2025

ACI-NA & ACI World Annual General Assembly, Conference and Exhibition

October 25 - 28, 2025
Toronto, ON

AIRPORTS COUNCIL INTERNATIONAL
NORTH AMERICA | WORLD

2025 Host Airport

Toronto Pearson

2025 Supporting Host Airport

BILLY BISHOP TORONTO CITY AIRPORT

Afternoon Agenda

AIRPORTS COUNCIL INTERNATIONAL
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12:00 PM – 1:15 PM	Networking Lunch
1:15 PM – 2:45 PM	**Rate-making Methodologies: North America vs. Rest of the World**
2:45 PM – 3:15 PM	Afternoon Networking Break
3:15 PM – 4:05 PM	**Summary of the ACI-NA Annual Financial Benchmarking Survey for FY2024 Results**
4:05 PM – 4:15 PM	Closing Remarks
4:15 PM – 5:00 PM	**Finance Committee Steering Group Meeting** (Steering Group members only)

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Rate-making Methodologies: North America vs. Rest of the World

Kathleen Sharman
EVP & CFO
Greater Orlando Aviation Authority

Slava Cheglatonyev
Director, Economic Policy & Sustainability
ACI World

Sheri Ernico
Principal
Jacobs

John Peellegoda
Senior Vice President Strategy and Chief Financial Officer
Billy Bishop Toronto City Airport

Rate-making Methodologies: U.S. vs. Rest of the World

CPE Code (Start):

FCI

Rate-making Methodologies: North America vs. Rest of the World

2025 ACI-NA & ACI World Annual General Assembly, Conference and Exhibition

Finance Committee Workshop

25 October 2025

Presented by:
Slava CHEGLATONYEV
Senior Director, Economic Policy & Airport Business
Airport Council International (ACI) World

ACI WORLD
AIRPORTS COUNCIL INTERNATIONAL

Reference materials

ACI World is the Source of Credible Data

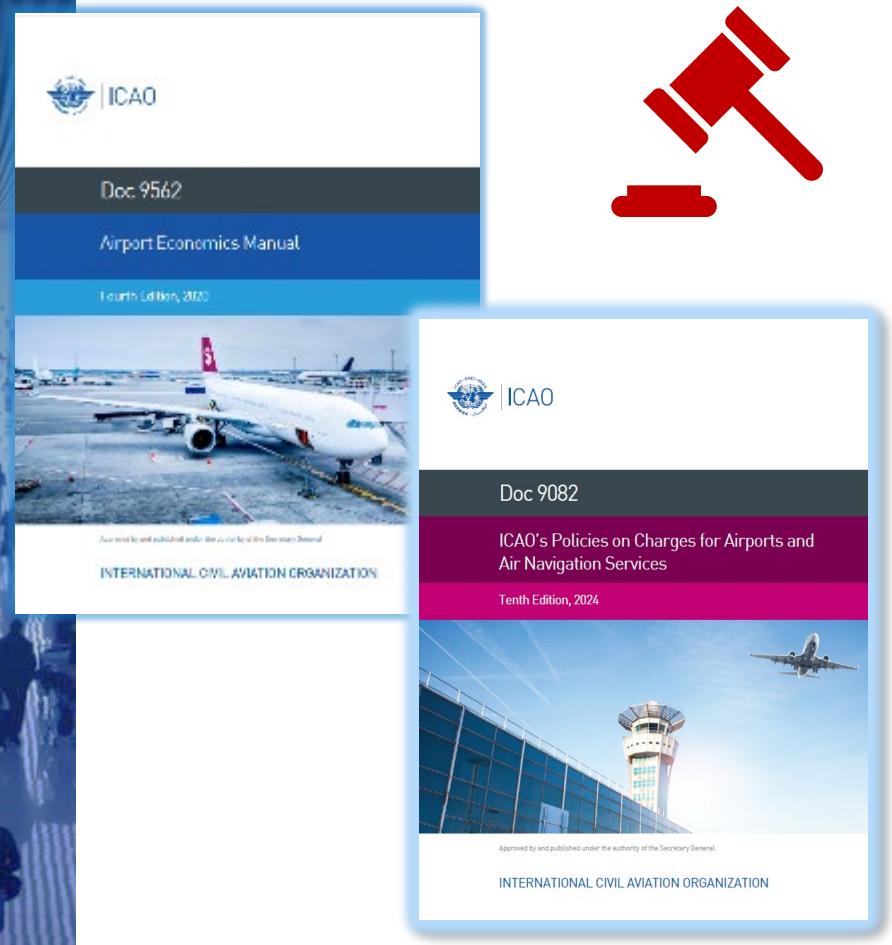
The ACI WORLD Airport Economics Report

1,069 airports Together, these airports handled **over 7 billion passengers**, or about **82.7% of worldwide passenger traffic** in 2019.

1. Why ICAO Matters in Global Airport Rate-Making Frameworks

ICAO's Policies on Charges – Doc 9082

Global policy foundations for airport pricing and economic oversight



- ✓ The policies are not binding, but **States are committed to follow them and conform to them – Typically included in national legislation.**
- ✓ **Economic oversight/regulation:** The function by which a State supervises commercial and operational practices of an airport.
- ✓ **Economic regulation focuses largely on the prices charged by the airport operator**, but can also include quality of service and market access. Economic regulation excludes other types of regulation, incl. safety, environment, labor, etc.
- ✓ **Economic oversight** may take several different forms, **from a light-handed approach** (such as the application of competition law) **to a more robust approach** (such as direct regulatory interventions in the economic decisions of airports)

Source: 1) Doc 9082, ICAO's Policies on Charges for Airports and Air Navigation Services; 2024
2) Doc 9562, Airport Economics Manual, 4th Edition, 2020

ICAO: Defining Airport Charges

New in the Doc 9082 10th edition: definitions of ICAO's key charging principles

An airport charge is a levy that is designed and applied specifically to recover the costs of providing facilities and civil aviation services

Non-Discrimination

Non-discrimination requires the application of uniform conditions, to all users from any Contracting State, for the use of equivalent airport or air navigation services. In particular, charges must not discriminate between foreign and domestic users, or between two or more foreign users, engaged in similar operations.

Cost-Relatedness

Charges should reflect the cost of facilities and services provided to the users. The allocation of costs should be determined on an equitable basis, so that no users shall be burdened with costs not properly allocable to them according to sound accounting principles.

Transparency

Sufficient, accurate and appropriate information should be exchanged between the service providers and users in a timely and efficient manner with the objective of identifying the connection between the provision of facilities and services and charges, to enable users to understand, among others, charging methodologies and their administration.

Consultation with Users

Service providers and users should participate in constructive engagement before the introduction of new charges or changes thereto. Such engagement should include, but is not limited to, discussions on performance, capacity development and investment plans. Transparent and relevant information relating to the proposed changes should be provided, and the views of users should be given proper consideration during the process.

Source: Doc 9082, ICAO's Policies on Charges for Airports and Air Navigation Services; 2024

Types of Airport Charges (ICAO Definitions)

Airport charges should reflect the cost of facilities and services provided

Landing Charges

Charges related to the provision and maintenance of runways and associated airside facilities, typically based on the aircraft weight.

Parking and Hangar Charges

Charges for the use of aircraft parking stands or hangars, often based on the duration of parking and area occupied.

Passenger Service Charges (PSC)

Charges for the use of passenger-related airport infrastructure, such as terminals, boarding bridges, and other handling facilities.

Security Charges

Charges levied to recover the cost of civil aviation security services provided in accordance with ICAO Annex 17.

Noise-Related Charges

Charges applied to discourage the use of noisy aircraft or promote operations that reduce noise impact.

Emission Charges

Charges based on the emissions produced by aircraft, usually related to local air quality concerns.

Fuel Throughput Charges

Charges imposed on fuel providers for the right to supply fuel at the airport, often called throughput or concession fees.

Rental of Premises and Concessions

Revenues earned from leasing terminal areas or retail space, or through agreements with commercial service providers.

Source: ICAO Doc 9082 – Policies on Charges for Airports and Air Navigation Services | ICAO Doc 9562 – Airport Economics Manual

ICAO Doc 9082 (New 10th Ed.) – Key Updates

Adapting airport pricing frameworks for a changing industry

Theme / Area	What's New in 10th Edition (with section references)
Flexibility in Pricing	Stronger endorsement of **flexible and responsive airport charges**, including demand-based or time-based pricing (Section **2.1.2** and **3.1.3**).
Dynamic Pricing	New recognition of **dynamic and demand-responsive pricing** as consistent with ICAO principles (Section **3.1.4**).
Modulation & Differentiation	Broader support for **modulated charges** (noise, emissions, time-of-day, congestion) if objective, transparent, and cost-related (Sections **2.1.1–2.1.4**).
Environmental Incentives	Clearer acceptance of **rebates, discounts, or incentives** for low-noise or low-emission aircraft (Sections **2.2.1–2.3.2**).
Crisis / Resilience Considerations	New emphasis on **resilience** and flexibility in pricing during shocks or traffic disruptions (Section **1.4** and **3.2**).

Source: Doc 9082, ICAO's Policies on Charges for Airports and Air Navigation Services; 2024

Summary of Regulatory Tills

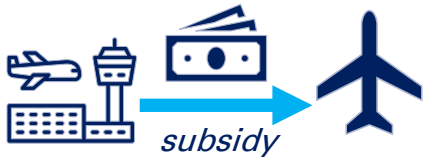
How regulatory models influence airport pricing and investment

Single Till / Residual

Cost of providing **aero + non-aero activities** – *subtract* Non-aeronautical revenues

=

Cost basis for aeronautical charges



Airlines lobby for this approach

Hybrid Till

Cost of providing **aero activities only** – *subtract* % Non-aeronautical revenues

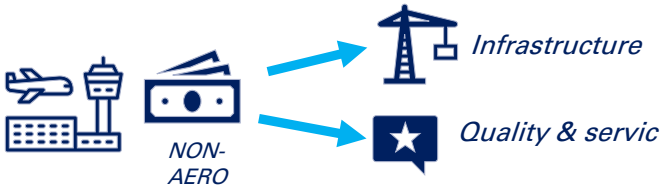
=

Cost basis for aeronautical charges

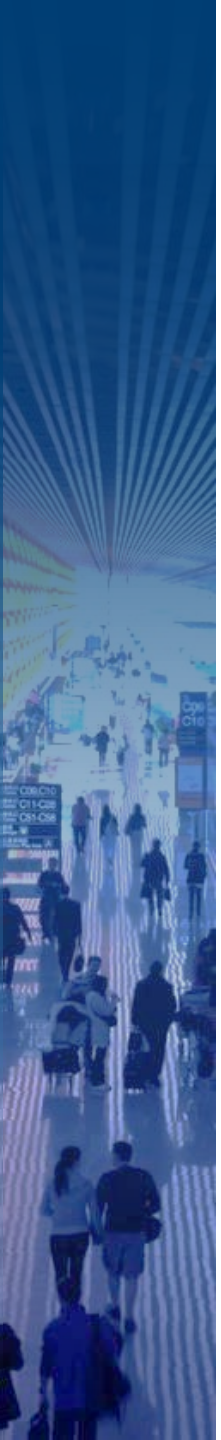
Dual Till / Compensatory

Cost of providing **aero activities only** → Cost basis for aeronautical charges

Costs and income from commercial (non-aero) activities → **Net revenue for the airport operator**



Airports lobby for this approach



Airport Rate-Making Methodologies by Region

Comparing global approaches to airport charging frameworks and regulatory practices

Region	Typical Till Model (ACI Data)	Regulatory Context & Practices	Key Characteristics
North America (U.S. & Canada)	**Hybrid Till dominant (51.5% of passenger traffic),** Single Till (30.9%), Dual Till (17.6%)	FAA and Transport Canada require airports to be **self-sustaining**; revenues must be used for airport purposes only.	Mix of **residual** and **compensatory** models. No formal economic regulation but extensive airline consultation. Historically Single Till, but **Hybrid frameworks are now prevalent** at large U.S. hubs.
Europe	**Dual Till dominant (54%),** Hybrid (28%), Single (18%)	Subject to **EU Airport Charges Directive (2009/12/EC)**; national regulators oversee charges.	Airports generally **commercialized/privatized**. Aeronautical and non-aeronautical revenues treated separately. Examples: Dual (UK), Single (Spain), Hybrid (France, Germany).
Latin America & Caribbean (LAC)	**Single Till dominant (45%)**, Dual (37%), Hybrid (19%)	Airports largely **privatized or operated via PPPs** under concession frameworks with defined returns.	Regulatory bodies cap or approve charges; **commercial revenues excluded** from aeronautical base. Emphasis on concession performance.
Africa	**Dual Till (52%),** Single Till (44%), Hybrid (3%)	Airports mostly **state-owned** with limited commercial autonomy.	Revenues consolidated under airport authority; **aeronautical and commercial income pooled** for operations and infrastructure.
Asia-Pacific & Middle East (APAC-MEA)	**Mixed models:** Dual (36%), Hybrid (35%), Single (29%)	Highly diverse regulatory regimes. Australia & India — Dual; Singapore & Hong Kong — Hybrid/Single; Gulf — Commercial/Hybrid.	Strong **commercialization and privatization** trends; regulators balance cost recovery, competitiveness, and investment incentives.

Source: ACI World Airport Economics Database

ICAO Commercial Agreements (Doc 9562)

High-level definition of the term "commercial agreements" between Airports and Airlines

Commercial agreements are legally binding arrangements to formalize a business relationship between an airport operator and one or more aircraft operators. This type of agreement creates rights and obligations between the signatories and ensures accountability and clarity in the provision of services by defining the nature, scope, duration, and price of those services.

Use of commercial agreements could serve to promote traffic growth and optimize service standards while managing risks among the Parties to the agreement. *While* ***commercial agreements may yield operational and efficiency benefits*** *to the signatories of the agreements, there is a risk that they could be anti-competitive and not compliant with the provisions of Doc 9082.* ***As commercial agreements are private*** *and affect all airport users, not just the Parties, it is not always clear whether they comply with the provisions of Doc 9082. The particular pros and cons of each individual agreement are likely to vary, and therefore, when evaluating such agreements, consideration should be given not only to how the ICAO policies on charges apply in relation to the agreement itself, but also to how the agreement impacts airport users as a whole.*

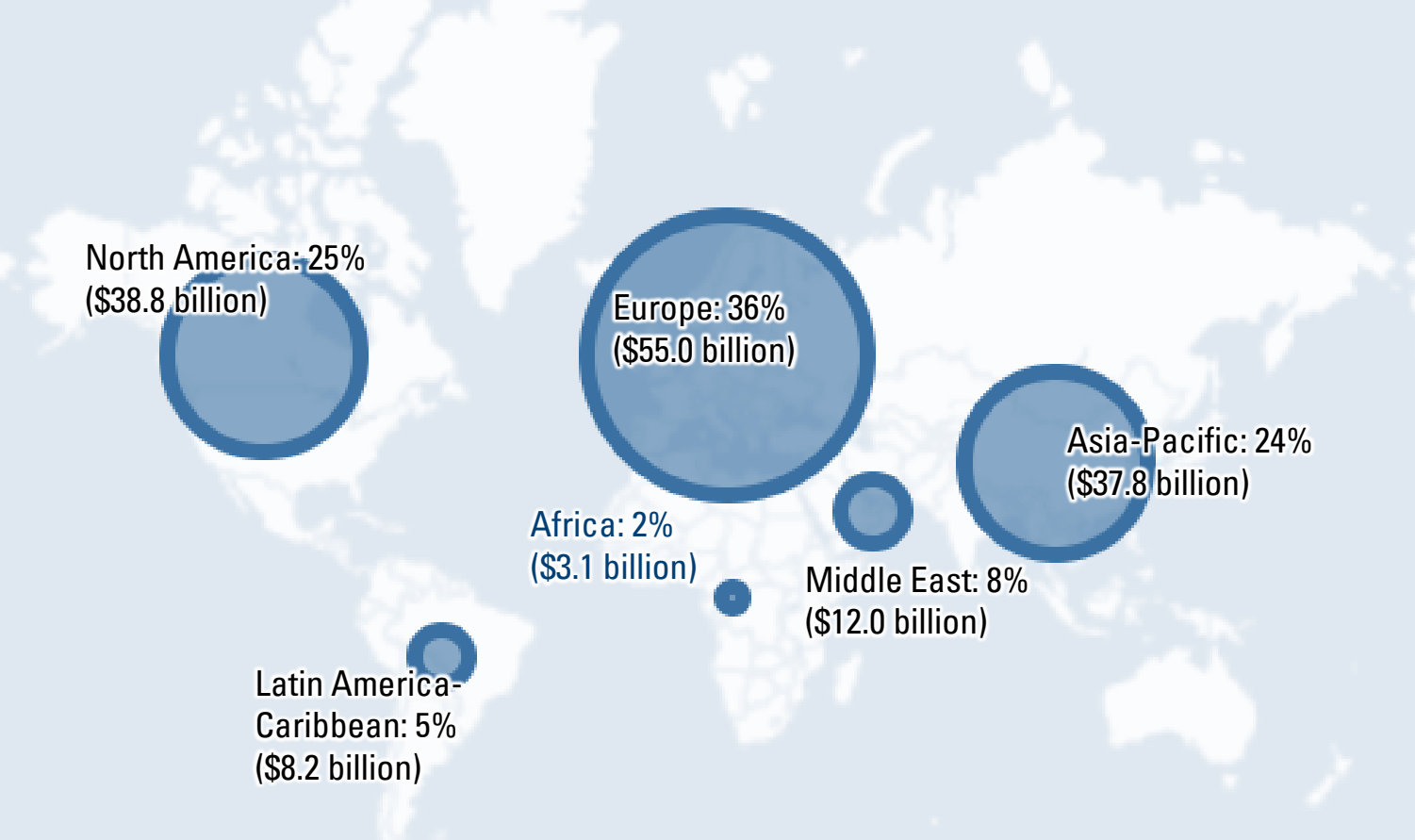
In the event that States choose to permit commercial agreements, these agreements should comply with the provisions of Doc 9082, consistent with the form of economic oversight adopted by the State. States should ensure that these commercial agreements are disclosable to, and subject to the oversight of, the regulator or the entity responsible for economic oversight. Guidance related to economic oversight of airports can be found in Doc 9562, chapter 1, section C, paragraphs 1.24 to 1.59."

Source: ICAO, AEP–ANSEP/10 Report, Montréal, 4–6 March 2025

2. How Airports Generate Revenue?

Distribution of global airport revenues for 2024*

North America generates 25% of global airport revenues



- ✓ **Europe, North America, and Asia-Pacific collectively contribute 83%** of global airport revenues, highlighting the dominance of developed markets
- ✓ **Emerging markets** such as the Middle East, LAC, and Africa represent smaller shares but **show potential for growth**

* - Preliminary figures

Source: ACI World Airport Economics Database

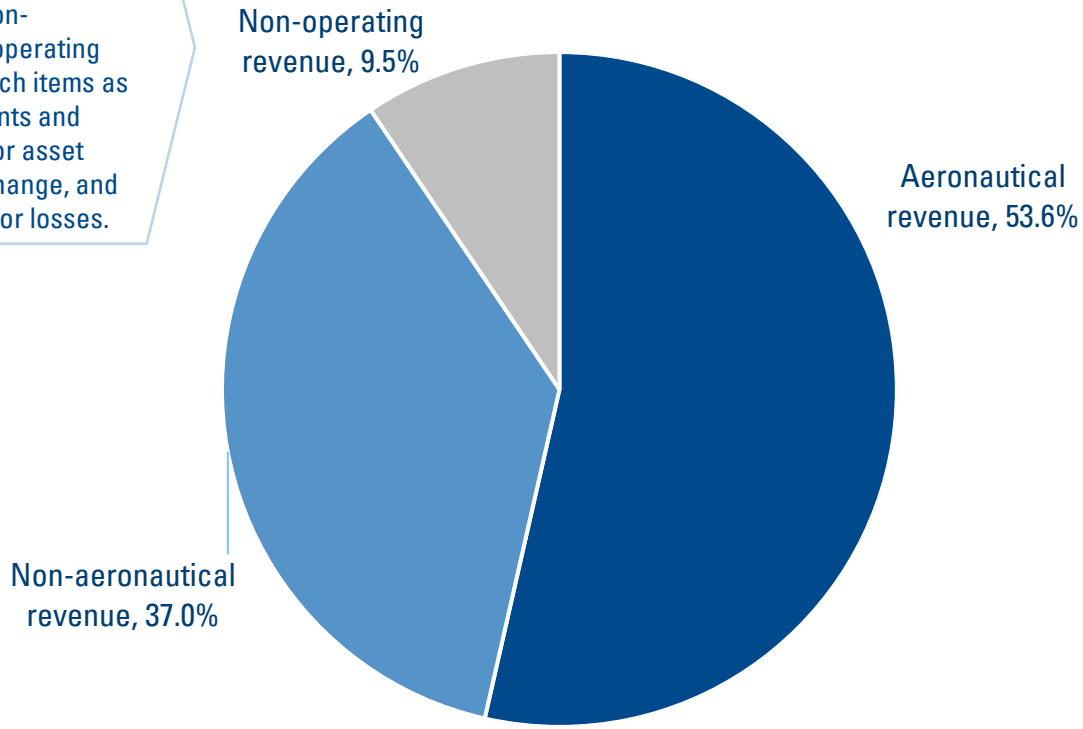
Distribution of airport revenues by key source

Aeronautical revenues are the main airport income source — 49% NA vs. 54% global

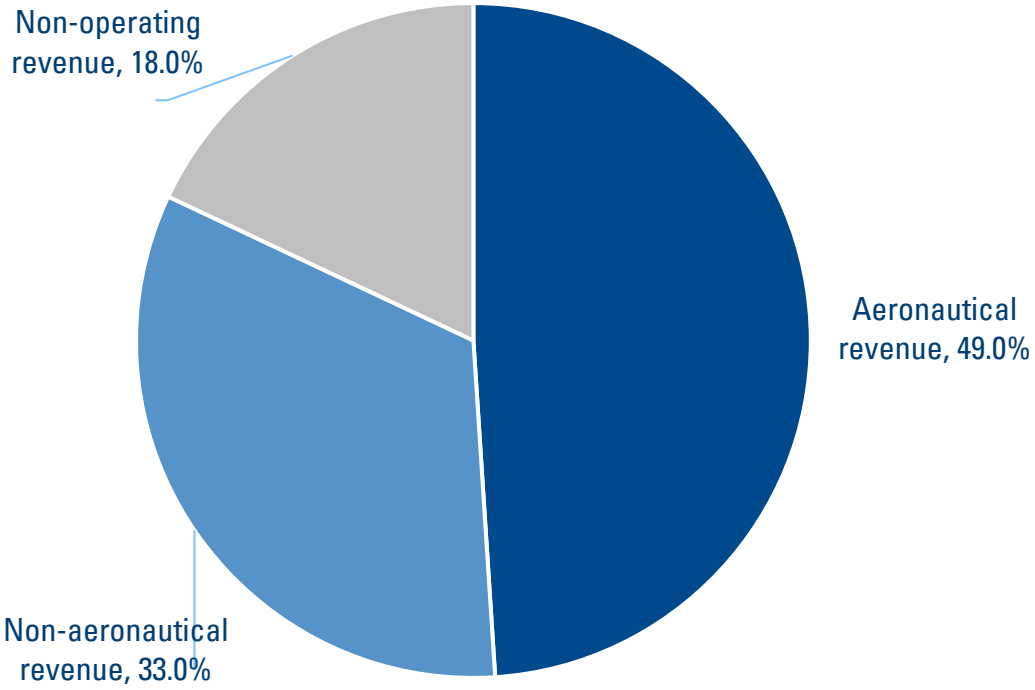
Non-operating income – Gains (or losses) from sources not related to the typical activities of the airport business (aeronautical and non-aeronautical). Non-operating revenues include such items as interest income, grants and subsidies, property or asset sales, currency exchange, and other atypical gains or losses.

2024* FY

World



North America



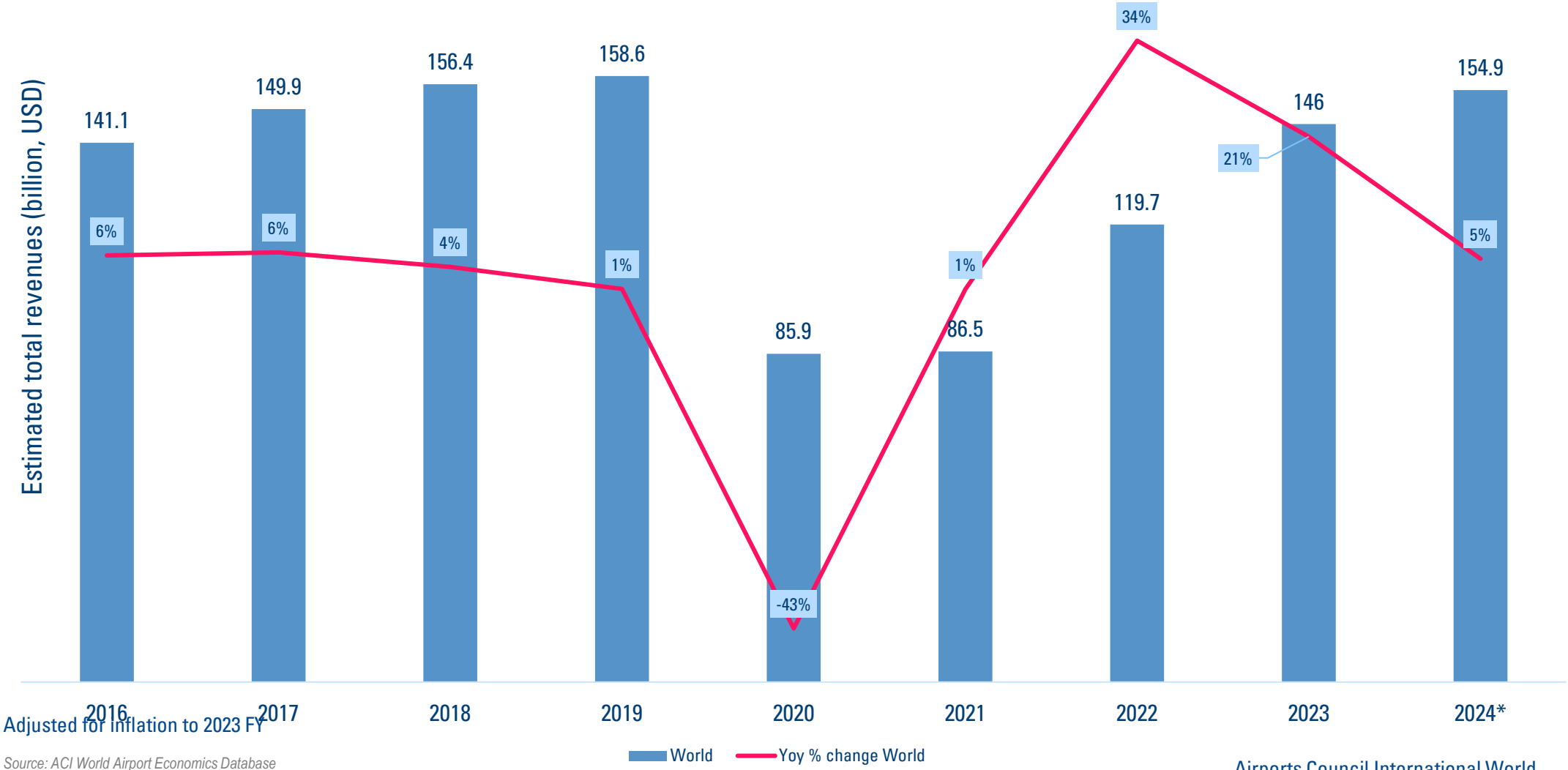
1) Aeronautical revenue includes ground handling charges
2) Non-aeronautical revenue includes ground handling concessions revenue

* - Preliminary figures

Source: ACI World Airport Economics Database

Evolution of airport industry total revenue

Global airport revenues remain 2% below 2019 levels

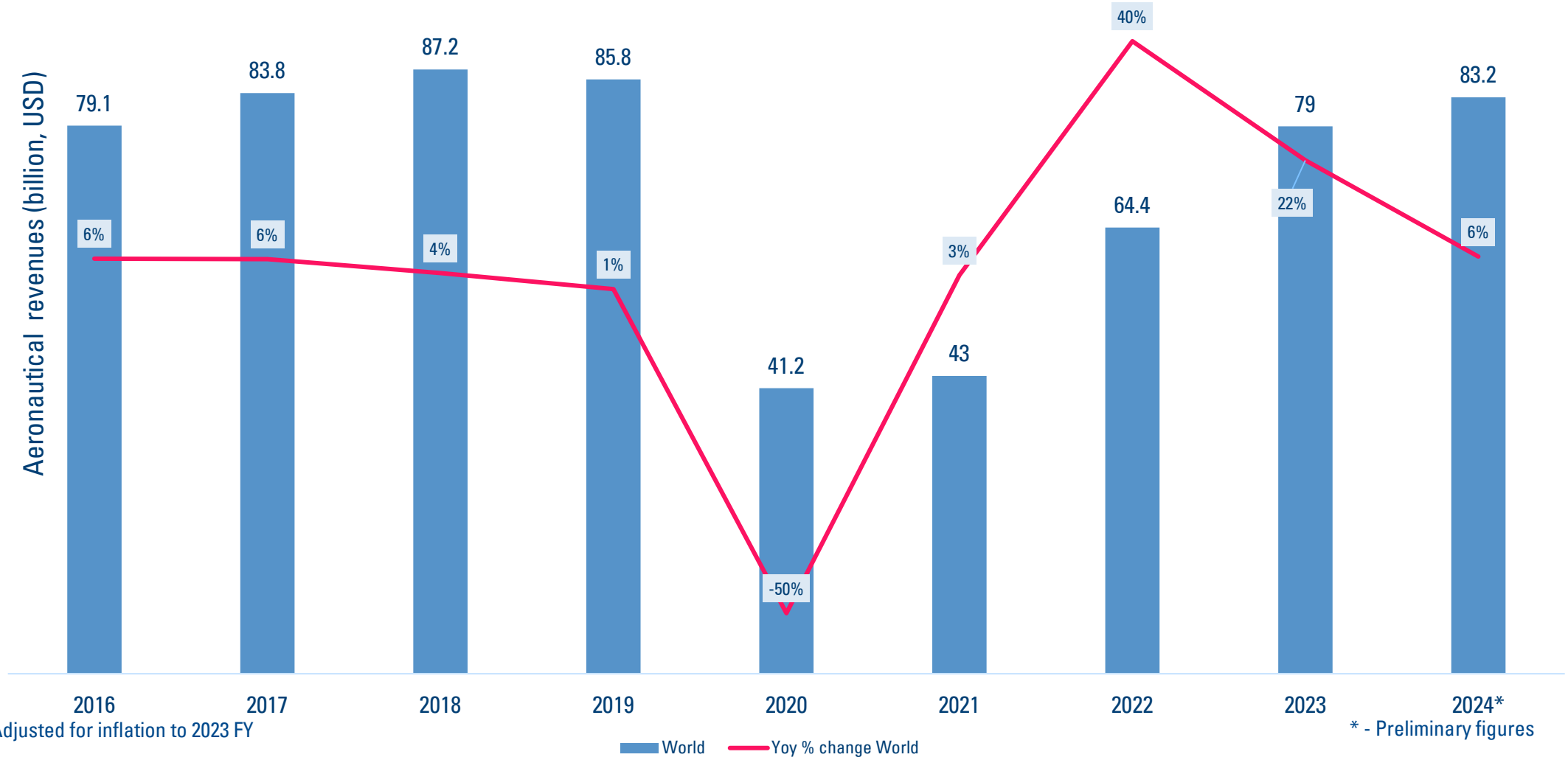


Adjusted for inflation to 2023 FX

Source: ACI World Airport Economics Database

Evolution of airport industry aeronautical revenue

Global aeronautical revenues remain 3% below 2019 levels



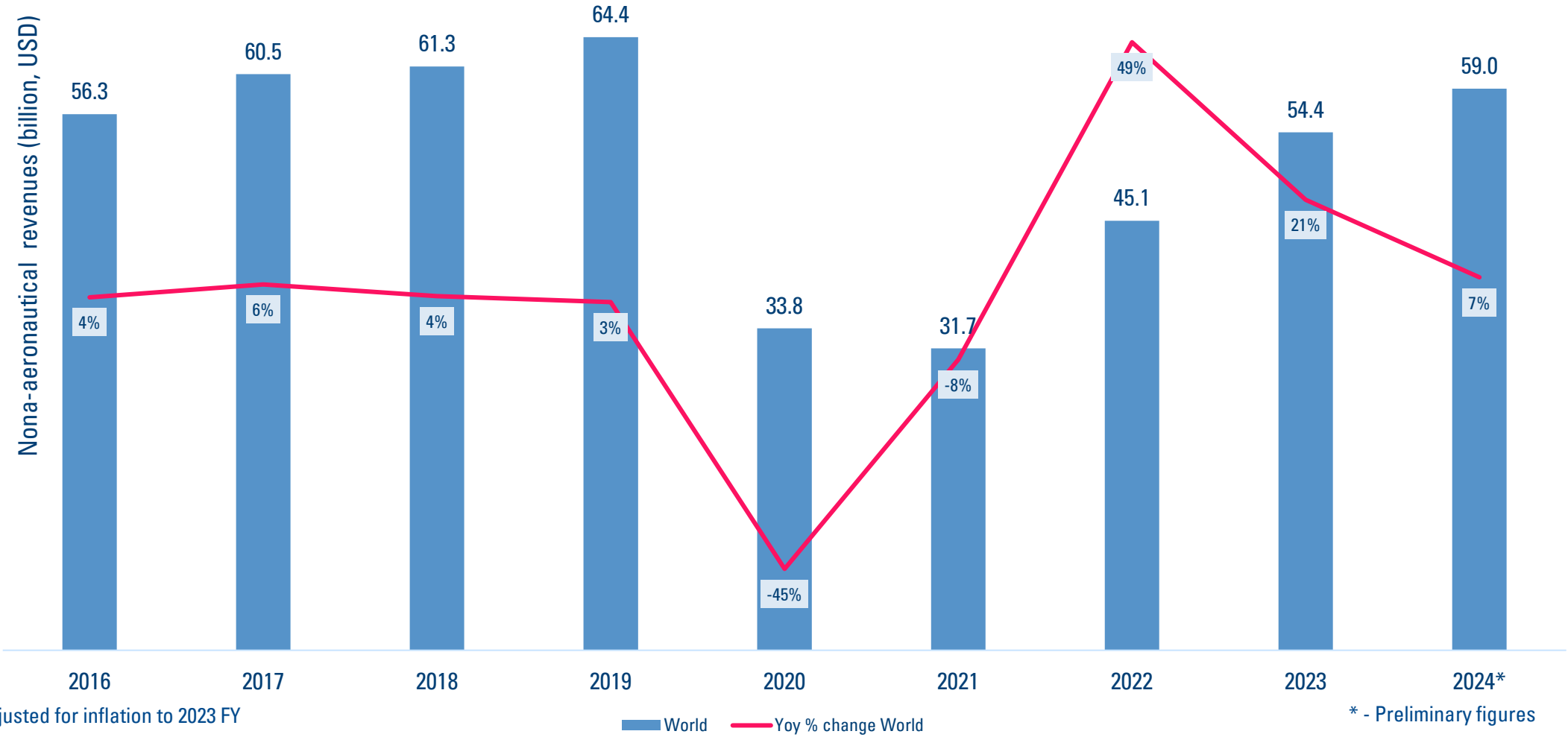
Adjusted for inflation to 2023 FY

* - Preliminary figures

Source: ACI World Airport Economics Database

Evolution of airport industry non-aero revenue

Global non-aeronautical revenues remain 8% below 2019 levels



Adjusted for inflation to 2023 FY

* - Preliminary figures

Source: ACI World Airport Economics Database

Global Mid-Term Airport Revenue Forecast

Airport revenue recovery lags behind the recovery in passenger traffic

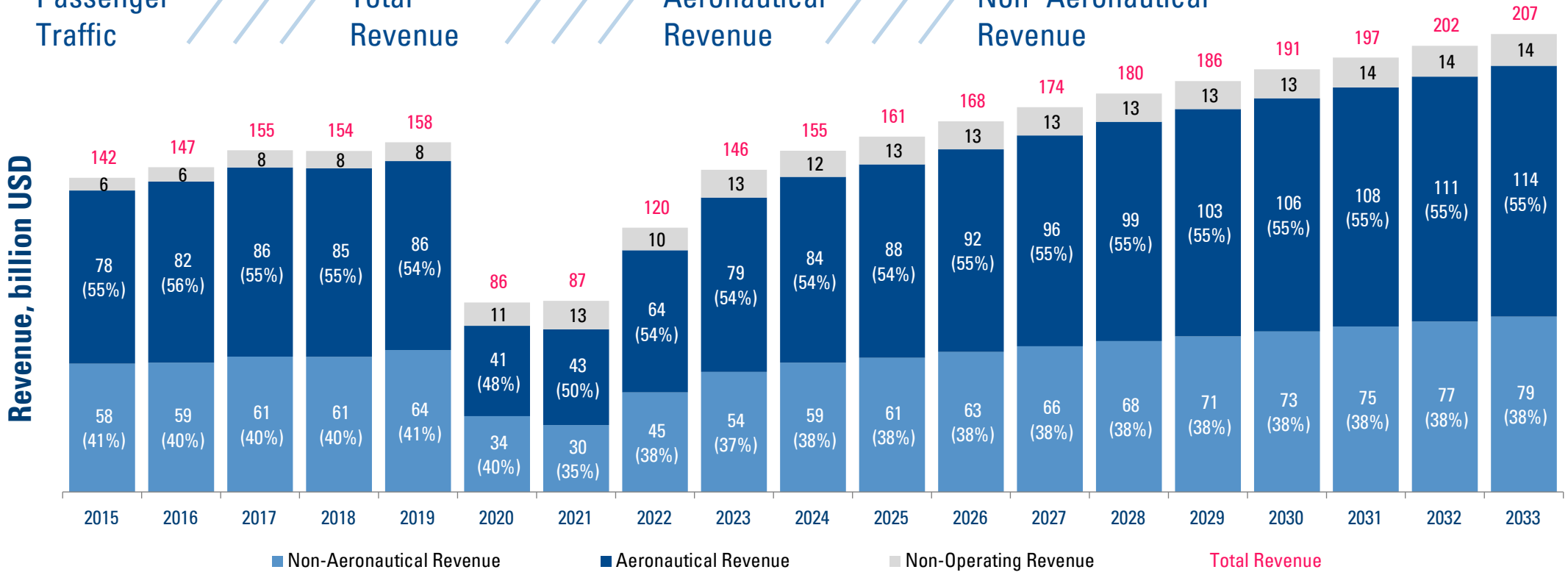
Recovery to 2019

2024 Passenger Traffic

2025 Total Revenue

2025 Aeronautical Revenue

mid-2026 Non -Aeronautical Revenue

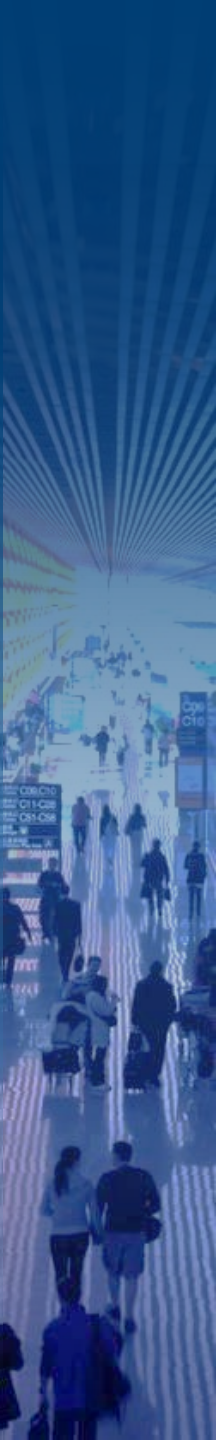


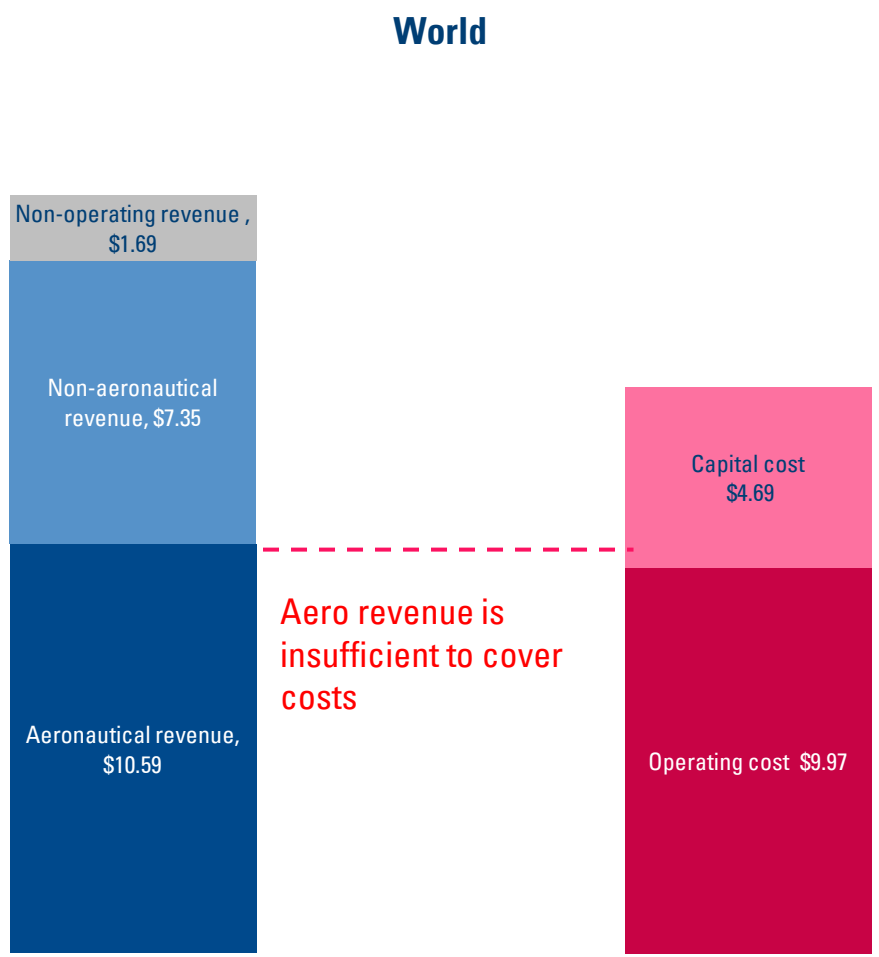
Source: ACI World Airport Economics Database

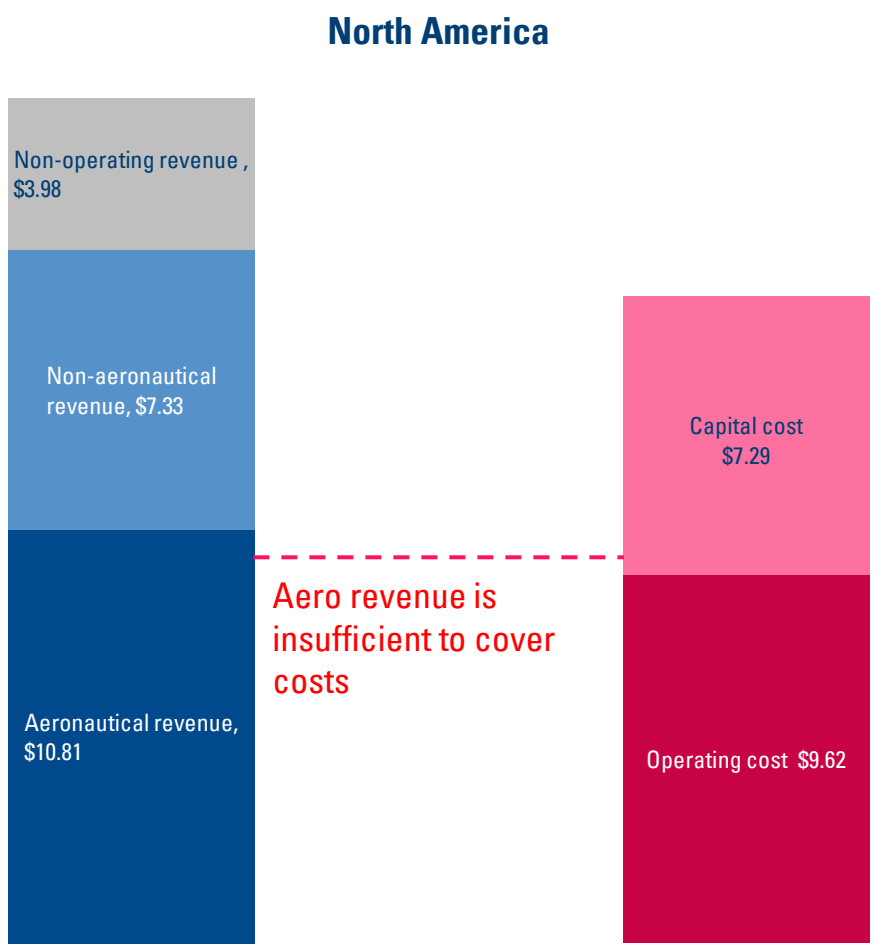
3. Aeronautical Revenue Dynamics: Global and North American Perspectives

Airport Revenue and Cost per Passenger

Revenue generated from airport charges is not enough to cover airport costs







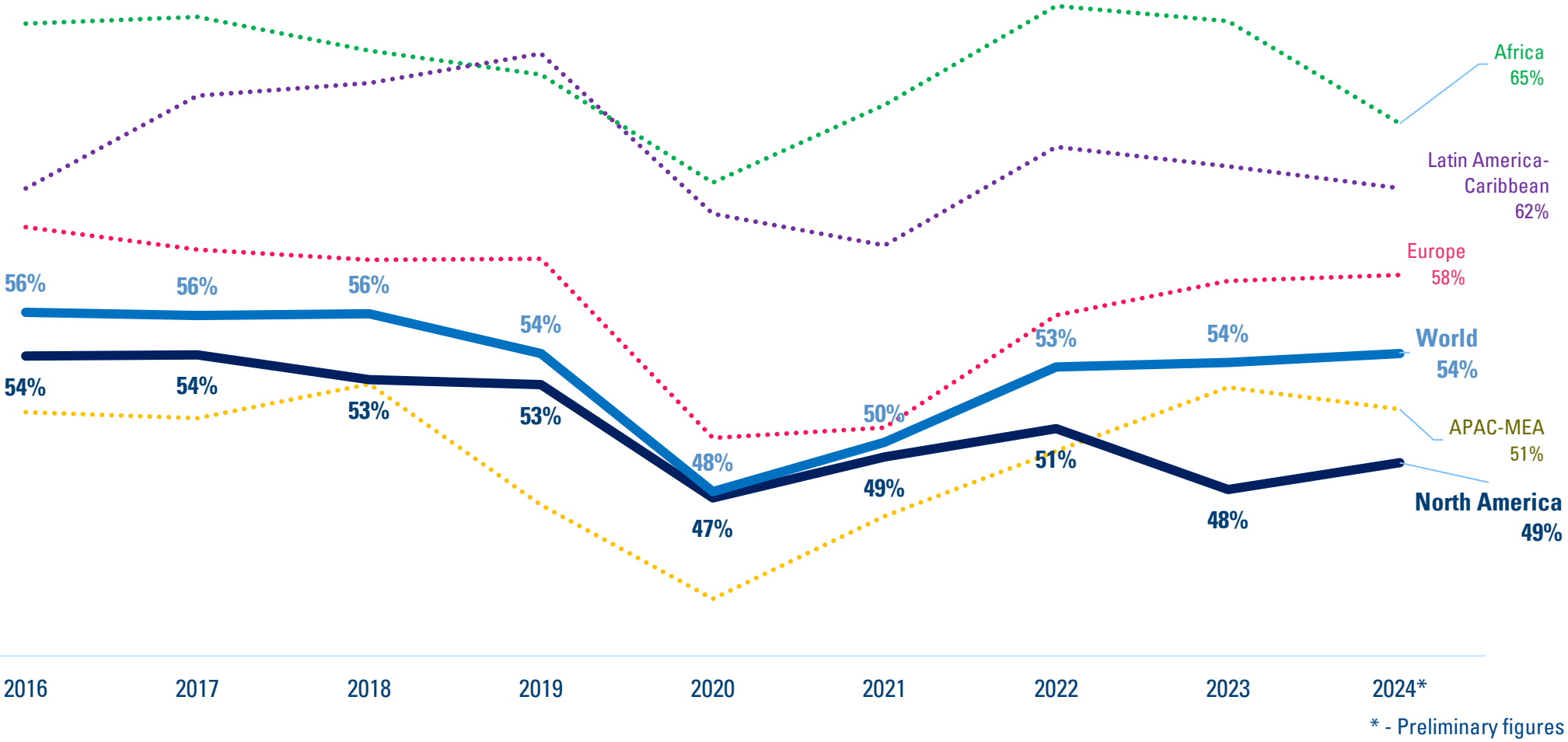
Adjusted for inflation to 2023 FY

* - Preliminary figures

Source: ACI World Airport Economics Database

Aeronautical revenue % total revenue

North America lags global average in aeronautical revenue share



* - Preliminary figures

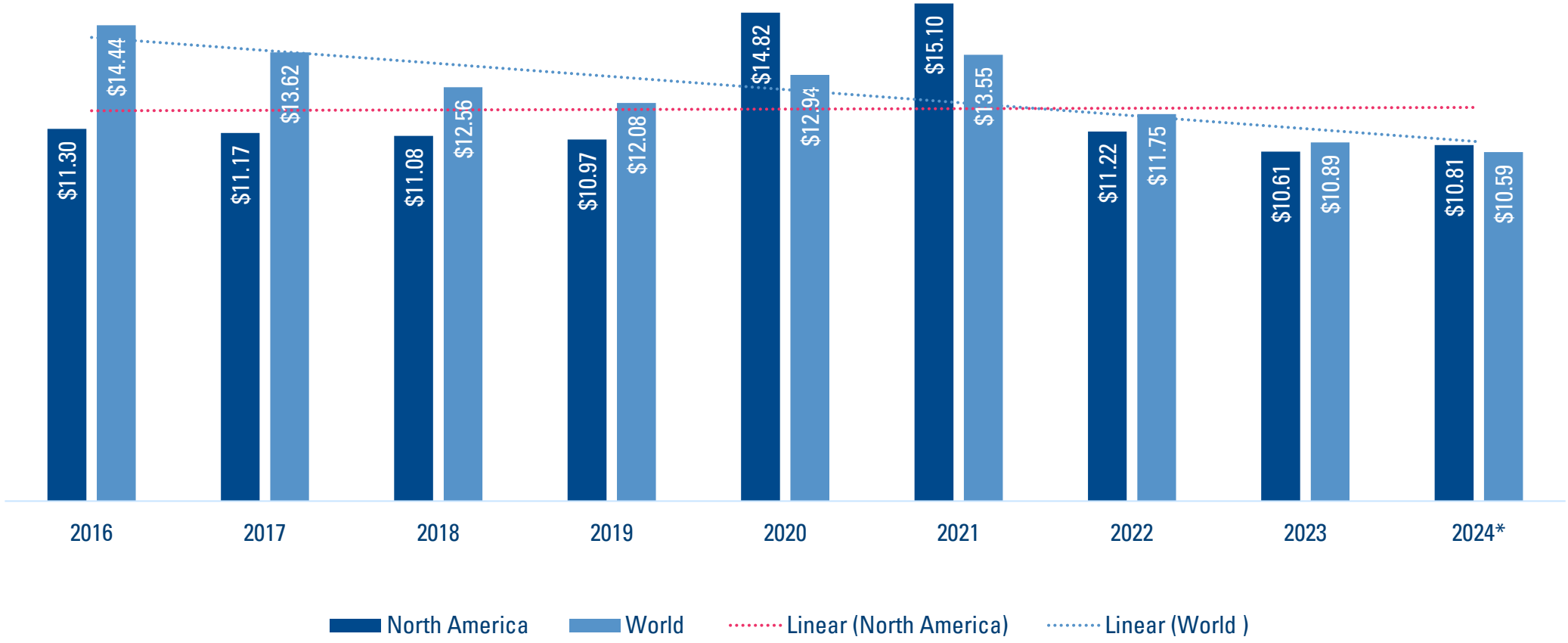
Source: ACI World Airport Economics Database

Aeronautical revenue per passenger

North America slightly above global average in aeronautical yield per passenger

North America CAGR (2016–2024): –0.6% per year

World CAGR (2016–2024): –3.9% per year



Adjusted for inflation to 2023 FY

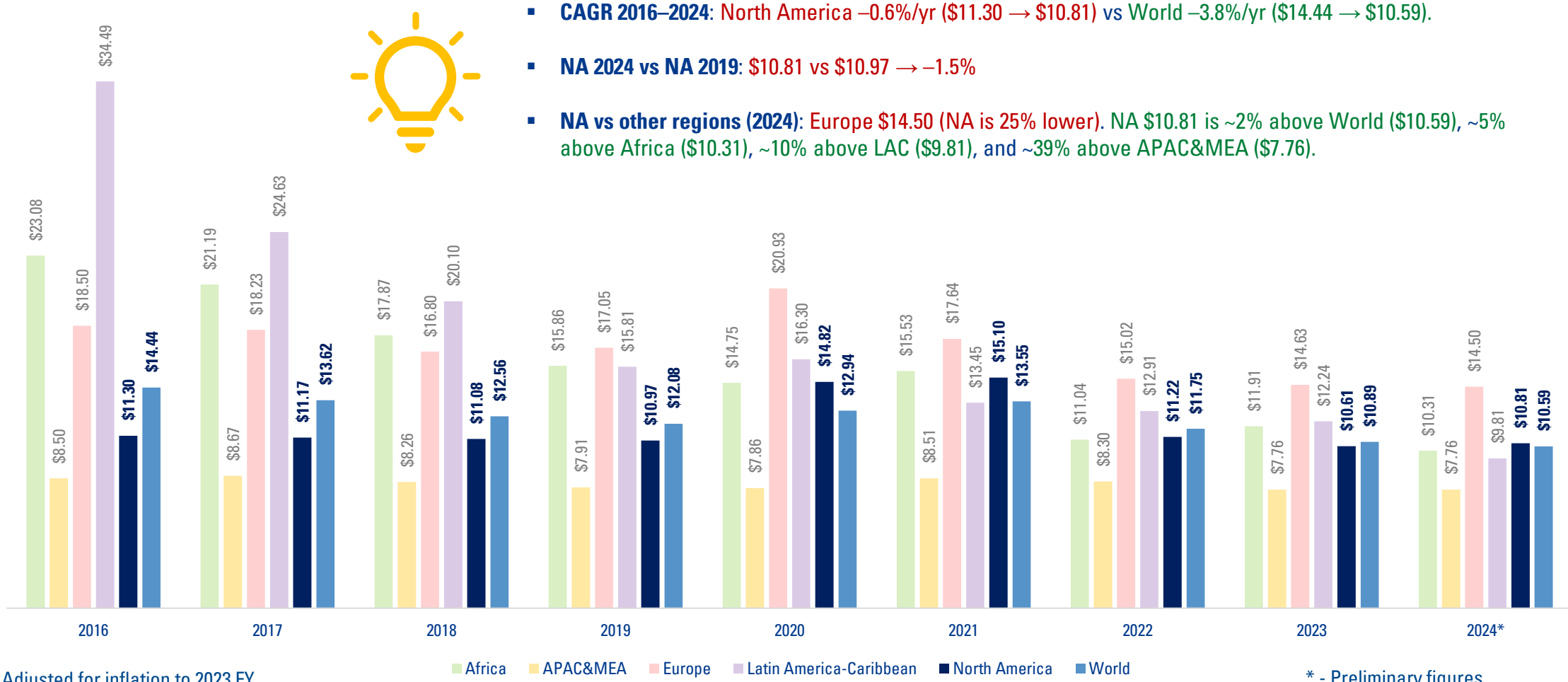
* - Preliminary figures

Source: ACI World Airport Economics Database

Aeronautical revenue per passenger

North America slightly above global average in aeronautical yield per passenger

- **CAGR 2016–2024**: North America –0.6%/yr ($11.30 → $10.81) vs World –3.8%/yr ($14.44 → $10.59).
- **NA 2024 vs NA 2019**: $10.81 vs $10.97 → –1.5%
- **NA vs other regions (2024)**: Europe $14.50 (NA is 25% lower). NA $10.81 is ~2% above World ($10.59), ~5% above Africa ($10.31), ~10% above LAC ($9.81), and ~39% above APAC&MEA ($7.76).



Adjusted for inflation to 2023 FY

* - Preliminary figures

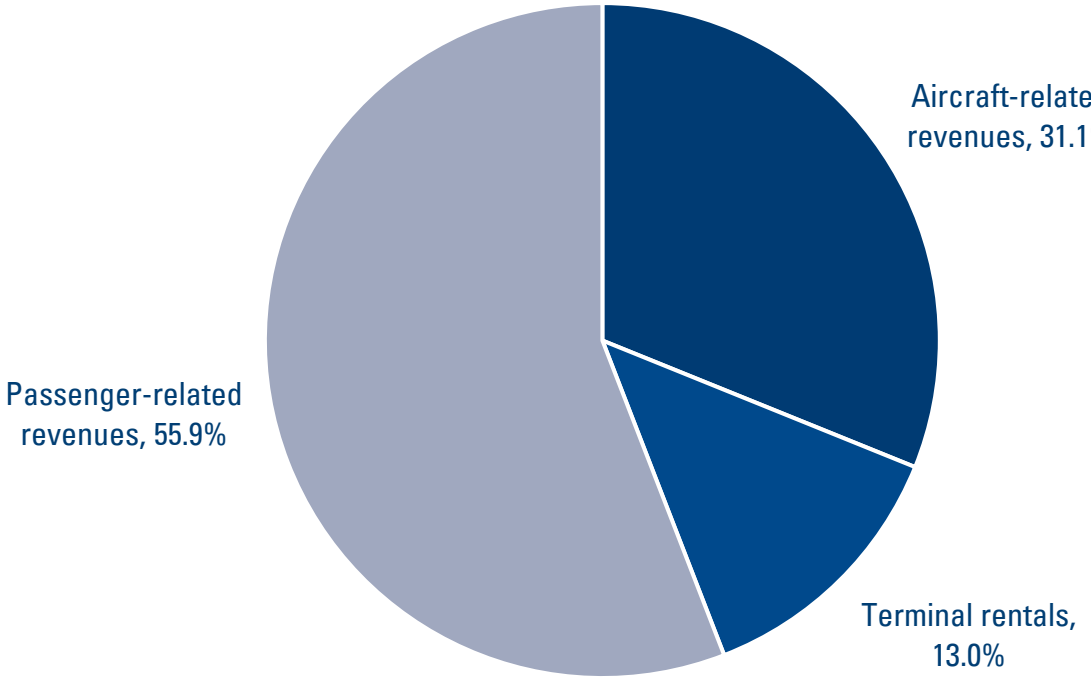
Source: ACI World Airport Economics Database

Distribution of aeronautical revenues by source

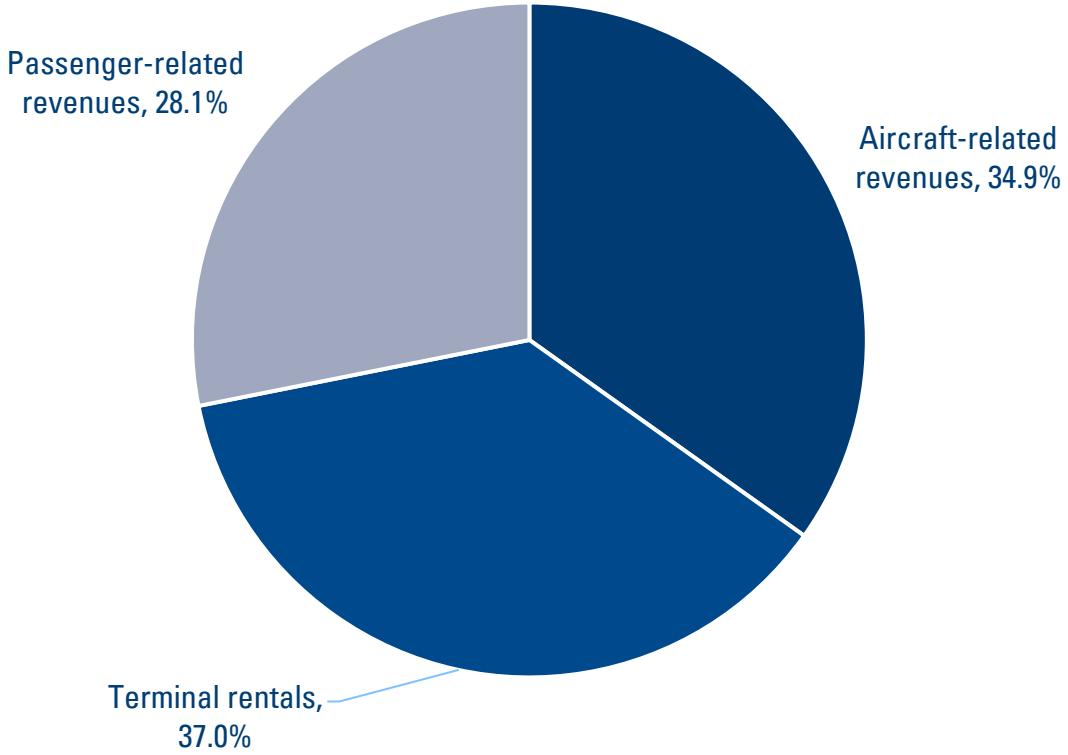
North America relies more on terminals, less on passenger revenues vs. global trend

2024* FY

World



North America



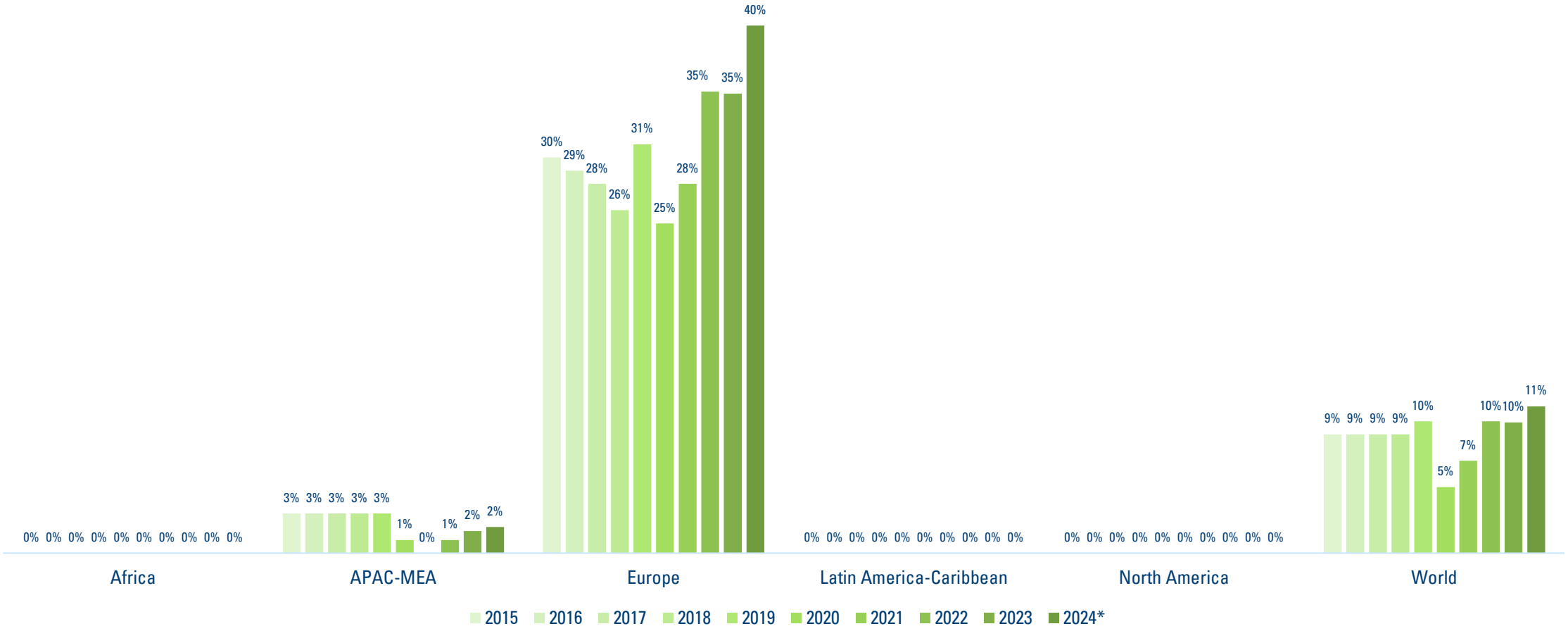
Passenger charges (AIF and PFC included)

* - Preliminary figures

Source: ACI World Airport Economics Database

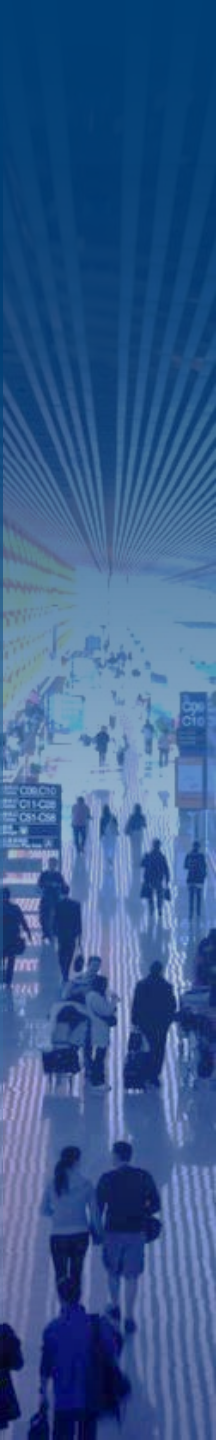
Noise and Environmental Charges

Airports by % of passenger traffic that apply Noise and Environmental Charges



* - Preliminary figures

Source: ACI World Airport Economics Database



Summary

1. ICAO Frameworks and Regulation

- ICAO's policies (Docs **9082** & **9562**) define the global basis for **airport charging and economic oversight**, guiding States in establishing consistent regulatory frameworks (often included in national legislation).

2. Global Airport Revenue Trends

- North America generates 25% of global airport revenues. Aeronautical revenues remain the major source, accounting for ~54% globally and ~49% in North America.
- Total airport revenues are still 3% below 2019 levels, reflecting a lag between passenger recovery in 2024 and revenue rebound, with full recovery projected by 2025–2026.

3. North America vs. Rest of the World:

- North America's aeronautical share (49%) is below the global average (54%), but yield per passenger is 2% higher ($10.81 vs. $10.59), with greater reliance on terminal rentals and less on passenger fees.

Session 4: Rate-making Methodologies: North America vs. Rest of the World How the Rest of the World Charges

Saturday, October 25, 2025

ACI-NA & ACI World Annual General Assembly, Conference and Exhibition

Finance Committee

Toronto, Canada

Sheri Ernico
Principal
Jacobs Aviation Advisory Services

Jacobs

Types of Airport Charges

Non-U.S.	U.S. Airports
1. Terminal navigation charges[1] (air traffic control, ramp control)	× USDOT collects through ticket tax; airlines typically provide ramp control
2. Landing fees – weight and/or fixed basis	✓ Weight based
3. Aircraft parking fees	✓ Rate-setting method varies by airport
4. Security charges, including costs to screen passengers and baggage	≈ Only for infrastructure costs and/or LEO; TSA and CATSA in Canada provide screening
5. (Terminal) Passenger charges	≈ Real estate or per-turn basis (AHTA restrictions)
6. Infrastructure or menu-based charges	✓ For jetways, BHS equipment, etc.
7. Airport development charges to recover costs of capital expenditures	≈ Capital charges included in landing fee and terminal rate bases, PFC revenues
8. Ground handling fees – per movement and passenger[2]	x Very few U.S. airports provide these services (ABE)

1. Not all airports charge terminal navigation fees to recover costs of providing air traffic control (ATC) services for aircraft descent into and departure from an airport as well as maneuvering on the ground
2. Not typically included in airport comparison calculations

Rate-Setting to Incentivize Certain Types of Behavior

1. **Pricing incentives** (to attract airline service)
   - Some European airports offer pricing incentives, which do not have to be offered to all airlines
   - Details are usually considered confidential for competitive purposes
2. **Differential landing fees***
   - Discourage use by smaller aircraft (Tokyo Narita fixed minimum fee
   - Encourage off-peak time of day
   - Encourage low emission aircraft (Copenhagen, Dublin, Dusseldorf, Frankfurt, London Heathrow and Gatwick, Stockholm and Zurich)
   - Minimize aircraft noise
   - Encourage off-peak seasonal service - different rates for summer peak, summer base, summer off-peak and winter (London Gatwick)

*Can vary according to the destination or origin of the flight

Environmental (Noise and Emissions) Charges

1. **Noise charges** - to encourage airlines to invest in new quieter and less polluting aircraft
   - ICAO Chapter 14 policies
   - Examples: Amsterdam (7 separate noise categories), Brussels, Frankfurt (15), London Heathrow and Gatwick, Prague (13), Rome Fiumicino (7)
   - Price incentives typically take the form of discounts
2. **Emissions charges** - on nitrous oxide (NOx) emissions in the landing and take off cycle
   - Examples include all Swedish airports, Copenhagen, Zurich, Geneva, Basle, Berlin-Brandenburg , Frankfurt, Munich, Hamburg, Cologne-Bonn, Dusseldorf and London Heathrow and Gatwick, Switzerland
   - Variations triggered studies to develop a common emissions classification scheme and standardized methodology to establish
3. **Revenue Neutrality** – noise mitigation sometimes charged separate

Other Variations to Basic Charges

1. **Variations by time (of day, year, or combination) - peak surcharges, off-peak discounts**
   - Peak/off peak pricing has been one of the most contentious issues in airport pricing and was introduced to mitigate congestion, including hour of day or season (e.g., Cancun, Mexico City, London Gatwick, Rome from 2013- 2024)
   - Current position appears to be that peak/off-peak pricing is acceptable as long as there is a clear congestion issue at peak times and there is a defined strategy to increase capacity
2. **Variations by origin or destination**
   - Higher prices for international traffic, reflecting the need for more facilities and space
   - Some airports also differentiate between different categories of international passengers, e.g., Dusseldorf, Frankfurt, Johannesburg, Lisbon, London Heathrow and Gatwick, Madrid, Milan, Paris Charles de Gaulle, Rome (note: some Canadian airports have lower rates to the U.S.)
   - For example, European airports have different charges for countries that are members of the EU, signatories to the Schengen agreement (where customs and immigration controls are removed or reduced), and outside Europe
   - Hong Kong's Airport Construction Fee has different rate for short-haul vs. long-haul, and economy vs. premium class
3. **Volume discounts**
   - In 2000, the European Commission called for abolishment of this discriminatory practice and most were discontinued
   - Budapest offers discounts to airlines achieving load factors of 80% or more

Pricing for CapEx

1. **Pre-funding becoming more common place** – airlines dislike because paying for facilities not yet available for use
   - Currently exist at Athens, Beijing, Hong Kong, Moscow Sheremetyevo, Singapore
   - Canadian airports charge Airport Improvement Fee (AIF) which is added to ticket fee with amount varying by airport
   - Also existed previously at Delhi and Mumbai
2. **Special A380 charges** – for gate fee

Orlando International Terminal C during construction

Pricing for Low Cost Carrier (LCC) Operations

1. Advent of low-cost or “budget” terminal facilities
2. 2008 EU Airport Charges Directive
   - Need to offer differentiated services levels, with corresponding pricing levels, on a non-discriminatory basis

The original low-cost terminal at Kuala Lumpur International Airport, which opened in 2006, was replaced by the larger klia2 terminal in 2014

Skytrax World’s Best Low-Cost Airline Terminals 2025

1. Paris CDG - T3
2. Tokyo Narita - T3
3. Kansai - T2
4. Centrair Nagoya - T2
5. Eindhoven (Netherlands)
6. Kuala Lumpur - KLIA2
7. Melbourne - T4
8. Bangkok Don Mueang
9. Berlin Schönefeld
10. Luton

Economic Regulatory Regimes

1. Airport vs. airline perspectives
2. Exist at both privatized and publicly operated airports
3. There are almost as many regulatory regimes as countries - general forms of regulation include:
   - *Rate of return* – airport allowed to earn a rate of return on an allowed rate base
   - *Price-cap* - airport prices adjusted by the rate of inflation plus or minus some predetermined amount – also called CPI – X, where CPI is the inflation index and X is the expected annual gain in efficiency
   - *Light-handed* - price controls negotiated between airports and airlines, with reserve powers (in some countries) for the state or a regulator to intervene in the event of non-agreement (e.g., Australia, New Zealand, U.S.)

South Affrica tariff setting price cap formula:

$$RWPTI_t <= (CPI_t - X_t + CF_t) + K_t$$

Where:

- $RWPTI_t$ = the sum of the revenue weighted percentage tariff increases in year t
- CPI_t = the CPI forecast at the beginning of period t for the period t
- X_t = the subtractive X factor for year t set out in subsection (c)
- K_t = the K factor for year t set out in subsection (d)

$$CF_t = (CPI_{t-1} - X_{t-1} + CF_{t-1} - (RWPTI_{t-1} - K_{t-1})) \times (1+Pr_{t-1})$$

Where:

- CPI_{t-1} = actual CPI for the year (t-1)
- Pr_{t-1} = predominant prime overdraft rate in year (t-1)
- $RWPTI_{t-1}$ = the sum of the revenue weighted percentage tariff increases in year (t-1)

Ownership, Price-Setting, and Regulatory Model (1 of 2)

Airport	System of price regulation
Amsterdam	Dual till, changes proposed by airport to Minister of Transport, passed by Royal Decree
Athens	Regulatory price cap - dual till
Auckland	Light handed, periodic Commerce Commission Inquiries
Bangkok	Prices set (infrequently) after negotiation with airlines and approval by Government
Beijing	Set by government in accordance with ICAO principles
Berlin Brandenburg	Cost based (ie not for profit) rate of return regulation
Brussels	Hybrid version of single till with CPI-X formula
Budapest	Dual till regulatory price cap, but may be substituted by agreement with airlines
Cancun	Regulatory price cap – dual till
Copenhagen	Regulatory price cap based on CPI-X, modified to take account of traffic growth
Delhi	Regulatory price cap – hybrid till
Dubai	No formal regulatory structure – increases approved by DGCA
Dublin	Regulatory price cap – single till
Dusseldorf	Single till, private framework agreements with airlines
Frankfurt	Dual till, increases based on operating costs and infrastructure costs and affected by traffic growth
Helsinki	No formal regulation, but guiding principle of increases at inflation minus 50%
Hong Kong	Prices set (infrequently) after negotiation with airlines and approval by Government
Jakarta	No formal regulatory structure – increases approved by Government
Johannesburg	Regulatory price cap with efficiency factor – single till
Kuala Lumpur	Prices set (infrequently) after negotiation with airlines and approval by Government
Lisbon	Regulatory price cap – dual till
London-LGW	Commitments Framework with airlines, endorsed by CAA
London-LHR	Regulatory price cap – single till
Los Angeles	Compensatory cost
Madrid	Regulatory price cap - dual till, allowing for cost recovery and necessary investment
Mexico City	Regulatory price cap – dual till
Miami	Residual cost

Source: Jacobs, *Review of Airport Charges 2024*.

Ownership, Price-Setting, and Regulatory Model (2 of 2)

Airport	System of price regulation
Milan Malpensa	Hybrid version of CPI-X taking account of service and environmental performance plus the cost of new infrastructure
Moscow	Prices set (infrequently) after negotiation with airlines and approval by Government
Mumbai	Regulatory price cap – hybrid till
Newark-EWR	Compensatory cost
New York-JFK	Compensatory cost
Osaka	Prices set (infrequently) after negotiation with airlines. Government has power of veto
Oslo	Charges are subject to a 'light price cap' under which the Ministry of Transport allows an overall increase of no more than forecast inflation
Paris-CDG	Hybrid till, CPI-X with adjustments for ground handling, security, subsidiaries' activities, performance and traffic growth
Prague	No formal regulatory structure - changes/increases approved by Minister of Transport
Rome	Regulatory price cap – dual till taking account of service and environmental performance plus the cost of new infrastructure
San Francisco	Residual cost
Sao Paulo	Decided by INFRAERO in consultation with Direccion de Aviacion Civile
Seoul	Prices set (infrequently) after negotiation with airlines and approval by Government
Singapore	Revenue yield cap - hybrid till
Stockholm	No formal regulation but prices may not increase by more than CPI
Sydney	Price monitoring only – regulatory price cap suspended
Tokyo Narita	Prices set (infrequently) after negotiation with airlines. Government has power of veto.
Toronto	No regulation. The "not for profit" status of Canadian airports does not preclude the setting of prices so as to recover infrastructure investment costs.
Vancouver	As for Toronto
Vienna	Dual till price cap regulation. Max. increase in charges = -0.35 x MTOW growth % + inflation
Warsaw	Partial single till. No regular review period
Washington	Hybrid residual /compensatory cost (partial profit sharing with airlines).
Zurich	Single till but no formal regulatory formula.

Source: Jacobs, *Review of Airport Charges 2024*.

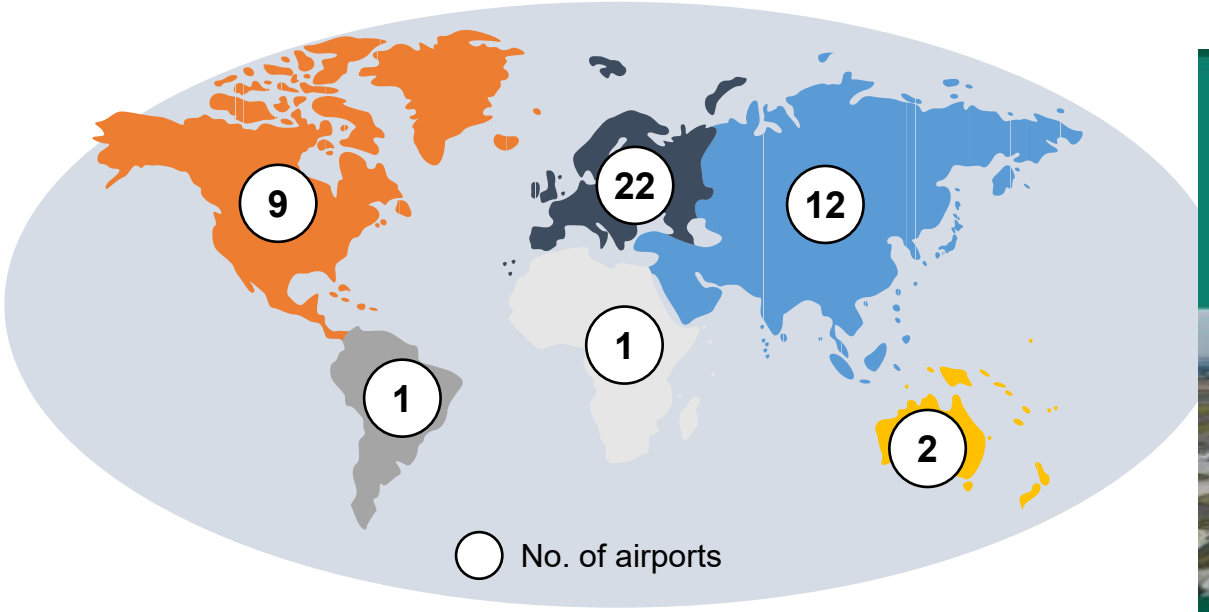
Jacobs Airport Benchmarking Reports Provide Additional Insights

» Jacobs produces three annual industry-leading airport benchmarking publications:

1. **Review of Airport Charges :** Compares the sum of aeronautical charges of the world's busiest airports for a sample of aircraft types
2. **Airport Performance Indicators** : covers performance, for CAPEX, OPEX & revenue metrics
3. **UK Airports Performance Indicators** : provides an extensive range of operational and financial performance measures for 25 UK airports

» 50+ major airports benchmarked for **charges** and **performance indicators** (PI) across our two global reports, with a further 30+ airports also benchmarked in our **UK PI report**

» 30+ Years of production under the same authorship, ensuring a consistent approach



Questions?

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sheri.ernico@jacobs.com

Discussion Topics

1. Including PFCs and AIP grants under aeronautical revenue for US airports
2. Considering airports as monopolies
3. Peak vs. off-peak pricing – airline vs. airport perspectives – is this something airports want to fight for?
4. Airport-airline business relationships - less contentious in North America vs. the rest of the world given the prevalence of commercial agreements in North America
5. Does ratemaking methodology (single vs. dual till) impact the overall level of rates?
6. What is an appropriate return on investment?
7. Using incentives to attract service and/or influence airline behavior
8. Government subsidies for airline service
9. “Hidden” cross subsidies between airports within a group (we see this in the US with the larger commercial service airport subsidizing GA reliever airports)

Audience Q&A

Rate-making Methodologies: U.S. vs. Rest of the World

CPE Code (End):

GTF

2025

ACI-NA & ACI World Annual General Assembly, Conference and Exhibition

AIRPORTS COUNCIL INTERNATIONAL
NORTH AMERICA | WORLD

October 25 - 28, 2025
Toronto, ON

Summary of the ACI-NA Annual Financial Benchmarking Survey for FY2024 Results

Ronda Chu
Acting Assistant Chief Financial Officer
San Francisco International Airport
Chair, Strategic Planning and Performance Management Working Group

J.T. Knadler
Executive Director
J.P. Morgan

Jeffrey Lack
Senior Director
Fitch Ratings

Summary of the ACI-NA Annual Financial Benchmarking Survey for FY2024 Results

CPE Code (Start):

39N

2025 ACI-NA Financial Benchmarking Survey for FY 2024

Ronda Chu | San Francisco International Airport
DWU Consulting
J.T. Knadler | JP Morgan
Jeffrey Lack, Fitch Ratings

October 25, 2025

Table of Contents

Part 1

- Overview
- Revenues
- Expenses
- Capital & Others

Part 2

- Discussion – A Rating Analyst's Perspective

Note: This presentation summarizes data from the FAA's Compliance Activity Tracking System (Form 5100-127) and ACI-NA Financial Benchmark Surveys.

ACI-NA Benchmarking Survey Overview

TRAFFIC / FLIGHT OPERATIONS

- Total Operations
- Cargo Operations
- Passenger Airline Operations
- Total Landed Weights
- Total Cargo Landed Weights
- Total Passengers
- Enplaned Passengers
- Connecting Passengers

EXPENSES

- Total Expenses
- Personnel Expenses
- Full Time Equivalent Headcount
- Non-Personnel Expenses
- Expense Breakout Categories

REVENUES

- Total Revenues
- Airline Revenues
- Concessions
- Rental Car
- Parking/Ground Transportation
- Rental/Lease Revenues

DEBT

- Total Debt
- Fixed Rate Debt
- Variable Rate Debt
- Annual Debt Service

OTHER

- TNC Transactions
- Capital Program

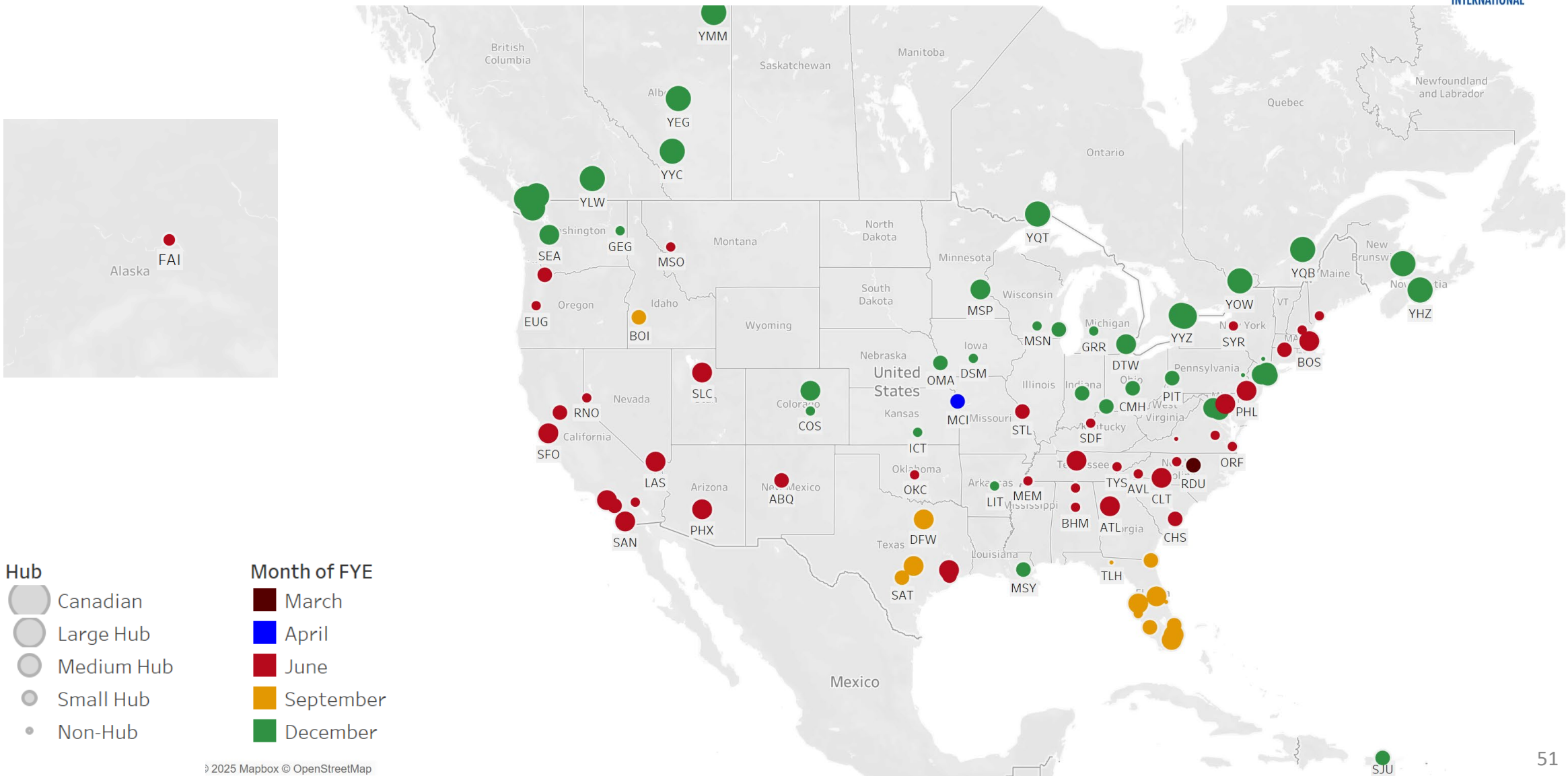
- Per Passenger
- Per Connecting Passenger
- Per Enplaned Passenger
- Per Intl. Passenger
- Per Operation
- Per Cargo Operation
- Per Parking Space
- Per Square Foot
- Per Employee

ACI-NA Benchmarking Survey Submissions

	FY24 Submissions	FY23 Submissions	FY22 Submissions	FY21 Submissions	FY20 Submissions (a)
Large Hub Airports	28	28	25	30	28
Medium Hub Airports	25	26	27	24	22
Small Hub Airports	28	25	22	29	28
Non-Hub/ Other US Airports	7	7	4	5	8
Canadian Airports	14	13	12	12	11
Total	**102**	**99**	**90**	**100**	**97**

(a) Hub classification for FY20 airports is based on calendar year 2019 revenue enplanements published by the FAA.

FY 2024 Participating Airport Map



Hub

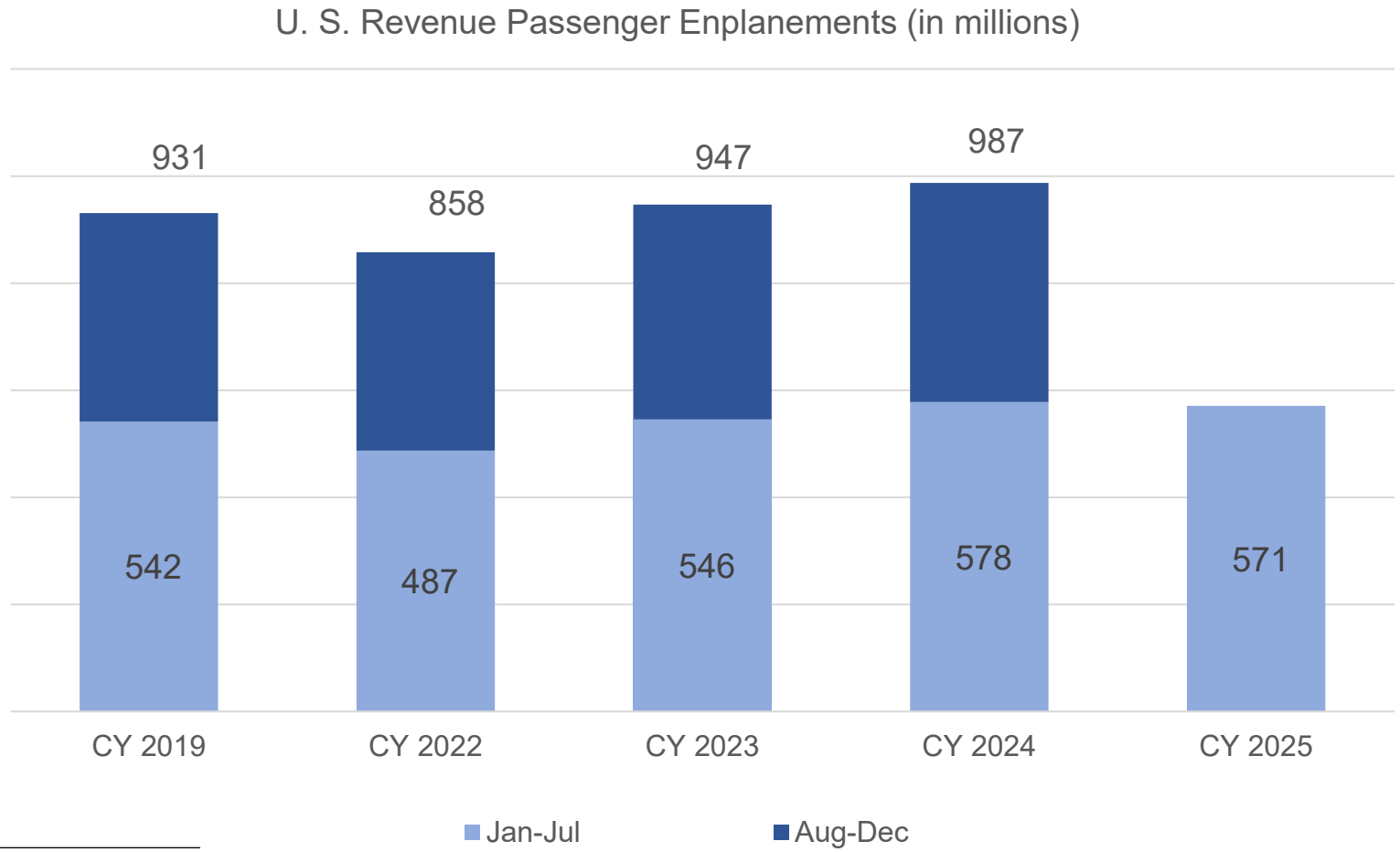
- Canadian
- Large Hub
- Medium Hub
- Small Hub
- Non-Hub

Month of FYE

- March
- April
- June
- September
- December

U.S. Passenger Increased 4.3% YOY

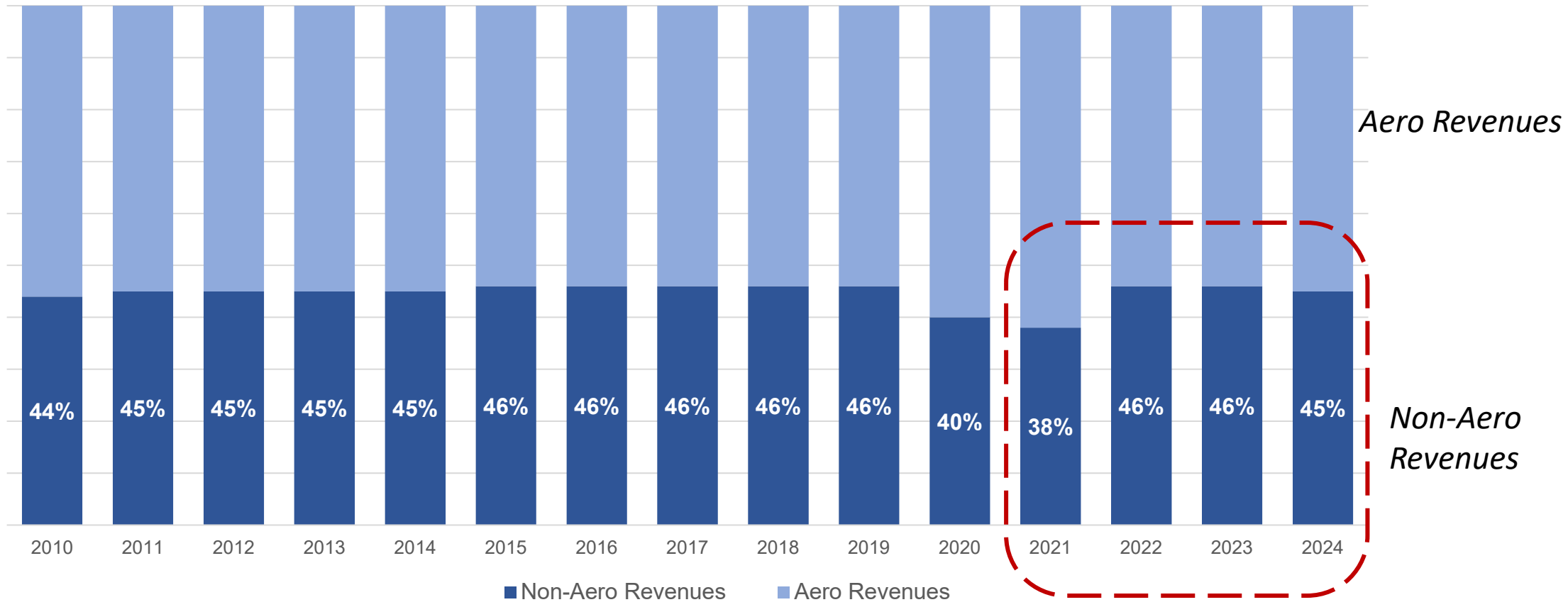
- CY 2025 thru July: -1.2% below same period in 2024



Source: Bureau of Transportation Statistics.

Revenues

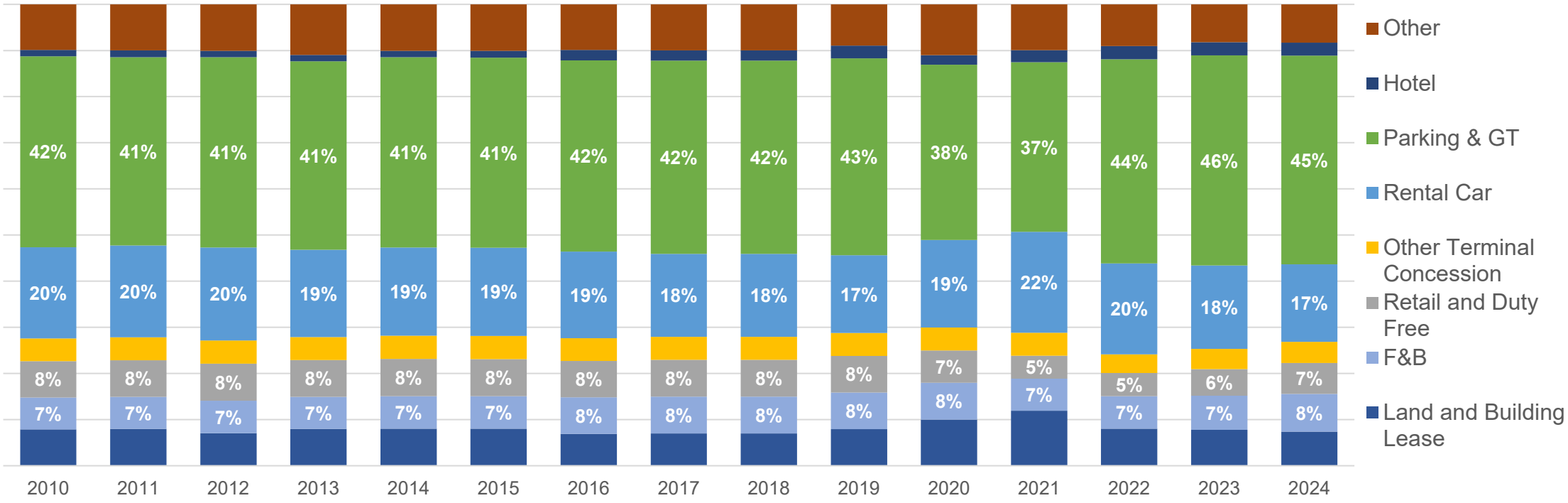
Relative Stability in Non-Aeronautical Revenue Share



Source: Respective fiscal year data from FAA Form 5100-127.

Non-Aeronautical Revenue Allocation

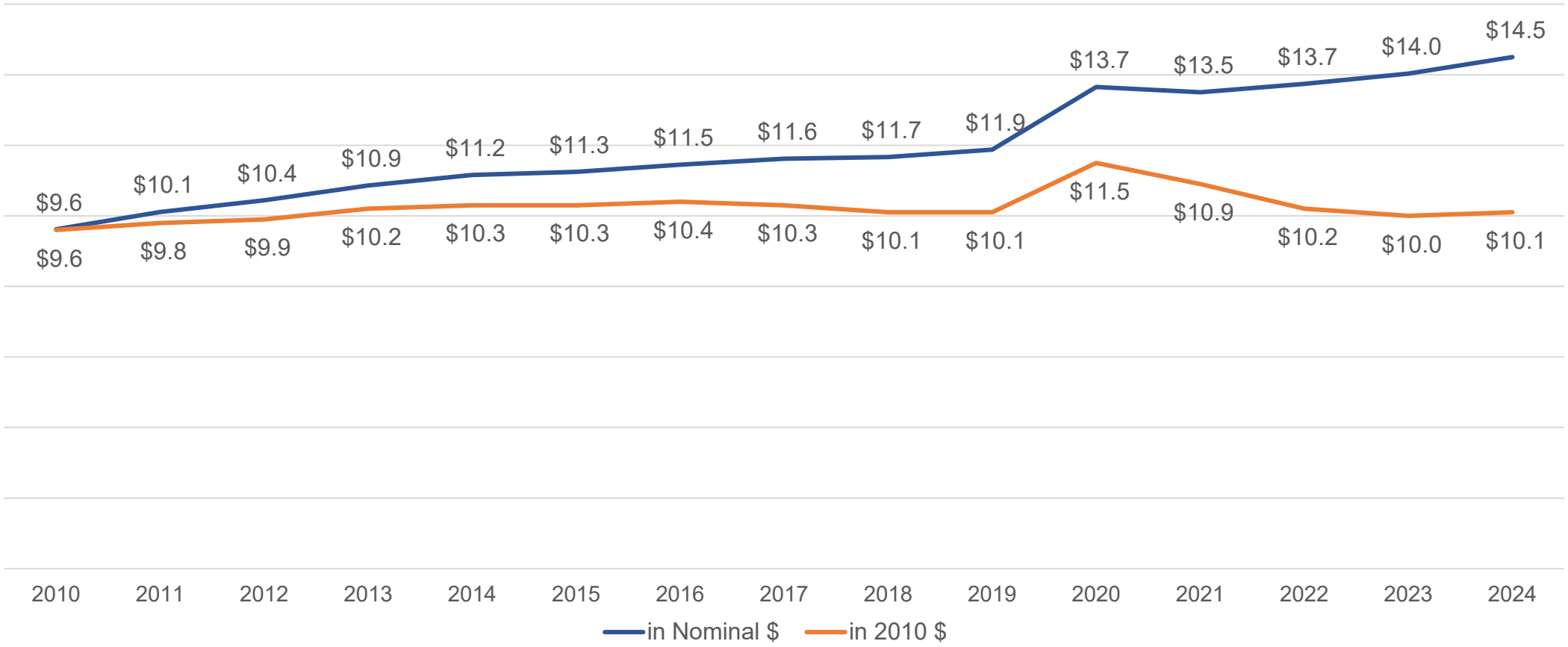
- Parking and Ground Transportation – declined 0.3 percentage point in 2024
- Retail and Duty-free - continued to recover in 2024
- Total Terminal Concession – increased 1.9 percentage point in 2024
- Rental Car - declined 1.3 percentage point in 2024 but flat to 2019



Source: Respective fiscal year data from FAA Form 5100-127.

Non-Aeronautical Revenues Per Enplanement

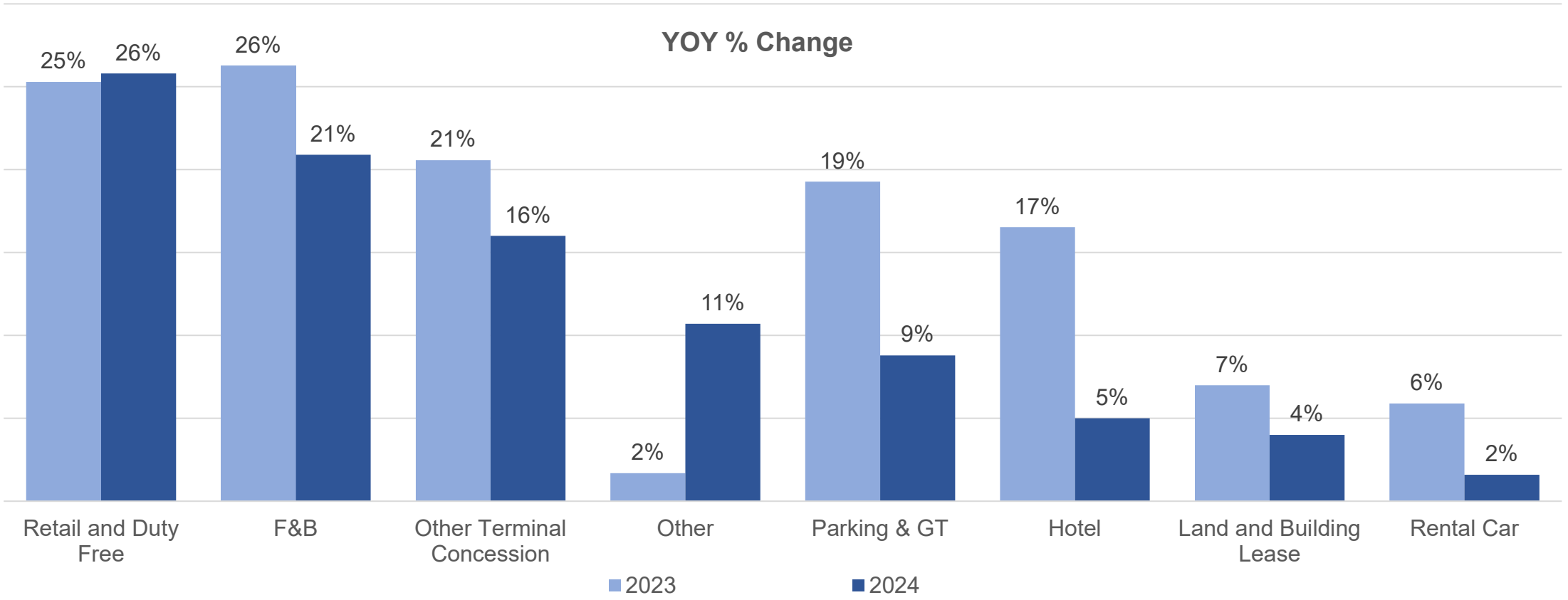
- +3.1% from 2023 to 2024



Source: Respective fiscal year data from FAA Form 5100-127, excluding airports with missing enplanements.

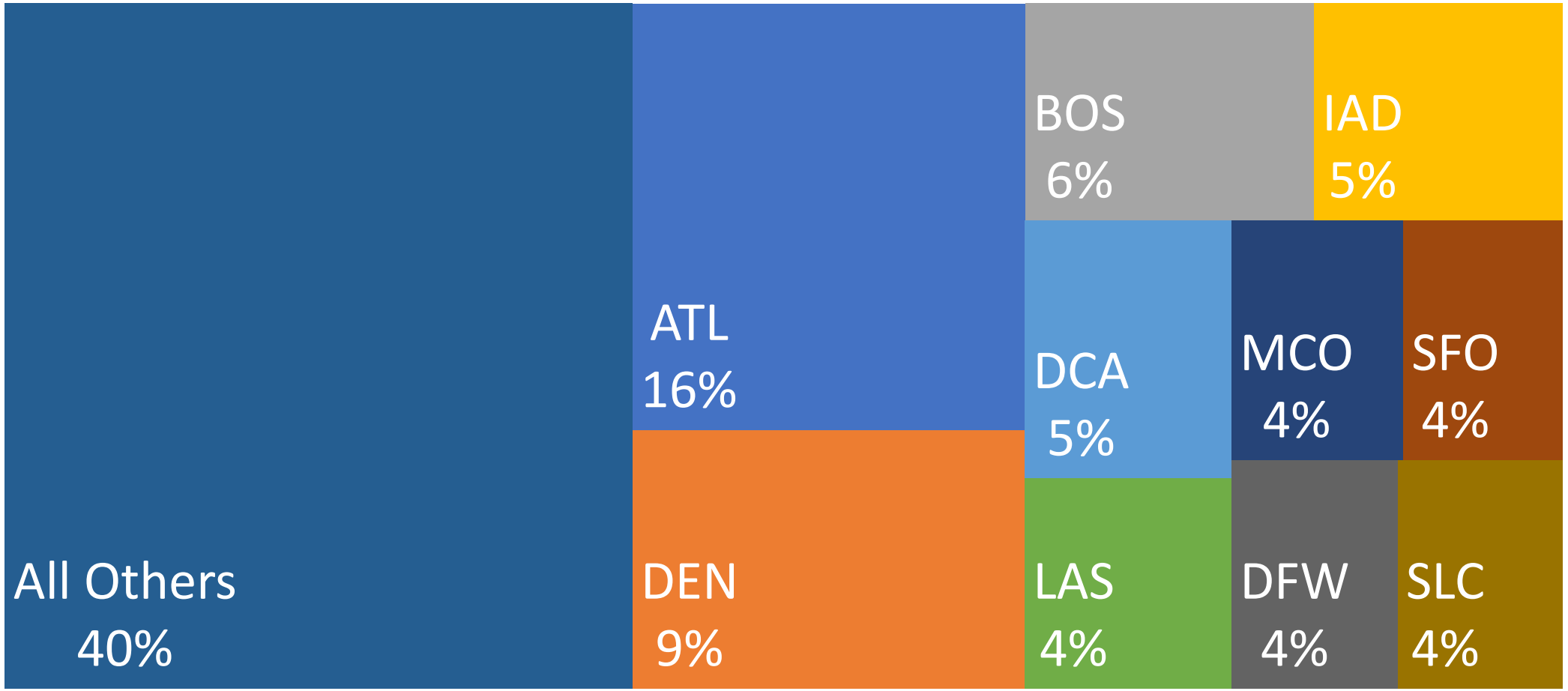
Non-Aeronautical Revenues Growth by Category

- Terminal concession revenues experienced the highest growth in 2024



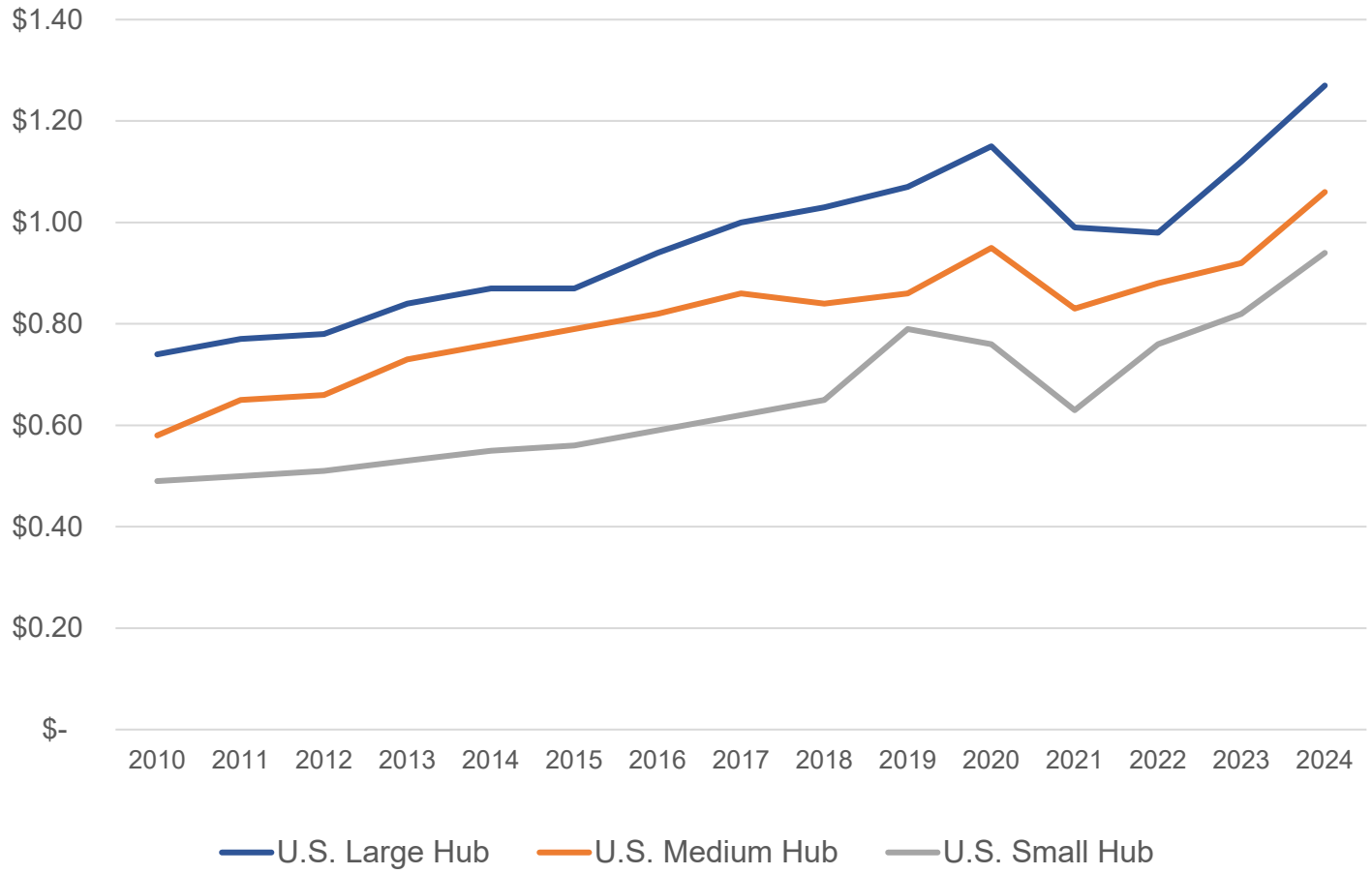
Source: Respective fiscal year data from FAA Form 5100-127.

Ten (10) Airports Contributed 60% to Food and Beverage Growth in 2024



Source: Respective fiscal year data from FAA Form 5100-127.

Food and Beverage Revenues Per Enplanement
By Hub Size



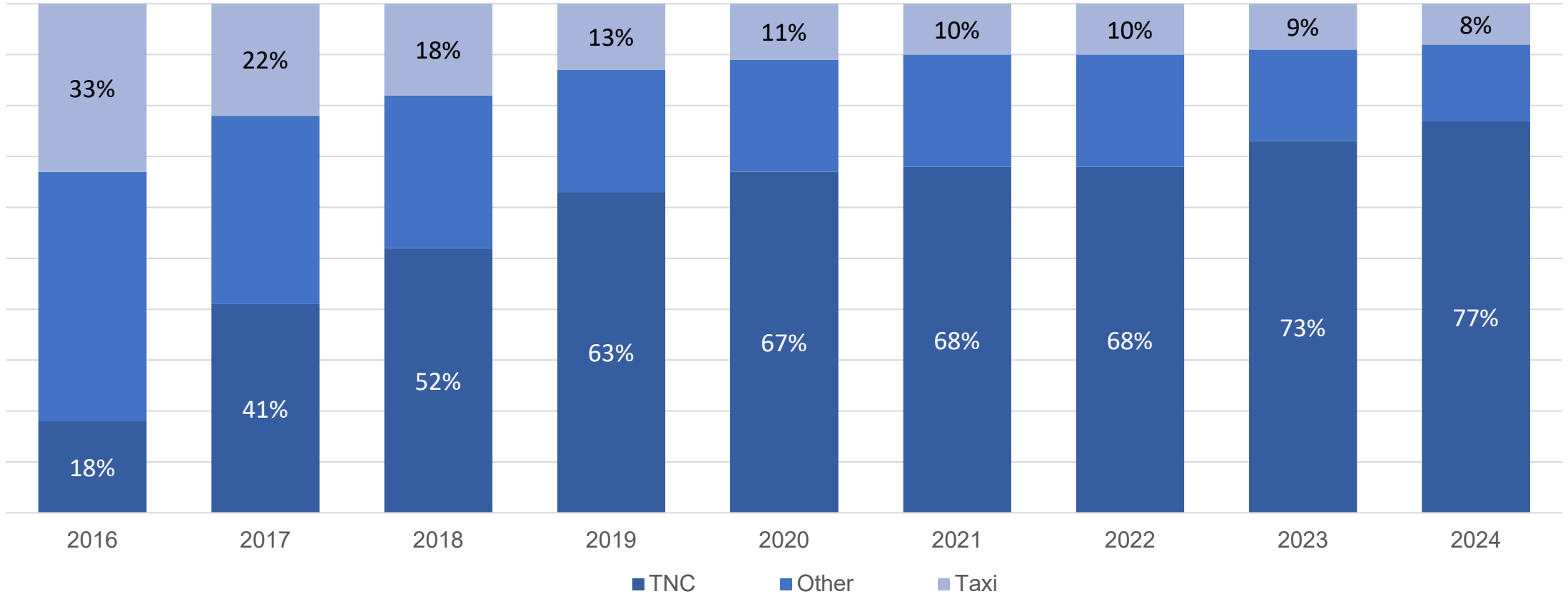
Top 5 Highest
Per Enplanement

Hub Size	2024 Top 5	2023	2024
Large	PHL	$2.02	$2.04
	DCA	$1.20	$1.95
	BOS	$1.40	$1.89
	TPA	$1.85	$1.88
	AUS	$1.70	$1.82
Medium	CHS	$2.04	$2.09
	HOU	$1.65	$1.75
	SJU	$1.44	$1.60
	ANC	$1.18	$1.57
	DAL	$1.37	$1.53
Small	DSM	$5.33	$5.82
	GSP	$3.14	$3.72
	BZN	$2.19	$2.52
	GUM	$1.60	$2.06
	VPS	$1.80	$1.91

Source: Respective fiscal year data from FAA Form 5100-127, excluding airports with missing enplanements.

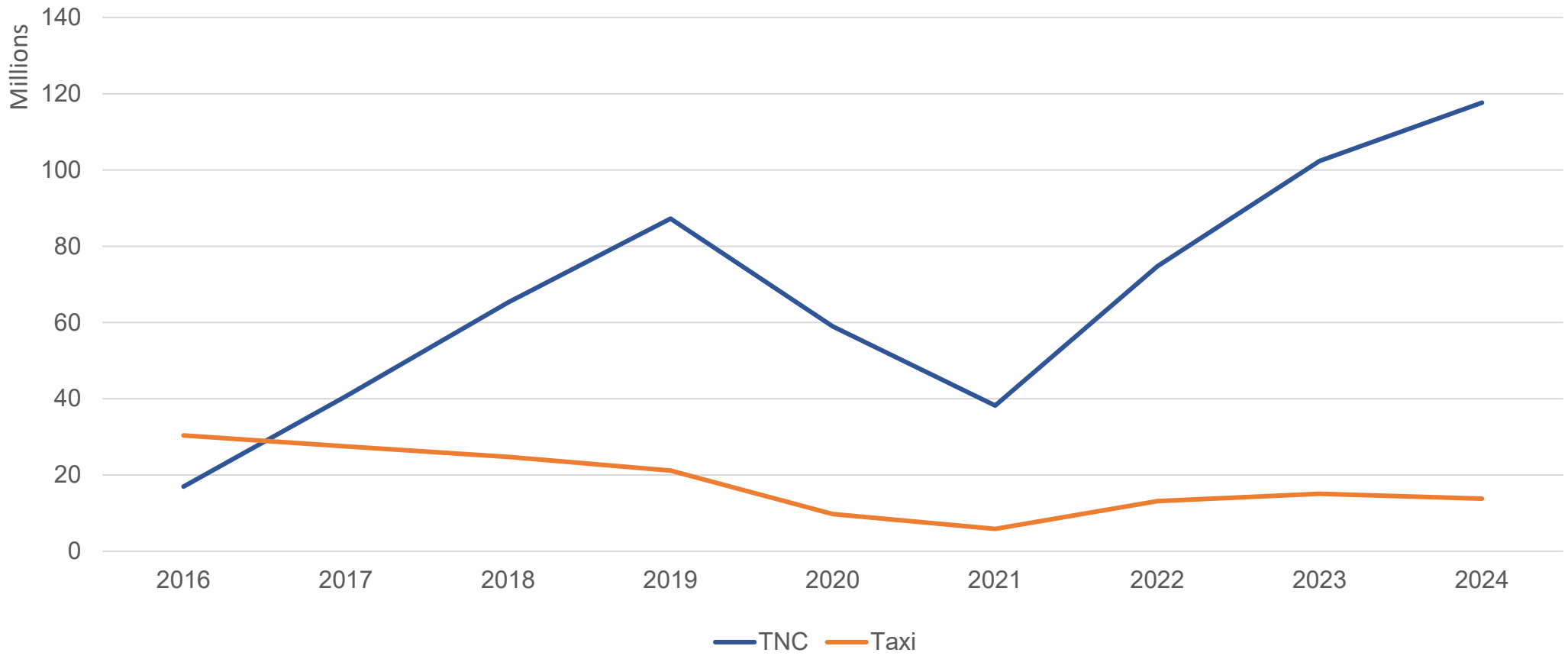
Ground Transportation Revenues Distribution By Mode

- TNC's share increased from 18% to 77% from 2016 to 2024



Source: ACI benchmark survey, including all participated airports in each fiscal year.

TNC and Taxi Trips

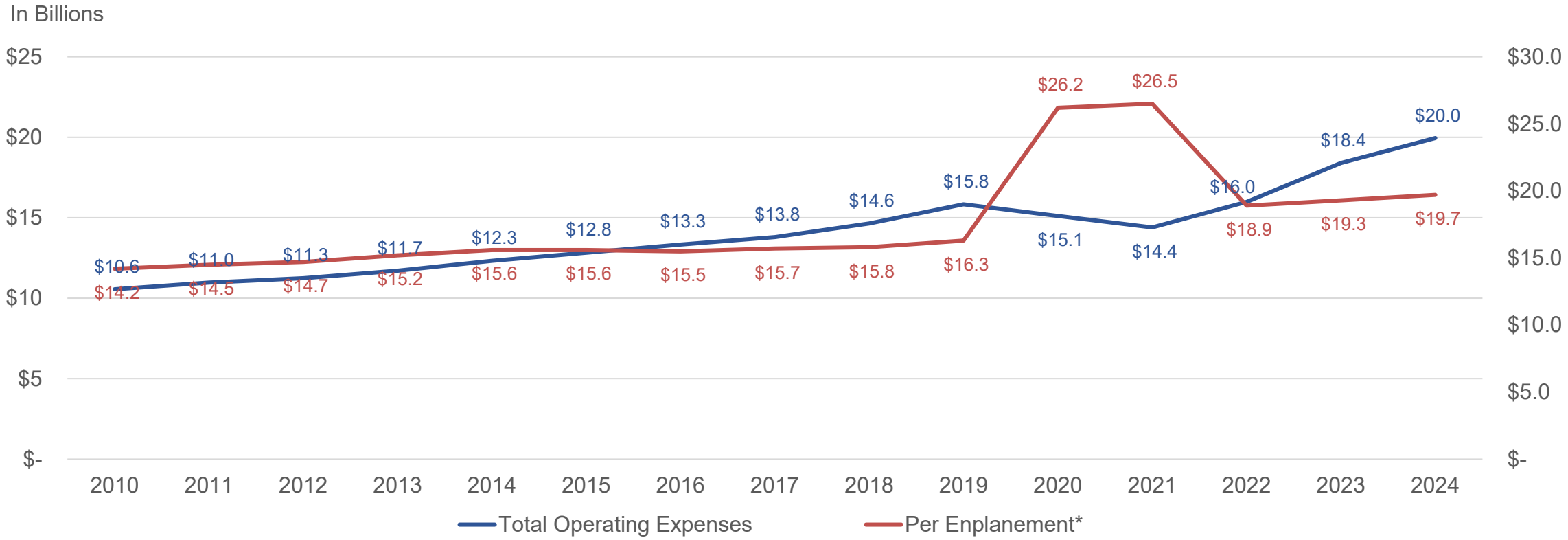


Source: ACI benchmark survey, including 31 airports participated in most years. Annual combined TNC and taxi trips for the 31 airports increased from 47 million in 2016 to 131 million in 2024.

Operating Expenses

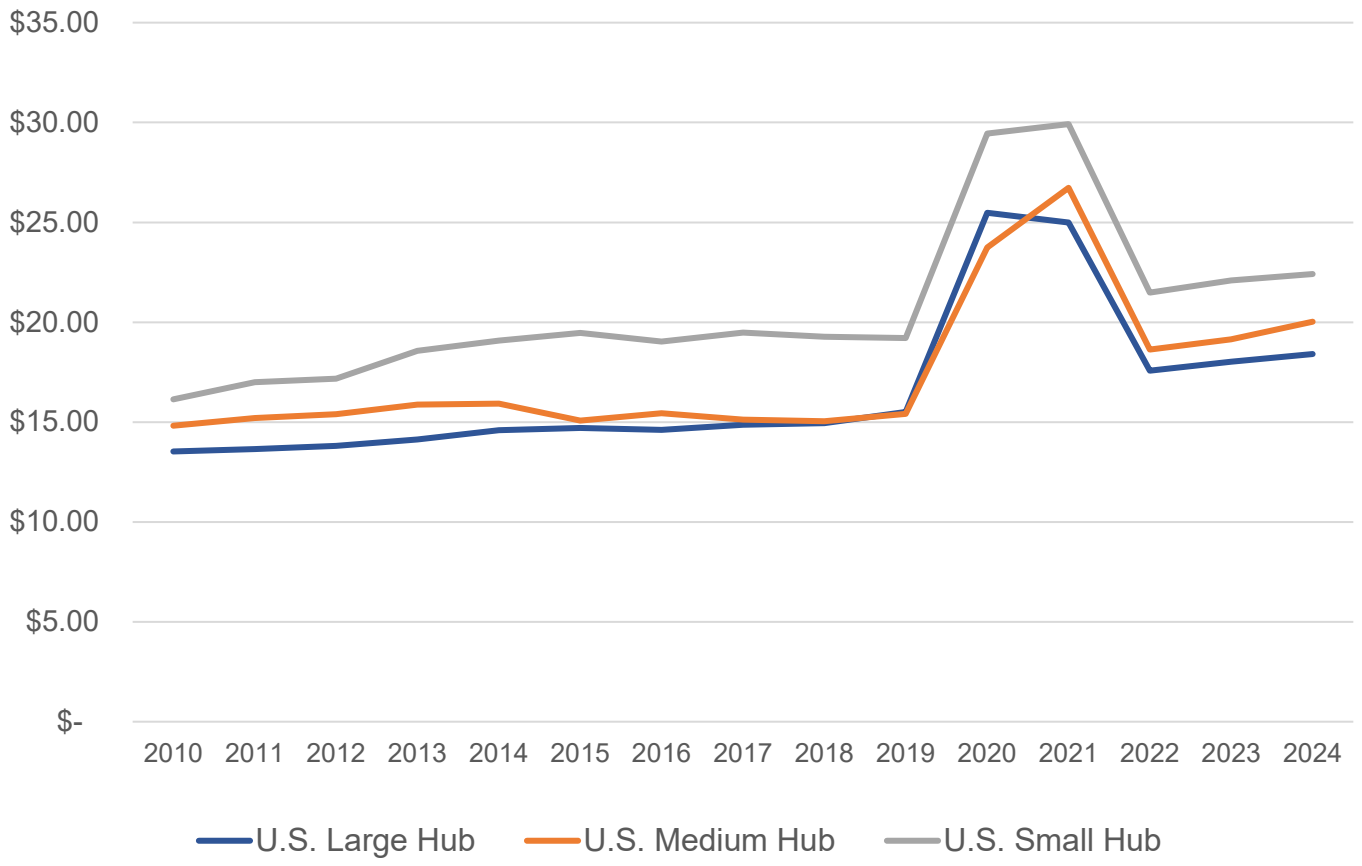
Total Operating Expenses

- In 2024, total industry operating expenses grew by 8.4%, down from a 15.1% increase in 2023



Source: Respective fiscal year data from FAA Form 5100-127.
** Per enplanement excludes airports with missing enplanements.*

Operating Expenses Per Enplanement
By Hub Size



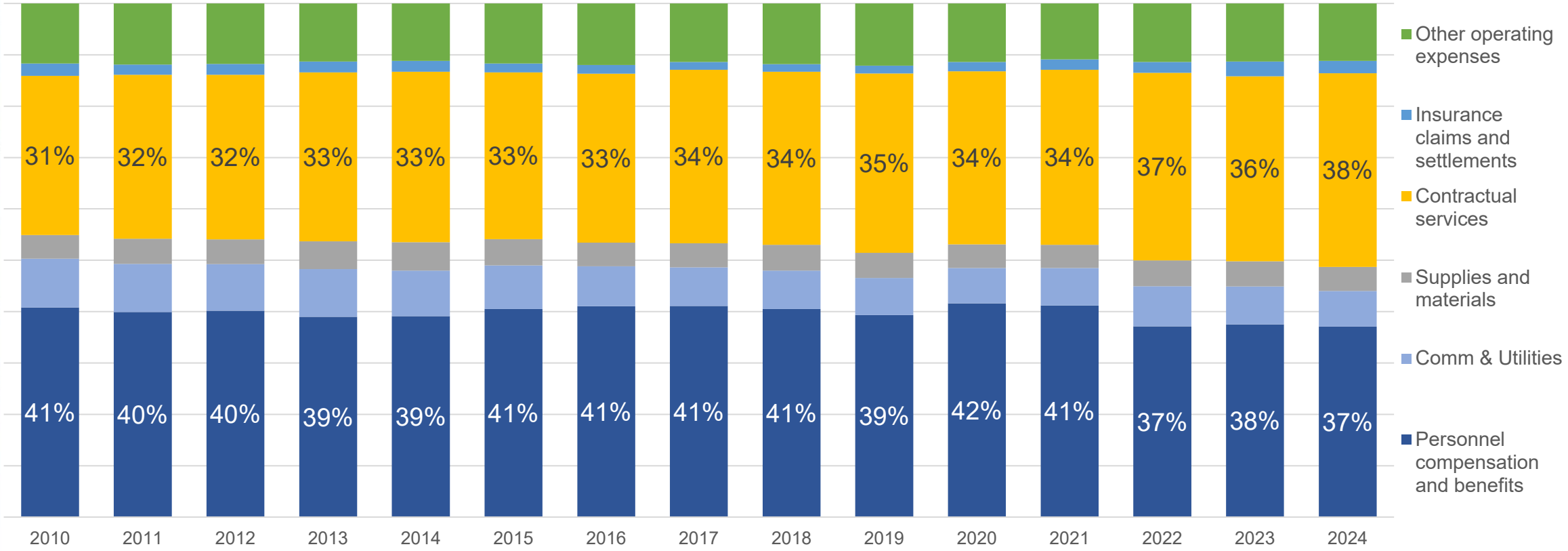
Top 5 Lowest
Per Enplanement

Hub Size	2024 Top 5	2023	2024
Large	ATL	$7.47	$7.51
	CLT	$8.64	$9.03
	LAS	$10.47	$11.21
	PHX	$13.00	$13.12
	BNA	$11.15	$13.18
Medium	MSY	$11.76	$11.81
	HOU	$13.96	$13.87
	DAL	$11.99	$14.28
	RDU	$15.13	$15.11
	OMA	$14.43	$15.20
Small	BZN	$10.18	$10.73
	PIE	$11.10	$12.17
	PGD	$14.52	$12.41
	ECP	$13.26	$13.04
	AVL	$13.04	$13.70

Source: Respective fiscal year data from FAA Form 5100-127, excluding airports with missing enplanements.

Operating Expenses Distribution

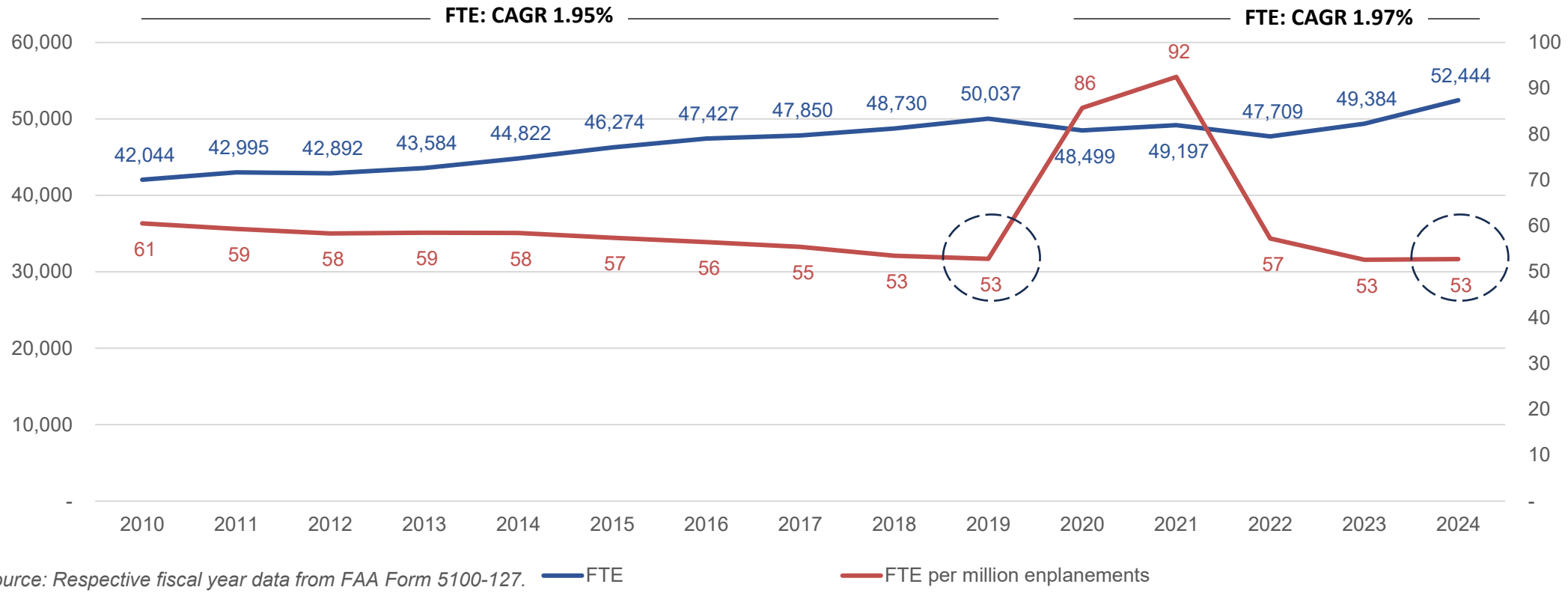
- Personnel compensation and benefits – dropped to the lowest level post COVID-19 pandemic
- Contractual services – increased from 31% to 38% during the past 15 years



Source: Respective fiscal year data from FAA Form 5100-127.

Full Time Equivalent Employees

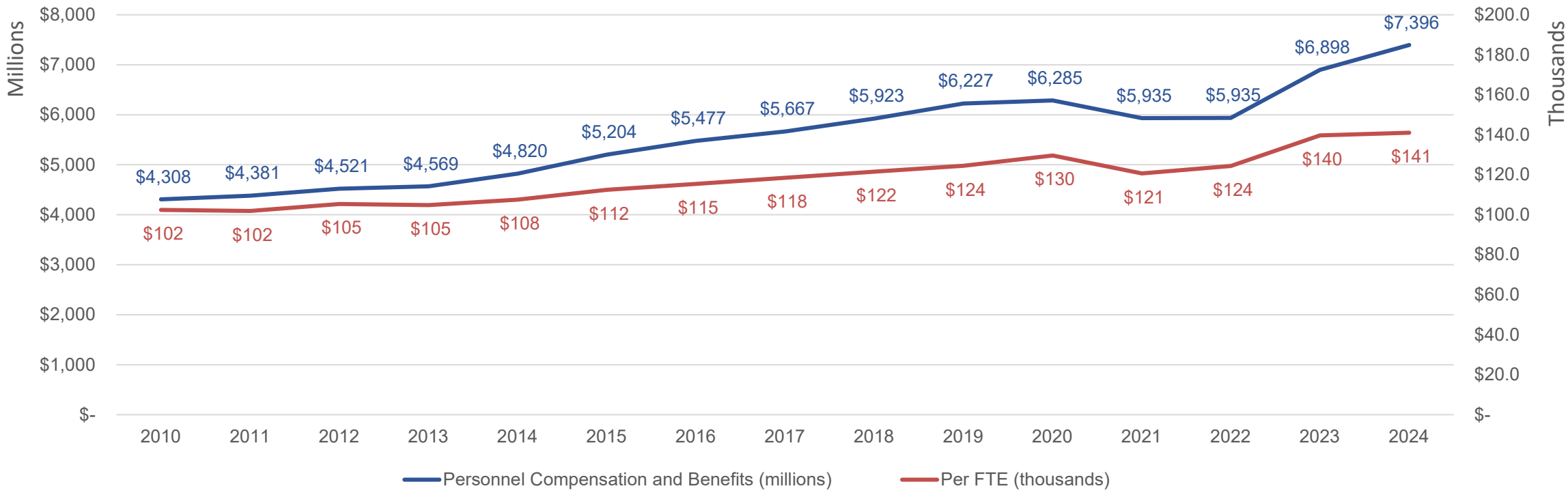
- FTE per million enplanements had been decreasing before 2019. After a spike during the COVID-19 pandemic, this metric returned to 2019 level in 2023 and kept flat in 2024



Source: Respective fiscal year data from FAA Form 5100-127.

Personnel Compensation and Benefits

- In 2024, personnel compensation and benefits per FTE increased by 1.0%, down from 12.3% in 2023

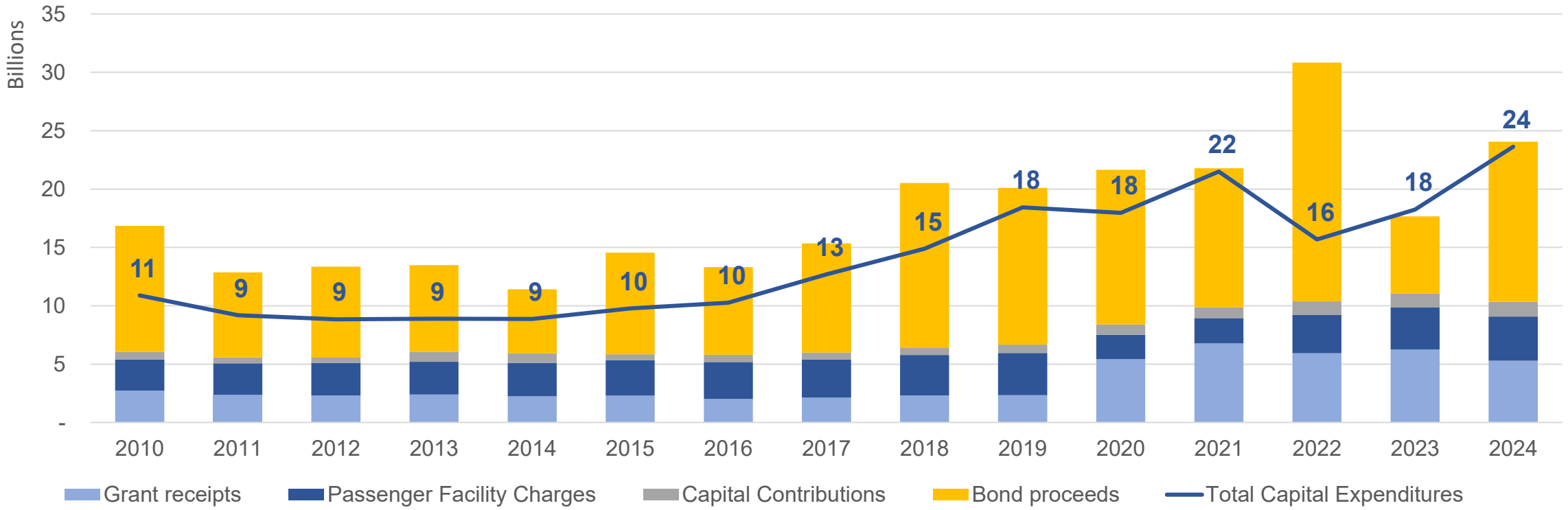


Source: Respective fiscal year data from FAA Form 5100-127.

Capital & Others

Capital Expenditure and Funding Trend

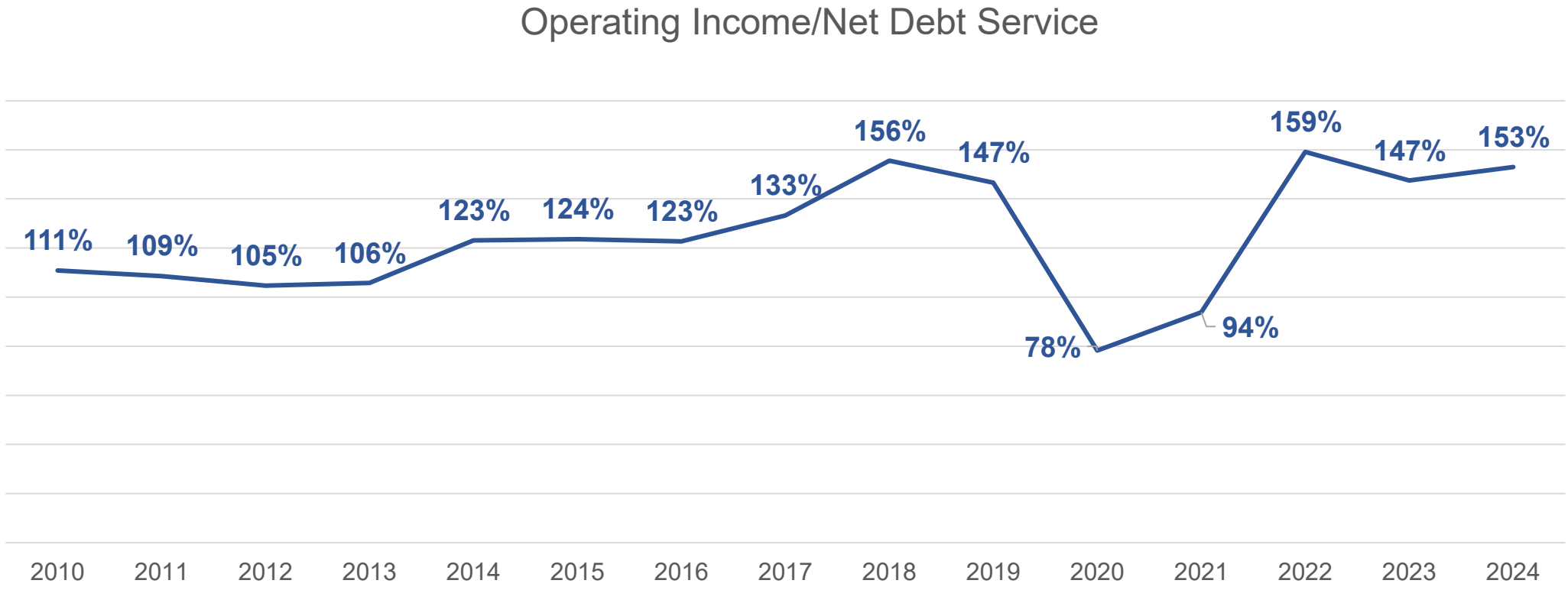
- Bond has been the primary source for funding capital projects
- Airports are resuming capital investment following the COVID-19 pandemic to meet traffic needs



Source: Respective fiscal year data from FAA Form 5100-127.

Ratio of Operating Income To Net Debt Service

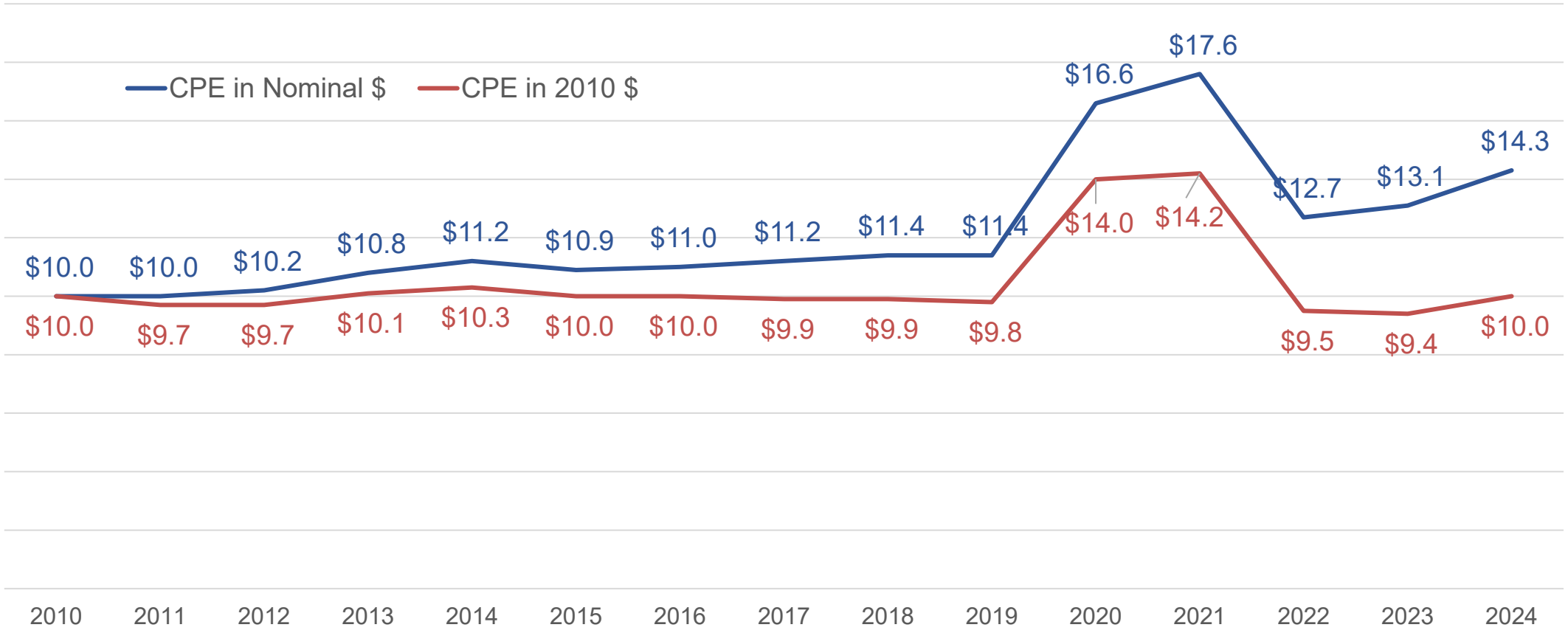
- Debt service coverage ratio increased from 147% in 2023 to 153% in 2024



Source: Respective fiscal year data from FAA Form 5100-127, excluding airports with zero net debt service.

Cost Per Enplanement

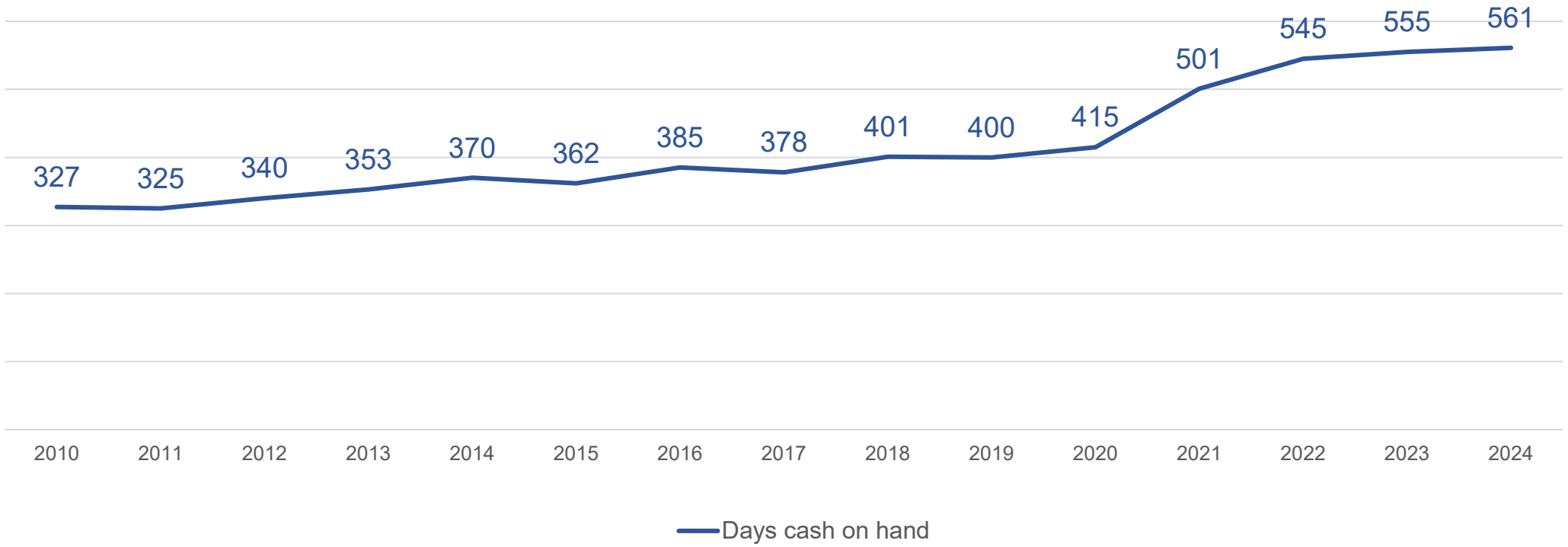
- CPE remains low level after adjusting for inflation



Source: Respective fiscal year data from FAA Form 5100-127.

Days Cash on Hand

- Airports have improved cash position significantly since COVID-19 pandemic



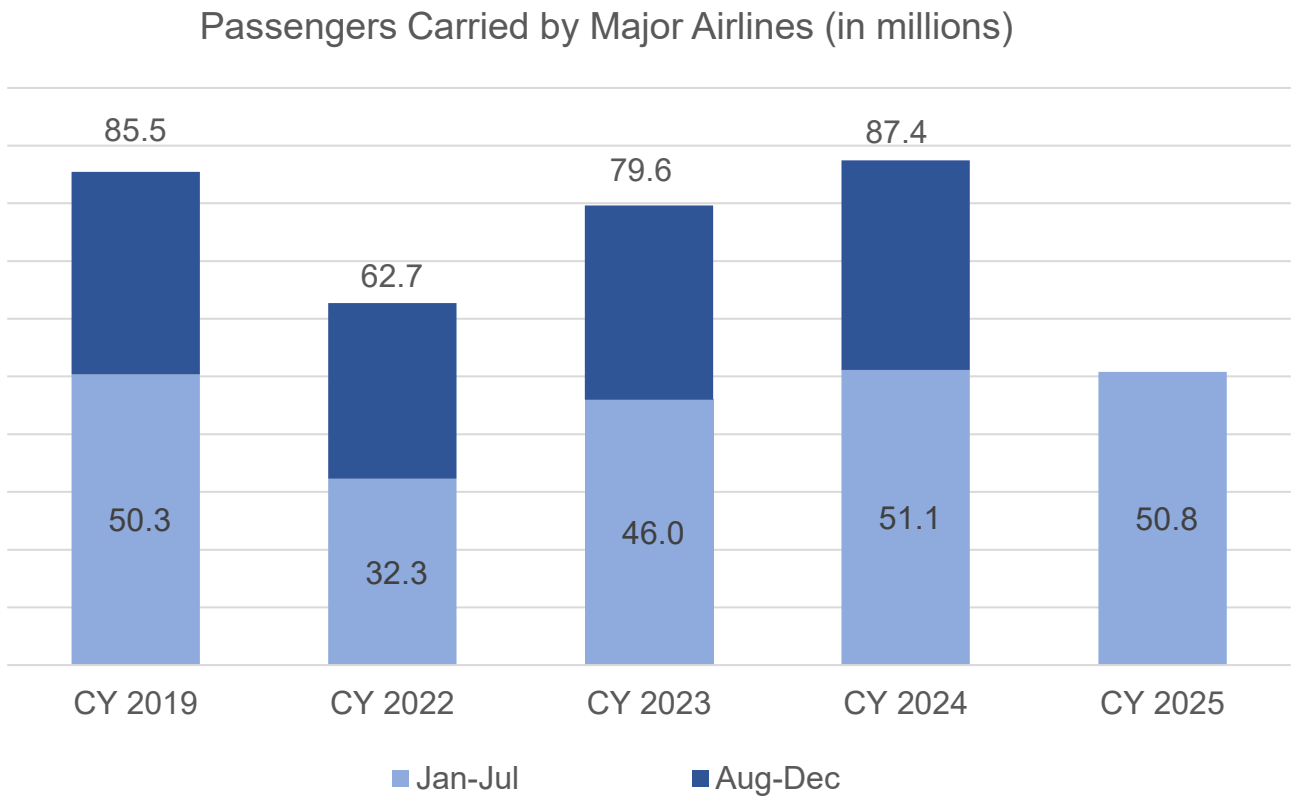
Source: Respective fiscal year data from FAA Form 5100-127.

Canadian Airport Industry Trends

(in Canadian Dollars)

Canada Air Traffic Trend

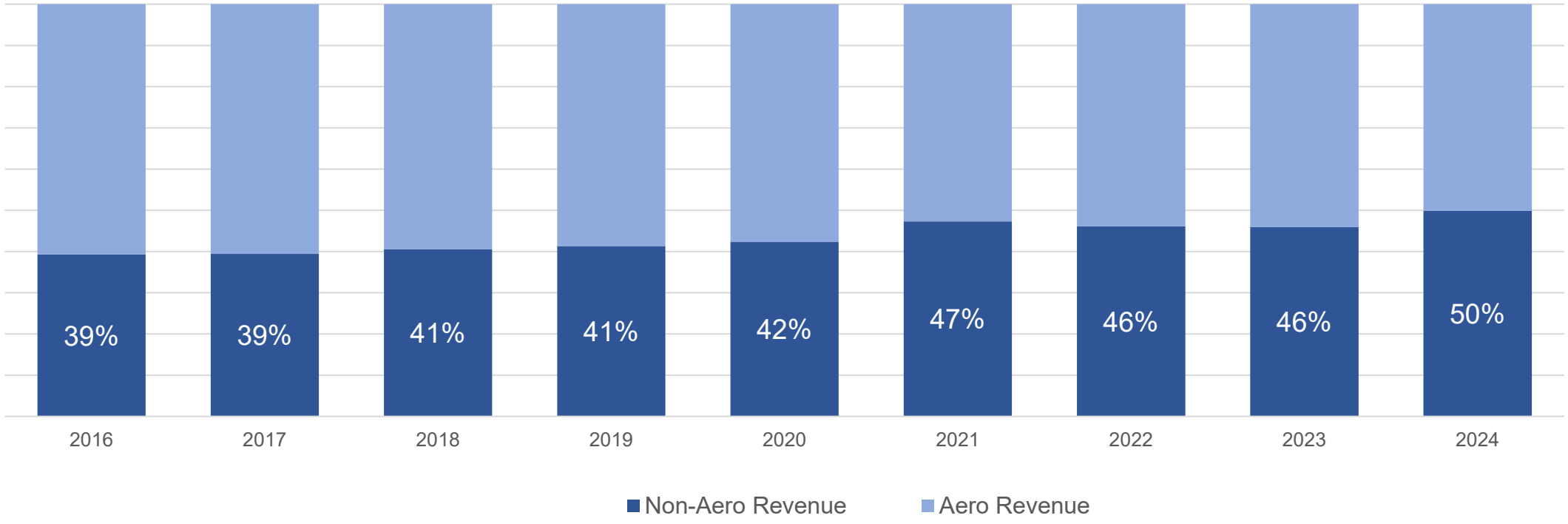
- CY 2024:
  - ▲ +9.8% above 2023
  - ▲ +2.3% above 2019
- CY 2025 thru July:
  - ▼ -0.6% compared to same period in 2024



Source: www.statcan.gc.ca.

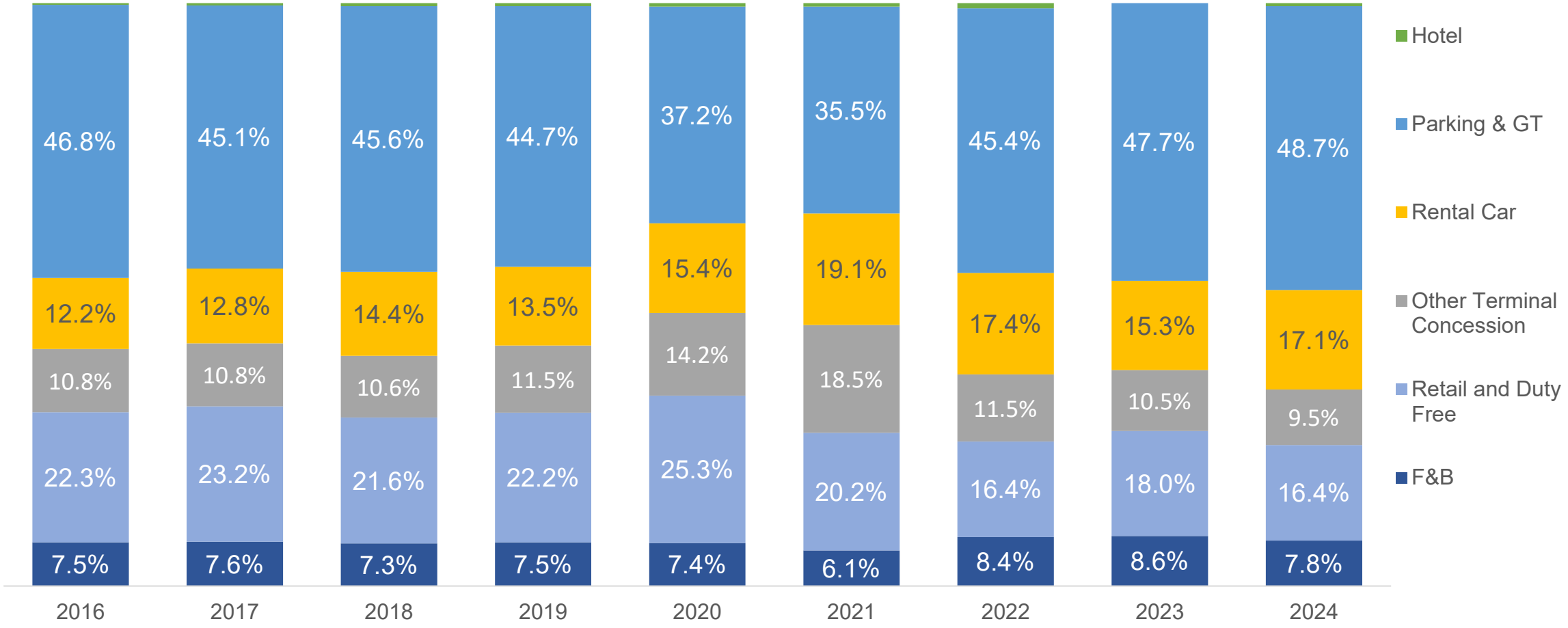
Revenue Allocation

- Non-aeronautical revenue share remained higher than 2019 level after traffic fully recovered, and increased by 3.9 percentage points in 2024.



Source: ACI benchmark survey, including all participated Canadian airports in each fiscal year.

Non-Aeronautical Revenue Allocation

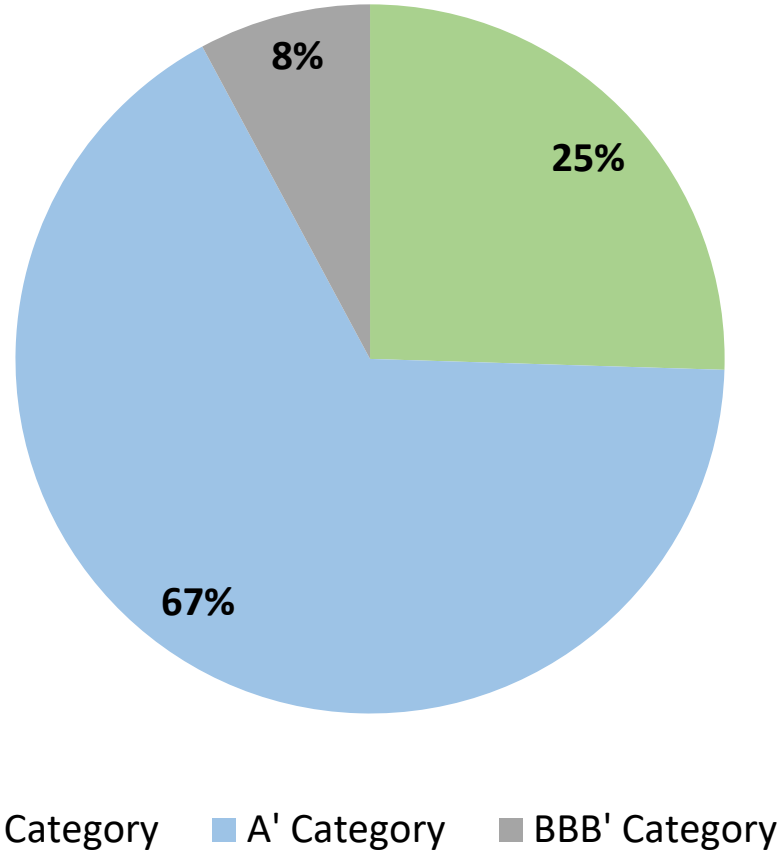


Source: ACI benchmark survey, including all participated Canadian airports in each fiscal year, excluding land and building rent.

Discussion –
A Rating Analyst's Perspective

Rating Distribution - Fitch

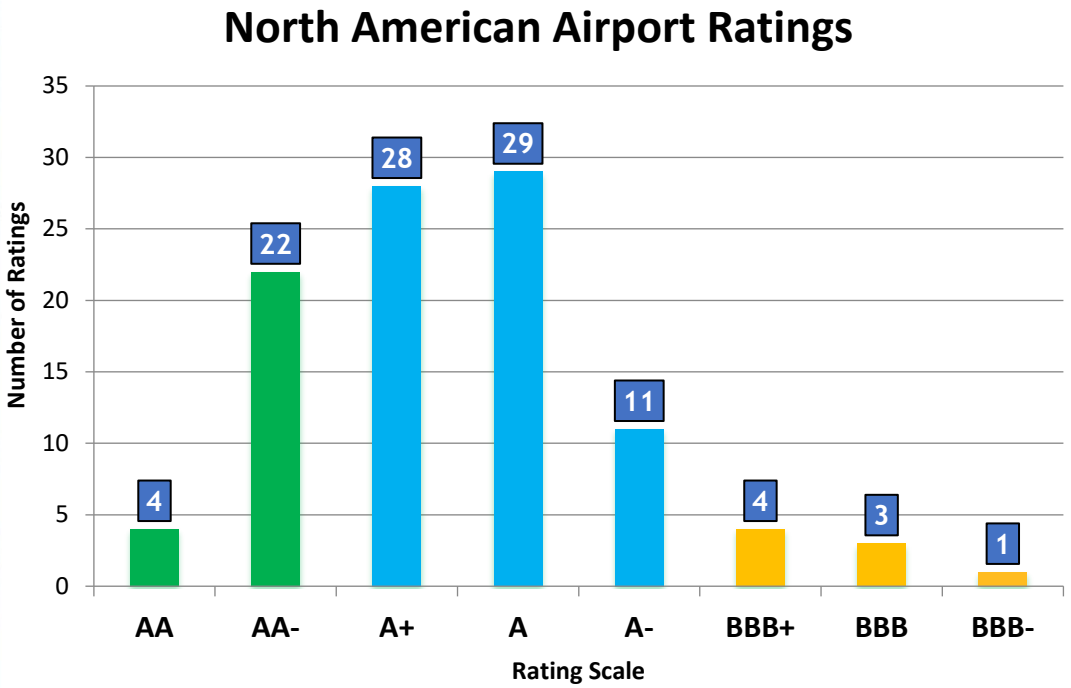
- The ‘A’ category continues to be the most dominant rating level for U.S. airports, indicating the sector’s resilience despite ever-evolving conditions and event-driven challenges derived from general economic factors and the airline industry.

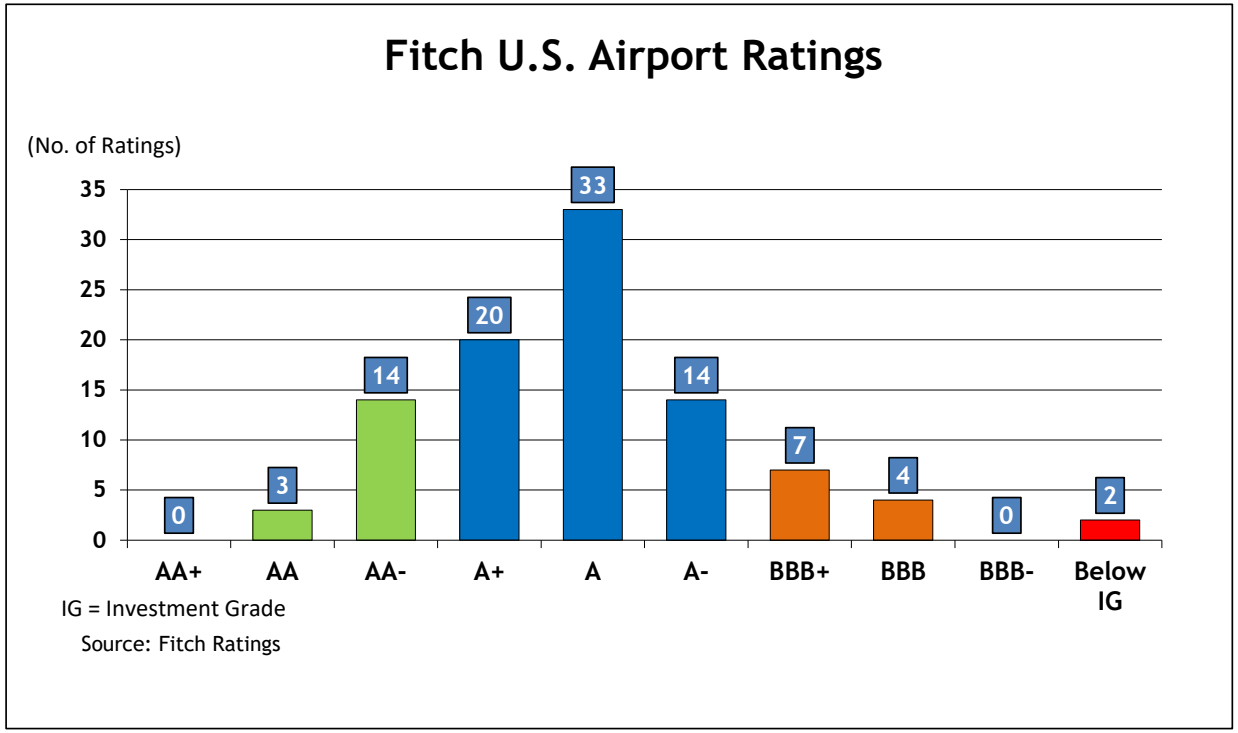


Source: Fitch Ratings

Rating Distribution - Fitch

2025 vs. **2018**

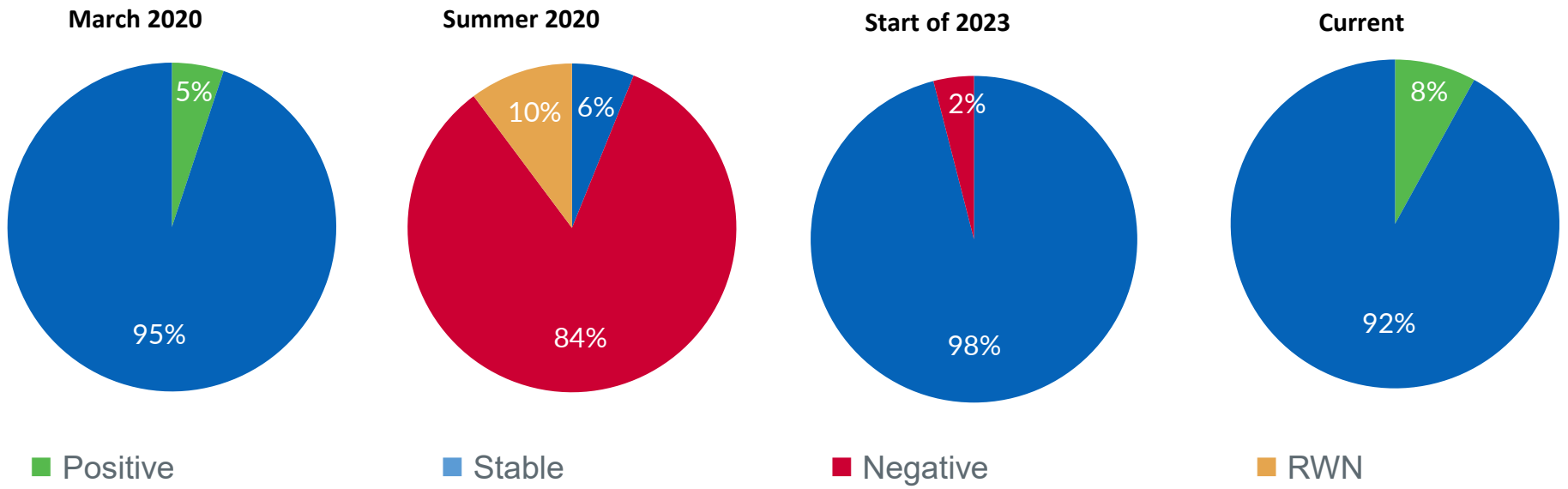




Source: Fitch Ratings

Ratings Outlooks During Three Years of Pandemic

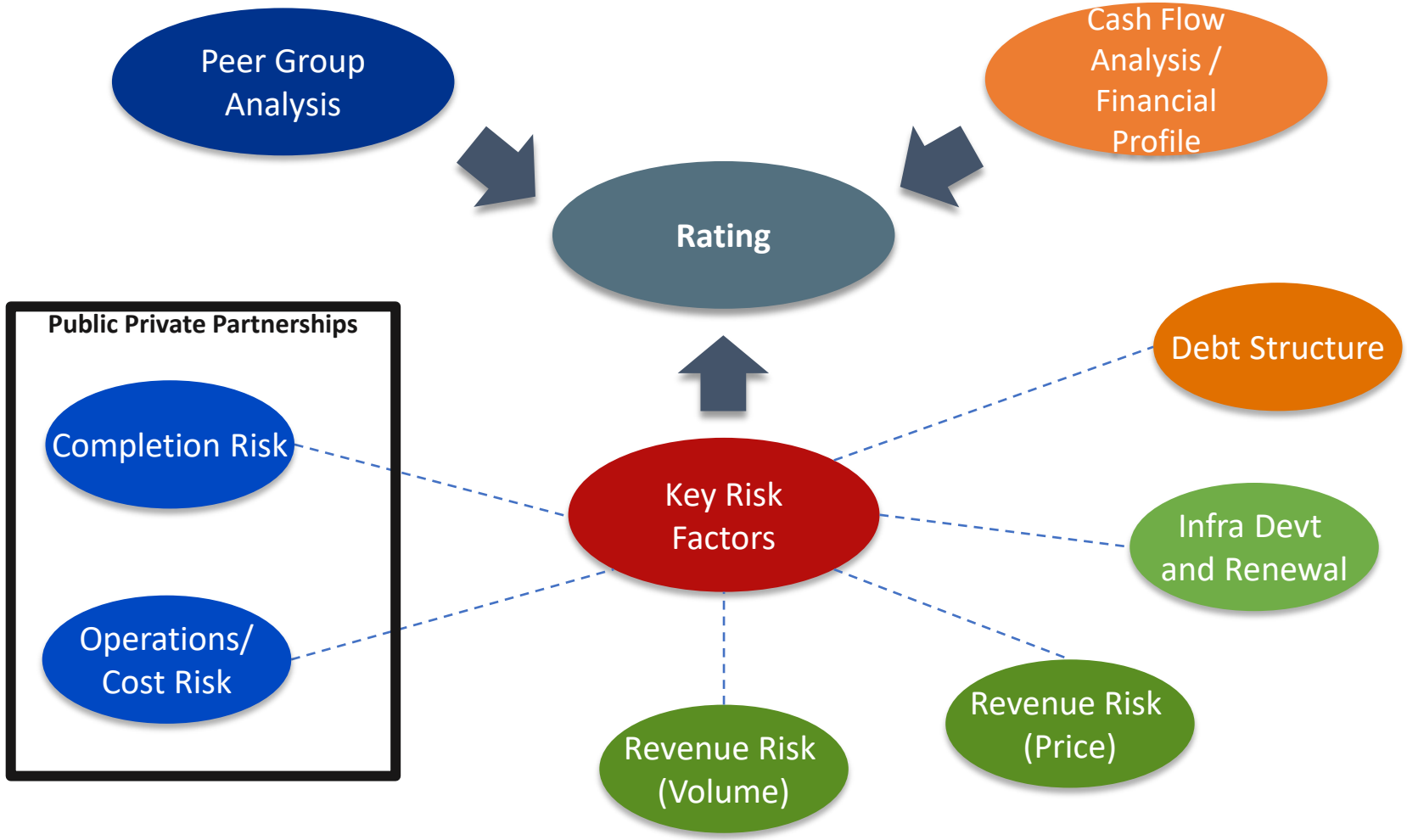
- **Few Airport Rating Downgrades in Contrast to All Airline Ratings Downgraded or On Negative Outlook**



- **Pre-COVID:** **Stable Sector Profile with Several Potential Positive Rating Actions**
- **Summer 2020:** **Most Ratings Had Negative Outlook or on Rating Watch**
- **Start of 2023:** **Airport Ratings Restored to Stable Outlook**

Source: Fitch Ratings

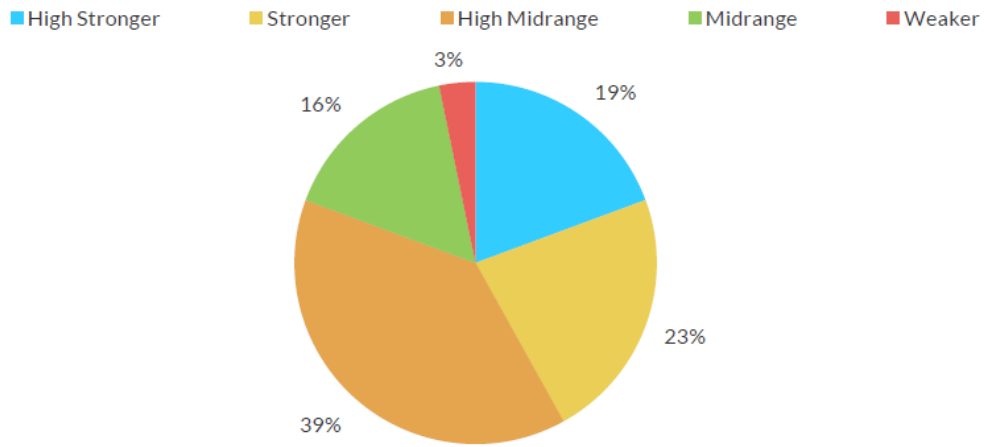
Analytical Framework – Fitch Ratings



Key Rating Driver Assessments

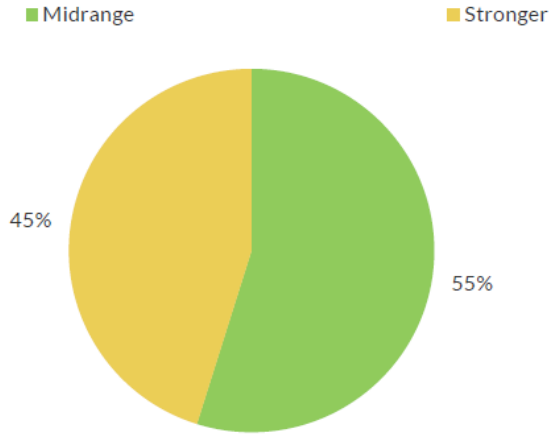
Attribute Assessment Distributions – U.S. Airports

Volume



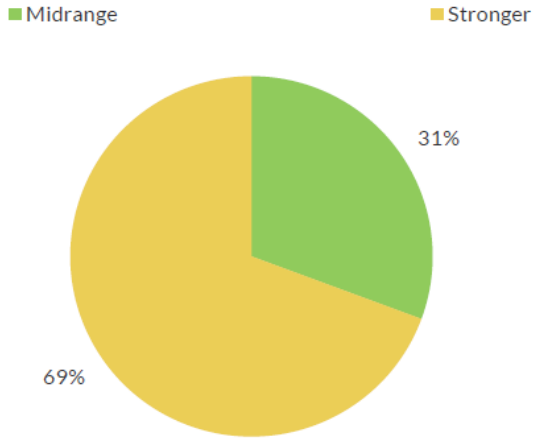
Source: Fitch Ratings

Infrastructure Renewal



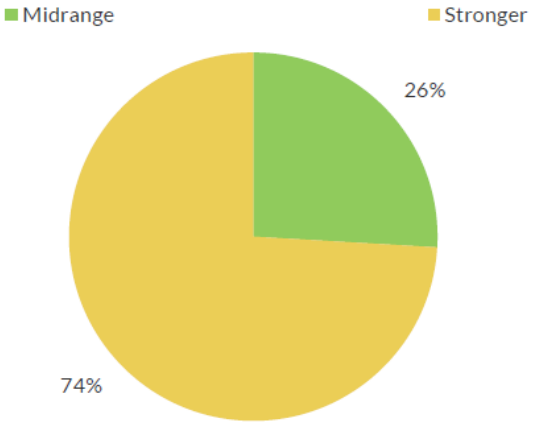
Source: Fitch Ratings

Price



Source: Fitch Ratings

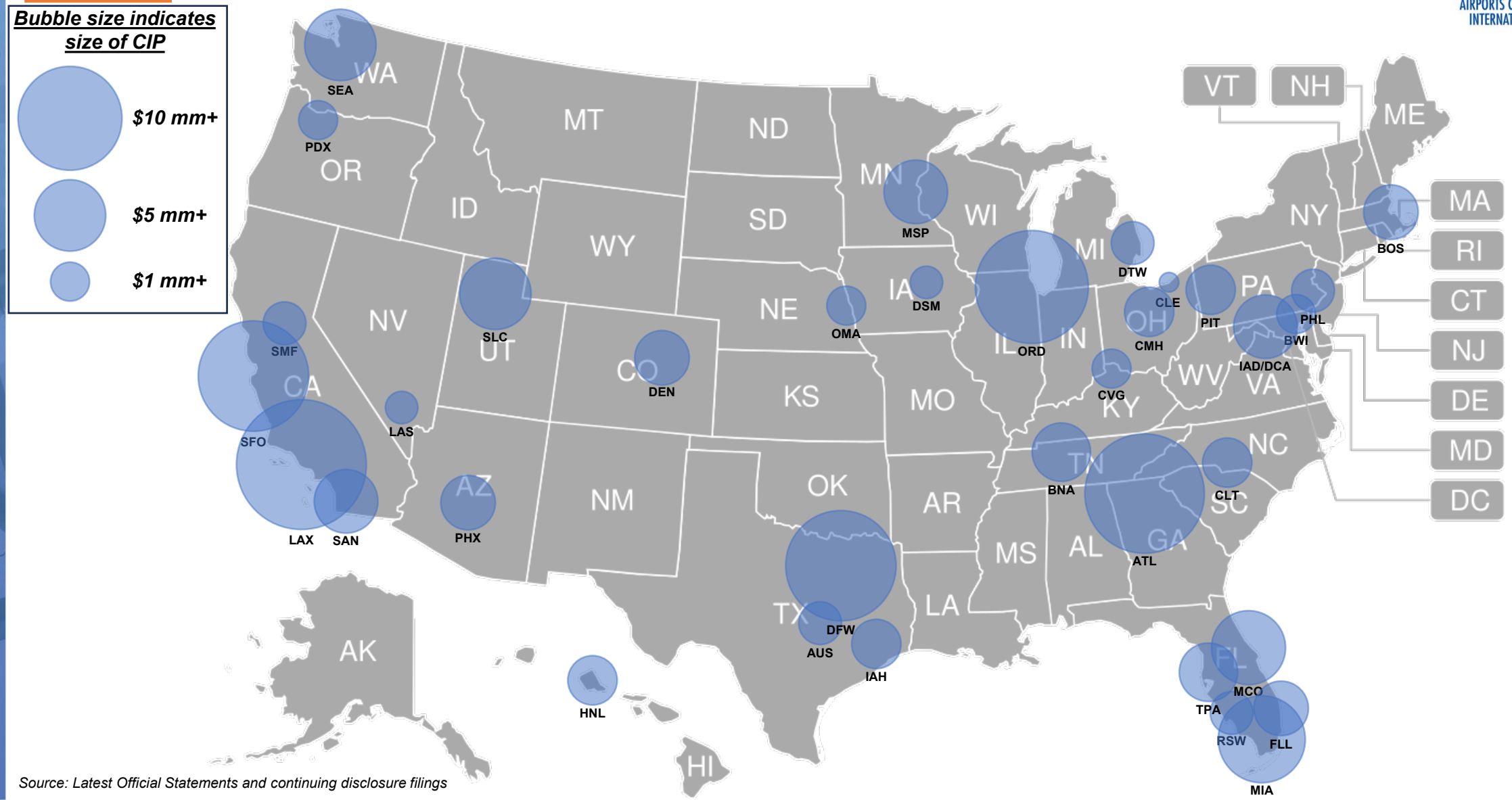
Debt Structure



Source: Fitch Ratings

“Fireside Chat”

Size of Capital Improvement Programs (CIP) at Select Large and Medium Hub Airports



Source: Latest Official Statements and continuing disclosure filings

Thank you

Audience Q&A

Summary of the ACI-NA Annual Financial Benchmarking Survey for FY2024 Results

CPE Code (End):

ATY

2025

ACI-NA & ACI World Annual General Assembly, Conference and Exhibition

AIRPORTS COUNCIL INTERNATIONAL
NORTH AMERICA | WORLD

October 25 - 28, 2025
Toronto, ON

Closing Remarks

Brian Butler
Chief Financial Officer
Salt Lake City International Airport
Vice Chair, ACI-NA Finance Committee