STREET CONDITION COMPLAINTS
&
MOTOR VEHICLE COLLISIONS

DATA THAT'S ACTIONABLE

<u>Is there a correlation between these two unrelated data sources I have connected?</u>

- Are collisions more likely to occur depending on road conditions?

- What kind of reported complaints are related to collisions?

- How can reported complaints aid as indicators to prevent potential collisions? E.g. Road Cave-ins

- What preventative measures can we take to decrease collision?

Realtime Insights

STREET CONDITION COMPLAINTS & COLLISIONS BY ZIP CODE (2019 - 2021)

WHAT IS THE RELATIONSHIP BETWEEN THE NUMBER OF COLLISIONS AND COMPLAINTS?
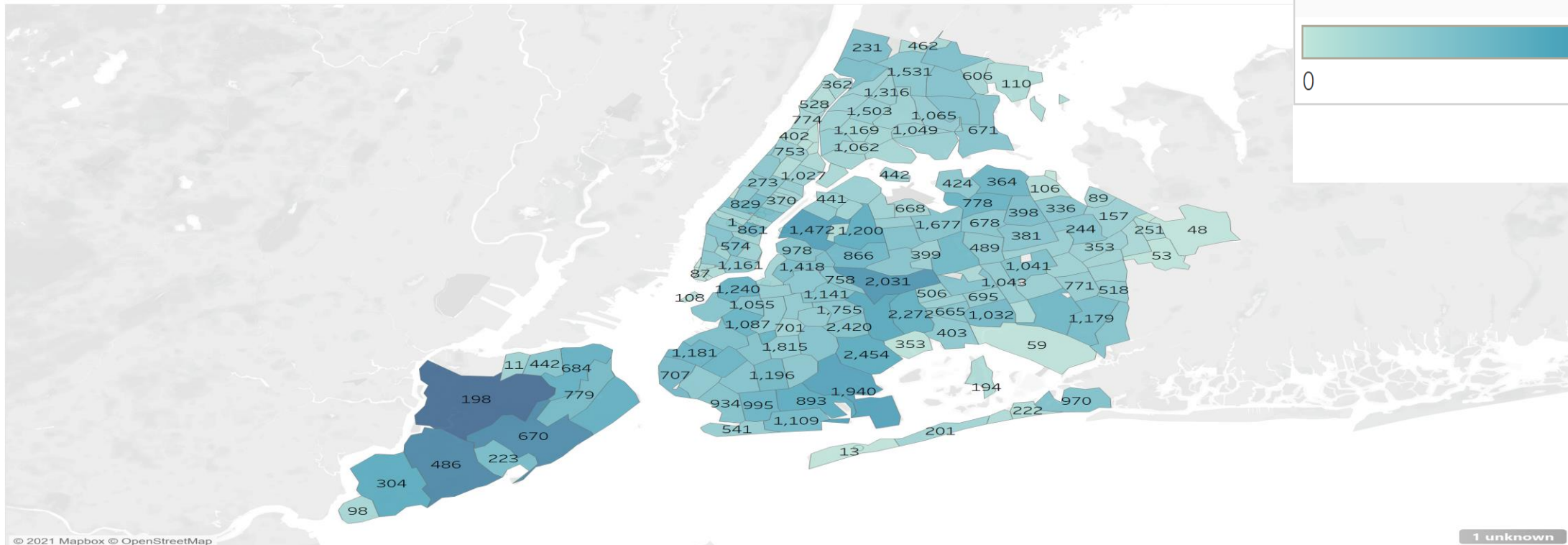
LOW COMPLAINTS & HIGH COLLISIONS

HIGH COMPLAINT & LOW COLLISIONS

HIGH COMPLAINTS & HIGH COLLISIONS

LOW COMPLAINTS & LOW COLLISIONS

THIS VISUALIZATION IS USEFUL. HOWEVER, A LINEAR REGRESSION ANALYSIS WILL REVEAL THE MOST INSIGHT TO THIS DATA

Street Condition Complaints And Collisions By Zipcode (2019 - 2021)
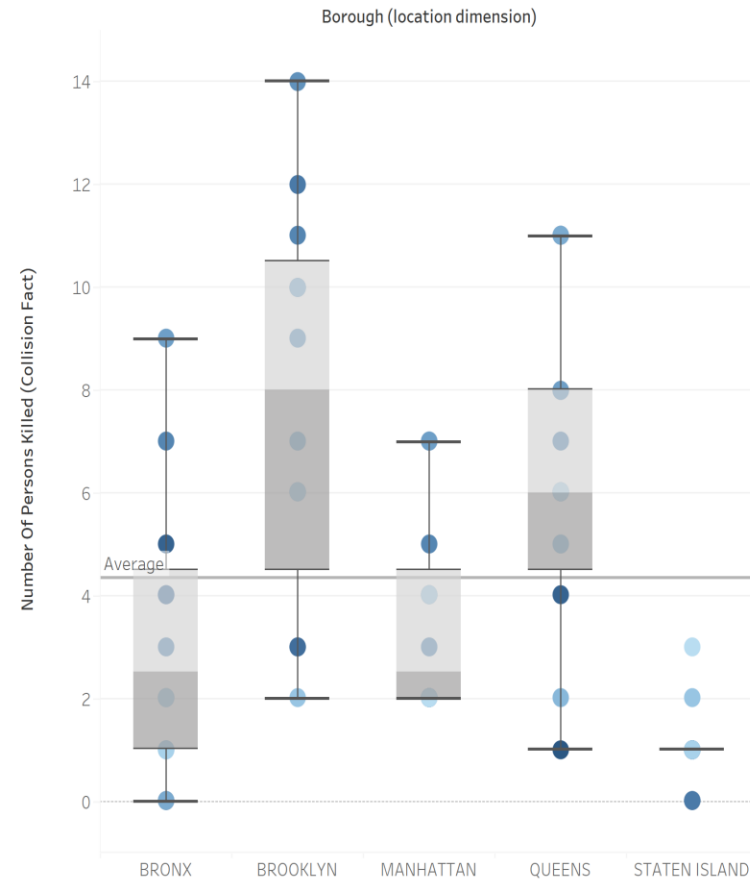
Number Of Complaints

0 — 12,449

HERE WE HAVE A HIGH-LEVEL OVERVIEW OF THE DISTRIBUTION OF TOTAL DEATHS & TOTAL INJURIES BY BOROUGH. THE MAXIMUM INDICATES WHICH MONTHS HAVE HIGHER TOTALS

- Brooklyn has the largest range and IQR of deaths and injuries followed by Queens & the Bronx

- While Staten Island has the smallest range, smallest IQR & the lowest number of deaths and injuries followed by Manhattan

- Possible causes for these outcomes could be because Manhattans congestion prevents high speeds & because of high use of public transportation

- Staten island is the only borough with outliers, this could be because the use of the ferry that decreases the number of vehicles on the island

- Deaths by borough average around 4

- Injuries by borough average around 800

- The months with the maximum injuries and deaths are darker on the spectrum

- This could be due to weather related conditions in the winter season as well as the holidays in November & December with increased travel

- Medium shades (mid-year/summer) tend to be closer to the average marks and within the IQR.

- This could be because road conditions are less dangerous during summer months.
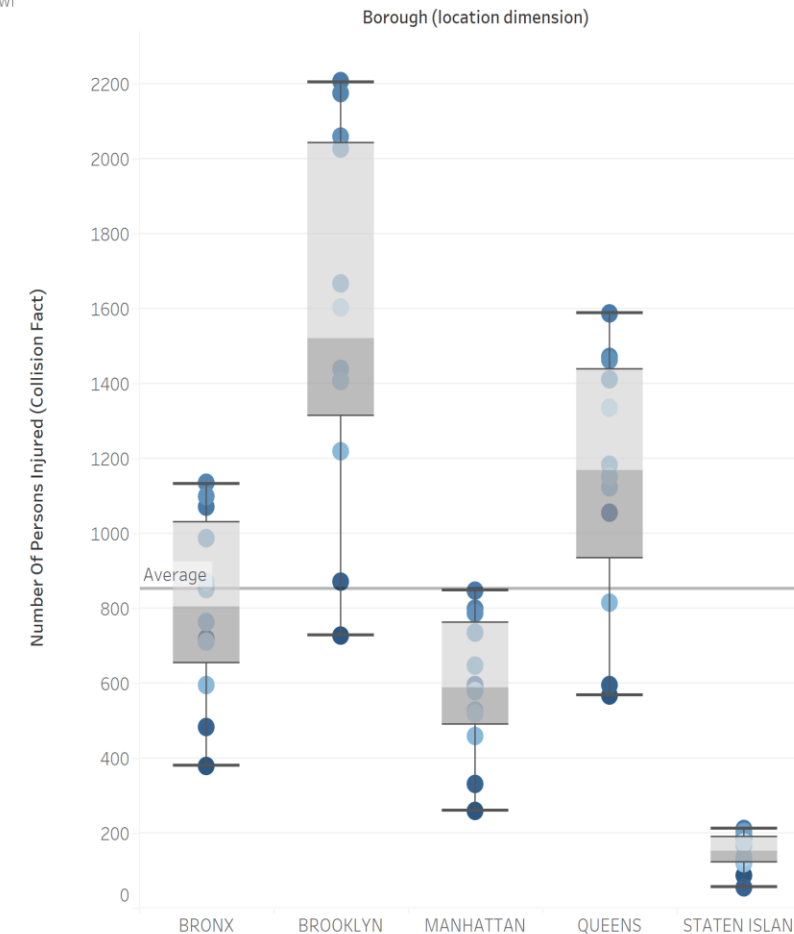
Month.
1   12

Number of Persons Killed By Borough (2019 - 2021)
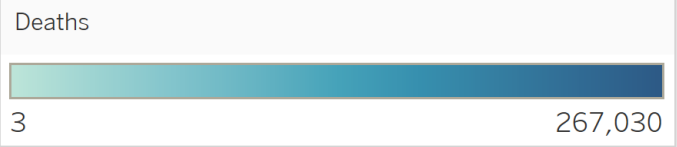Here we have a high level overview of the distribution of total deaths and total injuries by boroughough. THe outliers tell us wh
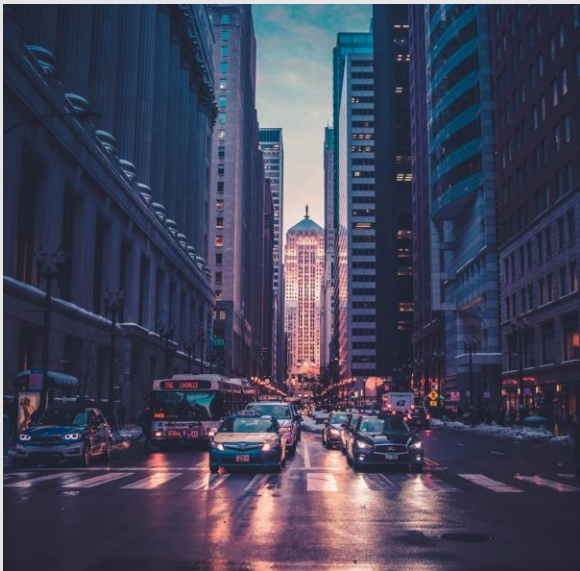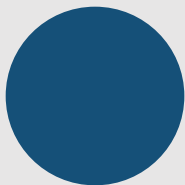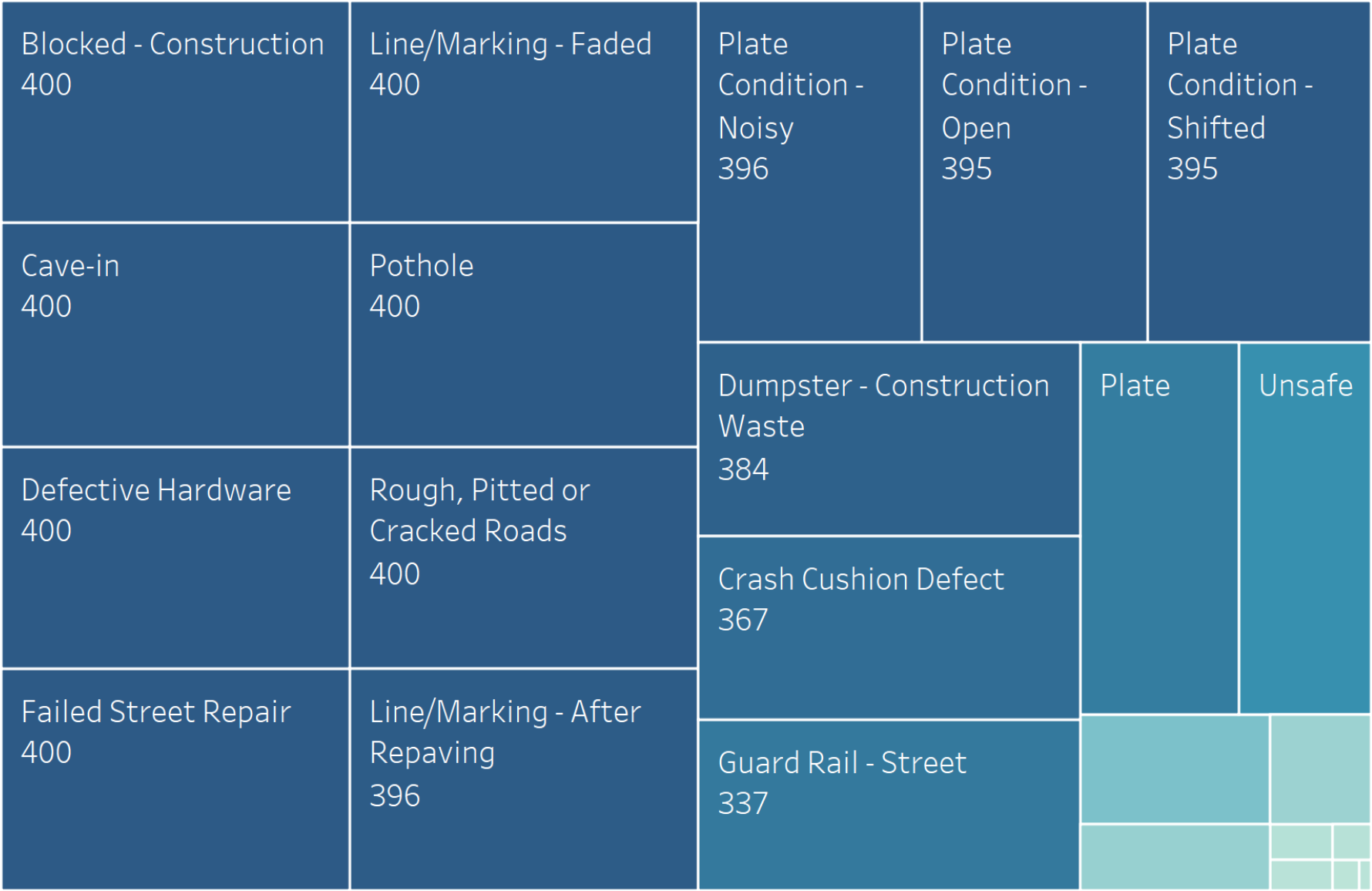
Borough (location dimension)

Number of Persons Injured By Borough (2019 - 2021)

Borough (location dimension)

4

Number of Deaths by Road Condition Description (2019 - 2022)

Deaths

3   267,030

Realtime Insights

Blocked - Construction 400	Line/Marking - Faded 400	Plate Condition - Noisy 396	Plate Condition - Open 395	Plate Condition - Shifted 395
Cave-in 400	Pothole 400	Dumpster - Construction Waste 384	Plate	Unsafe
Defective Hardware 400	Rough, Pitted or Cracked Roads 400	Crash Cushion Defect 367		
Failed Street Repair 400	Line/Marking - After Repaving 396	Guard Rail - Street 337		

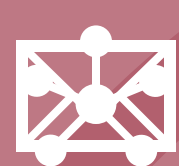# OCCURRENCES OF COMPLAINTS WHEN COLLISIONS OCCUR

THE ROAD CONDITION DESCRIPTIONS RELATED TO NUMBER OF DEATHS IN THE HEAT MAP, ARE SIMILAR TO DESCRIPTIONS THAT ARE LARGEST IN THE WORD CLOUD.

WITH THIS INFORMATION, WE KNOW THE RESOLUTION ACTION UPDATE DATE (TIMESTAMP) AND THE RESOLUTION DESCRIPTION ATTRIBUTES IN THE DATASET SHOULD BE MONITORED & BENCHMARKED.

THIS WILL ENSURE THAT WHEN THESE PROMINENT COMPLAINTS ARE REPORTED, THEY SHOULD BE RESOLVED IN A TIMELY MANNER TO PREVENT NEAR POTENTIAL COLLISIONS AND DEATHS.

Plate Condition - Noisy

Line/Marking - Faded

Cave-in   Defective Hardware

Pothole

Line/Marking - After Repaving

Rough, Pitted or Cracked Roads

Failed Street Repair   Blocked - Construction

Plate Condition - Shifted

Realtime Insights

Realtime Insights

THANK YOU !

Its Actionable... To Take Action