



# 5G Availability Across the Globe

A Python Based Visual Analysis By Jex  
Pearce



```
data.head()
```



	operator	city_name	deployment_type	status	latitude	longitude
0	Ooredoo	Abdullah al-Salem	5G NR	Commercial Availability	29.35186	47.98369
1	Optus	Canberra	5G NR	Commercial Availability	-35.28200	149.12868
2	Optus	Sydney	5G NR	Commercial Availability	-33.86748	151.20698
3	AT&T Mobility	Jacksonville, FL	5G NR	Commercial Availability	30.33218	-81.65565
4	AT&T Mobility	Atlanta, GA	5G NR	Commercial Availability	33.74900	-84.38798

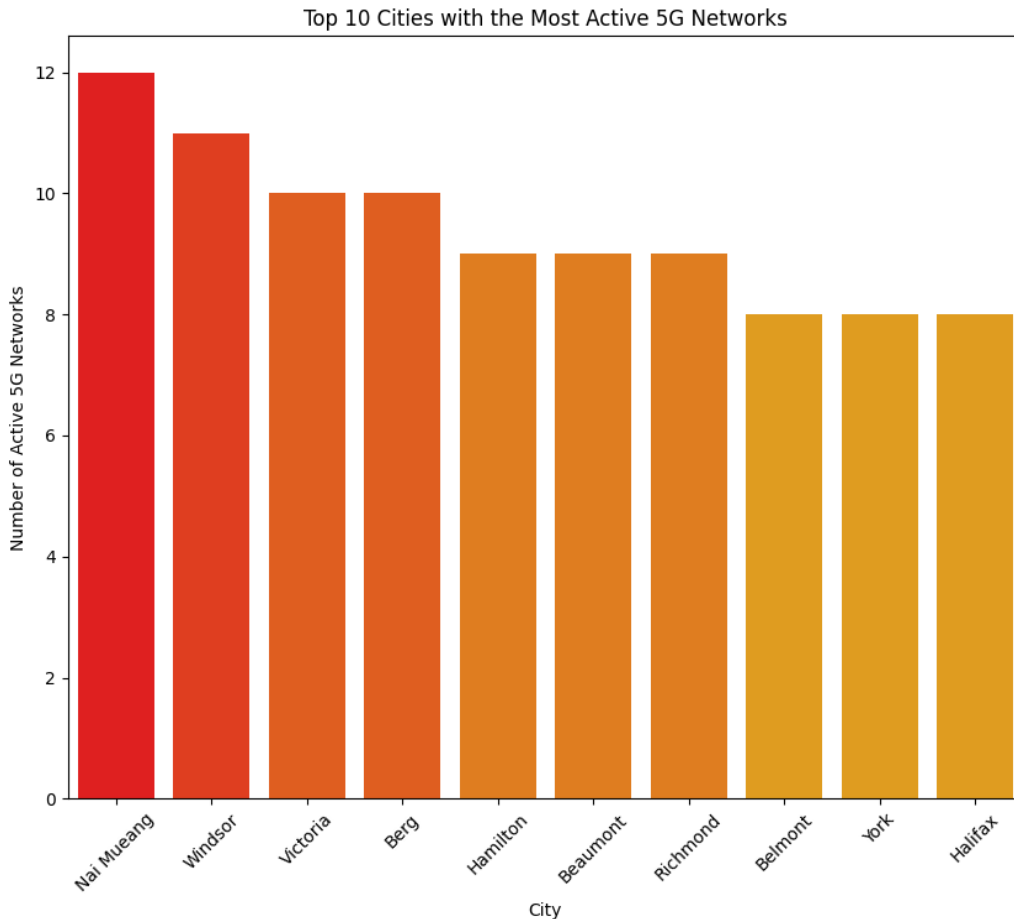


## A Brief Insight on the Dataset:

- After extensive merging of different excel spreadsheets, the final dataset lists:
  - **5G Operator:** The Telecommunications service provider (ex. AT&T)
  - **City Name:** The designated city with the 5G service
  - **Deployment Type:** Method used to implement the system. This entry largely remains unchanged, thus will not be analyzed in this report
  - **Status:** Always commercial
  - **Lat/Long**

# Top 10 Cities with the most Active 5G Networks

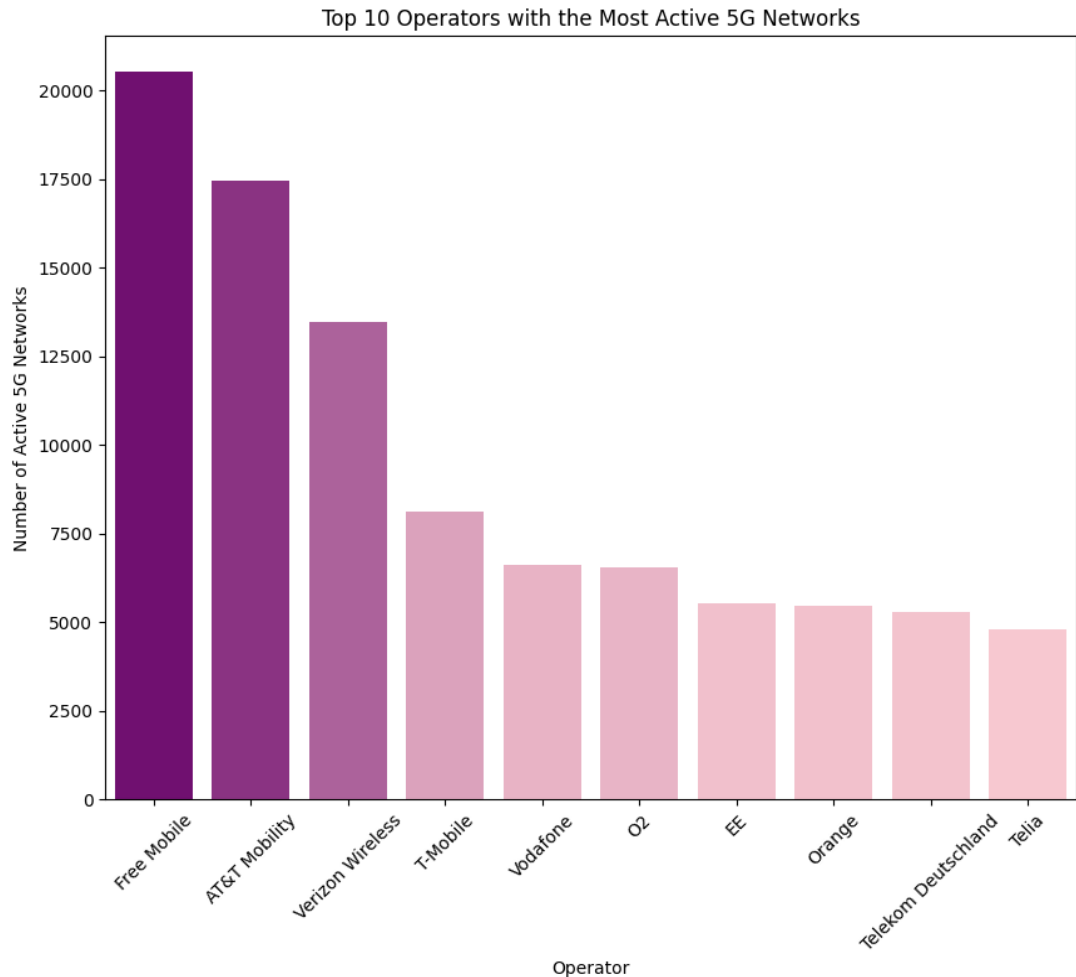
1. Nai Mueang, India
2. Windsor, UK
3. Victoria, Australia
4. Berg, Germany
5. Hamilton, Canada
6. Beaumont, USA
7. Richmond, USA
8. Belmont, USA
9. York, UK
10. Halifax, Canada



## Top 10 Operators with the most Active 5G Networks

```
top10operators = data['operator'].value_counts().head(10)
plt.figure(figsize=(10, 8))
```

The leading Free Mobile primarily provides its 5G services in France. The company covers approximately 77% of the French population as of early 2022. (RCR Wireless News , Mobile Europe)

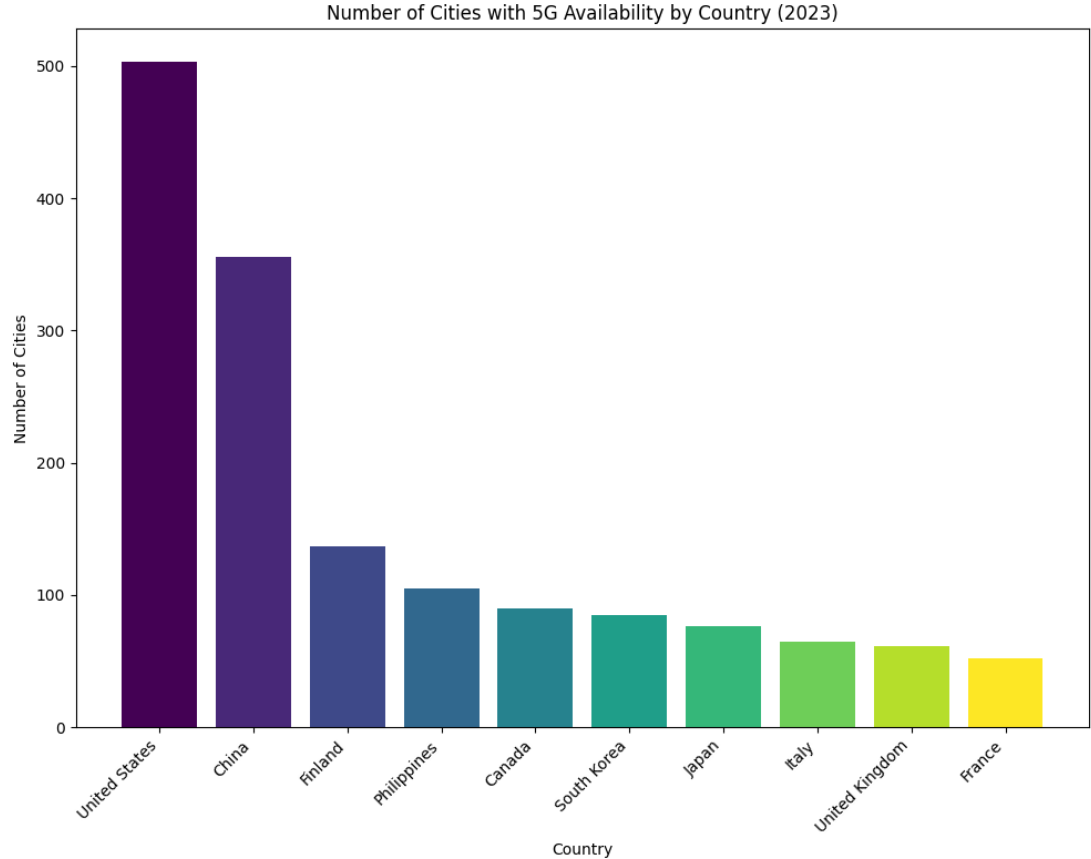


# Countries With the Most 5G Available Cities Worldwide

---

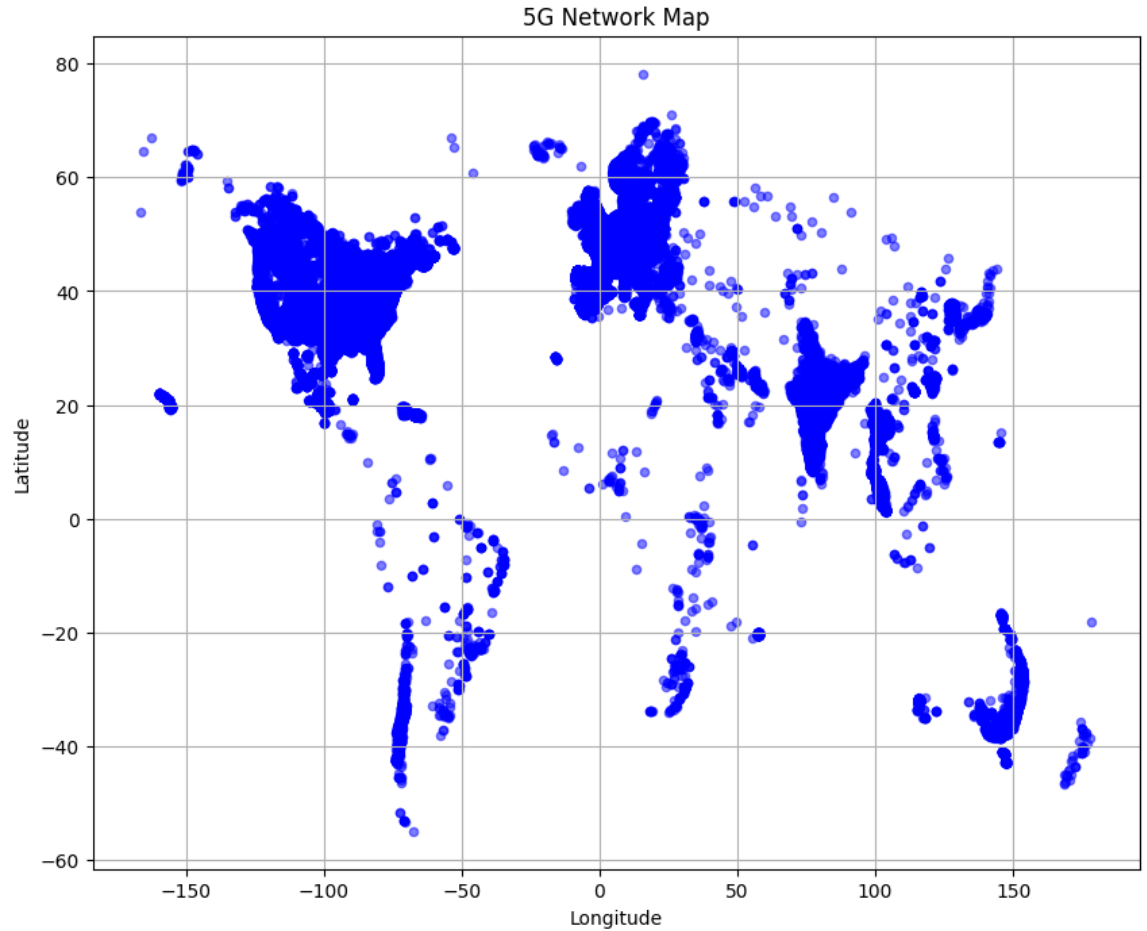
The USA and China leading the 5G availability is no surprise, but a notable standout is the Philippines, in fourth place.

- The Philippines were the first ASEAN country to adopt 5G, and its major telecom providers aggressively expanded throughout its many densely populated cities.

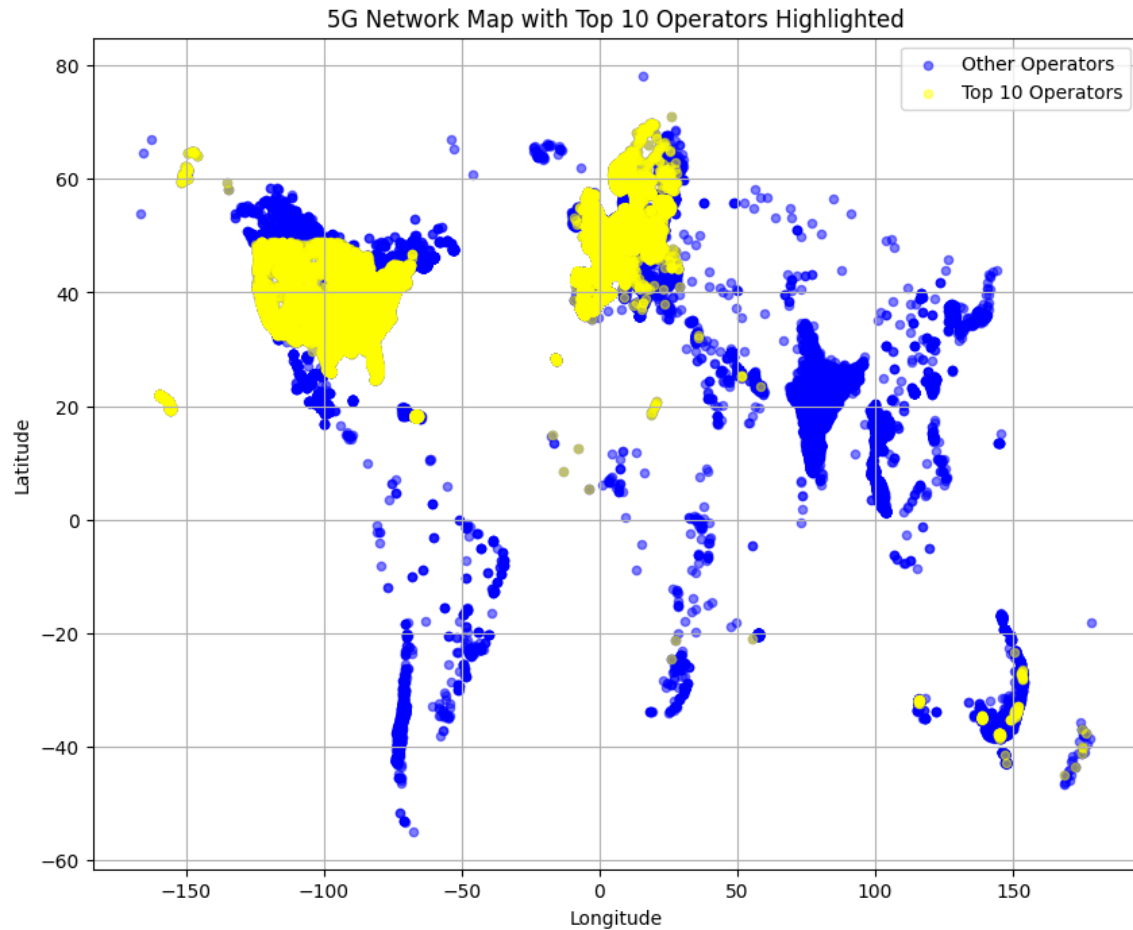


# 5G Network Map

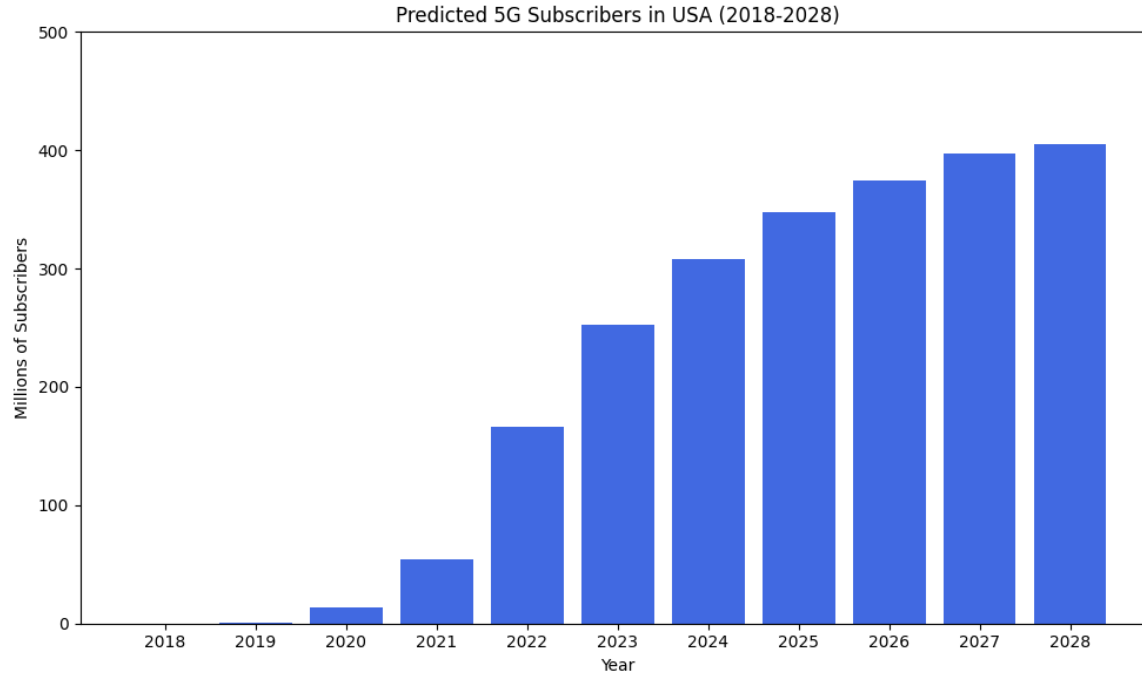
cred: kaggle.com for lat/long data



# 5G Network Map with Highlights



## Bonus: A Forecast for the Predicted 5G Subscribers in the USA (Statistica)



Data excel credit to Statistica.com





# Thank you for Reading

Jex Pearce

<https://jexpearce.github.io/jex/>