

Air Cargo Trends in The Americas

Andy Ricover Air Transport Specialist

October 7, 2017, Kuala Lumpur
FIATA World Congress

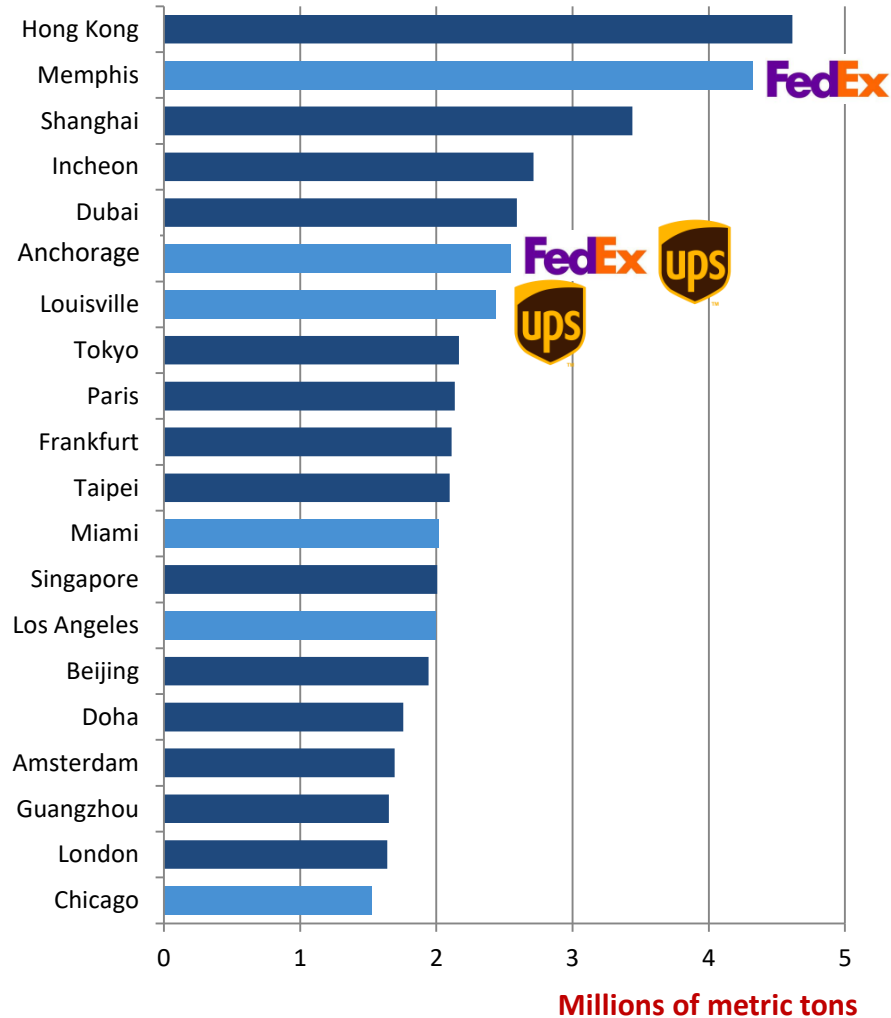


ALG TRANSPORTATION
INFRASTRUCTURE
& LOGISTICS

Top 20 Cargo airports in the World by throughput

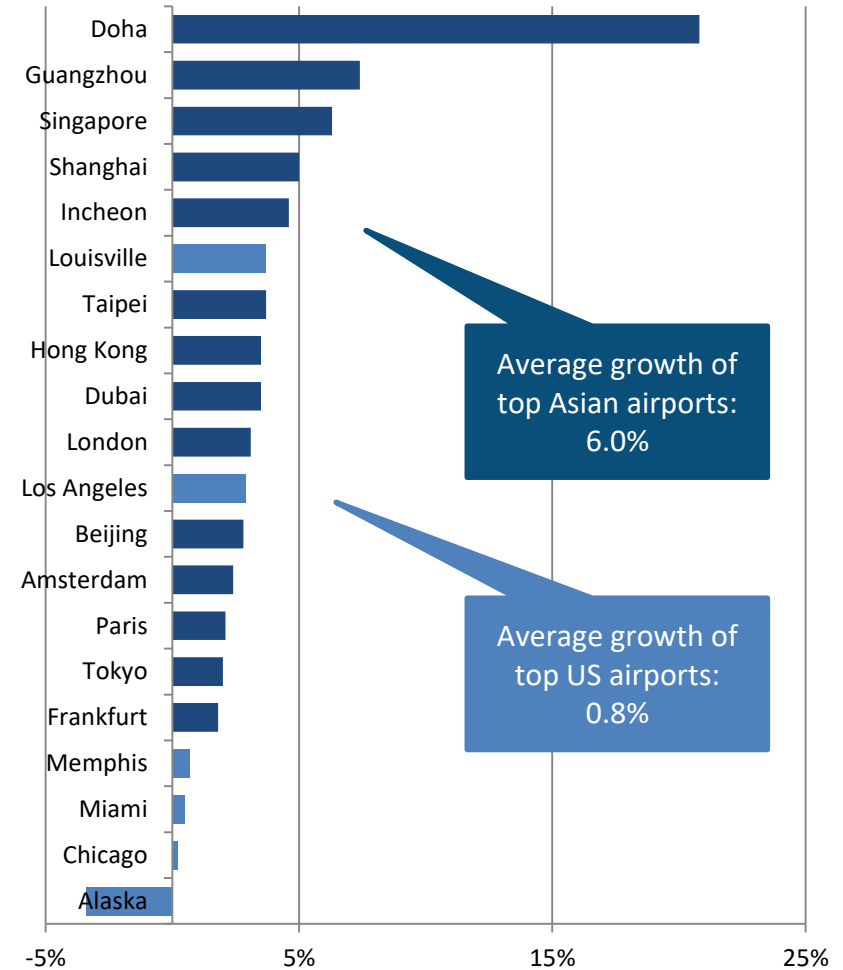
Loaded and unloaded cargo

2016



Growth in loaded and unloaded cargo

2016 vs 2015



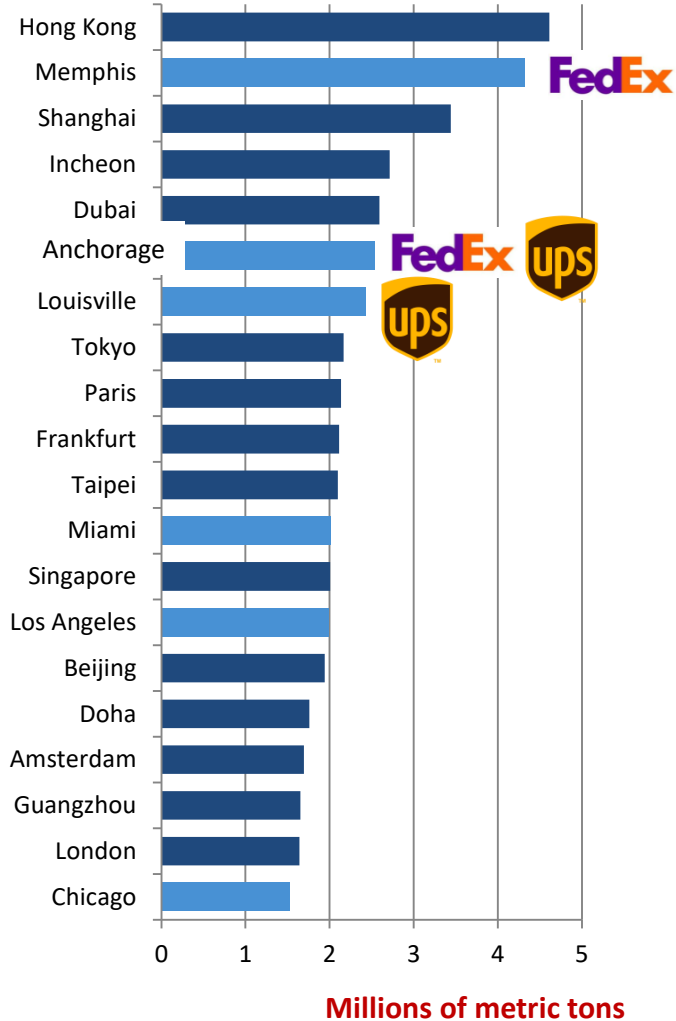
Average growth of top Asian airports: 6.0%

Average growth of top US airports: 0.8%

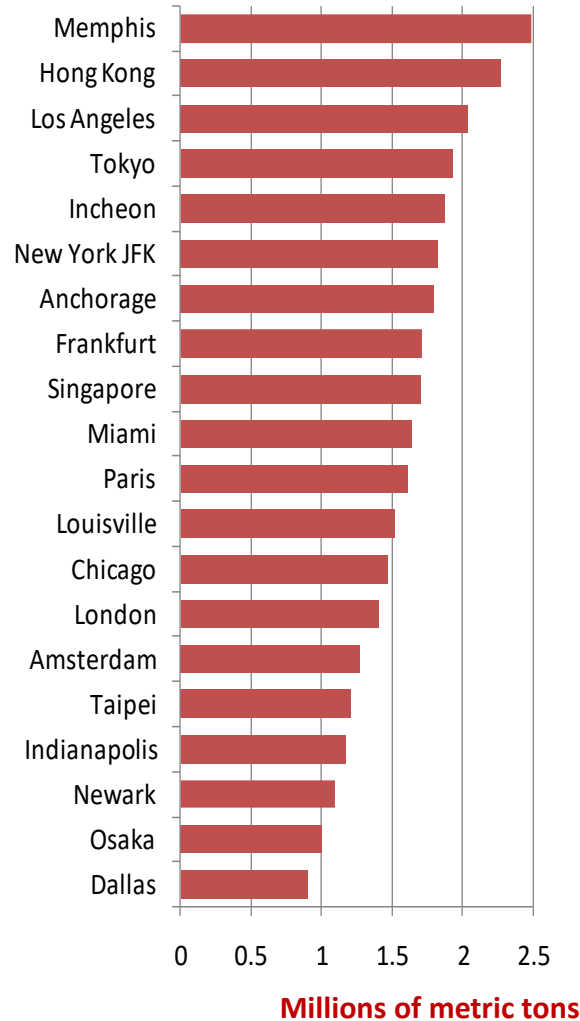
Source: AGL analysis, ACI

Top 20 Cargo airports in the World by throughput

Loaded and unloaded metric tons
2016



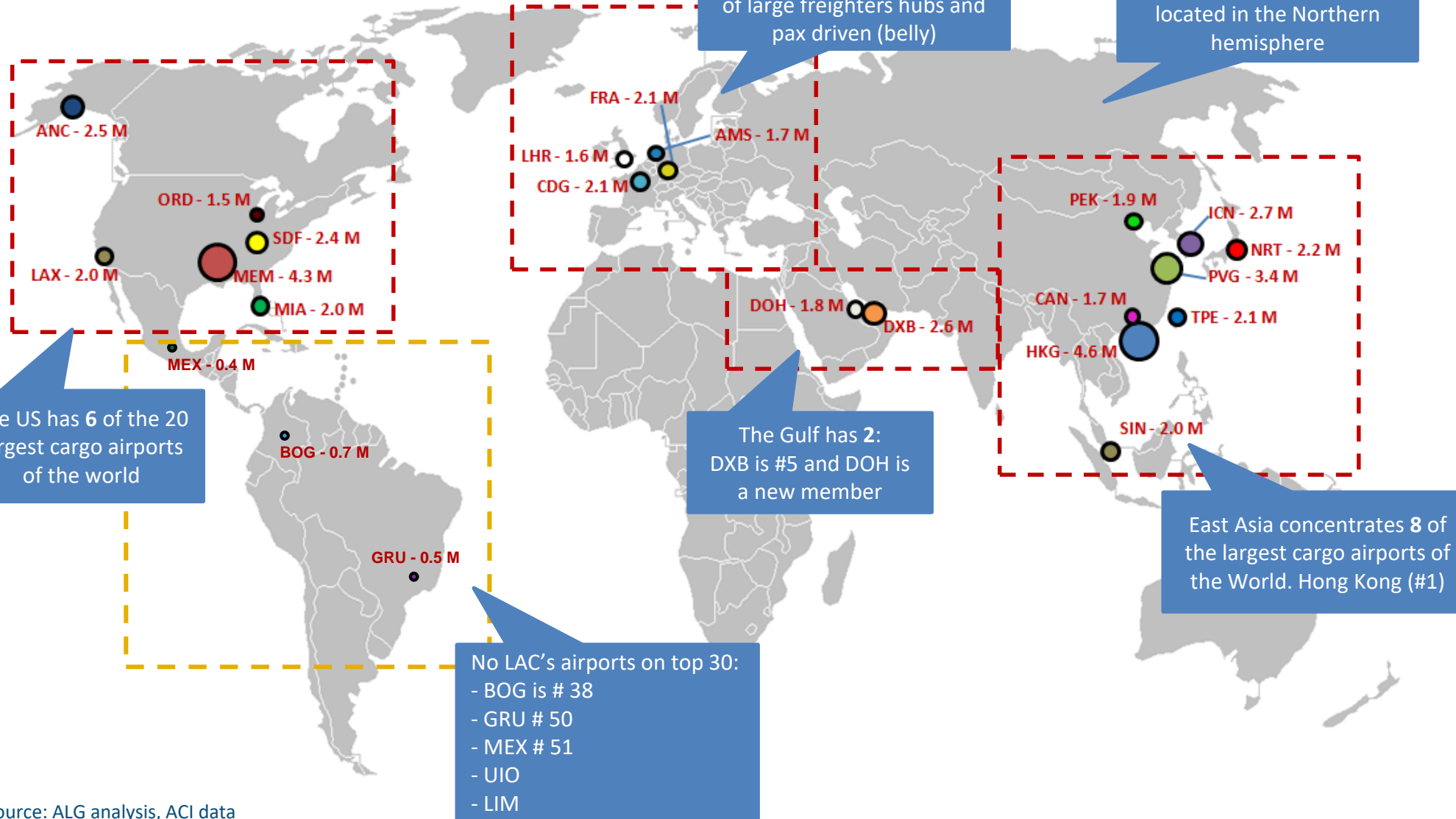
Loaded and unloaded metric tons
2000



Airport	2000	2016	Growth
Memphis	1	2	74%
Hong Kong	2	1	103%
Los Angeles	3	14	- 2%
Tokyo	4	8	12%
Incheon	5	4	45%
New York	6	Out	N/A
Anchorage	7	6	41%
Frankfurt	8	10	24%
Singapore	9	13	18%
Miami	10	12	23%
Paris	11	9	33%
Louisville	12	7	60%
Chicago	13	20	4%
London	14	19	17%
Amsterdam	15	17	33%
Taipei	16	11	73%
Indianapolis	17	Out	N/A
Newark	18	Out	N/A
Osaka	19	Out	N/A
Dallas	20	Out	N/A
Shanghai	Out	3	> 200%
Dubai	Out	5	>200%

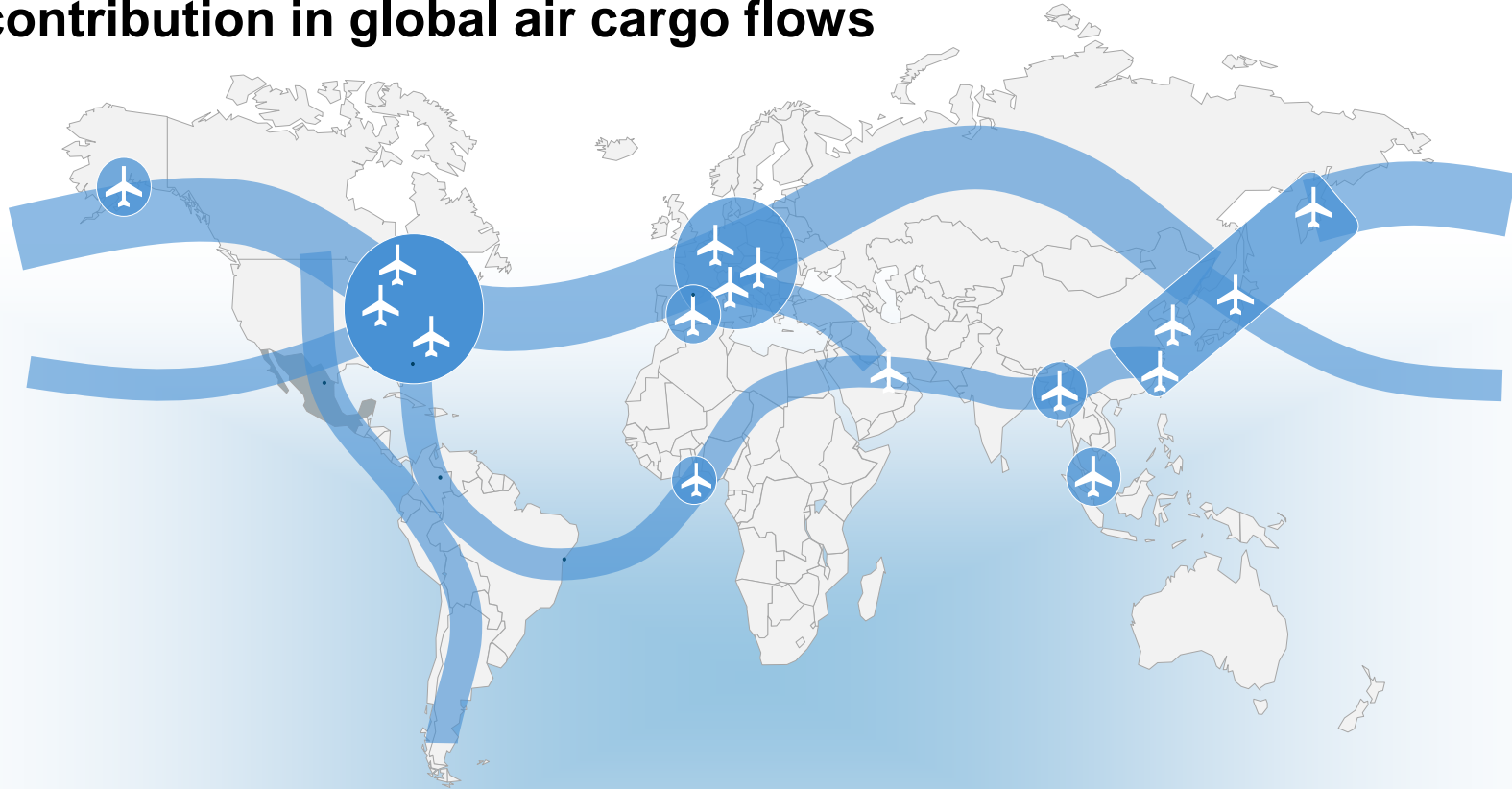
Top 20 Cargo airports in the World by throughput

(tons) 2016



Source: ALG analysis, ACI data

LAC's contribution in global air cargo flows



Central América & Caribe

Tocumen	149
Puerto Rico	146
San Jose	76
Guatemala	59
S. Domingo	56

Total LatAm

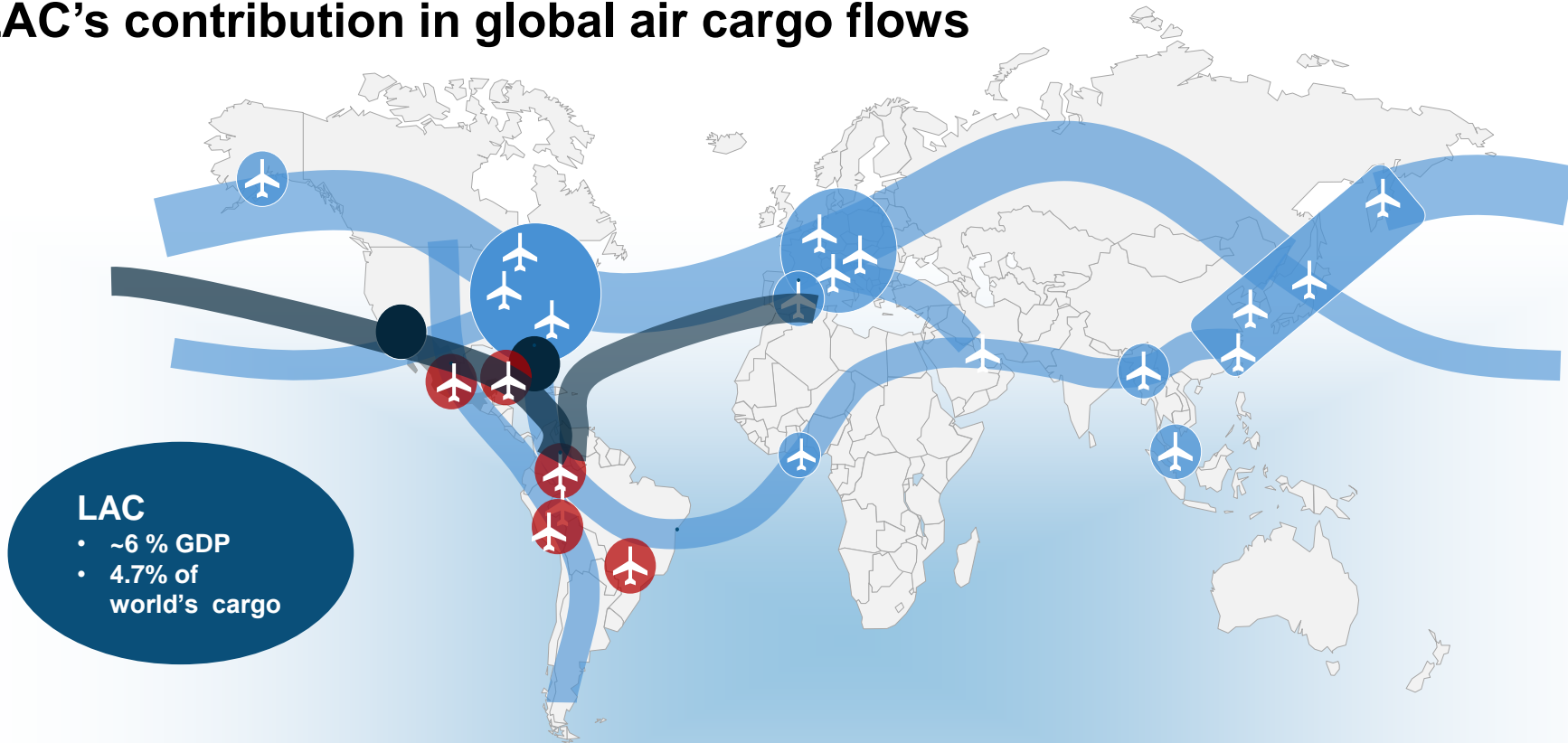
Bogota	637
Guarulhos	482
Mexico	399
Lima	297
Santiago	270

Asia

Hong Kong	4.380
Shanghai	2500
Dubai	2.506
Incheon	2.489
Tokyo	2.085

Source: ALG analysis with data from Airbus Global Market Forecast 2015/35

LAC's contribution in global air cargo flows



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Source: ALG analysis with data from Airbus Global Market Forecast 2015/35

Miami: Latin American connection to Asia

CONNECTS THE COASTS®



LAX ← MIA
IN 3 DAYS
Direct with no re-handling

- Expedited LTL Service
- Truck Load Service
- Airport to Airport
- Door to Door
- Local Pickup & Delivery
- US Customs Bonded
- CFS Station at LAX
- Trans-Loading
- Container Drayage and De-van

LAX: (310) 338-9333 | MIA: (305) 591-1276

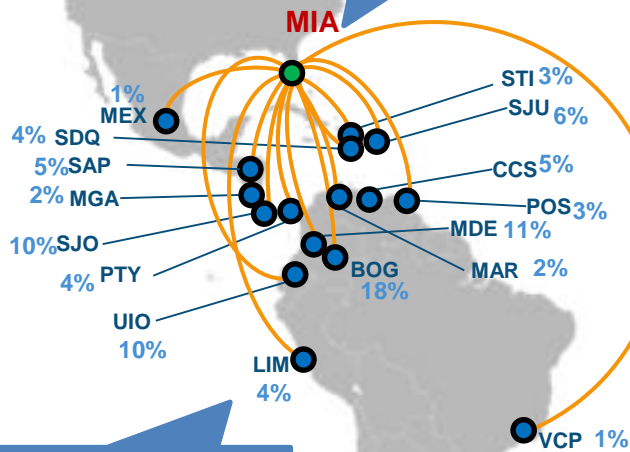
Source: SterlingTransportation

Miami as the gateway with LAC: Freighters Capacity

Main LAC airports with departing cargo to MIA*

2016 - Capacity share of international freight tons according to OAG

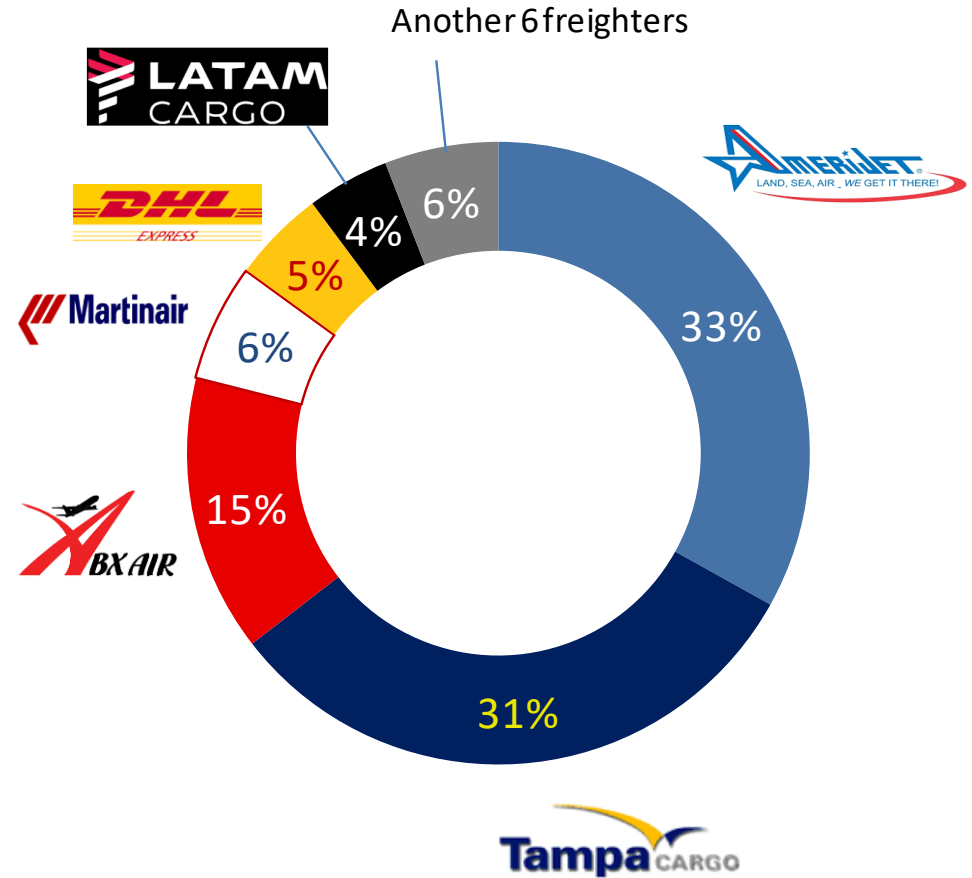
- 80% of US trade with LatAm
- 50%-50% O&D/Connections
- 82% freighters, 18% belly
- flights: 76 pax 79 cargo



The bulk of cargo into MIA is from Central America, Bogotá and Quito

Main Freighters at MIA

2016

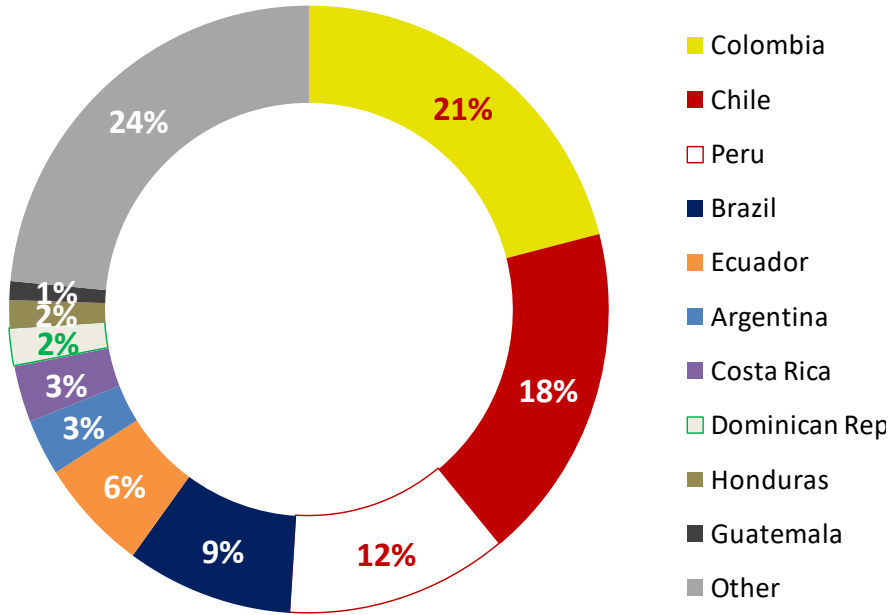


Note*: only the capacity of full freighter airlines was considered for this analysis (no belly cargo)

Source: consultant, using information from OAG

Air Cargo and trade statistics - Miami International airport

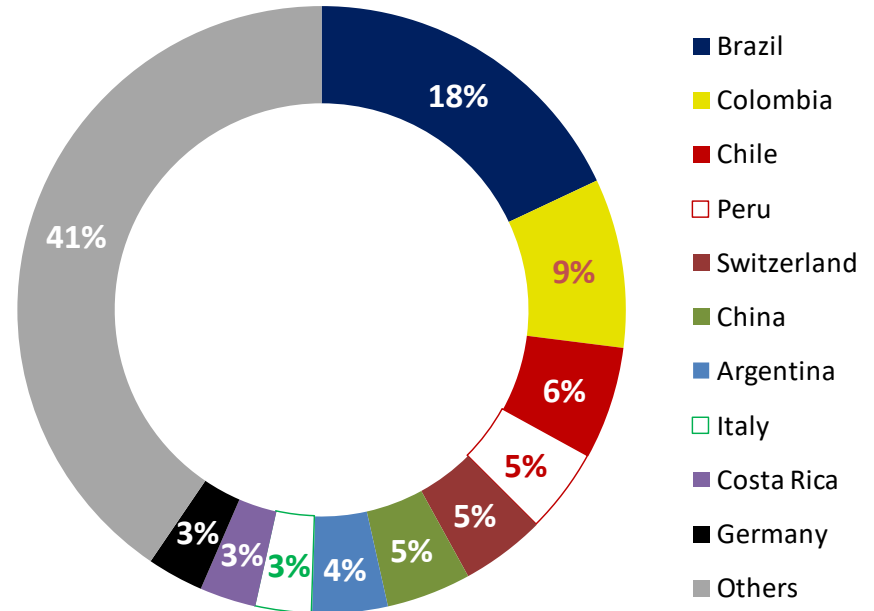
Top ten trade partners by weight
2016



Colombia represents 21% or 219,839 tons of trade with MIA.

2/3 of the tonnage is are with 6 countries

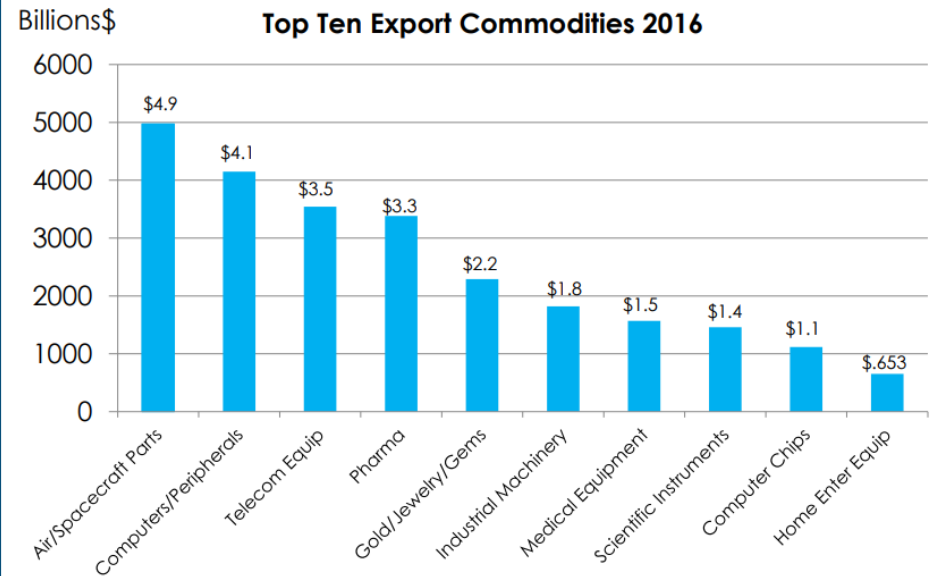
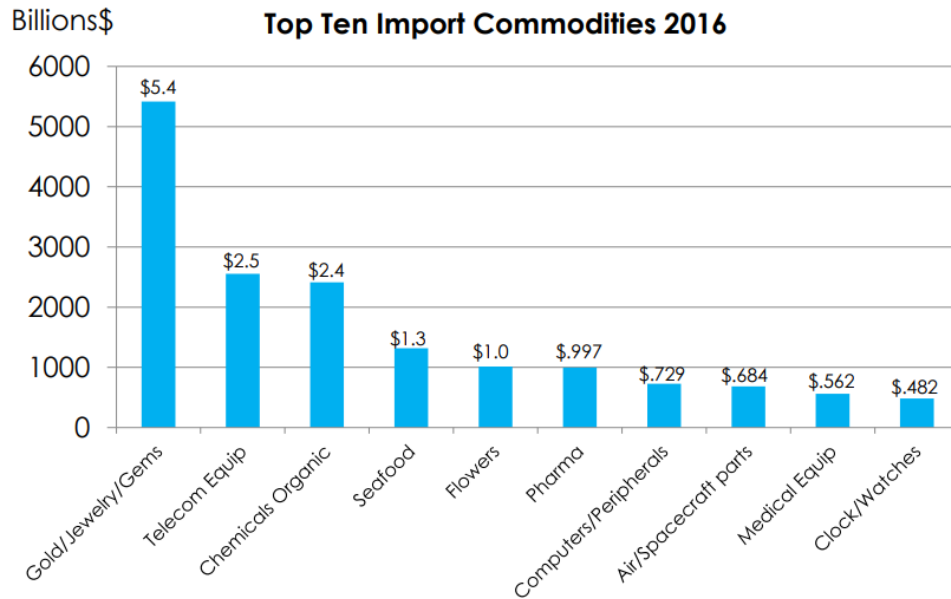
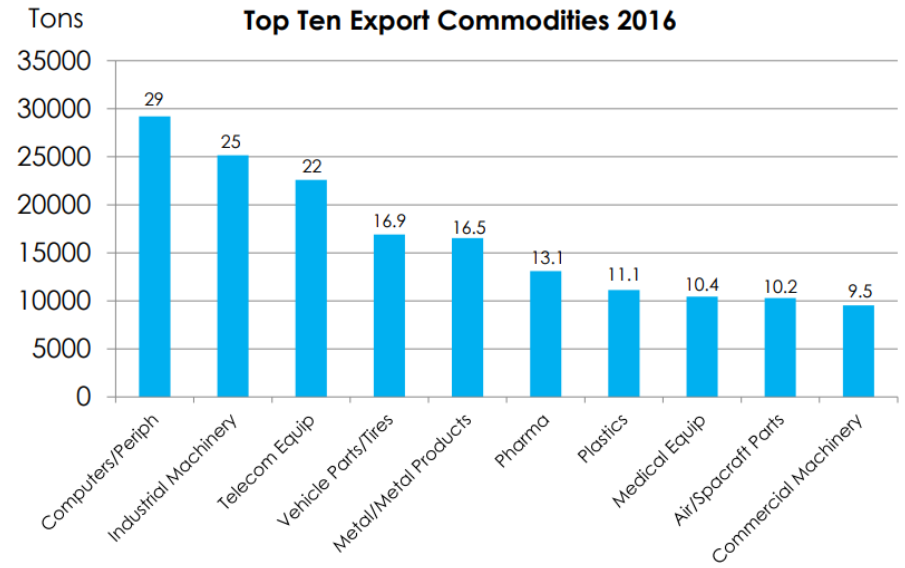
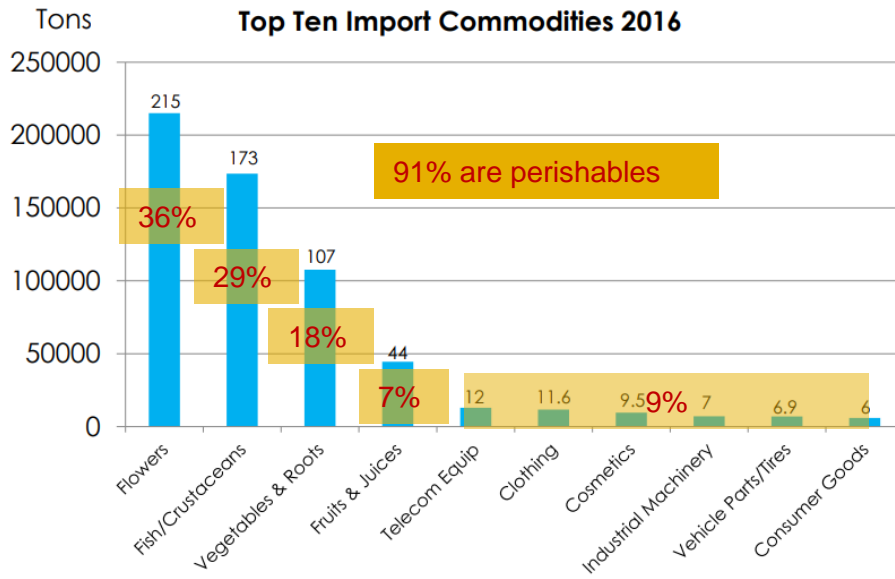
Top ten trade partners by value
2016



Brazil represents 18% or \$10.8B in trade with MIA.

Source: Miami International Airport

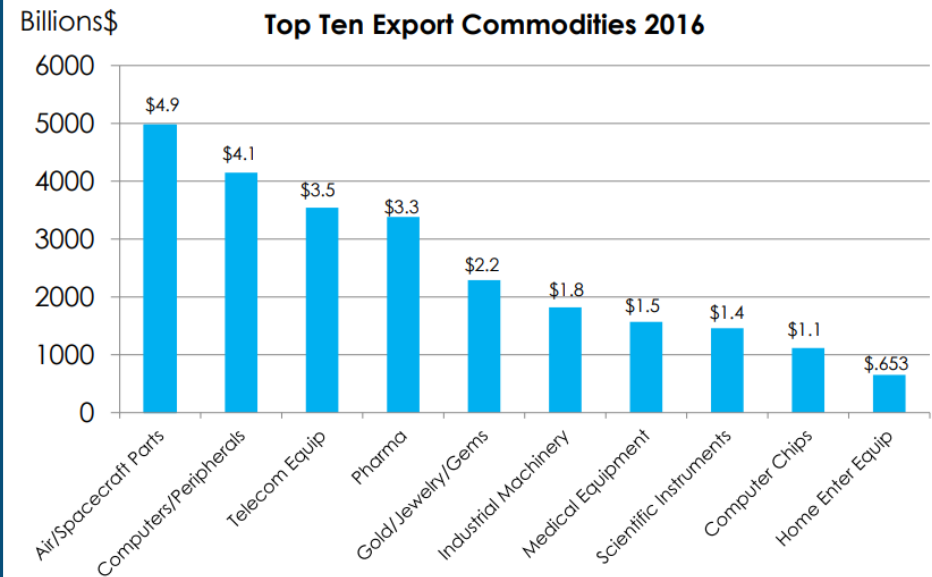
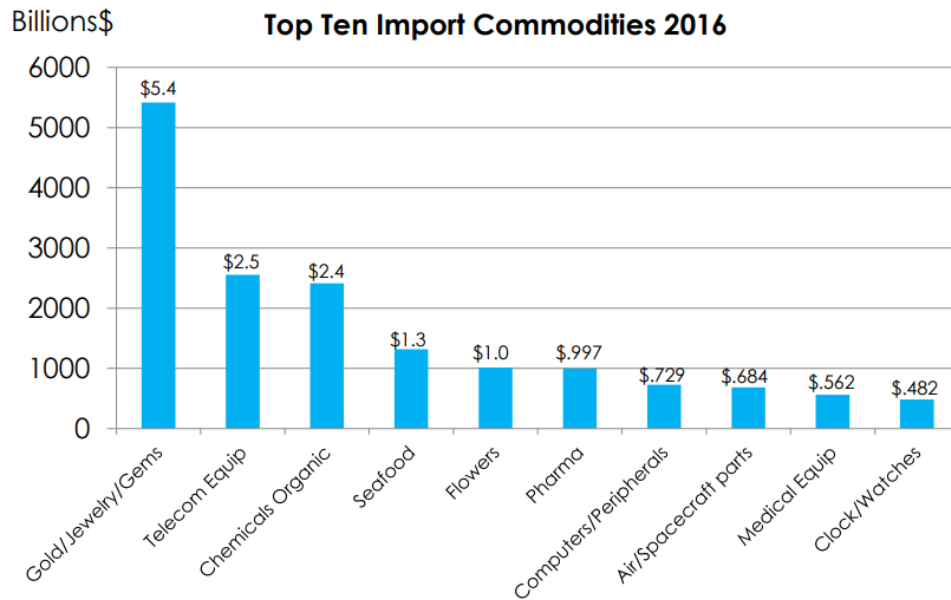
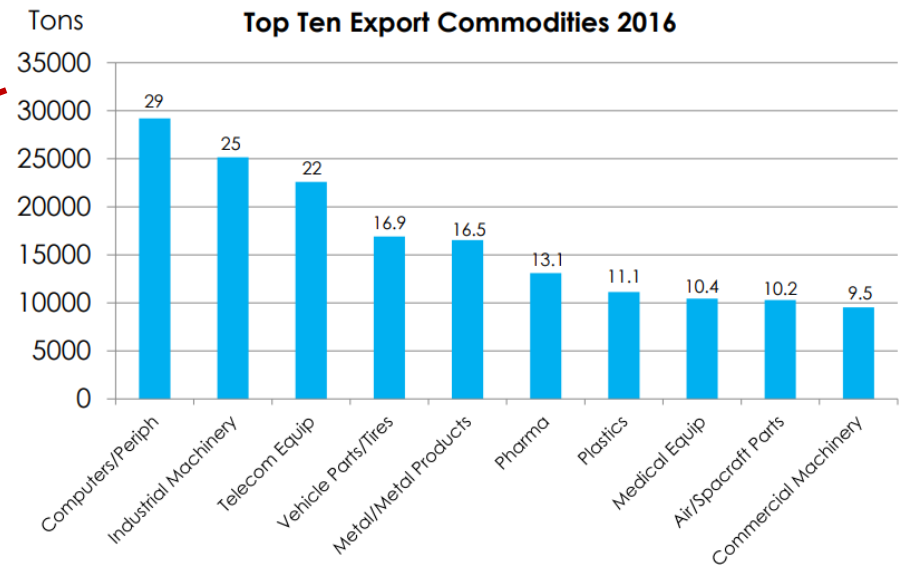
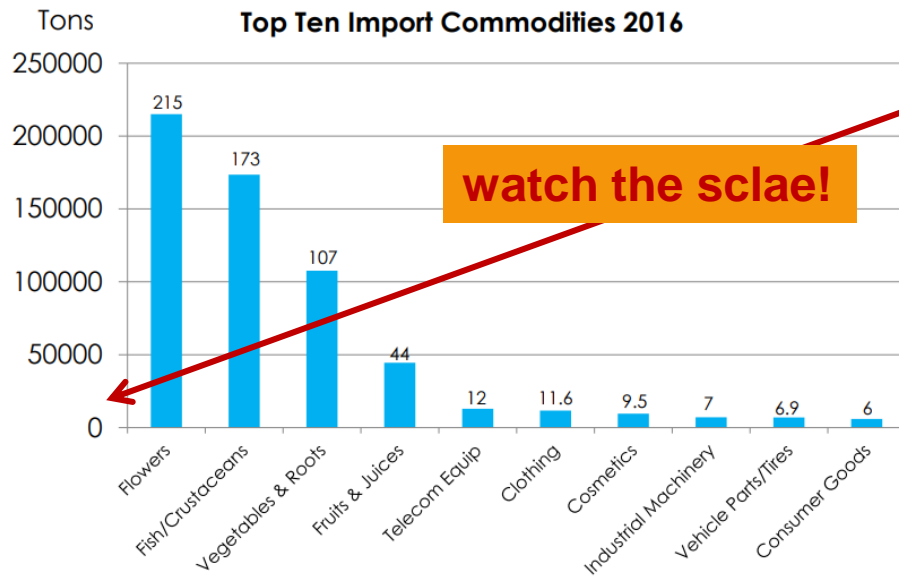
Miami: Imports and Exports of Commodities



Source: Miami International Airport

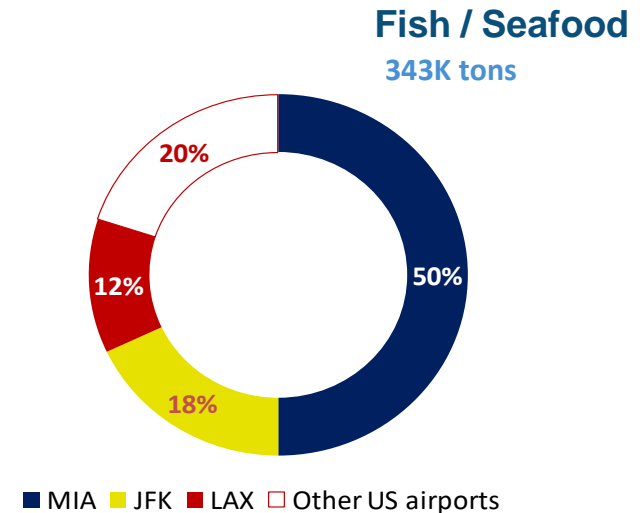
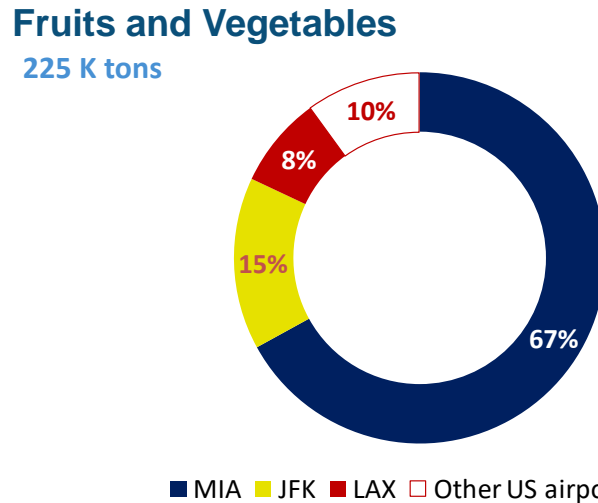
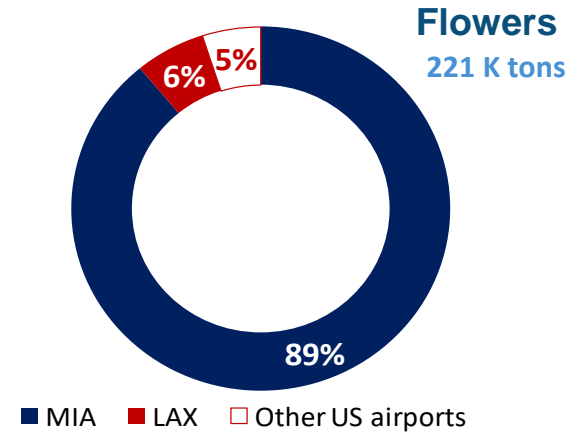
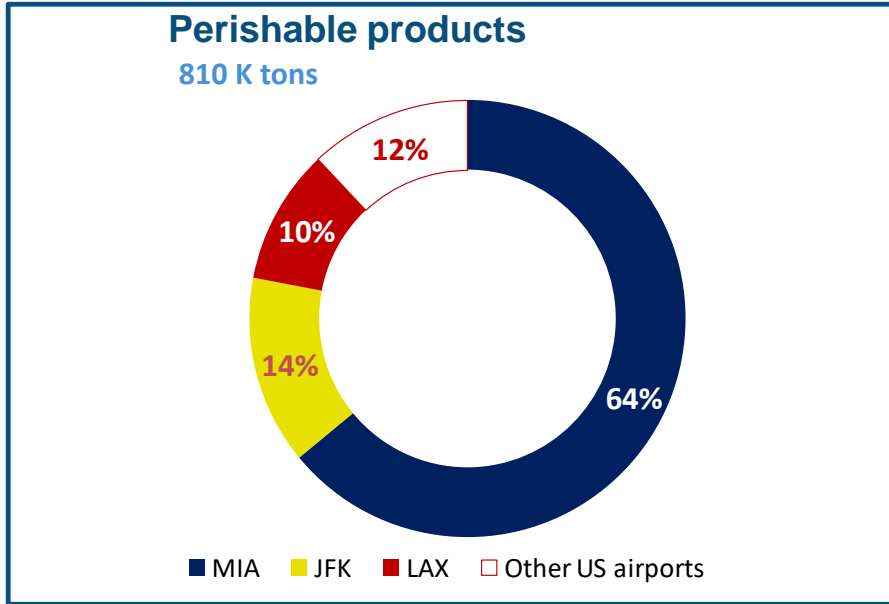
AIR CARGO TRENDS IN THE AMERICAS

Miami: Imports and Exports of Commodities



Miami International airport - total trade compared to other US airports

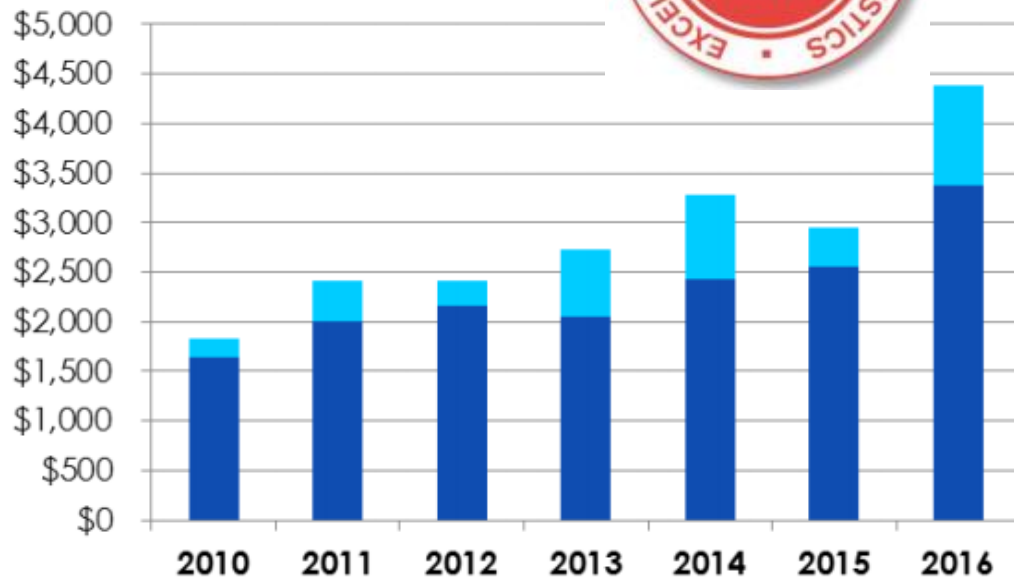
2016



Source: Miami International Airport

Miami International Airport: two new projects

Value of Imports and Exports of Pharma via MIA
(in 000 USD)



Imp.	\$178	\$415	\$255	\$681	\$860	\$404	\$997
Exp.	\$1,648	\$1,996	\$2,156	\$2,046	\$2,423	\$2,549	\$3,382

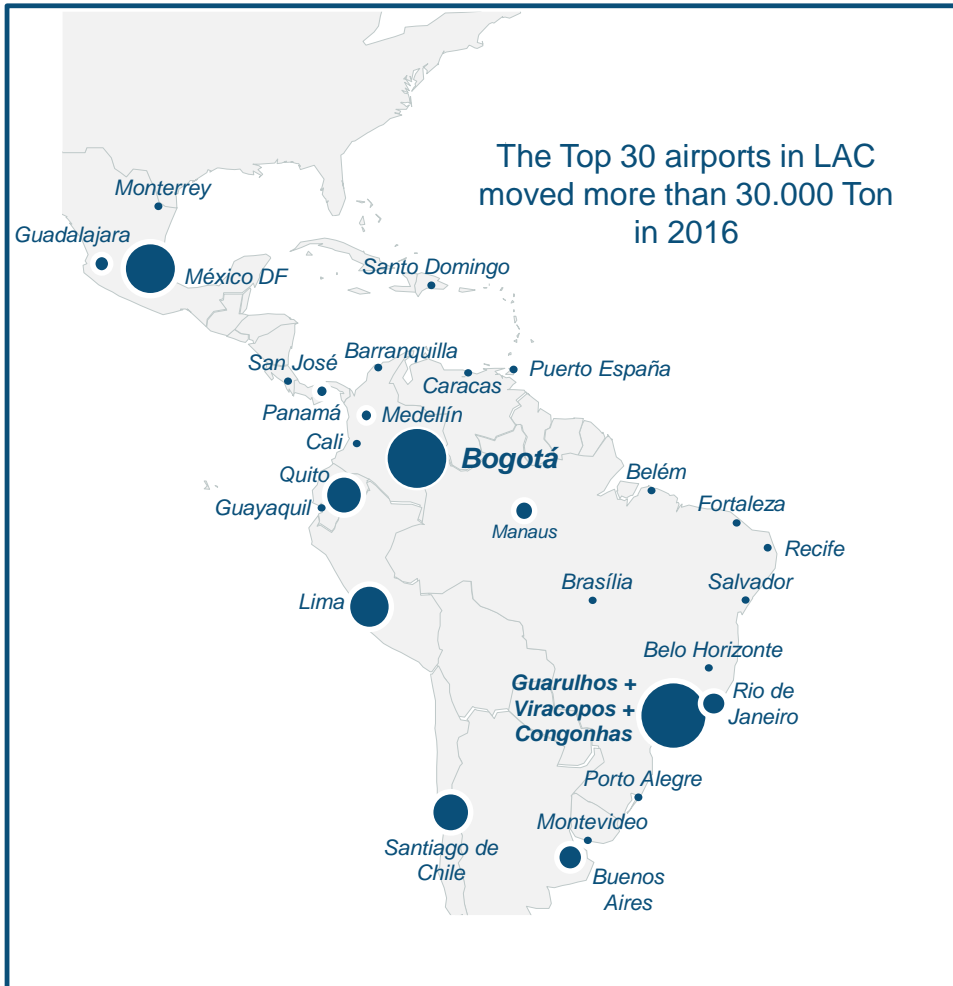
 imports
 exports

Ocean-to-Air: Central America's perishables

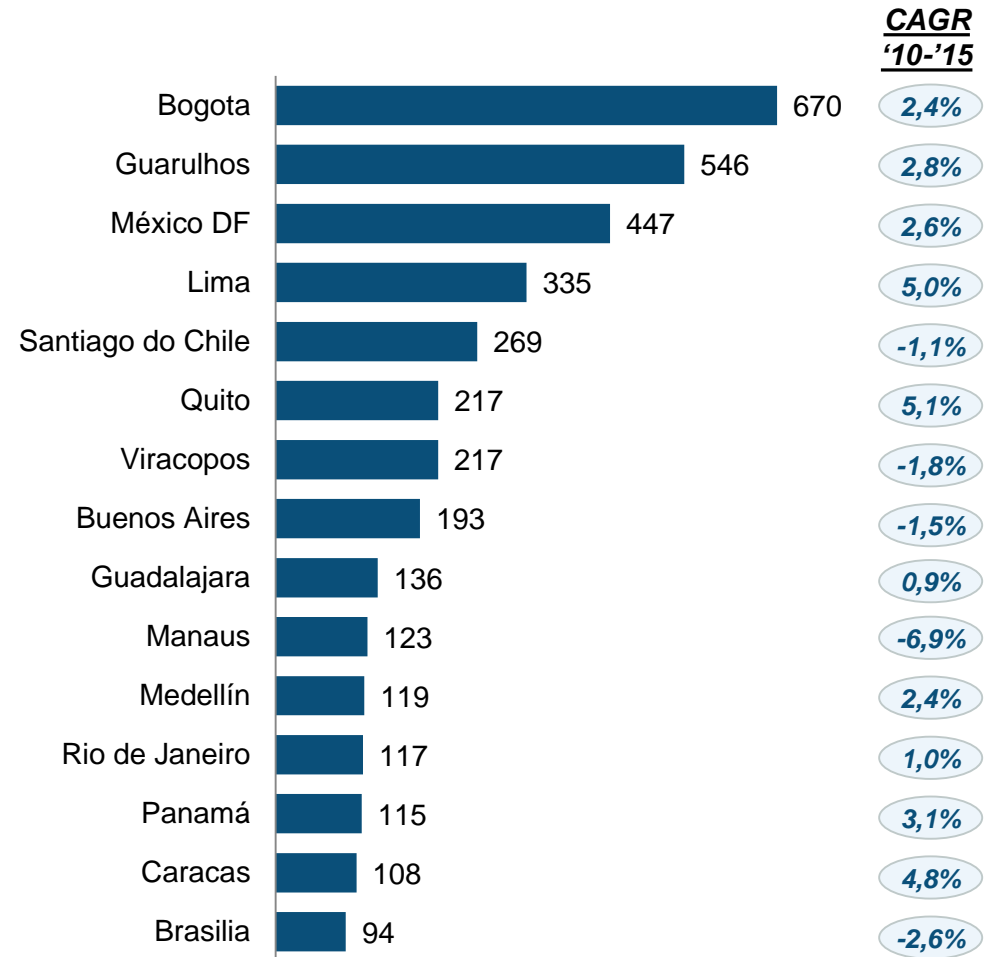


LAC Busiest Air Cargo Airports in 2015

Main cargo airports in LAC (000 ton 2015)



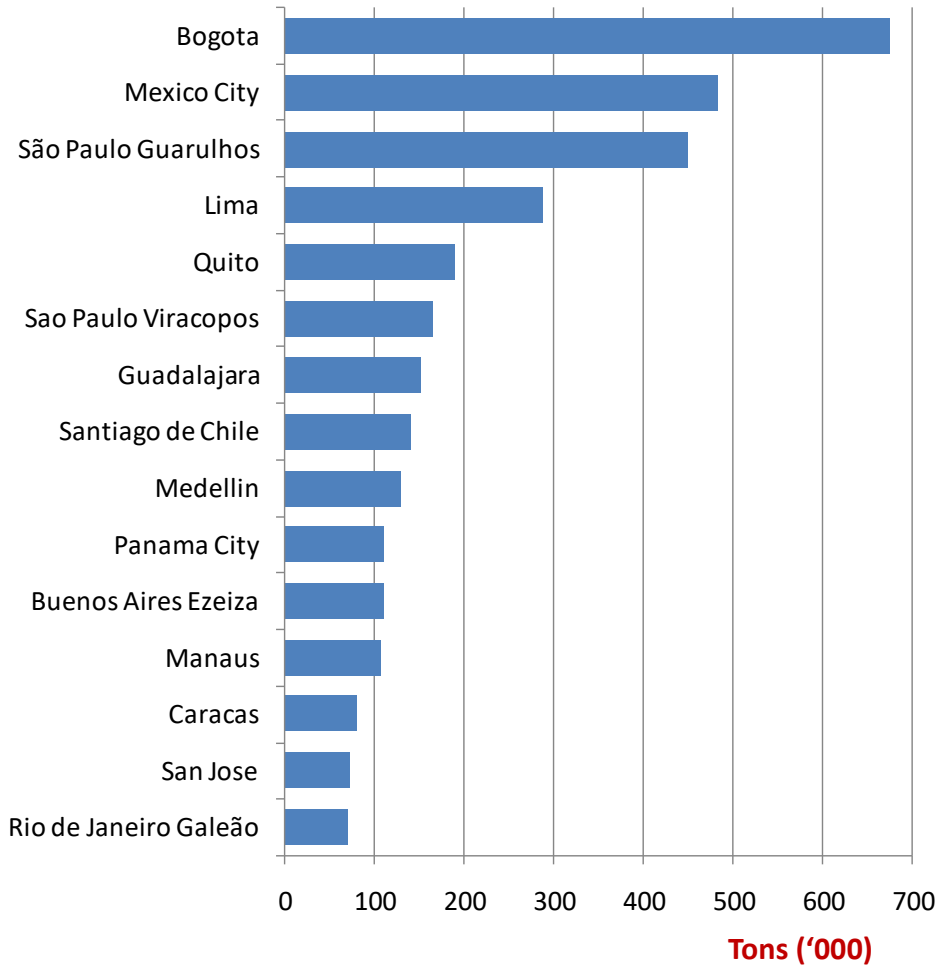
Ranking of LAC Airports in Cargo (000 ton 2015)



Top 15 airports in LatAm: Passenger traffic and Transported cargo - 2016

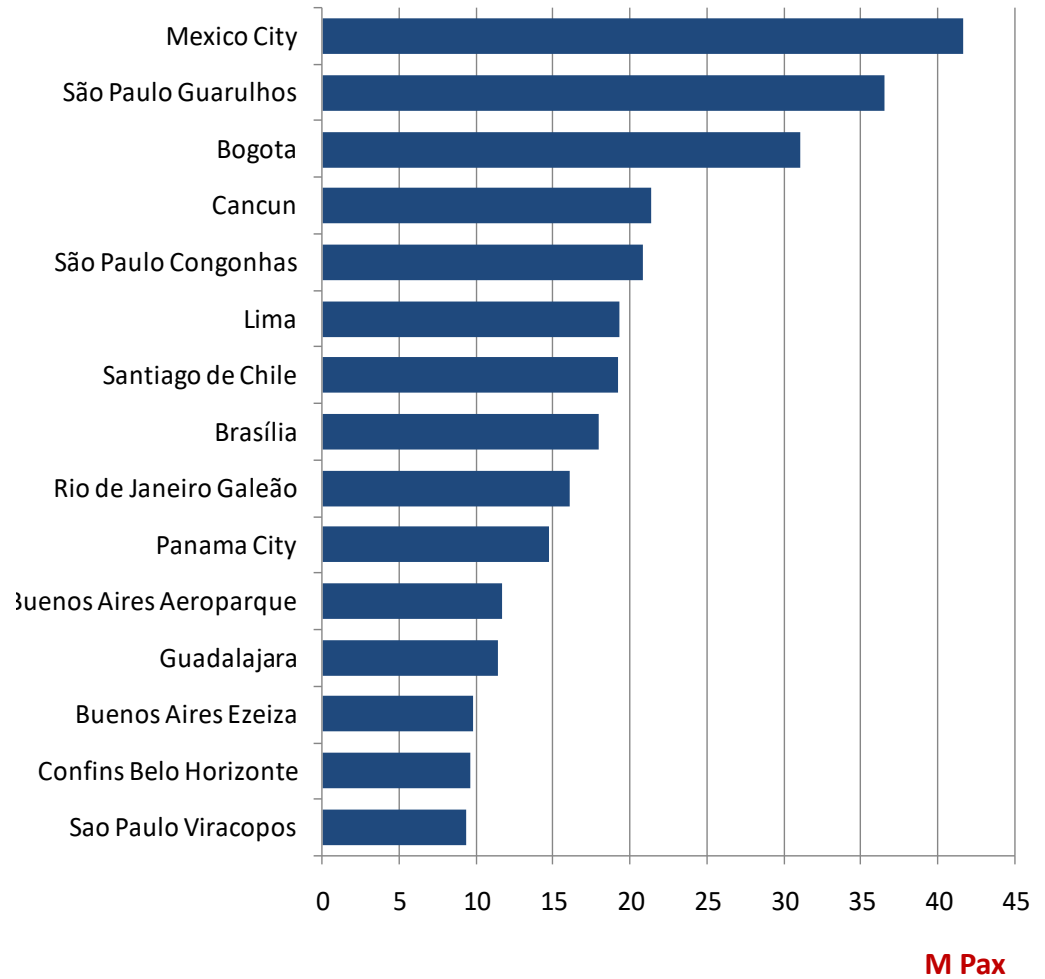
Transported cargo

2016*



Passenger traffic

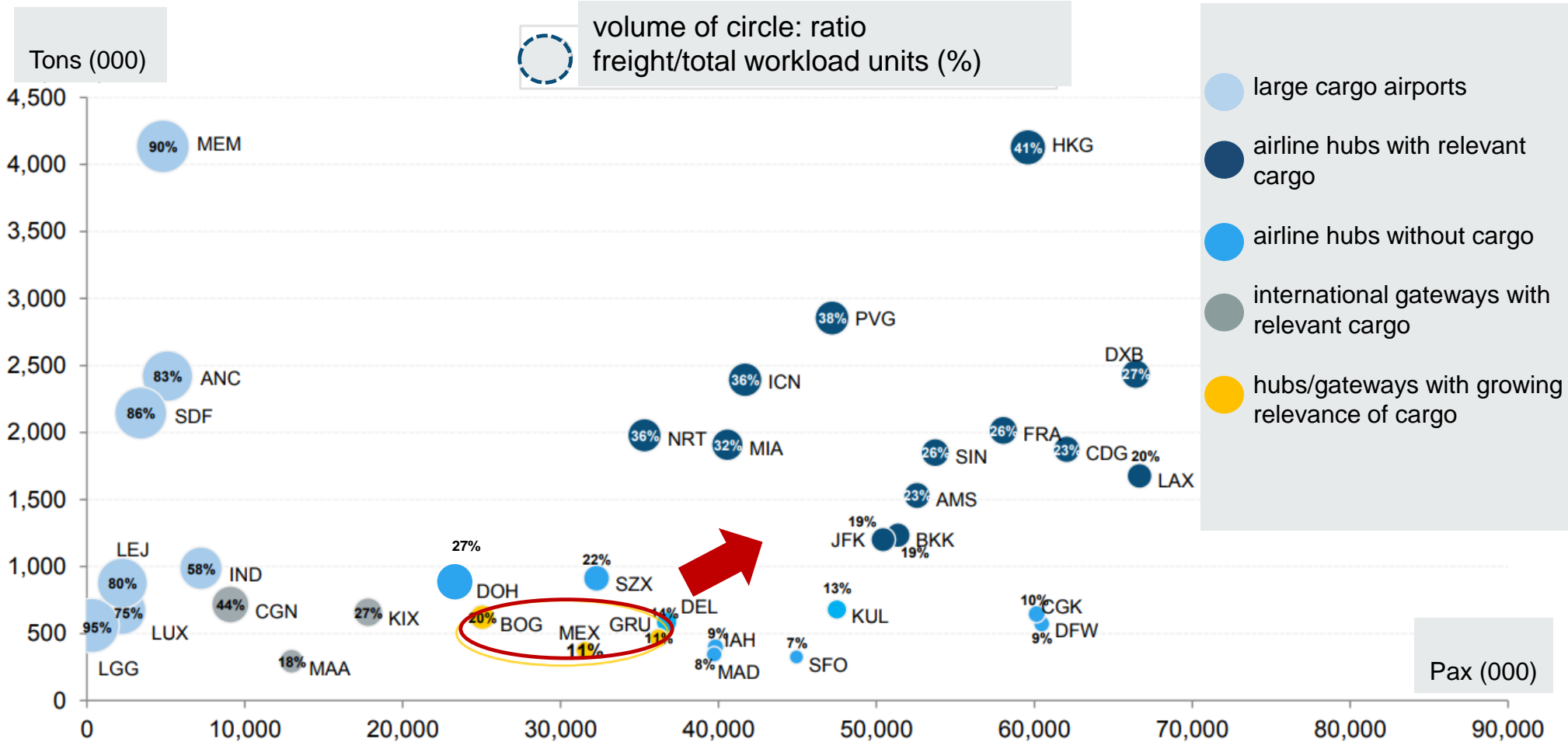
2016



Note*: cargo data for Caracas, Buenos Aires Ezeiza and San Jose airports are of 2015

Source: consultant, using information published by airports and Civil Aviation Departments

The role of the Latin American Airports in the Cargo Business (2015)



Source: ALG analysis on Flightglobal and ATI

LAC Recently modernization of the airport cargo facilities

Lima Cargo City (Perú)

- Opening May 2009
- 335.000 tons in 2015




Cargo Terminal Eldorado (Colombia)





- Opening Julio 2010
- 670.000 tons in 2015




Quito (Ecuador)




- Opening Agosto 2012
- 217.000 tons in 2015



Guadalajara (México)

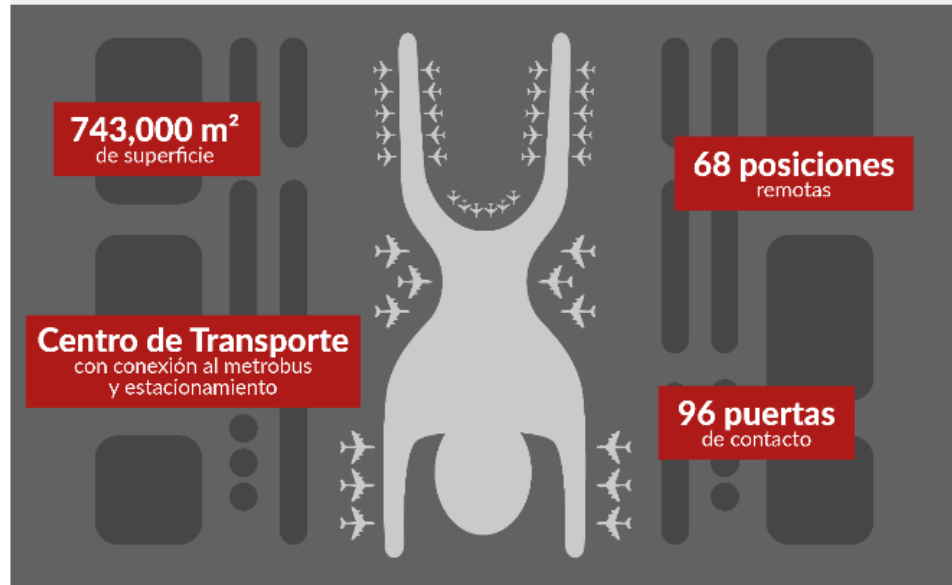
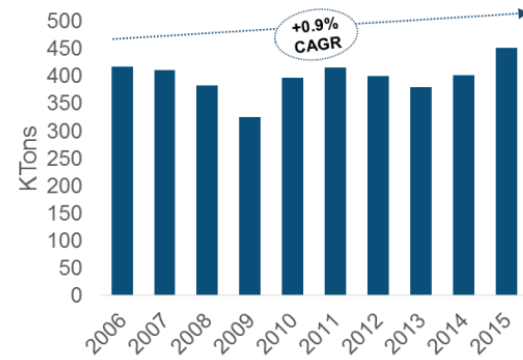
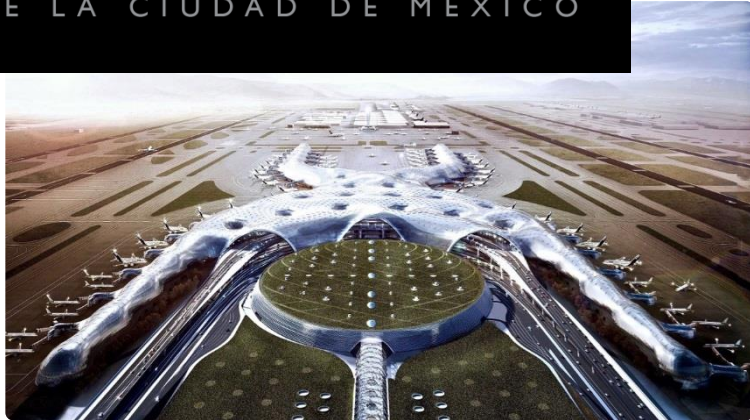
- Opening Mayo 2013
- 136.000 tons in 2014



Important developments, Panama Tocumen, Quito, Guadalajara

New Mexico City Airport: opening 2020?

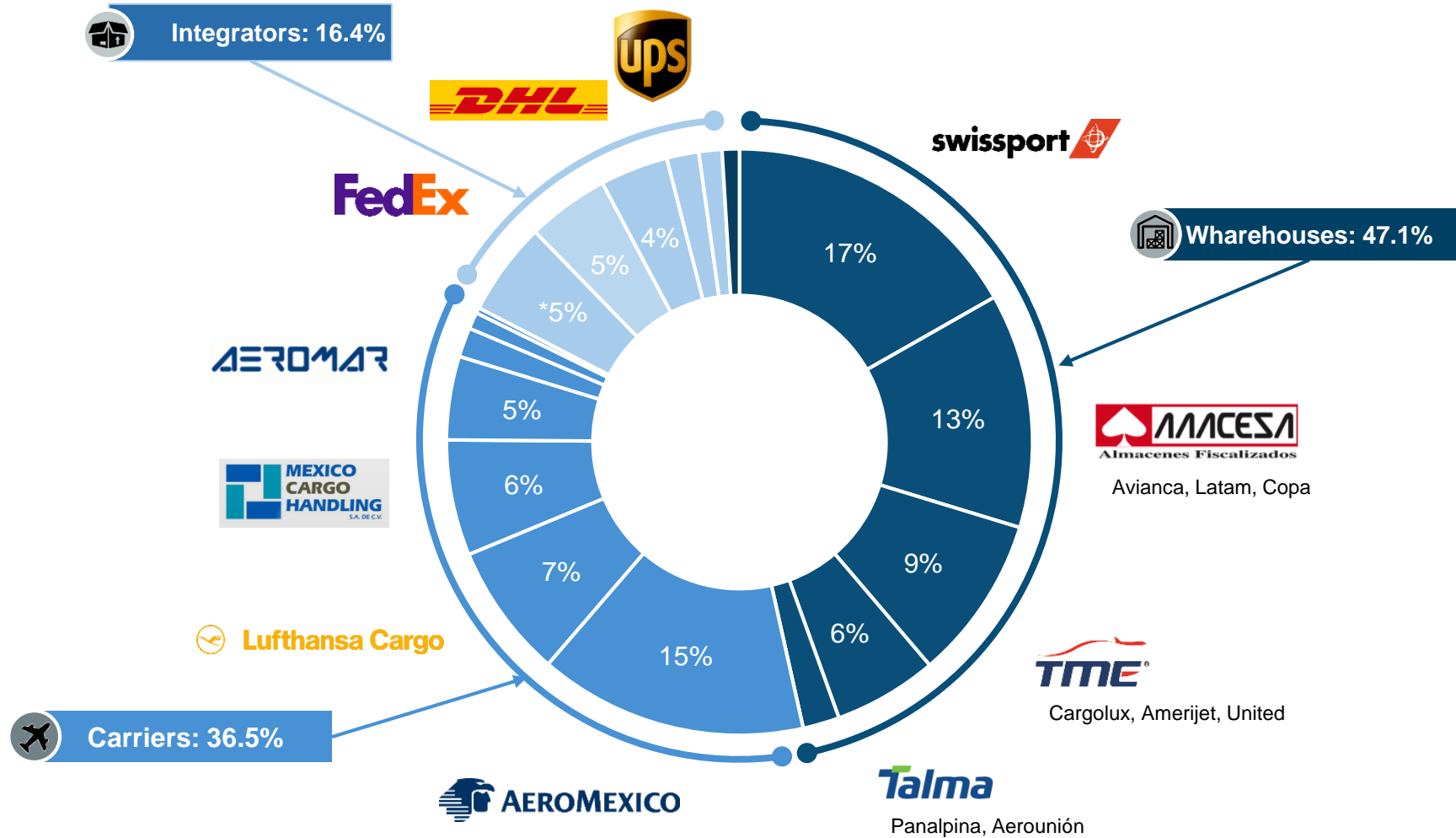
**NUEVO AEROPUERTO
INTERNACIONAL
DE LA CIUDAD DE MÉXICO**



FASE INICIAL	MÁXIMO DESARROLLO
CARACTERÍSTICAS DEL AEROPUERTO	
5,000 HECTÁREAS de superficie	5,000 HECTÁREAS de superficie
3 PISTAS EN OPERACIÓN en operación simultánea	6 PISTAS EN OPERACIÓN 3 en operación simultánea
1 TERMINAL	2 TERMINALES y 2 satélites

Source: GACM

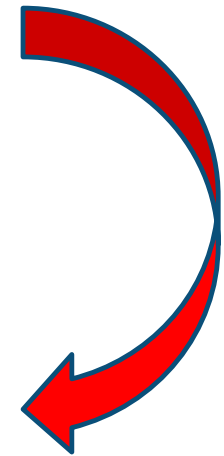
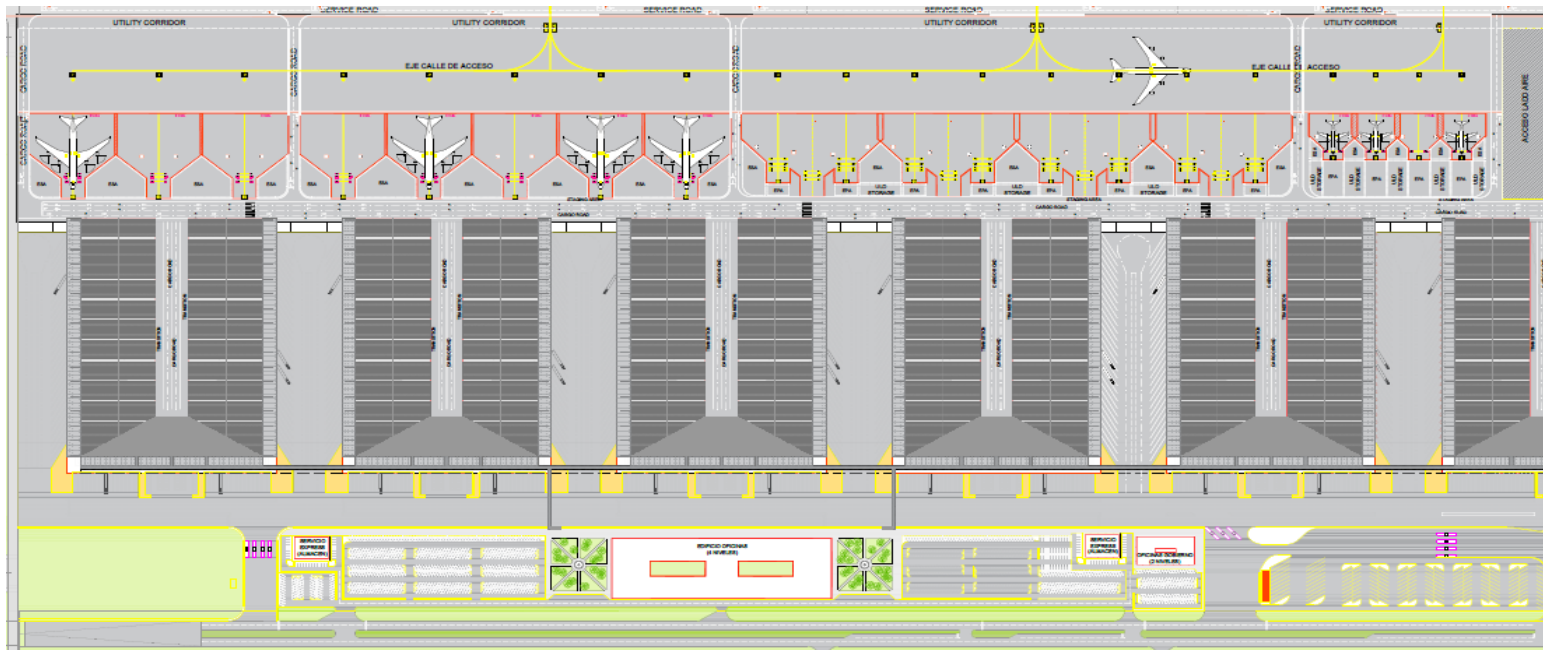
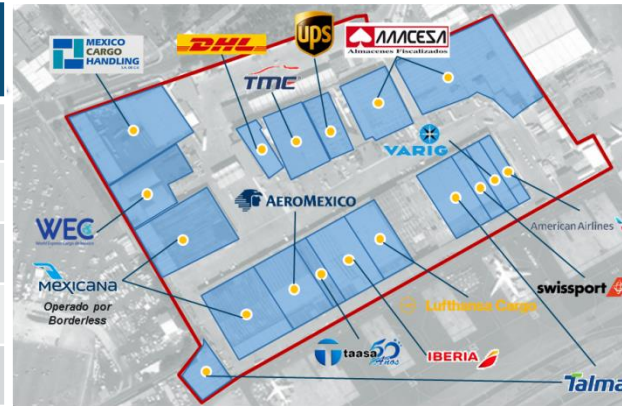
Mexico City's current situation: large number of operators



Source: ALG Analysis with OAG and SCT (Mexico) data

New Mexico City Airport: New air cargo center (midfield development)

	Current Airport	New Airport (Phase 1)
Total Area (Has)	16	40
INT/DOM	Segregated	Integrated
Terminals (m ²)	80.000	220.000
Docks	130	500
Apron stands	7	25



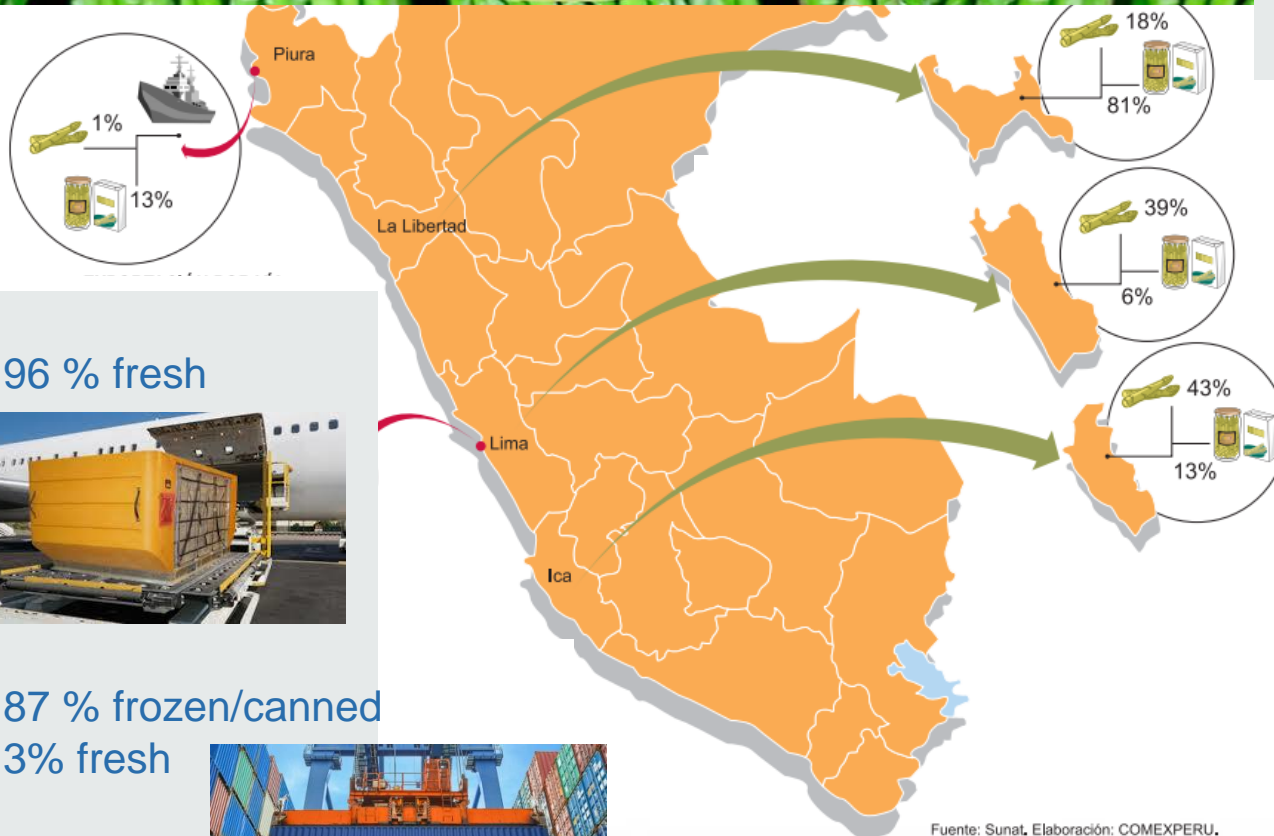
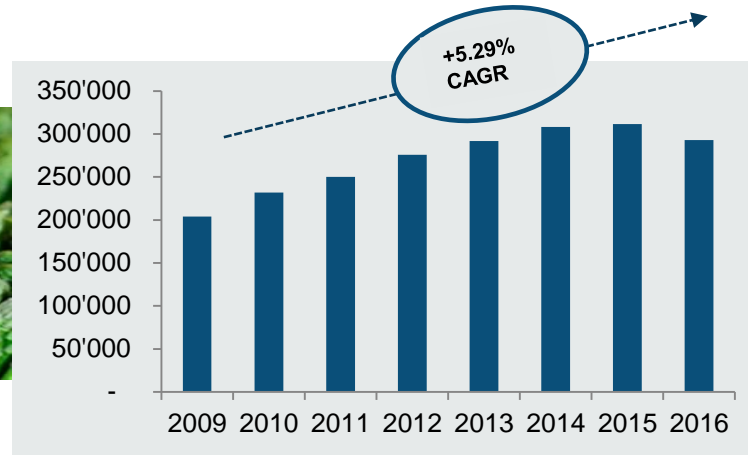
- 82 Has
- 25 stands
- 11 terminals x 20.000 m²
- 500 docks
- Office Center (> 5.000 m²)
- 1000 car spaces

Source: GACM

Lima Airport: it's mostly about asparagus



Lima Airport Exports (tons)



96 % fresh



87 % frozen/canned
3% fresh



70%



30%

Fuente: Sunat. Elaboración: COMEXPERU.

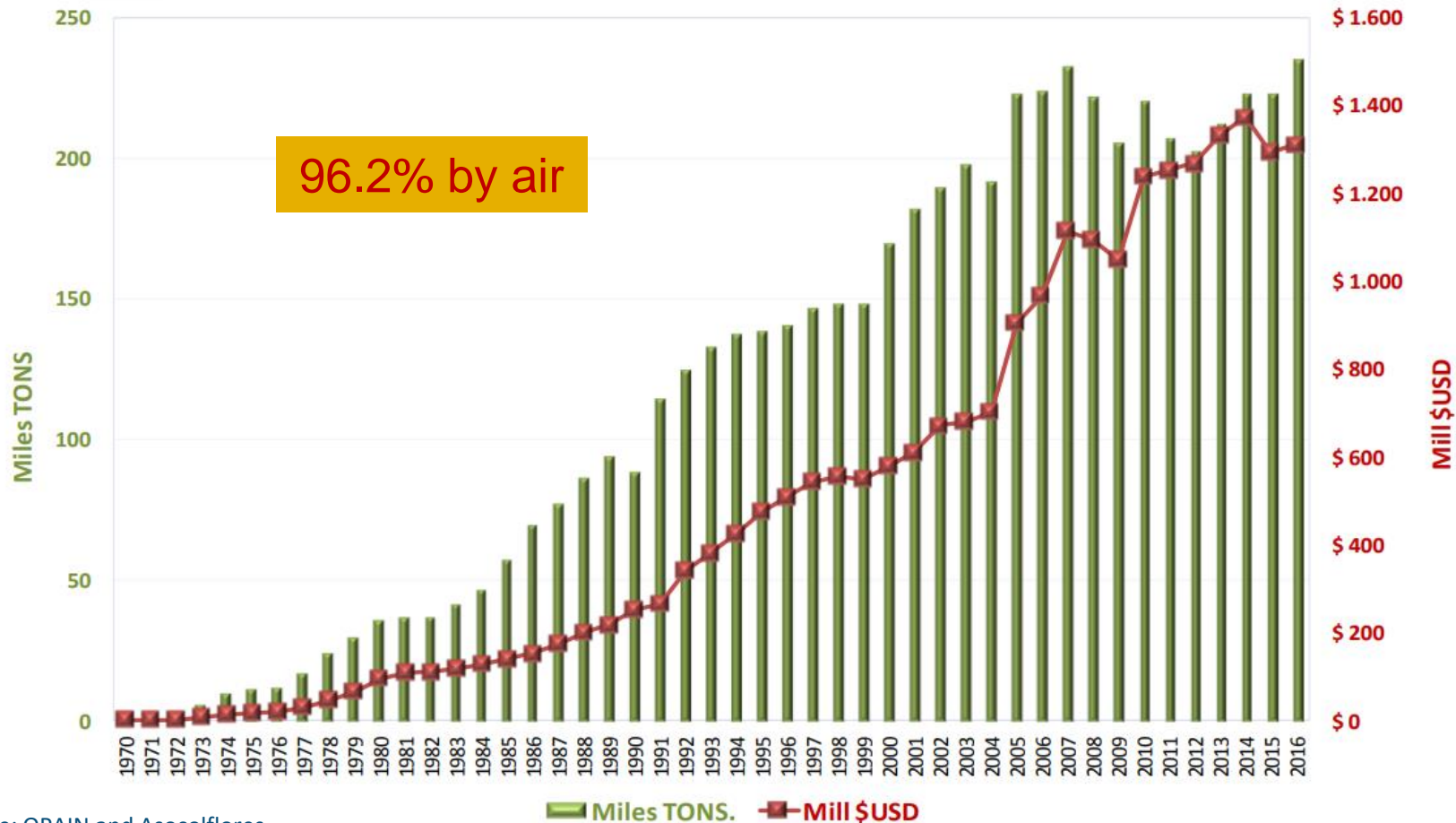
Lima Airport: New Cargo Facility



Bogotá Airport: Exports of Colombian Flowers



Exportaciones de Colombia Histórico



96.2% by air

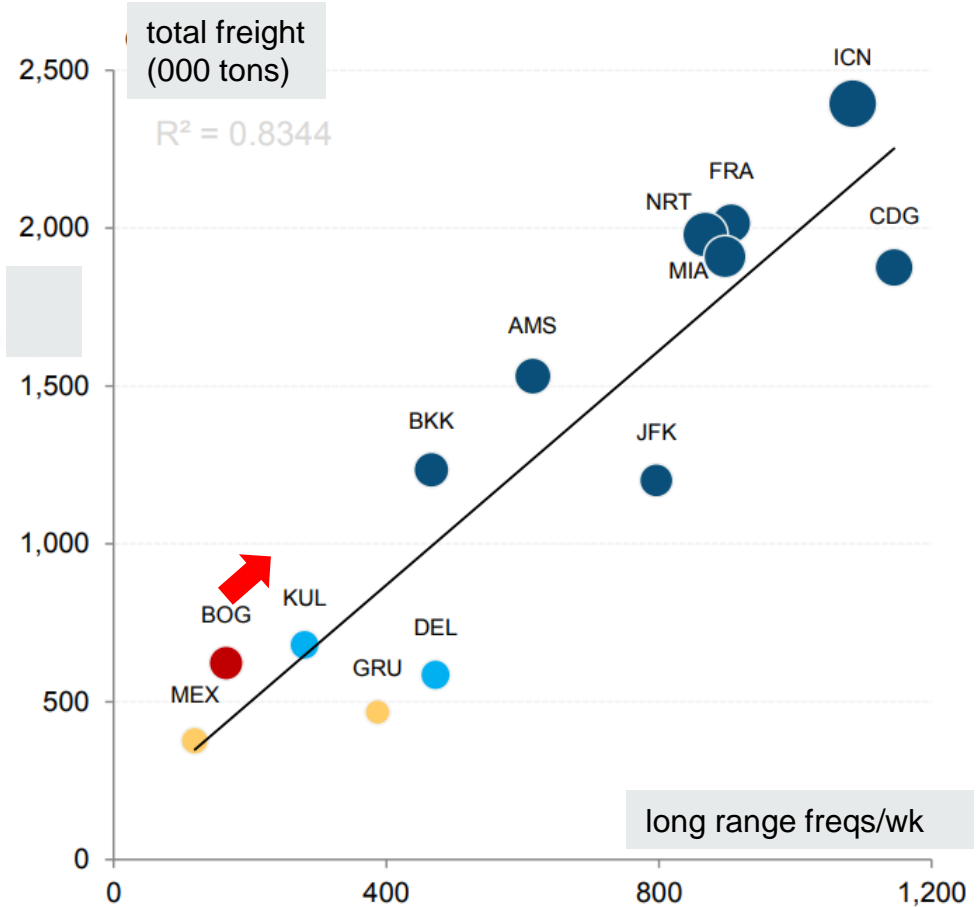
Source: OPAIN and Asocolflores

Bogotá Airport El Dorado

Regional Connectivity



Total Freight and LR Frequencies



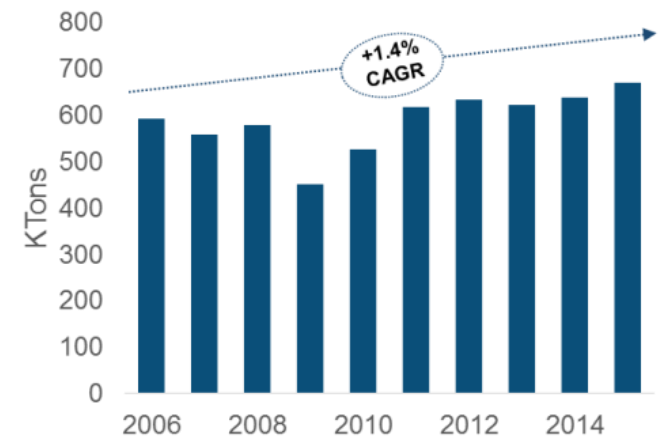
The role of BOG is changing with the introduction of long-haul aircraft (e.g. AV's 787s)

Source: ALG analysis on data from Opain, Aerocivil and airlines

Source: ALG analysis on Flightglobal and OAG data

Bogotá El Dorado: Cargo terminal (2010)

- Colombia is world's 2nd flower exporter
- 80% exports are flowers (75% to USA)
- 75% traffic with freighters
- 12,000 ops Cargo



Bogotá Airport: Terminal Cargo Facilities

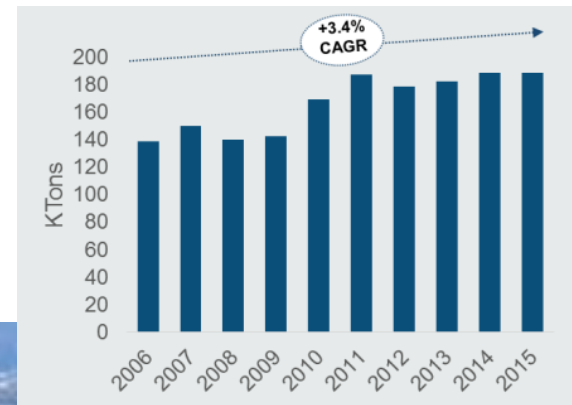


>650k tons in 2016
T1, T2 & T3
68,000 m²
25 apron positions
214 trucking docks
Business Center (6.500 m²)



Source: Opain

Quito Airport: new airport inaugurated in 2012



Quiport	
Elevation	2,400 m
Runway	4,100 m
Distance from City Center	40 km
Passengers	5 millions
Cargo	218.000 tn (3 rd LAC exporter)

Quito Airport: Cargo facilities

Cargo terminal (12.000 m2)



Tababela Cargo Center (flowers)



Quito Airport: a cargo busy day

Over 5 wide-body freighters: what's happening?



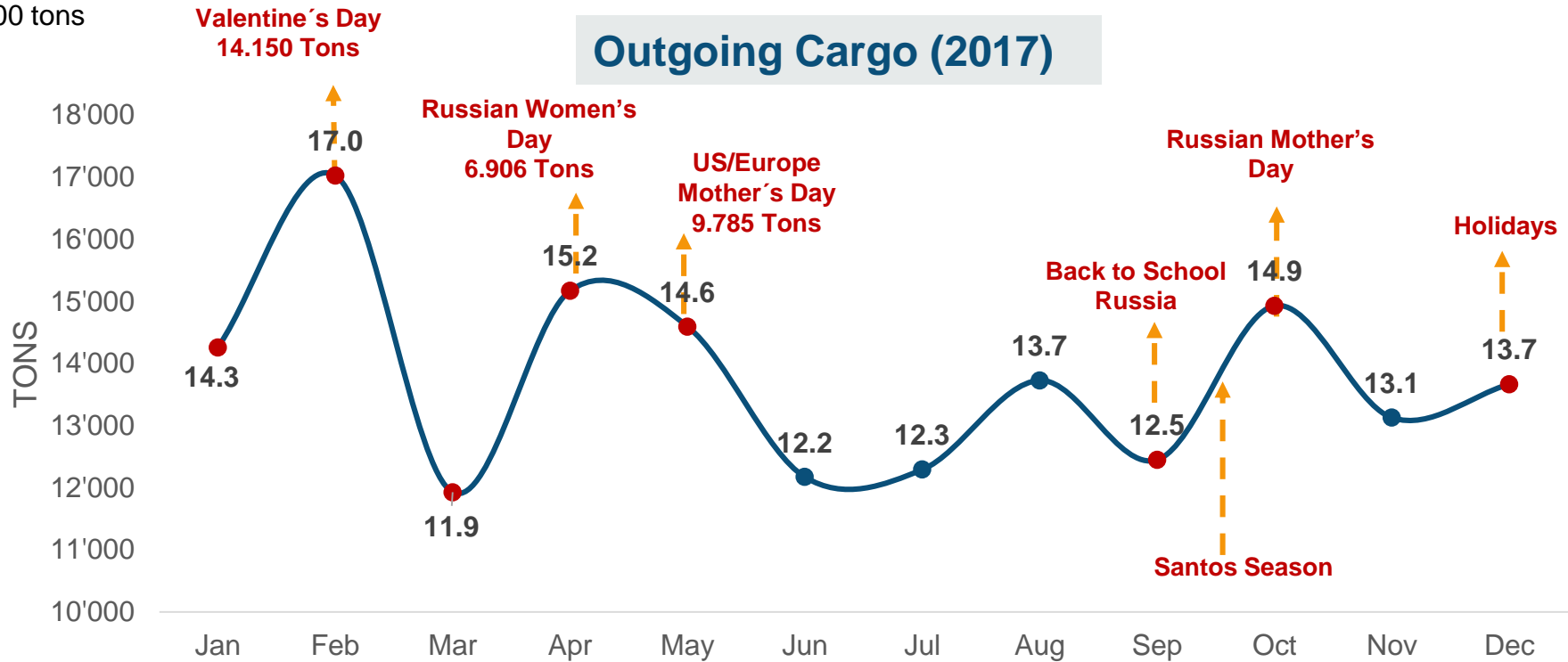
- Atlas
- Cargolux
- Airbridge
- UPS
- Etihad
- Emirates
- LAN Cargo
- AF/KLM/Martinair
- Cargologic
- Centurion
- Avianca
- Cubana
- Tampa
- LAS



Quito Airport: Cargo traffic profile

in 000 tons

Outgoing Cargo (2017)



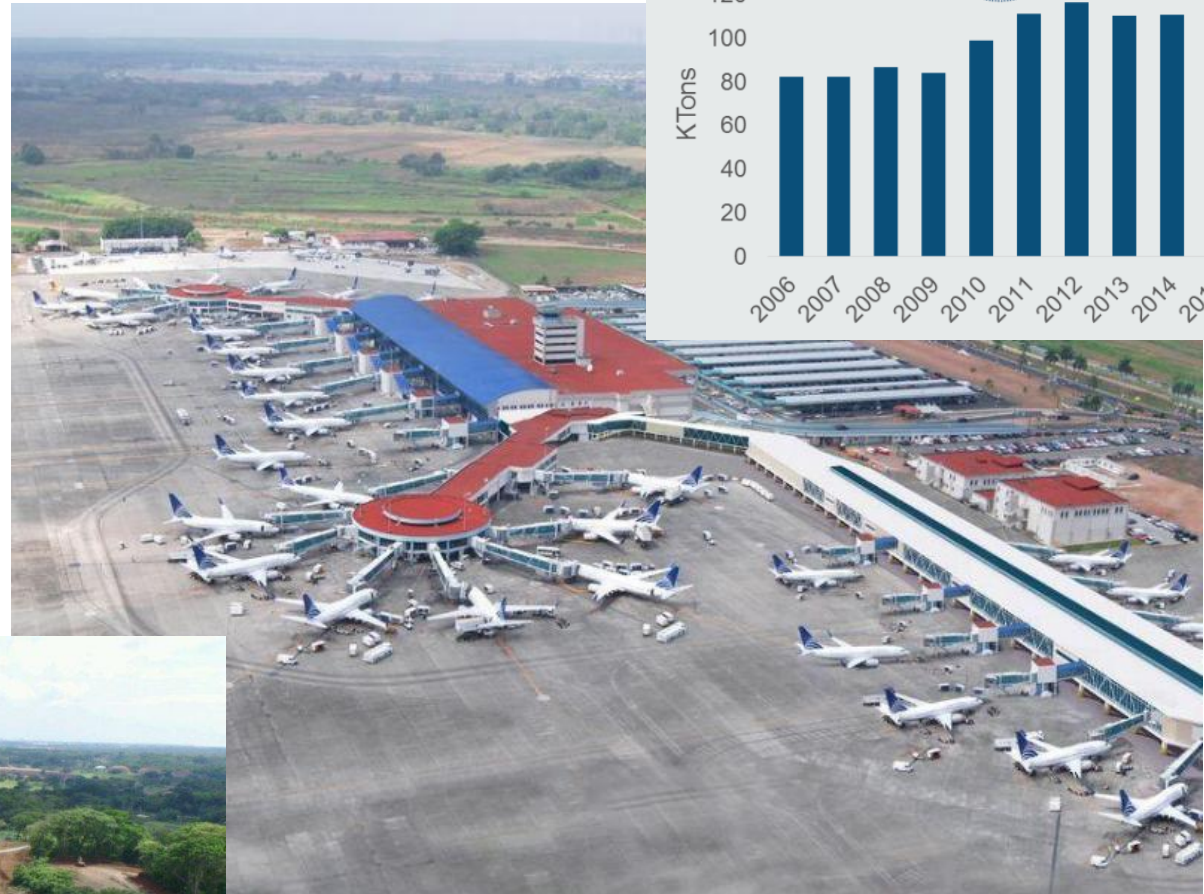
Cargo OUT	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2017	14.262	17.027	11.928	15.173	14.596	12.173	12.293	13.728	12.450*	14.930*	13.129*	13.668*	165.357

Source: Quiport

Panama Tocumen

Air Cargo:

- 92 Destinations
- 300 Daily flights
- Copa: cargo is not the core business
- Long haul developments: TK, KL, LH, EK increasing belly capacity



Shipping:

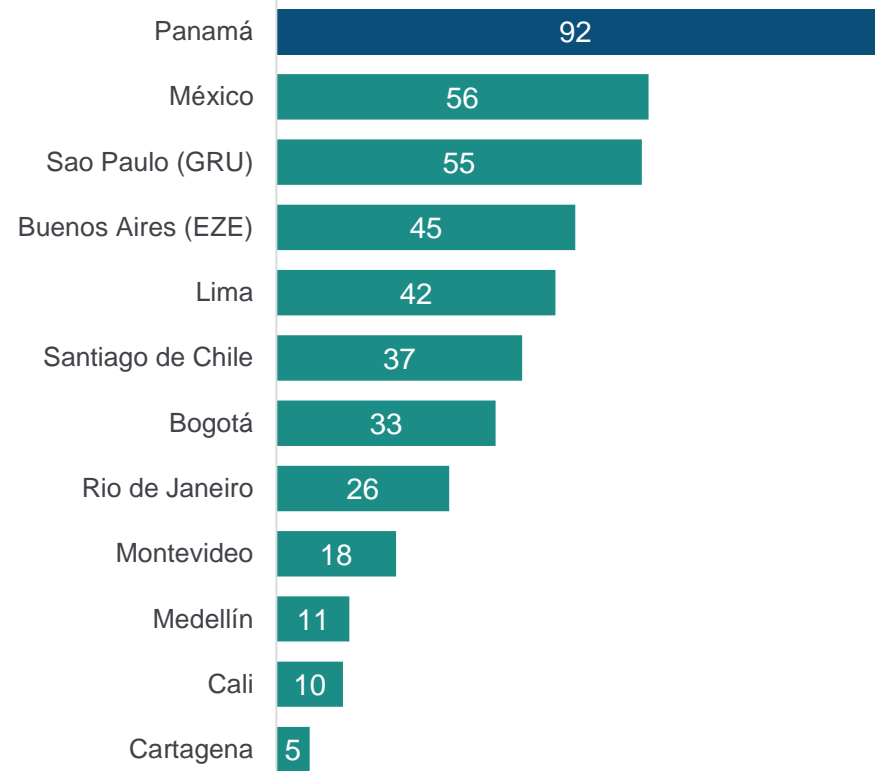
- 5% World's international trade
- 65 Services with weekly frequency
- 17 millions of annual TEU's
- potential to develop a logistics center to distribute by air sea freight

Source: Panama-Tocumen

Panama Tocumen: LAC's biggest international network

300 flights daily connecting **92 destinations**
from North, Center and South America

best connected airport in LAC
(# destinations)



Source: Panama-Tocumen

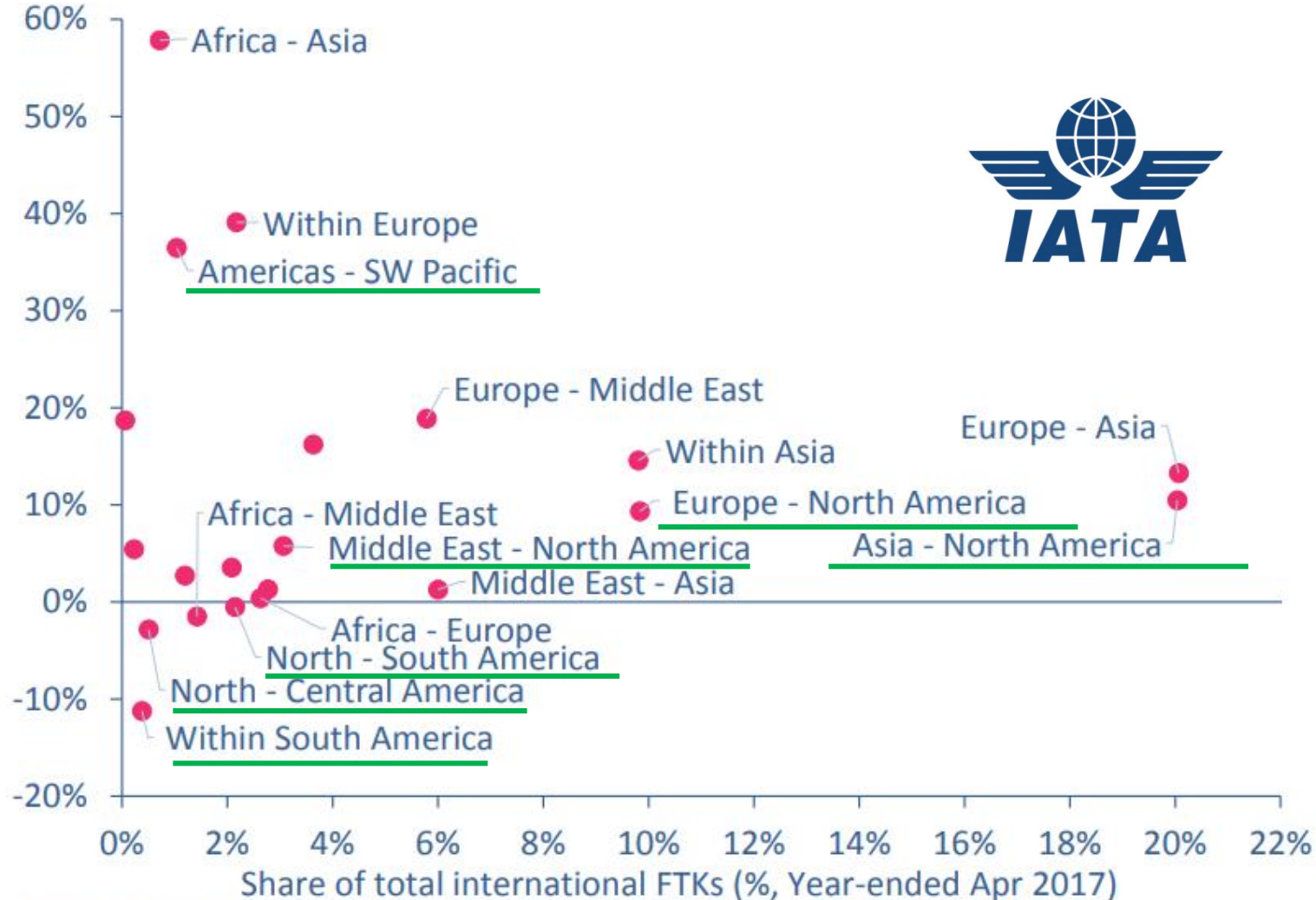
Panamá Tocumen: Future airport cargo center (in construction)



Source: Panama-Tocumen

IATA's Analysis by Region

International FTK growth by route (YTD, % y-o-y, up to Apr 2017)



Sources: IATA Economics, IATA Monthly Statistics by Route

Opposite results for North America and Latin America



Air freight market detail – May 2017

	World share ¹	May 2017 (% year-on-year)				% year-to-date			
		FTK	AFTK	FLF (%-pt) ²	FLF (level) ³	FTK	AFTK	FLF (%-pt) ²	FLF (level) ³
TOTAL MARKET	100.0%	12.7%	5.2%	3.0%	45.2%	10.2%	3.4%	2.8%	44.7%
Africa	1.6%	27.6%	14.7%	2.6%	26.2%	24.8%	11.9%	2.6%	24.8%
Asia Pacific	37.4%	11.3%	6.2%	2.5%	54.7%	9.9%	4.2%	2.8%	53.2%
Europe	23.5%	15.0%	5.7%	3.8%	46.5%	13.4%	5.3%	3.4%	47.3%
Latin America	2.8%	6.7%	7.1%	-0.1%	33.7%	↓ -1.4%	-1.2%	-0.1%	32.1%
Middle East	13.9%	10.2%	1.7%	3.5%	45.6%	8.4%	1.4%	2.9%	44.7%
North America	20.7%	13.9%	4.1%	3.1%	36.4%	↑ 8.8%	1.5%	2.4%	36.2%
International	86.7%	14.0%	5.1%	3.9%	49.3%	11.4%	3.5%	3.5%	48.9%
Africa	1.6%	28.8%	15.6%	2.7%	26.8%	25.8%	12.6%	2.7%	25.4%
Asia Pacific	33.3%	12.5%	5.2%	3.9%	60.1%	10.9%	3.7%	3.8%	58.5%
Europe	23.0%	15.2%	5.4%	4.1%	48.1%	13.4%	4.6%	3.8%	48.8%
Latin America	2.4%	5.7%	0.1%	2.0%	37.9%	↓ -2.4%	-4.1%	0.7%	37.6%
Middle East	13.9%	10.3%	2.8%	3.1%	45.7%	8.5%	2.4%	2.5%	44.9%
North America	12.6%	19.3%	5.3%	5.0%	42.5%	↑ 13.1%	2.2%	4.1%	42.7%

¹% of industry FTKs in 2016

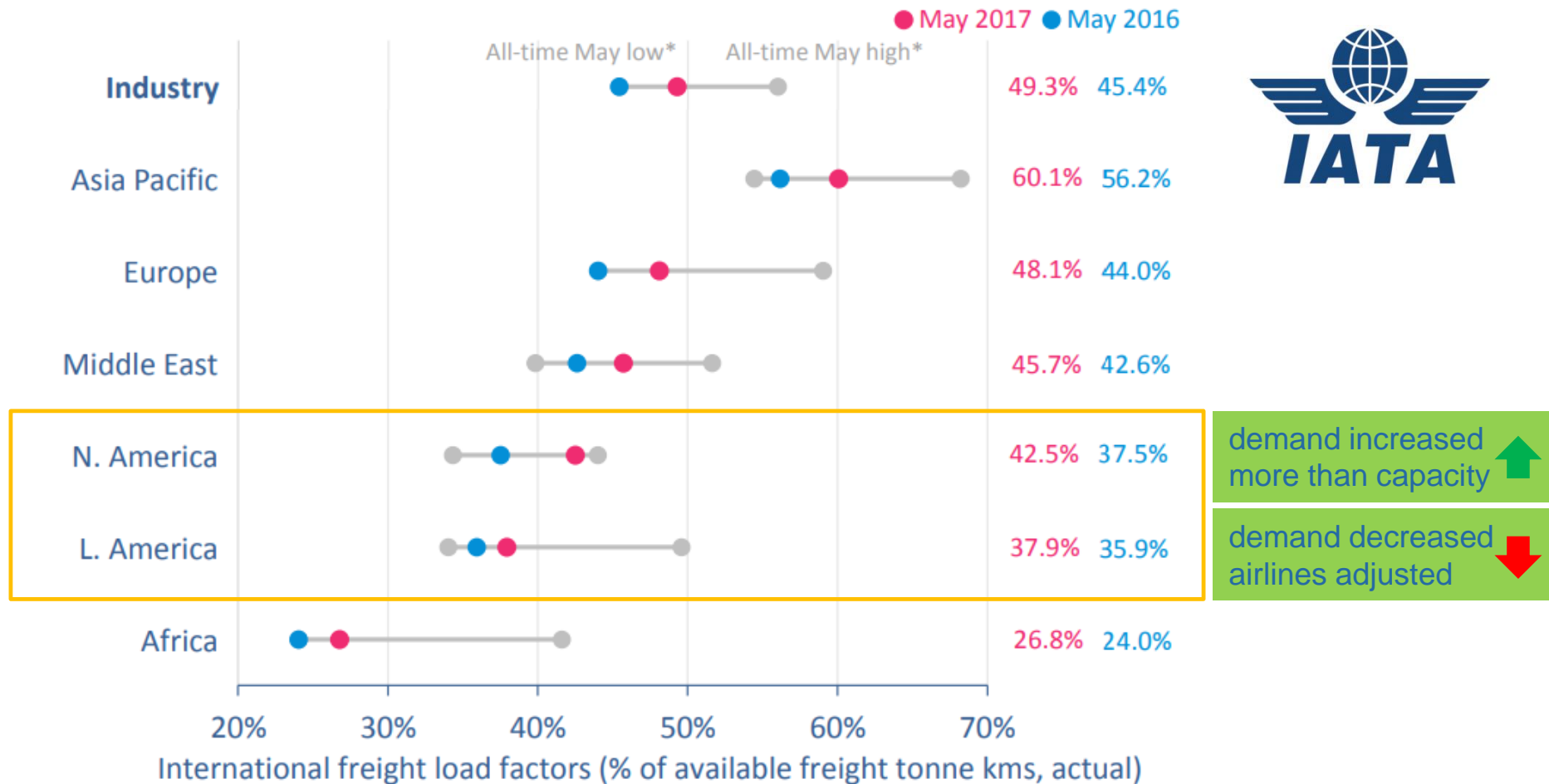
²Year-on-year change in load factor

³Load factor level

Note: the total industry and regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the region in which the carrier is registered; it should not be considered as regional traffic. Historical statistics are subject to revision.

Improved Load Factors in both Regions, due to different reasons

Freight load factors by region airport in LAC



Sources: IATA Economics, IATA Monthly Statistics



Concluding remarks

- **Demand** in the region is increasing:
 - progressive improvements in production and logistics of perishables
 - recuperating demand from the developed economies
 - increased capacity on belly cargo driven by increased passenger demand
 - perishables are commodities, sensible to the fuel price that can affect exports
- Airports are adapting **capacity**:
 - refocusing in the cargo business, mainly as landlords
 - large investments in infrastructure, upgrading logistics and technologies
 - business model allowing the introduction of competition
 - red tape continues to be the largest challenge, trade-off between control and functionality
 - airports searching for new markets

Thank you

