



Turnaround Report 2025



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2025 v 2024 Comparison

While the full 2025 dataset cover 450,000 turns in the year to March 2024, the annual comparison analysis is based only on like-for-like data from customers using Assaia's AI-based solutions in both the year to March 2025 and March 2024. This covers nearly 700,000 aircraft turns across nine airports across Europe and North America over the past two years.

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An efficient aircraft turnaround is key to helping reduce flight delays and enabling airlines and airports to optimise capacity. Cutting aircraft turn times and increasing gate utilization is also vital if the industry is to meet the projected demand for air travel, especially given ongoing capacity constraints.

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The constraints on airport capacity will demand further evolution of the aircraft turn if the industry is to meet increased passenger travel demand.

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01

Introduction

**Christiaan Hen, CEO, Assaia**

The aircraft turnaround has always been the most complex and least visible part of airport and airline operations. That's changing, and not a moment too soon.

This year's Turnaround Report is our third and most comprehensive yet, analysing more than 450,000 aircraft turns at 15 major airports across Europe and North America. It confirms a simple but powerful truth: better-managed turnarounds can play a critical role in helping the industry respond to its most pressing operational challenges.

In the past 12 months, the industry has faced record passenger growth, supply chain disruption, and continued pressure on both aircraft and airport availability. Yet, even in this high-demand environment, Assaia's data shows clear improvements in turnaround efficiency. Among the headline findings:

- A 5% increase in turns per stand — freeing up capacity without new infrastructure
- A 25% reduction in median departure delays - from four to three minutes
- Earlier deboarding and baggage loading, enhancing both punctuality and passenger experience

This transforms operational wins into strategic advantages, as the efficiencies gained last year alone could be worth tens of millions of dollars annually to individual airports and airlines. Over the next decade, that value could rise into the billions. This increased efficiency will be necessary to help meet the increase in passenger demand, which is projected to more than double by 2042, according to ACI World and ICAO traffic forecasts.

As this report shows, turnaround optimisation is no longer optional. Aircraft deliveries remain uncertain. Airport expansion remains constrained. Demand is only rising. In this context, the turnaround becomes an area where meaningful gains are still possible, and AI becomes the key to unlocking them.

Assaia's mission is to bring full visibility and control to the airside. With AI-powered, data-driven insights, we are helping airlines, airports, and ground handlers coordinate the turnaround in real-time - just as Formula 1 teams do with pit stops.

I'm proud that our technology has helped partners like Alaska Airlines, Berlin Brandenburg Airport, and JFKIAT unlock tangible gains in efficiency and service quality. But we're only just getting started.

Our report provides a clear view of how turnaround performance is improving where AI is applied. The next step is scaling that progress. With the right tools, the industry can move from reactive to proactive and unlock efficiency where it matters most.

Let's get to work.

**Turns per stand**

A 5% increase in turns per stand — freeing up capacity without new infrastructure.

+5%**Departure delay**

A 25% reduction in median departure delays - from four to three minutes.

3 mins**25%
time
saved**

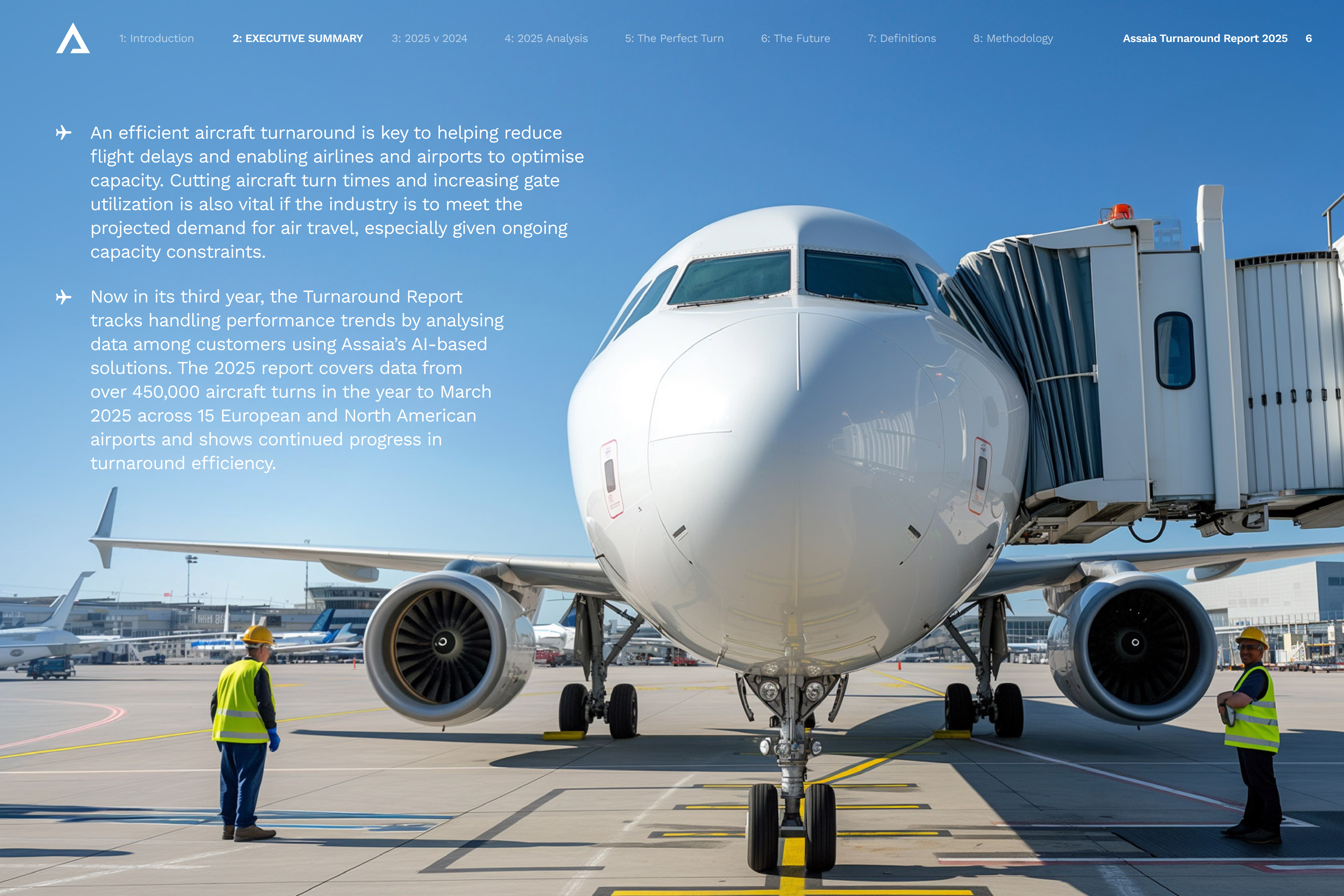


02

Executive Summary



- ✈ An efficient aircraft turnaround is key to helping reduce flight delays and enabling airlines and airports to optimise capacity. Cutting aircraft turn times and increasing gate utilization is also vital if the industry is to meet the projected demand for air travel, especially given ongoing capacity constraints.
- ✈ Now in its third year, the Turnaround Report tracks handling performance trends by analysing data among customers using Assaia's AI-based solutions. The 2025 report covers data from over 450,000 aircraft turns in the year to March 2025 across 15 European and North American airports and shows continued progress in turnaround efficiency.





Notably, there was a 5% increase in the average number of turns per stand conducted at airports each day, driven by an increase in average narrowbody aircraft turns per stand from 4.5 to 4.75 a day. This illustrates how increased efficiency can help mitigate capacity constraints, as it equates to an extra narrowbody turn for one in 20 stands per day.

Greater efficiency also helps airlines save money by reducing delay costs. The data shows the median departure delay was cut by 25% to three minutes last year, as well as a reduction in the most disruptive delays, which are typically unrecoverable during the day.

Improved airline on-time performance was also supported by deboarding passengers more quickly and beginning the loading of outbound bags earlier. These subprocesses of the turn are particularly significant as they directly impact passenger experience.

Uniquely, the Turnaround Report tracks 13 different subprocesses which form part of the turn. This provides a clear picture of what the “perfect turn” looks like today and the pressure points which come to the fore during delays.

In the long term, the constraints in airport capacity will intensify as the forecast doubling in air traffic will not be matched by a similar increase in gate capacity or staff levels. This will drive the need for greater efficiency in the turnaround, and the aviation industry can draw inspiration from Formula 1, where faster pit stops have been achieved by working in seamless harmony in a similar multi-process environment.

The report estimates that optimising processes and reducing turnaround times could, in 10 years’ time, be worth up to \$1.44 billion a year for a large European low-cost carrier and \$500 million for a large hub airport through savings and additional revenue.

Departure delay

The data shows the median departure delay was cut by 25% to three minutes last year, as well as a reduction in the most disruptive delays, which are typically unrecoverable during the day.



Potential value

The report estimates that optimising processes and reducing turnaround times could, in 10 years’ time, be worth up to \$1.44 billion a year for a large European low-cost carrier and \$500 million for a large hub airport through savings and additional revenue.

\$1.44B



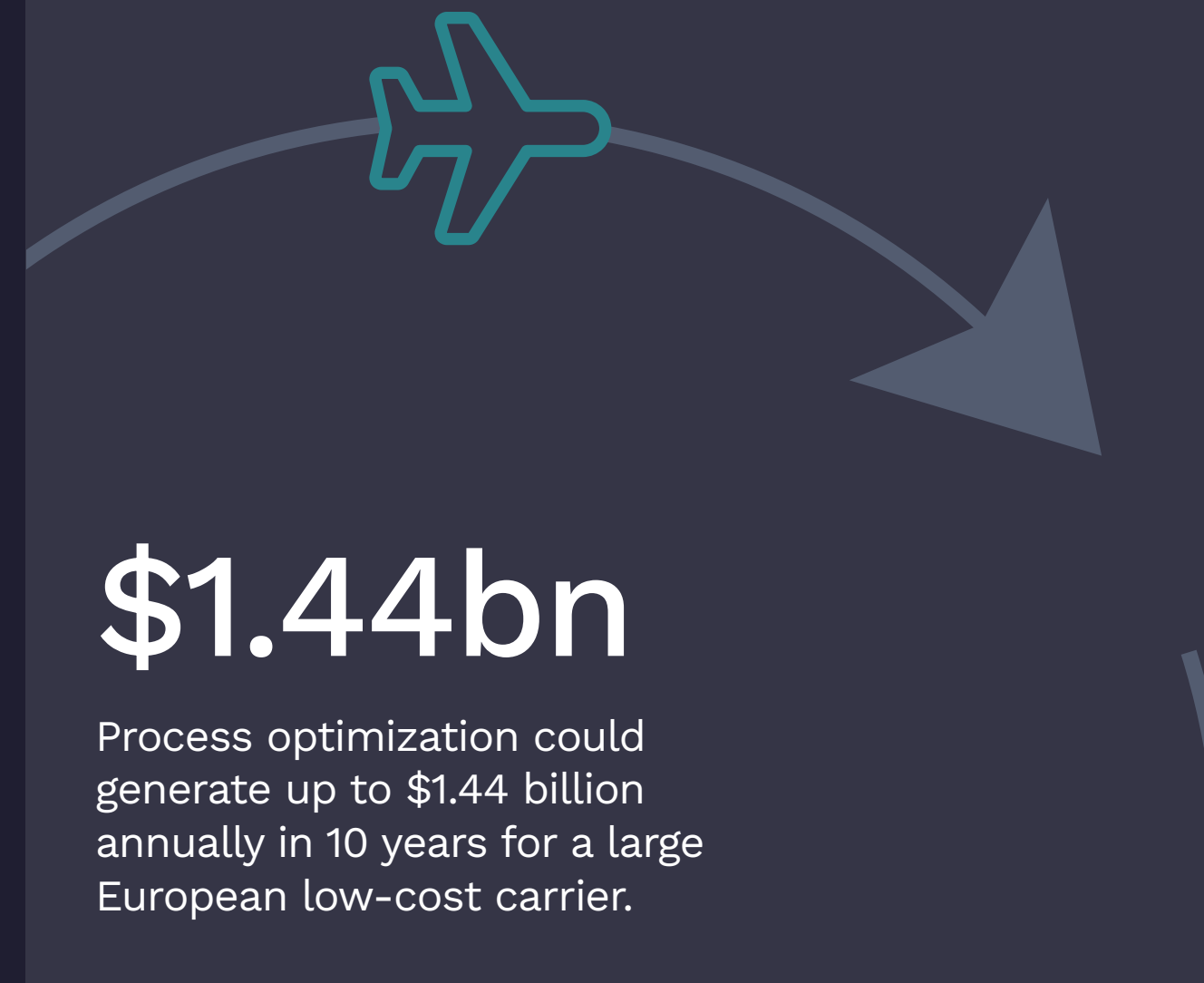


ASSAIA TURNAROUND REPORT

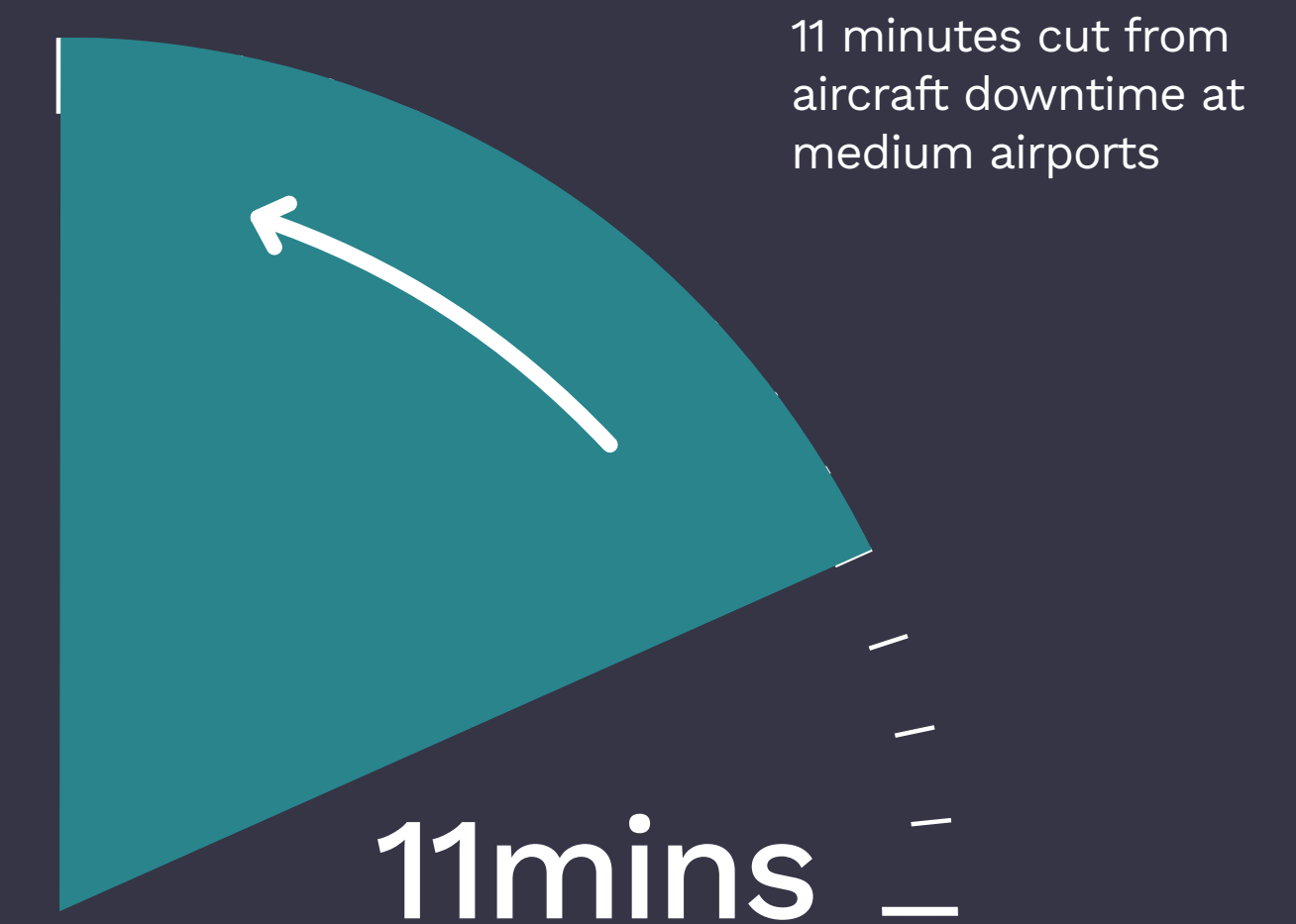
Key Statistics

2024 → 2025 →

PROCESS OPTIMIZATION



MINUTES CUT



DEPARTURE DELAY

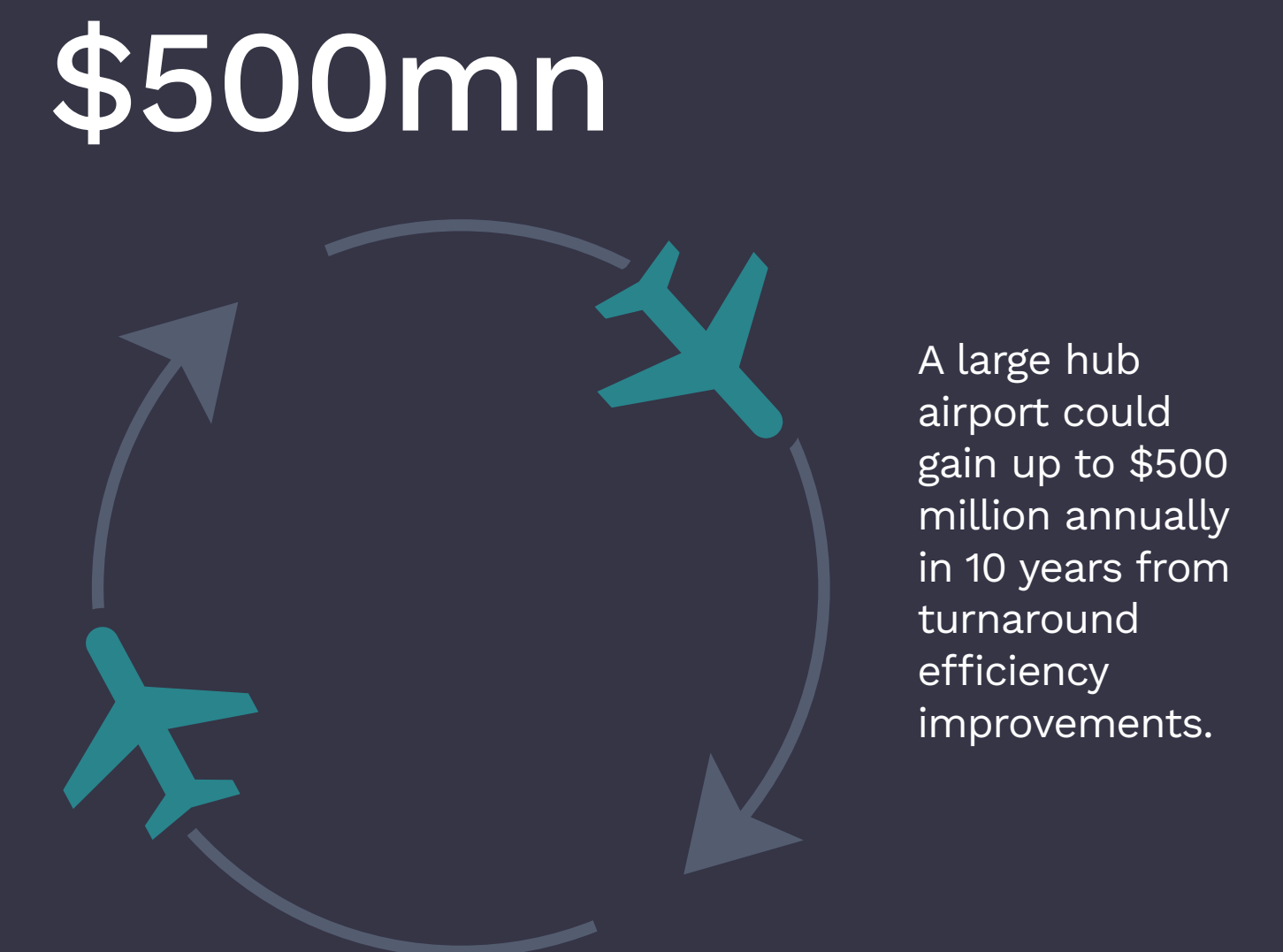
Median departure delay was reduced by 25%, or one minute, down to three minutes.



DEBOARDING & BAGGAGE LOADING



EFFICIENCY IMPROVEMENTS





03

2025 v 2024 Comparison

While the full 2025 dataset covers 450,000 turns in the year to March 2024, the annual comparison analysis is based only on like-for-like data from customers using Assaia's AI-based solutions in both the year to March 2025 and March 2024. This covers nearly 700,000 aircraft turns across nine airports across Europe and North America over the past two years.



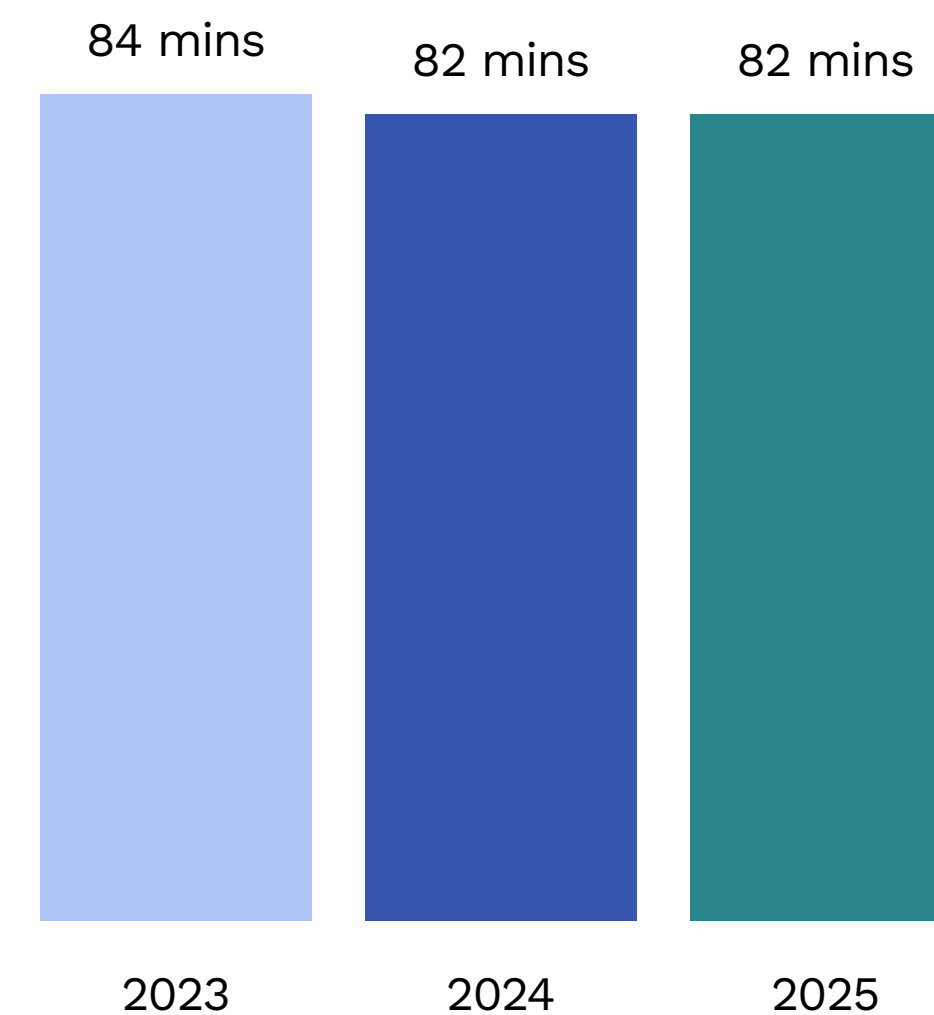
Aircraft turn times keep pace with surging traffic

Key metrics for all aircraft:

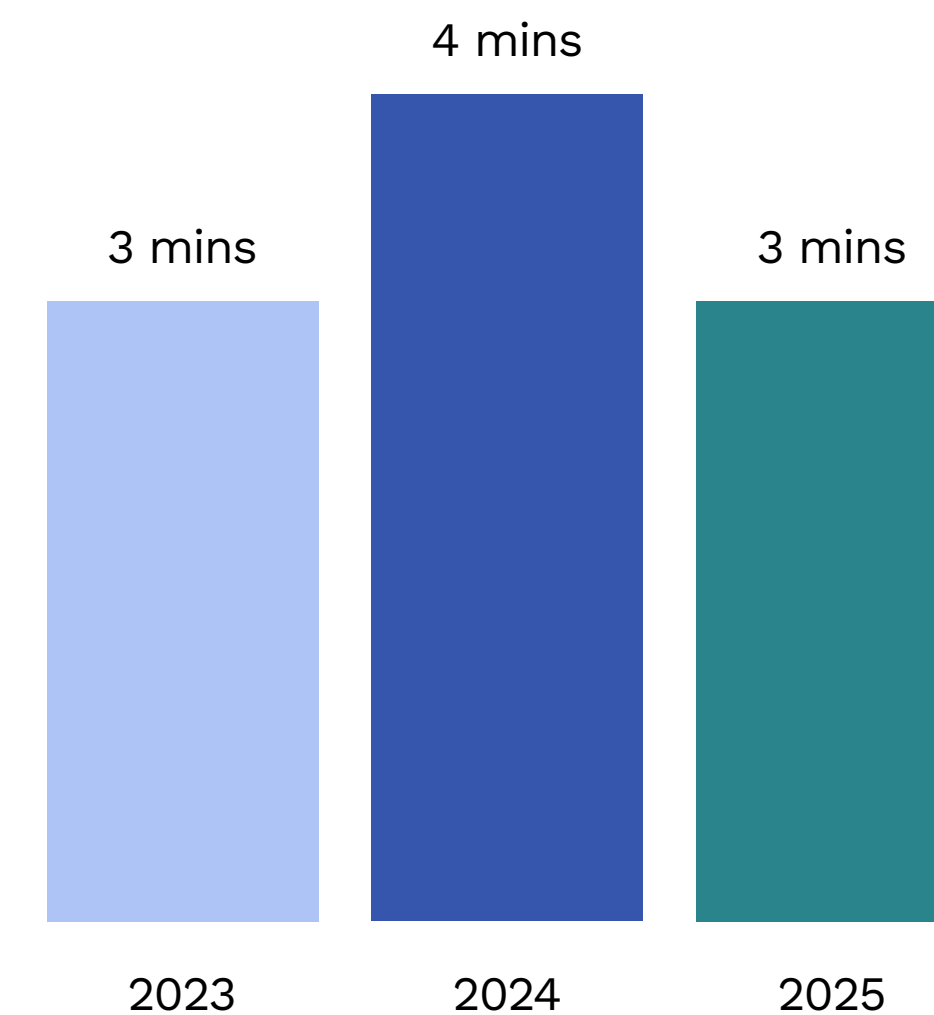
- Actual turn time (ATT): 82 minutes (2025) vs 82 minutes (2024).
- Median departure delay: three minutes (2025) vs four minutes (2024).
- Average departure delay: 11.22 minutes (2025) vs 11.52 minutes (2024).
- Median turns per stand per day: four (2025) vs four (2024).
- Average turns per stand per day: 4.5 (2025) vs 4.3 (2024).

Overall, aircraft turnaround times were unchanged last year, meaning the improvements seen in 2024 were retained during a period of intensified pressure as passenger traffic increased while supply chain and capacity constraints continued. Passenger numbers handled across the industry rose by around 800 million¹ over the period compared with the previous year.

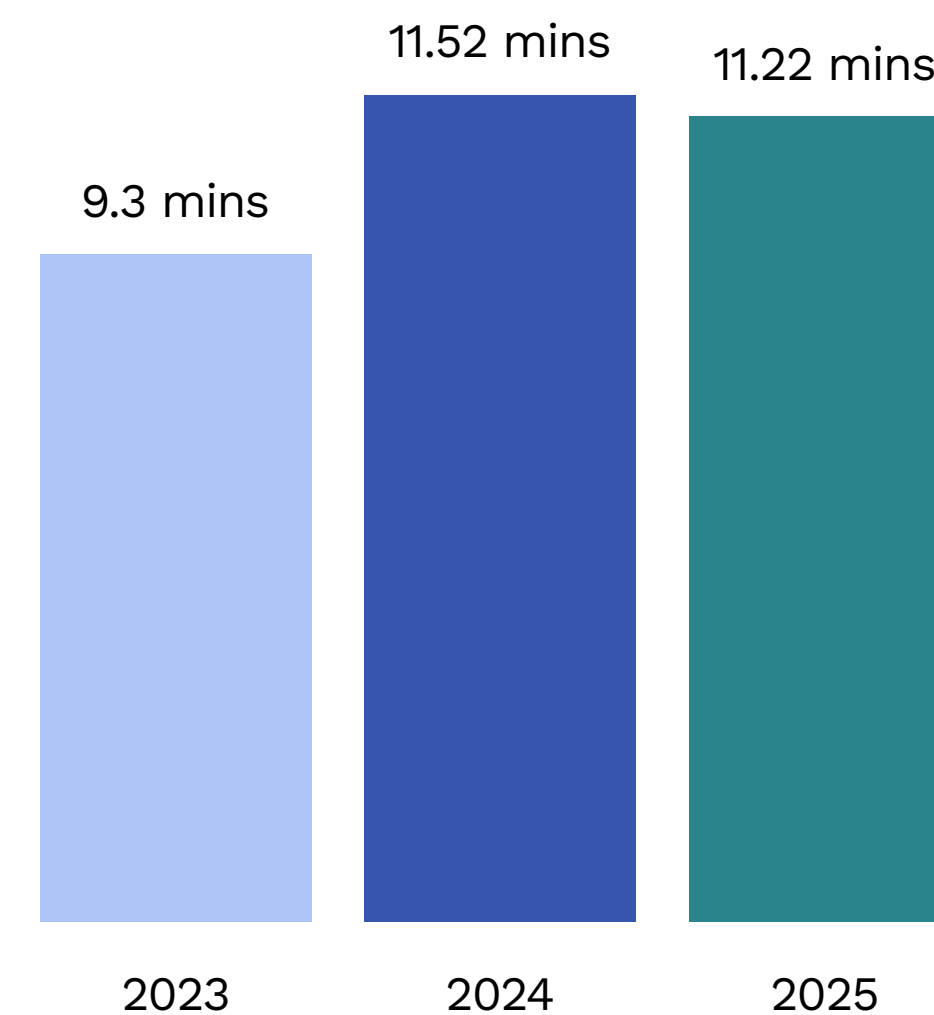
Actual turn time (ATT):



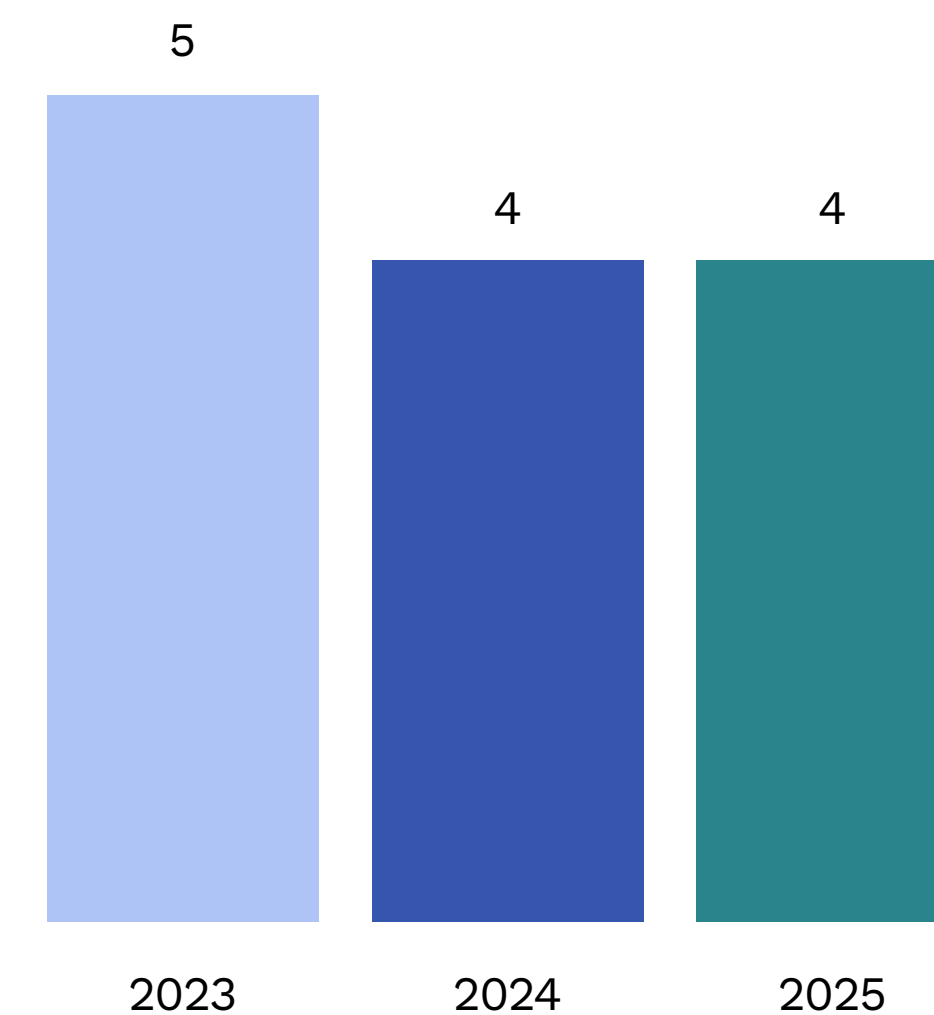
Median departure delay:



Average departure delay:



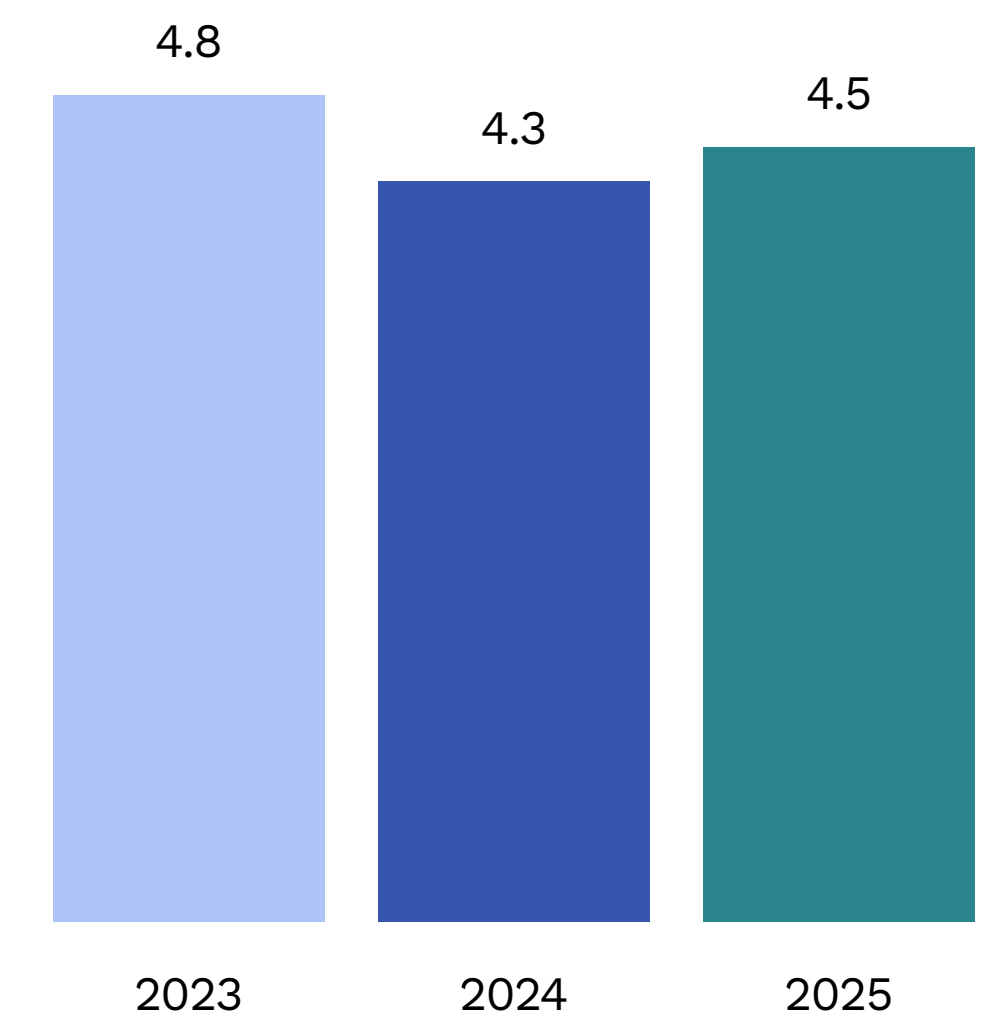
Median turns per stand per day:



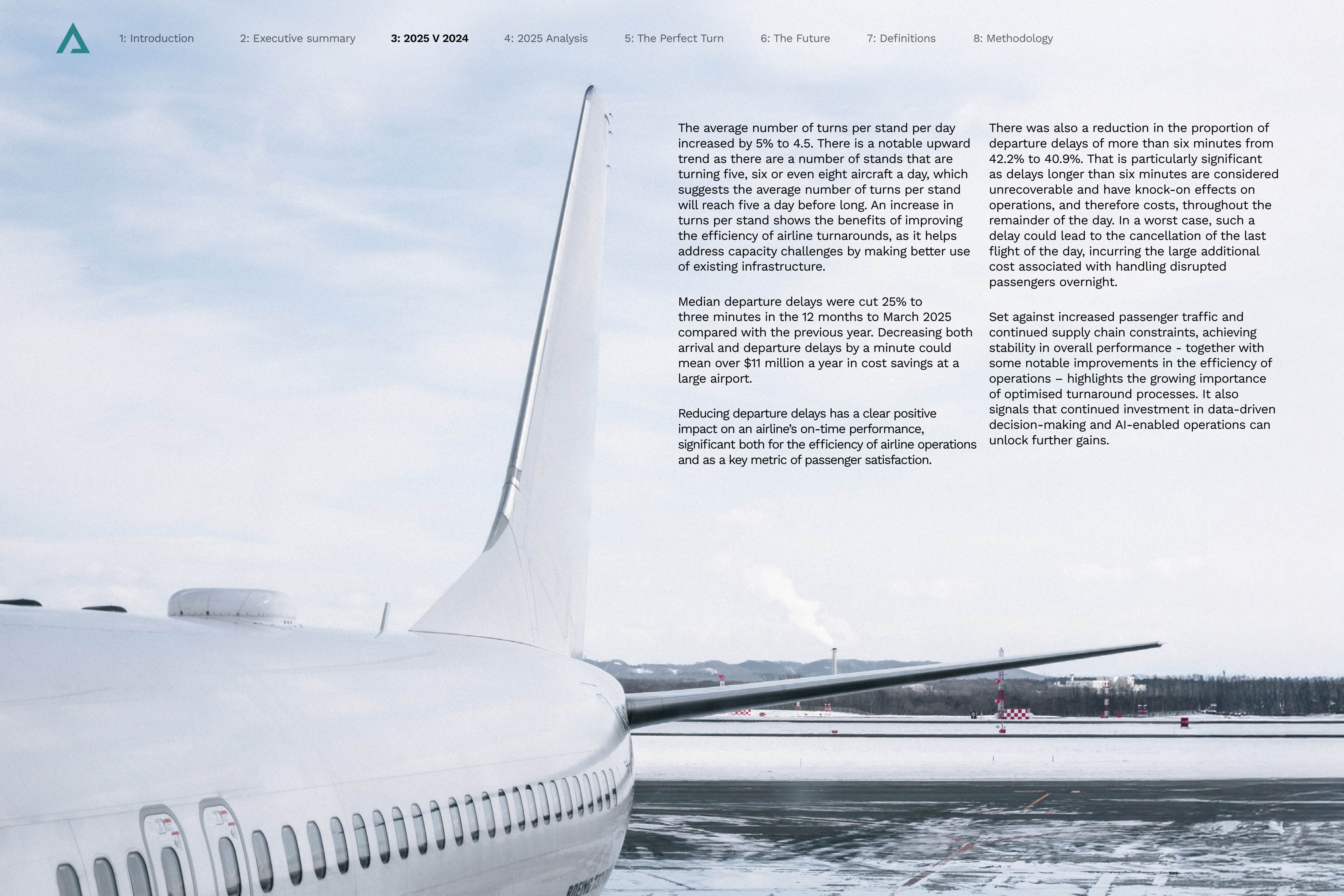
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[Data] suggests the average number of turns per stand will reach five a day before long. An increase in turns per stand shows the benefits of improving the efficiency of airline turnarounds, as it helps address capacity challenges by making better use of existing infrastructure.

Average turns per stand per day:



¹ ACI World traffic report (July 2025)



The average number of turns per stand per day increased by 5% to 4.5. There is a notable upward trend as there are a number of stands that are turning five, six or even eight aircraft a day, which suggests the average number of turns per stand will reach five a day before long. An increase in turns per stand shows the benefits of improving the efficiency of airline turnarounds, as it helps address capacity challenges by making better use of existing infrastructure.

Median departure delays were cut 25% to three minutes in the 12 months to March 2025 compared with the previous year. Decreasing both arrival and departure delays by a minute could mean over \$11 million a year in cost savings at a large airport.

Reducing departure delays has a clear positive impact on an airline's on-time performance, significant both for the efficiency of airline operations and as a key metric of passenger satisfaction.

There was also a reduction in the proportion of departure delays of more than six minutes from 42.2% to 40.9%. That is particularly significant as delays longer than six minutes are considered unrecoverable and have knock-on effects on operations, and therefore costs, throughout the remainder of the day. In a worst case, such a delay could lead to the cancellation of the last flight of the day, incurring the large additional cost associated with handling disrupted passengers overnight.

Set against increased passenger traffic and continued supply chain constraints, achieving stability in overall performance - together with some notable improvements in the efficiency of operations - highlights the growing importance of optimised turnaround processes. It also signals that continued investment in data-driven decision-making and AI-enabled operations can unlock further gains.



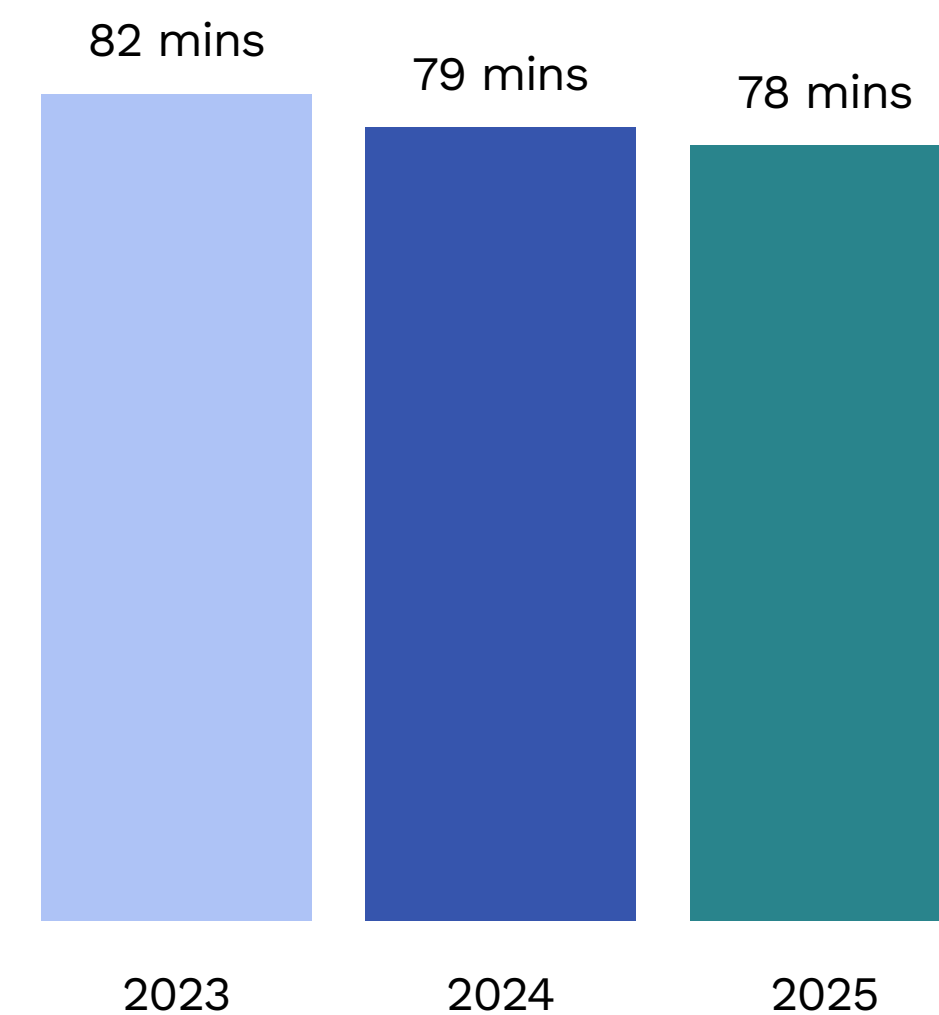
Increasing narrowbody turns per stand

Key metrics for narrowbodies only:

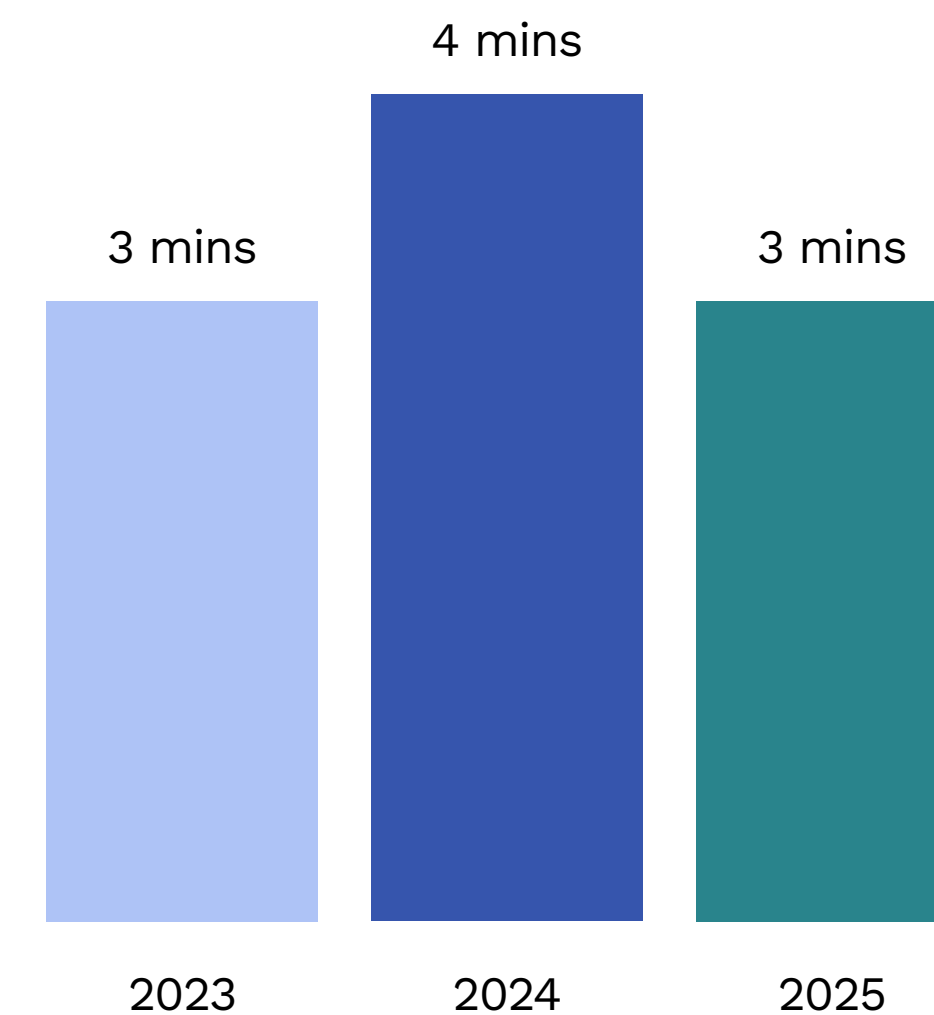
- Actual turn time (ATT) for narrowbodies: 78 minutes (2025) vs 79 minutes (2024).
- Median departure delay for narrowbodies: three minutes (2025) vs four minutes (2024).
- Average departure delay for narrowbodies: 11 minutes (2025) vs 11 minutes (2024).
- Median turns per stand per day: five (2025) vs five (2024).
- Average turns per stand per day: 4.75 (2025) vs 4.5 (2024).

Significantly, the report shows that the average number of turns per stand per day is improving for narrowbody aircraft. This increased from 4.5 to 4.75 turns per stand per day – meaning one in twenty stands added a turn every day.

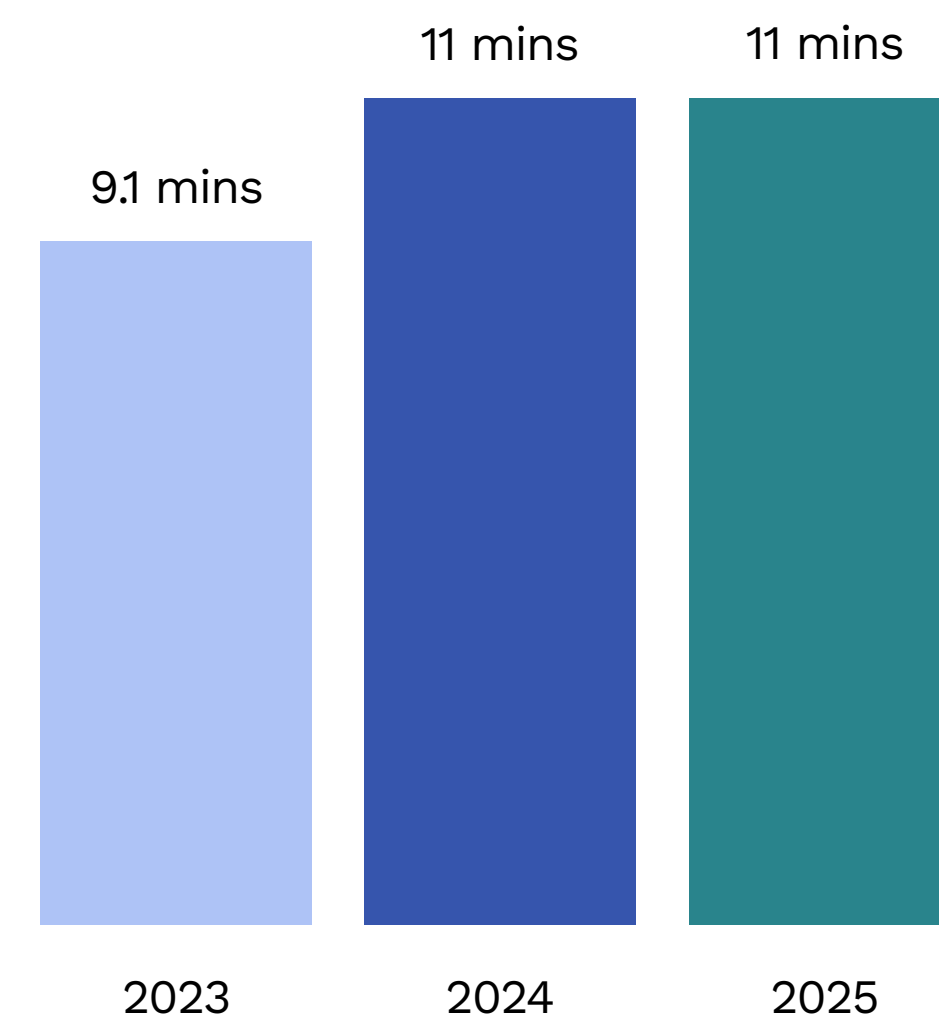
Actual turn time (ATT) for narrowbodies:



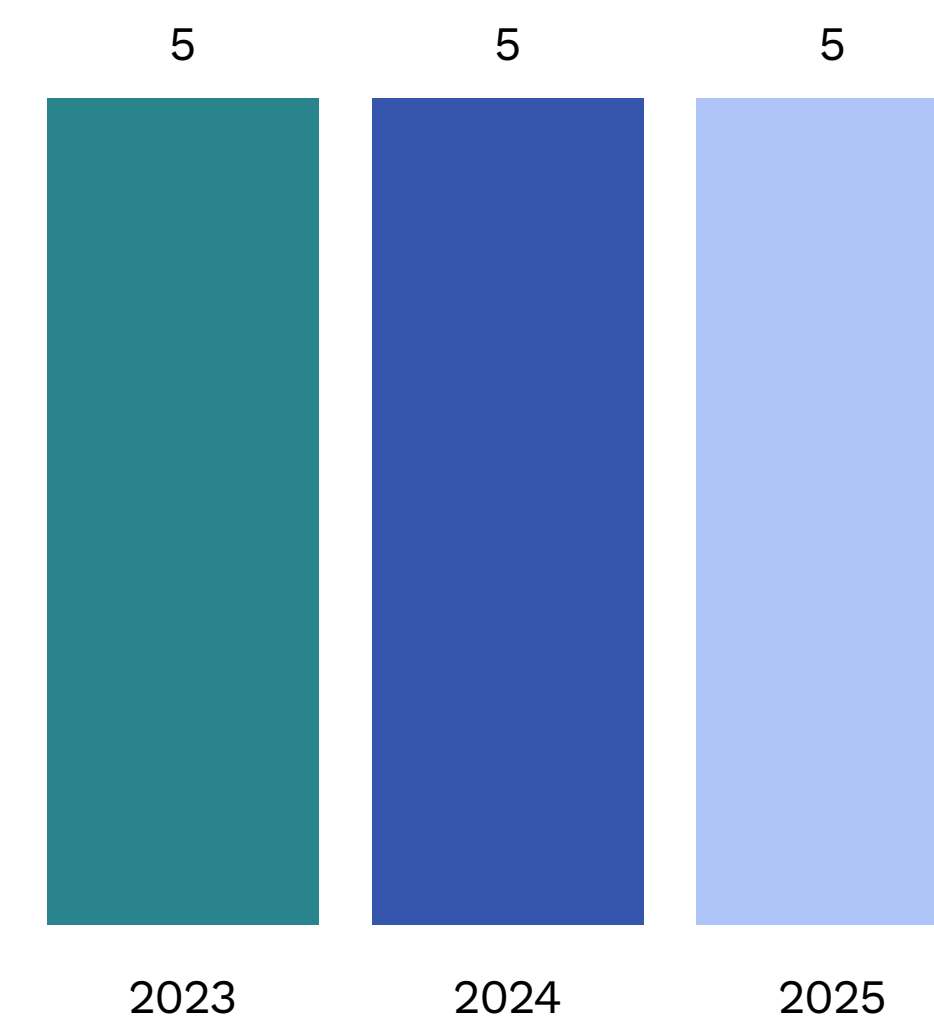
Median departure delay for narrowbodies:



Average departure delay for narrowbodies:



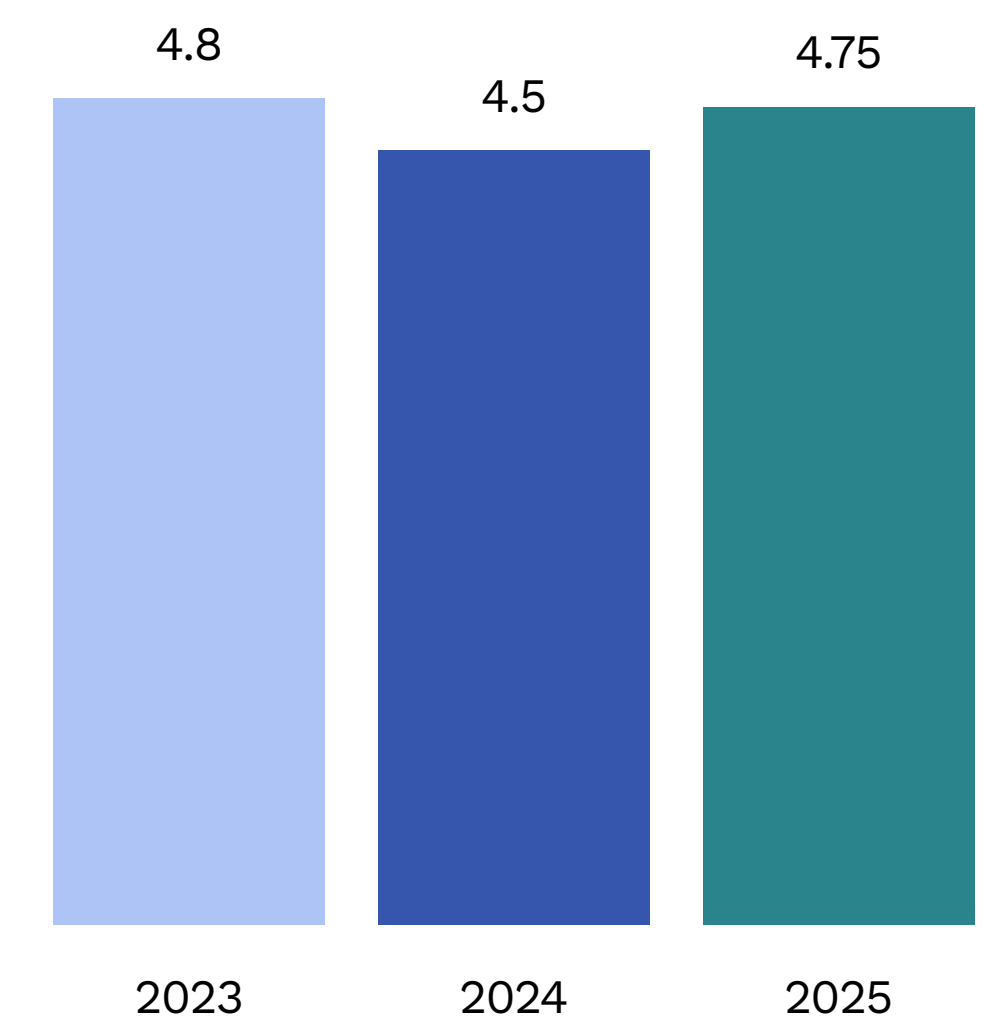
Median turns per stand per day:



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An increase in turns per stand shows the benefits of improving the efficiency of airline turnarounds, as it helps address capacity challenges by making better use of existing infrastructure.

Average turns per stand per day:





The additional turns could be worth more than \$23 million in revenue for an airport, while it opens up much-needed extra slots at congested airports. It underscores the effectiveness of better-controlled turnarounds in helping address capacity issues.

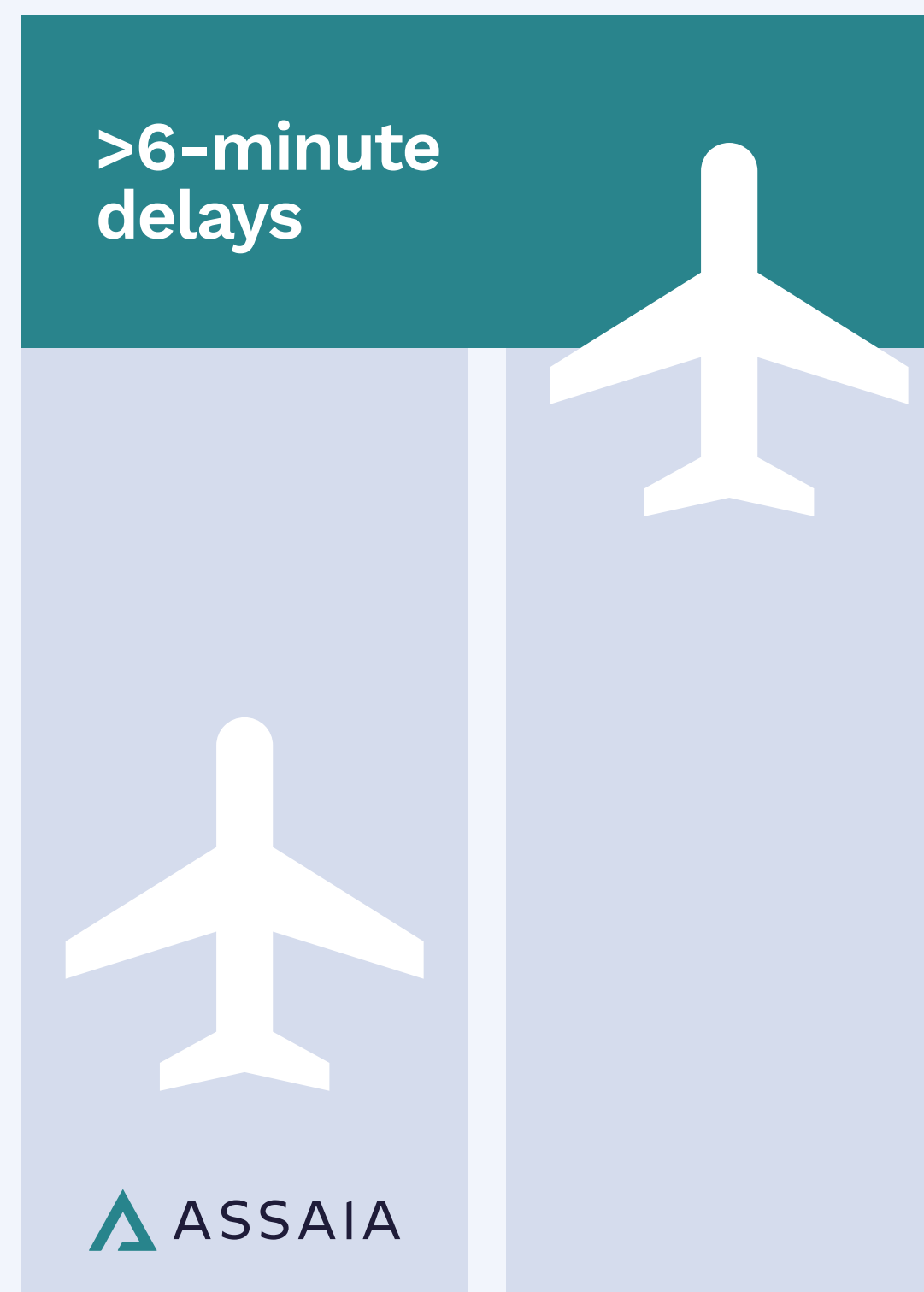
There was a one-minute improvement in actual turnaround time on narrowbody aircraft to 78 minutes. Such a reduction could generate almost \$15 million in additional revenues at a large airport through the operation of additional flights.

Improving the efficiency of narrowbody turns provides a significant opportunity for airlines and airports, given this segment forms the backbone of short-haul operations and as the shorter average flight time means there is more scope to boost aircraft utilization through optimisation of operations.

It is especially relevant to carriers feeding long-haul services, given the knock-on impact of either delaying the connecting long-haul flight or requiring the rebooking of passengers. The latter is particularly costly as the lower frequency of long-haul flights means there are less readily available alternative rebooking options.

Reducing the unrecoverable zone

There was also a reduction in the proportion of departure delays of more than six minutes from 42.2% to 40.9%. That is particularly significant as delays longer than six minutes are considered unrecoverable and have knock-on effects on operations, and therefore costs, throughout the remainder of the day.



Potential value

There was a one-minute improvement in actual turnaround time on narrowbody aircraft to 78 minutes. Such a reduction could generate almost \$15 million in additional revenues at a large airport.

▲ \$15M

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At SKY VC, we back technologies that power the future of travel. This year's report highlights the operational gains already being achieved through greater visibility of turnaround activity. It also points to how data-driven insights will shape more predictive and sustainable airside management in the years ahead.

Stephen Snyder, SKY VC

SKYVC



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Deboarding passengers earlier enables other critical processes to begin sooner, such as refuelling, catering and cleaning.



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The findings in the Turnaround Benchmark Report underline how critical turnaround performance is to the resilience of the entire aviation network. With air traffic increasing and capacity constrained, the ability to understand and manage turnaround time will be central to how airlines adapt.

Harvey Tate, Head of Airport Innovation, IAG



Improved passenger experience through faster deboarding

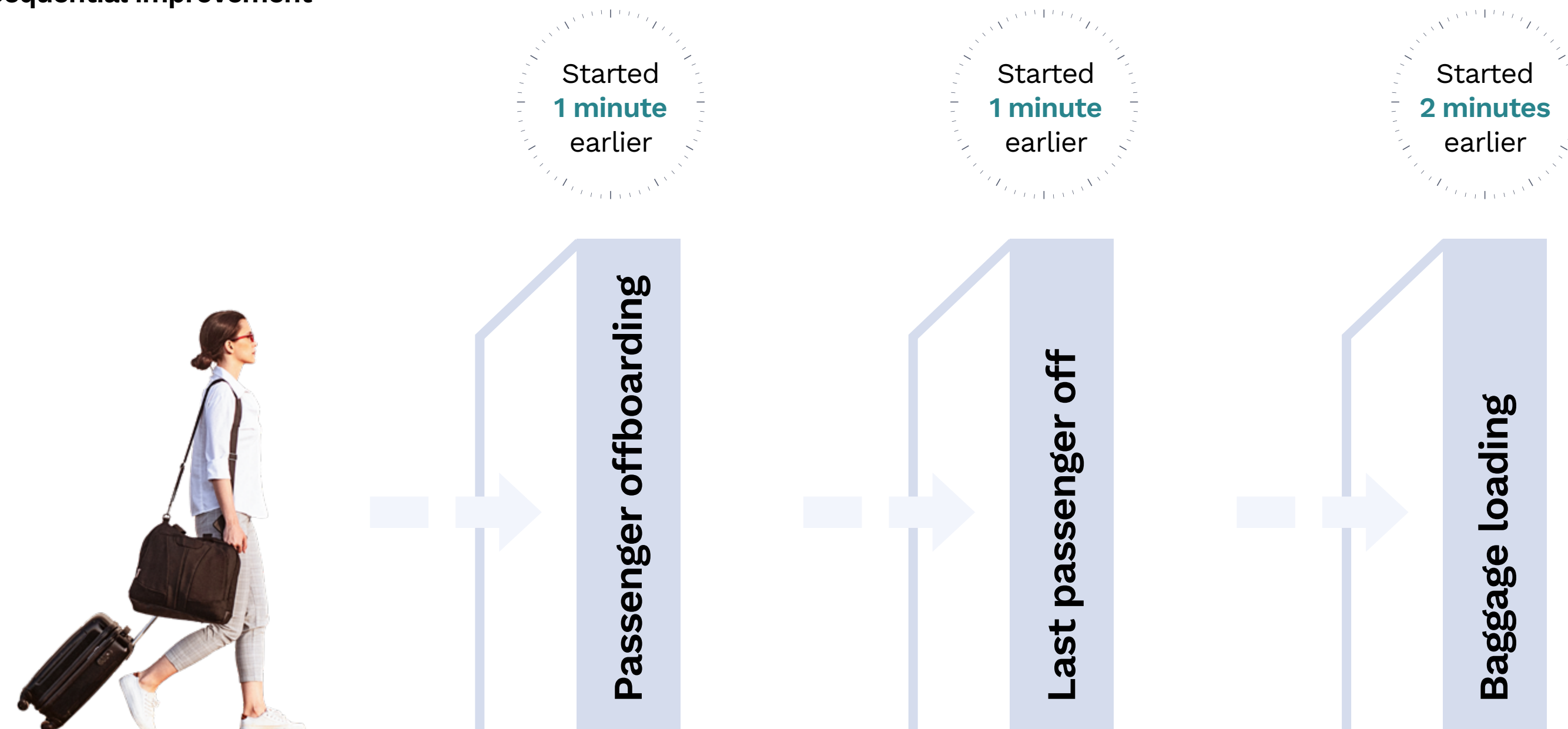
This year's report shows an improvement in the efficiency of processes that have a direct impact on passenger experience.

Median passenger offboarding after arrival started one minute earlier than the previous year, a gain also reflected in a one-minute improvement in the time taken for the last passenger to disembark. Deboarding passengers earlier enables other critical processes to begin sooner, such as refuelling, catering and cleaning. There was also a two-minute median improvement in how soon the outbound baggage loading began, again helping a timely departure.

This has a clear positive benefit for airlines and airports in terms of supporting good on-time performance – crucial given the negative impact poor punctuality can have on an airline's reputation. This is evident in net promoter scores (NPS), a key performance indicator for airlines in tracking customer loyalty. A Frost & Sullivan report² indicated a 1% drop in an airline's on-time performance could result in a reduction of up to 0.6% in an airline's NPS.

Similarly, passenger experience is improved by less waiting around and being able to disembark earlier, helping them get to the next stage of their journey through the airport more quickly. This is particularly significant for transfer passengers, as it can have a direct impact on the ease of their onward journey and could even mean the difference between making their connection or not.

Sequential improvement



² Frost & Sullivan Navigating Through Turbulence white paper (January 2020)



Medium-sized airports make the most gains

Medium-sized airports covered in the data were a stand-out performer last year, reporting improvements in cutting stand downtime, adding more turns per stand per day and being best in class in terms of gate utilization.

Notably, certain gates had a demonstrable increase of up to two additional flights per day, a trend most apparent during busy periods. It means while the median number has not changed yet, there are more turns per stand per day taking place.

While there was a slight increase in the median actual turn time to 90 minutes among medium-sized airports, stand downtime was cut by 11 minutes versus the previous year. This reduction in the time a stand is empty between turns, when combined with the increased turns per stand, suggests improved efficiency.

Operation	Time, NB	Delta from last year	Time, WB	Delta from last year
Chocks on	AIBT + 1	0	AIBT + 1	0
Chocks off	AOBT - 18	-3	AOBT - 32	+2
Bridge connected	AIBT + 2	0	AIBT + 4	0
Bridge disconnected	AOBT - 4	0	AOBT - 6	0
Cargo door open	AIBT + 2	0	AIBT + 5	0
Cargo door closed	AOBT - 7	+1	AOBT - 15	+1
GPU connected	AIBT + 4	0	AIBT + 8	+1
GPU disconnected	AOBT - 15	-1	AOBT - 22	-2
Air hose connected	AIBT + 9	0	AIBT + 14	-1
Air hose disconnected	AOBT - 14	+3	AOBT - 33	+1
First pax out	AIBT + 4	-1	AIBT + 4	0
Last pax out	AIBT + 15	-1	AIBT + 13	-1
First bag off	AIBT + 6	0	AIBT + 10	N/A
Last bag off	AIBT + 19	0	AIBT + 20	N/A
Catering connected	AOBT - 73	0	AOBT - 122	-1
Catering disconnected	AOBT - 55	+1	AOBT - 77	-2
Fueling connected	AOBT - 62	-2	AOBT - 109	+1
Fueling disconnected	AOBT - 46	-1	AOBT - 34	+1
First bag on	AOBT - 46	-2	AOBT - 40	N/A
Last bag on	AOBT - 13	+1	AOBT - 17	N/A
First pax in	AOBT - 41	0	AOBT - 46	+2
Last pax in	AOBT - 18	+1	AOBT - 24	-2
Pushback on stand	AOBT - 52	-1	AOBT - 86	+1
Pushback connected	AOBT - 44	-5	AOBT - 62	+3

AIBT (Actual In-Block Time), AOBT (Actual Off-Block Time)



A reduction of 11 minutes in stand downtime for a medium-sized airport turning five aircraft per stand each day would equate to up to 44 minutes of extra capacity per stand per day. This significant saving could make the difference to enable enough time to schedule another flight on a stand.

Medium-sized airports achieved an increase in gate activity with a relatively limited impact on average departure delays. While median departure delays increased by four minutes from off-peak to peak periods (from one to five minutes), medium-sized airports still outperformed their larger peers in terms of having lower departure delays.

Larger airports did cut one minute from actual turn times to 81 minutes, driven by faster turnarounds of narrowbodies. For a Toronto Pearson-sized airport, that could result in increased revenues of up to \$15 million. Arrival and departure delays at large airports were both reduced by one minute last year, to a median of four minutes and three minutes, respectively.

The fact that airports were able to increase the number of turns on some stands to higher levels than in previous years illustrates the potential to boost activity without requiring additional infrastructure by further optimising gate usage.

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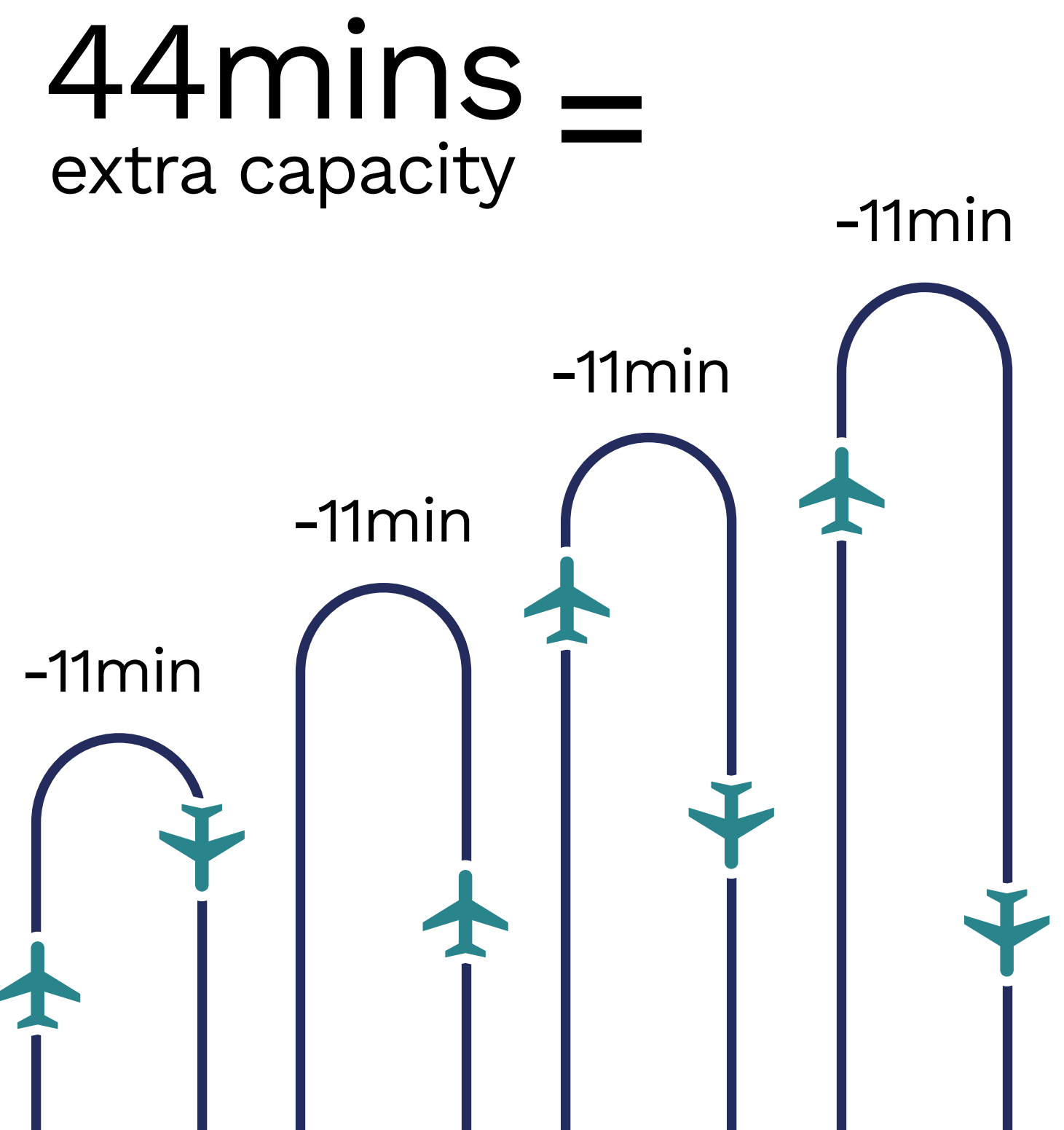
The insights demonstrate how turnaround optimisation links closely to broader airport priorities such as reducing ground emissions and improving passenger experience. The report makes clear that efficiency and sustainability are increasingly two sides of the same coin, reinforcing the value of AI in delivering those benefits.

Luigi Di Piazza



Time Creates Capacity

A reduction of 11 minutes in aircraft downtime for a medium-sized airport turning five aircraft per stand each day would equate to up to 44 minutes of extra capacity per stand per day. This significant saving could make the difference to enable enough time to schedule another flight on a stand.





04

2025 Analysis

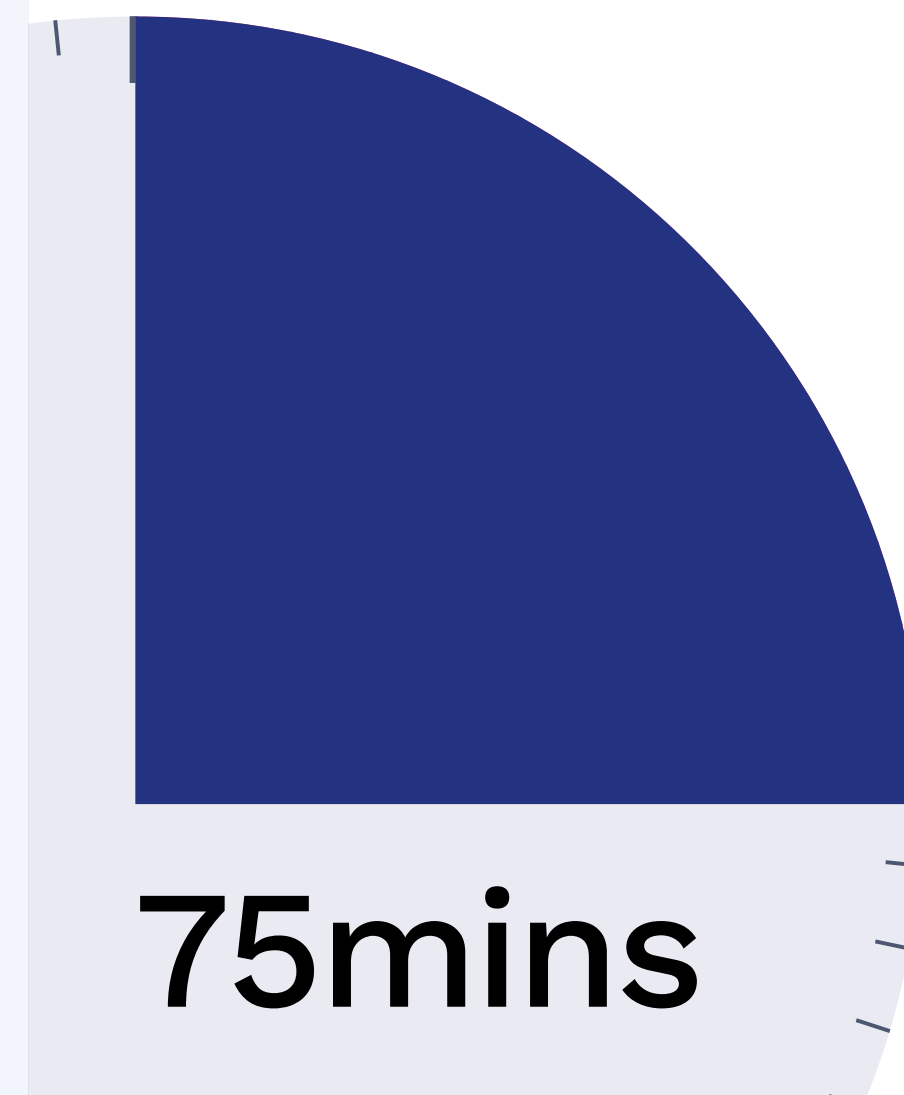


This analysis is based on the wider dataset of customers using Assaia's AI-based solutions for the year to March 2025 and covers 453,662 aircraft turns at 475 stands across 15 airports in Europe and North America.

Key metrics for all aircraft:

- Median actual turn time (ATT): 75 minutes (2025).
- Median departure delay: four minutes (2025).
- Average departure delay: 11 minutes (2025).
- Median turns per stand per day: five (2025).
- Average turns per stand per day: 4.7 (2025).

Median actual turn time (ATT):



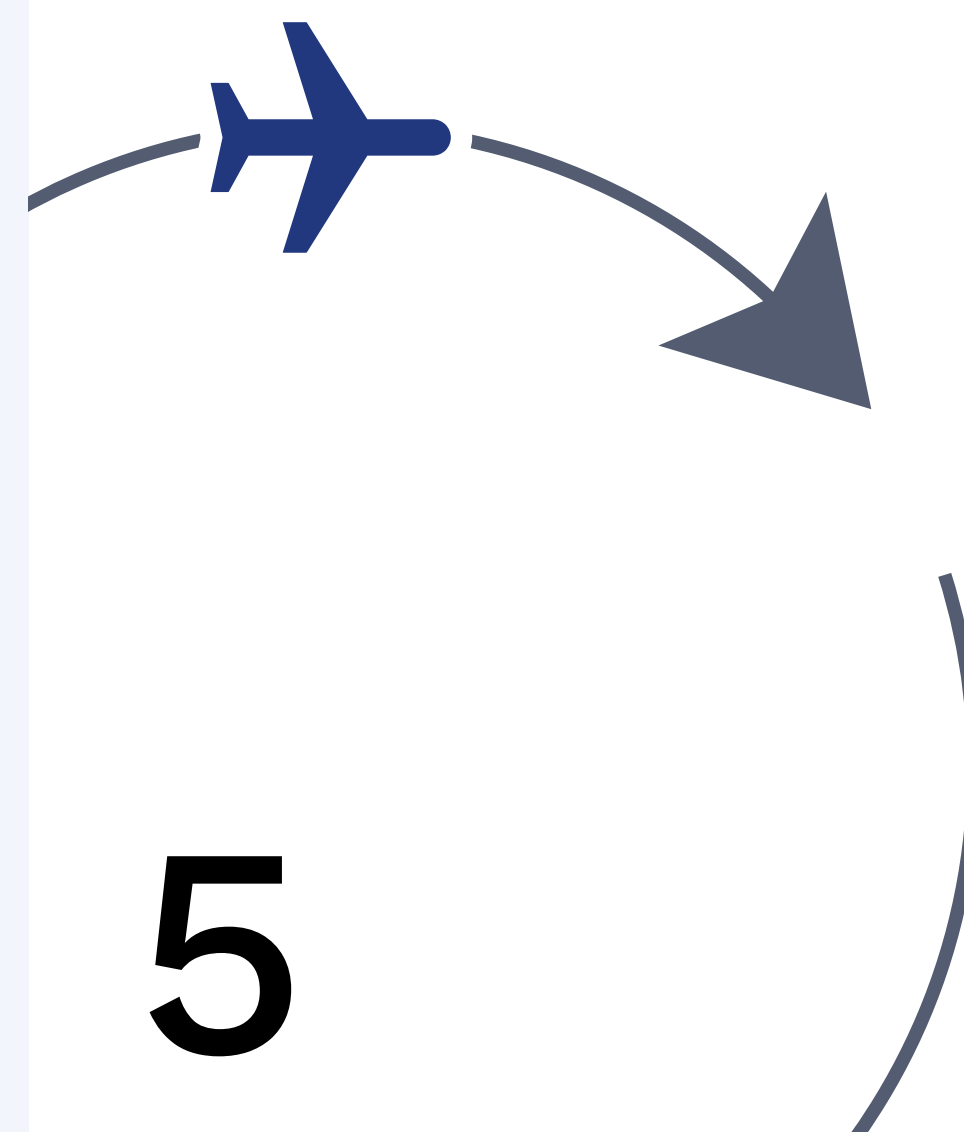
Median departure delay:



Average departure delay:



Median turns per stand per day:



Average turns per stand per day:



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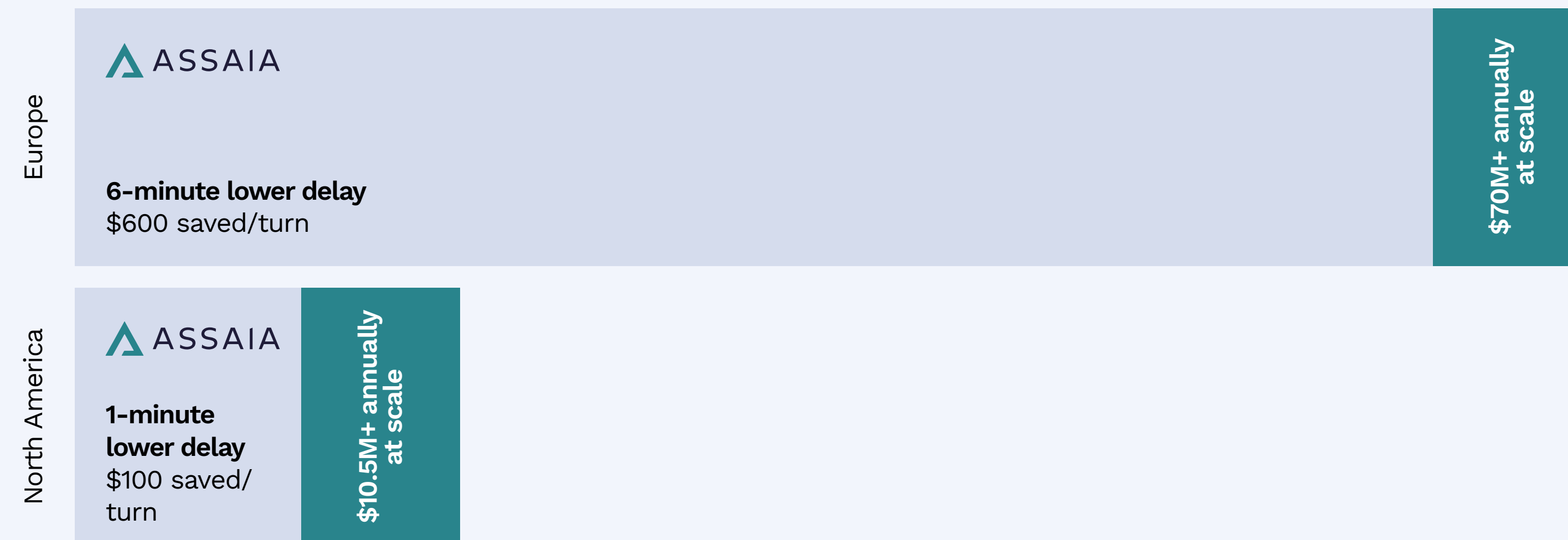
The report illustrates the benefits of combining rigorous data with operational expertise. By breaking down turnaround processes at this level of detail, Assaia creates new opportunities for research and for industry stakeholders to adopt best practices based on evidence.

Professor Graham Braithwaite FRAeS,
Cranfield University





Economic Value



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The data illustrates the different dynamics at play in European and North American operations. This in part reflects the greater use of airline-operated gates in North America and common-use gates in Europe. The latter provides airports with more scope to optimise gate utilization as they are not limited to a single airline’s operations.

Christiaan Hen

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North American airports added an extra turn per stand during peak periods — Europe did not.

Dynamics differ in European and North American markets

The data illustrates the different dynamics at play in European and North American operations. This in part reflects the greater use of airline-operated gates in North America and common-use gates in Europe. The latter provides airports with more scope to optimise gate utilization as they are not limited to a single airline’s operations.

The more prominent use of airline-operated gates at hub airports in North America is reflected in wider gaps between aircraft turns and lower gate utilization compared to those in Europe. However, North American airports experience less than half the departure delays of those in Europe:

- Actual turn time:
Europe 54 minutes vs North America 81 minutes.
- Stand downtime:
Europe 52 minutes vs North America 68 minutes.
- Turns per stand per day:
Europe five turns vs North America four turns.
- Median departure delays:
Europe six minutes vs North America three minutes.

The data shows that those airports operating Assaia ApronAI outperformed the industry average and recorded lower levels of departure delays. Notably, Assaia-operated airports in Europe on average had a six-minute lower delay (12 minutes), compared with the average of almost 18 minutes³, equating to a saving of almost \$600 per turn or over \$70 million per year at a large airport. North American Assaia-operating airports had an average departure delay of 11 minutes, one minute less than the industry average – a saving of \$100 a turn.

³ Eurocontrol average delay data 2023



Dynamics differ in North American and European markets

North America

81

Turn Time (minutes)



68

Stand Downtime (minutes)



4

Turns per Stand per Day



3

Median Departure Delay (minutes)



Europe

54

52

5

6



North American airports rise to peak challenge

One of the most intriguing insights the data shows is the way in which airports in North America were more adaptable at increasing efficiency during peak periods.

North American airports covered by the data were able to fit in an additional turn per stand during the peak periods, averaging five turns a day rather than four during the off-peak periods. In Europe, that remained unchanged at five turns per day.

This could signal that there are more intense travel peaks in North America than in Europe, while also reflecting that the lower gate utilization at airline-operated gates means it is easier to add the extra flight. Increased peak season operations are also supported by seasonal hiring patterns for peak periods.

North American airports also managed to cut aircraft turn times during the peak, whilst in Europe the turnaround time increased. Actual turn time was one minute faster during the peak than off-peak in North America, while it was one minute slower in Europe.

While the increased pressure in the peak reflects in higher average departure delays than in off-peak periods, again, this is less pronounced in North America than in Europe.

Analysis of the various subprocesses shows that in Europe, many of these take place earlier against actual off-block time (AOBT) rather than later against estimated off-block time (EOBT) – a classic delay pattern. However, in North America, there was relatively little difference between these metrics in the peak compared with off-peak.

The ability to efficiently flex operations up during peak periods will only become more important as air travel demand continues to grow, particularly in mature markets where there is limited scope to expand infrastructure to support additional capacity.

KPI	EU (Off-peak  peak )
ATT	54  55
STT	45 - 45
ATT - STT	7  8
Down time	51  57
Departure delay	4  11
Arrival delay	1  -3
Turns/stand/day	6 - 6

KPI	NA (Off-peak  peak )
ATT	81  80
STT	68  67
ATT - STT	10  9
Down time	70  64
Departure delay	2  6
Arrival delay	6  1
Turns/stand/day	4  5



Assaia’s report findings mirror what we see every day in our own operation: that better data around the turnaround leads directly to more reliable schedules and improved passenger flow. It’s a reminder of how important it is to measure the right things.

Pasha Saleh, Alaska Airlines



The 2025 report shows that the pressures around turnaround are universal, whether in Asia, Europe or the Americas. The research illustrates how shared challenges across the industry can be addressed through more systematic use of data.

Tetsuya Murayama, Marubeni Corporation





05

What Does The Perfect Turn Look Like



What does the perfect turn look like?

Breaking down the various subprocesses of the turn underlines the constituent parts involved in a successful turn and the impact of delays in these being carried out.

Analysis of turn data for Boeing 737-800s - the aircraft type for which the most data is available – shows how important the timely completion of baggage offloading is to achieve the perfect aircraft turn.

While it took 13 minutes to offload baggage in the perfectly executed turn on a 737-800, that stands at 14 minutes across the median and 15 minutes in cases where there was a flight delay of 15 minutes or more. This shows the importance of making a good start to ensure a timely turn and reveals a potential area which, even when it is not the cause, is an indication of a delay to come.

Direct correlation between cause and effect is harder to determine further into the turn because there is more scope for knock-on impact and other factors to affect timings in the departure part of the turn.

At the heart of the perfect turn is ensuring the right people are in the right place at the right time. That is easier to achieve when everything is planned in advance. The challenge comes when things change in real-time. This is where the power to predict what is going to happen is so valuable as it can help keep the turn on track and reduce the need for operational changes.

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The Turnaround Benchmark Report highlights how minor operational delays can ripple across an entire airport system. At a major hub like Toronto Pearson, where gate allocation and connection times are crucial, this kind of visibility helps us manage congestion and keep the wider network moving.

Dean Wright, Director, Integrated Operations Control Centre, Toronto Pearson

Toronto Pearson 



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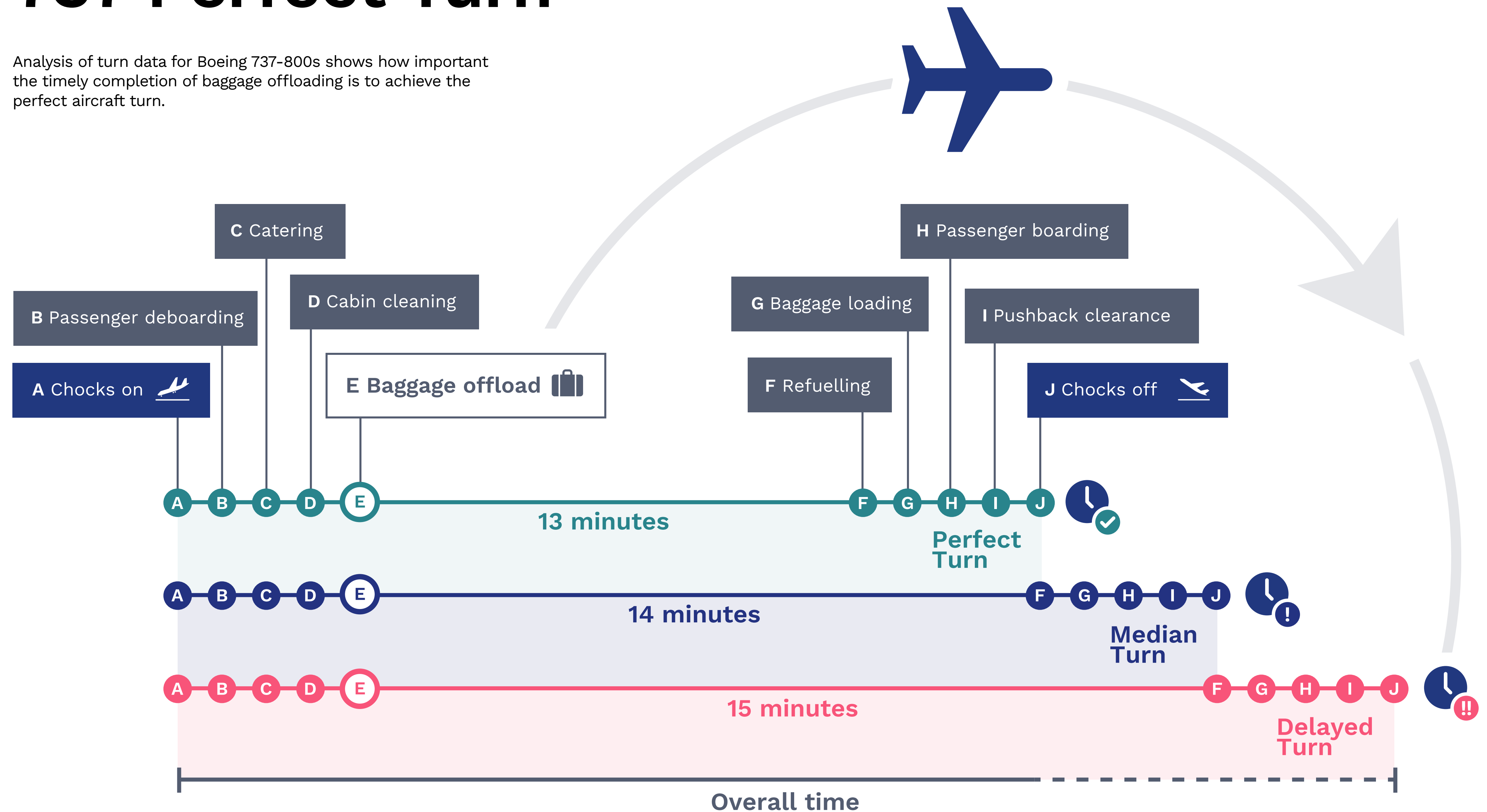
At the heart of the perfect turn is ensuring the right people are in the right place at the right time. That is easier to achieve when everything is planned in advance. The challenge comes when things change in real-time and deviate from the optimum. This is why the power to predict what is going to happen is so valuable as it keeps the turn on track and reduces the requirement for operational changes.





737 Perfect Turn

Analysis of turn data for Boeing 737-800s shows how important the timely completion of baggage offloading is to achieve the perfect aircraft turn.





06

What May The Future Hold For The Turn



The constraints on airport capacity will demand further evolution of the aircraft turn if the industry is to meet increased passenger travel demand. It means that in the longer term, the driver will not just be about minimising delays. The future will demand faster, more efficient turnarounds – potentially to less than 40 or even 30 minutes.

Here, the aviation industry can draw inspiration from Formula 1, where limited space and high stakes have driven teams to reduce pit stop times to little more than a couple of seconds by working in seamless harmony. Similarly, the future of aviation will require real-time data integration, predictive analytics and flawless coordination across all aircraft operations.

AI will play a pivotal role in this transformation by structuring unstructured data from sources like video, audio, and sensors. AI can provide real-time insights, predict future scenarios and optimise decision-making. Machine learning will enable precise forecasting, while advanced communication tools will streamline human-technology interaction, replacing traditional screen apps.

Over the next decade, the evolution of the perfect turn with such enhancements can deliver significant financial benefits to the industry.

So, how big could the financial gains be in enhancing the perfect turn through these tools? A large European low-cost carrier (operating 3,500 daily flights) could yield a gain of \$900 million from cutting turn times by five minutes and saving three minutes through the use of AI-predictive analytics. Cutting the turnaround by 10 minutes would increase that to \$1.4 billion annually.

While for a large airport handling 1,200 flights a day, the gains from the same improvements could be worth between \$300-500 million annually.

The future of airport, airline, and ground handler operations will be highly automated, with data collected from various sources to create a unified real-time picture and predict the airport's future state. This understanding will empower decision-makers by enabling products like Assaia's to become the critical orchestration system for the airport's airside, connecting and controlling services and tools seamlessly.

The Future



A large European low-cost carrier 3,500 daily flights



Cutting turn times
by 5 minutes



& saving 3 minutes
through the use of
AI-predictive analytics

**\$900 million
gain**



Cutting turn times
by 10 minutes

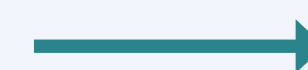


**\$1.4 billion
gain annually**



Large airport handling 1,200 flights a day

Cutting turn
times by between
5 and 10 minutes



**\$300-500 million
gain annually**





07

Definitions

**a. Stand types**

- Narrowbody: 90% or more narrowbody turns
- Widebody: 90% or more widebody turns
- Mixed: The rest

b. Peak/off-peak travel

- Peak: All travel in June, July, and August, plus travel between the 20th
- December and 7th January
- Off-peak: Everything else

c. Airport size

- Small: LJU, YHZ
- Medium: YYC, JFK, LGW, DEN, CVG, BER
- Large: SEA, YYZ, IAH, ATL, LHR, FCO, DXB, SYD, SIN, EWR, FUK, CPH

d. Delay

- Arrival: Actual in-block time - Scheduled in-block time
- Departure: Actual off-block time - Scheduled off-block time

e. Hub/non-hub**f. Hubs:**

- Stand JFK-B24
- B6 turns at JFK
- SEA, YYC, DEN, IAH, ATL, YYZ, EWR, FCO, CPH

g. Non-hubs:

- CVG, LJU, LGW, the rest of JFK, YHZ, BER

h. Legacy/LCC was defined with the help of ChatGPT**i. Airline/common-use stands****j. Common-use:**

- Stands Sea-a6, sea-a7, sea-a12, sea-s1, sea-s2, sea-s6, sea-s7, sea-s8, sea-9a, sea-9, sea-s10, sea-s11, sea-s12, sea-s15, sea-s16, sea-b11, sea-b15
- Airports YYZ, JFK, YYC, BER, SIN, YHZ, LJU, LGW, CPH, FCO

k. Airline-operated:

- SEA, EWR, IAH, ATL, DEN, CVG
- JetBlue turns at JFK
- Stand JFK-B24

l. Time period

- 2024-04-01 to 2025-03-31 is “2025”
- 2023-04-01 to 2024-03-31 is “2024”
- 2022-04-01 to 2023-03-31 is “2023”



08

Methodology



a. Filtered out

- Turns with both the inbound and outbound flight numbers missing
- Turns that were shorter than 15 minutes or longer than five hours
- Turns that departed more than two hours early or two hours late (relative to EOBT)
- When partitioning the data, any groups that had fewer than 300 turns on record were instead displayed as Null or missing.

b. Kept

- The timeframe was from 2022-04-01 to 2025-03-31.
- Turns per stand per day: only stands that had a median value of at least 1.5 turns per day were included in any turns per stand per day content





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