

Data Science Flex Program

Midterm Project

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San Pedro, Nico

Agenda

Introduction

Part I – Key Insights

Part II – Anatomy of the Dashboard

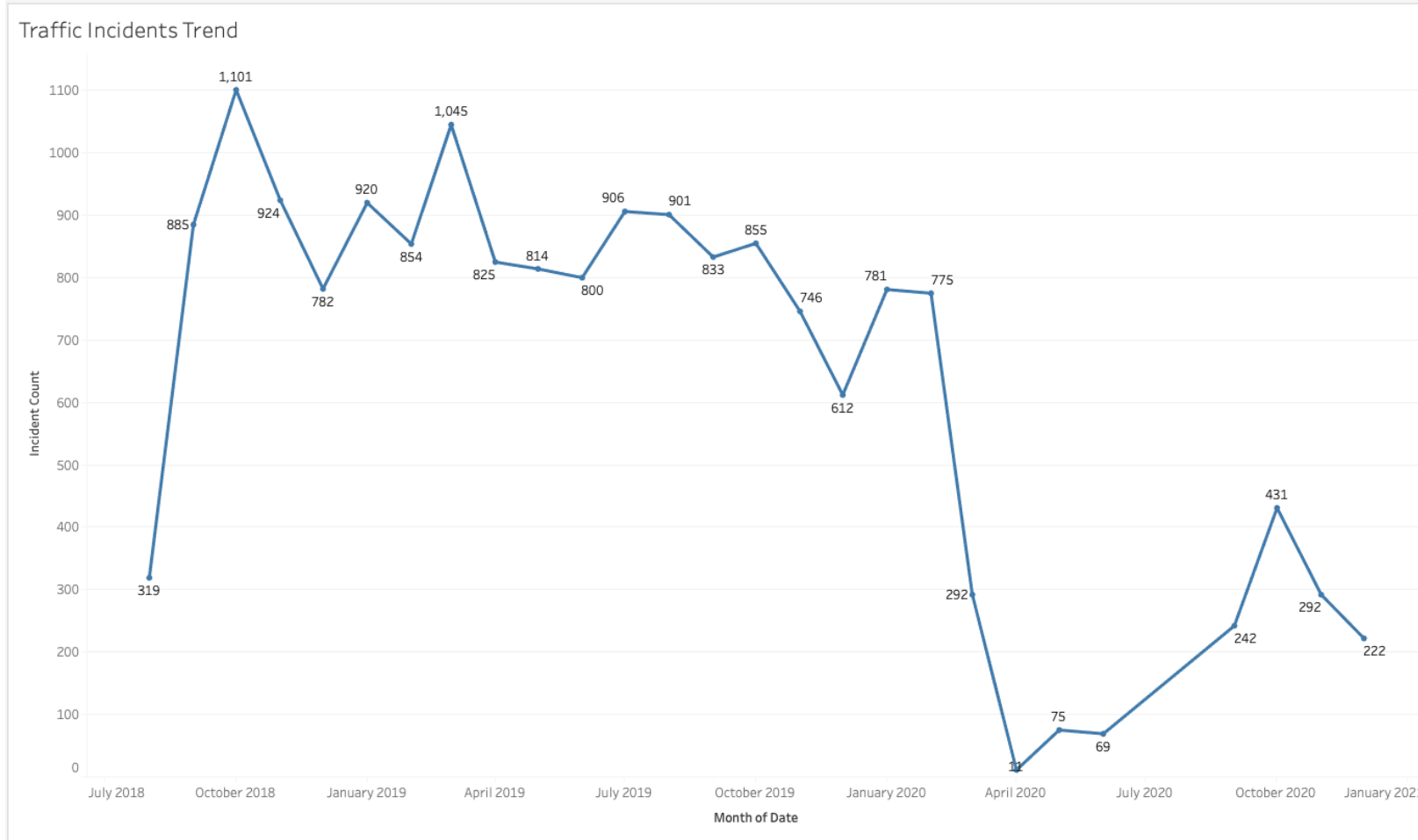
Part III – Dashboard Demo

Introduction

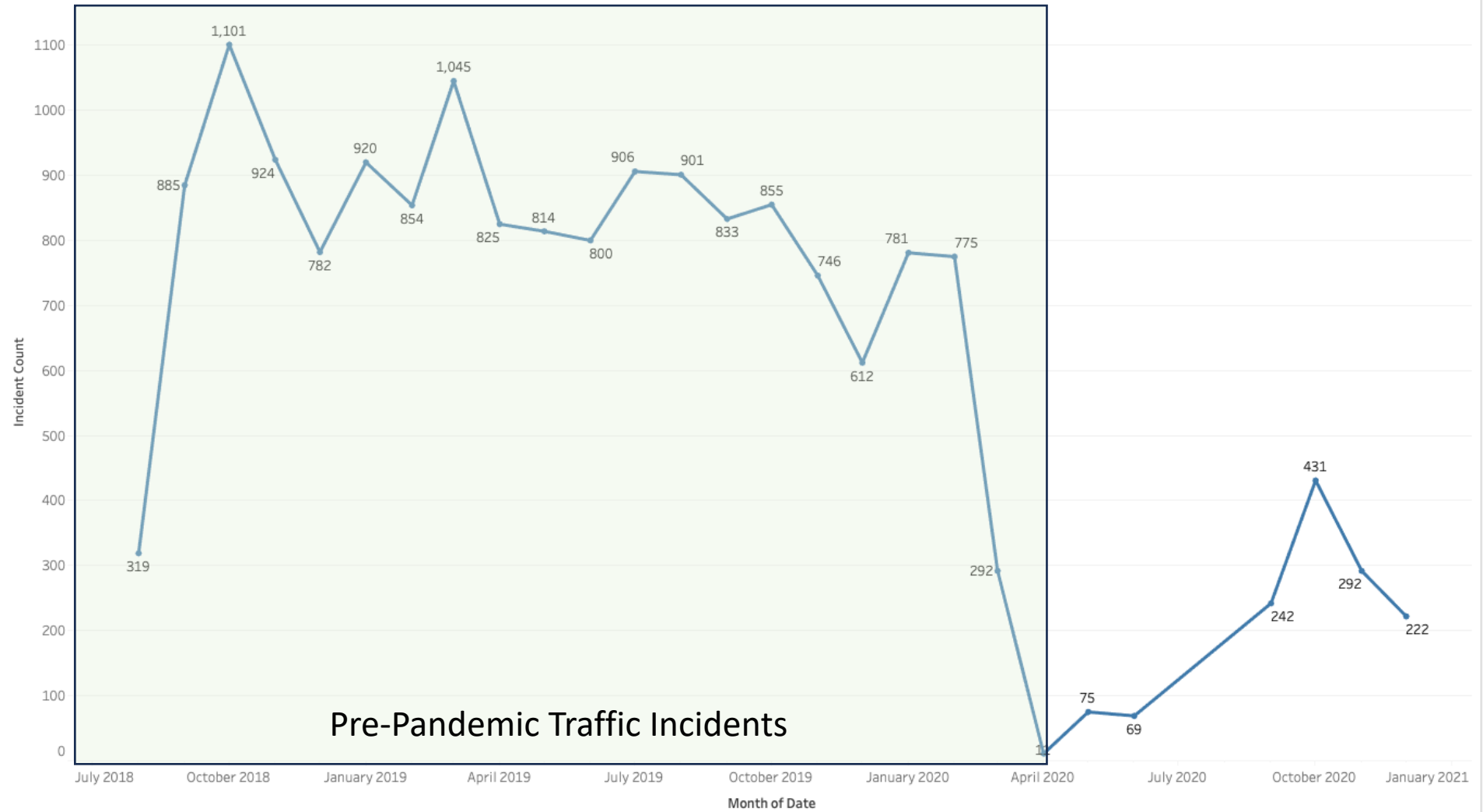
Dataset: 2018 – 2020 Traffic Incident

Goal: Create an interactive dashboard to review recent data for future planning and decision making.

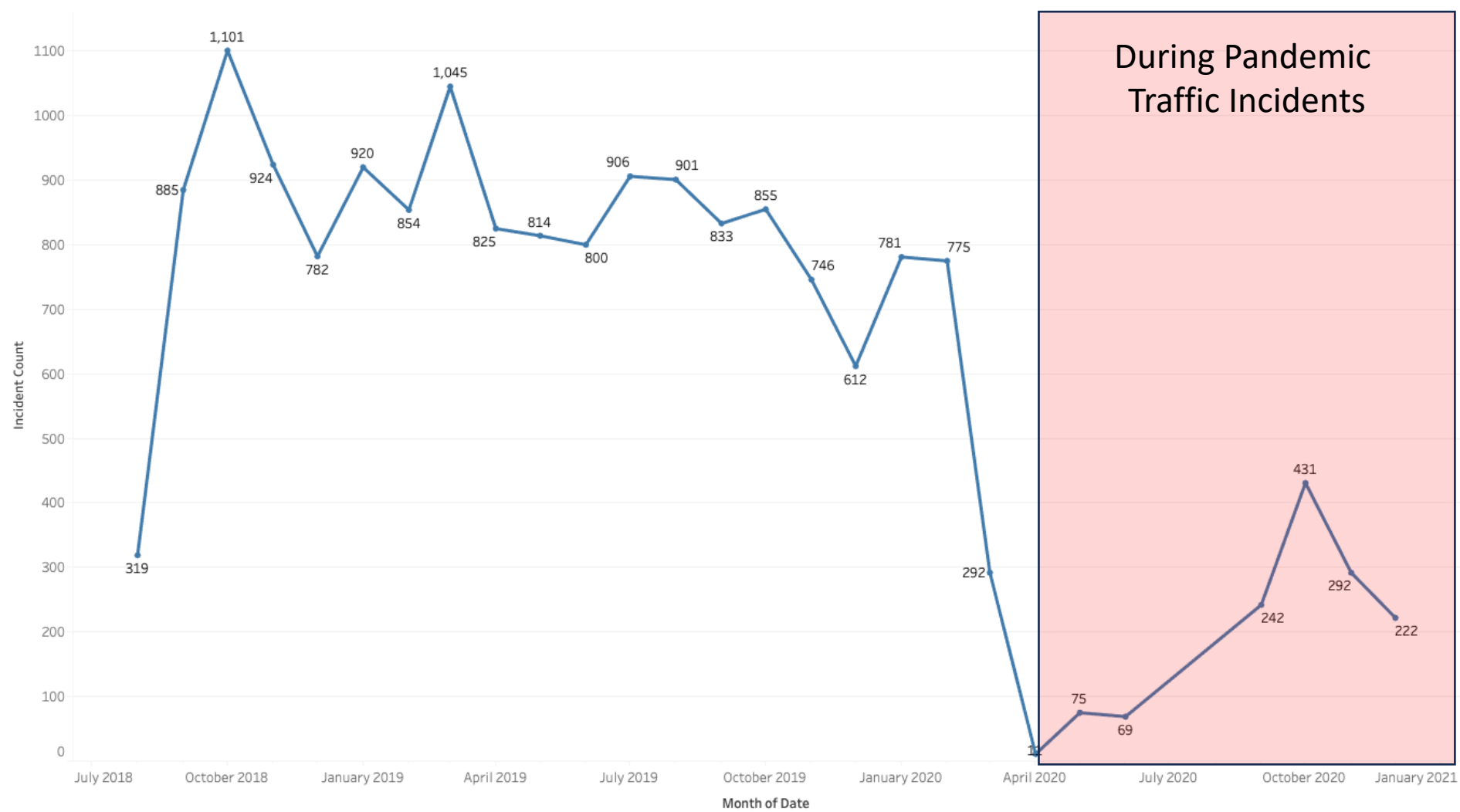
Part I – Key Insights

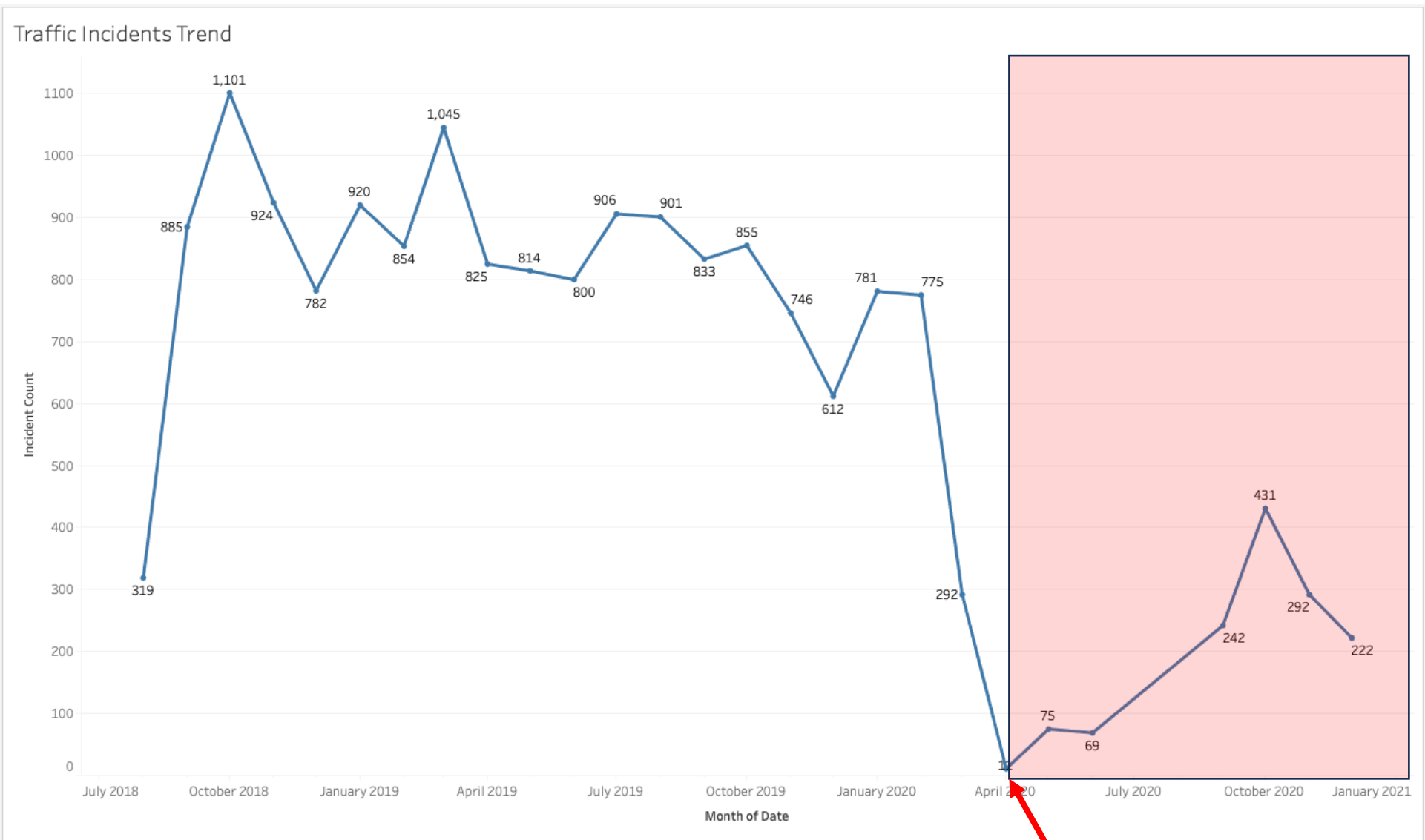


Traffic Incidents Trend



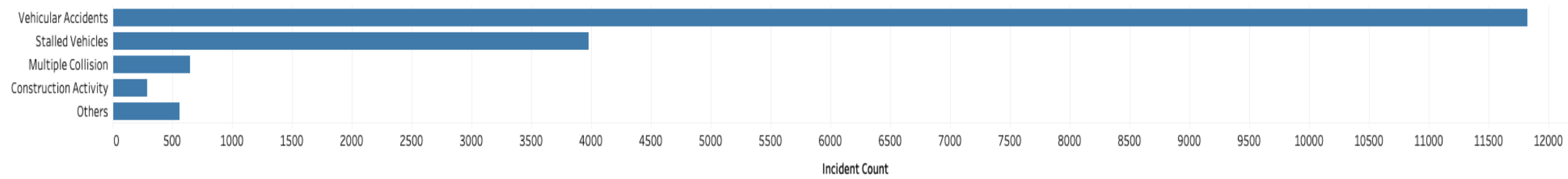
Traffic Incidents Trend





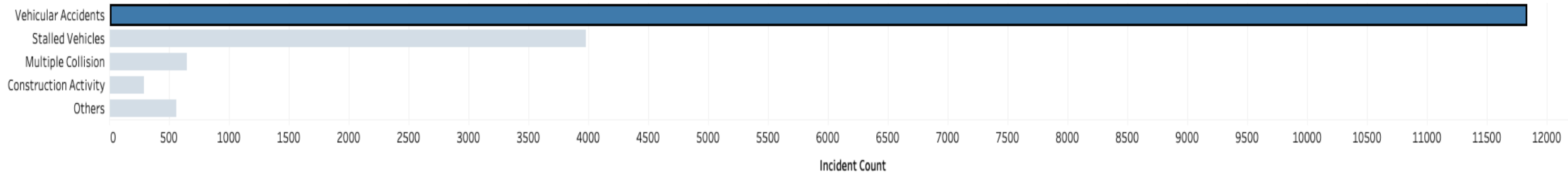
Lockdown Started

Top Incidents



Over **2/3** of the
incidents were
caused by Vehicular
Accidents

Top Incidents



Day/Time Heatmap

Week Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
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The traffic incidents
mostly occurred
early in the
morning.

Day/Time Heatmap

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Especially weekdays
morning

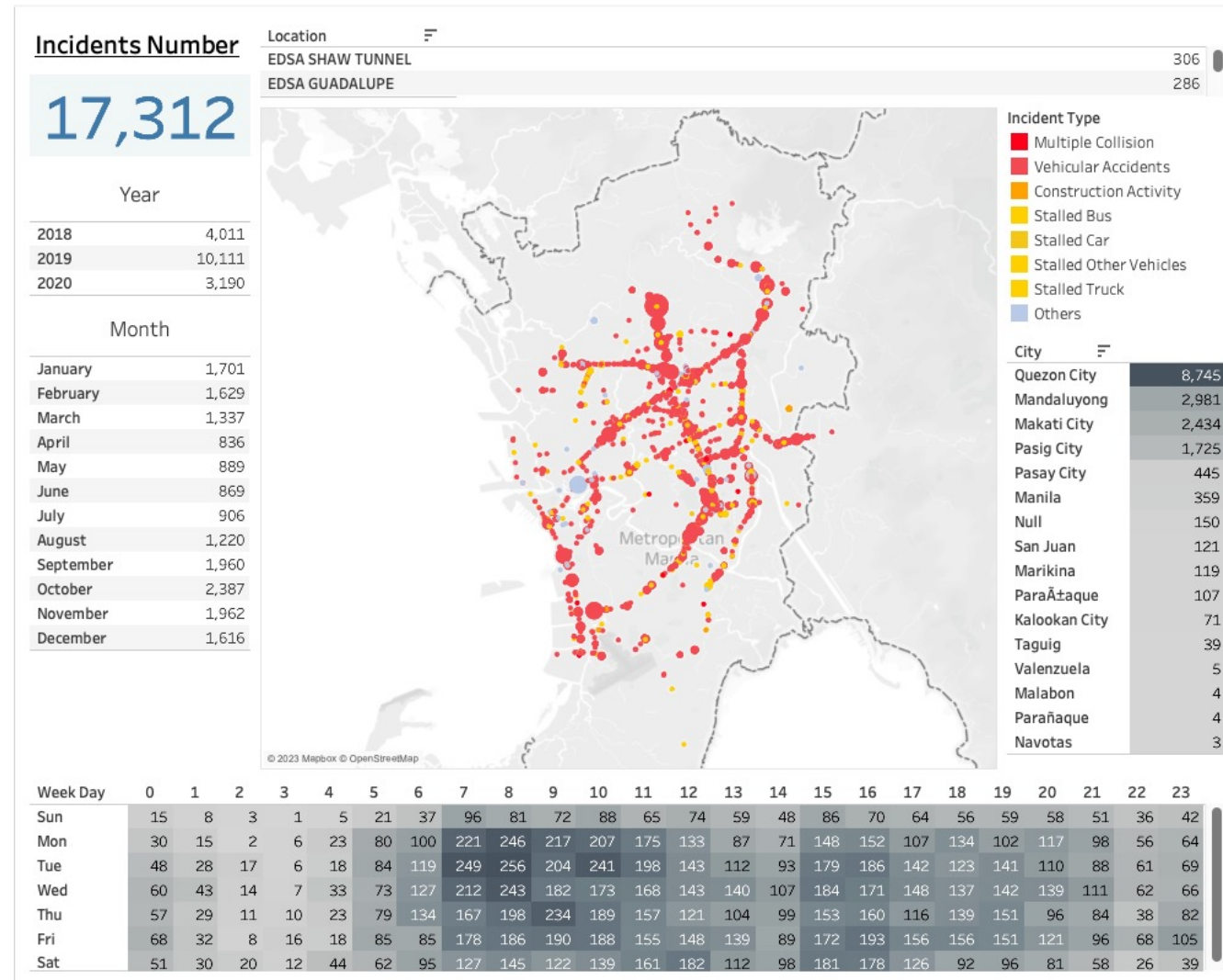
Part I Summary

- The traffic incident was significantly affected by the COVID-19 restrictions starting March/April 2020.
- Majority of the reported traffic incidents were caused by vehicular accidents.
- Most of the incidents took place during weekday morning.

Part I Recommendations

- Look into developing an administrative method to limit the volume of vehicles on the road such as enhanced plate coding schemes, express lanes or alternate routes.
- Consider taking public transportation such as busses and trains to reduce the volume of private vehicles on the road.
- Stay focused on driving and avoid distractions especially during weekday morning.

Part II – Anatomy of the Dashboard



Incidents Number

17,312

Year

2018	4,011
2019	10,111
2020	3,190

Month

January	1,701
February	1,629
March	1,337
April	836
May	889
June	869
July	906
August	1,220
September	1,960
October	2,387
November	1,962
December	1,616

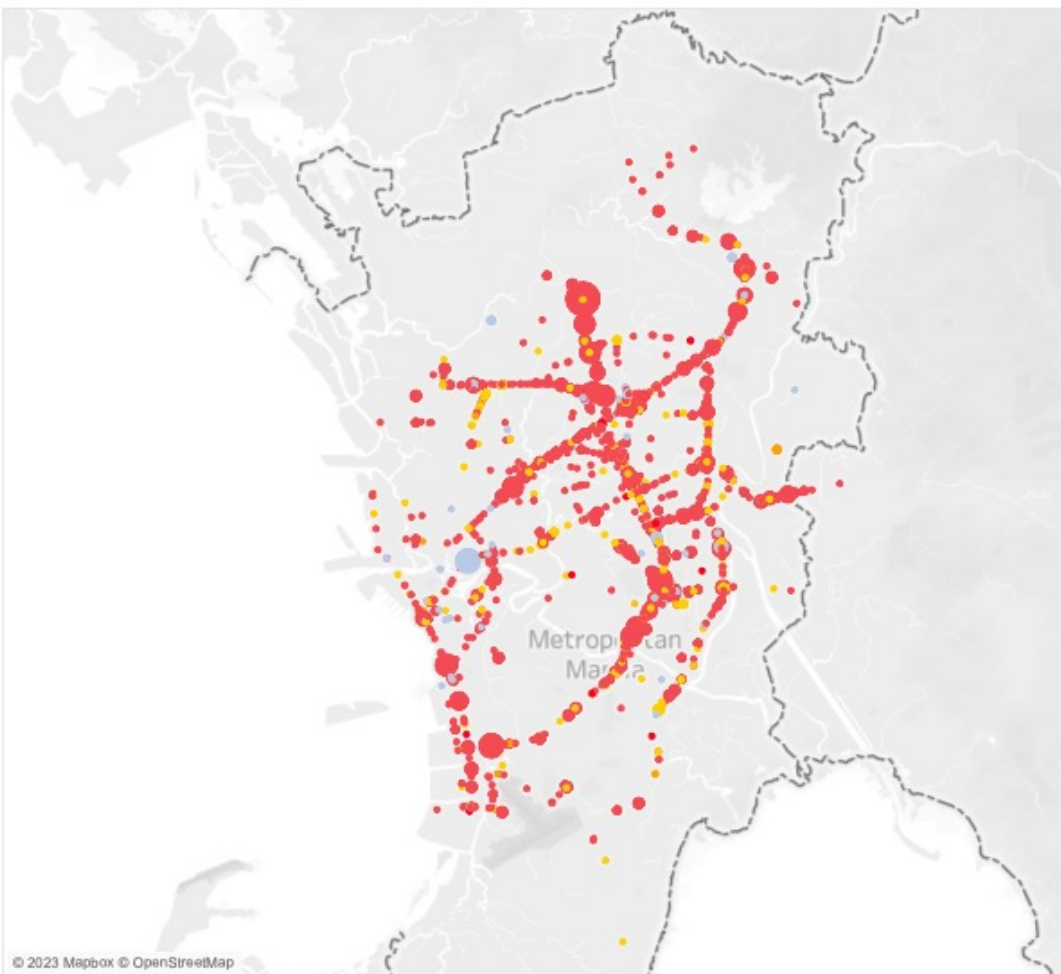
Location

EDSA SHAW TUNNEL

306

EDSA GUADALUPE

286



Incident Type

- Multiple Collision
- Vehicular Accidents
- Construction Activity
- Stalled Bus
- Stalled Car
- Stalled Other Vehicles
- Stalled Truck
- Others

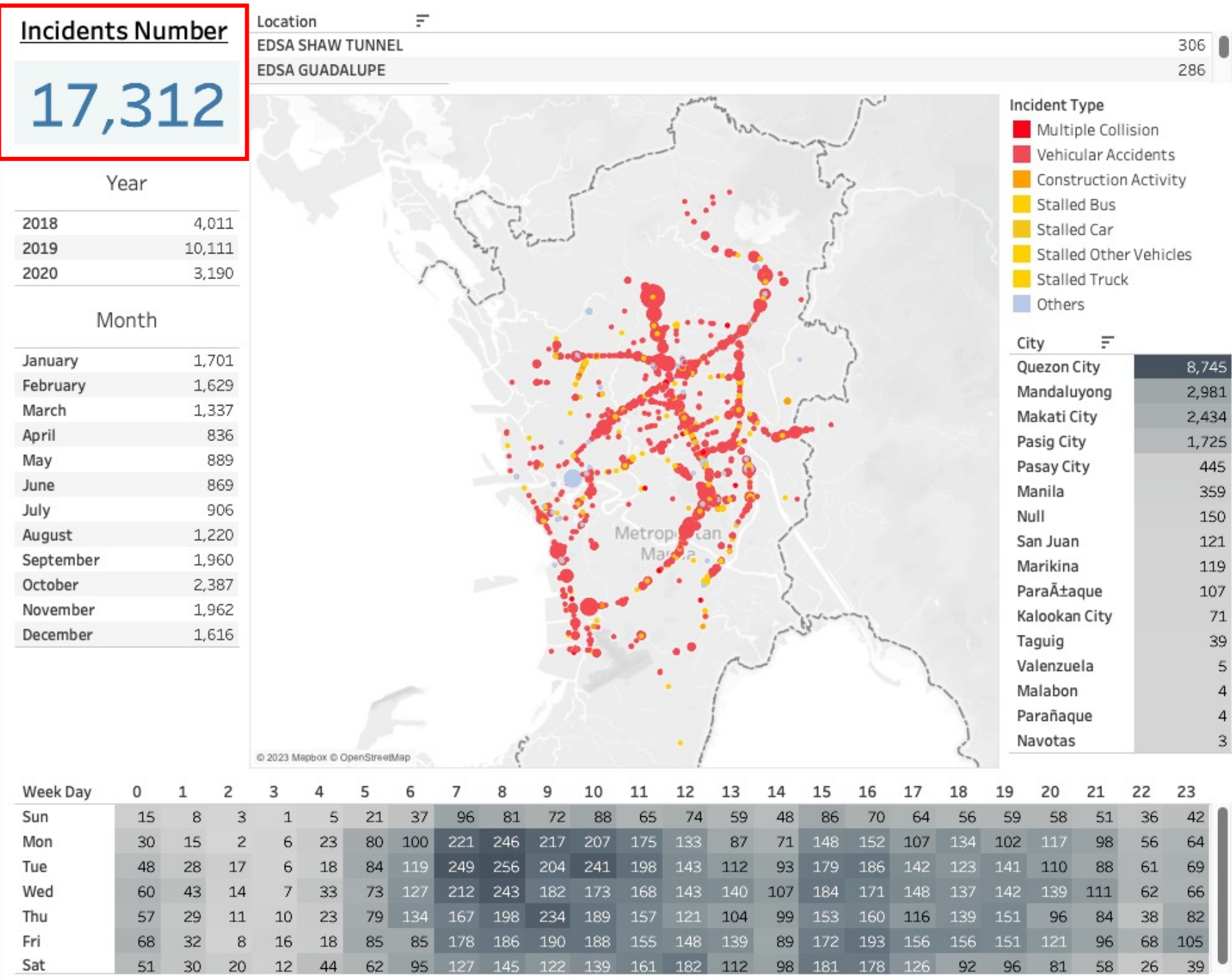
City

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Mandaluyong	2,981
Makati City	2,434
Pasig City	1,725
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Manila	359
Null	150
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Incident Number Card
- shows the incident number based on the current selection.

-by default, it shows all incidents count.



Incidents Number

17,312

Year/Month Card

- shows the incident count per year and month.

-serves as a filter.

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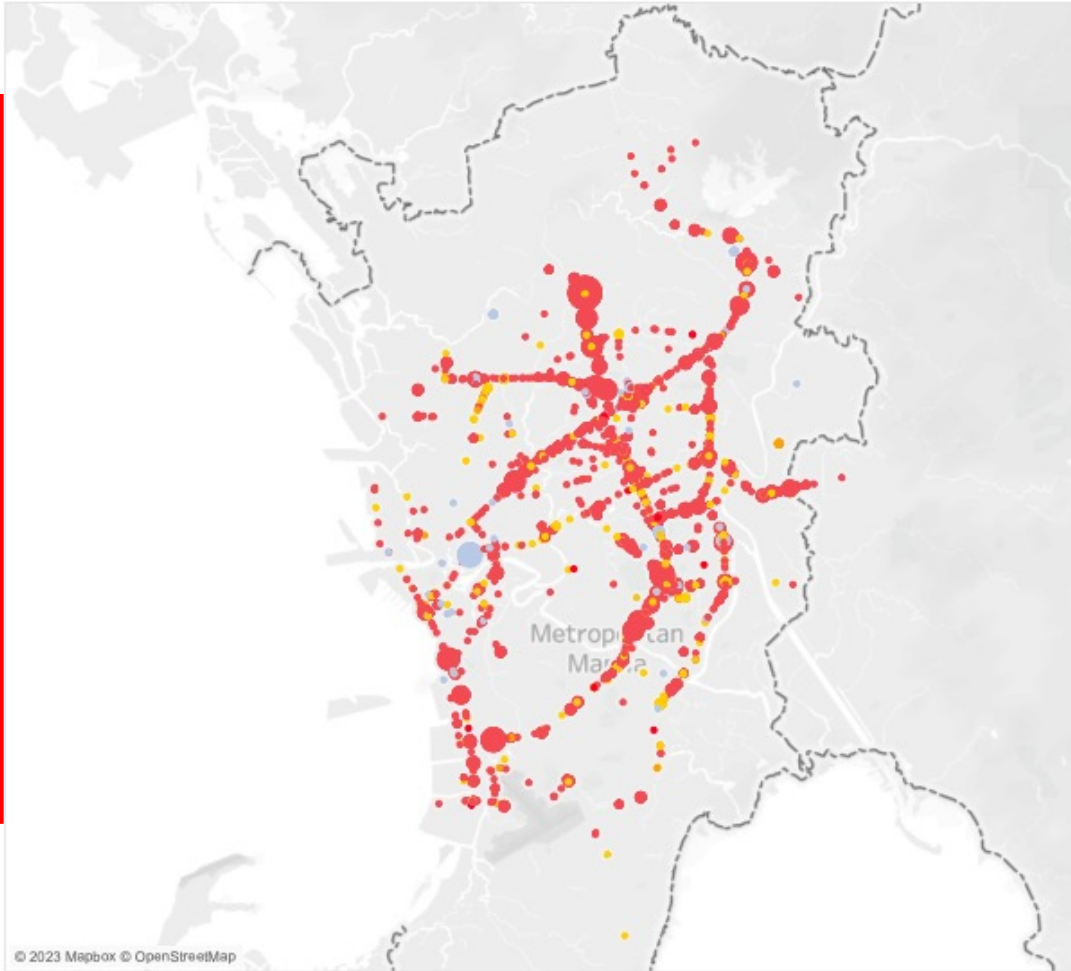
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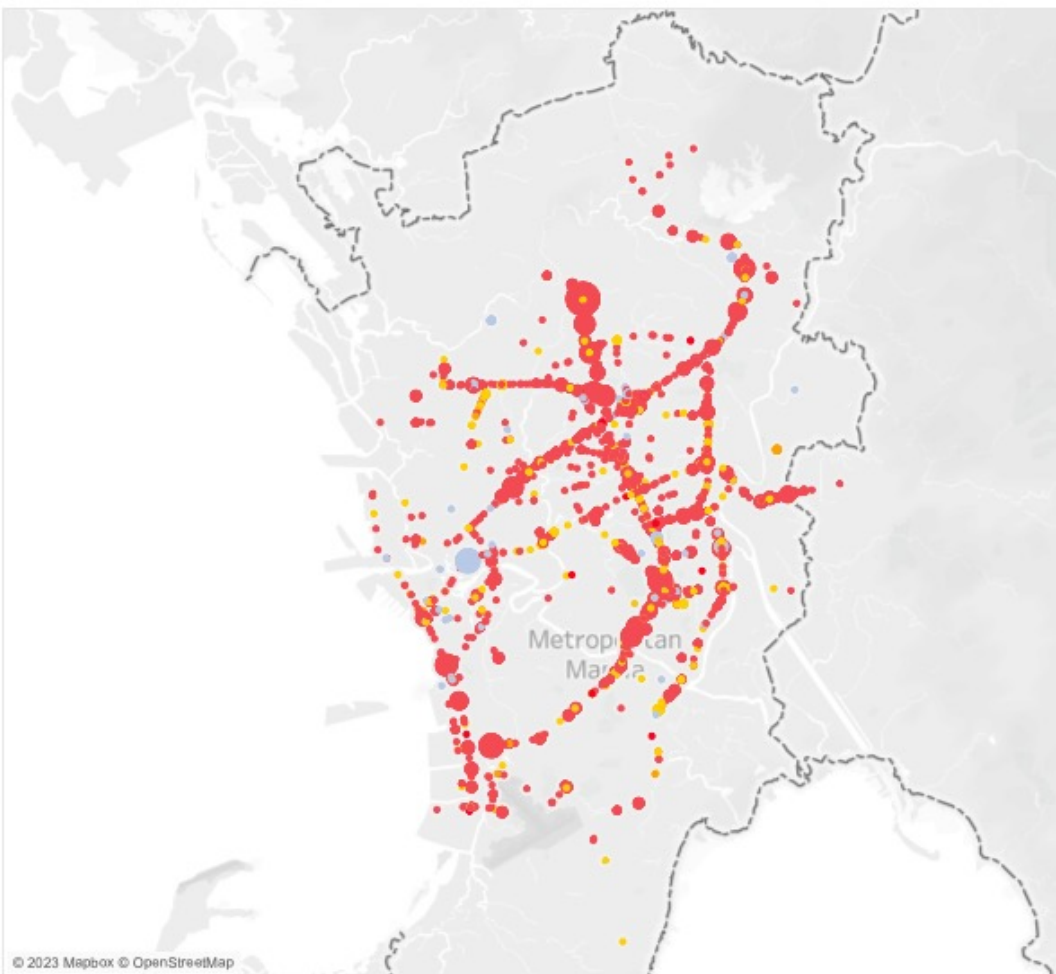
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Hours/Weekday Heat Map Card

- shows the incident count as a heat map depending on the current selection./s

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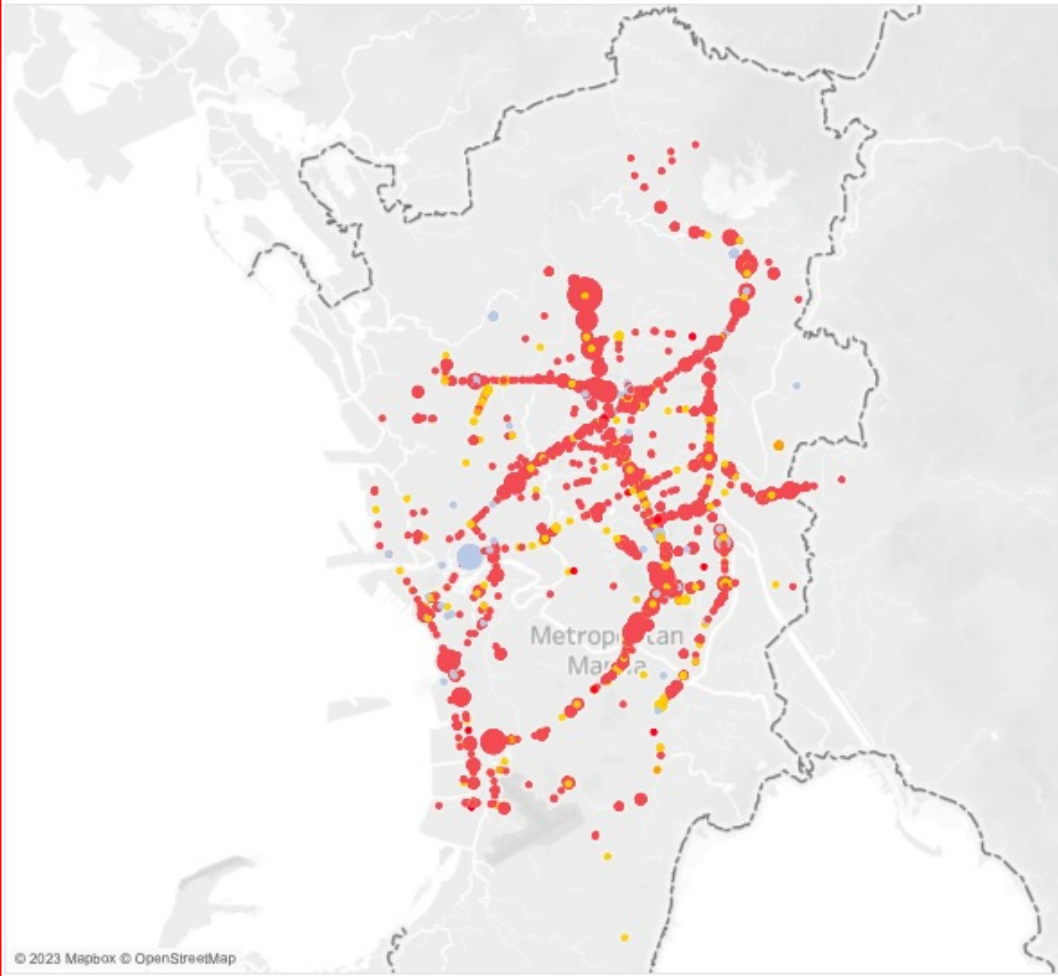
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Location/Map

Card

- shows the map where the incident have happened.

-

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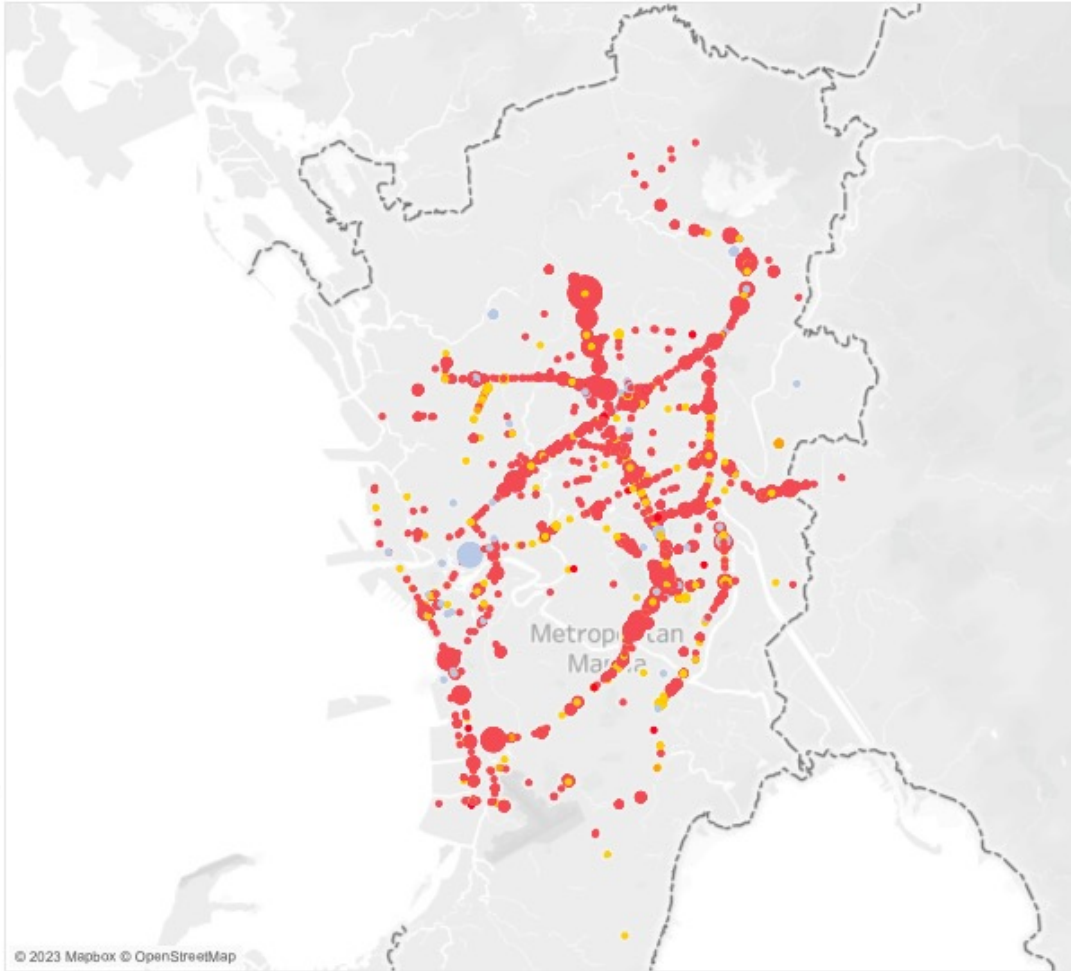
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Location/Map Card

- shows the incident types

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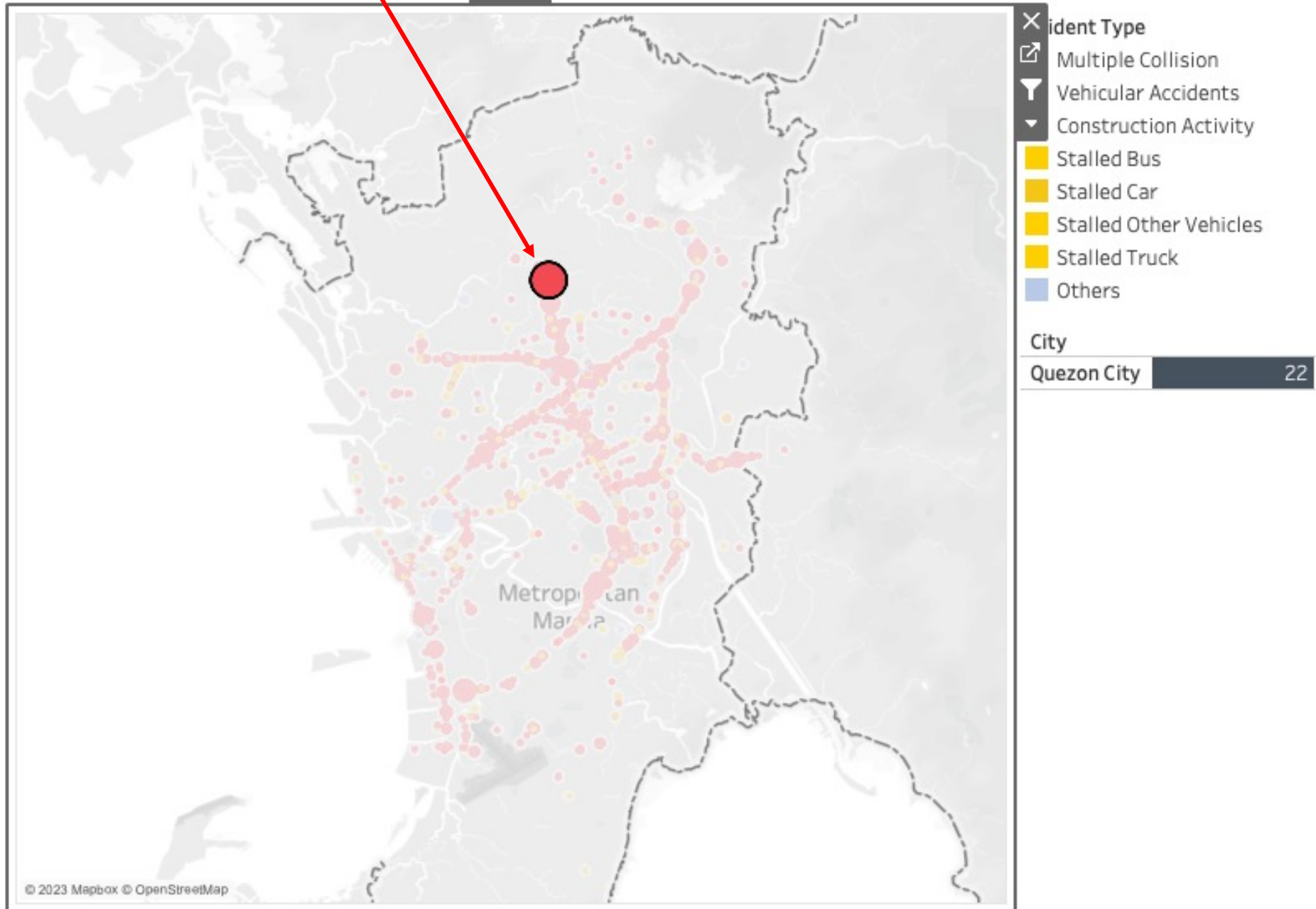
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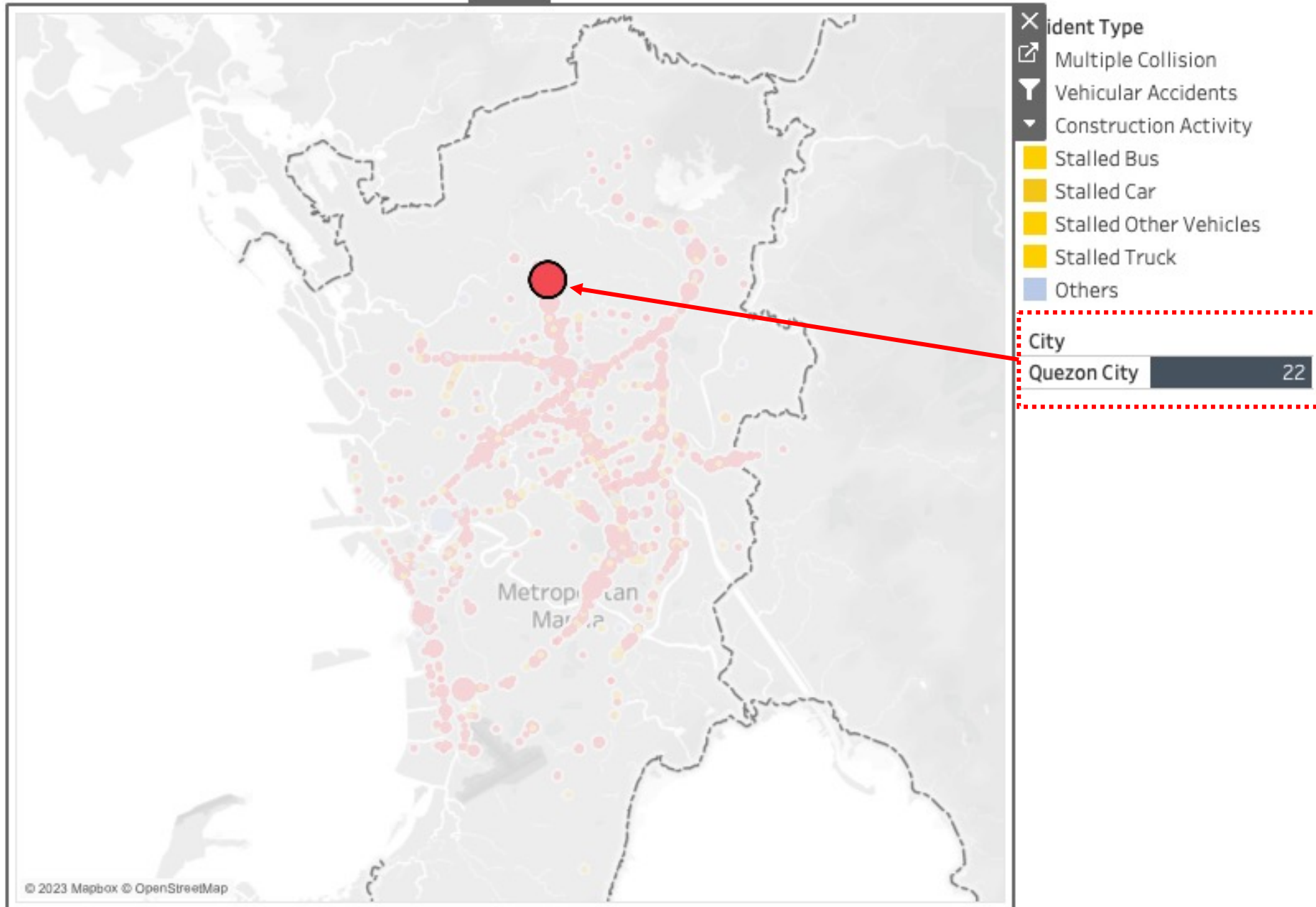
MINDANAO AVE SAUYO

22

Location/Map Card

- shows the exact location of the street where the incident have happened.





Location/Map Card
- shows the jurisdiction of which city the incident have happened.

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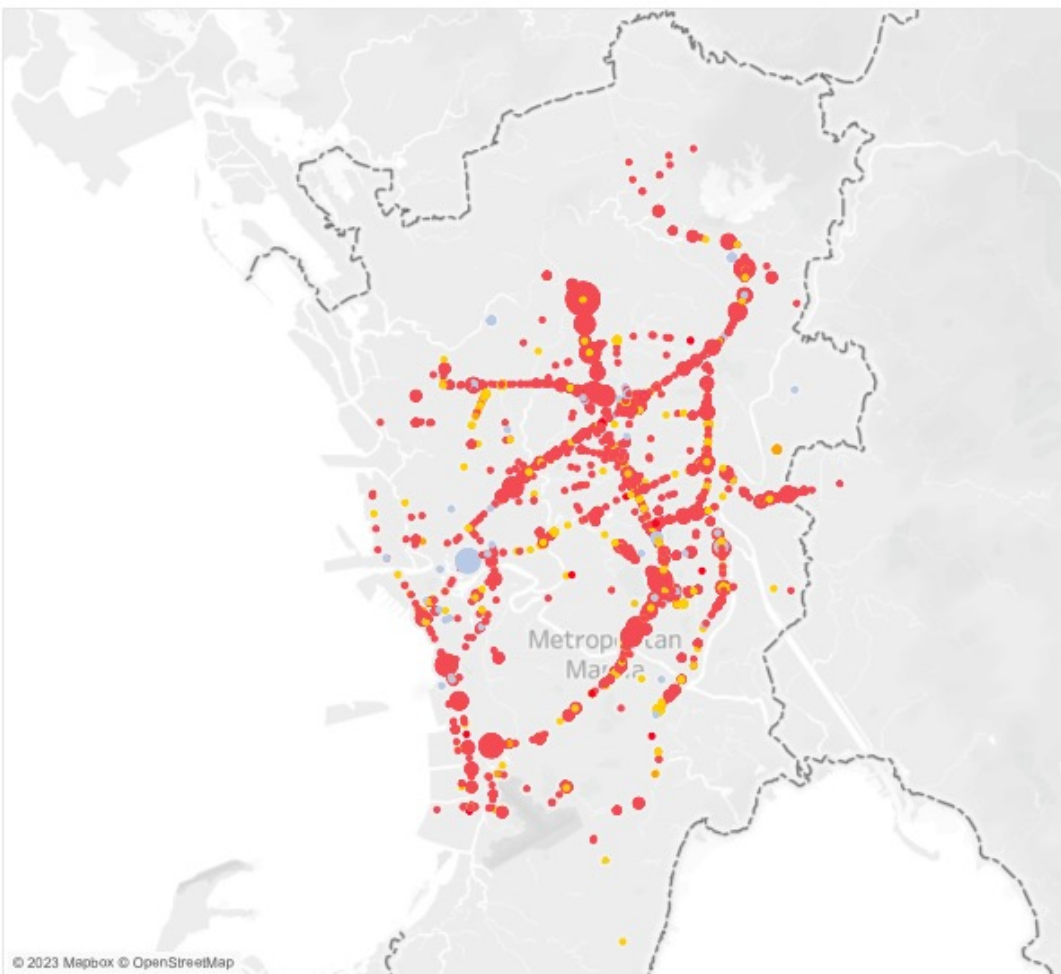
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Part II Summary

The dashboard has 4 major parts:

1. Incident Count Card
2. Month/Year Card
3. Week/Hour Card
4. Location/Map Card

End of Presentation