



Animal Rescue in London

CLAY KYNOR
DALIT HENDEL

Target Audience

STATE AND LOCAL ELECTED LEADERS OF THE
LONDON BOROUGH COUNCIL AND CONCERNED
CITIZENS

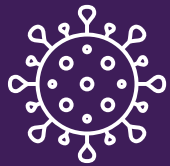
Target Concerns

PROVIDE INSIGHTS INTO INCIDENT PATTERNS AND
SPENDING NEEDS SURROUNDING ANIMAL RESCUES

Dataset and Tools

- Data source: London.gov
- Recorded incidents of the London Fire Brigade (LFB) rescuing animals from dangerous situations
- Data spans from 2009 to 2021 (ends 31/05/2021)
- Records incident type, locations, cost, etc.
- 7544 rows and 31 columns
- Jupyter Notebook, Google Colab, and ARCGISpro
 - python packages: pandas, numpy, matplotlib, and seaborn

Hypotheses



Animal rescues have increased over periods of societal instability/turmoil (such as a global pandemic or Brexit)



Small pets (such as household pets) will be more common and thus make up the bulk of animal rescues across all recorded time periods



Rescuing animals from heights is the most expensive animal rescue category

Location:



London, England, United Kingdom

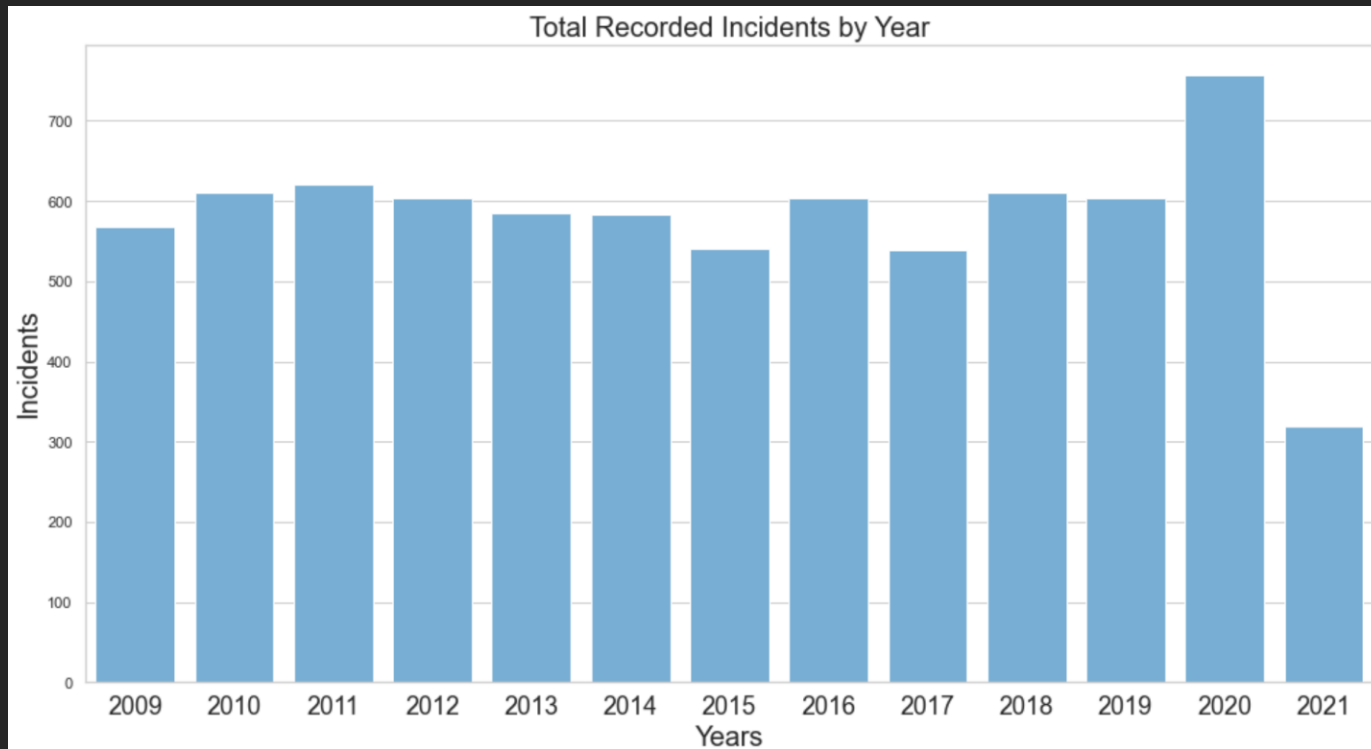


32 boroughs and the City of London

Total Incidents:

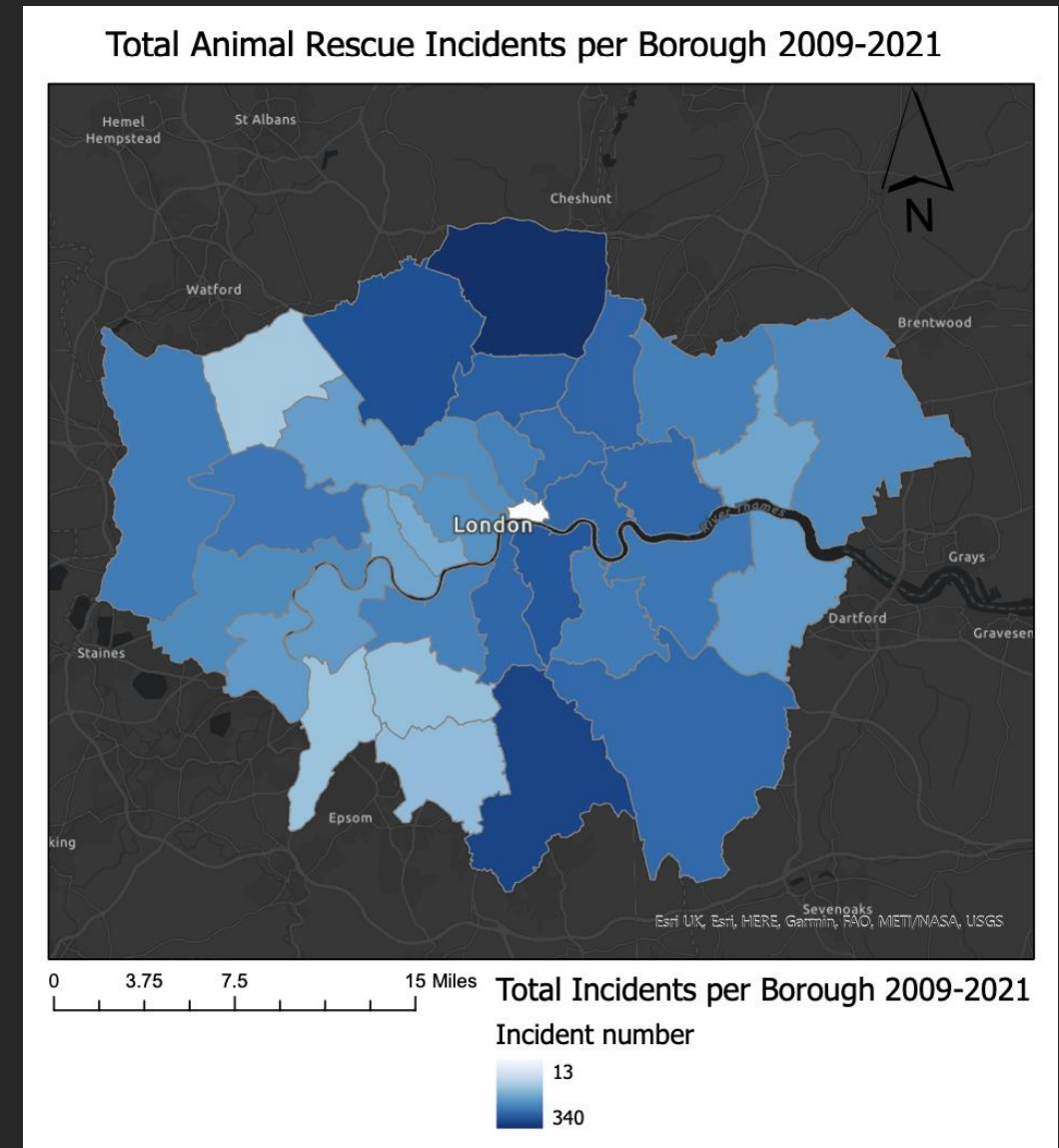
By year (left)

By borough (right)

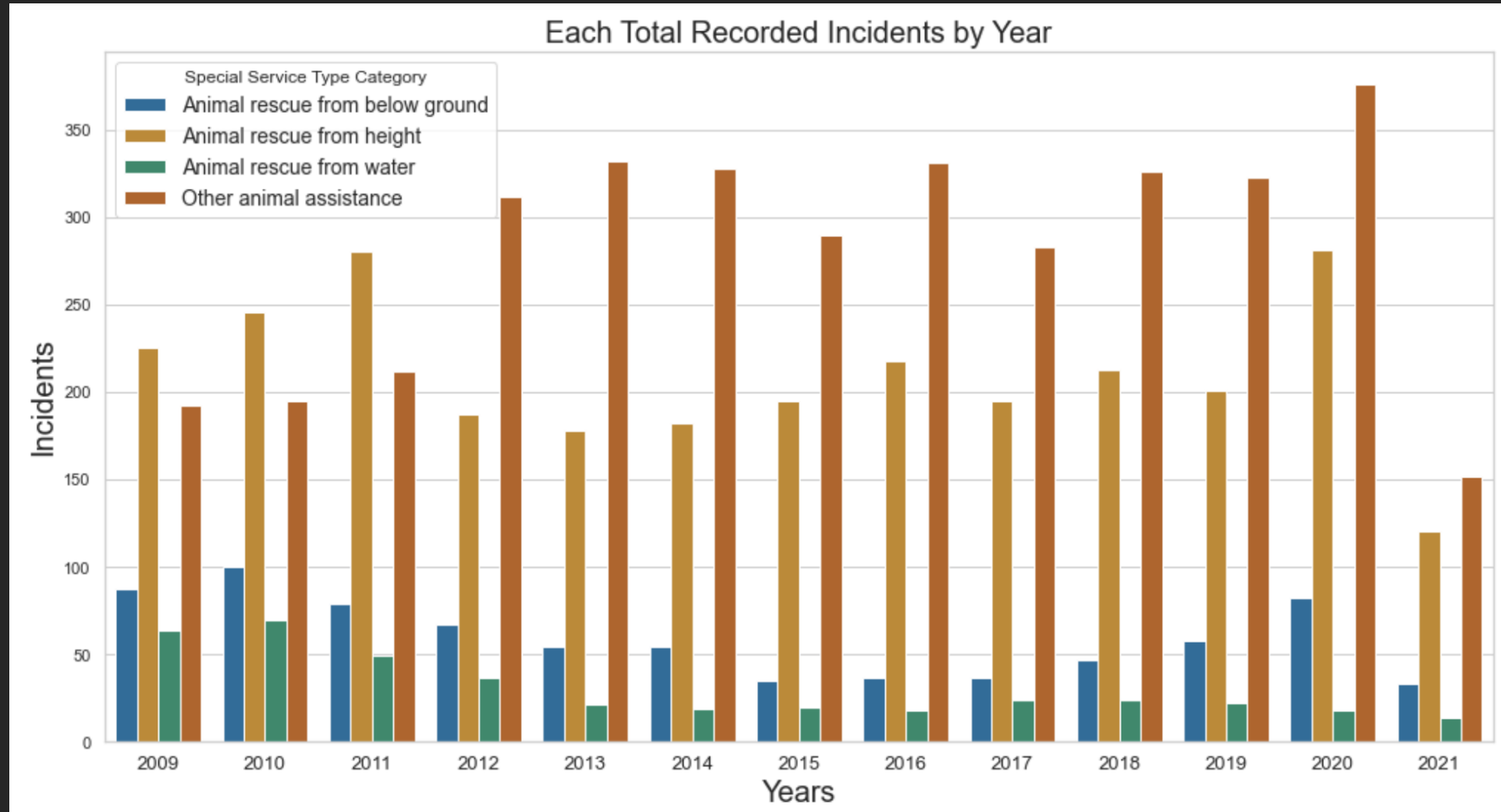


Brexit: 2016

COVID19: 2019-2021

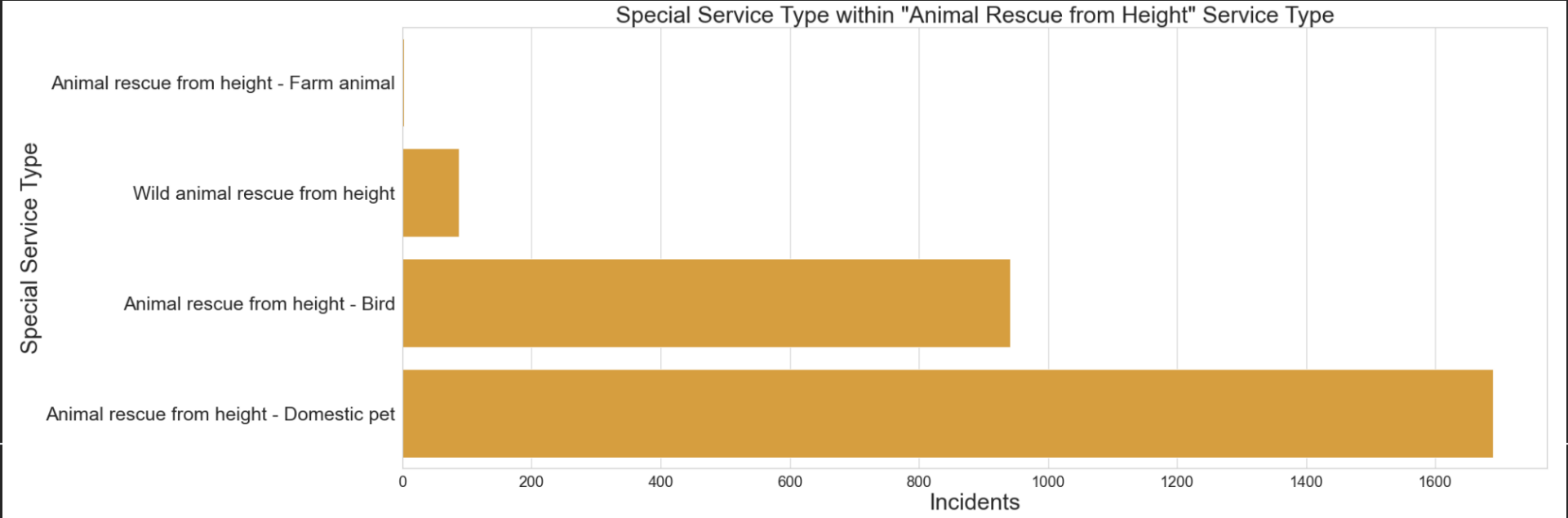
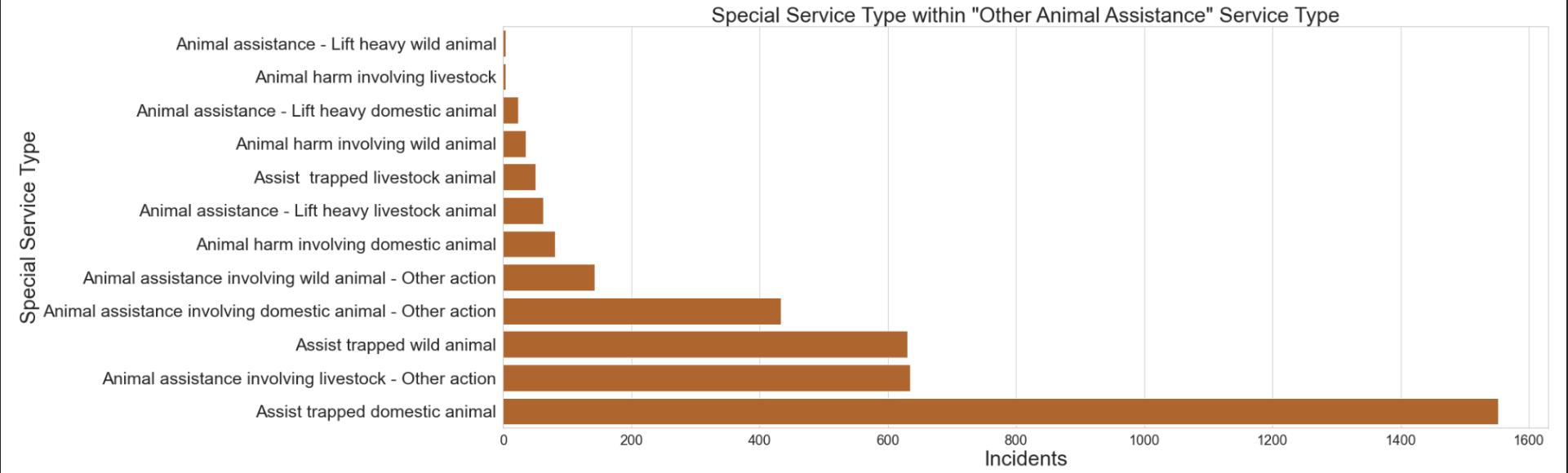


Animal Rescue Service Types by Year

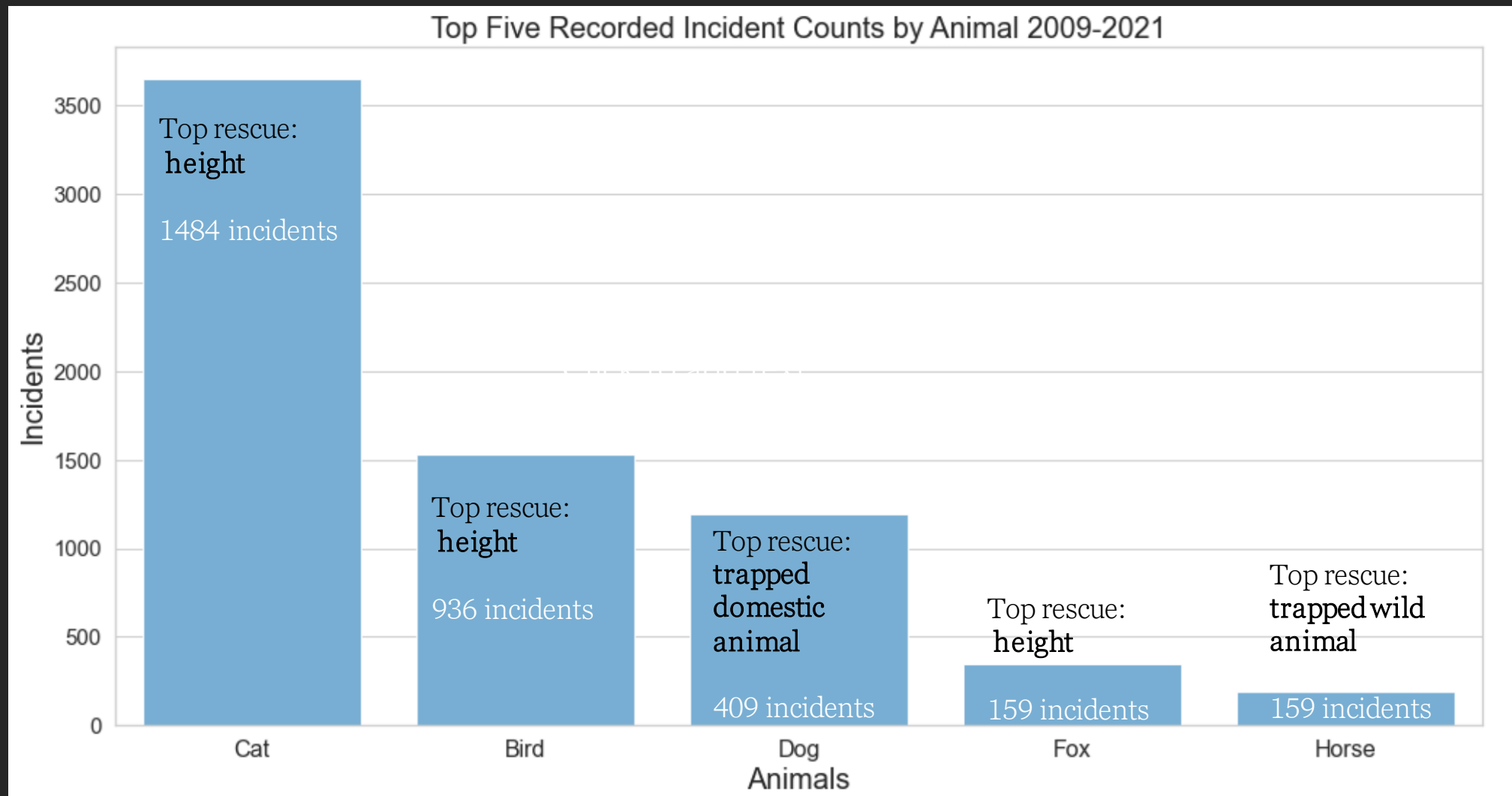


- 2009-2011 **Animal rescues from height** was the highest incident count
- 2012-2021 **Other Animal Assistance** was the highest incidence count
- With **Animal rescue from water** being consistently the lowest

A Closer Look at the Historical Highest Service Types

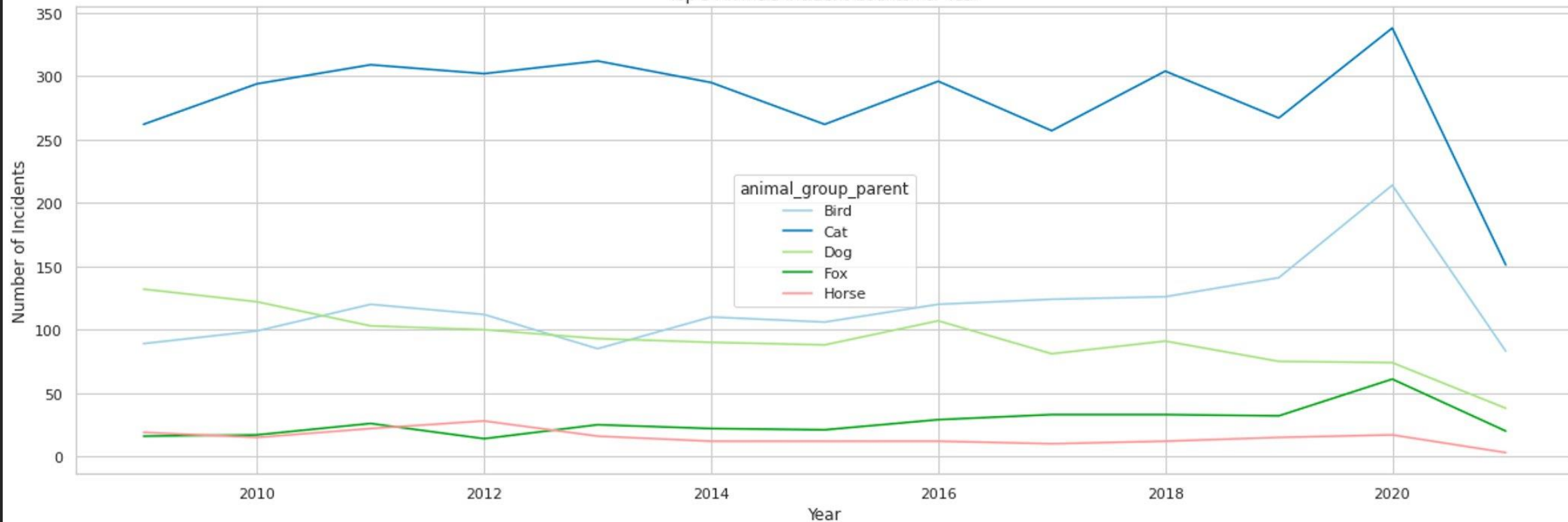


Top Five Most Rescued Animals

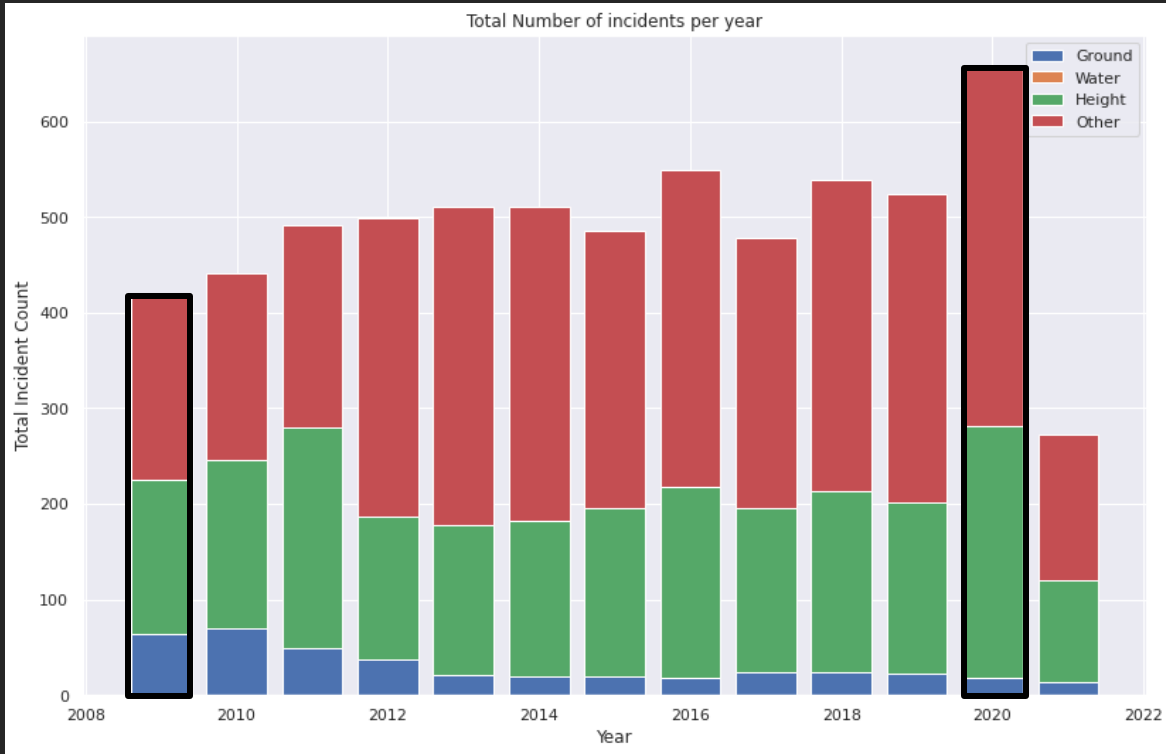


Top Five Most Rescued Animals

Top 5 Animals Incident Counts Per Year

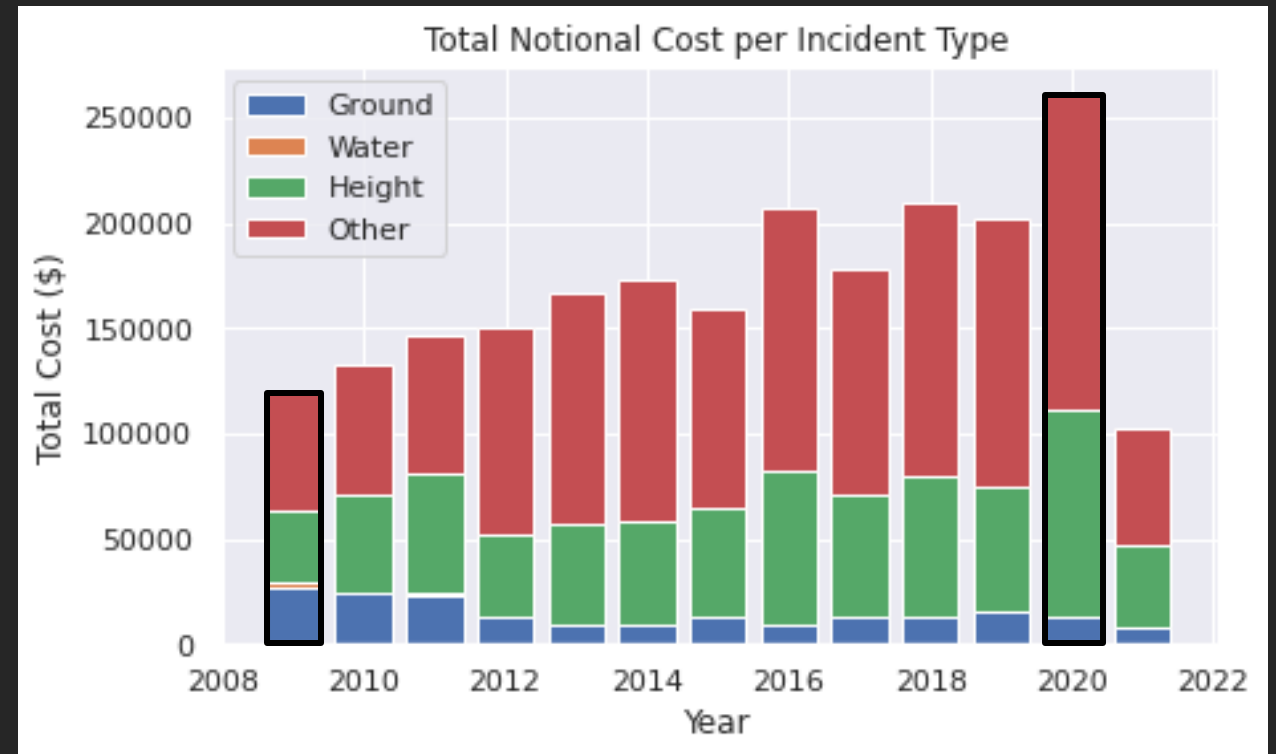


Costs



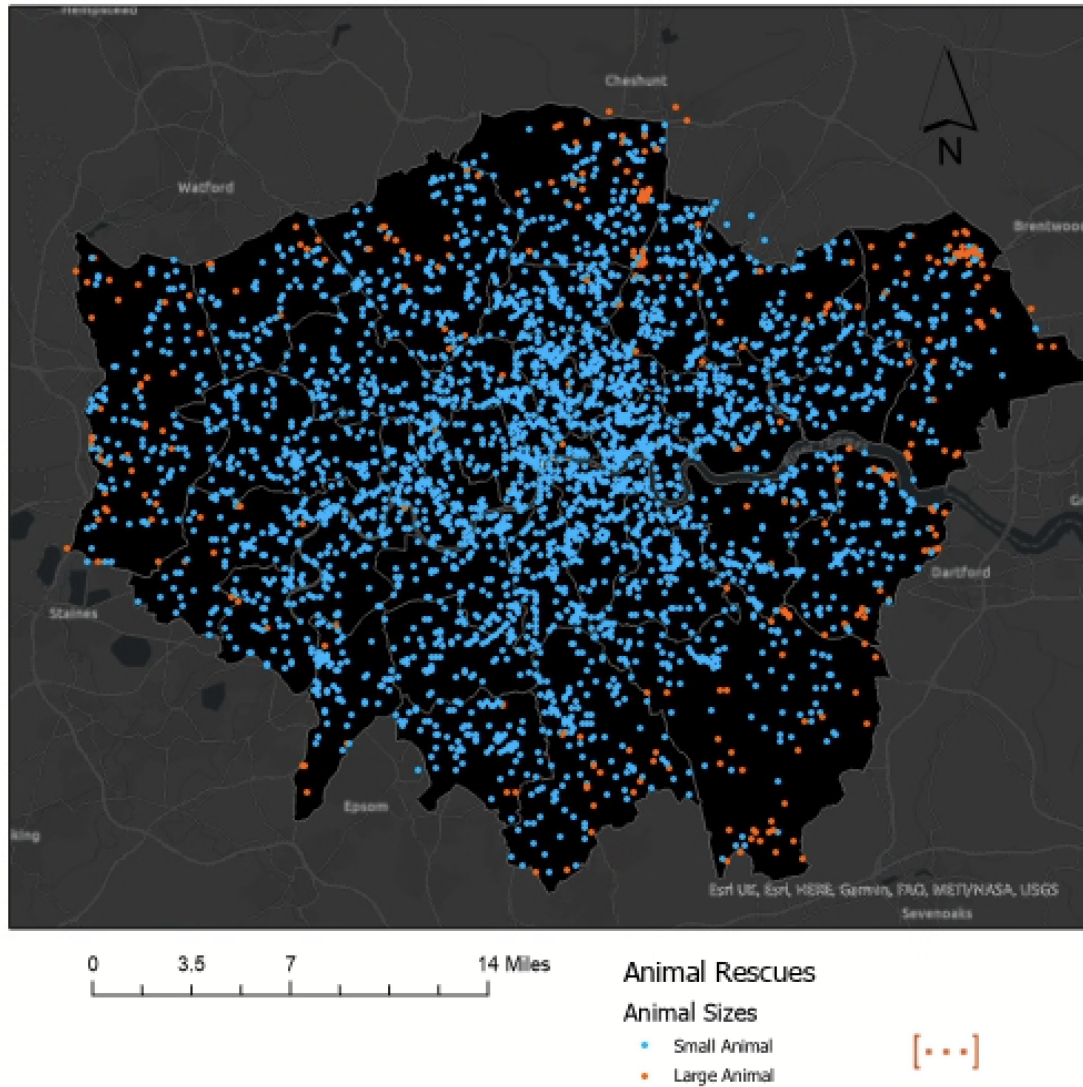
33.27% increase in total incidents from 2009 to 2020

Average water incident rescue costs are 141.9% of the average all non-water rescues (shown in blue, green, red)



73.2% increase in yearly cost from 2009 to 2020

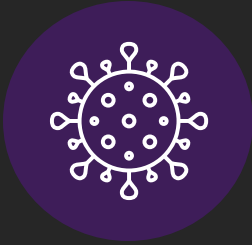
Animal Rescues Classified by Animal Size 2009-2021



Large animal rescues tended to be on the outskirts of London

Majority of rescues are of small animals

Findings



- There was an increase of number incidents in 2020 by 28.8% compared to the average of each year in the previous decade



- Majority of animal rescue incidents consist of small domestic animals (66.7%)



- Costs per incident have increased by 18.22% in 2020 compared to the average from the previous decade.
-

Next Steps: Further Exploration

- Using our analysis of major resource expenditures to reduce costs
 - Advertise proper pet safety
- Borough-specific changes
- Cost outliers

pump_hours_total	hourly_notional_cost	incident_notional_cost	final_description	...
12.0	290	3480	FOAL IN RIVER WATER LEVEL ONE IMPLEMENTED	...
9.0	295	2655	KITTEN TRAPPED IN CHIMNEY	...
10.0	298	2980	HORSE FALLEN INTO SWIMMING POOL	...
12.0	326	3912	CAT STUCK WITHIN WALL SPACE RSPCA IN ATTENDANCE	...
8.0	333	2664	HORSE TRAPPED IN DOORWAY ADDITIONAL FRU REQUES...	...

Most Expensive Incidents



Questions?

Works Cited

- (2021). Animal Rescue Incidents Attended by LFB (London Fire Brigade) [Data set]. London Data Store.
- [Seaborn.pydata.org](https://seaborn.pydata.org) - API Reference sheets for distribution and categorical plots