



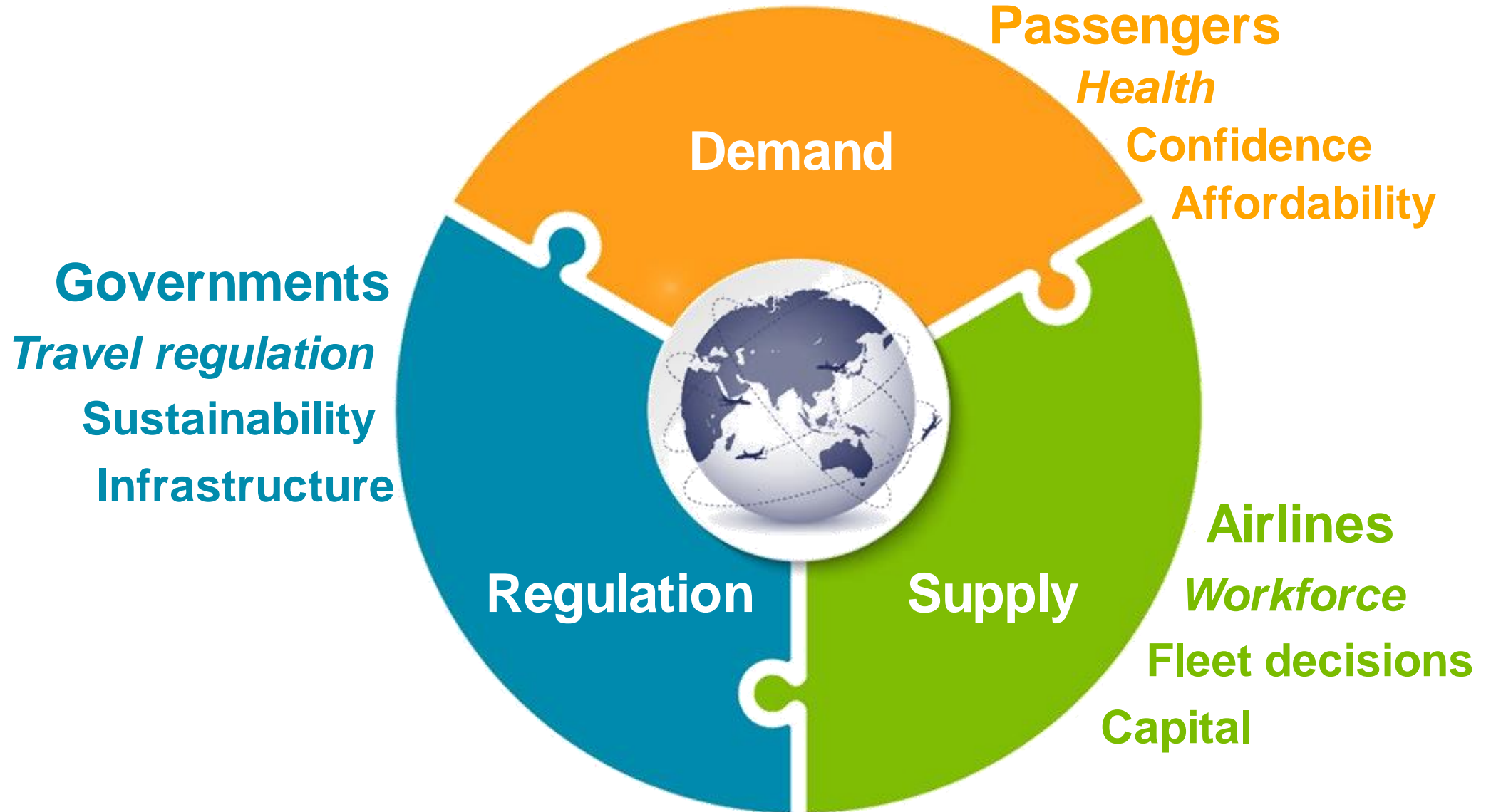
2021 Commercial Market Outlook

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The Boeing Company

September 2021

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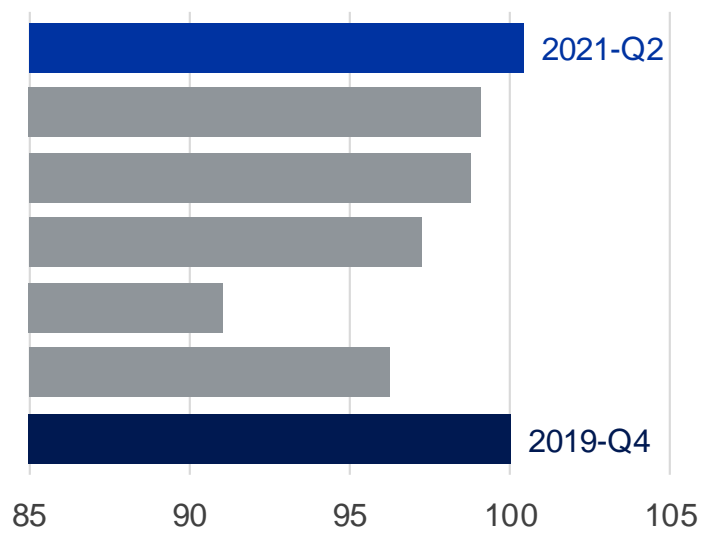
Near-term market dynamics: demand, supply, regulation



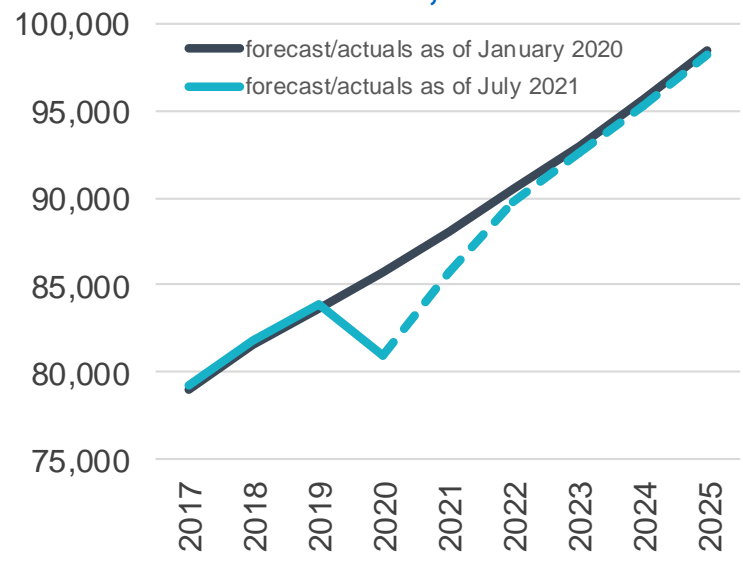
Economy has recovered to pre-crisis levels



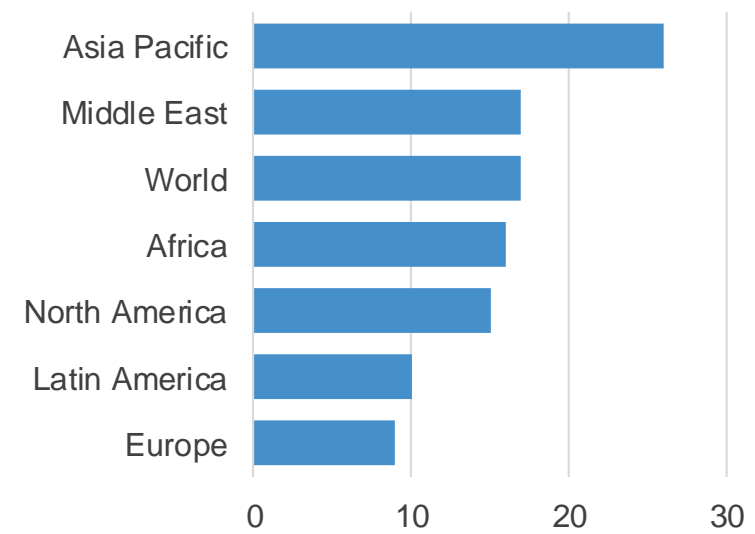
GDP level in % of 4Q 2019



Global GDP, real in USD



2025 GDP % above 2019 levels

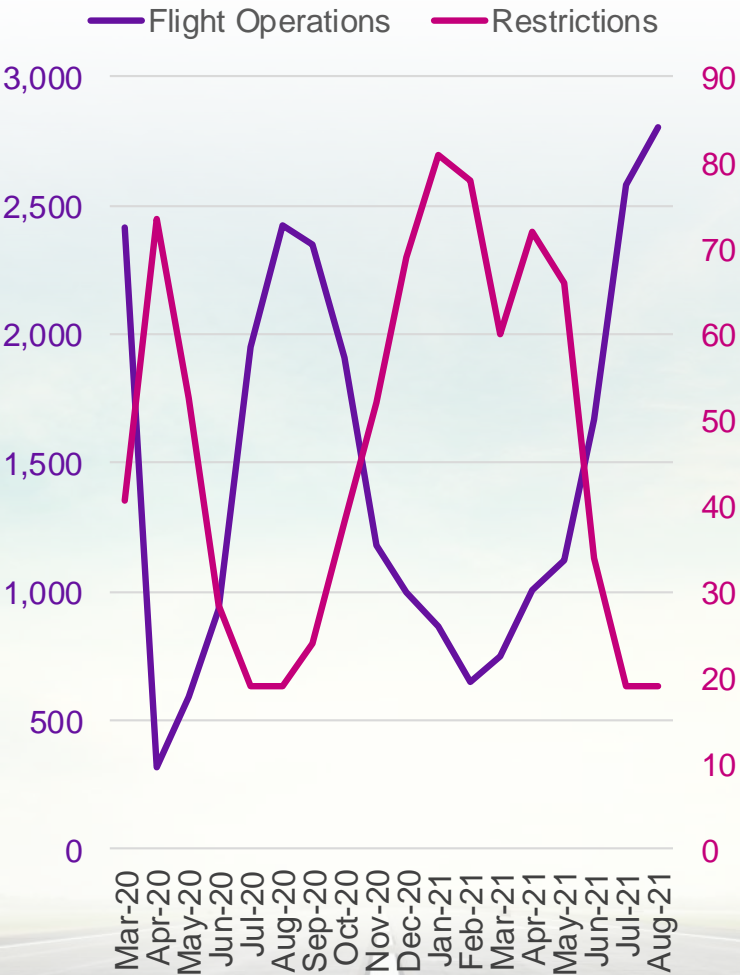


COVID restrictions key to air traffic developments

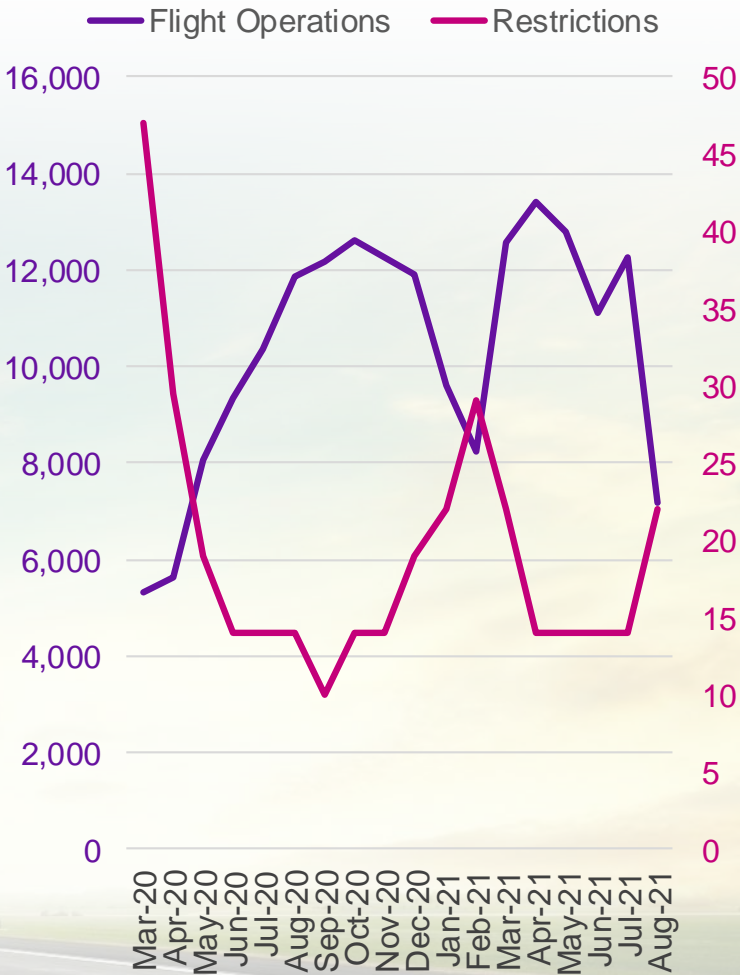
United States



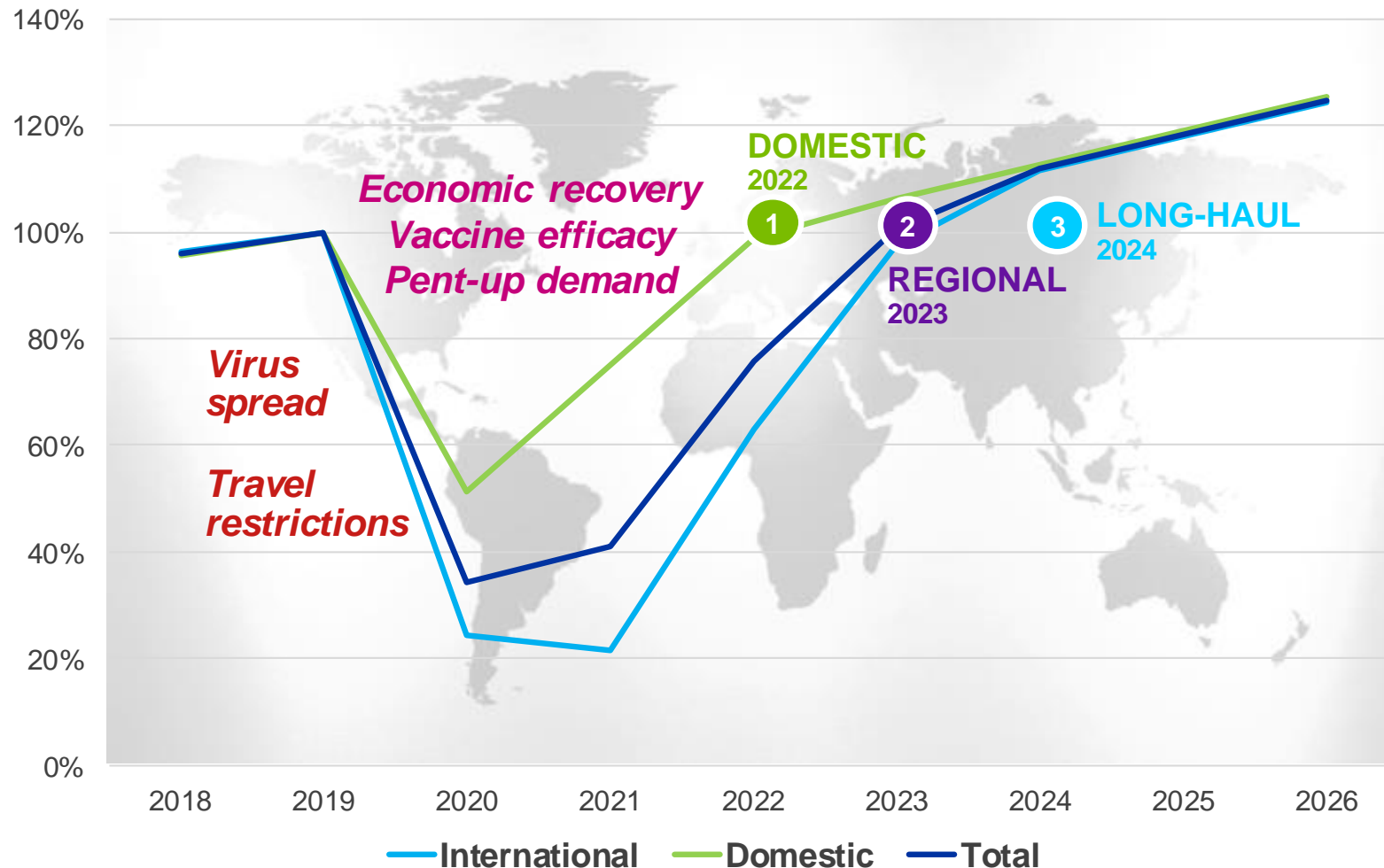
Germany



China



Multi-speed recovery assumptions largely unchanged from CMO 2020



Domestic markets lead
LCCs recover fastest
Single-aisle resilience
Hubs support long-haul recovery
2023-2024 return to 2019 traffic

Commercial aviation market outlook trends

Replacement

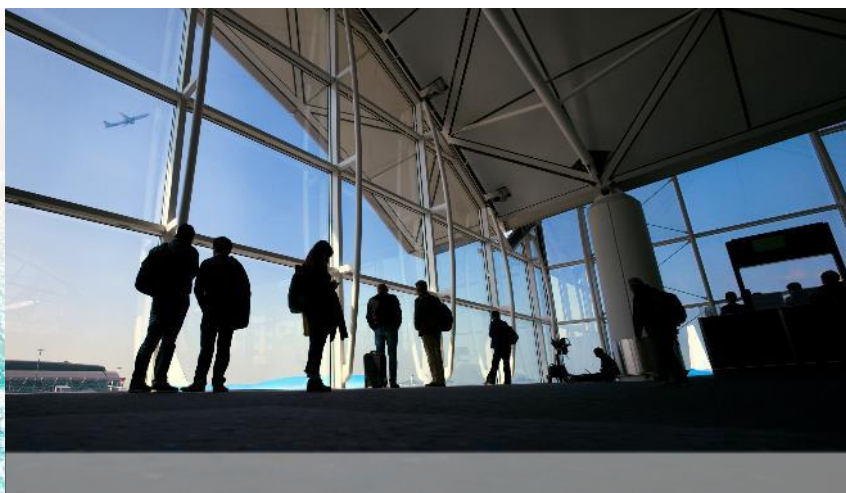


Fleet renewal

Sustainability

Efficiency

Resilience



Travel demand

Market diversity

Innovation

Versatility

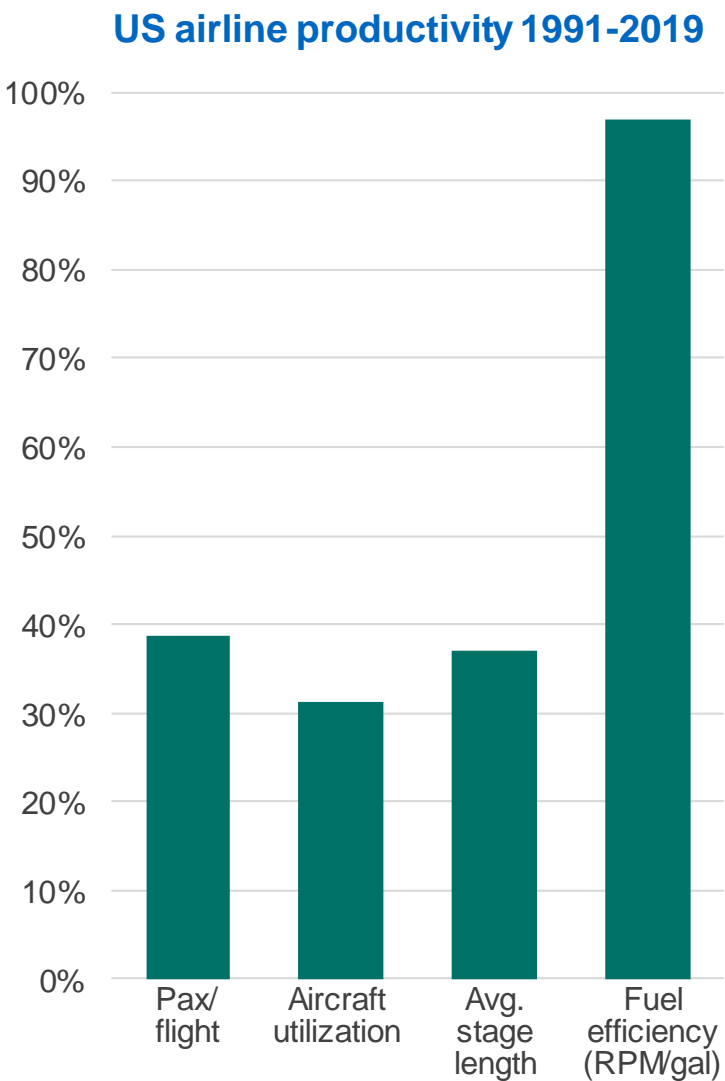
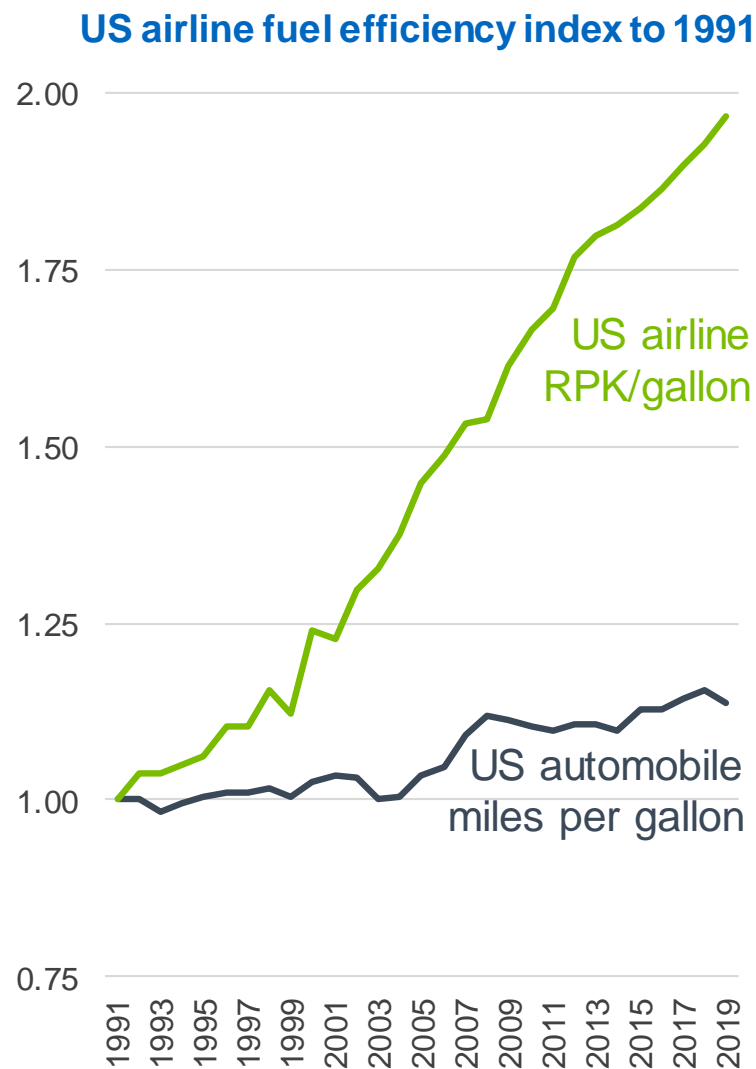


Capability

Network flexibility

Commonality

Commercial aviation relentless drive for efficiency



SOURCE: US DOT Bureau of Transportation Statistics (BTS)



Retirements tracking prior downturn trends

Announced
1,500+

Not flying
4,000-5,000

Formally retired
~450



Fleet renewal provides significant cost savings & environmental benefits;
3,000+ aircraft ready for near-term replacement

Fuel savings

\$9B

per year

Cost savings

\$16B

per year

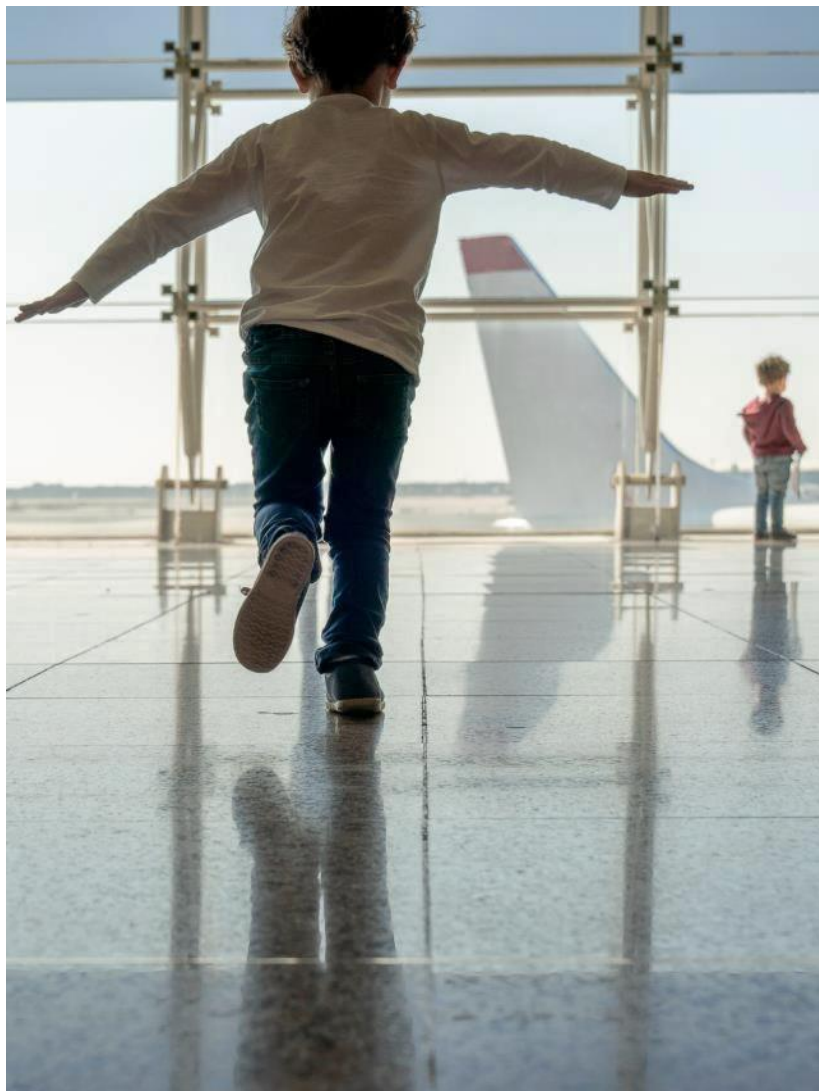
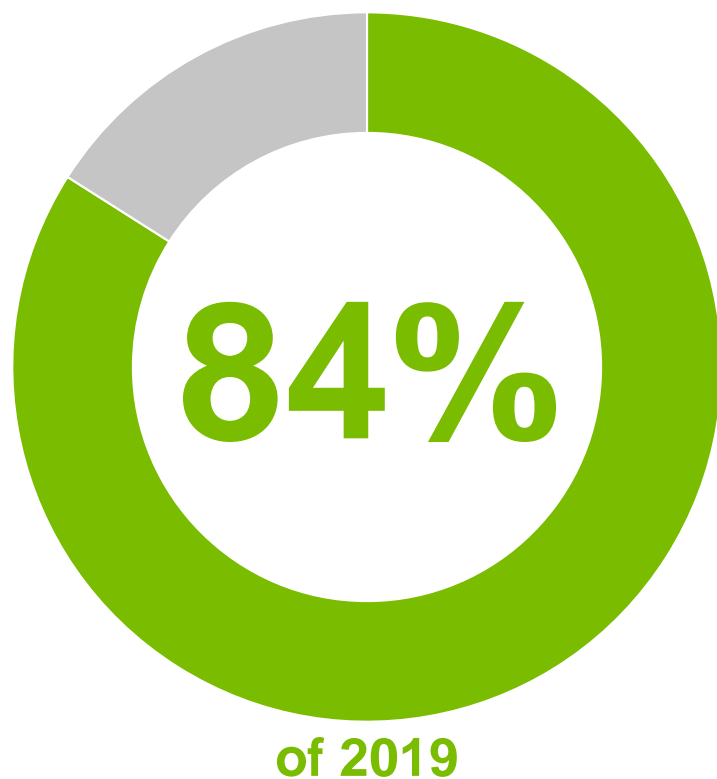
CO₂ reduction

36M tonnes

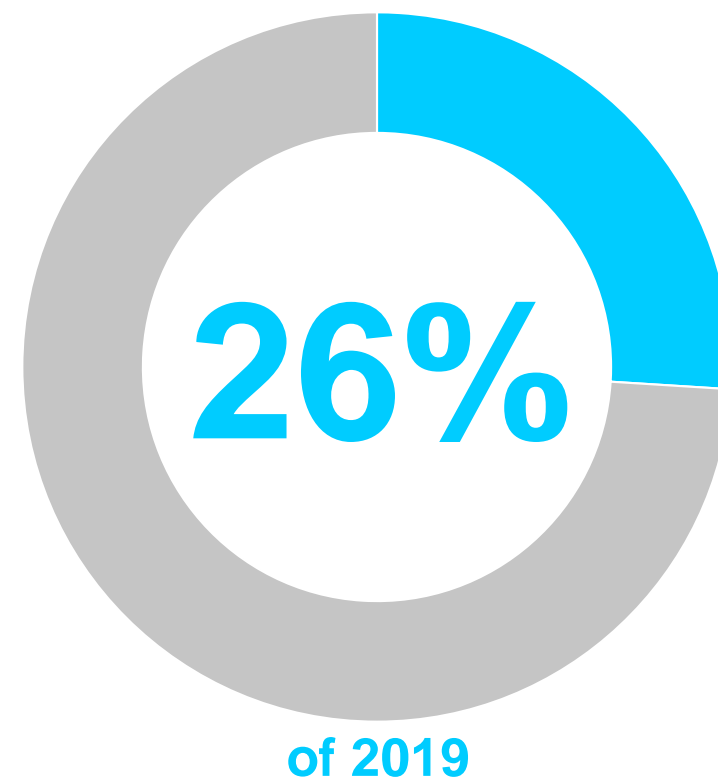
per year

Rapid traffic recovery in markets where travel restrictions able to ease

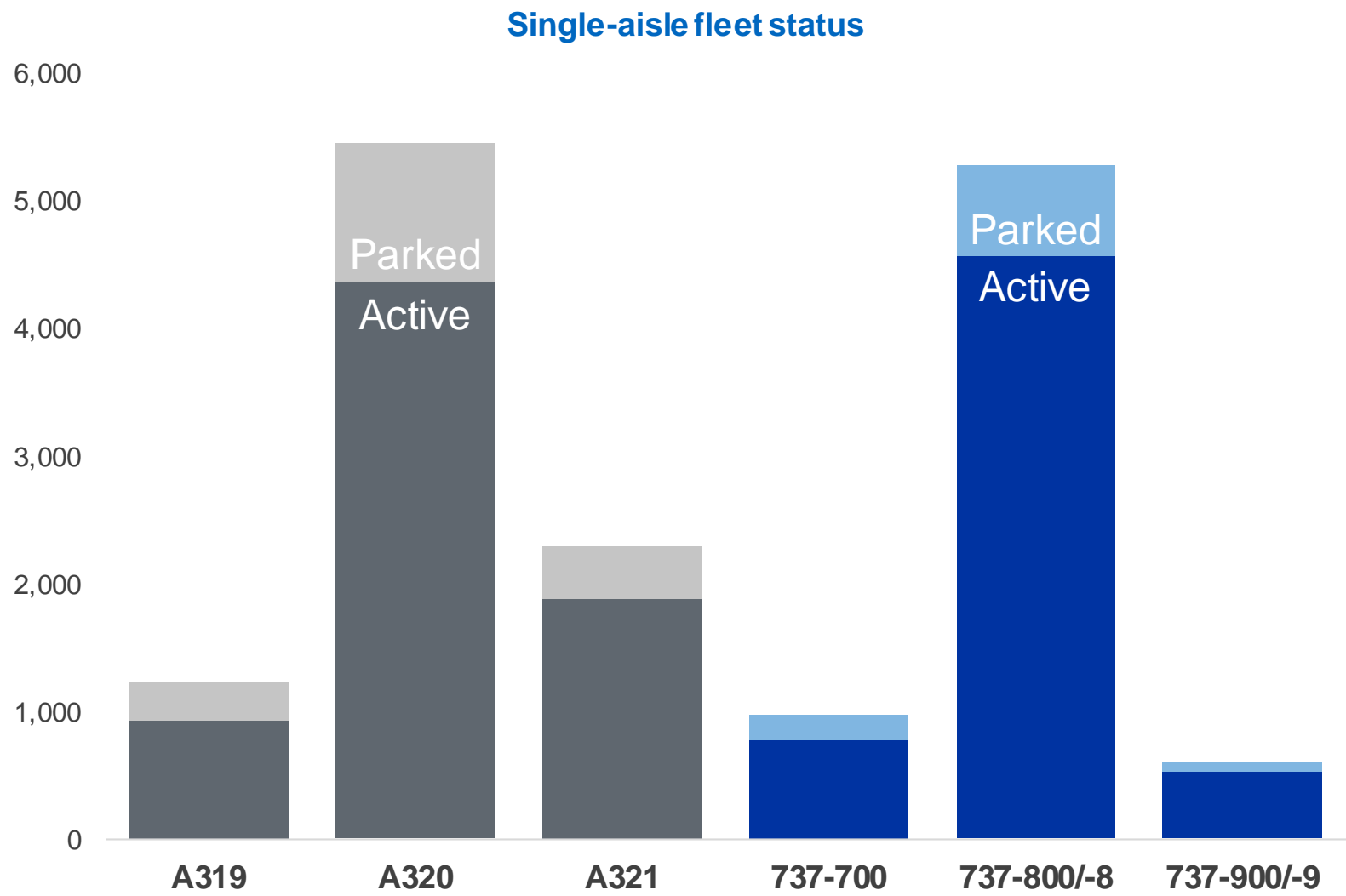
July Domestic



July International



Versatile fleets remain most active



SOURCE: Cirium

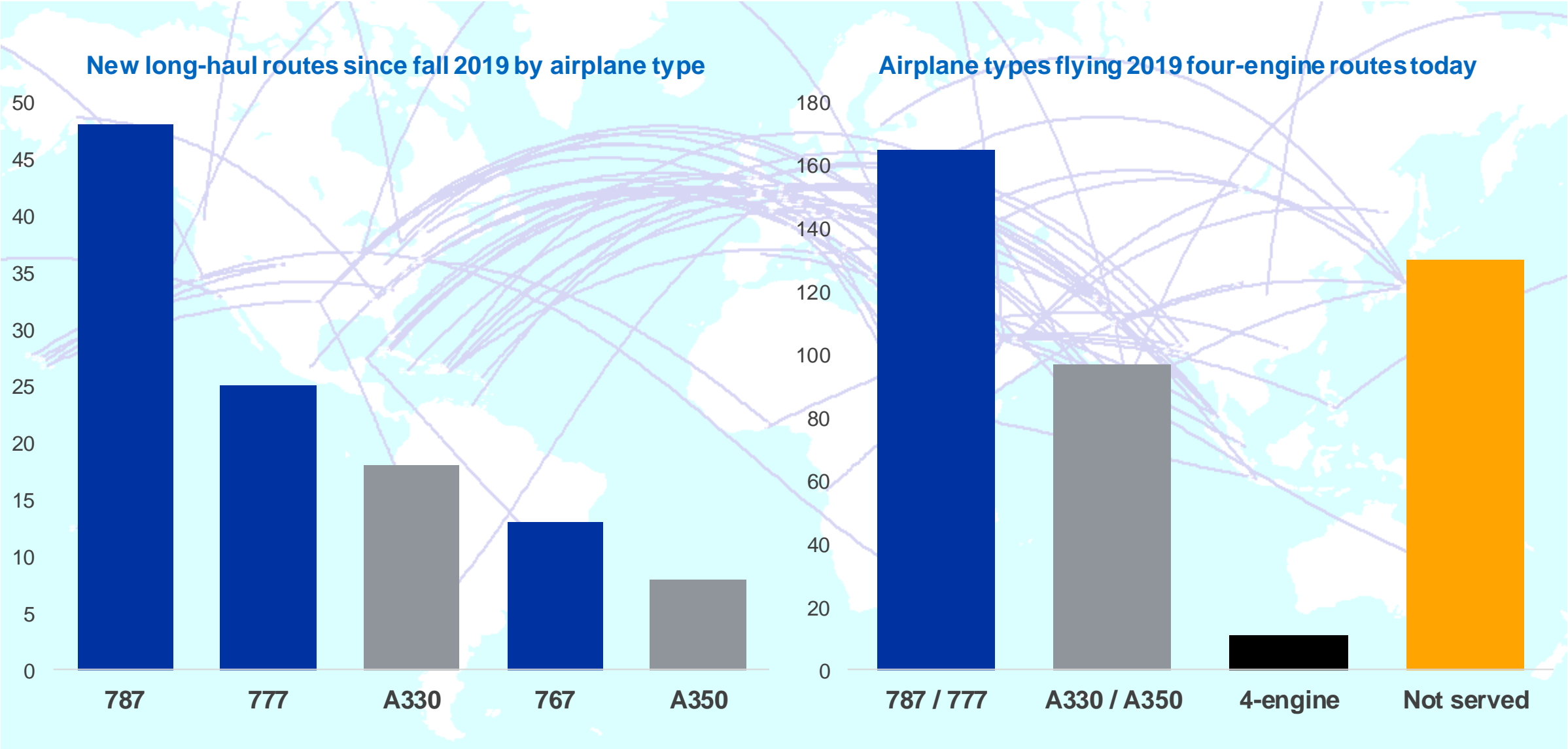


Mid-size single-aisles

70%
of active fleet

~90%
active

Versatile twins drive dynamic long-haul networks



SOURCE: Cirium/Diio

Why we travel

Family & friends



Exploration



Customer connections



20-year forecast: long-term fundamentals remain intact

Growth rates from 2019 base year



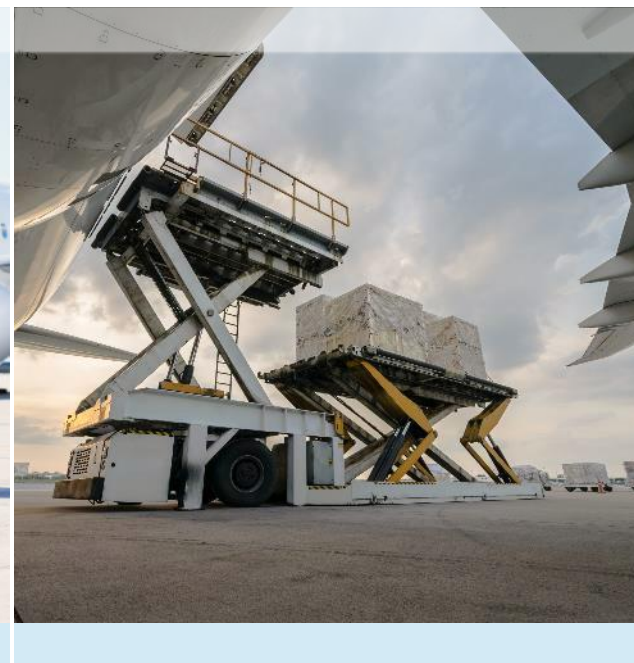
World economy
(GDP)

2.7%



Passenger traffic
(RPK)

4.0%



Cargo traffic
(RTK)

4.0%



Fleet growth
(jets)

3.1%

First decade delivery impact, long-term resilience led by single-aisles

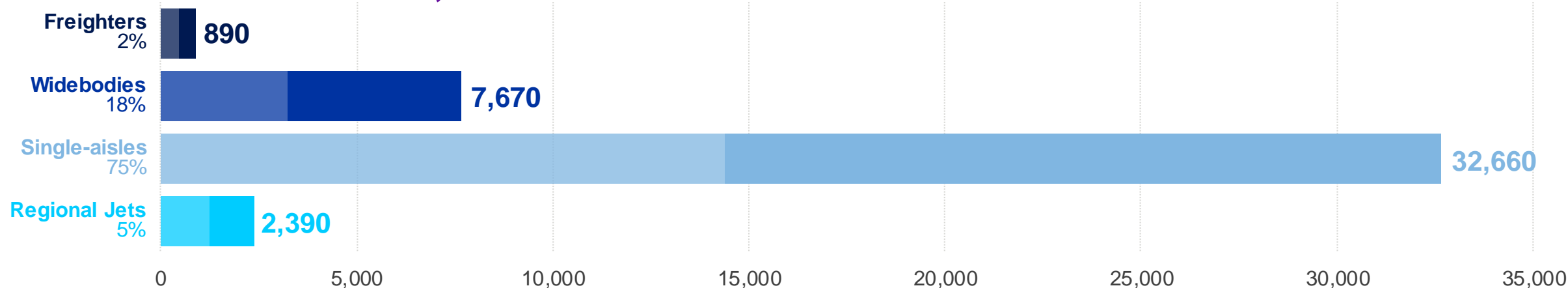


New airplane deliveries 2021-2030:

19,330

New airplane deliveries 2021-2040:

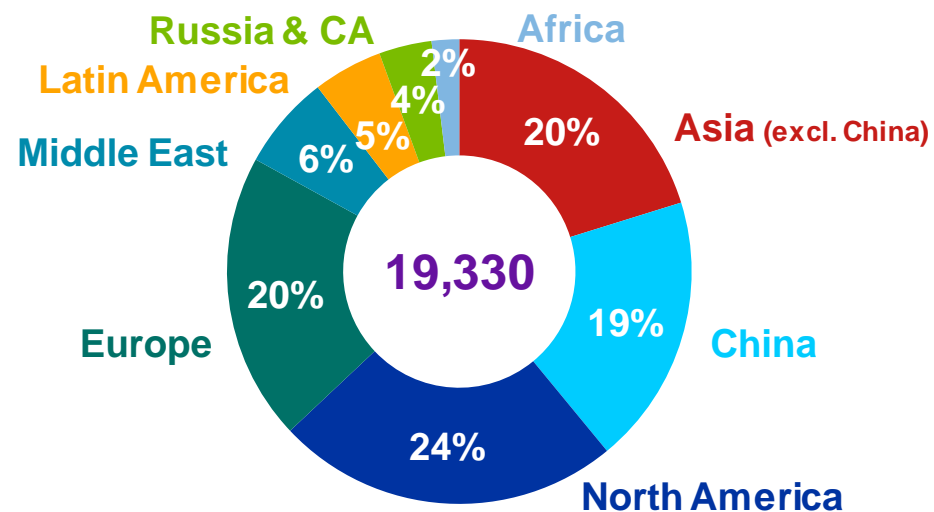
43,610



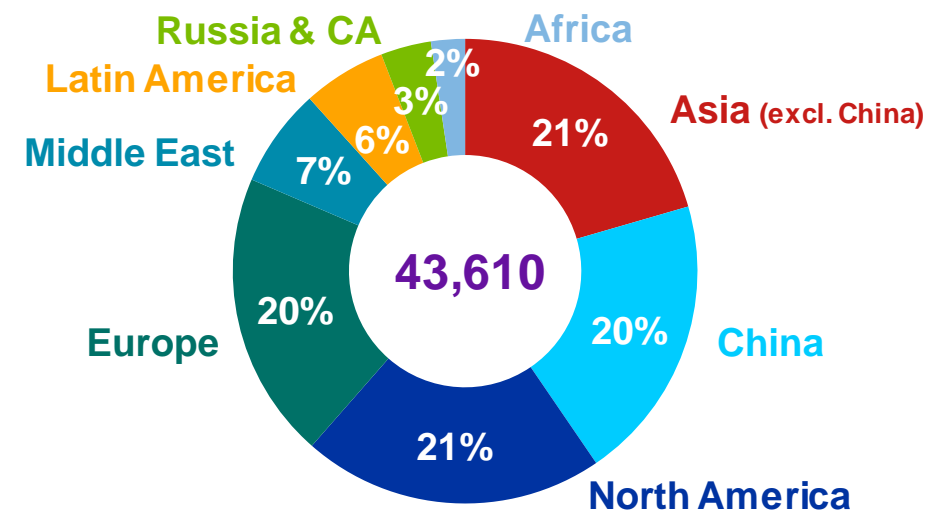
Regionally diverse future airplane demand



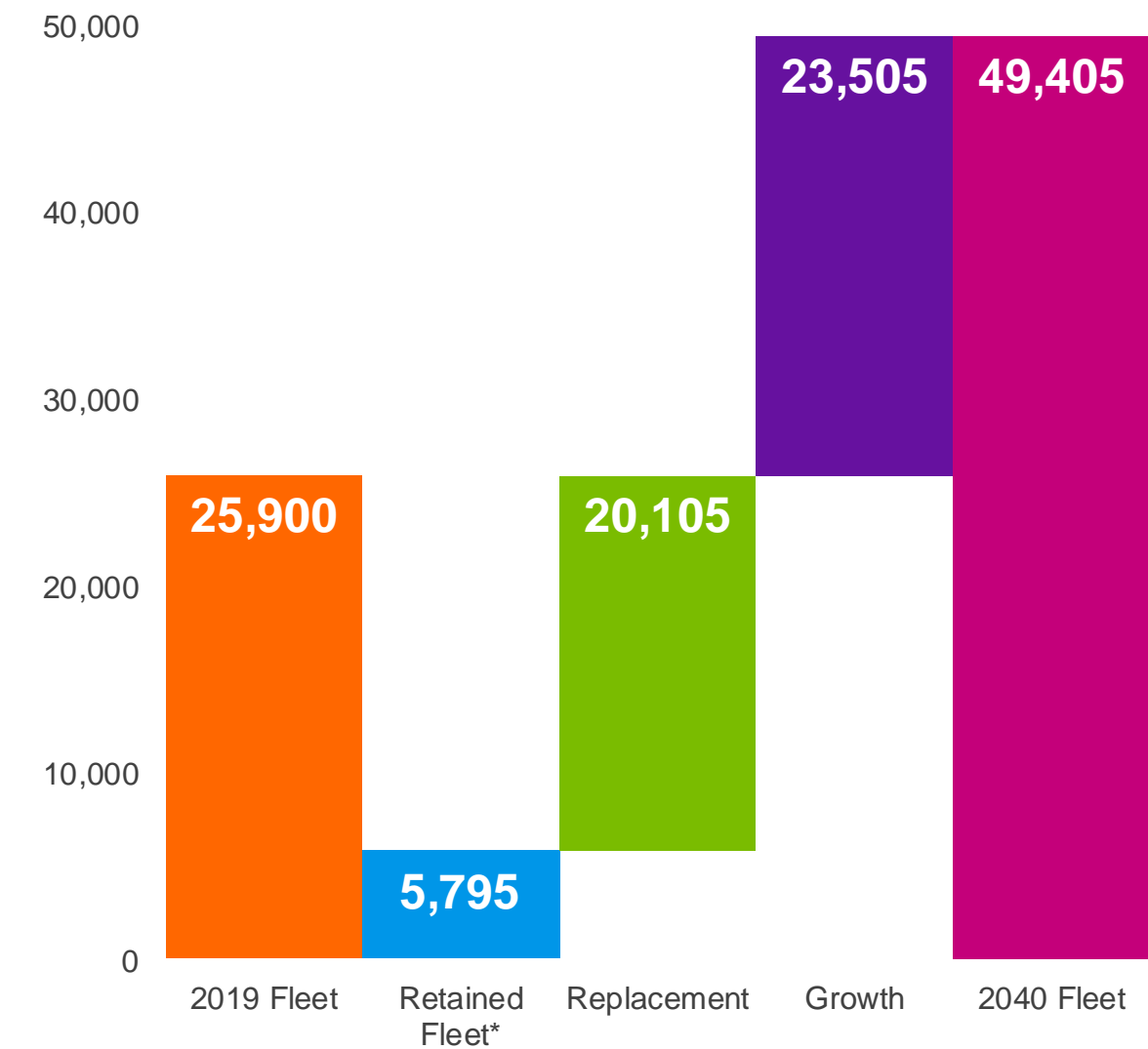
New airplane deliveries by region: **2021-2030**



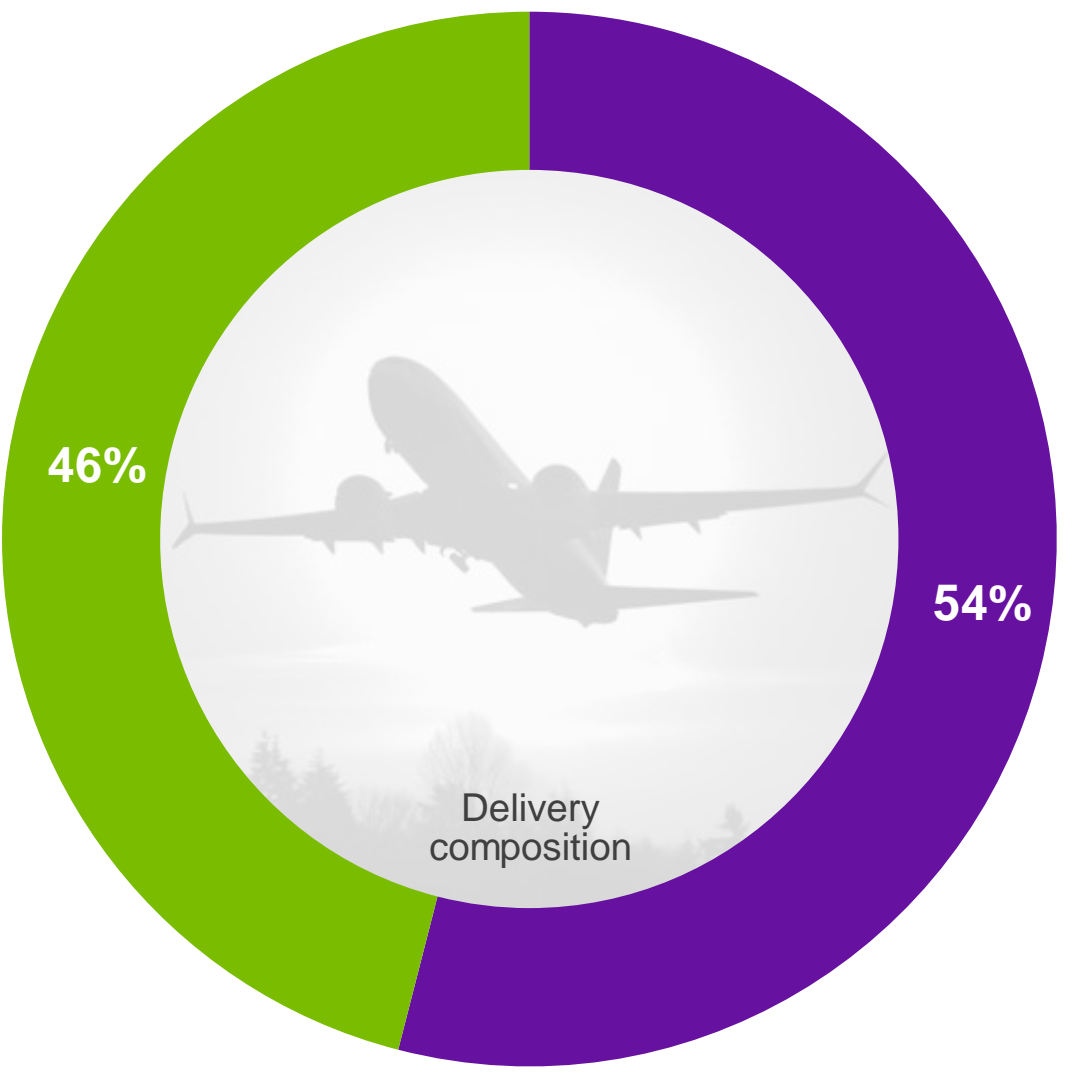
New airplane deliveries by region: **2021-2040**



Delivering sustainable growth, 80% fleet renewal over next 20 years



*Retained fleet includes 2020 deliveries



Air cargo and freighter market outlook trends

Capacity



Passenger recovery

Conversion supply

Freighter value

E-commerce & logistics



Growth

Emerging markets

Business models

Replacement



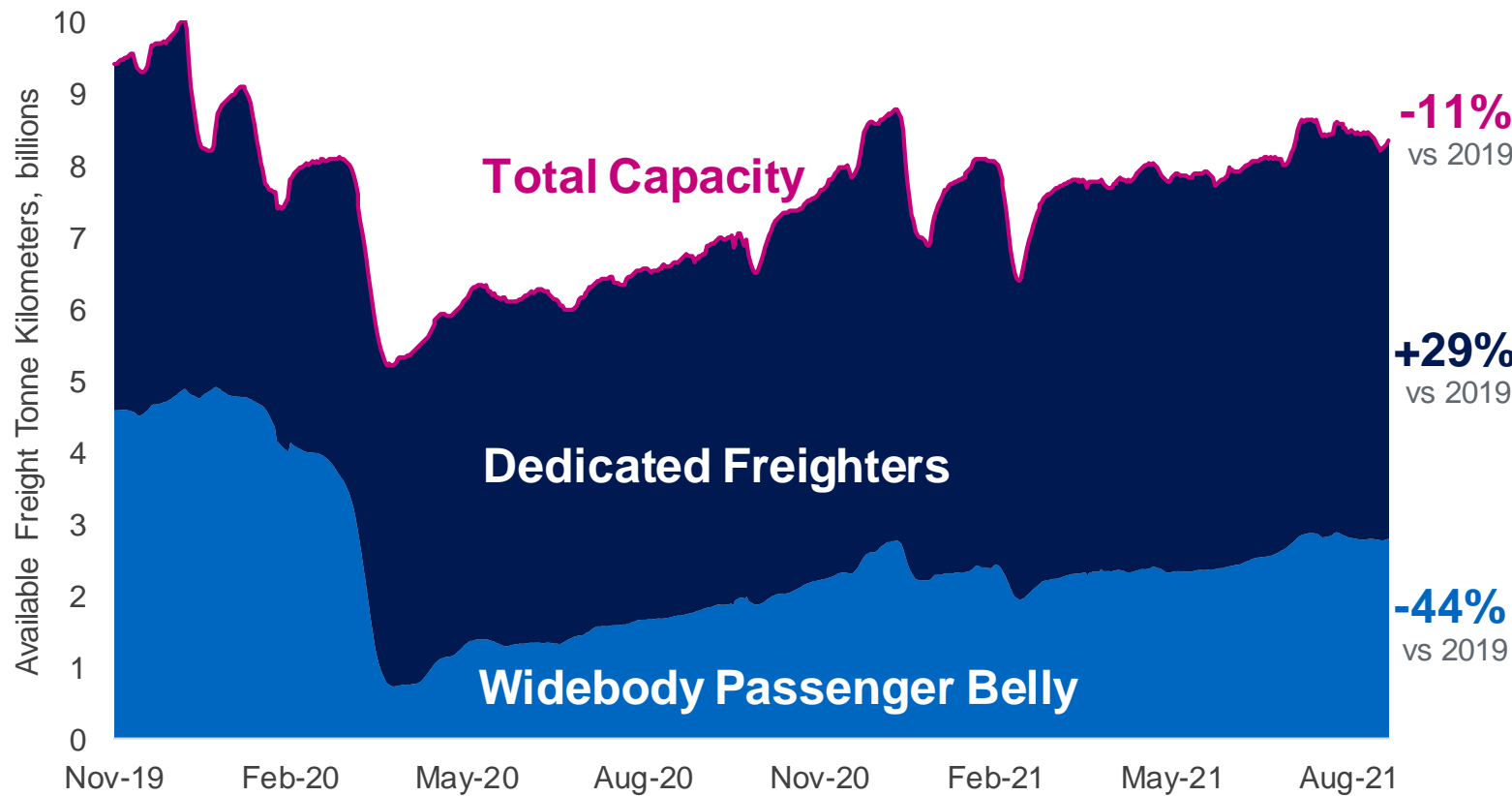
Efficiency

Capability

Sustainability

Long-haul passenger service reductions driving near-term demand for freighter capacity

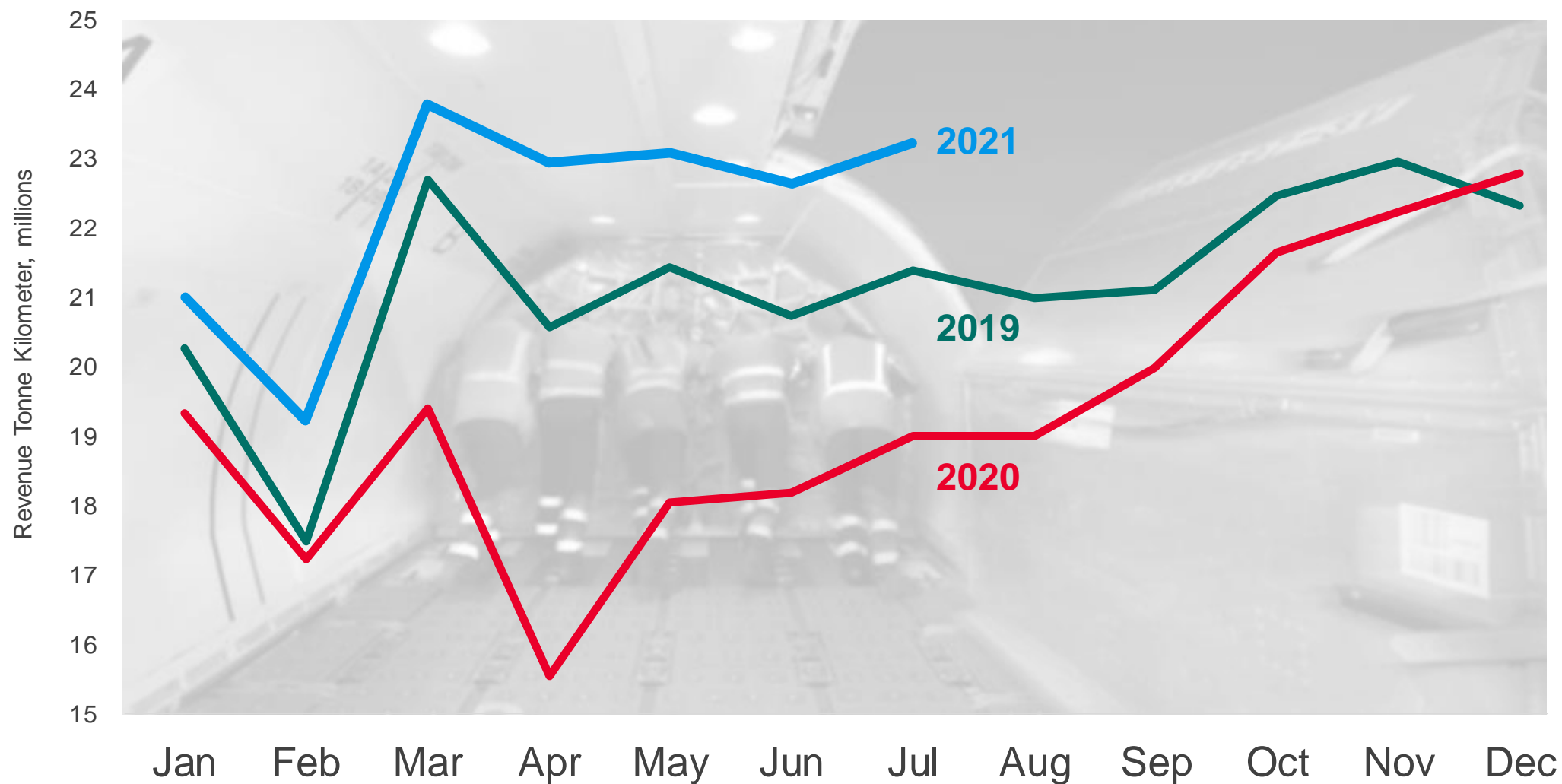
Global air cargo capacity
Moving 7 day total



SOURCES: BR&T-E ADAPT/FlightRadar24, Boeing analysis

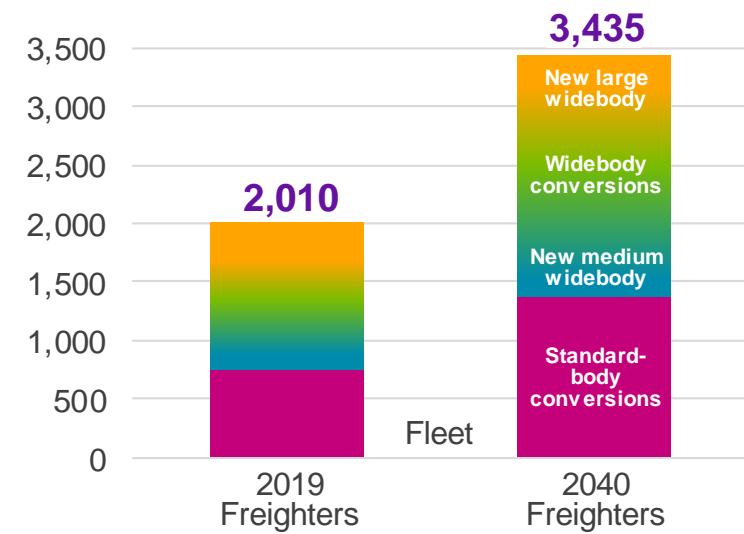
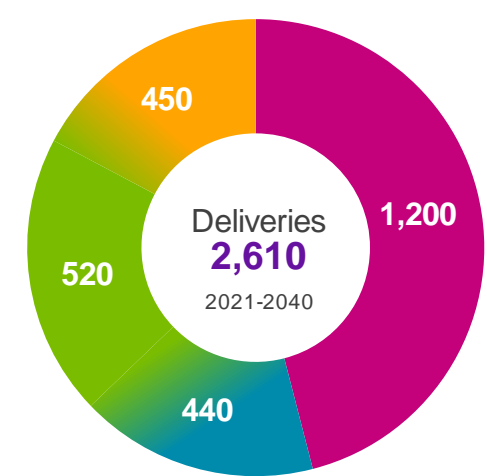


World air cargo traffic above pre-pandemic levels despite capacity loss





Freighter fleet to grow by 70% by 2040



Commercial aviation services market outlook trends

Recovery



Evolution



Transformation



Used parts supply

Freighter conversions

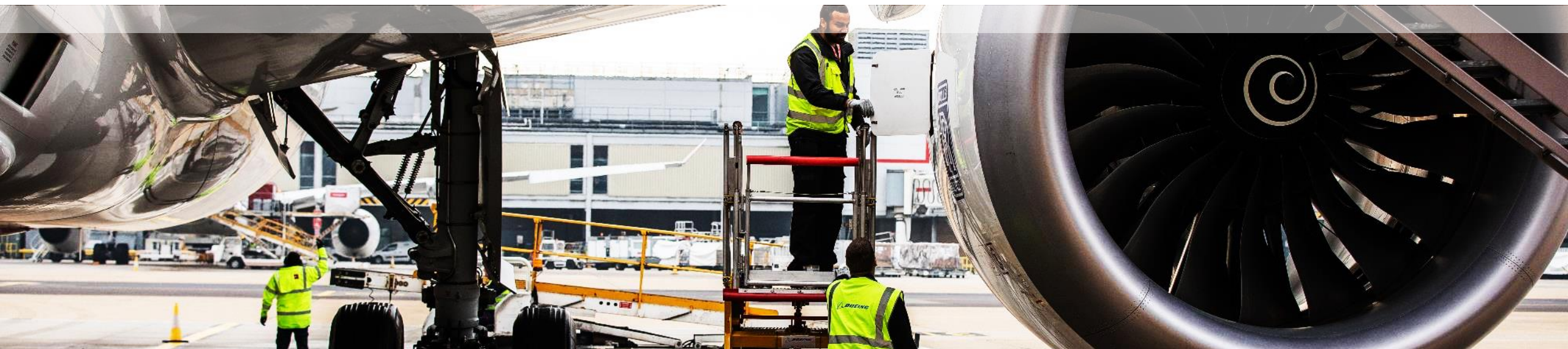
E-enabled ops growth

Fleet renewal & training

Digital enablement

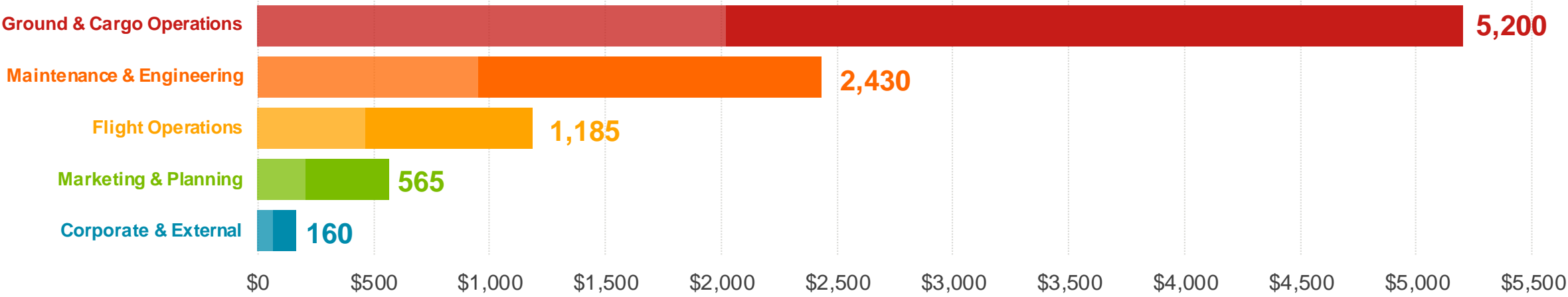
Operations optimization

\$9.5 trillion commercial services market; First decade utilization impact, longer-term transformation



Commercial Aviation Services 2021-2030:
\$3.7T

Commercial Aviation Services 2021-2040:
\$9.5T





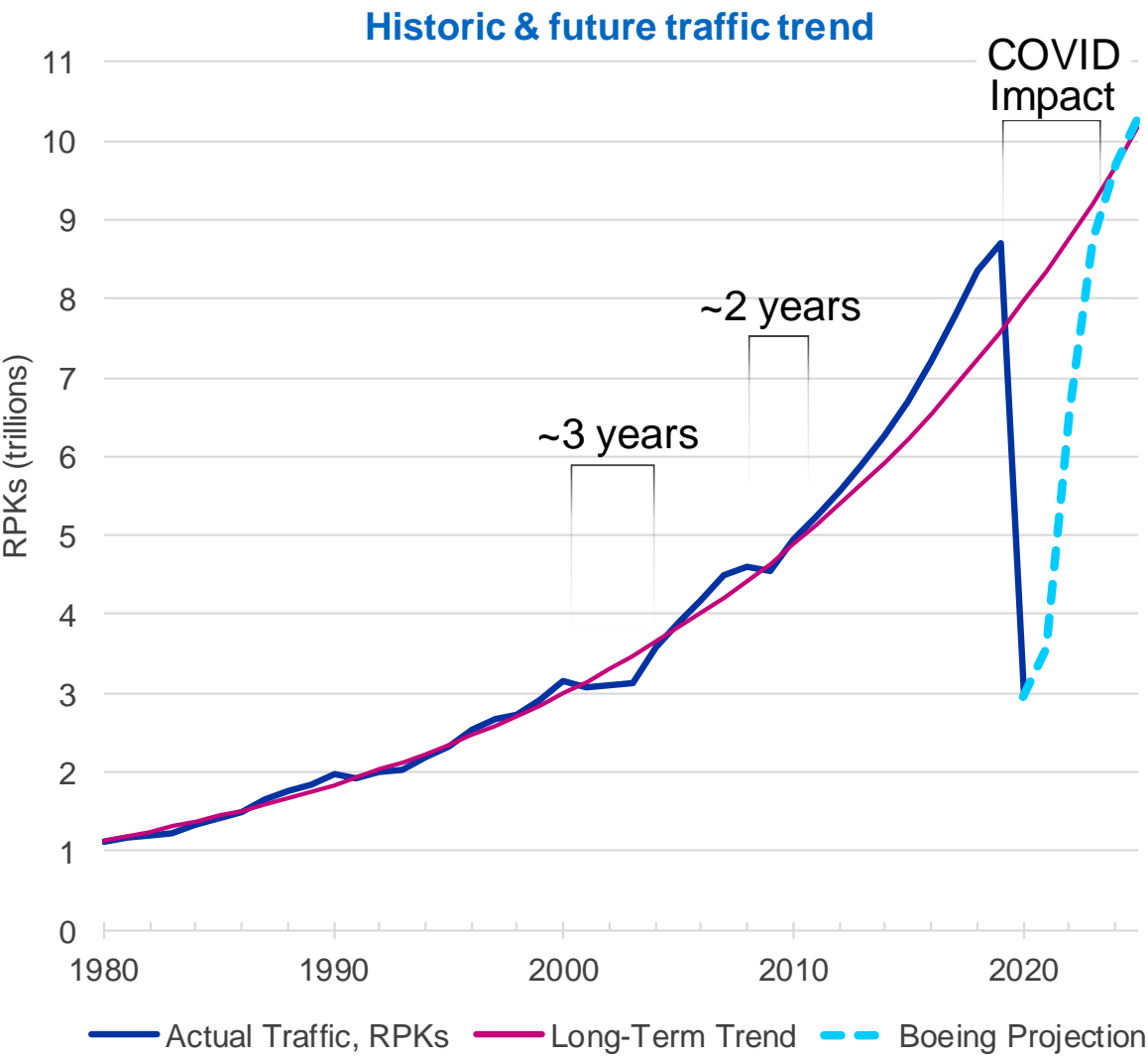
Commercial aviation needs 2.1 million new personnel to meet projected air travel demand

Pilots
612,000

Technicians
626,000

Cabin Crew
886,000

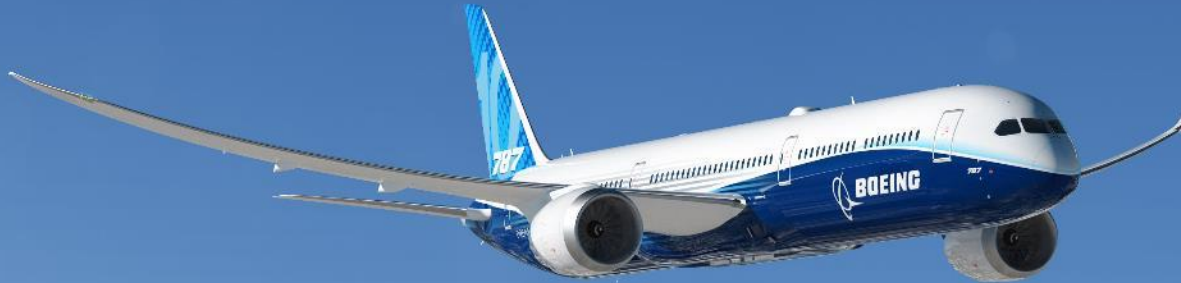
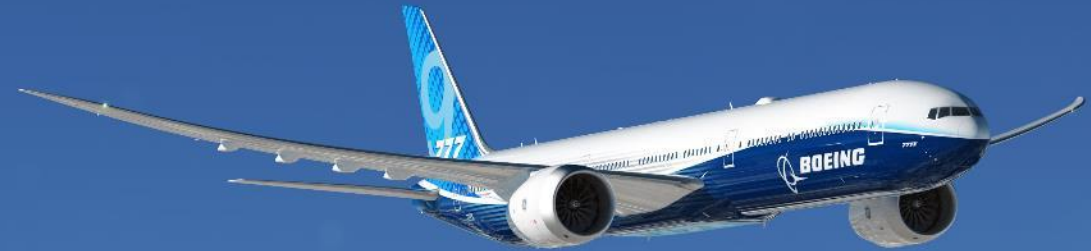
Aviation proven resilient over and over again



RPKs = Revenue Passenger Kilometers
SOURCES: 2000-2020 IATA stats, Boeing analysis



Most versatile family of aircraft



Offering the most
capability & productivity

Designed for efficiency
& sustainability

Delivering versatility
for a dynamic market



Summary

A photograph of an airplane wing, likely a Boeing 737, silhouetted against a bright sunset sky. The sun is low on the horizon, creating a strong orange and yellow glow. The wing's structure, including the leading edge and flaps, is clearly visible in the foreground.

Recovery progress largely as expected

Near-term volatility driven by virus, policy dynamics

Demand fundamentals drive resilience in long-term outlook

Single-aisle leads recovery; robust freighter demand

Commercial aviation services follow global fleet trends

