

**UNDERSERVED
UNCOVERED**



**OAG's Top 50 underserved
international routes**

OAG[®]
connecting the
world of travel

Contents

| | |
|--|----|
| About OAG's underserved uncovered | 3 |
| About the data | 3 |
| OAG's Top 50 underserved international routes | 4 |
| Key Findings – a concentration of one-stop opportunities | 6 |
| United States – missing Saigon | 8 |
| Thailand – one stop to Bangkok | 11 |
| Saudi Arabia – paradise for hub airports | 12 |
| In conclusion | 13 |



OAG's Top 50 underserved international routes

In an ideal world all passengers would be able to take a scheduled air service directly from where they want to start their journey to their destination with no stops, no change of planes and no waiting in intermediate airports. In the real world, air travellers often fly indirectly for a myriad of reasons including airline preference, lower air fares and sometimes because there simply is no direct or non-stop air service.

Where there are significant volumes of passengers travelling between two airports via a third point (indirect traffic) we consider this market to be underserved as there is potential for new, direct air services. There may be rational and practical reasons why an airline is unable to provide some or more non-stop air services on a route, such as bilateral issues, competitive 6th freedom pricing and the range of aircraft available in the fleet. But the fact remains, if there are considerable volumes of passengers travelling on one-stop routes, there is more demand than the one-stop route can accommodate and that represents an opportunity for new airline services and airport route development priorities.

Using data from OAG's Traffic Analyser, we shine a light on the world's Top 50 Underserved Routes.

About the data

- The ranking considers international airline bookings only for 2015, the most recent year for which full data is available, and identifies the top 50 passenger routings by round trip booking volumes using O&D data, which make a single airport connection in each direction i.e. these are one-stop journeys.
- By underserved we mean routes which may have non-stop services or may only be served with connecting services. Aside from excluding domestic passenger bookings, the ranking excludes all journeys where the non-stop distance is greater than 8,900 miles, effectively the maximum non-stop range of aircraft currently in service. There are no airlines currently operating non-stop routes of over 8,900 miles.
- Many, but not all, of the routes in the ranking have non-stop air services however all have sizeable volumes of one-stop traffic and they have been ranked in terms of this volume.
- The report only considers scheduled air services. There will be routes where charter operations are the only direct air services, or supplement existing non-stop and indirect scheduled air services.



OAG's Top 50 underserved¹ international routes

| Rank | Route | From (or to) | To (or from) | One-stop bookings 2015 | Non-stop bookings 2015 | Route distance (miles) |
|------|---------|---------------------|------------------|------------------------|------------------------|------------------------|
| 1 | CGK-JED | Jakarta | Jeddah | 279,733 | 543,916 | 4,953 |
| 2 | JFK-TLV | New York-JFK | Tel Aviv | 238,995 | 432,354 | 5,665 |
| 3 | BKK-CDG | Bangkok | Paris-De Gaulle | 238,955 | 153,592 | 5,853 |
| 4 | BKK-LHR | Bangkok | London-Heathrow | 230,542 | 357,700 | 5,933 |
| 5 | LAX-SGN | Los Angeles | Ho Chi Minh City | 203,359 | unserved | 8,159 |
| 6 | DXB-MNL | Dubai | Manila | 192,504 | 430,998 | 4,291 |
| 7 | LAX-MNL | Los Angeles | Manila | 188,229 | 179,170 | 7,295 |
| 8 | BKK-PEK | Bangkok | Beijing | 186,153 | 582,104 | 2,050 |
| 9 | JED-MNL | Jeddah | Manila | 180,670 | 76,718 | 5,341 |
| 10 | JED-KHI | Jeddah | Karachi | 179,224 | 389,310 | 1,788 |
| 11 | BKK-LAX | Bangkok | Los Angeles | 175,962 | 17,322 | 8,252 |
| 12 | DEL-SFO | Delhi | San Francisco | 165,117 | 854 | 7,693 |
| 13 | KWI-MAA | Kuwait | Chennai | 162,946 | 106,868 | 2,348 |
| 14 | PEK-TPE | Beijing | Taipei | 158,644 | 654,810 | 1,071 |
| 15 | DPS-PVG | Denpasar Bali | Shanghai | 156,917 | 55,416 | 2,791 |
| 16 | BKK-FRA | Bangkok | Frankfurt | 155,465 | 211,370 | 5,574 |
| 17 | CUN-LAX | Cancun | Los Angeles | 152,688 | 301,650 | 2,117 |
| 18 | BOS-CUN | Boston | Cancun | 152,603 | 77,460 | 1,737 |
| 19 | DOH-KTM | Doha | Kathmandu | 147,454 | 177,184 | 2,087 |
| 20 | FOC-JFK | Fuzhou | New York-JFK | 146,810 | 14,288 | 7,757 |
| 21 | GRU-MCO | Sao Paulo-Guarulhos | Orlando | 146,405 | 144,202 | 4,268 |
| 22 | DEL-RUH | Delhi | Riyadh | 142,894 | 93,422 | 1,887 |
| 23 | COK-KWI | Kochi | Kuwait | 139,700 | 96,340 | 2,260 |
| 24 | LHR-MNL | London-Heathrow | Manila | 139,133 | 60,938 | 6,690 |
| 25 | DAC-JFK | Dhaka | New York-JFK | 138,467 | unserved | 7,867 |

¹ By underserved we mean routes which may have non-stop services or may only be served with connecting services

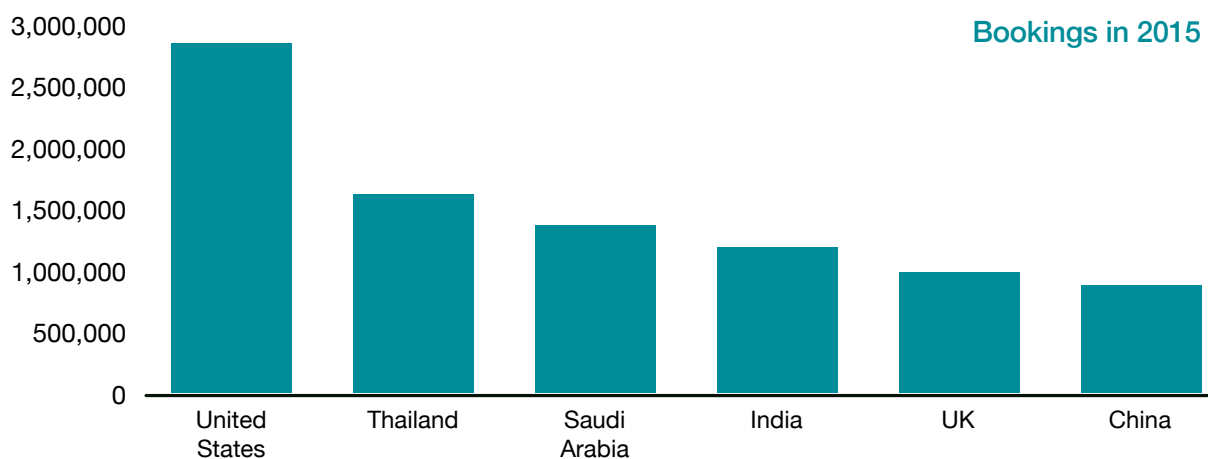
| Rank | Route | From (or to) | To (or from) | One-stop bookings 2015 | Non-stop bookings 2015 | Route distance (miles) |
|------|---------|-----------------|------------------|------------------------|------------------------|------------------------|
| 26 | EZE-MIA | Buenos Aires | Miami | 137,711 | 463,824 | 4,423 |
| 27 | HKG-LHR | Hong Kong | London-Heathrow | 135,043 | 686,188 | 5,984 |
| 28 | BKK-MUC | Bangkok | Munich | 134,325 | 91,700 | 5,450 |
| 29 | BKK-MAN | Bangkok | Manchester | 133,631 | unserved | 5,966 |
| 30 | JFK-MNL | New York-JFK | Manila | 132,510 | 19,936 | 8,510 |
| 31 | CCJ-JED | Calicut | Jeddah | 130,794 | 94,982 | 2,538 |
| 32 | LHR-MCO | London-Heathrow | Orlando | 129,232 | 3,002 | 4,328 |
| 33 | DOH-MNL | Doha | Manila | 128,597 | 88,520 | 4,525 |
| 34 | BKK-JFK | Bangkok | New York-JFK | 127,994 | unserved | 8,650 |
| 35 | HKG-LAX | Hong Kong | Los Angeles | 127,908 | 220,502 | 7,248 |
| 36 | SFO-SGN | San Francisco | Ho Chi Minh City | 127,016 | unserved | 7,828 |
| 37 | ISB-JED | Islamabad | Jeddah | 126,146 | 326,072 | 2,222 |
| 38 | HKT-PEK | Phuket | Beijing | 125,702 | 138,330 | 2,480 |
| 39 | JED-LHE | Jeddah | Lahore | 125,420 | 431,332 | 2,270 |
| 40 | DXB-LHR | Dubai | London-Heathrow | 122,244 | 988,454 | 3,416 |
| 41 | DMM-KTM | Dammam | Kathmandu | 121,659 | unserved | 2,182 |
| 42 | DEL-JFK | Delhi | New York-JFK | 121,489 | 70,052 | 7,304 |
| 43 | CUN-EZE | Cancun | Buenos Aires | 119,417 | 79,964 | 4,284 |
| 44 | CGK-RUH | Jakarta | Riyadh | 117,915 | 39,890 | 4,562 |
| 45 | DEL-YVR | Delhi | Vancouver | 117,840 | unserved | 6,920 |
| 46 | BOM-JFK | Mumbai/Bombay | New York-JFK | 117,722 | 20,336 | 7,787 |
| 47 | DPS-PEK | Denpasar Bali | Beijing | 115,530 | 112,192 | 3,375 |
| 48 | GYE-JFK | Guayaquil | New York-JFK | 115,205 | 159,938 | 2,982 |
| 49 | HKT-LHR | Phuket | London-Heathrow | 114,159 | unserved | 6,153 |
| 50 | DEL-MEL | Delhi | Melbourne | 113,761 | 28,114 | 6,333 |

A concentration of one-stop opportunities

There were 7.5m one-stop bookings on the Top 50 underserved international routes. Eight of the routes had no non-stop scheduled air services in 2015, so indirect routings were the only way to fly between the airports.

There is no typical underserved route in the Top 50 ranking; some are long routes connecting distant airports which may be unserved or underserved because there is no right aircraft to operate the route. Other routes are much shorter, at just over 1,000km. The routes connect airports in 26 different countries but there are a handful of countries where the underserved routes are concentrated.

ONE-STOP BOOKINGS BY MAIN ORIGIN/DESTINATION COUNTRY MARKETS



Source: **OAG** traffic analyser

With a total of 19 of the Top 50 routes starting or ending in the US, the ranking highlights the strong significant opportunity the US holds for more direct services.

Next up is Thailand with 10 routes starting or ending there, followed by Saudi Arabia with 9.

India, the UK and China - also had significant numbers of routes with high volumes of one-stop bookings.

Altogether, 46 of the 50 routes originate in, end at or connect between one of these six countries – China, India, Saudi Arabia, Thailand, the UK and the US. This degree of concentration has arisen for a combination of reasons, airline focus on hubs and restrictive bilateral air service agreements being just two. In the UK, specifically, a lack of runway capacity at London-Heathrow Airport may be a contributing factor.

The route with the largest international volume of one-stop bookings in 2015 was Jakarta-Jeddah (CGK-JED) with 280,000 one-stop passengers, in addition to 544,000 non-stop passengers.

Delhi-Melbourne (DEL-MEL) (Ranked No. 50) had 114,000 one-stop passengers, an average of 312 per day, on top of 28,000 passengers who flew non-stop.

The longest route was Bangkok-New York JFK (BKK-JFK) at 8,650 miles between the airports, which has no non-stop scheduled air service, although operating non-stop is technically possible. The shortest route was Beijing-Taipei (PEK-TPE) at 1,071 miles.

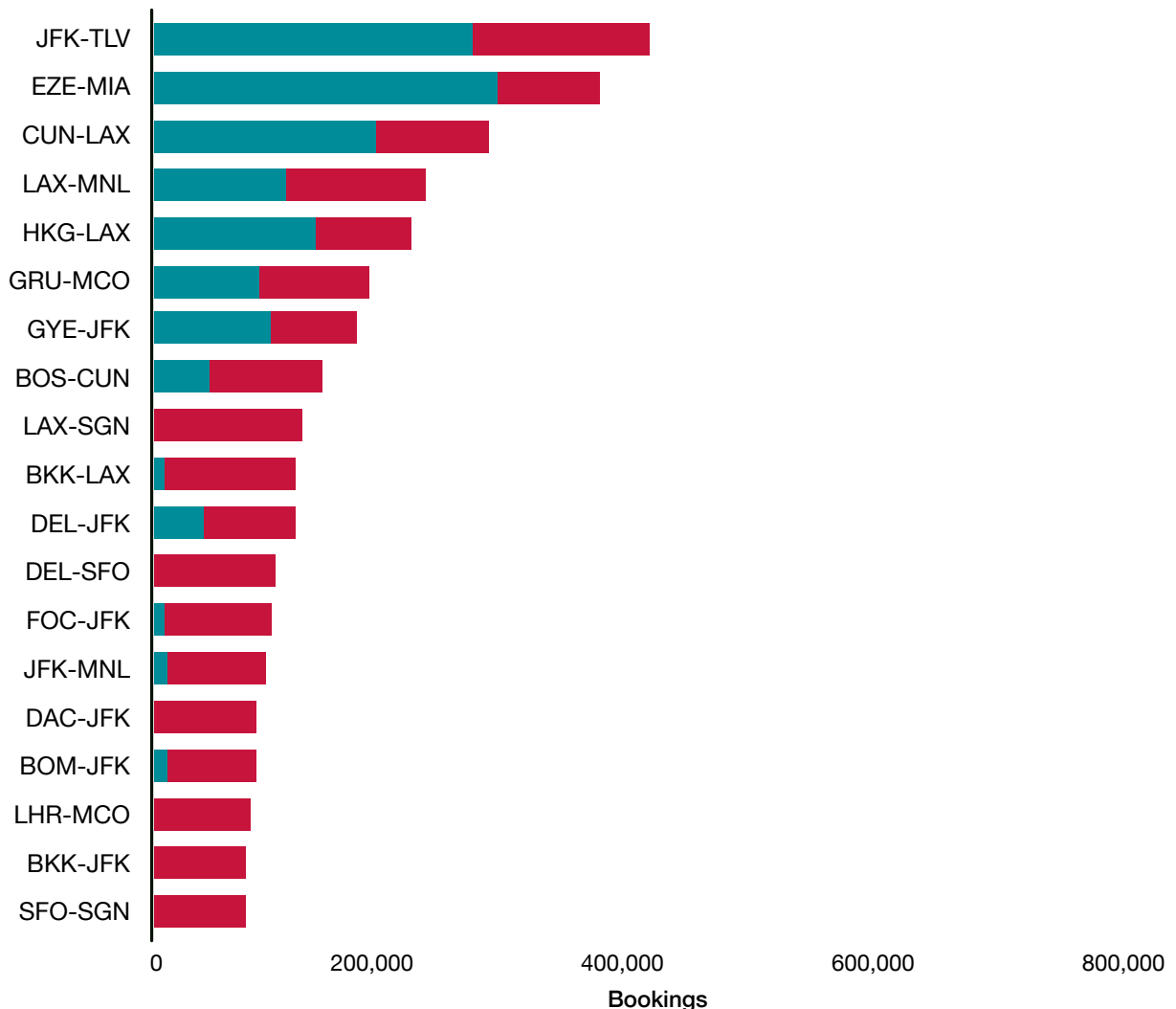
United States – missing Saigon

More than a third of the Top 50 underserved international routes were to and from the United States, amounting to 2.8m bookings in 2015.

There were four routes in the ranking which were to or from the US which had no non-stop air service. In each case indirect traffic in 2015 exceeded 112,000 bookings. These were Los Angeles- Ho Chi Minh City (LAX-SGN), Dhaka- New York JFK (DAC-JFK), Bangkok-New York JFK (BKK-JFK) and San Francisco- Ho Chi Minh City (SFO-SGN). The summer 2016 airline schedule shows that all four remain unserved as do a further two routes, New York JFK-Manila (JFK-MNL) and Los Angeles-Bangkok (LAX-BKK). The Mumbai-New York JFK route appears to have non-stop traffic but there is also no non-stop flight; rather passengers are routing via Delhi on through tickets.

London Heathrow - Orlando (LHR-MCO) had a very small volume of direct bookings, the result of tickets with through flight numbers, but Orlando was served non-stop from another airport in the London system, London Gatwick. The indirect bookings suggest the true scheduled market size for London - Orlando may be closer to 600,000.

US UNDERSERVED ROUTES IN TOP 50 - 2015



Source: **OAG** traffic analyser

Non-stop One-stop

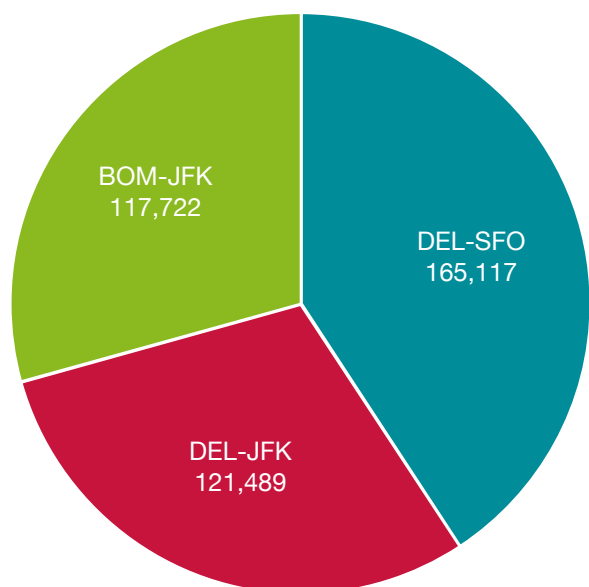


Delhi-San Francisco (DEL-SFO) also had negligible bookings in 2015. For most of the year this route had no non-stop air service operation but in December Air India commenced operations.

The biggest underserved route from the US was New York JFK to Tel Aviv (JFK-TLV) with almost 240,000 one-stop bookings. This market had 430,000 non-stop scheduled passengers in 2015 as well as charter air services, but over a quarter of a million passengers still chose scheduled one-stop air services. In fact, one-stop bookings on this route grew in 2015, up 19% from 2014. The withdrawal of US Airways/American Airlines operations between the US and Tel Aviv may have contributed to this.

The next largest underserved route from the US was Buenos Aires to Miami (EZE-MIA) with 138,000 one-stop bookings in 2015. While many airports are used for connecting between Buenos Aires and Miami, the primary one is Santiago (SCL) which attracts just under a third of connections.

ONE-STOP BOOKINGS BETWEEN THE US & INDIA



Source: **OAG** traffic analyser

India is the largest underserved country market to and from the US featured in the Top 50 routes. In 2015 there were close to 4.5 million scheduled airline bookings between the US and India, according to OAG traffic analyser, and the Top 50 ranking shows that there were 404,000 one-stop bookings in 2015 across three US-India underserved routes, the largest of which was Delhi-San Francisco (DEL-SFO).

Among the Top 50 underserved routes from the US, five were to Latin America with combined one-stop traffic of 705,000 bookings in 2015.

Mexico has the largest indirect country market in Latin America from the US, with over 305,000 one stop bookings between Cancun and two US cities – Los Angeles and Boston.

There is only one underserved route among the Top 50 between the US and China, and this is New York to Fuzhou. This route had 147,000 indirect bookings in 2015, in addition to 14,000 non-stop bookings in 2015.

Thailand - one-stop to Bangkok

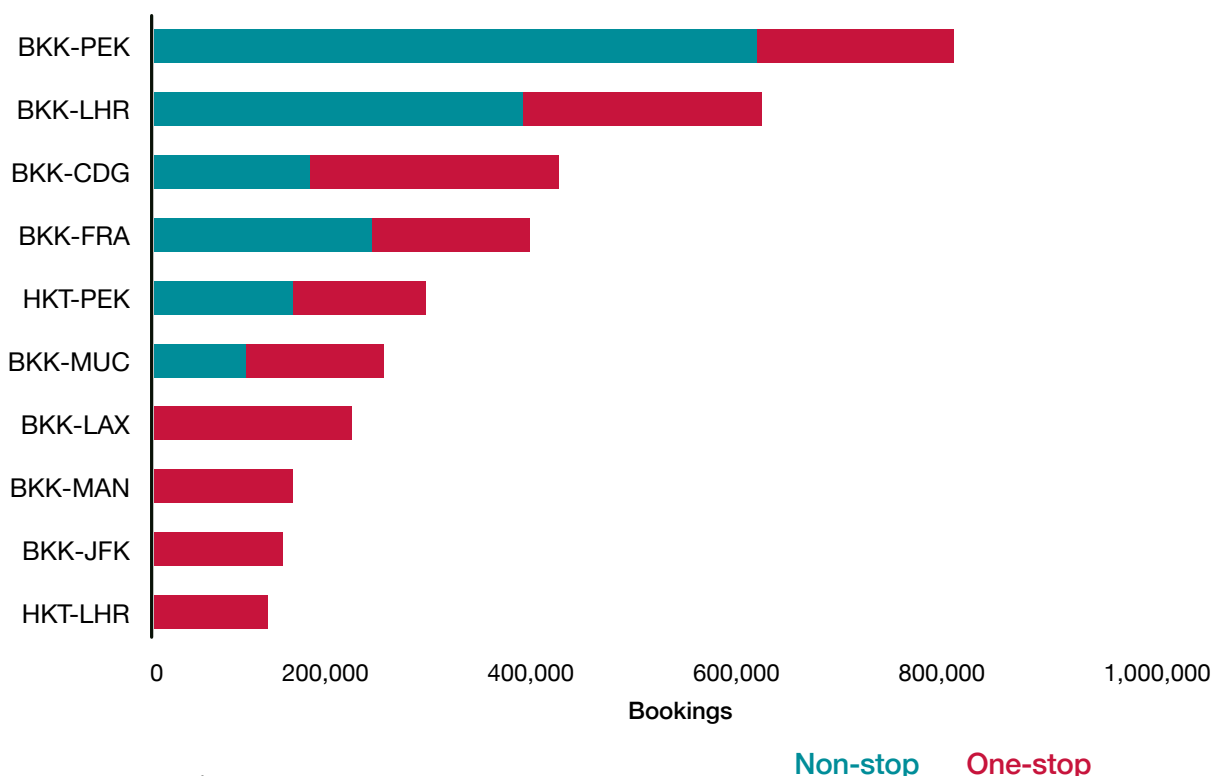
After the US, routes to and from Thailand feature most often in the Top 50 international underserved routes. The ten routes shown in this graphic generated 1.6 million one-stop international bookings 2015.

Nearly two thirds of one-stop bookings were on five routes between Thailand and Europe, in particular from Bangkok to the UK (London and Manchester), Germany (Frankfurt and Munich) and France (Paris). With the exception of Manchester, all of these cities already have non-stop services to Bangkok.

There is also a sizeable indirect market from Beijing to both Bangkok and Phuket. In the case of Phuket-Beijing, the non-stop market and the one-stop market are comparable in size.

The analysis suggests there is considerable demand from the UK to Phuket, currently without non-stop scheduled air service, as the one-stop indirect market had 114,000 bookings in 2015.

THAILAND UNDERSERVED ROUTES IN TOP 50 - 2015



Source: **OAG** traffic analyser



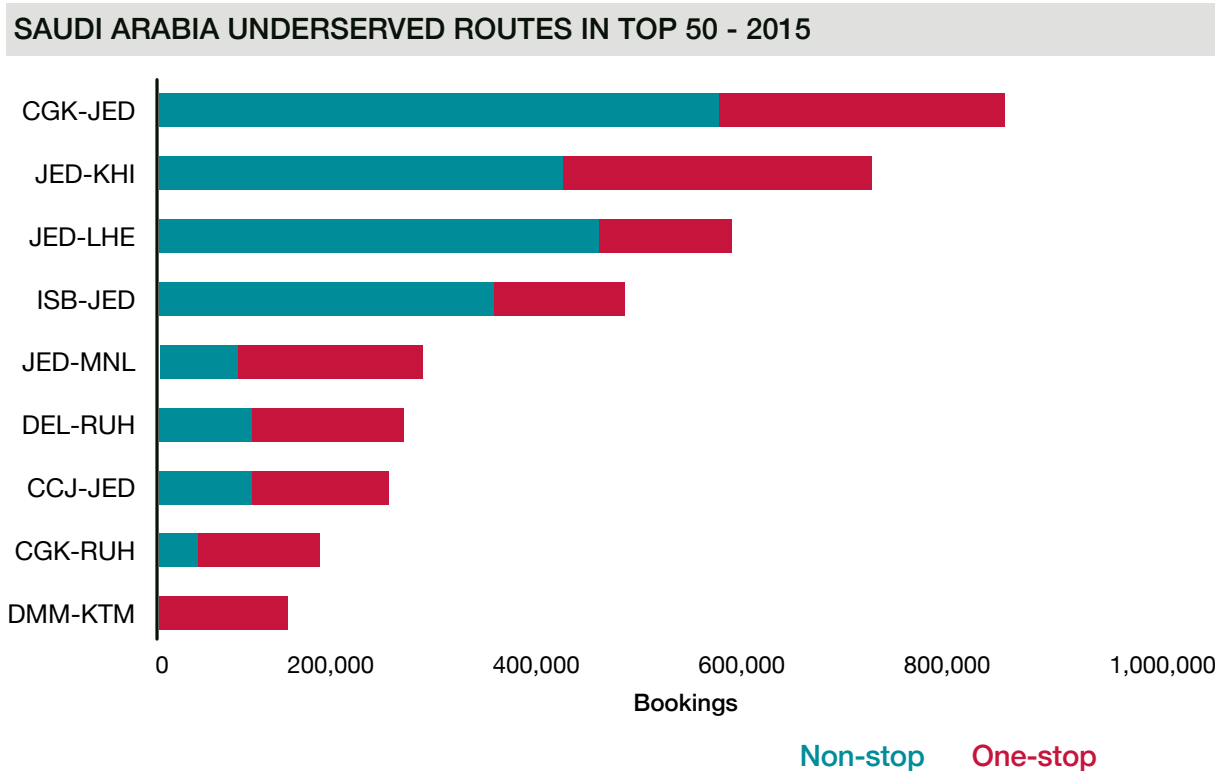
Saudi Arabia – paradise for hub airports

The nine routes to or from Saudi Arabia in the Top 50 global underserved routes had 1.4 million one-stop bookings in 2015.

The largest single route is Jeddah-Jakarta with 280,000 indirect bookings, as well as 544,000 non-stop bookings. One-stop bookings make up a third of non-stop and one-stop traffic combined. Almost 75% of the one-stop traffic routes via Dubai or Abu Dhabi, the hub airports of the United Arab Emirates.

The next three largest indirect routes from Saudi Arabia are all to Pakistan, to Karachi, Lahore and Islamabad. These three routes had nearly 431,000 one-stop bookings in 2015 and a further 1.1 million non-stop bookings so the one-stop traffic volume is 38% of the non-stop volume.

For each of the remaining five underserved routes in the Top 50 from Saudi Arabia which are Jeddah to Manila in the Philippines and Calicut in India, Riyadh to Delhi in India and Jakarta in Indonesia, and Damman to Kathmandu in Nepal, the majority of bookings appear to be indirect.



Source: **OAG** traffic analyser

In conclusion

The US dominates the list of top international underserved routes. As the largest air transport market in the world this may be surprising, but structured as it is around domestic hub-and-spoke airline networks we shouldn't be surprised if international travel sometimes requires routing via a hub airport.

In the US in particular, aircraft range plays a part. Only recently have aircraft become available which make the long routes from Los Angeles and New York to Asia as operationally worthwhile as routing via intermediate hubs with the help of an alliance partner. As the take-up of Dreamliner's has shown, and as is expected with delivery of the longer range A350s, passengers should have more non-stop options on these 'long thin' routes in future.

Liberalized aviation markets are also key to enabling more passengers to travel non-stop to where they want to go. This is apparent in the list of US underserved routes. Despite the US having spearheaded Open Skies agreements with over 100 agreements currently in place, fewer than half of the underserved US routes we list operate under Open Skies agreements. The majority of underserved routes from the US are to places where the air service agreement is more restrictive. Passengers can, of course, choose to travel indirectly – as this ranking shows – but some will choose a different destination which may be easier to get to. How many tourist visits are these destinations missing?

Finally, infrastructure constraints affect passengers. Airports such as London Heathrow and Bangkok feature repeatedly in the Top 50 underserved routes, a direct consequence of the lack of capacity for new air services.

Clearly air travellers can choose whatever route suits them best. While underserved routes represent opportunities for airlines to start new air services, equally, they are opportunities for airlines and airports to compete to attract those travelers via their hub, often through the availability of great fares. But if it was as competitive to fly direct to where you wanted to go, who wouldn't want to do that?

Understanding international air passenger traffic demand



If you need to understand international market demand at an airport and want to ensure data credibility when negotiating and advising on new services with the most influential global airlines, OAG Traffic Analyser is the tool you need.

Top international markets and airport market sizes

MIDT (Marketing Information Data Tapes) 'passenger traffic' based on GDS bookings • Unadjusted bookings • Adjusted bookings to represent true total market figure • Average fare data from Travelport issued tickets • Historic traffic information • Includes internet bookings

How passengers fly and who they fly on

Accurate picture of O&D Demands for airports with foreign flag carriers • Premium traffic analysis – broken down by fare category and can be rolled up into a premium traffic category • Measure seasonality of traffic on a granular level

www.oag.com/trafficanalyser

For more information, **visit www.oag.com**
or email us on **contactus@oag.com**

Europe, Middle East & Africa

1 Capability Green
Luton
Bedfordshire LU1 3LU
United Kingdom

T: +44 (0)1582 695050

Americas

801 Warrenville Road
Suite 555
Lisle
Illinois 60532
USA

T: +1 800 342 5624

Asia

6 Shenton Way
#24-08A, Singapore
OUE Downtown 2
068809

T: +65 6395 5888

China

#3710B Jingguang Building
Hujialou Chaoyang District
Beijing China 100020

T: +86 10 5095 5960

Japan

Toranomon
40MT Building 9F5-13-1
Toranomon Minato-Ku
Tokyo 105-0001

T: +813 6402 7301

Usage and attribution

This information can be reproduced either in whole or in part, online or in print, for non-commercial purposes only but must include attribution to OAG and a link to www.oag.com.

Disclaimer

The intended recipient ("The Customer") acknowledges that all data provided by or available through OAG is owned either by OAG Aviation Worldwide Ltd or by a third party provider ("The Owners") and that the customer shall not acquire any ownership or interest in such data.

OAG data is solely for the benefit and purposes of the intended recipient and may not be disclosed to, used by or copied by anyone other than the intended recipient. OAG Aviation Worldwide Ltd has used reasonable efforts in collecting and preparing data in the report but cannot and does not warrant that the information contained in this report is complete or accurate. OAG Aviation Worldwide Ltd hereby disclaims liability to any person for any loss or damage caused by errors or omissions in this report.

oag.com

