



CAREC Aviation

Istanbul, Turkey
18-19 April 2018

Part I

CAREC Aviation Scoping Study



Central Asia Regional Economic Cooperation Program

Aviation and the Role of CAREC: *A Scoping Study*



March 2018

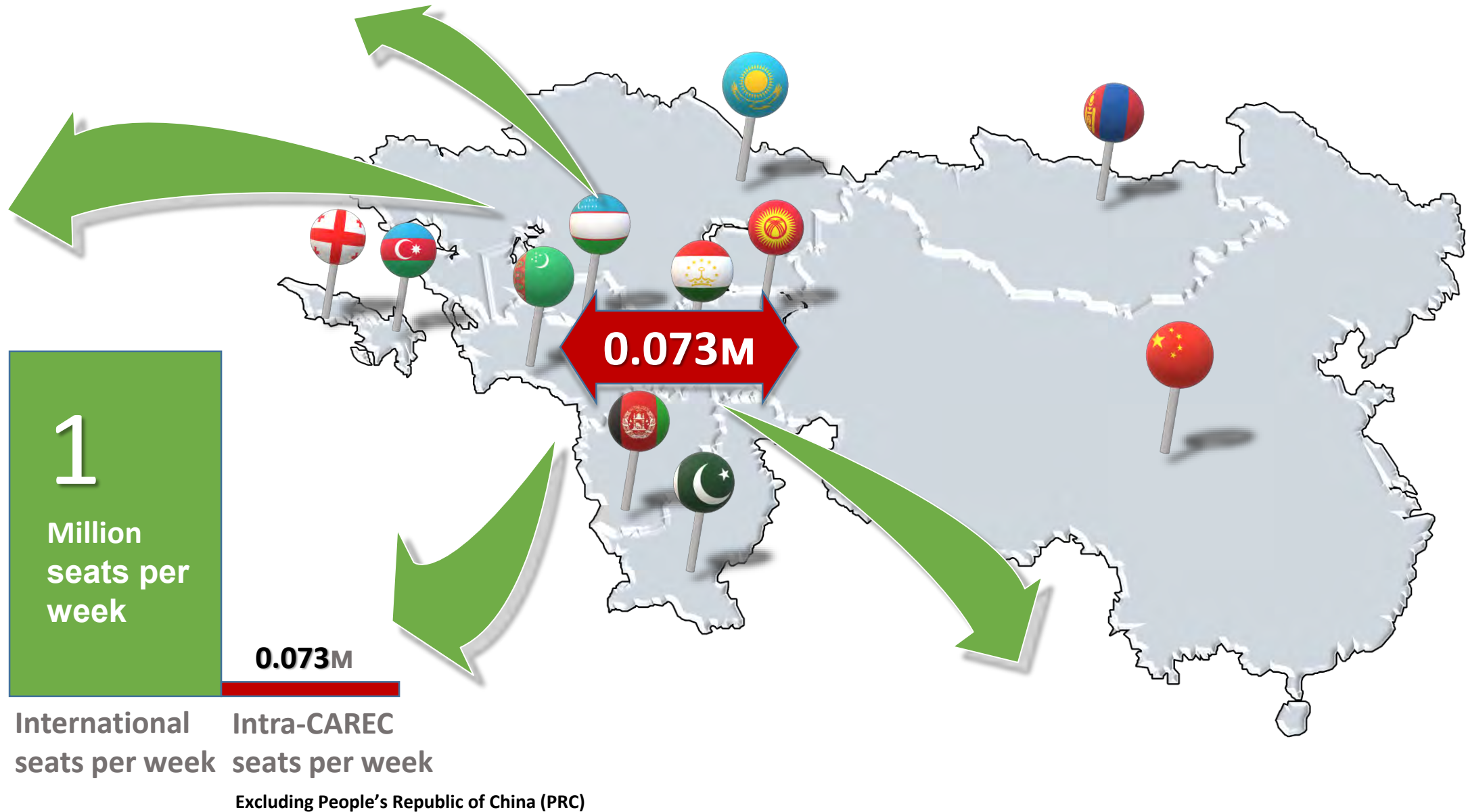


Major findings

- **By regional and international standards, inter-CAREC air connectivity is poor**
- **Lack of regional and bilateral air agreements restricts access**
- **Large potential for aviation growth, especially in the tourism sector**

1. Policy

Connectivity within CAREC



Less than half of all country pairs within CAREC are served with direct flights

Weekly scheduled frequencies between CAREC countries (as of September 2017) Source: OAG

	Afghanistan	Azerbaijan	Georgia	Kazakhstan	Kyrgyz Republic	Mongolia	Pakistan	PRC	Tajikistan	Turkmenistan	Uzbekistan
Afghanistan				1			8	1			
Azerbaijan			21	23				5		6	2
Georgia		21		21				3			
Kazakhstan	1	23	21		13			41	8	2	18
Kyrgyz Republic				13		3		10	2		2
Mongolia					3			53			
Pakistan	8							12			2
Tajikistan				8	2			7			1
Turkmenistan		6		2				4			
Uzbekistan		2		18	2		2	8	1		
Total	10	57	45	127	30	56	22	144	18	12	33
Total 554 frequencies	2%	10%	8%	23%	5%	10%	4%	26%	3%	2%	6%

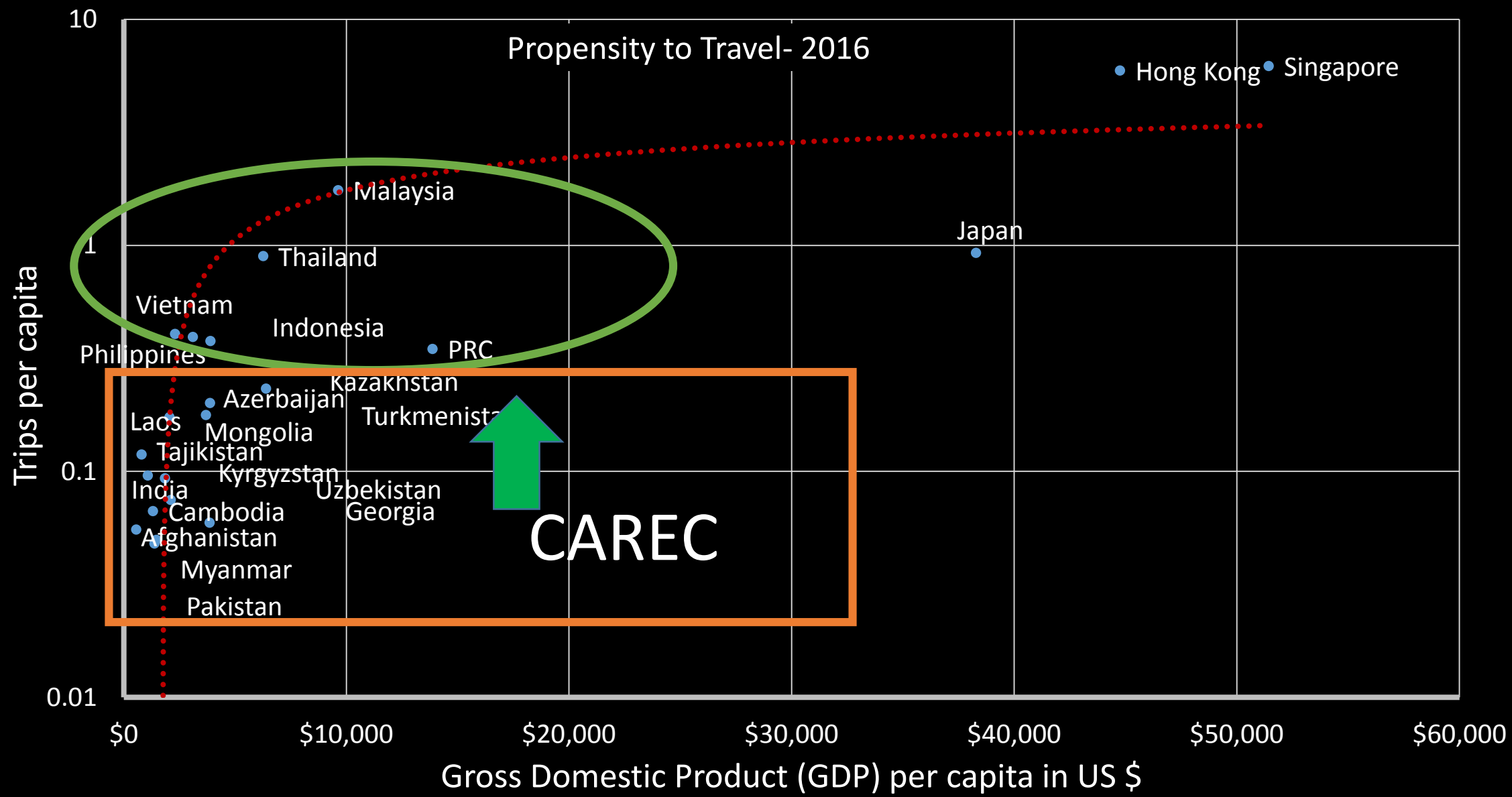
Most airlines serving CAREC are country-constrained

Airline	Number of CAREC countries served	Number of CAREC airports served
Air China	3	4
Air Kyrgyzstan	1	1
Aero Mongolia	1	1
Air Astana (Kazakhstan)	6	7
Air Manas (Kyrgyz)	1	1
Ariana (Afghanistan)	1	1
Avia Traffic (Kyrgyz)	2	2
AZAL (Azerbaijan)	3	3
China Southern	8	10
Georgian Airways	0	0
Hainan Airlines	1	1
Hunnu Air (Mongolia)	1	4
Kam Air (Afghanistan)	1	2
MIAT (Mongolia)	1	1
PIA (Pakistan)	2	2
SCAT (Kazakhstan)	3	5
Shaheen Air (Pakistan)	1	1
Somon Air (Tajikistan)	2	2
Suparna (PRC)	1	1
Tajik Air (Tajikistan)	3	3
Turkmenistan Airlines	2	2
Uzbekistan Airways	6	8
	Number of CAREC countries served	Number of CAREC airports served

CAREC
countries
served

CAREC
airports
served

CAREC propensity-to-travel is below countries with similar GDP/capita



2. Infrastructure and Fleets



Expansion of the Astana International Airport

Renovation of Tbilisi International Airport



New Ashgabat International Airport



New Ulaanbaatar International Airport

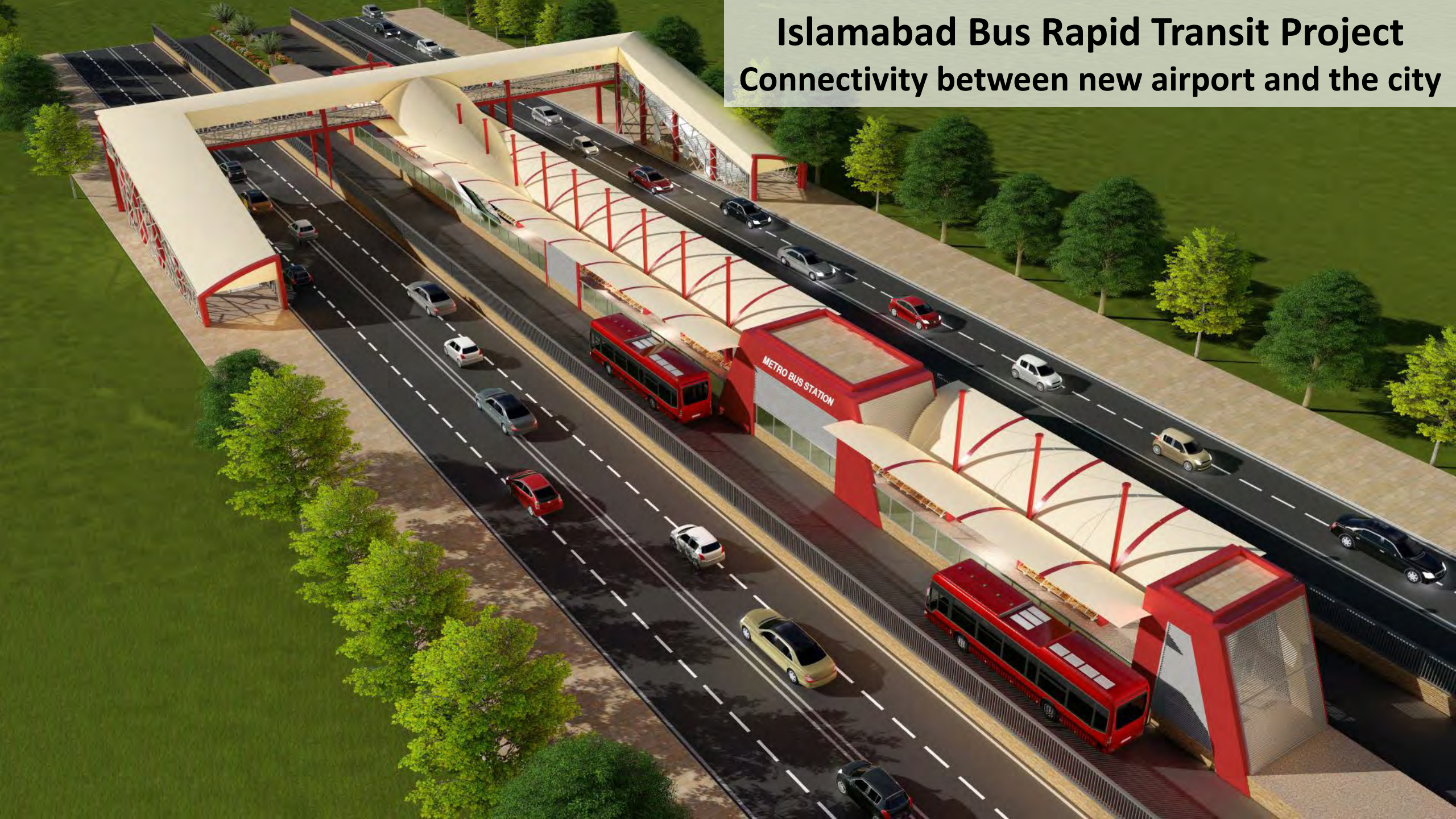


New Islamabad International Airport



Islamabad Bus Rapid Transit Project

Connectivity between new airport and the city



Fleets



CAREC country	Number of wide-body aircraft	Number of narrow-body aircraft	No. of regional aircraft	Total active fleet	Passenger aircraft/ freighters
Afghanistan	3	8	5	16	15/1
Azerbaijan	22	12	9	43	25/18
PRC	386	2,619	234	3,239	3,158/81
Georgia	9	8	6	23	12/11
Kazakhstan	4	36	52	92	90/2
Kyrgyz Republic	0	11	6	17	14/3
Mongolia	2	4	10	16	16/0
Pakistan	16	47	23	86	85/1
Tajikistan	1	11	8	20	14/6
Turkmenistan	3	21	0	24	24/0
Uzbekistan	12	13	13	38	34/4
Total	458	2,790	366	3,614	3,487/127
Total (ex. PRC)	72	171	132	375	329/46

**Opening up secondary markets
with smaller, regional aircraft**





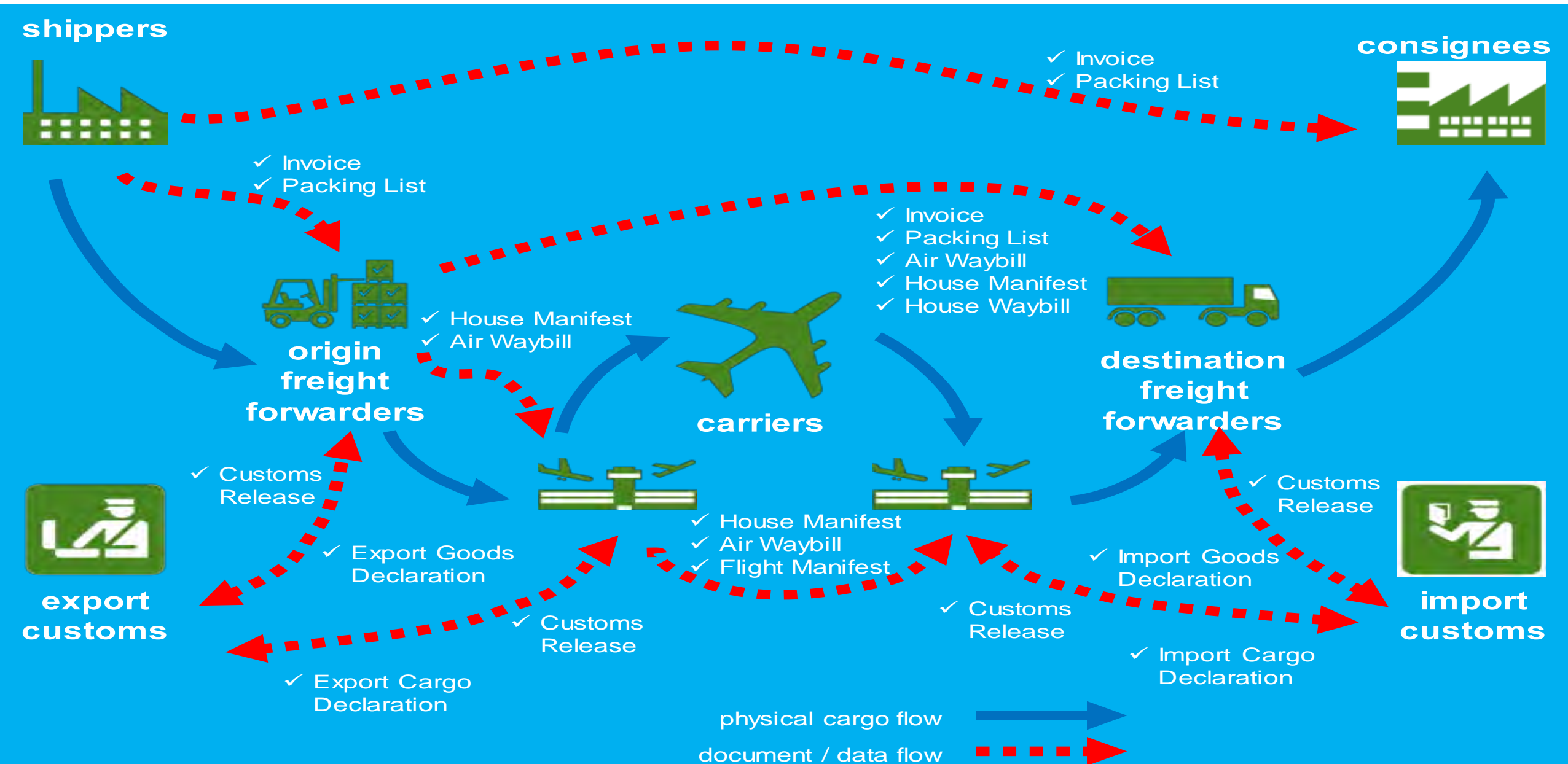
3. Operations

Immigration capacities and excessive visa restrictions constrain travel



Paperless “e-cargo” systems can dramatically improve freight efficiency

Current processes in CAREC can involve over 30 documents for a single shipment



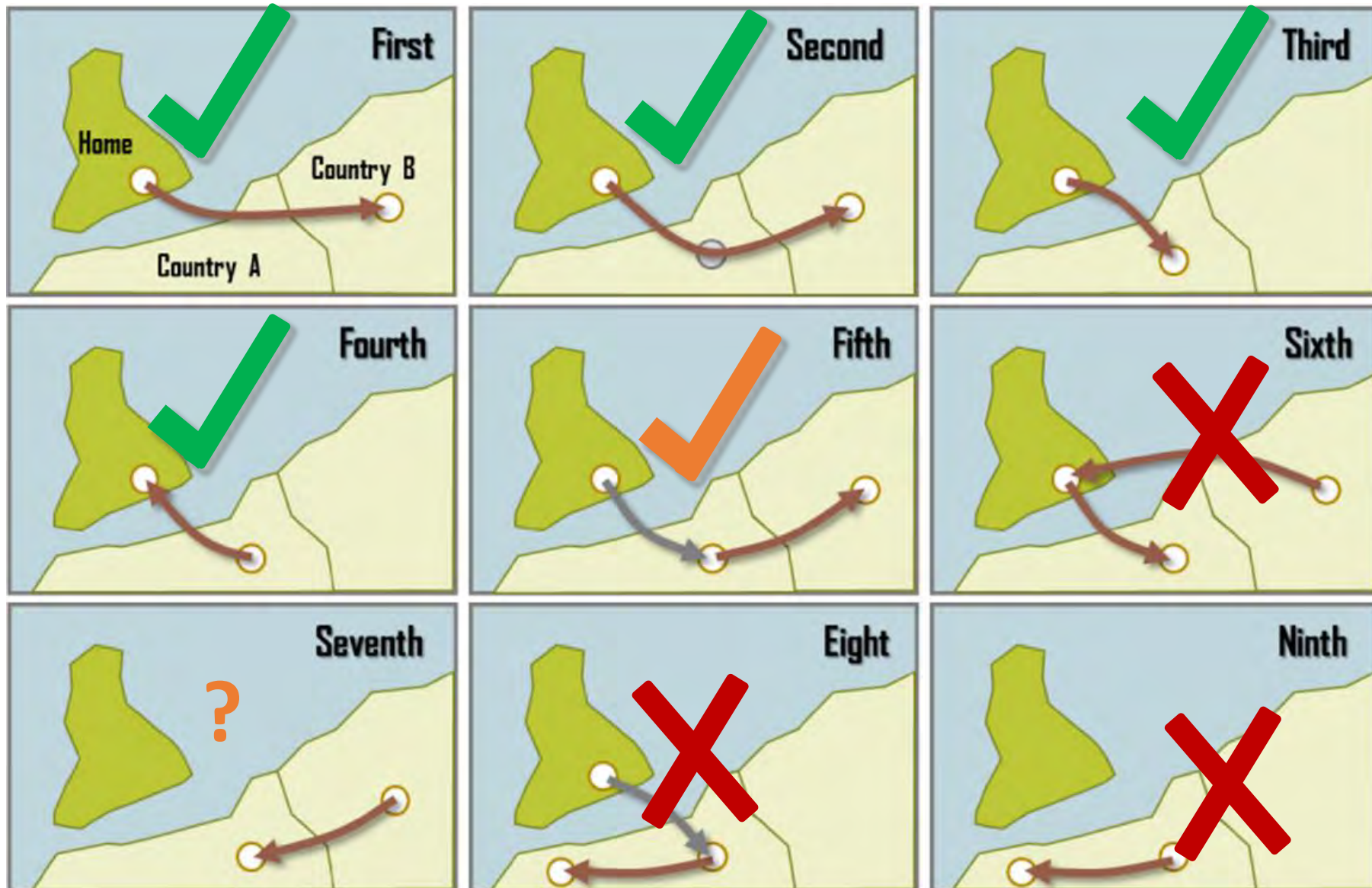
Study Recommendation

**CAREC countries could adopt a gradual, phased approach to managed competition
e.g. Allowing open access to unserved city pairs**



Phased Approach:

Move towards granting third and fourth freedom rights within CAREC



Nine Rights
of Freedom
in Aviation

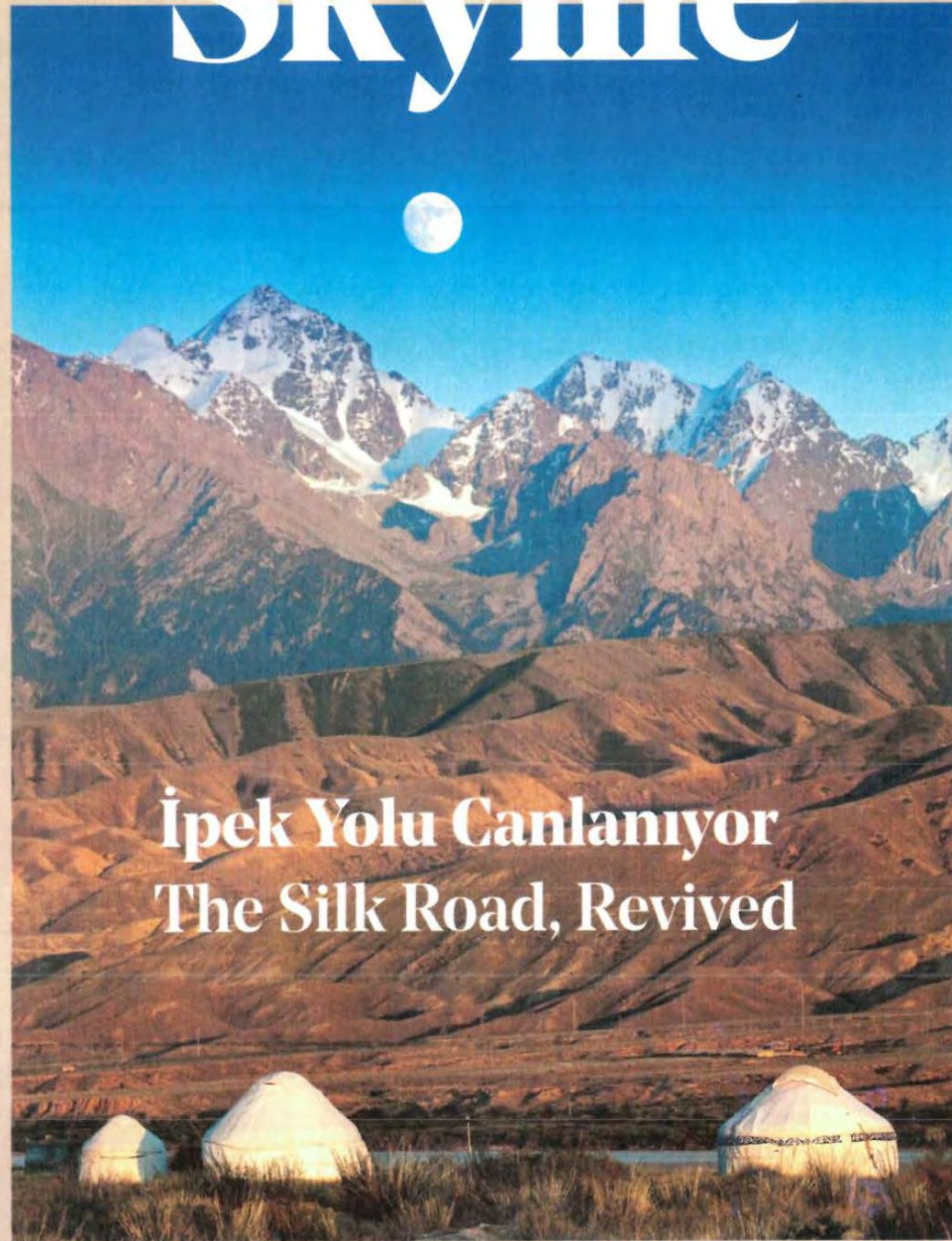
Sept 2019 / 417
MAYIS AYI 2019

Aviatic
Türk Hava Yolları'nın Dergisi

TÜRKİYE
AIRLINES

Skylife

İpek Yolu Canlanıyor
The Silk Road, Revived



Marketing Connectivity

Turkish Council and Turkish Airlines:
"The Modern Silk Road Tour Package"



Part II.

Case Studies



1. Malaysia-Singapore Case Study



Market Opening: Singapore-Malaysia (2008)

Pre-liberalisation (2003 – 2008)

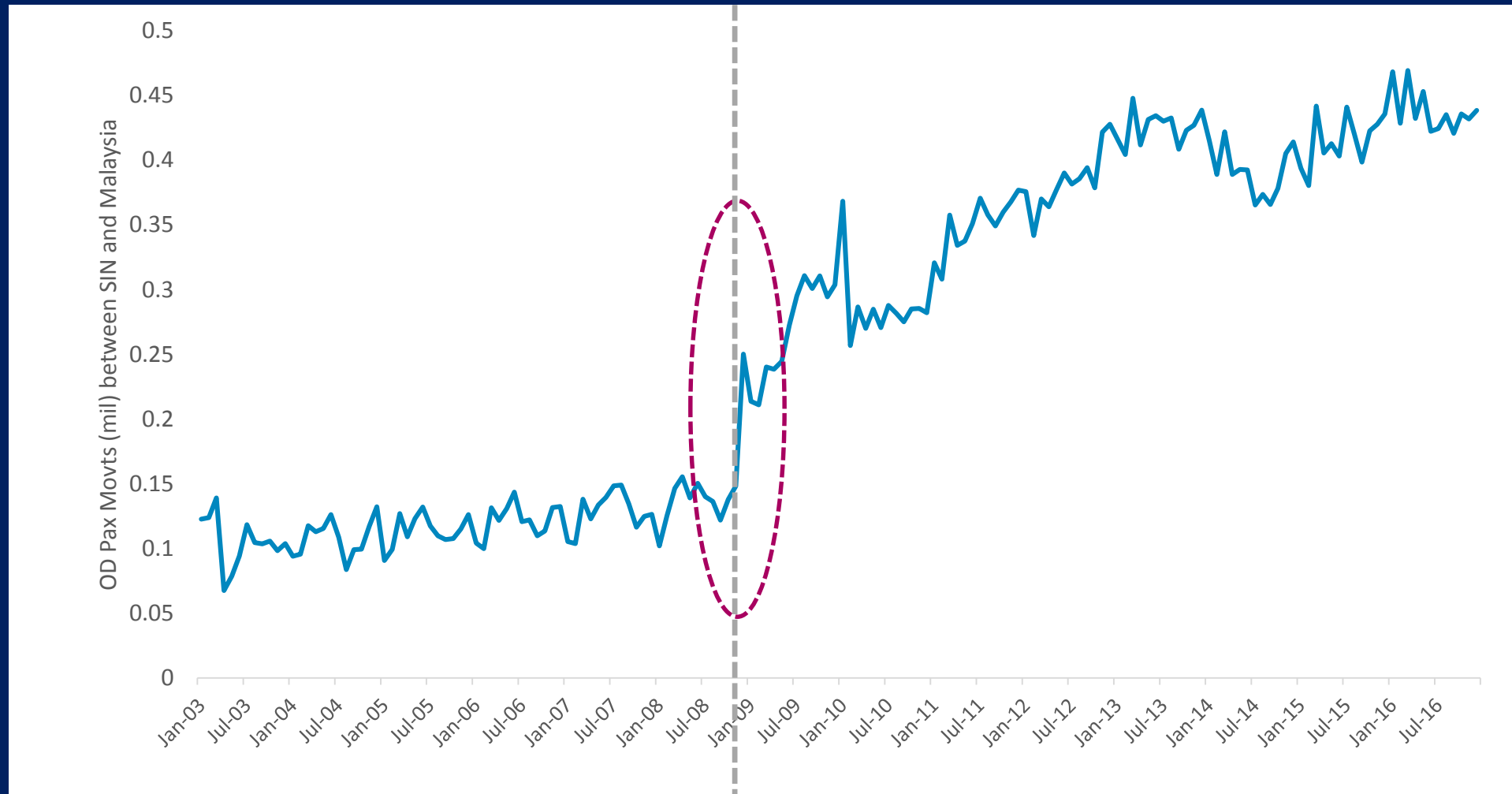
Weekly services (as at Jan 03): 210

City links (as at Jan 03): 5

Post liberalisation (2009 – 2016)

Weekly Services (as at Dec 16): 538

City links (as at Dec 16): 8



Source: Civil Aviation Authority of Singapore (CAAS)

Singapore's terminal 4 and 5 expansion



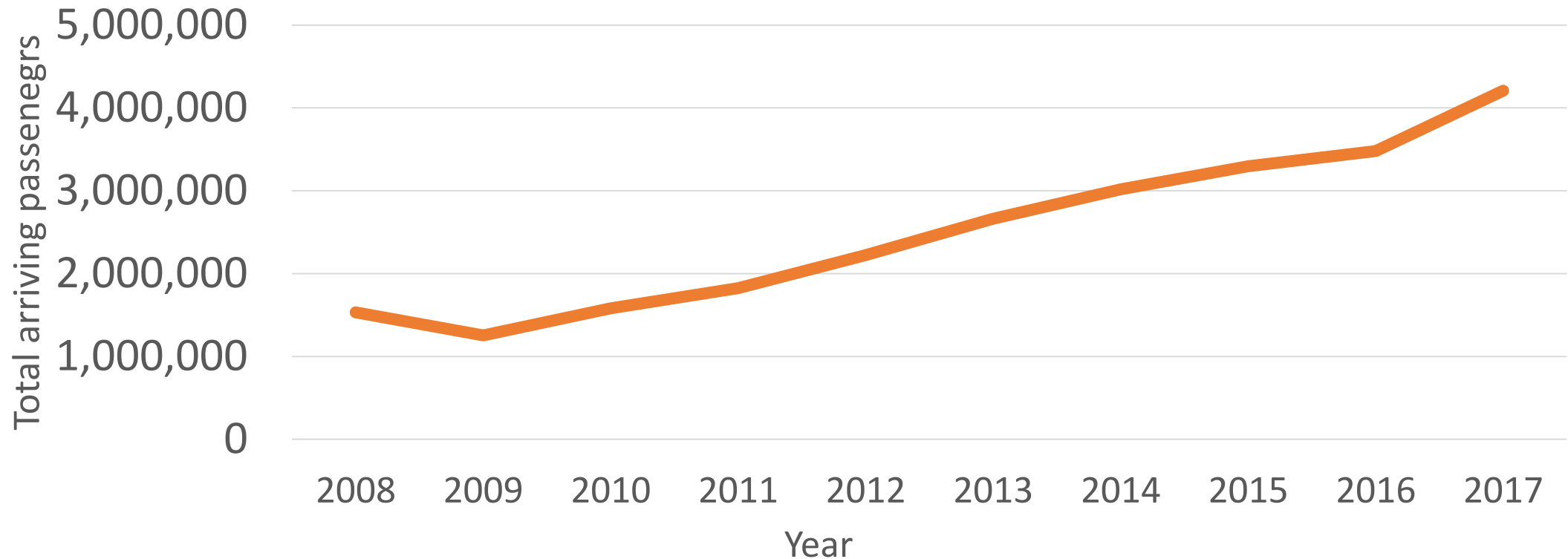
2. Siem Reap Case Study



Cambodia: 30% of total visitors enter Cambodia via Siem Reap

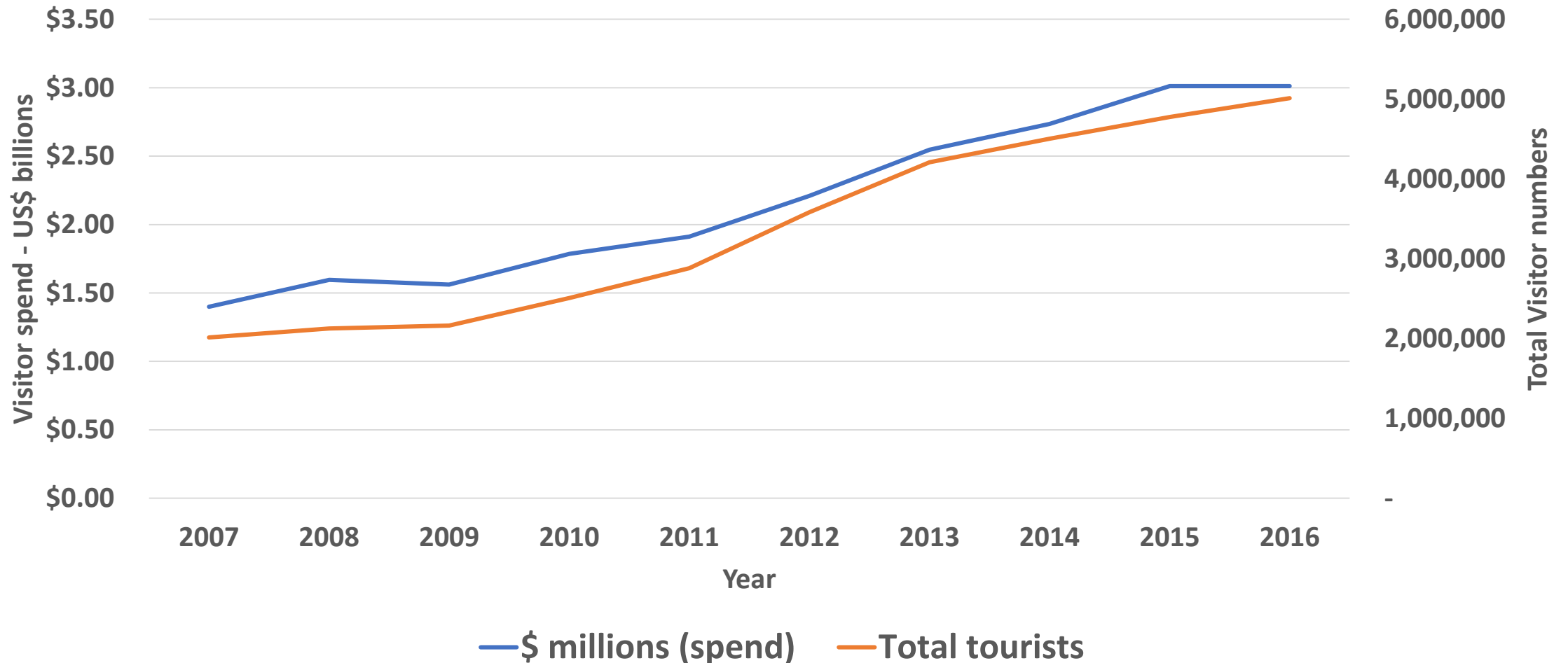
Siem Reap 99% of traffic are international visitors/tourists

**Siem Reap Airport annual passenger traffic:
2008 to 2017**

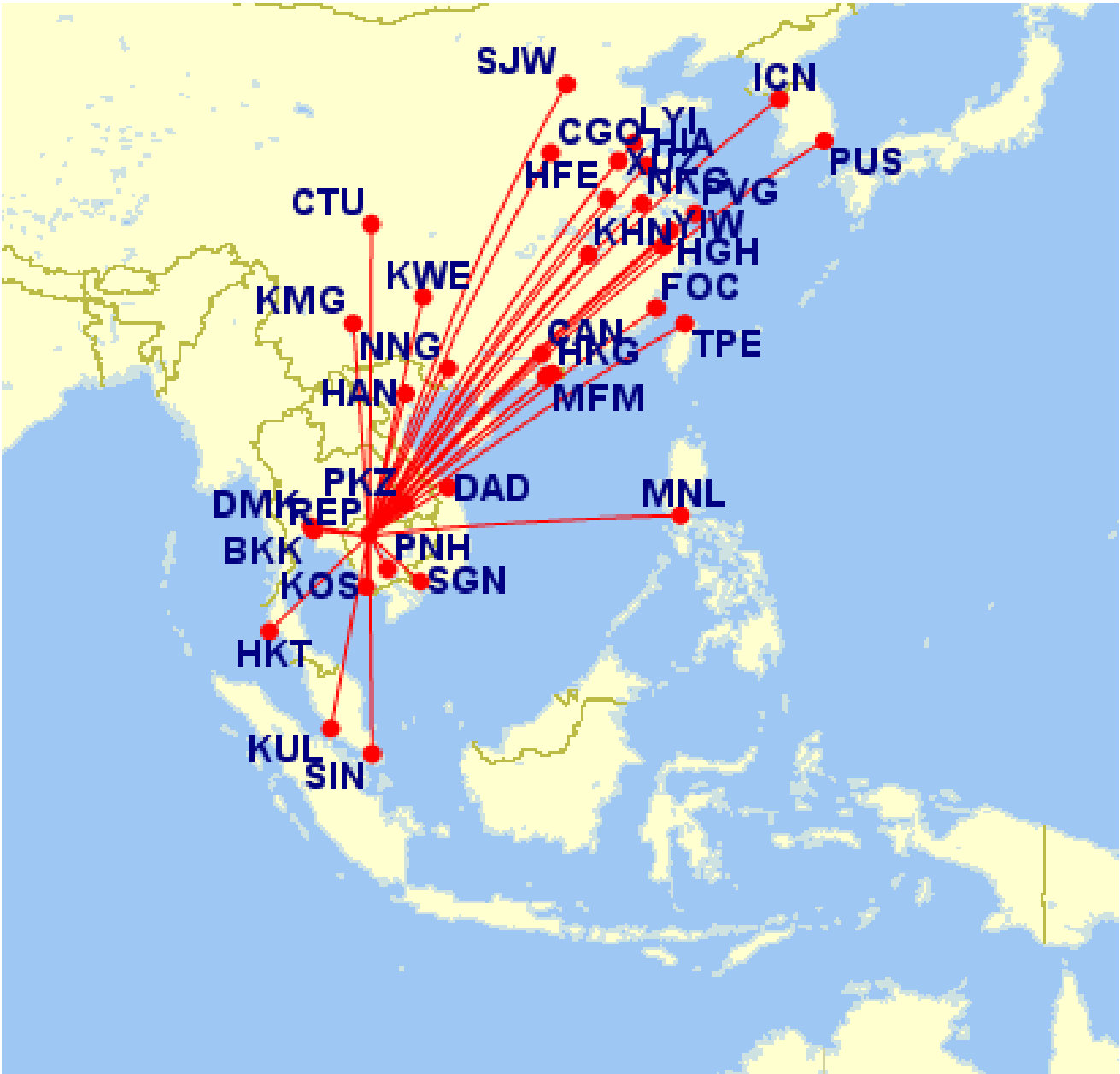


Siem Reap accounts for \$1 billion of tourist spending

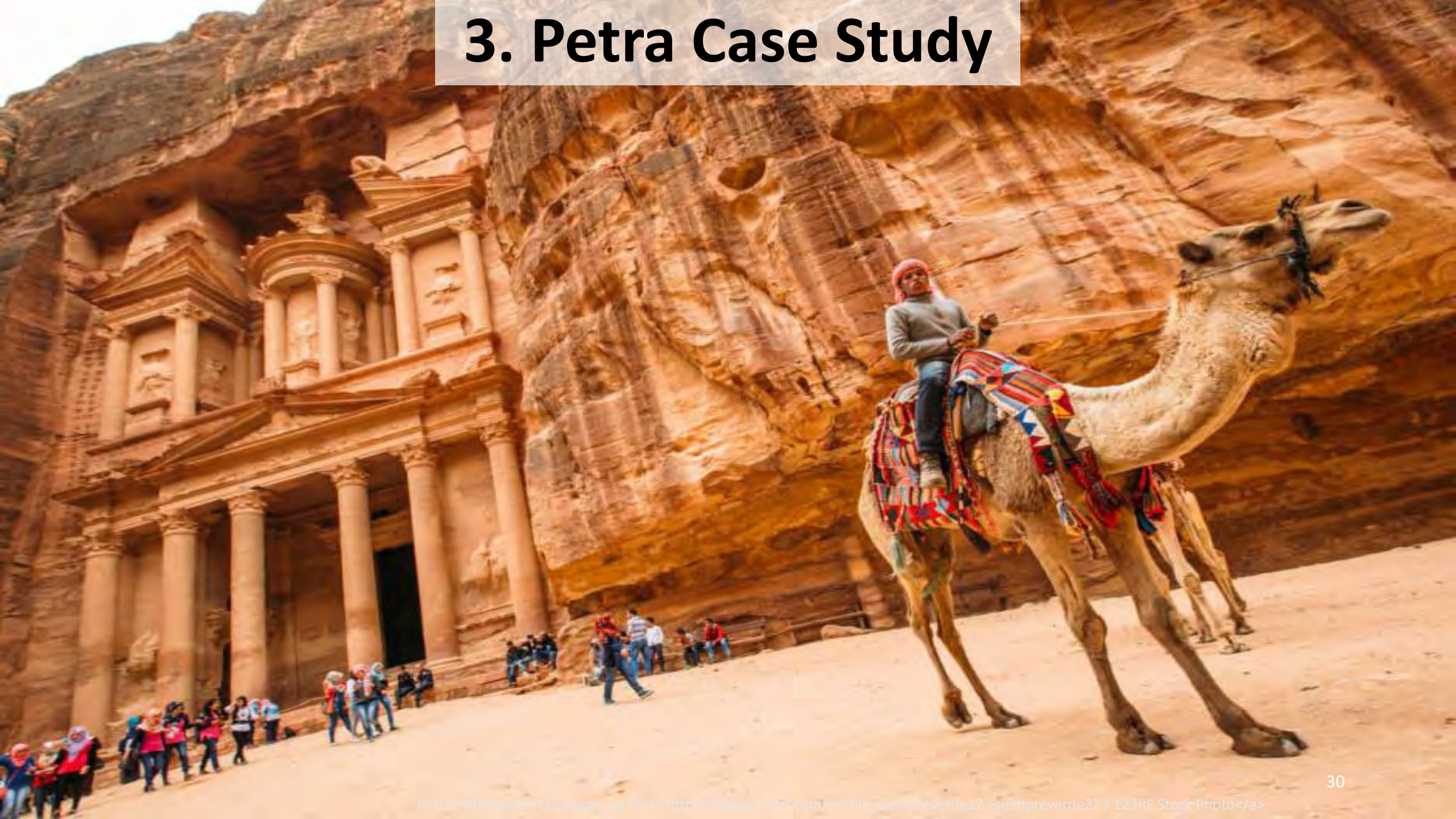
Cambodia - total visitors and tourist expenditure



Siem Reap is well-connected to Asia with mostly daily non-stop flights



3. Petra Case Study



Petra, Jordan



Petra2 Attribution Copyright: siempreverde22 / 123RF stock photo

A tale of two sister cities...

Two 300 B.C. civilisations

Madain Saleh Saudi Arabia




470,000 Tourists

~20,000 Tourists

2017

31

Coordinated Aviation, Visas, Infrastructure, & Tourism Marketing

	2018		2017	2019	
 470,000 Petra	✓	Visas	✗	✓	 ~20,000 Madain Saleh
	✓		✓	✓	
	✓		✓	✓	
	✓		✗	✓	
		Site access			
		Hotels			
		Tourist attractions			



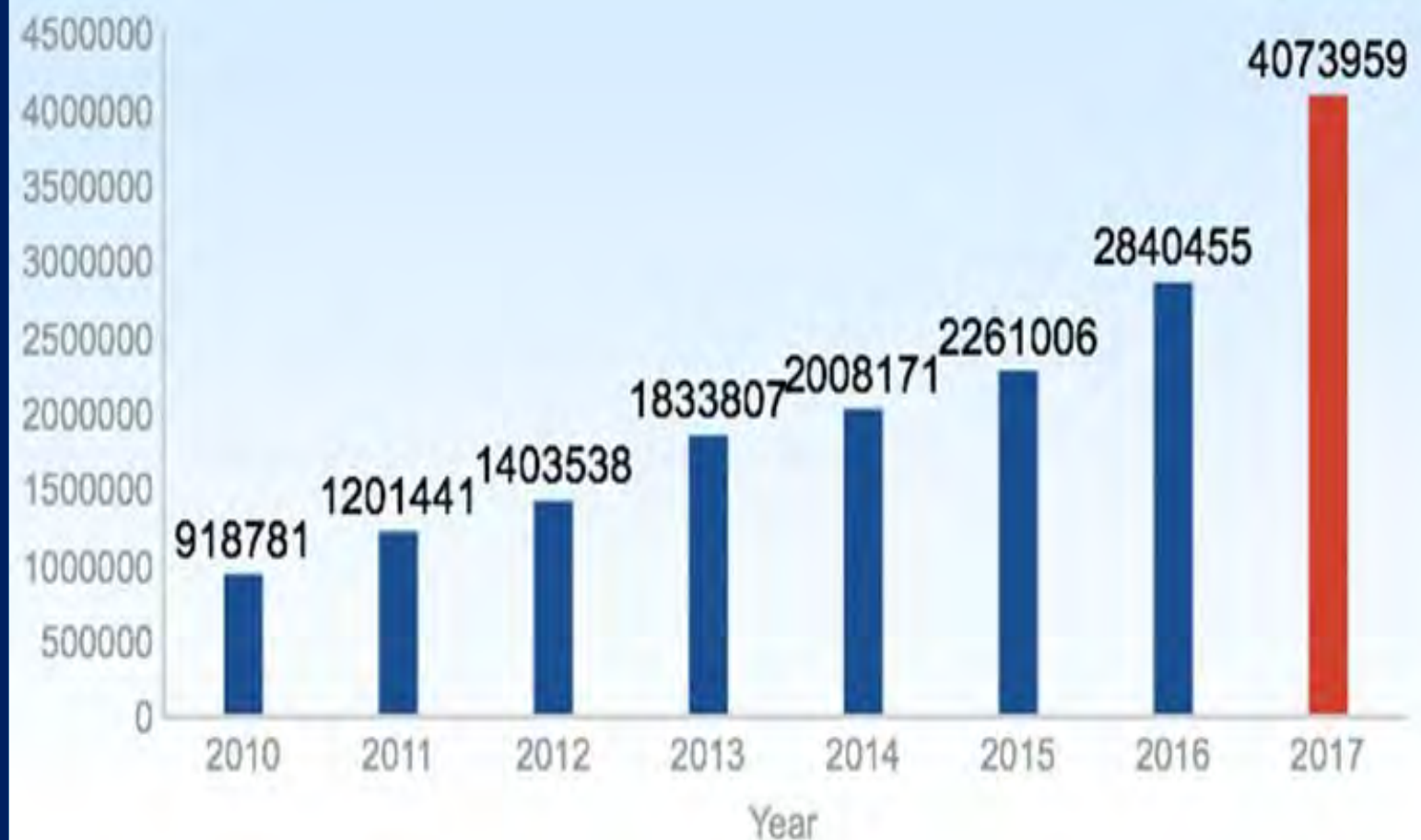
4. Georgia and Azerbaijan Case Studies

Tbilisi

The city that loves you

Georgia has demonstrated a more open market, lower fees and taxes can dramatically stimulate demand

- Visa free entry to citizens of nearly 100 countries
- Developed Kutaisi as a low-cost airport, attracting budget airlines to Europe
- New rail links for more accessibility



Growth in Georgia's annual aviation passenger traffic from 2010 to 2017

Source: Georgia Civil Aviation Authority

Azerbaijan



- Introduced an e-visa system for nearly 100 countries
- Low taxes and airport passenger charges

Baku airport traffic increase **+23%** for 2017

Total of **4.06 million** passengers in 2017

A total of **55** airlines served Baku,

AZAL had **55% share** or **2.2 million** passengers



The benefits of promoting the creation of Low-Cost Carriers (LCCs)

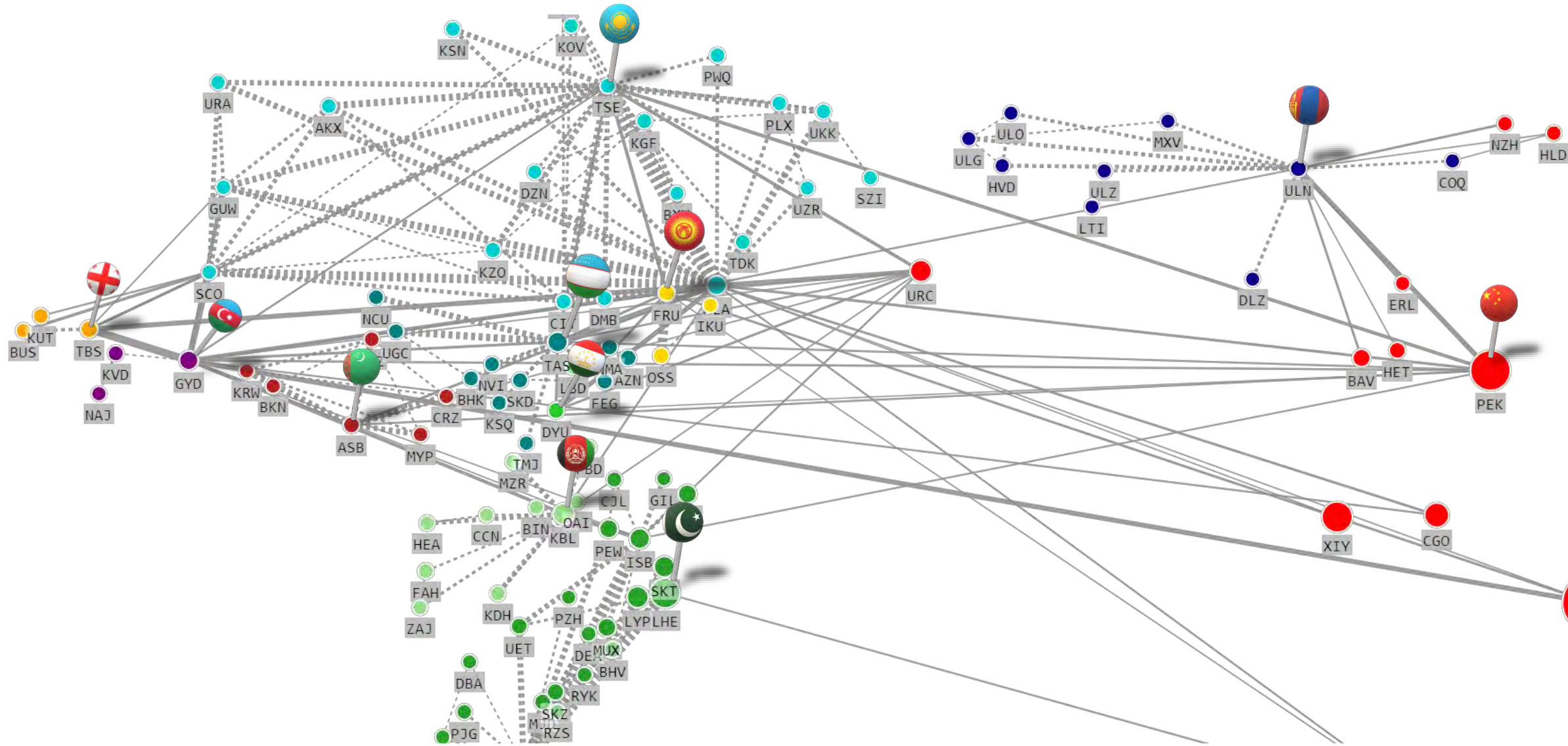
- Buta Airways (Azerbaijan) as a catalyst for market growth
- Lower fares enable a larger portion of the local population to fly and boosts inbound tourism



Part III. Tourism and CAREC economic development

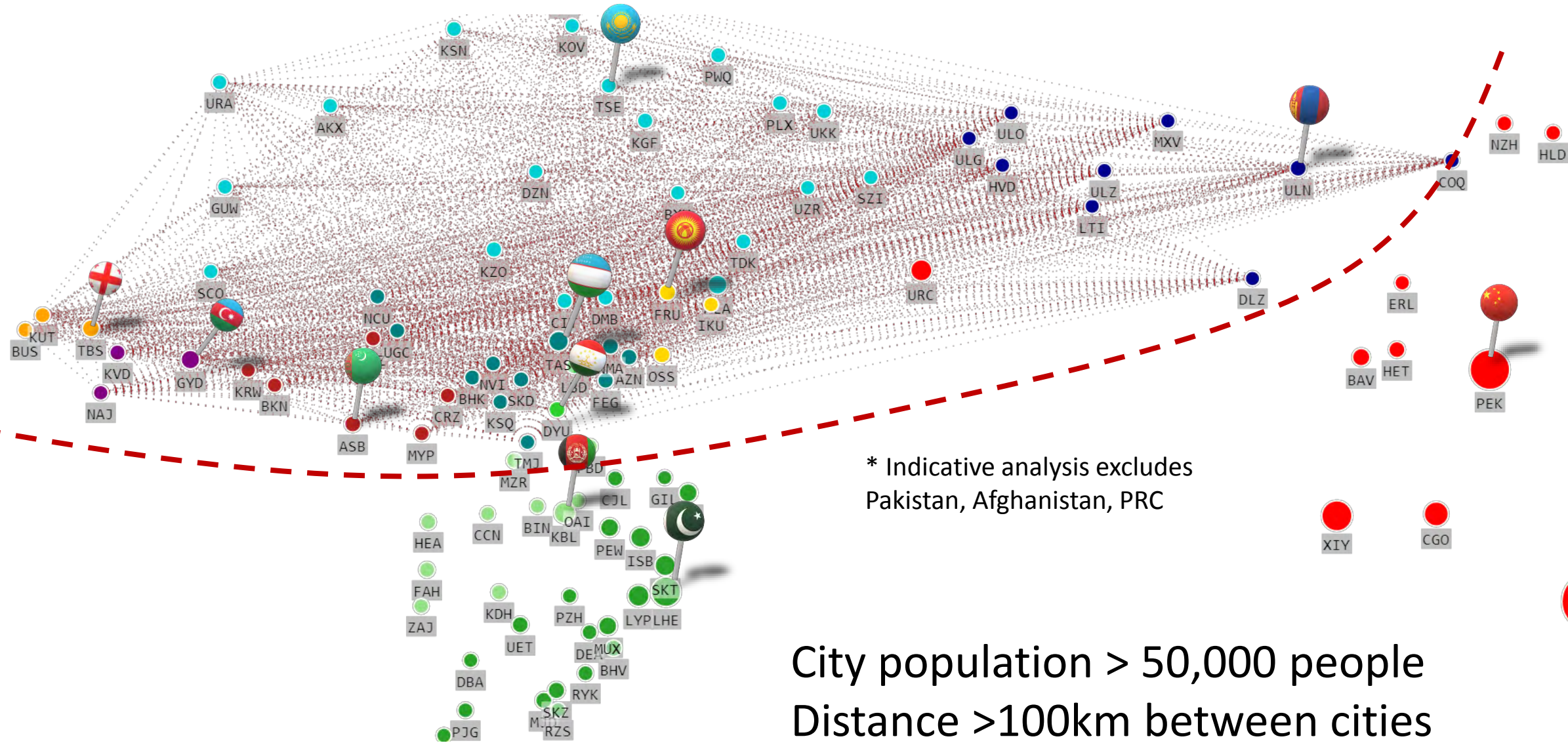


Current city pairs served in Central Asia region*



* Analysis excludes Pakistan, Afghanistan, PRC

Unserved city pairs in Central Asia region*

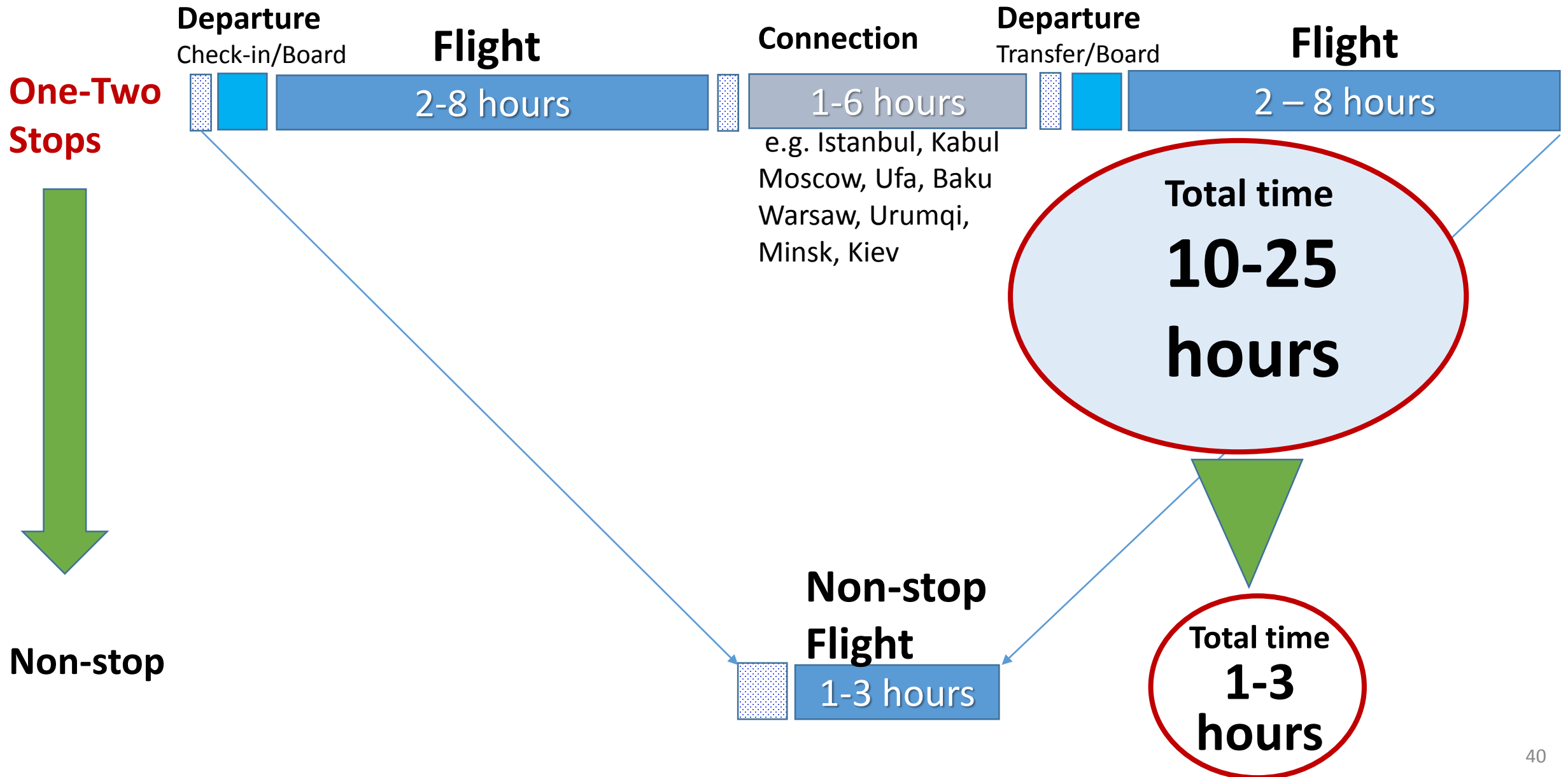


* Indicative analysis excludes
Pakistan, Afghanistan, PRC

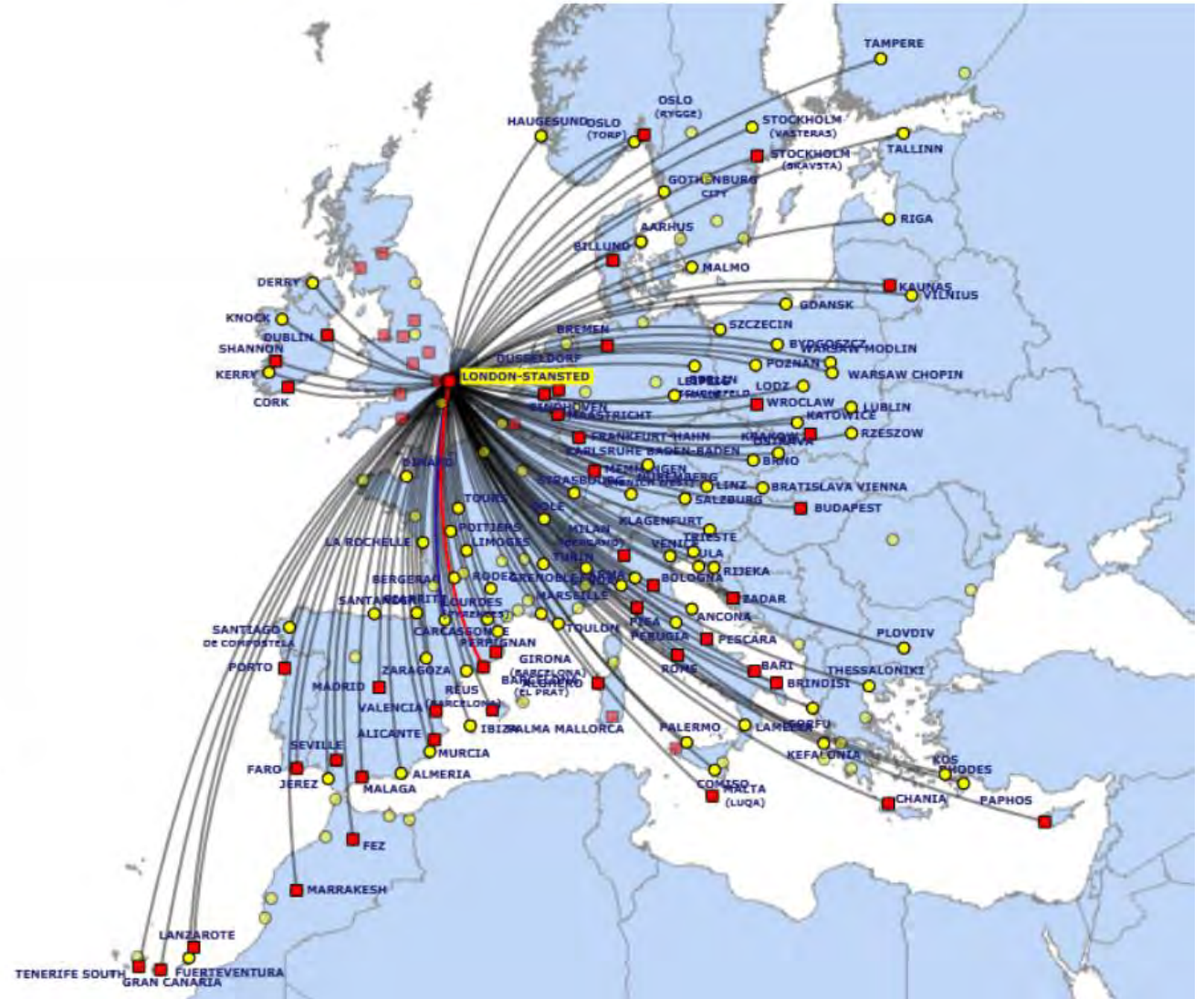
City population > 50,000 people
Distance > 100km between cities

ILLUSTRATIVE ONLY

Non-stop flights in CAREC can substantially reduce travel times

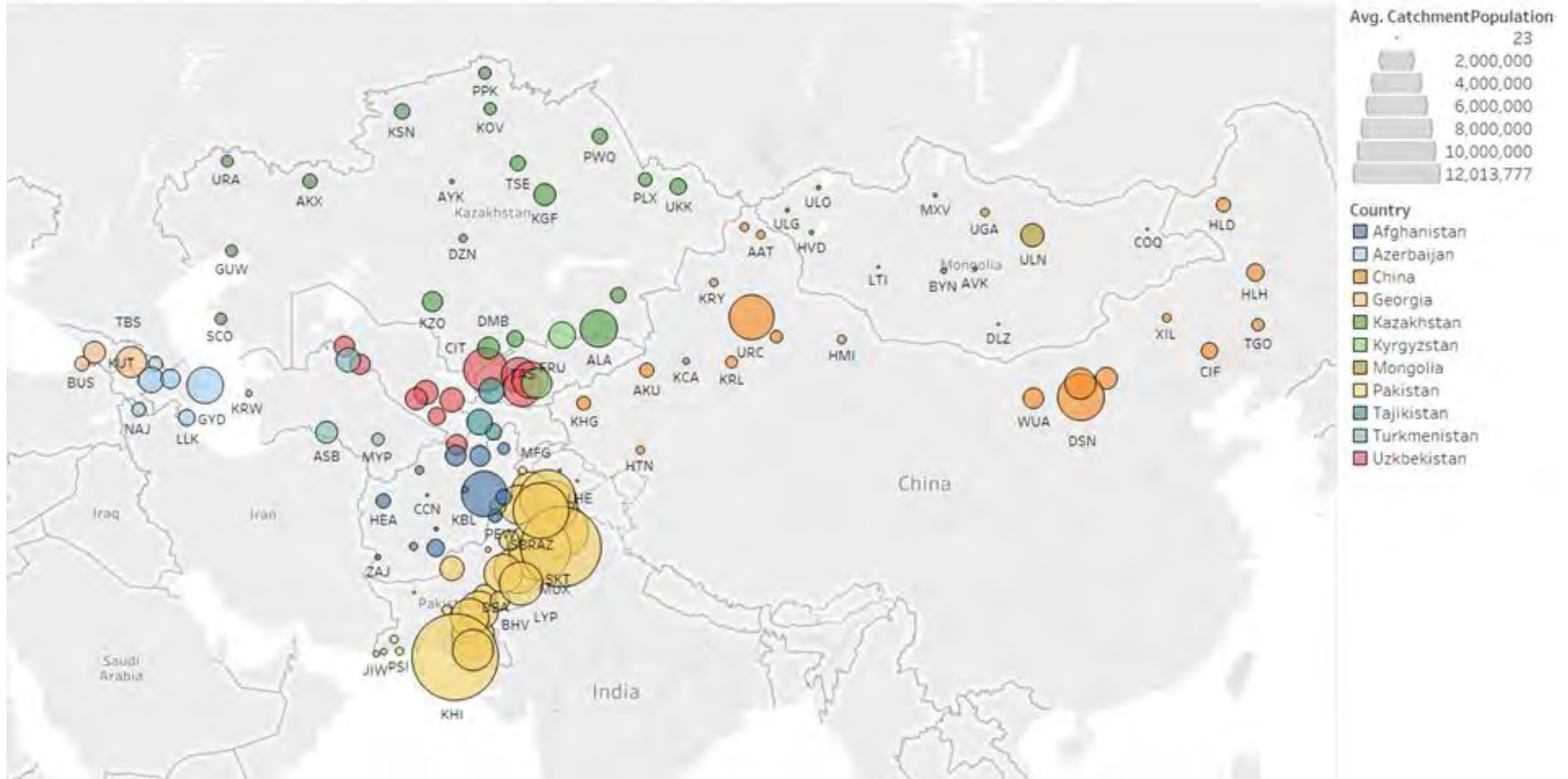


Successful airlines like Ryanair have created a 300 aircraft, 130 million annual passenger operation mostly on un-served city pairs

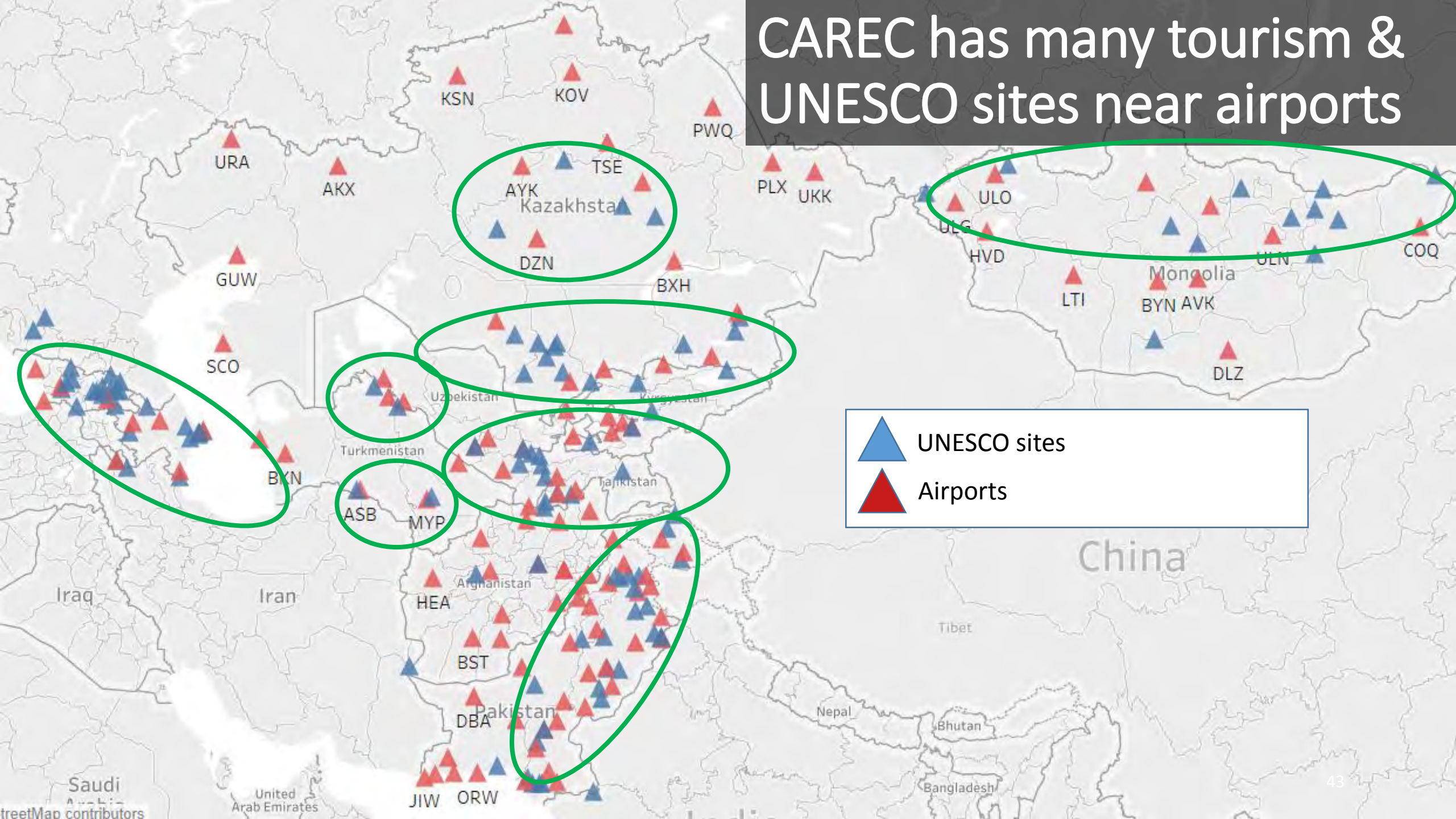


Connectivity to many secondary cities can open vital tourism markets for CAREC

Population catchment within 100km of airport



CAREC has many tourism & UNESCO sites near airports



**Minaret and
archeological
remains of Jam,
Afghanistan**



Gobustan Rock Art, Azerbaijan



Upper Svaneti, Georgia



Saryaka, Kazakhstan



Chang'an Tianshan Silk Road Corridor, Kazakhstan, Krygyz Republic, and PRC



**Western Tien-Shan / Aksu-Jabagly State Nature Reserve,
Kazakhstan, Kyrgyz Republic, and Uzbekistan**



Uvs Nuur Basin, Mongolia



Landscapes of Dauria, Mongolia



Rohtas Fort, Pakistan



Mogao Caves, PRC



Sarazm, Tajikistan



Tajik National Park, Tajikistan



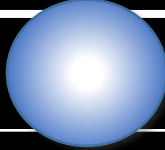

















Parthian Fortresses of Nisa, Turkmenistan



Itchan Kala, Uzbekistan



CAREC* countries have high growth potential for tourism

Country	% contribution to GDP	
Cambodia		32.4
CAREC average		5.2
 Azerbaijan		14.6
 Georgia		27.1
 Kazakhstan		6.2
 Kyrgyz Republic		3.9
 Mongolia		11.4
 Pakistan		6.9
 Tajikistan		8.2
 Uzbekistan		3.1

* Excludes PRC, and no data available for Afghanistan and Turkmenistan

Source: World Bank 2016

The prize of enhanced CAREC tourism



Potential growth of 10% (short-term) to 50% (medium term) above current direct contribution could contribute another **US\$1.39-\$6.95 billion** to the economies of CAREC.

Based on data from WTCC, 2016 and World Bank

The role of secondary airports and regional aircraft fleets to a tourism strategy



Call for expressions of interest on hosting national aviation seminars

- Market development policies
 - Project development
- Training needs assessment



Toward Connected Skies
Scoping the Role of CAREC in Enhancing
Regional Cooperation in Aviation
6-7 April 2017 • Singapore

Определение роли ЦАРЭС
в усилении регионального сотрудничества
в области авиации
6-7 апреля 2017 г. • Сингапур



CAREC Aviation...Ready to take-off

