NYC MV Collisions





- Query Integration Schema to answer business questions (not source files or tables)
 - SQL
- Create dashboards using Integration
 Schema to answer business questions
 - Tableau Online
 - Power BI Service



NYC MV Collisions: Business Questions

Metrics:

- number of collisions
- number of people injured or died
- number of people by role, such as pedestrian, injured or died
- number of vehicles involved

Dimensions

- Trend (granularity month, year), also seasonality, i.e., Spring, Summer, Fall and Winter
- Annual statistics
- Time of day (hour granularity), note you can band hours together for such things as morning commute, evening commute, late night, etc.
- Vehicle types (for the time period data is available)
- Collision causes



NYC MV Collisions: Business Questions

- Collision Analysis: This was done to reveal top causes that led to collisions and fatalities
- Time Series Analysis: Reveal what time of day, day of week, weekday/weekend have most collisions
- Fatality Analysis: This revealed that pedestrians were killed more often than other road users whenever collisions occurred

Notes:

- Create Map visualizations for some of analysis
- Create treemaps, bar charts, scatterplots and other visualizations as appropriate
- Textual reports should also be included as appropriate
- It is acceptable to have a data visualization and a textual report



NYC MV Collisions: Business Questions

- How Many Car Accidents Are There in NYC Every Year?
- Which Boroughs in New York City Have the Most Accidents?
- How Many NYC Car Accidents Result in an Injury?
- Which NYC Borough Has the Most Fatal Car Accidents?
- When Do Most New York City Car Accidents Happen?
- How Common Are Bicycle Accidents in NYC?
- How Often Are Pedestrians Involving New York Traffic Accidents?
- How Many Motorcyclists are Injured or Killed in NYC Accidents?
- Are Trucks Involved in Many New York Accidents?



Assignment 3

- Upload
 - Screen shots of dashboards
 - Upload Tableau dashboard with imported data to class Online Site
 - Upload Power BI dashboard with imported data to class Workspace
 - Create and run SQL queries to answer submit of questions and upload screen shots of completed queries

- Naming convention:
 - Prefix files with Teamxx_
 - Only assignments following the naming convention will be graded



Appendix

- Provide examples of analysis done on NYC MV Collisions data
- Use as background and to examine how others analyzed data
- Not asking to replicate their work or visualizations

Background

- Analysis of New York City Motor Vehicles Collisions, Presentations
 - Note: analysis was done in 2019 and only used collisions file/table
- Data Analysis on NYC Motor Vehicle Collision
 - Complete May 2021
- New York City Motor Vehicle Collision Data Visualization
- Completed Feb 2018

