

My presentation is a hypothetical pitch to the United Kingdom's Tourism Office to increase tourism from the US to capture more economic opportunity.

The goal is to figure out the biggest area of economic opportunity based on the data presented.

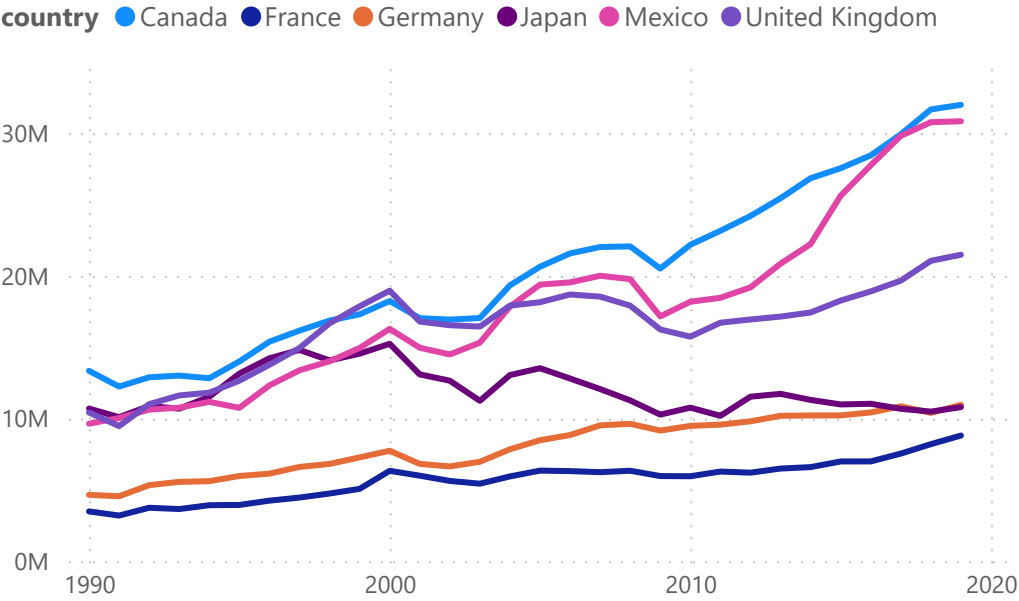
The project was created around a dataset that has all US to foreign gate airplane flights from 1990 - 2019.

In order to create the information seen here:

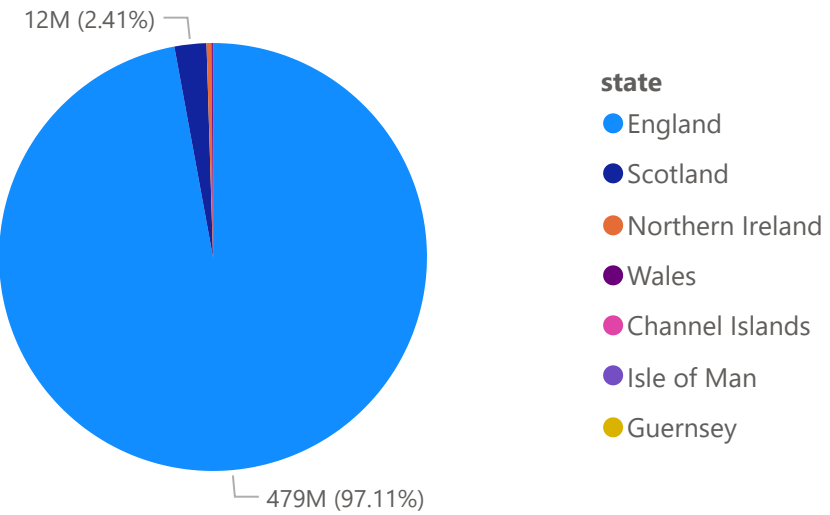
- . All the airports in the world were downloaded and cleaned from Wikipedia
- . I used SQL to find the unique identifiers (FAA outliers) in the data set that had blank values associated with them and was able to backfill them with DOT information
- . I also created a dataset of all the countries in the world and classify them into continent and region - where there were discrepancies I defaulted to the UN classification for regional boundaries.

Additional data can always be added to the project. The goal was to display technical and business capabilities within a Power BI setting.

Flight Total of Top 6 Countries by Year in the World



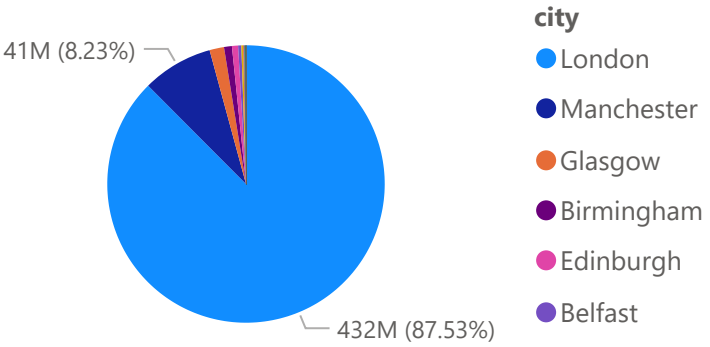
Sum of Total of flights to the UK from 1990 - 2019



Having direct flights from one area to another can boost business dramatically - Bloomberg Article

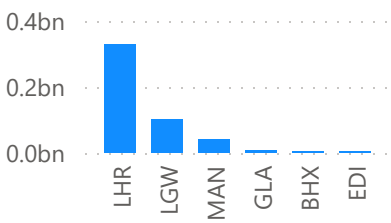
- The UK is within the top 3 countries traveled to from the US and only trending upwards over the years from 10M to 20M
- Flights within 5,500 - 6,000 mile sweet spot increases GDP by 0.8%
- Currently 87% of the airport traffic from the US is going only to 2 airports in London
- Opportunity to market to different kinds of tourist: drifters, cultural, adventure, educational who don't crave cities
- With the rise of wellness and mindfulness more people are choosing slower vacations
- Scotland has 43 airports and has the greatest ability to accept international flights
- <https://www.bloomberg.com/news/articles/2017-10-31/the-economic-power-of-direct-flights>

Sum of UK Total by City

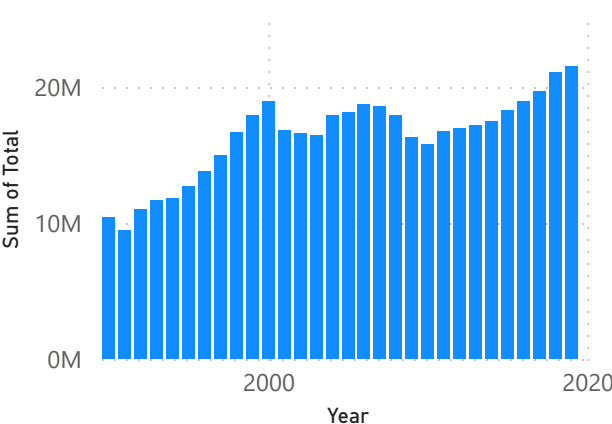


| | |
|-------------------------|-----|
| Gatwick Airport | LGW |
| Heathrow Airport | LHR |
| London City Airport | LCY |
| London Stansted Airport | STN |
| Luton Airport | LTN |
| metropolitan area | LON |

Flights to the UK by Airport



Flights to the UK overall



Year, Month

1990

1991

1992

1993

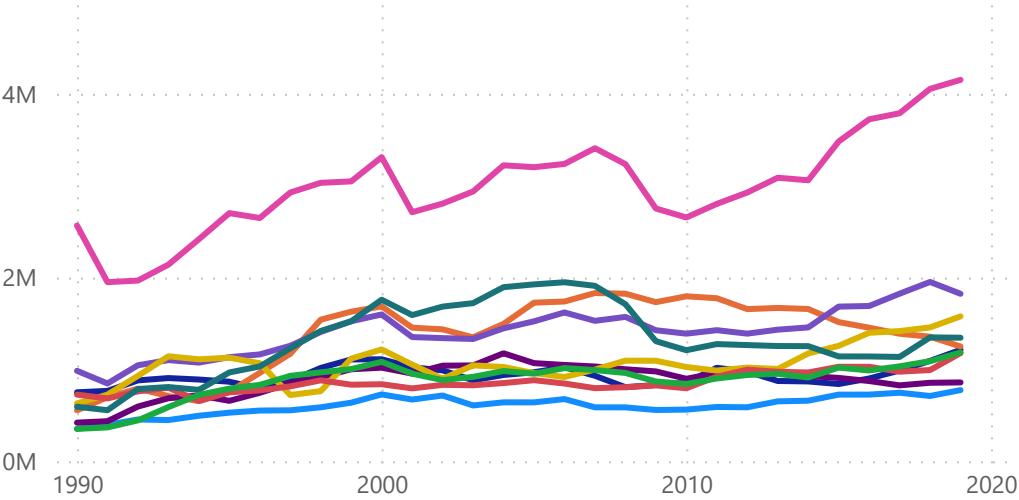
1994

Airports per Region

| | |
|------------------|----|
| Channel Islands | 2 |
| England | 73 |
| Guernsey | 1 |
| Isle of Man | 1 |
| Isles of Scilly | 1 |
| Northern Ireland | 5 |
| Scotland | 43 |
| Wales | 4 |

Top 10 US Gates to UK Overall

usg_apt ATL BOS EWR IAD JFK LAX MCO MIA ORD SFO



- All top airports located well within 5.5k-6k mile range of Scotland and in volume
- Two of your airports are doing the 'heavy lifting' for international flights and co-located at the bottom of the country
- Opportunity to leverage existing international airports higher in the country to spread wealth across Scotland itself and give a test ground for increasing without disrupting largest economic
- Greater capitalization on unique strengths instead of competing with London cities
- Opportunity to create a consistent international flight - historically trade off between airports seen in 'Current US Gates to Scotland'

Year, Month

1990

1991

1992

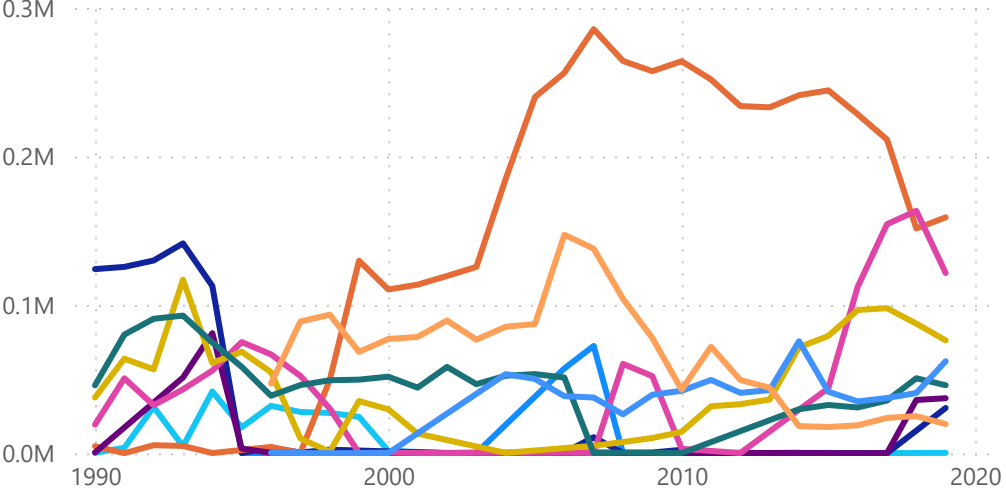
1993

1994

1995

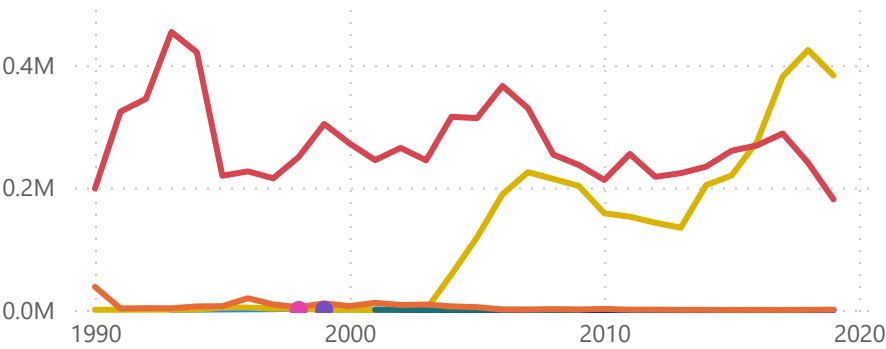
Current US Gates to Scotland

usg_apt ATL BGR BOS EWR IAD JFK MCO ORD PHL SFB



Airport Usage in Scotland

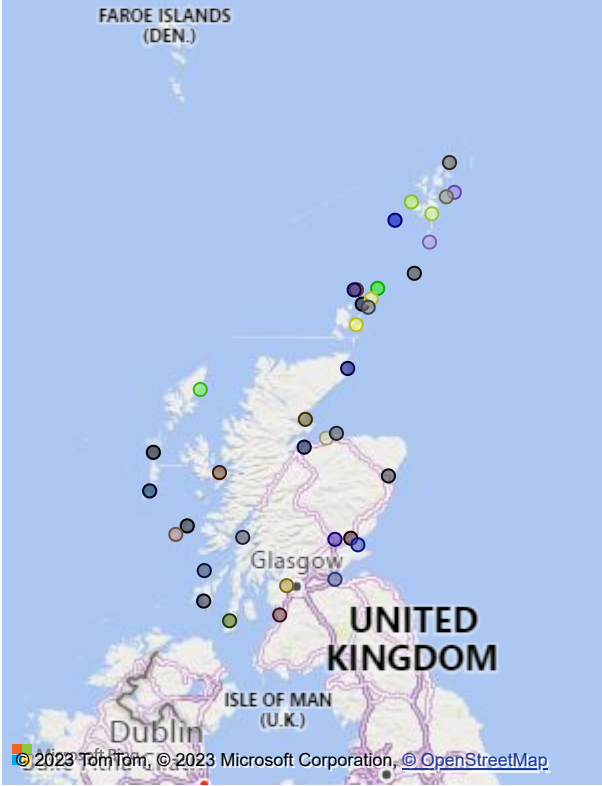
fg_apt ABZ ADX CAL COL EDI GLA INV LMO PIK



| | | |
|---------|-------------------|-----|
| 8181825 | Glasgow Airport | GLA |
| 3533028 | Edinburgh Airp... | EDI |
| 155481 | Glasgow Prestw... | PIK |
| 3895 | Aberdeen Airport | ABZ |
| 993 | RAF Lossiemouth | LMO |

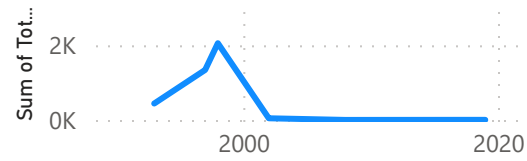
Map of Airports in Scotland

airport Aberdeen... Baltasou... Barra Ai...



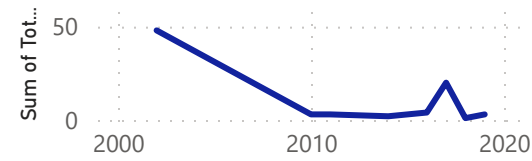
Aberdeen Airport

fg_apt ● ABZ



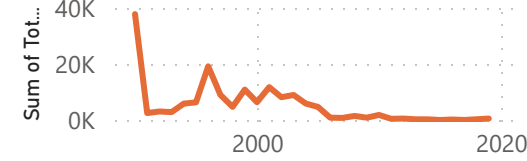
Inverness Airport

fg_apt ● INV



Glasgow Prestwick Airport

fg_apt ● PIK



Highlighted Airports in Scotland

airport ● Aberdeen... ● Edinbur... ● Glasgow... ● Glasgow... ● Invernes...



Recommendations for Airports to Pursue Regular International Flight Connections

- Aberdeen is already an international airport and able to handle international flights
- Inverness has proposed changes in progress that would add 323 m of runway, making it long enough for international flight
- Capitalize on your already great offerings for tourism in the area with ads to the drifter, cultural, adventure, educational tourist
- Consider doing virtual marathons and merit badges like was done in the pandemic to increase interest in the local area
- Consider sponsoring a YouTube personality

Further Investigations & Data collection

- Current flight patterns of both airports - Identify which airports and countries would provide the most opportunity
- Analyze current customers and feedback
- Project fiscal benefits and costs
- Select target websites and YouTubers for ads

Follow up discussion:

- .Initially getting into the data set I was not sure where it would lead or which country.
- .I picked the UK because its the 3rd highest traveled to and already enjoys a steady stream of visitors to its borders.
- .To go further and have a more complete analysis I would ask for feedback and perspectives of the stakeholders before spending additional man-hours.
- .If the route is deemed profitable I would track down Scotland's flight data for the suggested airports and find the biggest sources of flight there already is, create a volume difference for what it is and could be and figure out the buying patterns of the traveler and create a game plan of implementation.

I enjoyed getting to work on this project and enjoyed getting to know a little bit more about all the countries in the world and looking at the data that connects us all.