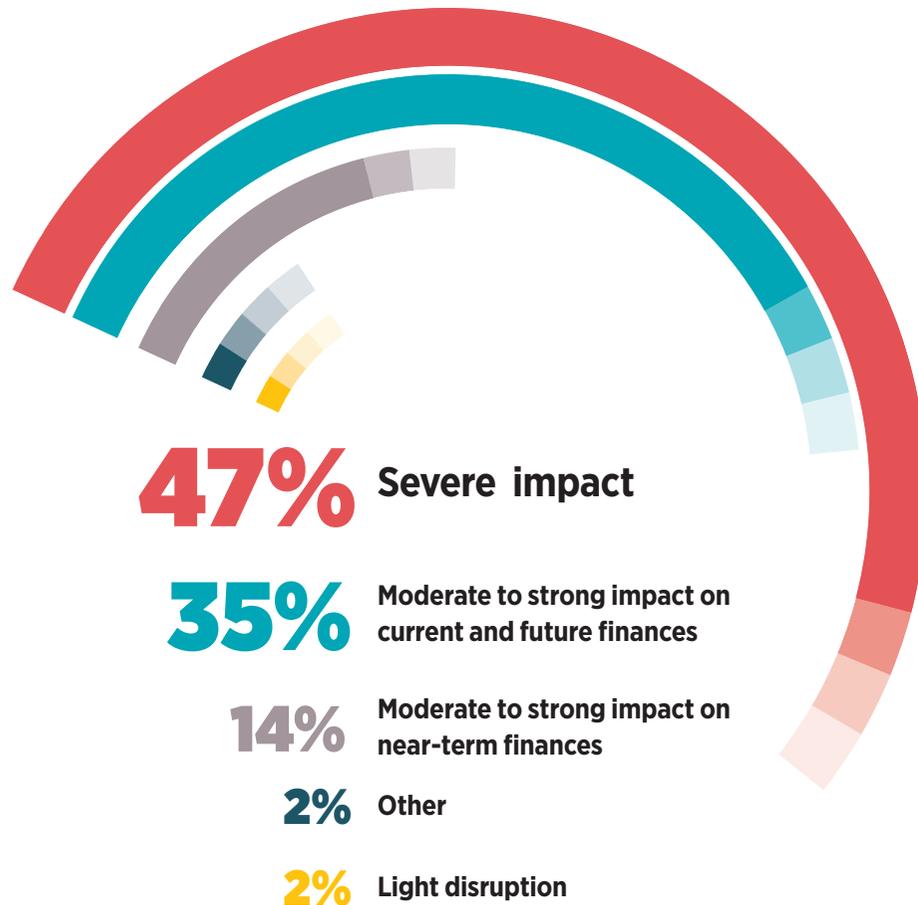
Airports International and Hitachi Vantara partnered to conduct a global survey to assess the impact of COVID-19 on the airport business.



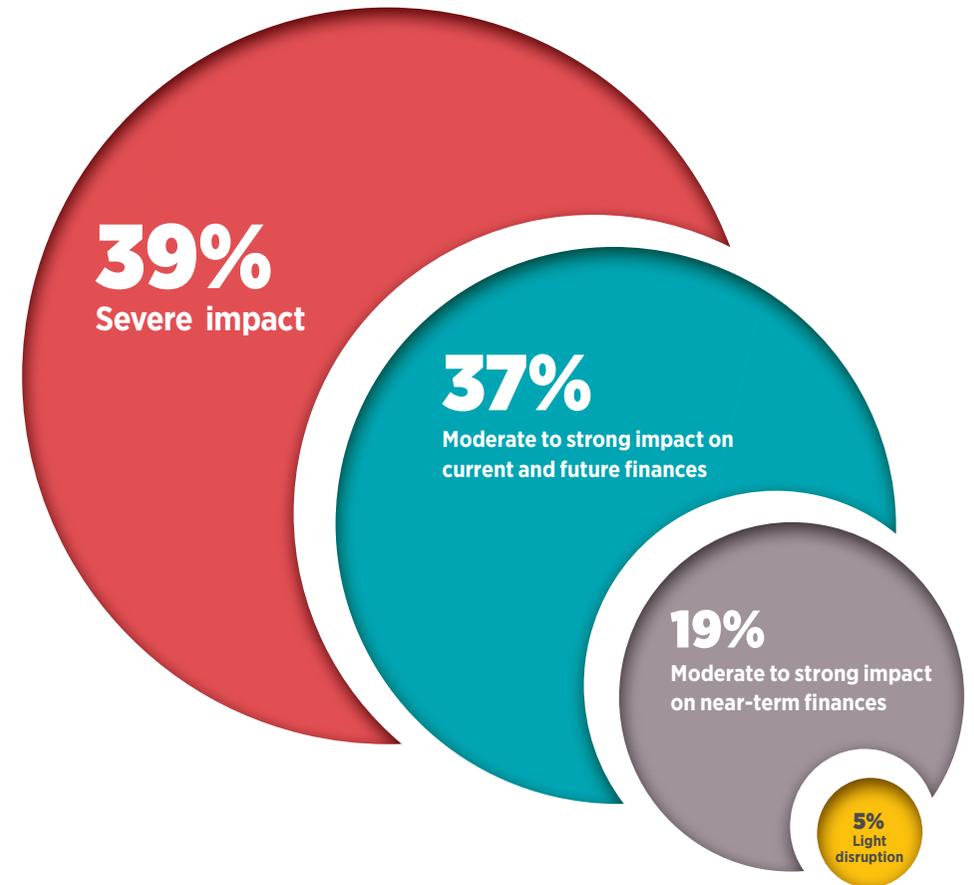
# SECTION 1: THE FINANCIAL AND OPERATIONAL IMPACT ON AIRPORTS

Airports took a severe financial hit during the pandemic, as reported by 47% of respondents.

## FINANCIAL IMPACT OF COVID-19



## OPERATIONAL IMPACT OF COVID-19





## COVID PASSENGER VOLUMES

And, not surprisingly, passenger volumes decreased majorly during the pandemic.



**77%** Severely decreased

**11%** Slightly decreased

**3%** Strongly increased

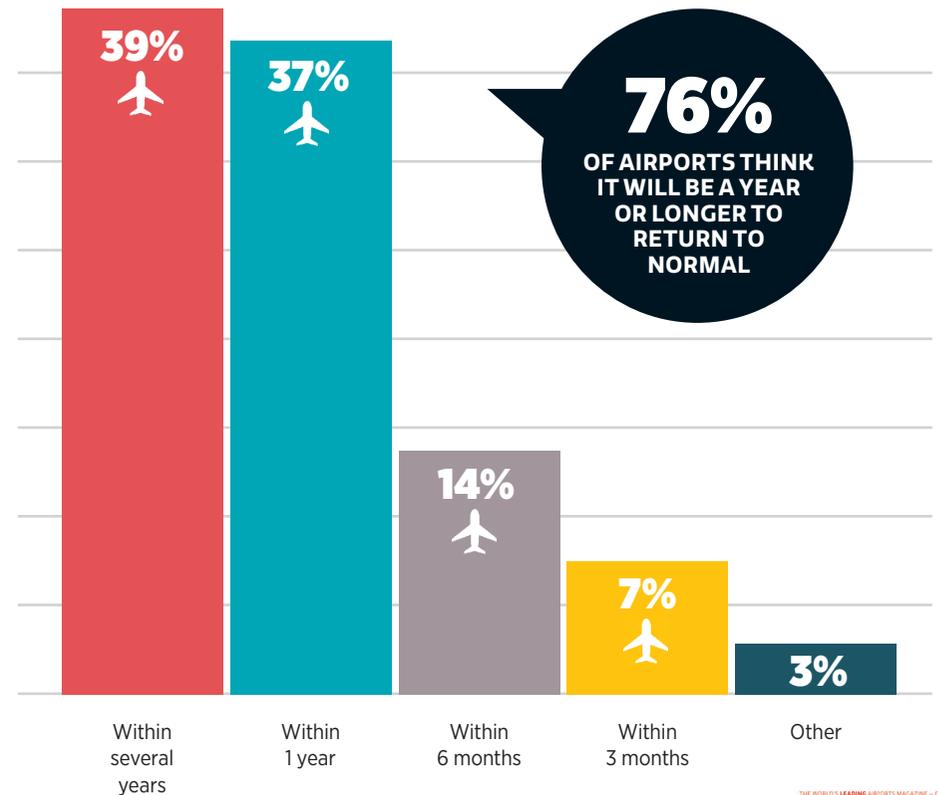
**2%** Slightly increased

**2%** No change

**5%** Other

## RETURN TO NORMAL PASSENGER LEVELS

74% of airports believe that pre-pandemic passenger levels will return within a year to several years, which will have an enormous impact on airports and airline financial health. In order to shorten this time and increase passenger confidence levels, airports need solutions to help prevent and mitigate the spread of COVID-19, while maximizing the customer experience.

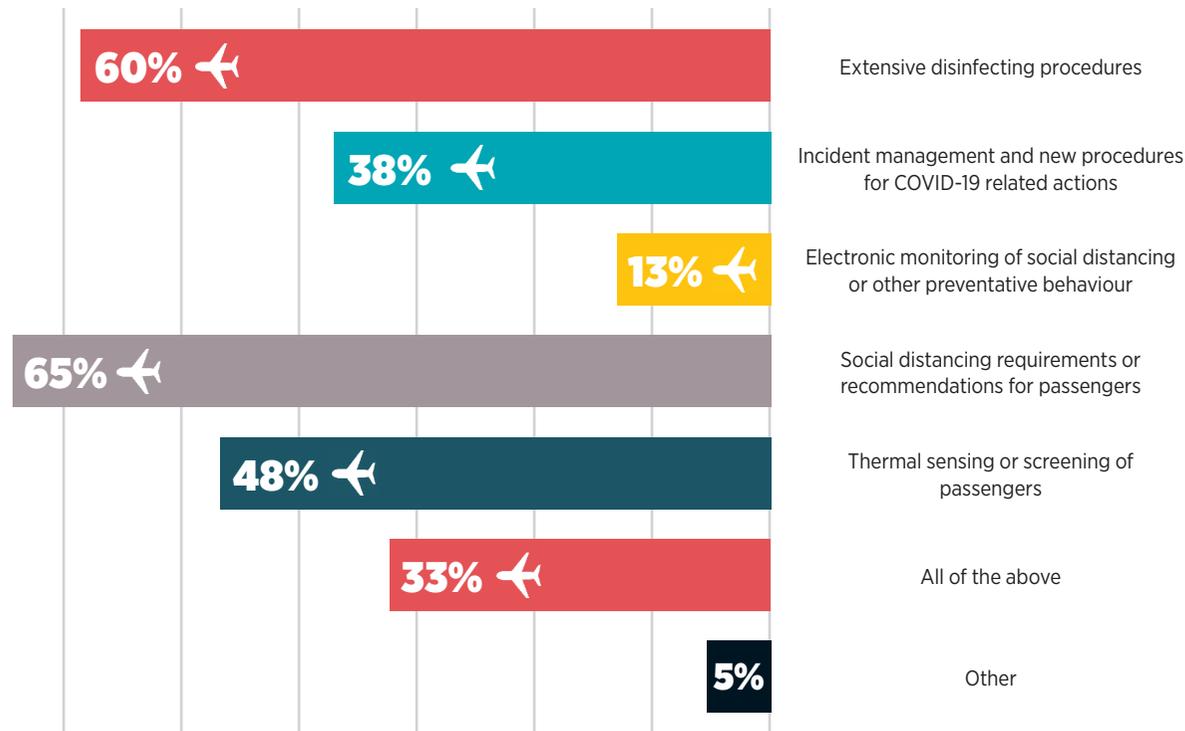




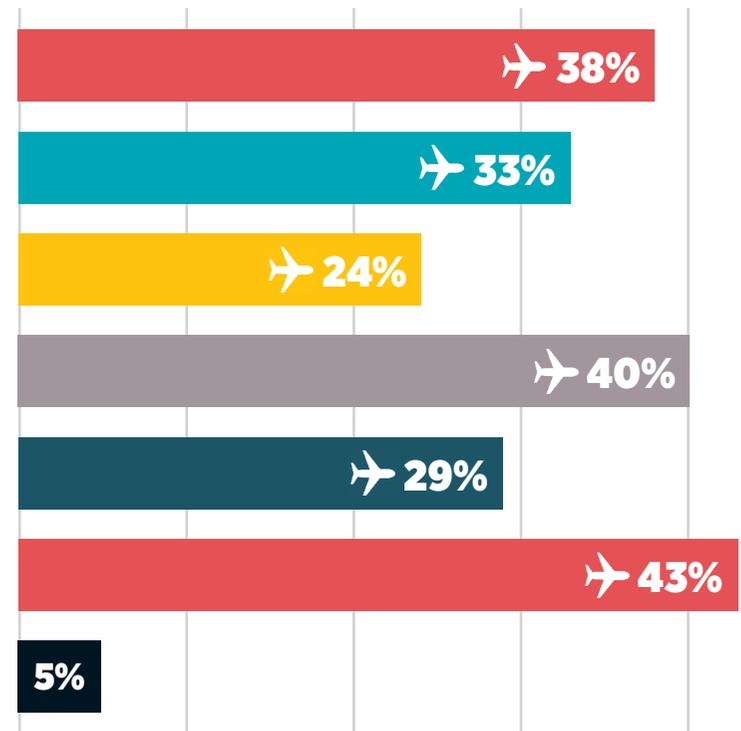
# SECTION 2: THE STEPS BEING TAKEN BY AIRPORTS TO PREVENT OR MITIGATE THE SPREAD OF COVID-19

To get to the pre-pandemic passenger level airports, passenger confidence needs to be restored and measures taken to protect health need to be transparent. This is not only to boost confidence through passenger safety, but also to meet strict new regulations to keep people safe and healthy. It's also the first step on the path to becoming a "smart airport."

## HOW AIRPORTS ARE RESPONDING TO COVID-19



## AND WHICH STEPS WILL YOU TAKE IN THE NEXT 6-12 MONTHS



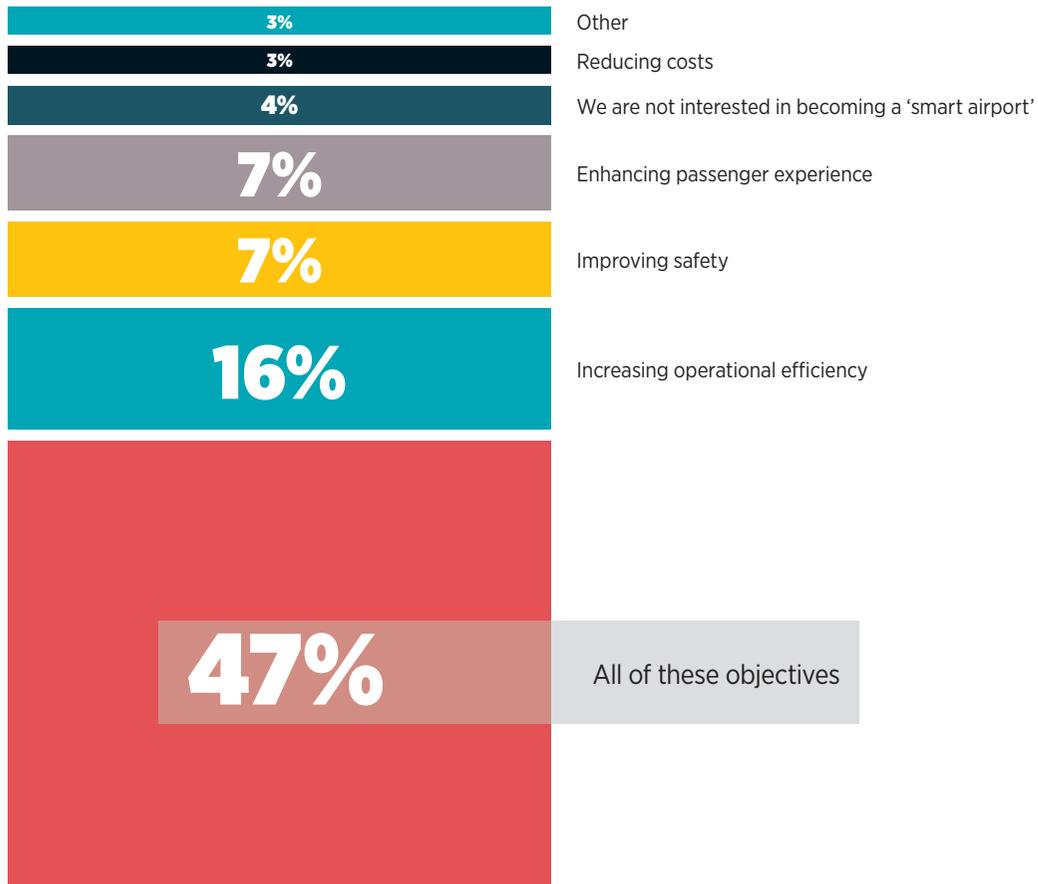
Over the next 6-12 months, almost half of the respondents reported that they plan to take "all of the above" steps, showing a strong commitment to making air travel safer.



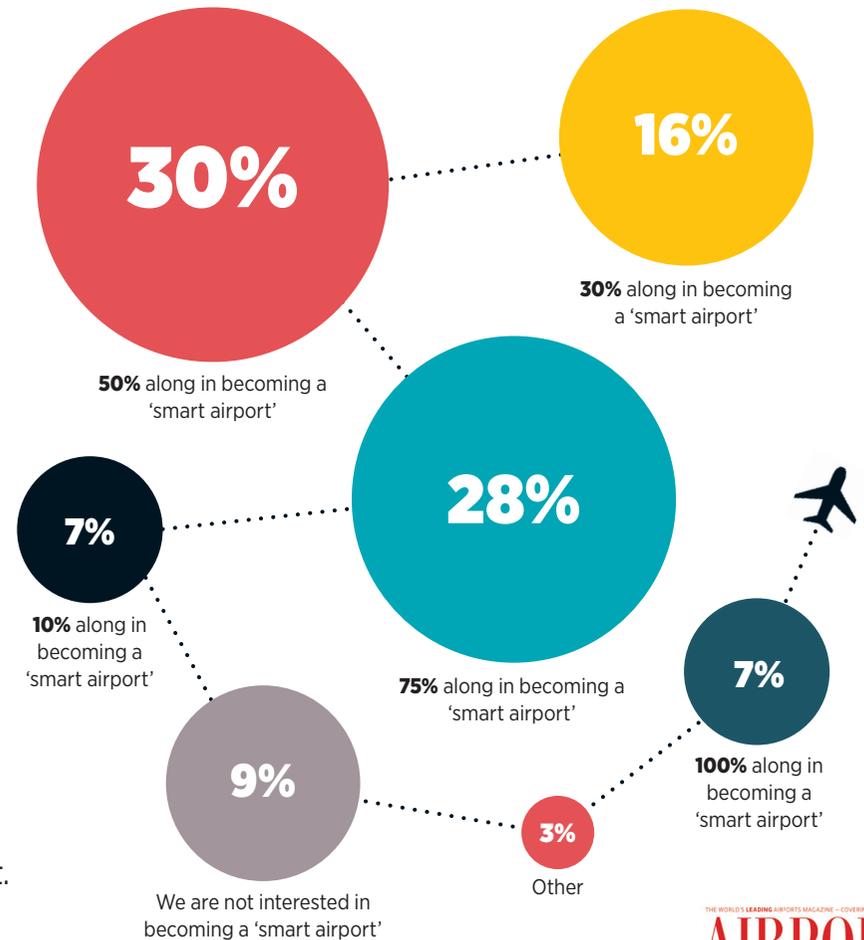
# SECTION 3: BUILDING A DIGITAL FOUNDATION TO BECOME SMARTER

To create a better and safer overall experience for passengers, the pandemic has proven that airports need to become smarter if they are not already.

## MAIN OBJECTIVES IN BECOMING A 'SMART AIRPORT'



## HOW FAR ALONG IS YOUR AIRPORT IN BECOMING A 'SMART AIRPORT'?



Per the data, airports still have a way to go when it comes to being smart. Fewer than 35% of them felt they were at least 3/4ths of the way there.



# SECTION 4: SMARTER AIRPORTS TODAY ARE A RESULT OF INNOVATIVE TECHNOLOGIES

The global pandemic is giving airports the technological foundation for enhancing operations, resulting in an improved and safer passenger experience for the future.

## CAMERAS AND SENSORS TO DETECT COVID-19 SYMPTOMS AND MEET STRICT REGULATIONS:

<b>Etihad Airways</b> is testing <b>kiosks</b> in <b>Abu Dhabi International Airport</b> that monitor body temperatures and heart and respiratory rates. <sup>1</sup>	<b>Doha's Hamad International Airport</b> uses <b>smart helmets</b> that assess body temperatures using thermal imaging, AI and AR. <sup>1</sup>
<b>JFK</b> uses an <b>AI platform</b> to monitor terminal congestion. <sup>2</sup>	<b>Pittsburgh International Airport</b> is piloting software that shows <b>real-time crowd estimates</b> for areas in the terminal, such as bathrooms, coffee shops and retail outlets directly to the passenger's phone. <sup>2</sup>

## TOUCHLESS SENSORS AND TECHNOLOGIES TO ENSURE PASSENGER SAFETY FROM ENTERING THE AIRPORT ALL THE WAY TO BOARDING:

<b>Hong Kong International Airport</b> is using <b>Intelligent Sterilization Robots</b> to kill up to 99.99% bacteria and viruses in the air. <sup>1</sup>	<b>Hong Kong International Airport</b> is testing a <b>full-body disinfection booth</b> that takes 40 seconds to disinfect from head to toe. <sup>1</sup>
<b>Kentucky's Louisville Muhammad Ali International Airport</b> has <b>automated hand sanitizer stations</b> and bathroom soap dispensers. <sup>1</sup>	<b>Munich, Singapore and Hong Kong International Airports</b> provide <b>security checkpoints without human interaction</b> with electronic terminals. <sup>2</sup>
<b>LAX and San Francisco International</b> are working to bring <b>automated boarding gates</b> to terminals that will scan your face and biometrically verify your identity. <sup>2</sup>	<b>Jakarta Airport</b> , uses <b>video analytics</b> to improve operational management, increase awareness and provide an excellent customer experience for over 100 million passengers annually. <sup>3</sup>

\*Airports International and Hitachi Vantara conducted a survey between July 9 and July 23, 2020 to assess the impact of COVID-19 on the airport business. The global survey had 125 respondents.

<sup>1</sup> Five ways the pandemic may change airports for the better. CNBC

<sup>2</sup> The Airport of the Future Will Have No Check-In or Security Lines. Businessweek

<sup>3</sup> PT. Angkasa Pura II (Persero) / <https://www.hitachivantara.com/en-us/news-resources/press-releases/2018/g1180913a.html>