## BUSINESS INTELLIGENCE Tableau Activity

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SELECTED DATASET: Barcelona Accidents DATASET LINK:

The dataset selected is the Barcelona accidents dataset, which has information about injuries, number of vehicles involved, time, and locations of accidents in Barcelona in 2017.

Facts: Mild Injuries, Serious Injuries, Victims, Vehicles Involved

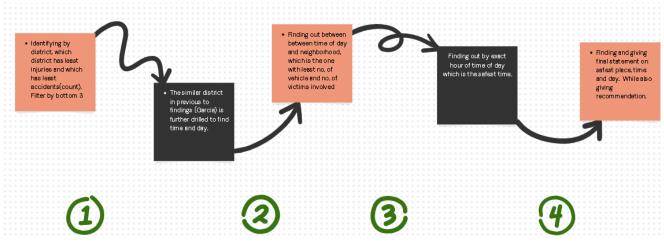
Dimensions: District Name, Neighbourhood Name, Street, Weekday,

Month, Day, Hour, Part of the Day

**Useless Variables:** none

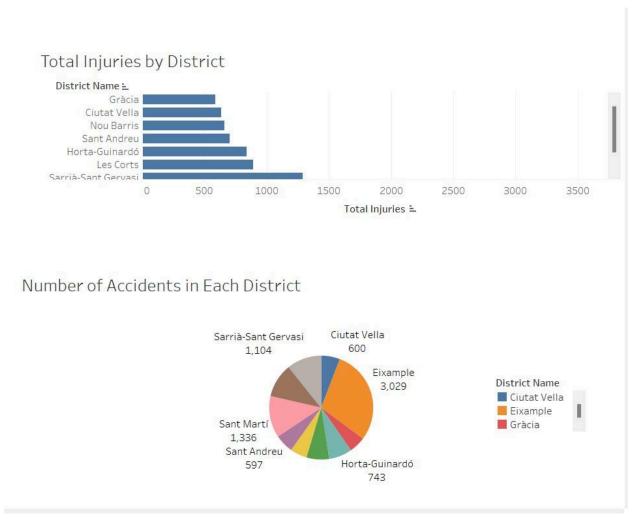
**Identified Problem:** Safest day, time and place in Barcelona.

- Defining Problem: Understanding when in Barcelona you have least chance of getting into a vehicle accident by specific to location, part of day/date.
- 2. Drill Down:

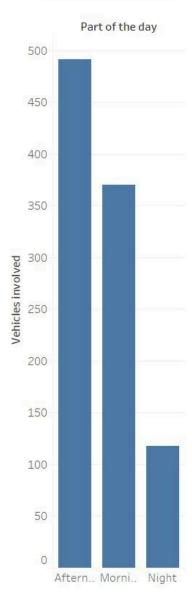


3. **Final statement:** Safest district in Barcelona is Garcia by least no. of accidents and injuries. Within Garcia El coll is the safest

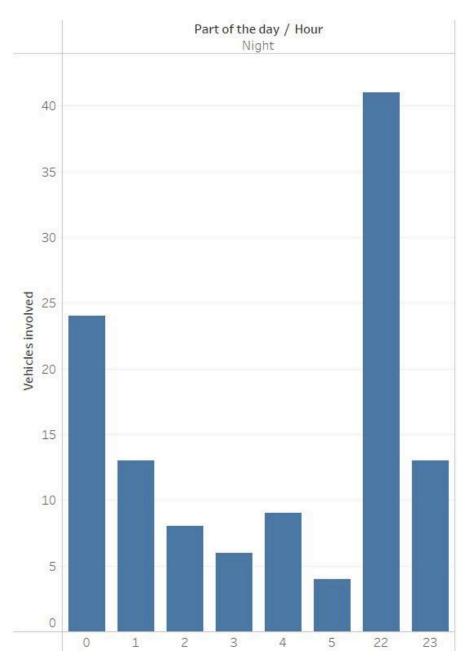
neighbourhood while part of day is night when least no. of cars are involved in accidents specifically at 5 in the night.



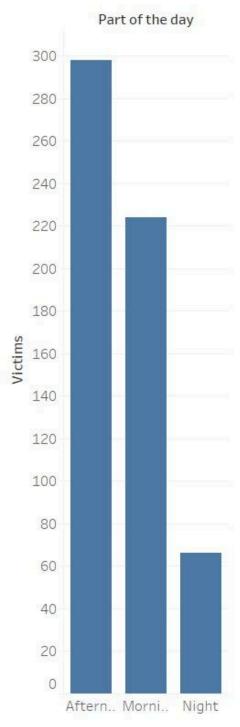
 We can see Garcia as the district with least accidents and total injuries(calculated column).



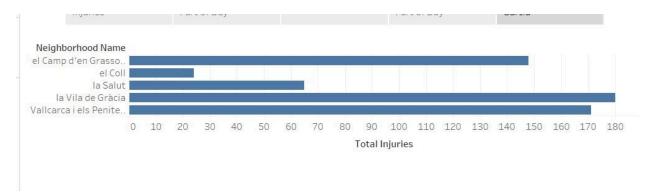
-Part of day can be seen by total vehicles involved and we can see the least are at night with less than 130.



- After further drilling down we can see by hour that least vehicles involved in crash is at 5 am with less than 5.



- Least victims are also at night with less than 80.



 Neighbourhood in Garcia with least total injuries is El Coll with less than 30 injuries overall.

4. Recommendation: Even though Garcia is safest as overall but by time may be accurate as no. of vehicles involved being low could be due to the correlation of there being lesser no. of vehicles on streets at night. A more accurate finding should include the ratio of vehicles involved in accidents to no. of vehicles on road.

## 5. Screenshot from assignment - 01:

## **Identified Problems:**

## 1. Areas With a High Number of Vehicles Involved

Areas with a high total number of vehicles involved will be analysed across several factors such as weekdays, part of the day, hours, etc.

Process Diagram:

Observe total vehicles involved in each district, identify the district with the highest total Observe total vehicles involved in each neighbor hood of the district with the highest

total

Identify
the
streets
with the
highest
total
vehicles
involved
in the
neighbor
hood
with the
highest
total

In the street with the highest total, observe total vehicles in each part of the day

Does the part with the highest total vehicles in this area also has the highest total vehicles overall in the neghbor hood?

On the street with the highest total vehicles, what day, part of the day, and hours have the highest total vehicles ?