MARCH 9TH, 2022

ANALYSIS OF BIRD STRIKE DATASET

HW3 - Tableau Assignment

PRESENTED TO

MSIS 5633
Predictive Analytics Technologies

PRESENTED BY

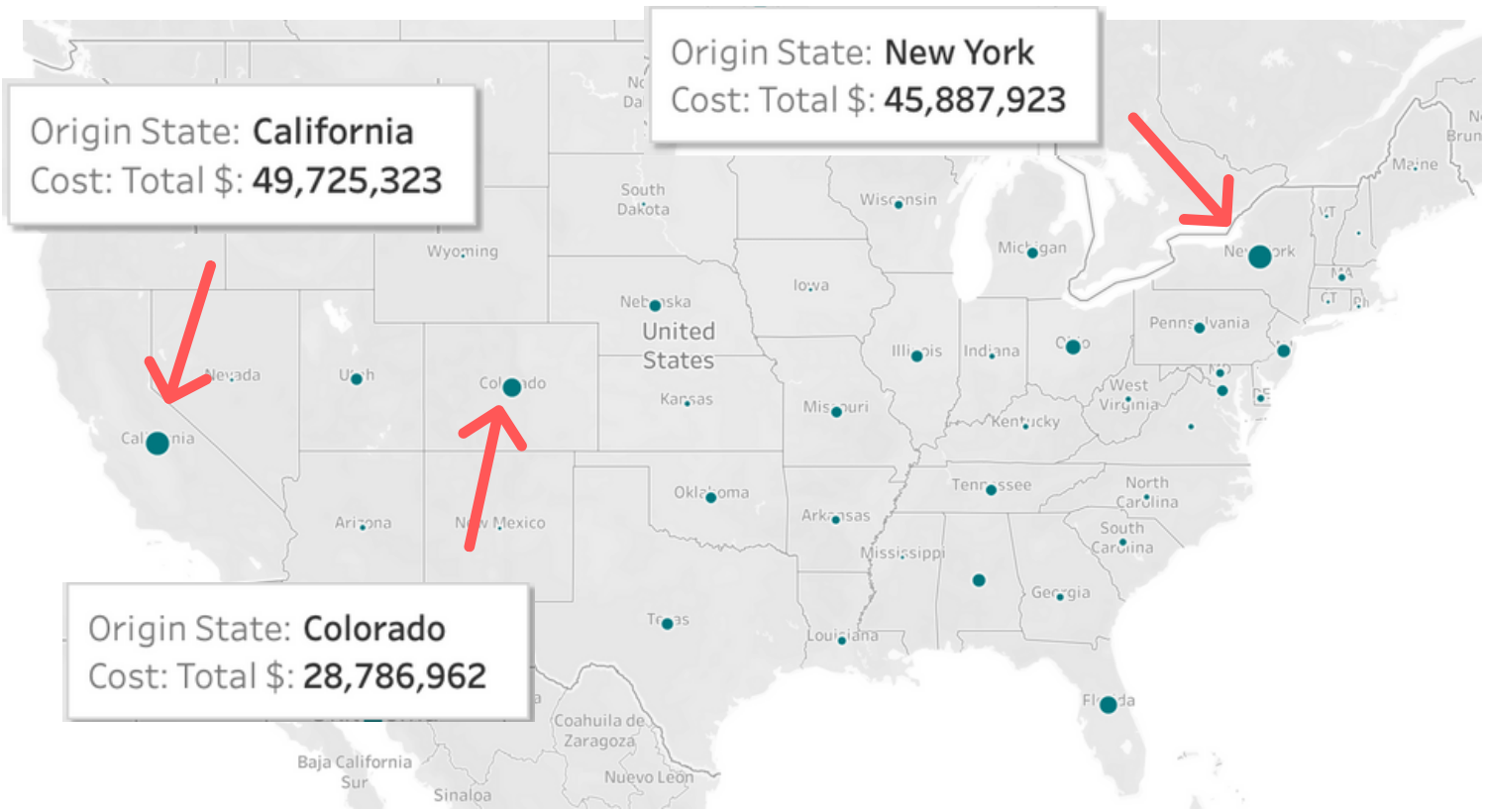
Moises Marin
A20349918
mmarinm@okstate.edu

TABLE OF CONTENTS

TOTAL COST BY STATE

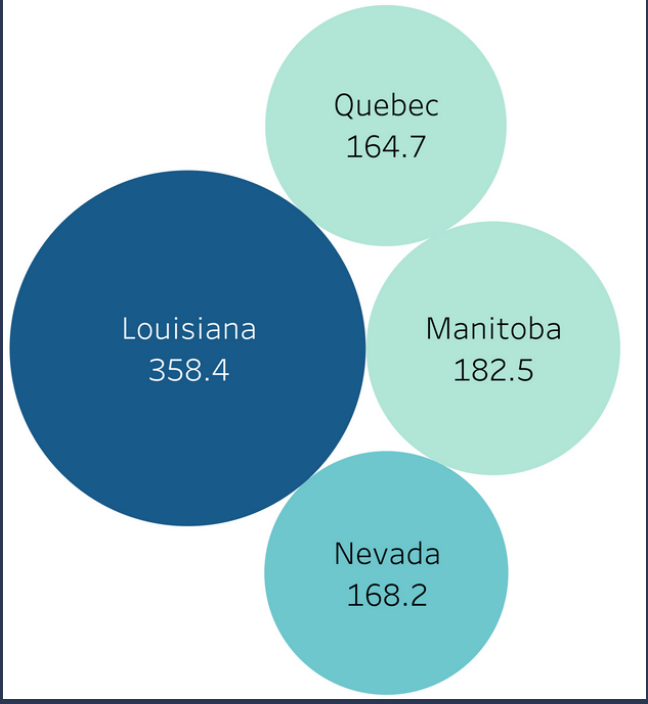
$49,725,323

California has the highest total monetary cost as a result of bird strikes. Followed by New York and Colorado.



AVERAGE SPEED FOR THE AIRPLANES WITH BIRD STRIKES

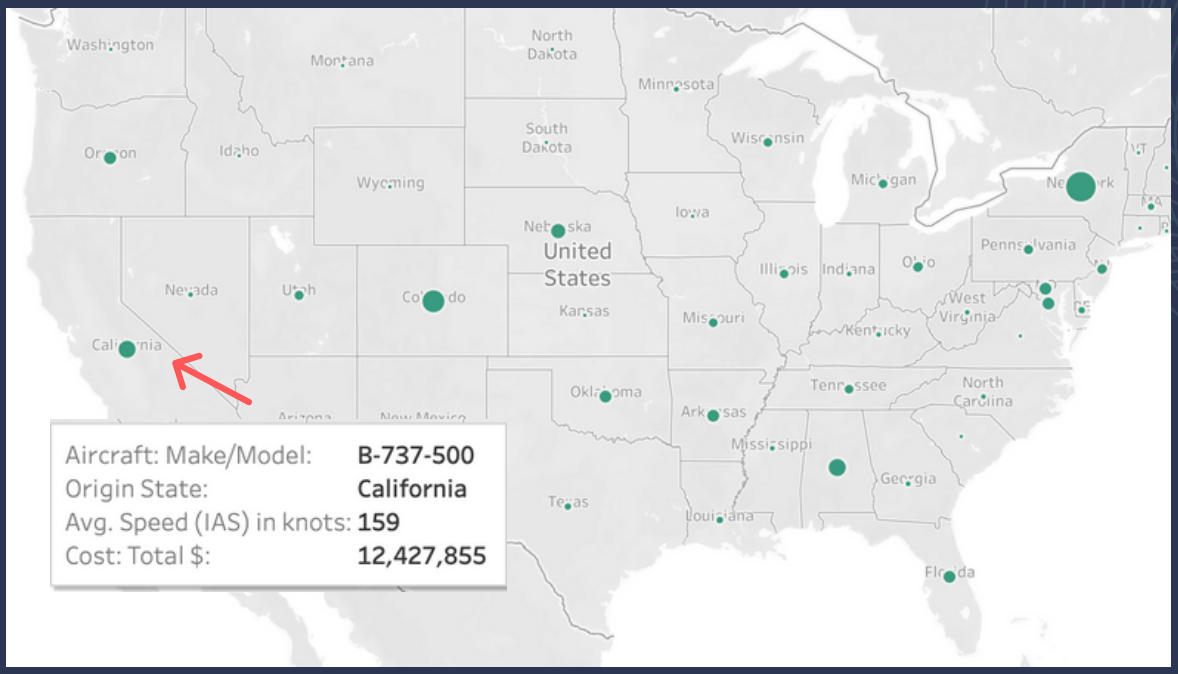
Louisiana has the highest average speed.



Louisiana, Quebec, Manitoba and Nevada are the 4 cities with the highest average speed.
Louisiana is the one with the hight cost with $6.4M, followed by Nevada with $1.5M. Quebec and Manitoba on the other hand, have a total monetary cost of 0.

AIRCRAFT MODELS

For the 12 months to December 1, 2025

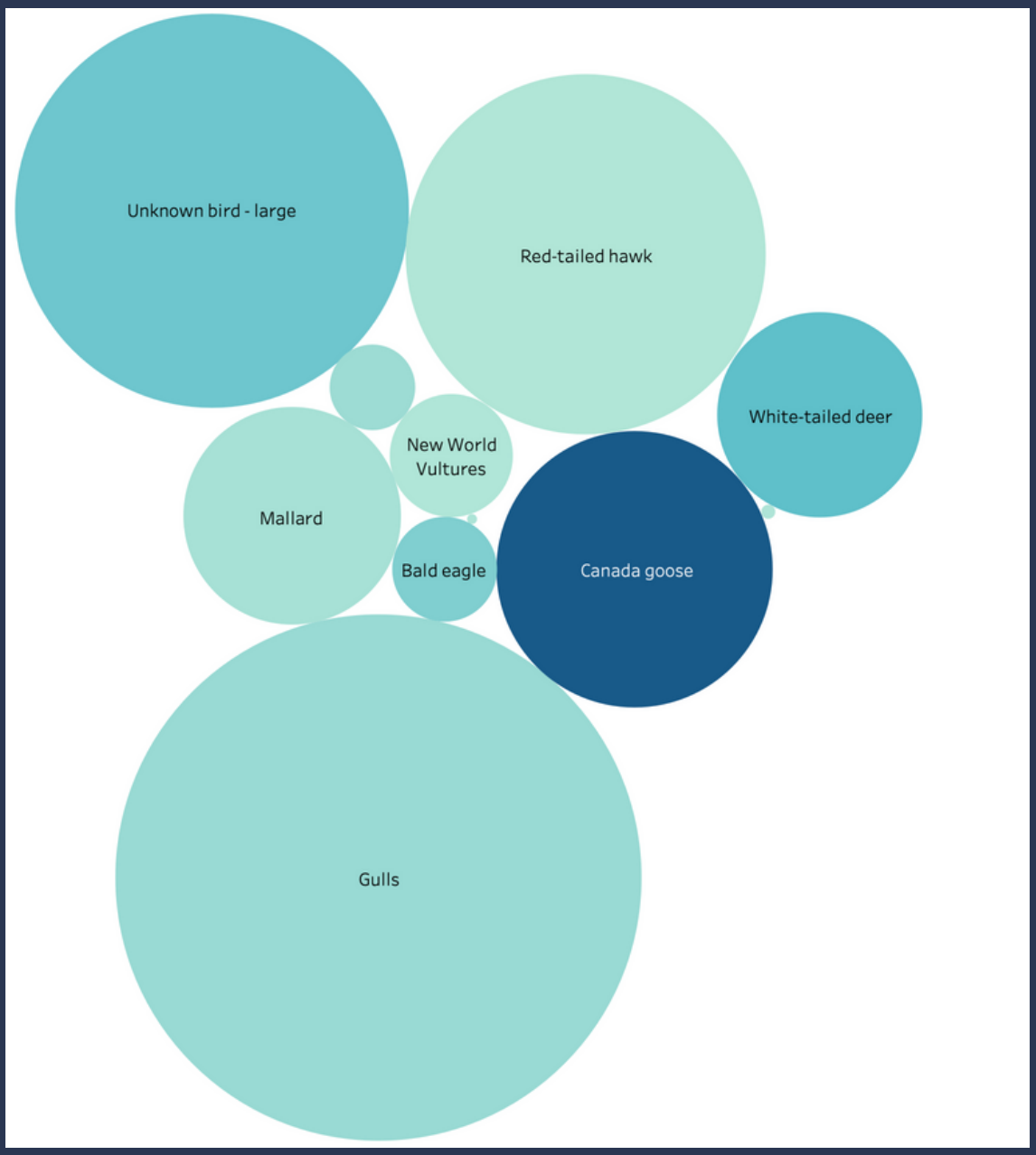


The aircraft model with highest monetary cost varies from city to city. In New York it's the Airbus A320 , In California it's the Boeing 737 500 and in Colorado it's the Boeing 757 200.

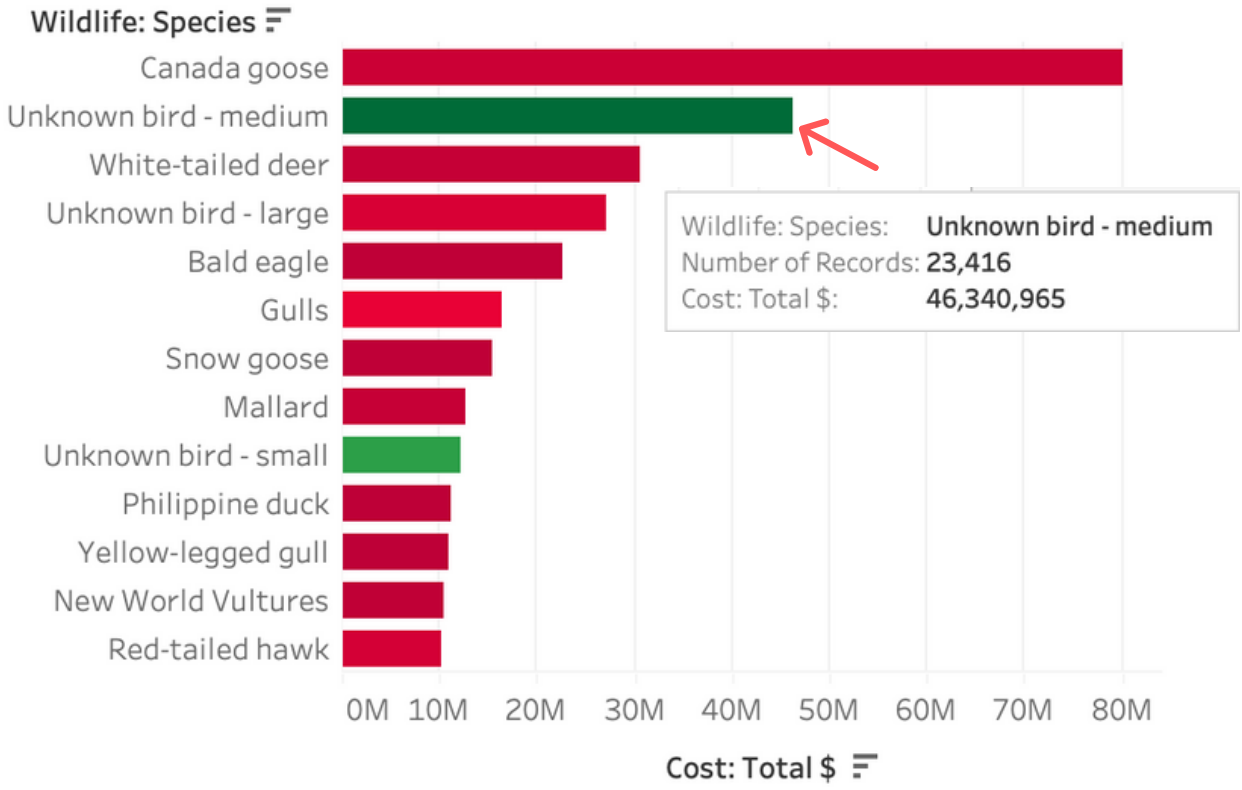
As can be expected, when we look at states with lower monetary cost, we find smaller airplane models, for example the DC 1010 in Texas or the Learjet 60 in Alabama

BIRD SPECIES

Excluding unknown birds of size small and medium, these are the species with the most events. The Canadian goose is the one that is related to the highest monetary cost.



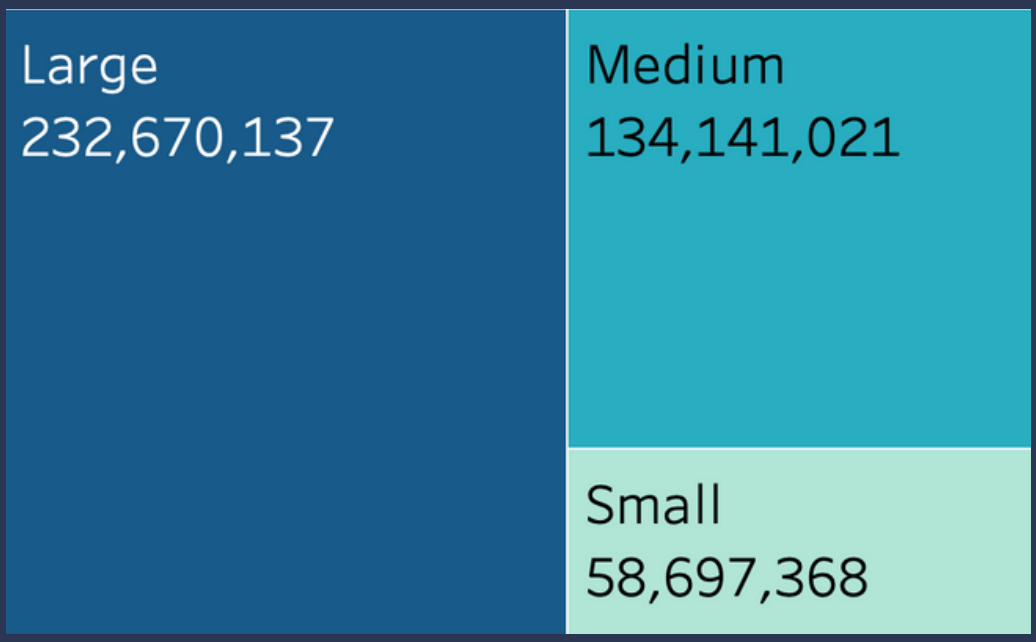
Filtering by total monetary cost over 10M, these are the bird species related to strikes, ranked by total cost.



Green indicates the highest number of events.

BIRD SIZE AND COST

The bigger the bird the higher the total monetary cost.

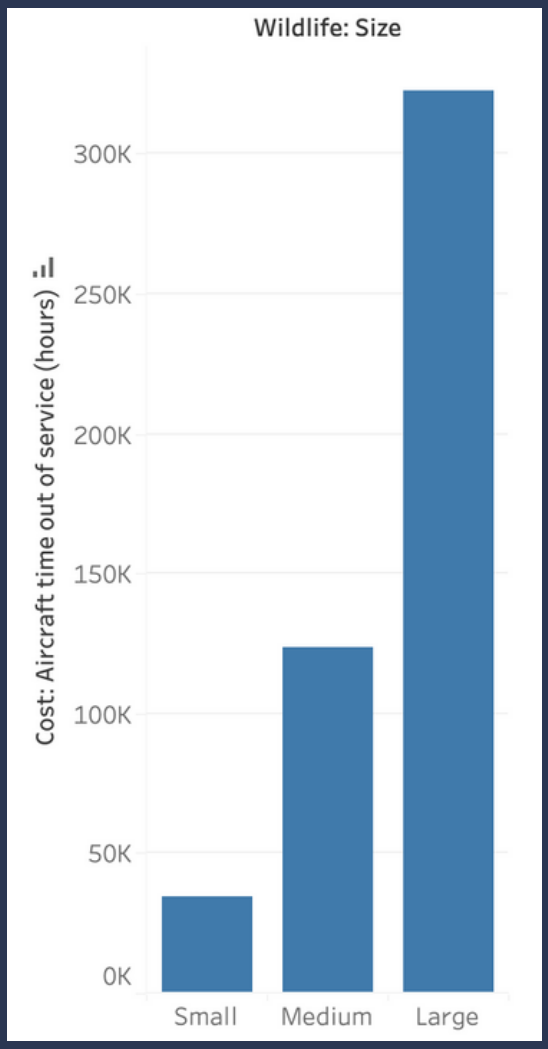


A bigger bird can cause more problems to an aircraft in motion.

BIRD SIZE AND AIRCRAFT TIME OUT

The size of the bird has an impact on the number of hours an aircraft remains out of service.

A birdstrike with a large animal takes more than 10 times the time it takes to repair an aircraft that hit a small bird.



PHASE OF FLIGHT

When: Phase of flight	
Climb	218,858,672
Take-off run	83,587,845
Approach	74,416,873
Landing Roll	49,484,932
En Route	8,544,123
Descent	8,124,393
Landing	244,464
Taxi	177,358
Parked	20,965

The climb is the most expensive moment for a birdstrike, if resources are used to prevent such events, they should be targeted to this phase of the flight. It's interesting how parked aircraft also present a cost when they hit a bird.

QUESTIONS? CONTACT ME.

Moises Marin
mmarinm@okstate.edu