

# **SIMPLILEARN CRIME ANALYSIS TABLEAU PROJECT**

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**In this project, I assumed the role of a Data Analyst within the research wing of the police department. The primary objective was to analyze historical crime data using Tableau to uncover patterns, trends, and geographic hotspots of criminal activity. By transforming raw data into interactive dashboards and visual stories, the aim was to assist law enforcement agencies in making informed decisions for criminal investigations, resource allocation, and preventive strategies.**

**This crime analysis project involves time series analysis, category-wise segmentation of crimes, and geographical mapping to identify high-risk areas. The dashboards are designed to deliver actionable insights in a visually intuitive manner, enabling stakeholders to quickly interpret complex datasets. Ultimately, this analysis supports the department in reducing crime rates and improving public safety through data-driven strategies.**

#### **Action**

**Created four interactive Tableau dashboards to support the police department in analyzing crime data:**

- 1.Overall Crime Statistics Dashboard – Mapped crime locations on a geo-map, highlighted most common incidents, and included a live feed showing total and recent crimes.**
- 2.Time Period Analysis Dashboard – Analyzed crime patterns by day, hour, and time blocks (morning to night) to identify peak crime periods.**
- 3.Trend Analysis Dashboard – Visualized year-over-year changes in crime rates and compared incident trends for the same date/time across years.**
- 4.Comparative Analysis Dashboard – Compared incidents with and without arrests, analyzed severity by category, and added filters for type and location for deeper insights.**

Tableau Public - Crime analysis Project

FileDataWindowHelp

Connections

Crime\_data

Microsoft Excel

Sheets

Cleaned with Data Interpreter

Review the results. (To undo changes, clear the check box.)

Sheet1

Sheet1 A1:V10000

New Union

New Table Extension

Sheet1 (Crime\_data)

Filters0Add

Sheet1 A1:V10000

Need more data?

Drag tables here to relate them. [Learn more](#)

Sheet1 A1:V10000

34 fields 247797 rows

100rows

Name

Sheet1 A1:V10000

Fields

| Type | Field Name    | Physical Table   | Remo...    |
|------|---------------|------------------|------------|
| #    | ID            | Sheet1 A1:V10000 | ID         |
| Abc  | Case Number   | Sheet1 A1:V10000 | Case N...  |
| 📅    | Date          | Sheet1 A1:V10000 | Date       |
| 🔢    | FormattedDate | Calculation      | Calcula... |
| Abc  | Block         | Sheet1 A1:V10000 | Block      |
| Abc  | UCR           | Sheet1 A1:V10000 | UCR        |

| #                | Abc              | 📅                      | 🔢              | Abc                        | Abc              | Abc                        | Abc                | 🔢           |
|------------------|------------------|------------------------|----------------|----------------------------|------------------|----------------------------|--------------------|-------------|
| Sheet1 A1:V10000 | Sheet1 A1:V10000 | Sheet1 A1:V10000       | Calculation    | Sheet1 A1:V10000           | Sheet1 A1:V10000 | Sheet1 A1:V10000           | Sheet1 A1:V10000   | Calculation |
| ID               | Case Number      | Date                   | FormattedDate  | Block                      | UCR              | Primary Type               | Primary type count |             |
| 11614273         | JC174951         | 01-01-2017 12:00:00 am | 1/January/2017 | 018XX S CALIFORNIA AVE     | 1153             | DECEPTIVE PRACTICE         |                    |             |
| 11622471         | JC184902         | 01-01-2017 12:00:00 am | 1/January/2017 | 013XX S LAWNDAL E AVE      | 1153             | DECEPTIVE PRACTICE         |                    |             |
| 11255786         | JB185271         | 01-01-2017 12:00:00 am | 1/January/2017 | 045XX N HAZEL ST           | 1155             | DECEPTIVE PRACTICE         |                    |             |
| 11259747         | JB190580         | 01-01-2017 12:00:00 am | 1/January/2017 | 038XX W ARMITAGE AVE       | 1153             | DECEPTIVE PRACTICE         |                    |             |
| 11267468         | JB195629         | 01-01-2017 12:00:00 am | 1/January/2017 | 017XX W HENDERSON ST       | 1752             | OFFENSE INVOLVING CHILD... |                    |             |
| 10824428         | JA125662         | 01-01-2017 12:00:00 am | 1/January/2017 | 047XX S GREENWOOD AVE      | 1154             | DECEPTIVE PRACTICE         |                    |             |
| 10827683         | JA126646         | 01-01-2017 12:00:00 am | 1/January/2017 | 0000X W TERMINAL ST        | 810              | THEFT                      |                    |             |
| 10801101         | JA100031         | 01-01-2017 12:00:00 am | 1/January/2017 | 074XX S SOUTH CHICAGO A... | 1320             | CRIMINAL DAMAGE            |                    |             |
| 10801104         | JA100015         | 01-01-2017 12:00:00 am | 1/January/2017 | 004XX W 66TH ST            | 486              | BATTERY                    |                    |             |
| 10801111         | JA100033         | 01-01-2017 12:00:00 am | 1/January/2017 | 010XX W ADDISON ST         | 502P             | OTHER OFFENSE              |                    |             |

Data Source

Crime Locations

Most Common Criminal Incidents

Live Crime Feed

Introductory Dashboard

Distribution Count of Crime Inci...

Percentage of Incident Reportin...

Time Period Analysis Dashbo...

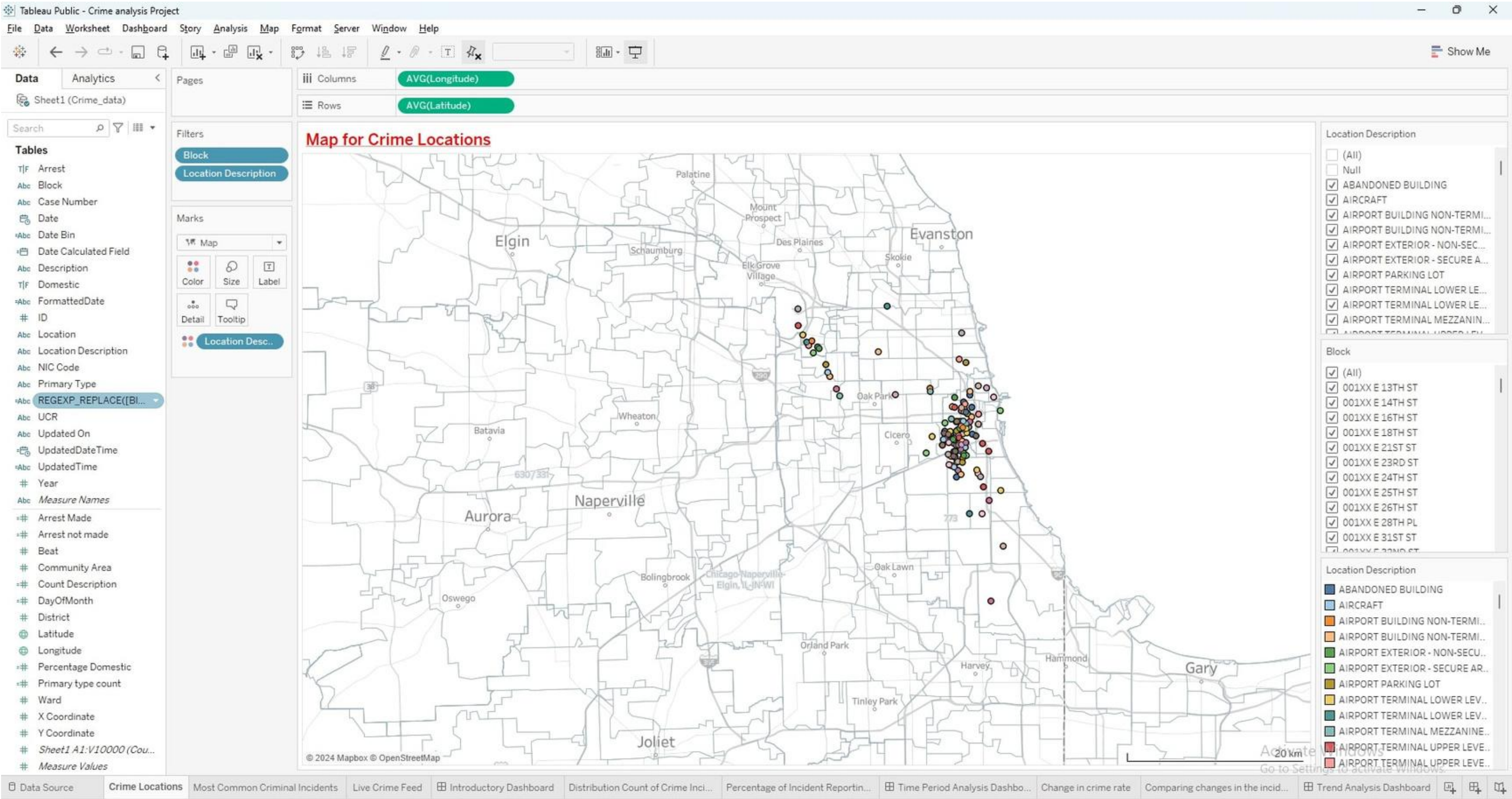
Change in crime rate

Comparing changes in the incid...

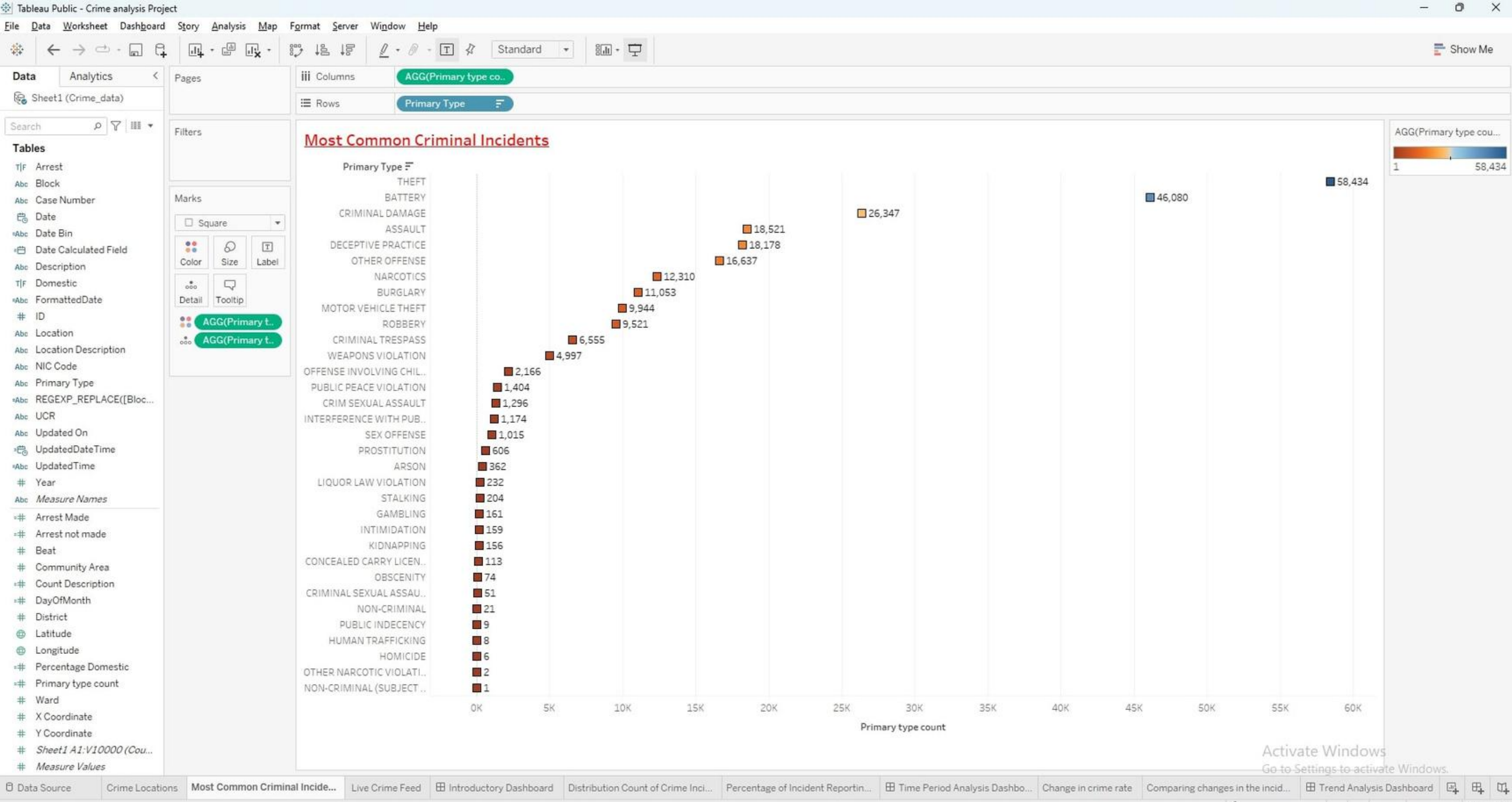
Trend Analysis Dashboard

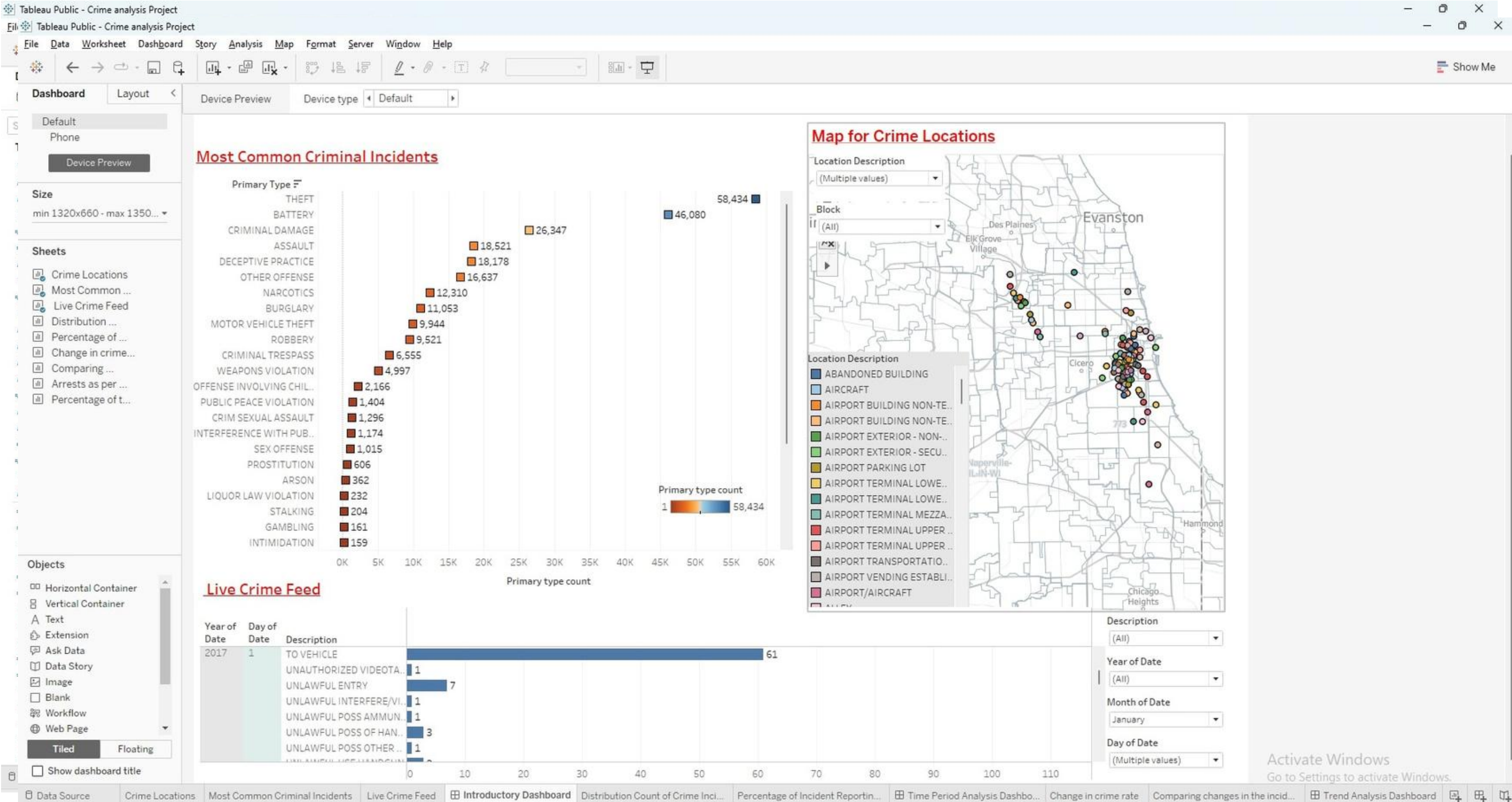
Activate Windows

Go to Settings to activate Windows.

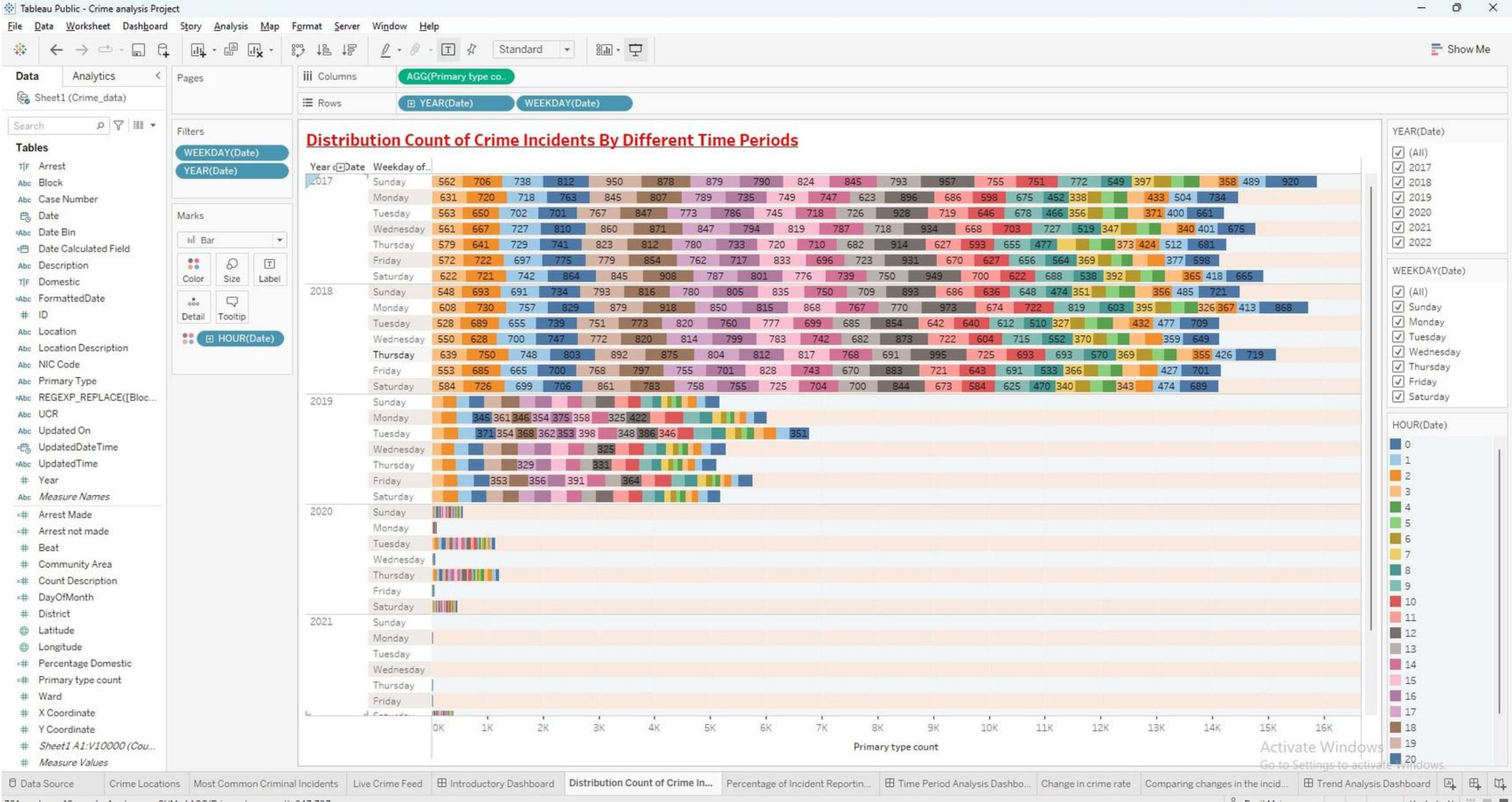






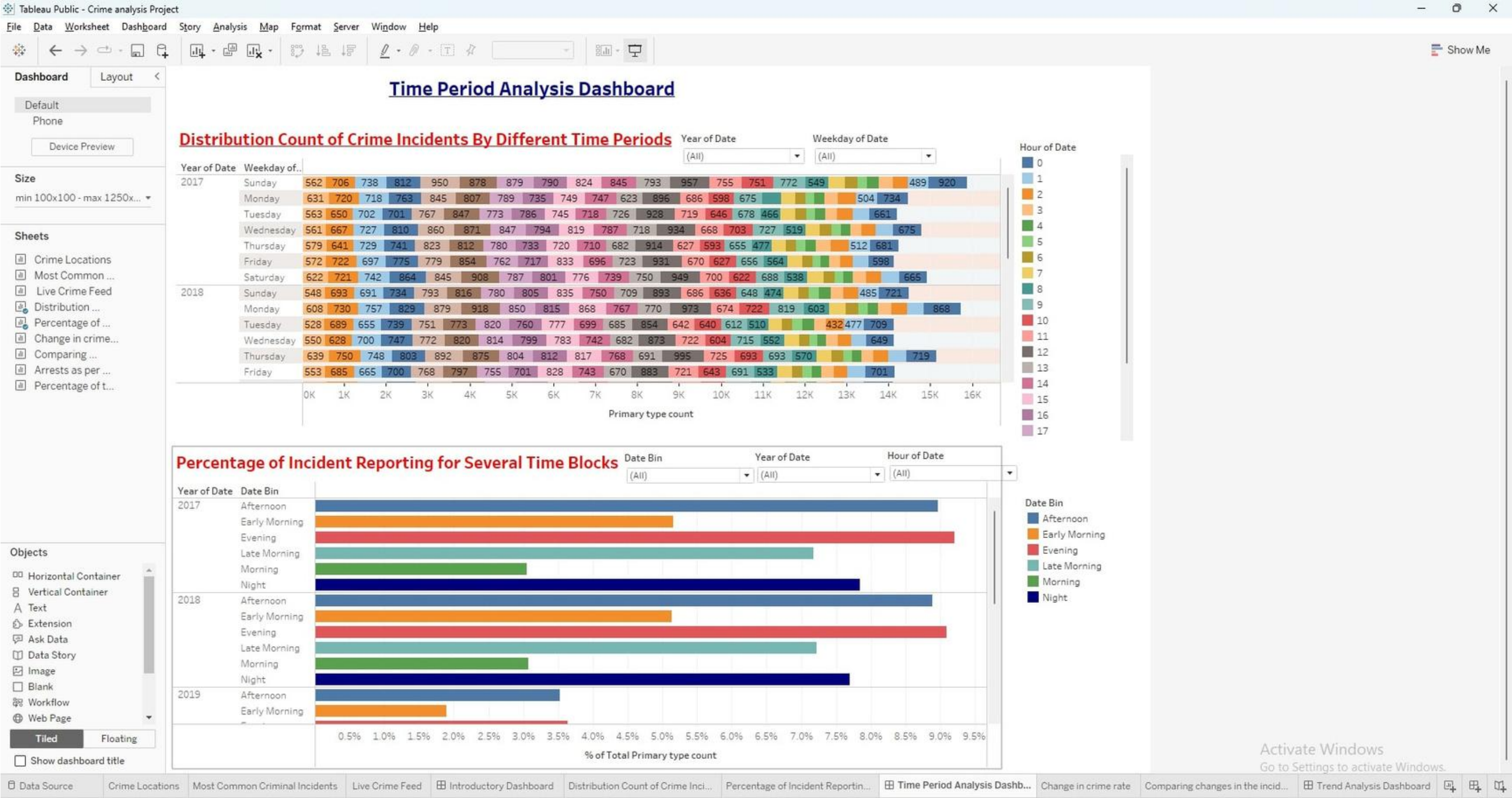


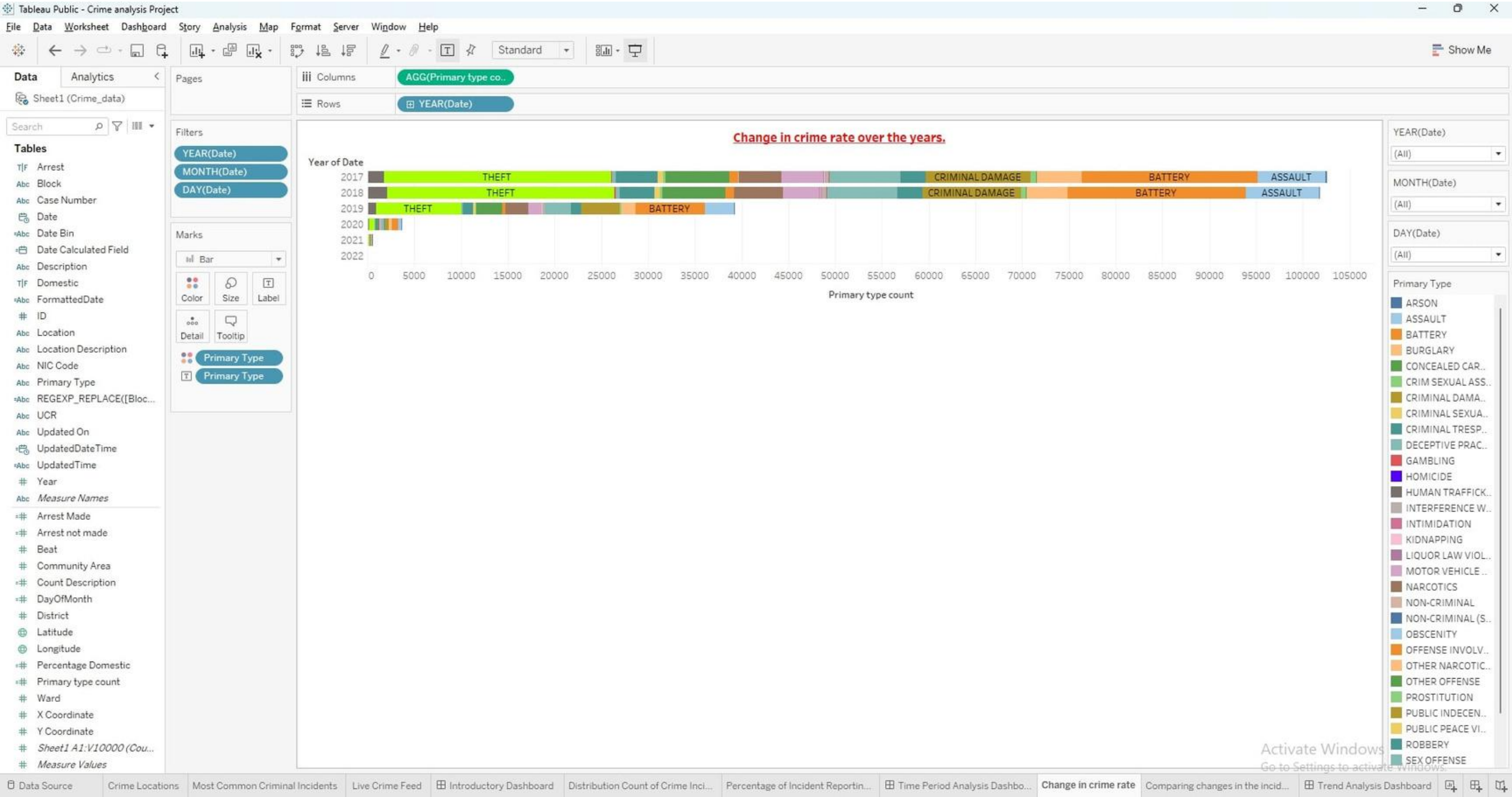




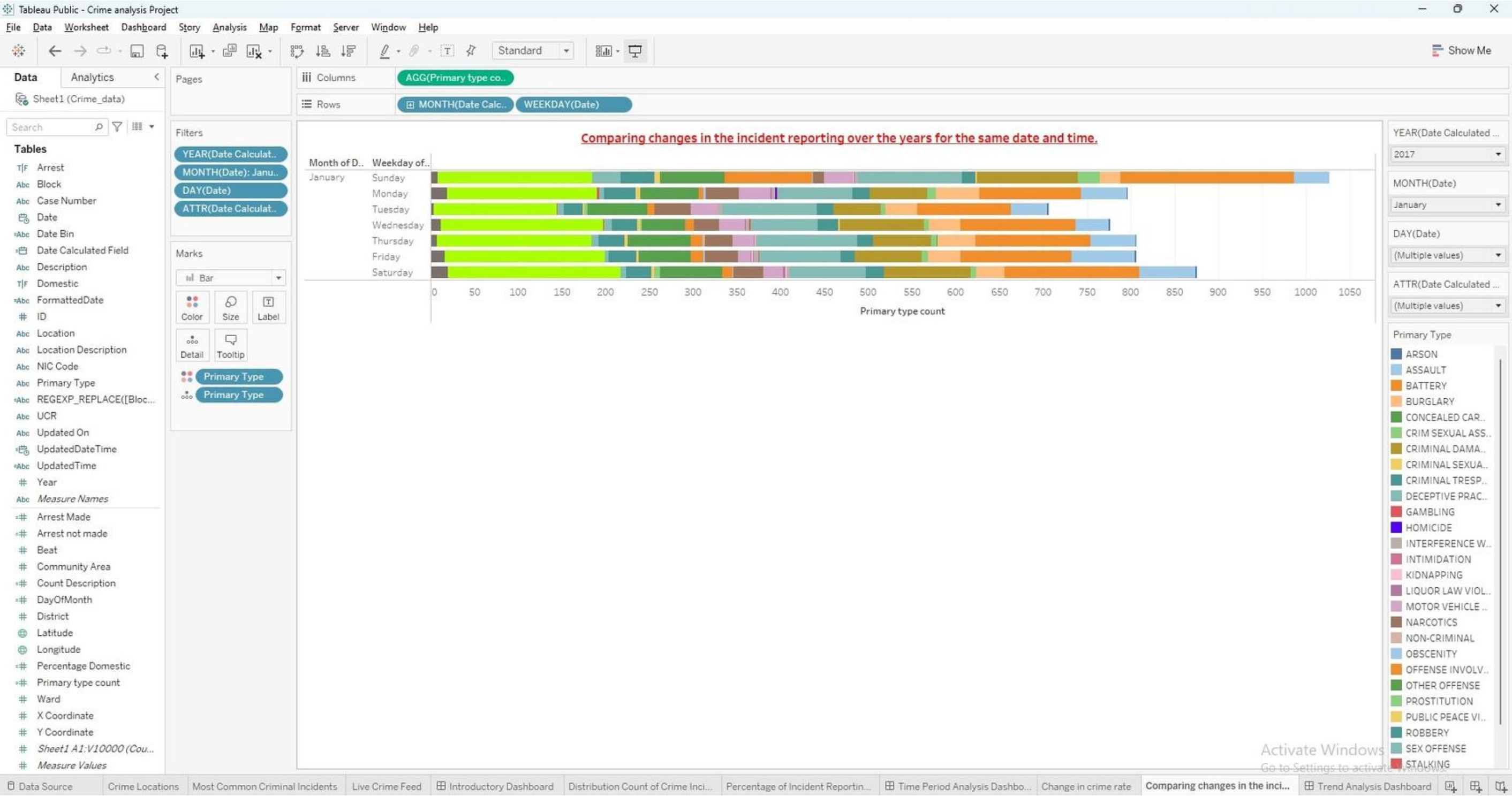




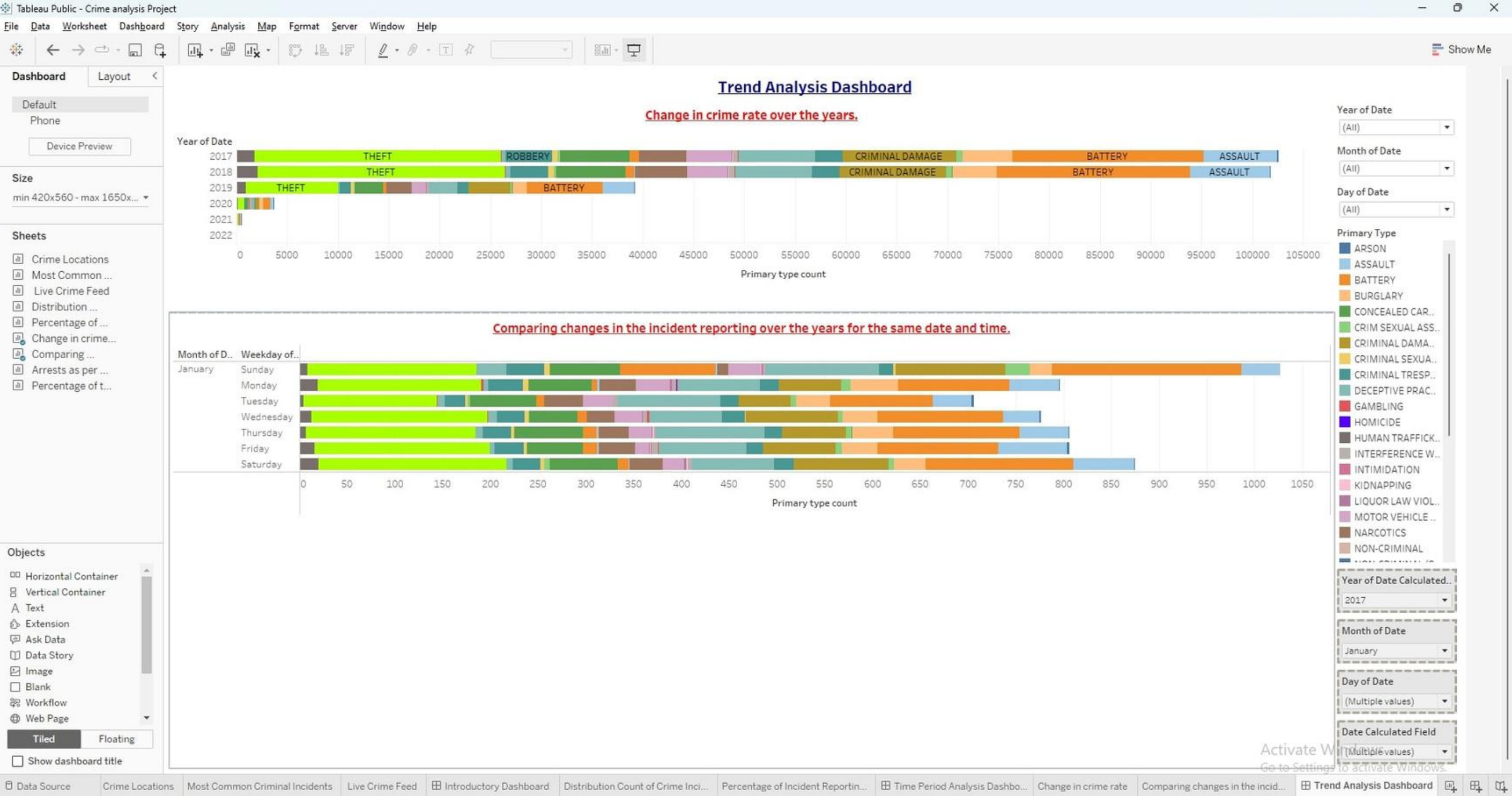


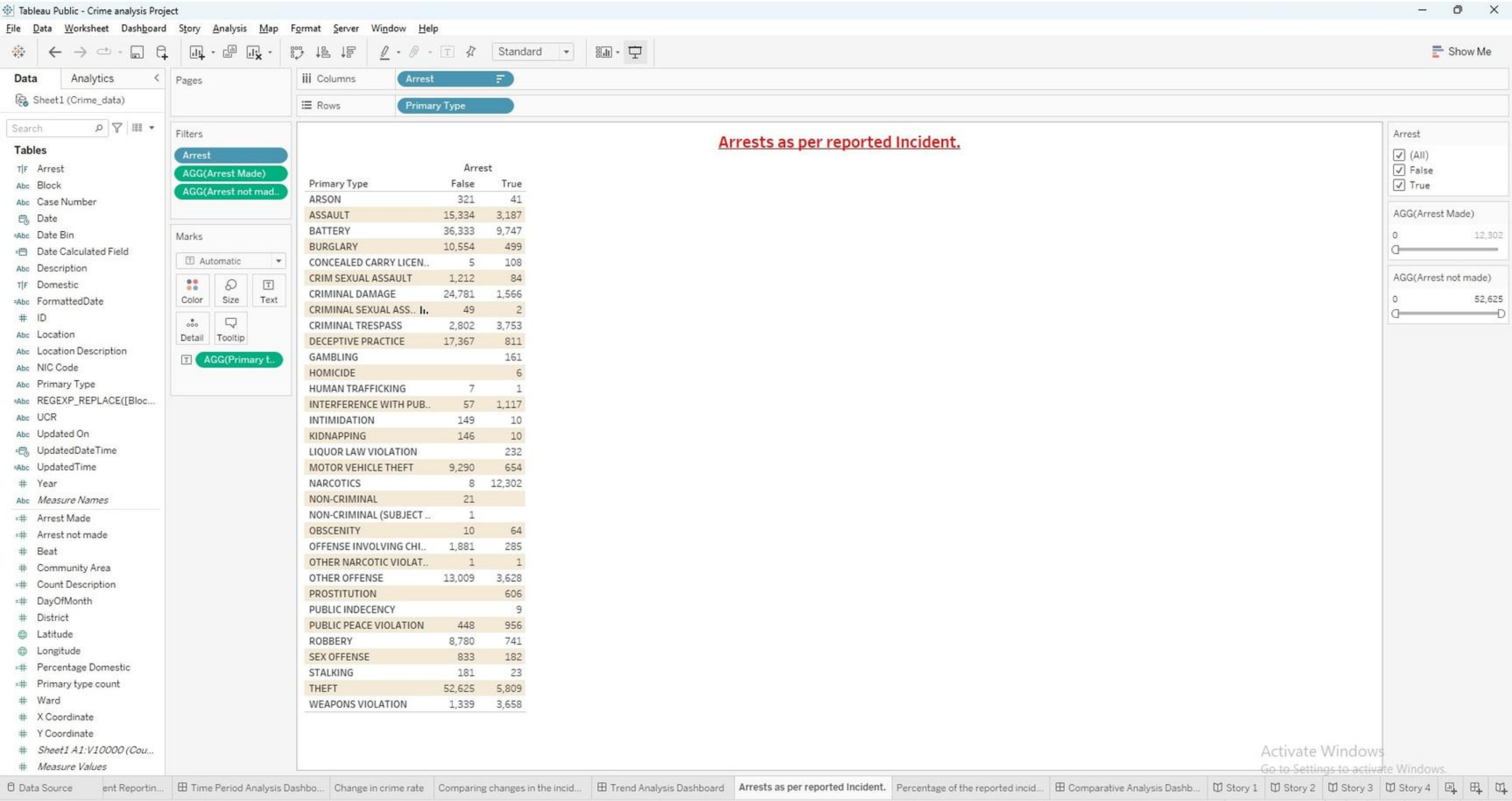


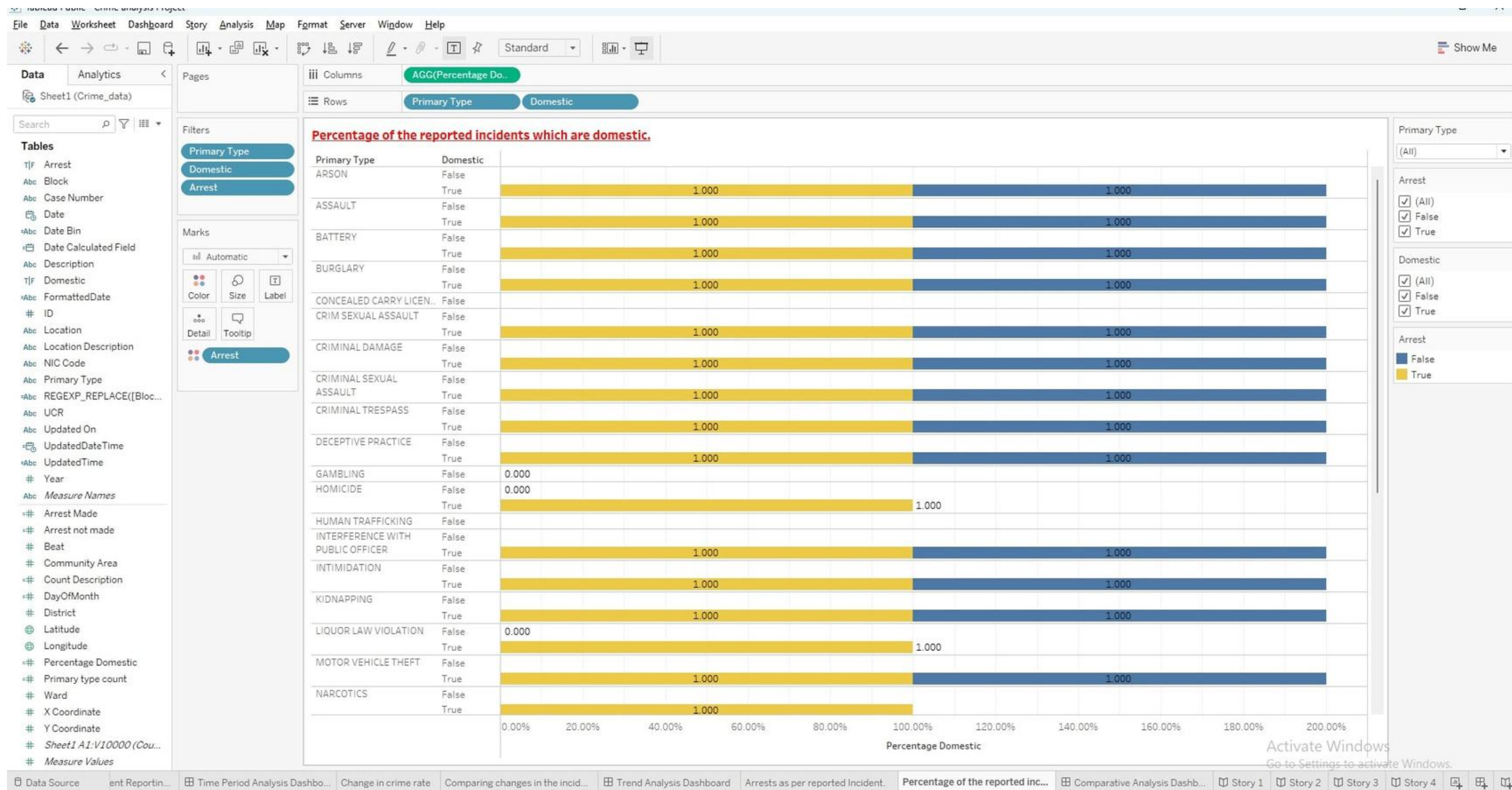










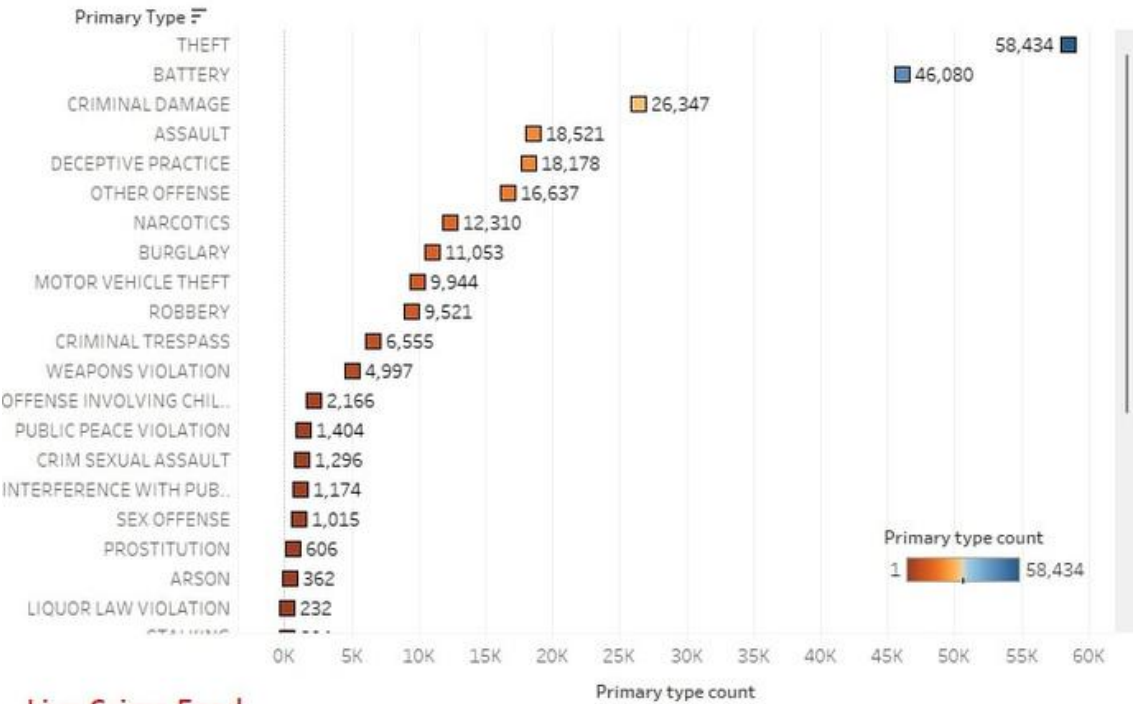




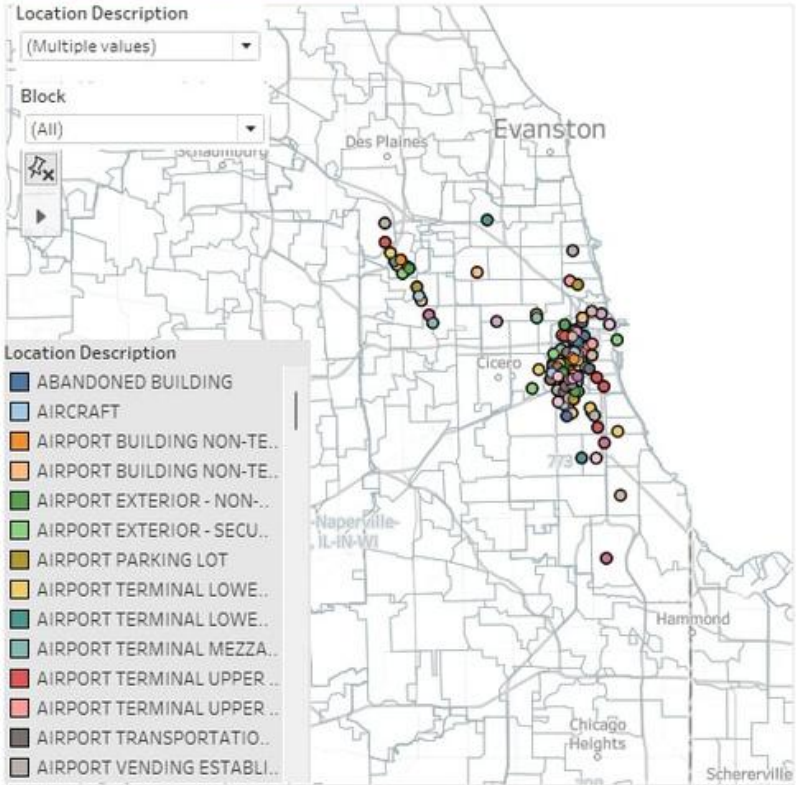


Overall Crime Statistics Dashboard

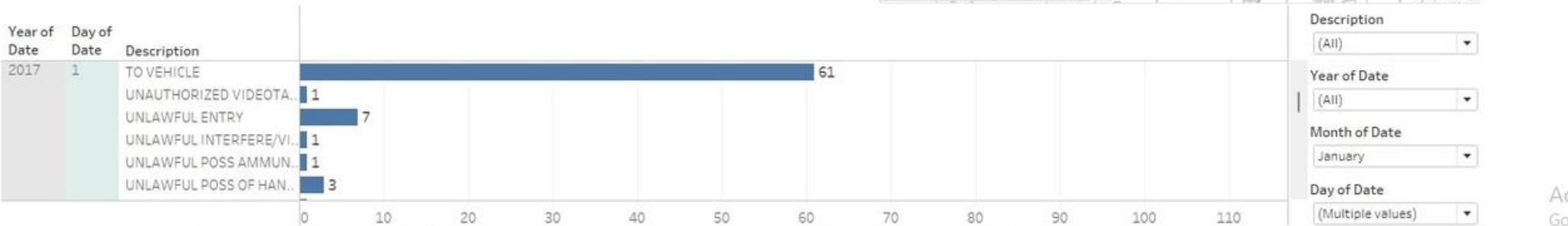
Most Common Criminal Incidents



Map for Crime Locations

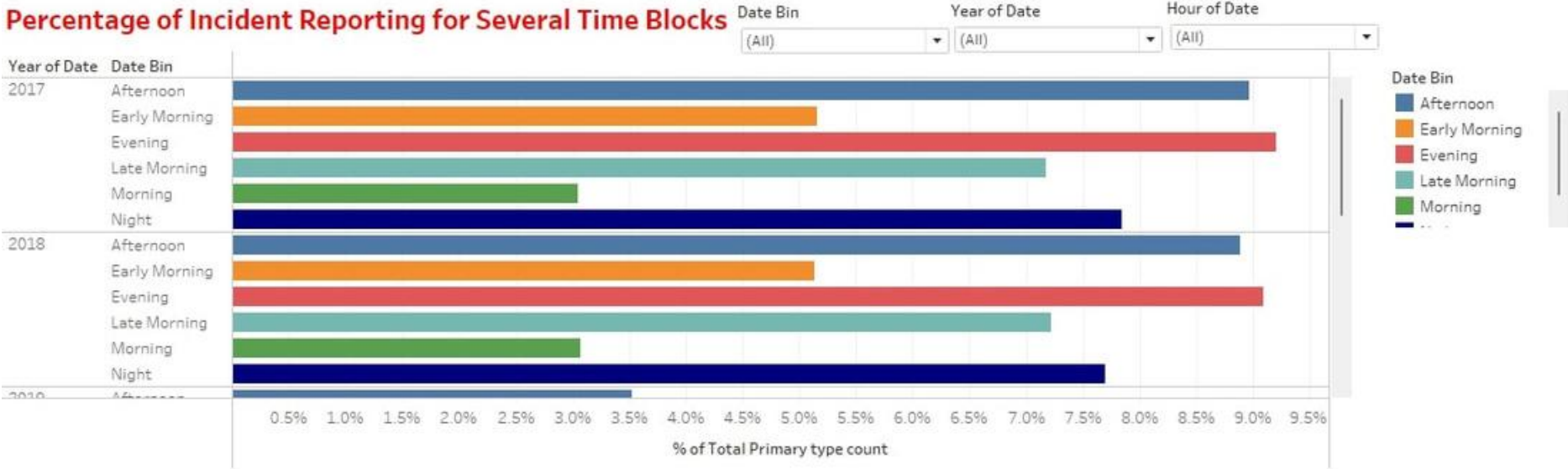
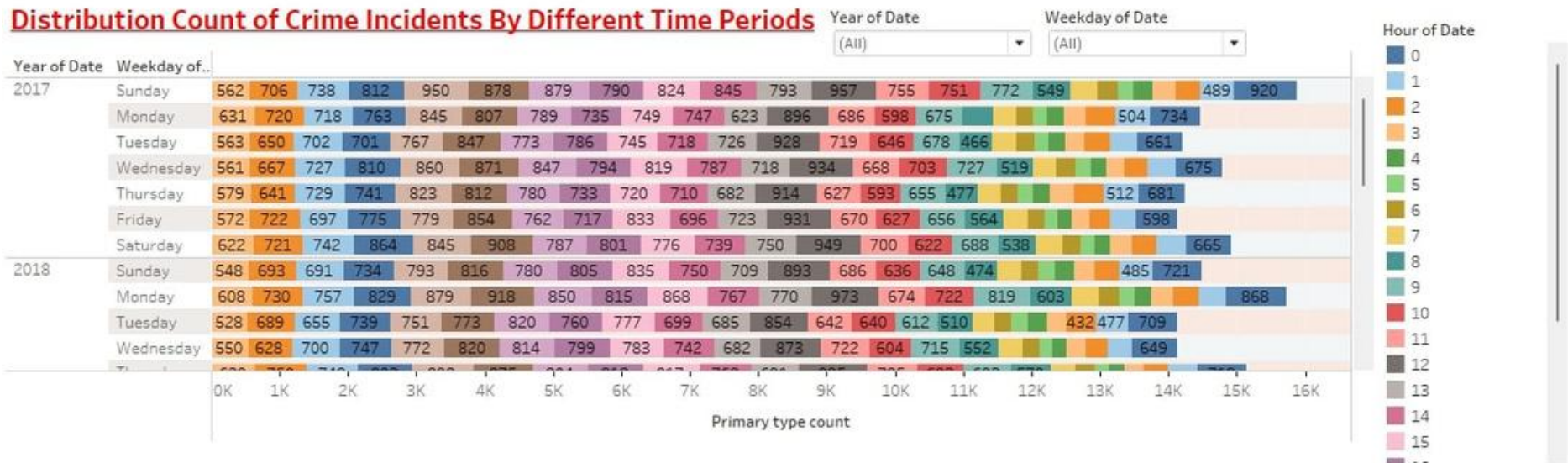


Live Crime Feed





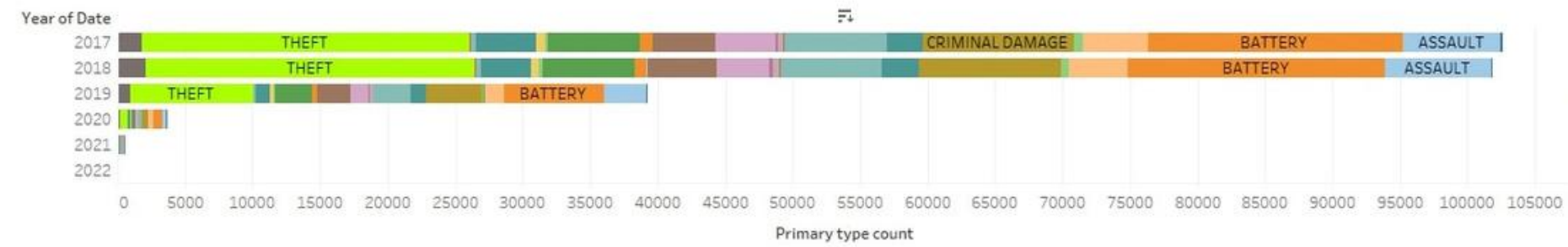
Time Period Analysis Dashboard





### Trend Analysis Dashboard

Change in crime rate over the years.



Year of Date  
(All)

Month of Date  
(All)

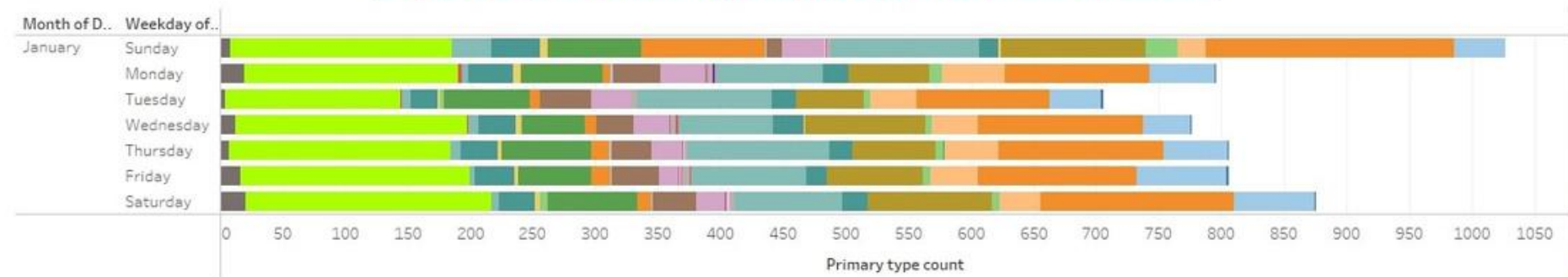
Day of Date  
(All)

Year of Date Calculated..  
2017

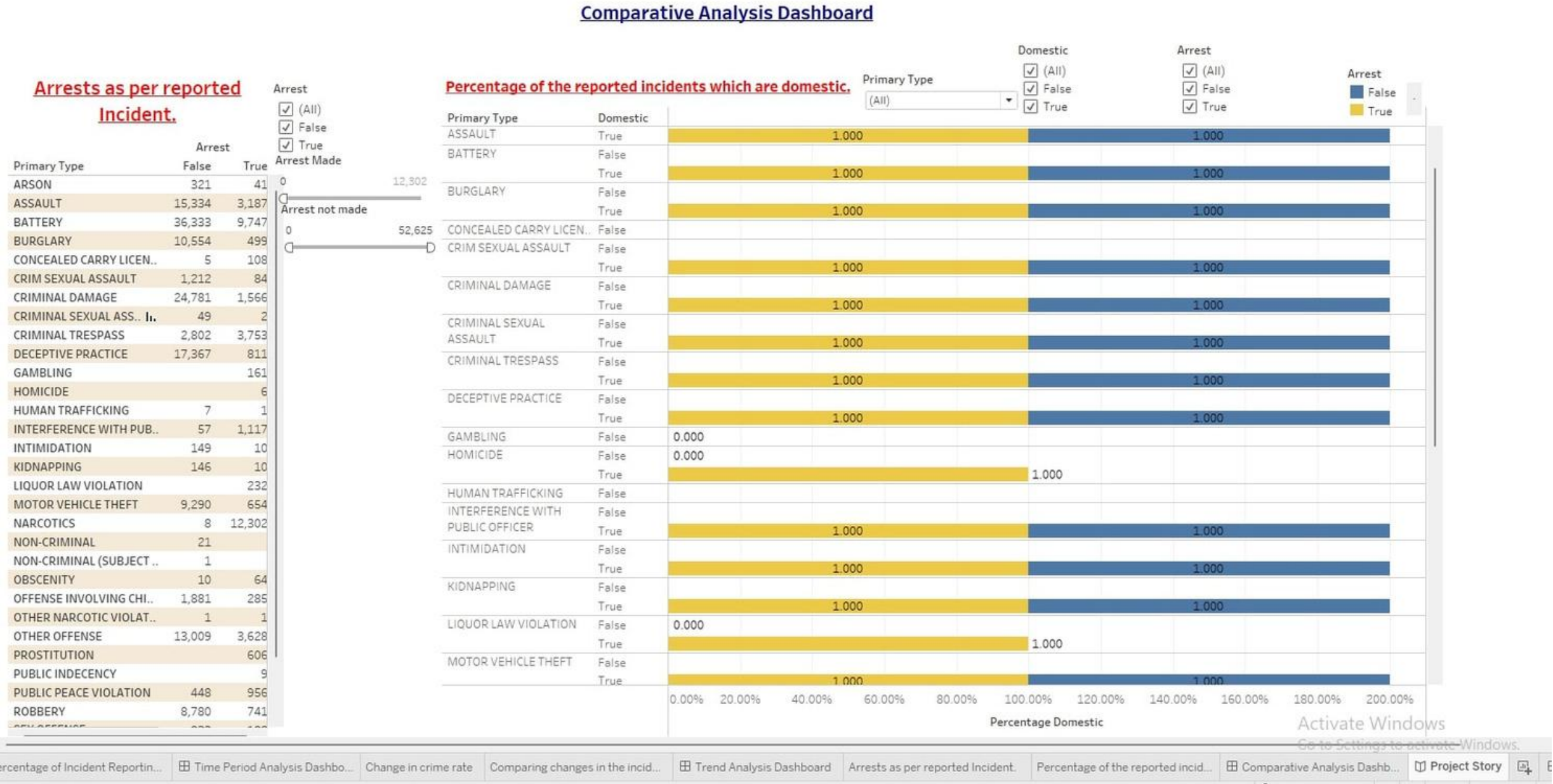
Month of Date  
January

Day of Date  
(Multiple values)

Date Calculated Field  
(Multiple values)



- Primary Type
- ARSON
  - ASSAULT
  - BATTERY
  - BURGLARY
  - CONCEALED CAR..
  - CRIM SEXUAL ASS..
  - CRIMINAL DAMA..
  - CRIMINAL SEXUA..
  - CRIMINAL TRESP..
  - DECEPTIVE PRAC..
  - GAMBLING
  - HOMICIDE
  - HUMAN TRAFFICK..
  - INTERFERENCE W..
  - INTIMIDATION
  - KIDNAPPING



percentage of Incident Reportin...

Time Period Analysis Dashbo...

Change in crime rate

Comparing changes in the incid...

Trend Analysis Dashboard

Arrests as per reported Incident.

Percentage of the reported incid...

Comparative Analysis Dashb...

Project Story

THANK YOU