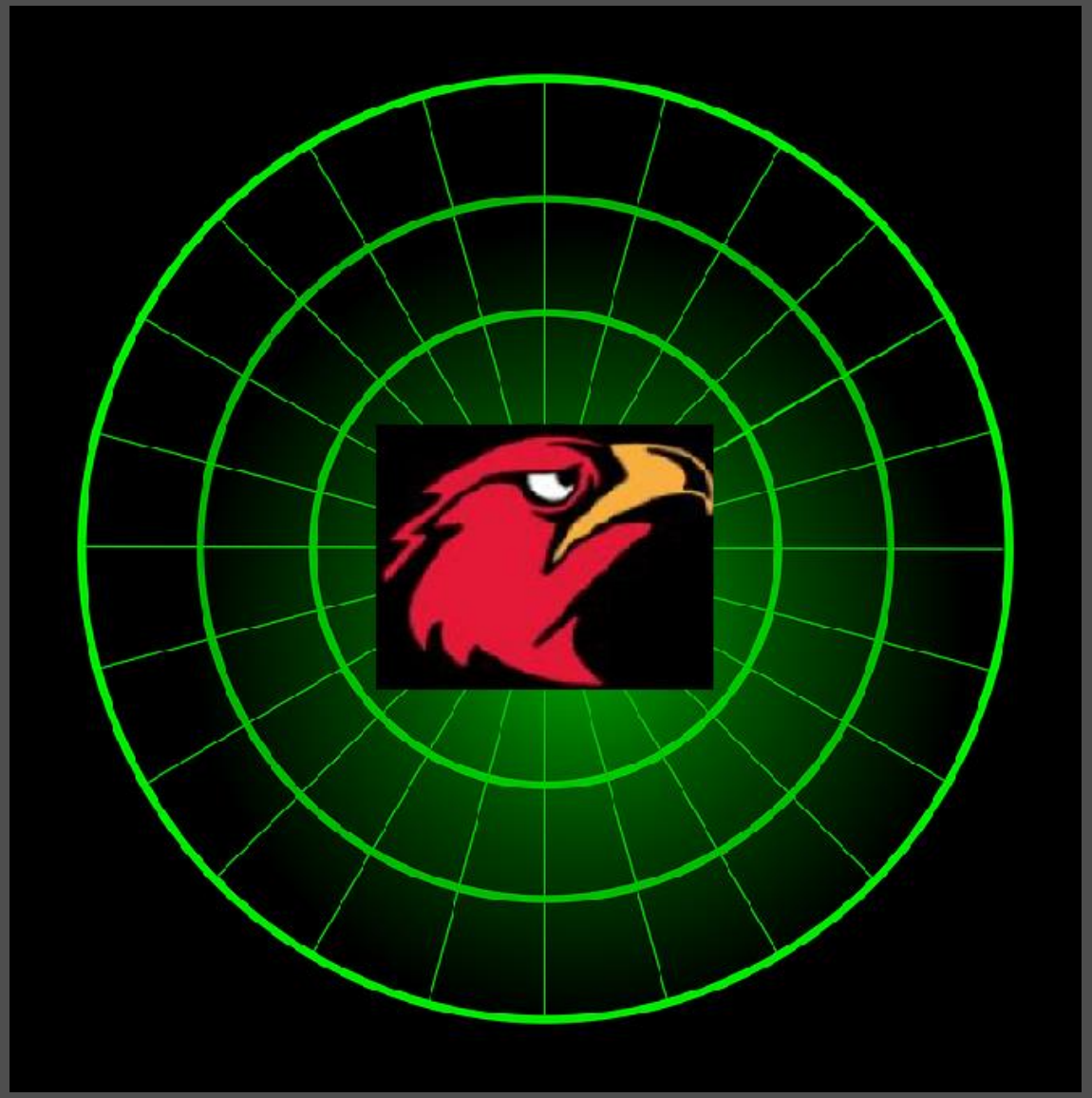

Chicago Crime Hawk

- Rajesh Kumar Rajendran
- Madhumitha Ravi

Why Chicago Crime Hawk?

- Ignorance and lack of public awareness on the various crimes happening around is potentially the biggest asset for a criminal.
- This fundamental flaw needs to be combated to avoid multiple crimes happening around any city.
- Due to lack of awareness, people are more susceptible to threat.
- To overcome this predicament, we are proposing a solution in form of an Android application.
- This app provides location based crime data that is sourced from government agencies.

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What is Chicago Crime Hawk?

- Using Google API, we are pin pointing the problem areas in a particular locality with indexes on various crime occurrences and statistics.
- There would be a specific differential colouring pattern that would be used throughout the map, which helps users of any age.
- Initially, the solution would be implemented for a limited population. It is aimed at the streets bordering Chicago.
- The app collects real time data from users (who have faced any type of criminal activity) using Google forms which in turn would be fed to the database of the application.

Benefits

- It would benefit students and faculties of the college, which in future would be implemented on a larger scale of population.

- The following are the benefits of the application.

  - Up to date crime data.
  - Contains various data helpful for general public. Data related to Police Stations, Fire Stations, Hospitals and Bus stops with phone numbers and TTY (Teletype for people with hearing impairment)
  - Various crime topologies like Theft, Battery, Assault, Homicide and Sexual assault.
  - Acts as an liaison between Public safety enforcement officials and public.
  - Assists international students on navigating to safe routes.

Requirements

- **For Android users**

  - *Hardware requirements*
    - RAM : a minimum of 512 MB.
    - MEMORY : minimum of 50 MB.

  - *Software requirements*
    - OS : Android 5.0 Lollipop and Up

- **- For Development of App**

  - *Hardware requirements*
    - RAM : a minimum of 2 GB.
    - MEMORY : minimum of 50 MB.

  - *Software requirements*
    - IDE : Android Studio

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Topologies

RED - FATAL

- CRIMINAL DAMAGE
- CRIMINAL TRESPASS
- HOMICIDE
- KIDNAPPING
- OFFENSE INVOLVING CHILDREN
- OTHER NARCOTIC VIOLATION
- PUBLIC PEACE VIOLATION
- WEAPONS VIOLATION
- NARCOTICS

BLUE – PROPERTY CRIMES

- ARSON
- BURGLARY
- INTERFERENCE WITH PUBLIC OFFICER
- LIQUOR LAW VIOLATION
- THEFT
- ROBBERY
- MOTOR VEHICLE THEFT

YELLOW – PETTY CRIMES

- ASSAULT
- BATTERY
- CONCEALED CARRY LICENSE VIOLATION
- DECEPTIVE PRACTICE
- GAMBLING
- OTHER OFFENSE

PINK – SEXUAL CRIMES

- INTIMIDATION
- OBSCENITY
- PUBLIC INDECENCY
- STALKING
- CRIMINAL SEXUAL ASSAULT
- HUMAN TRAFFICKING
- PROSTITUTION
- SEX OFFENSE

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Breakdown of Timeline

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Division of Work

- Rajesh Kumar Rajendran
  - Google Maps API module
  - GPS Tracker module
  - Application Testing
  - Definition of future enhancements
  - Database connectivity module
- Madhumitha Ravi
  - List Adapter module
  - Data mining to gather required data
  - Data Visualization module
  - Data Analysis

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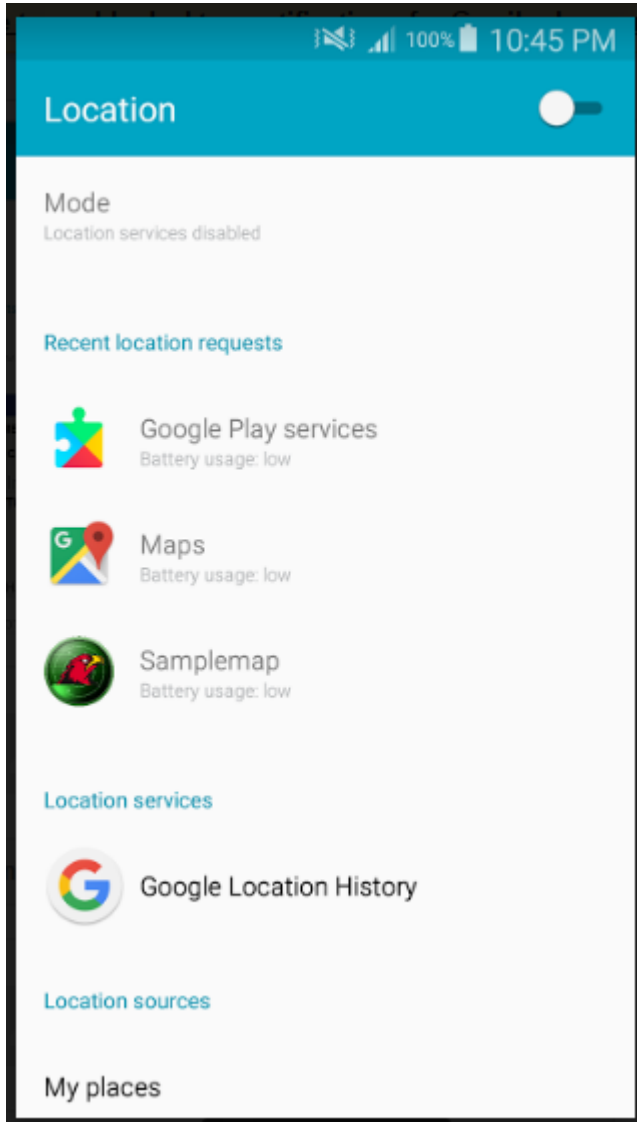
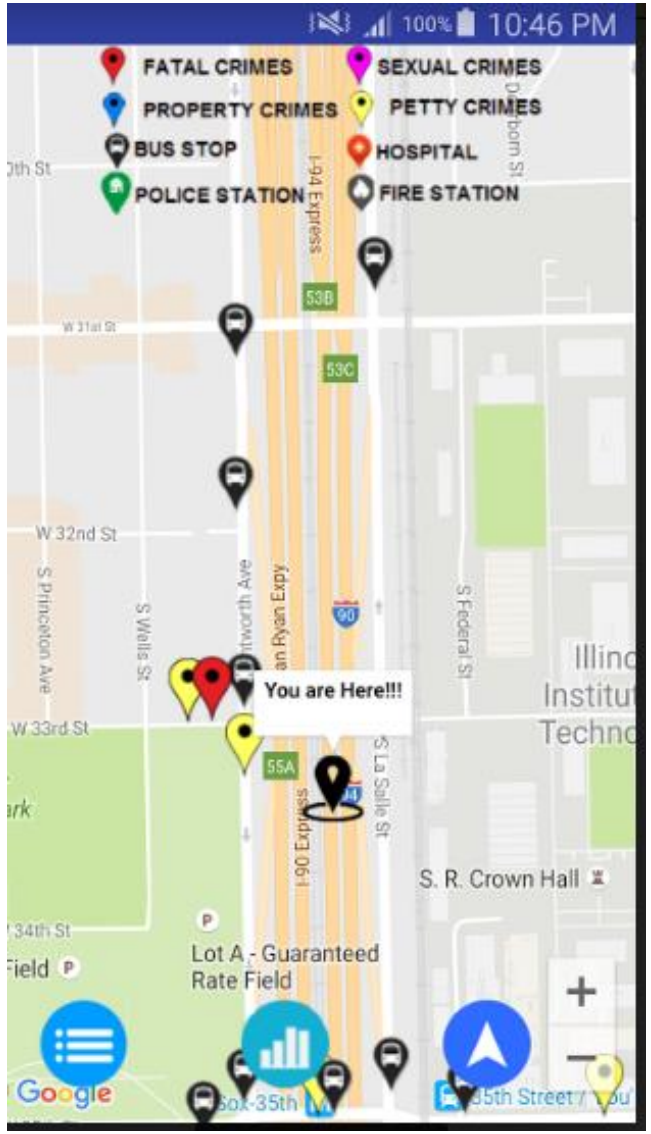
Application Screenshots





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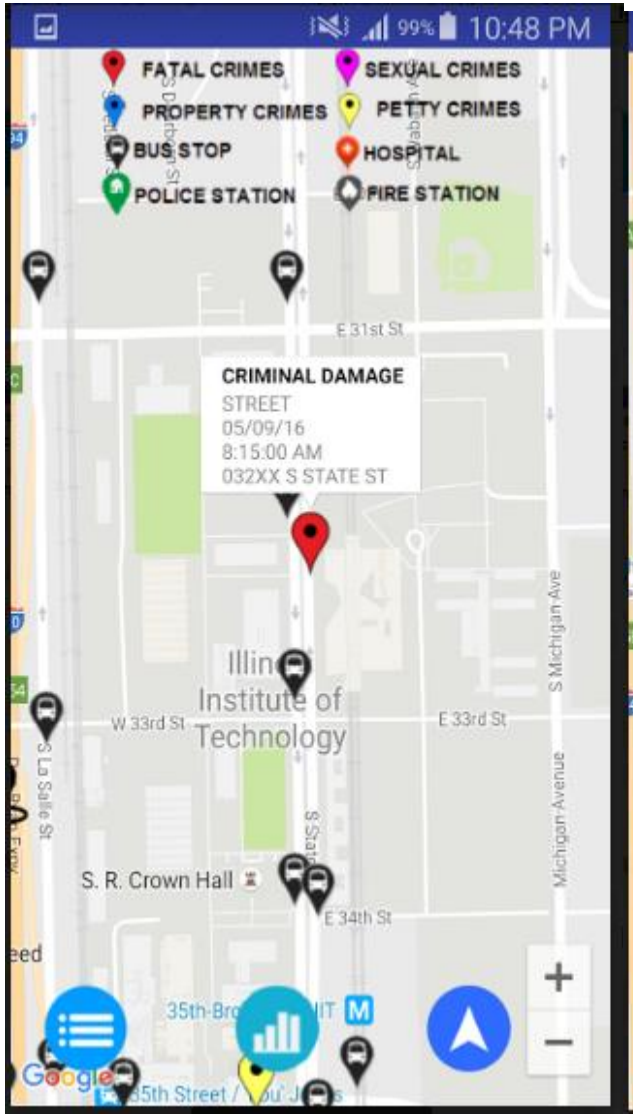

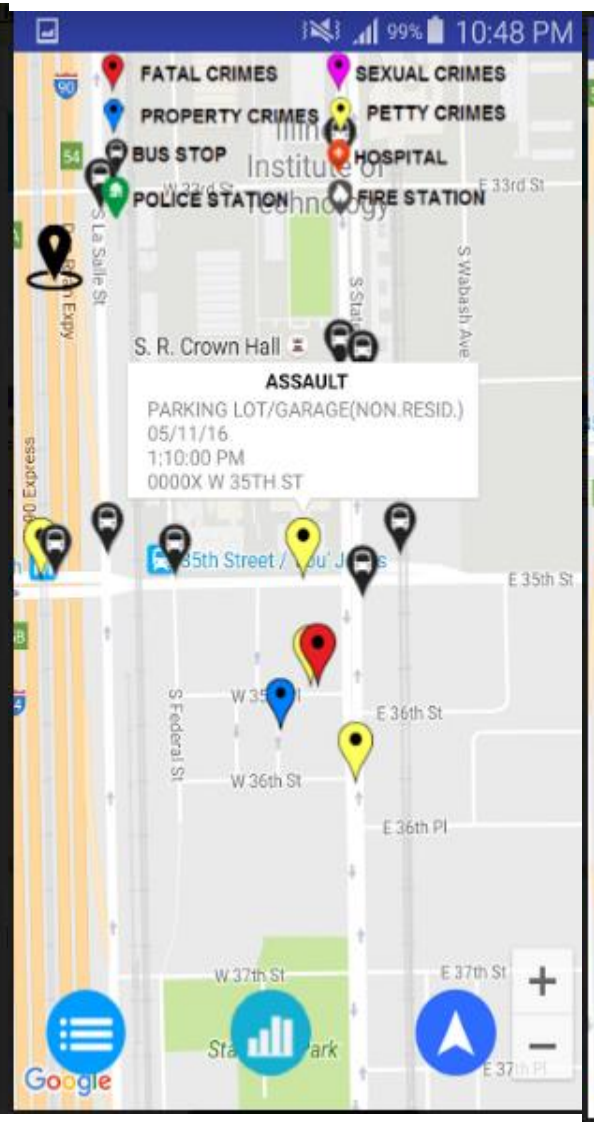

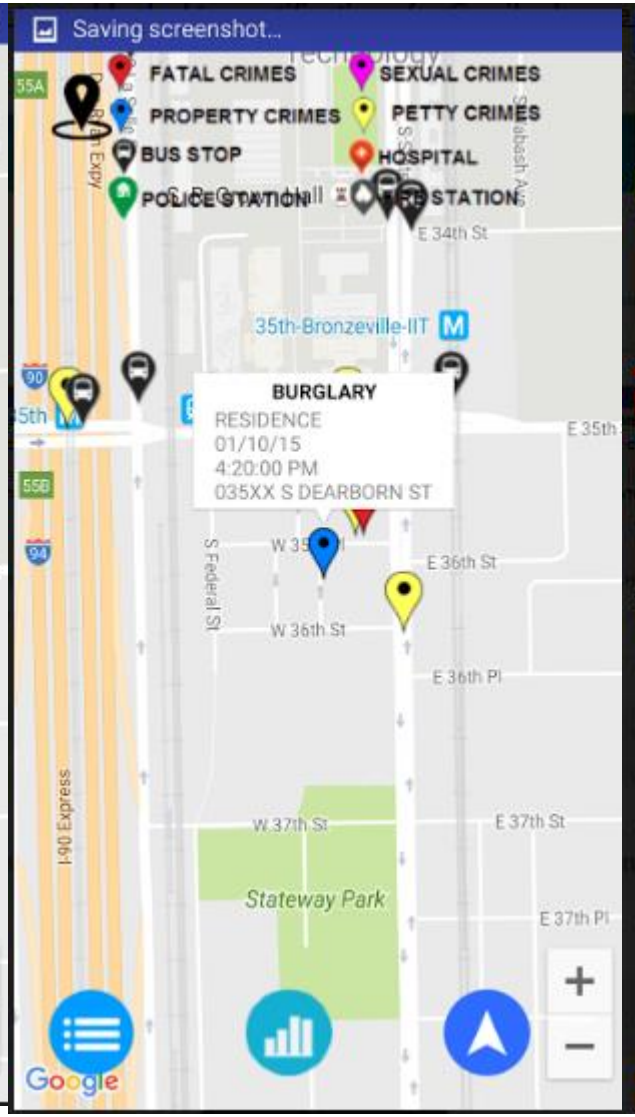

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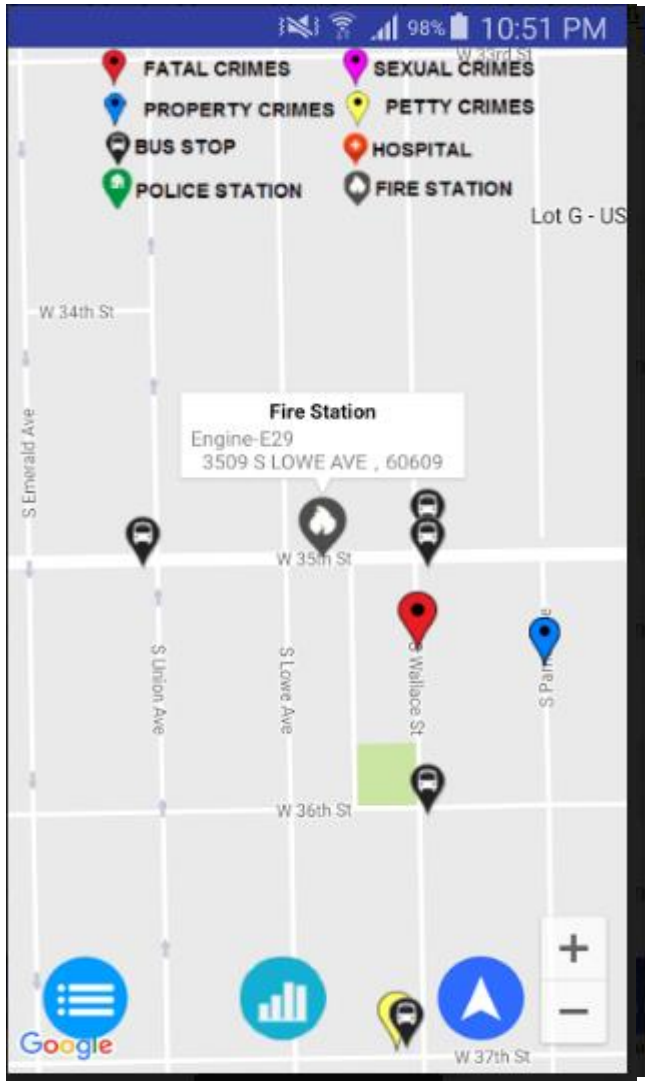

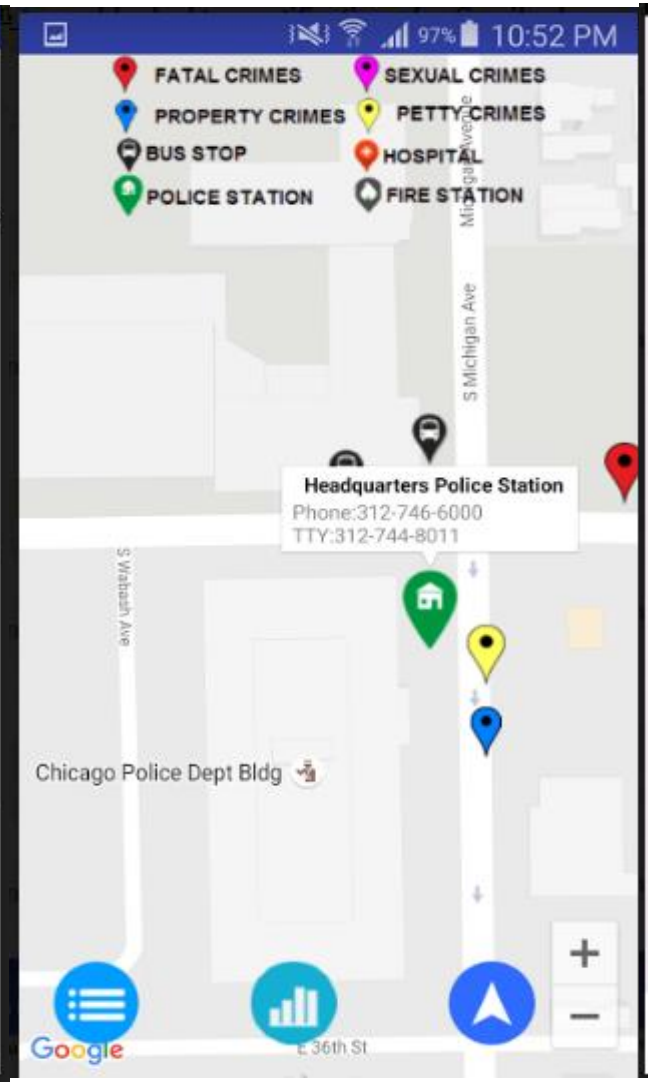

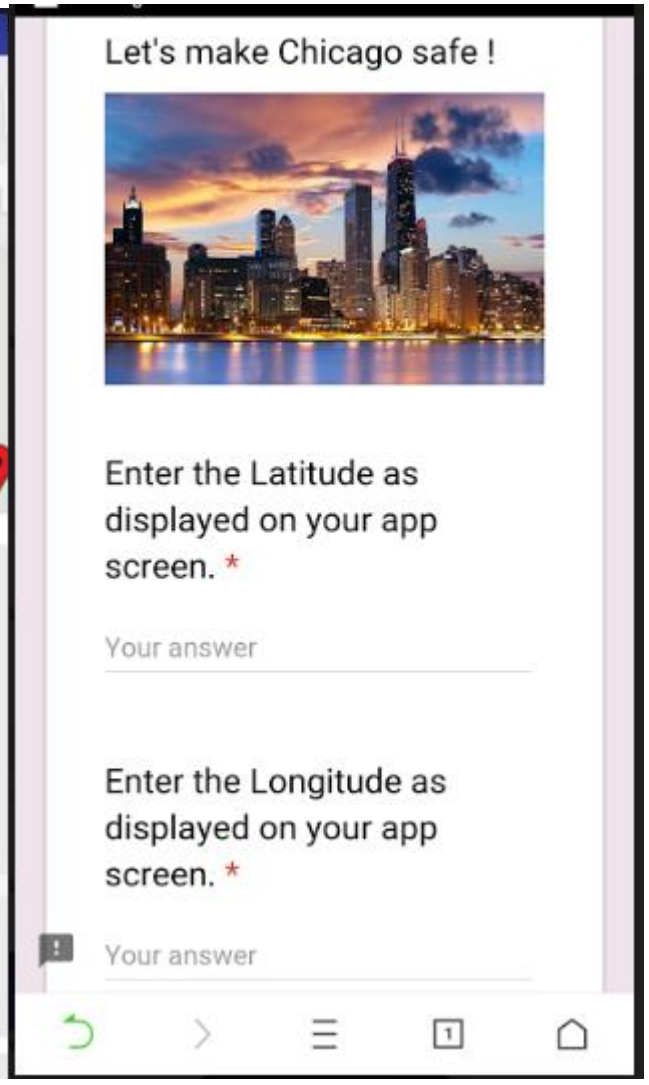

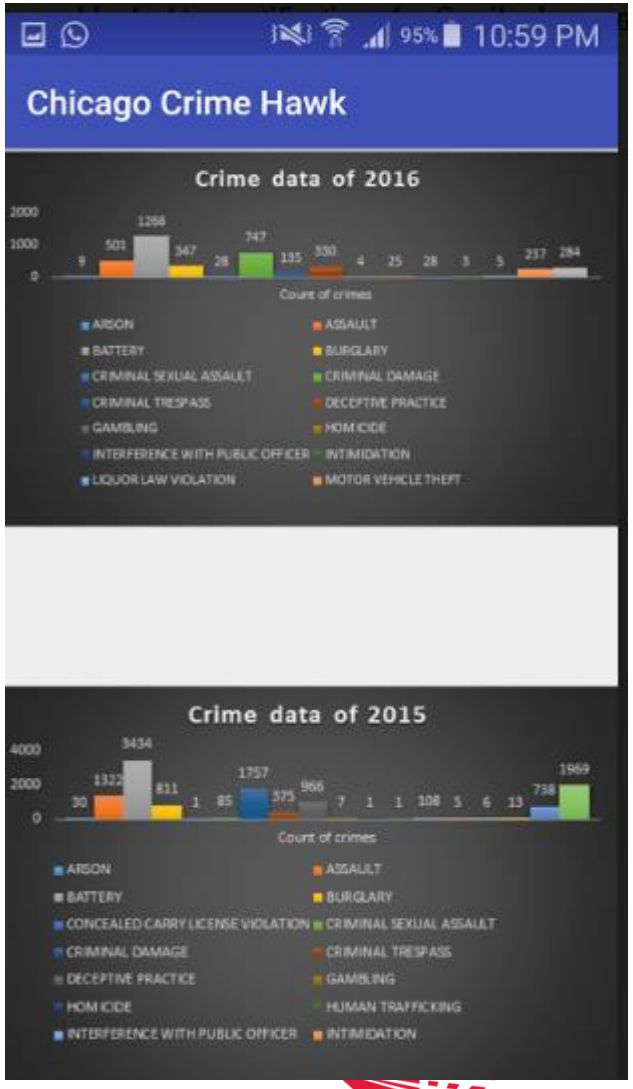

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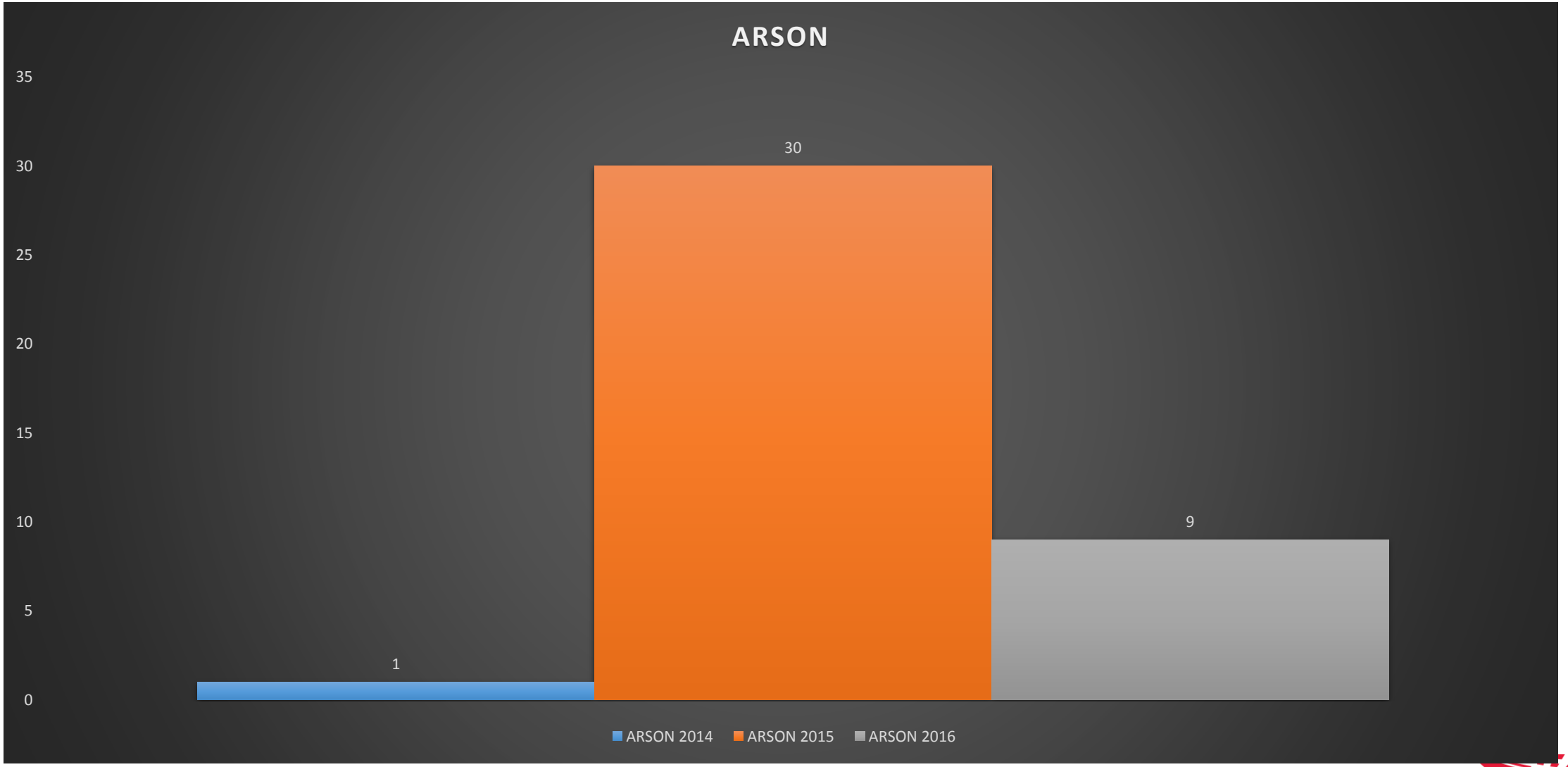
Usage of App for Analysis



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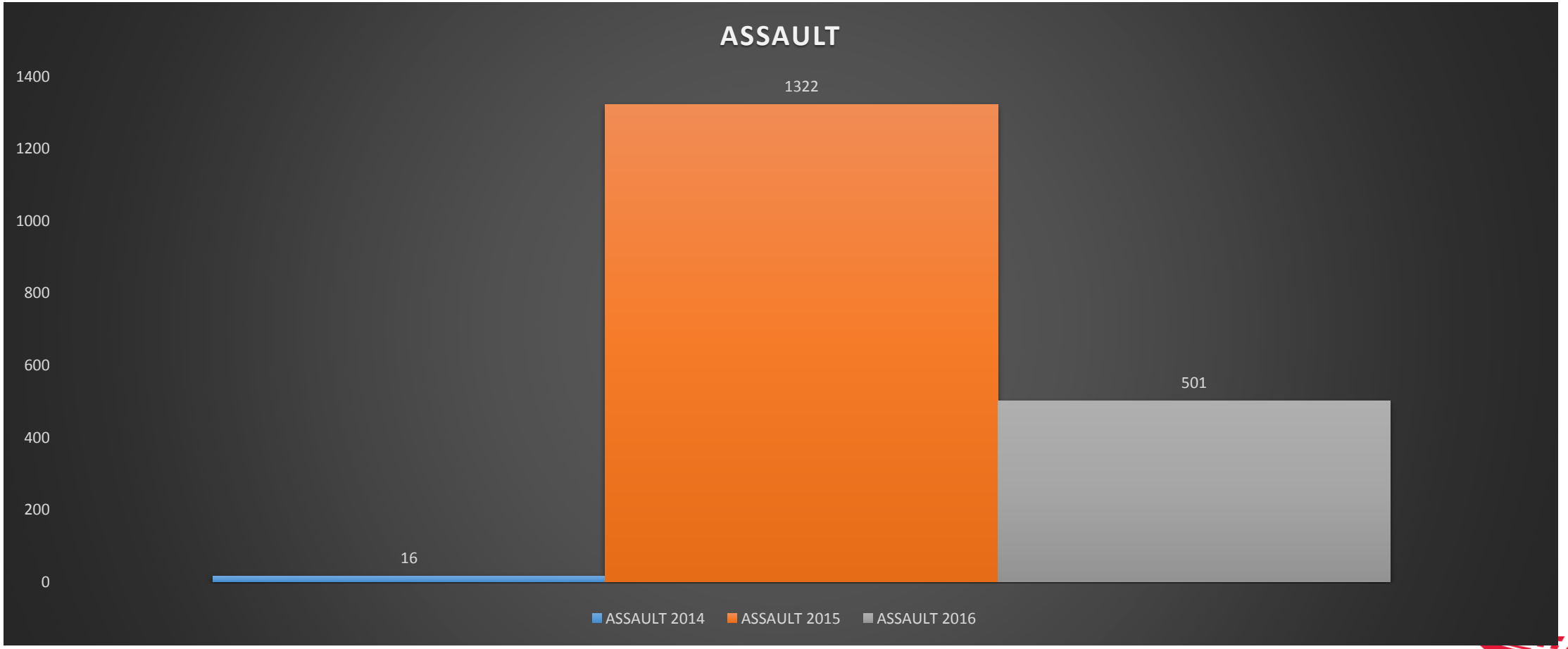

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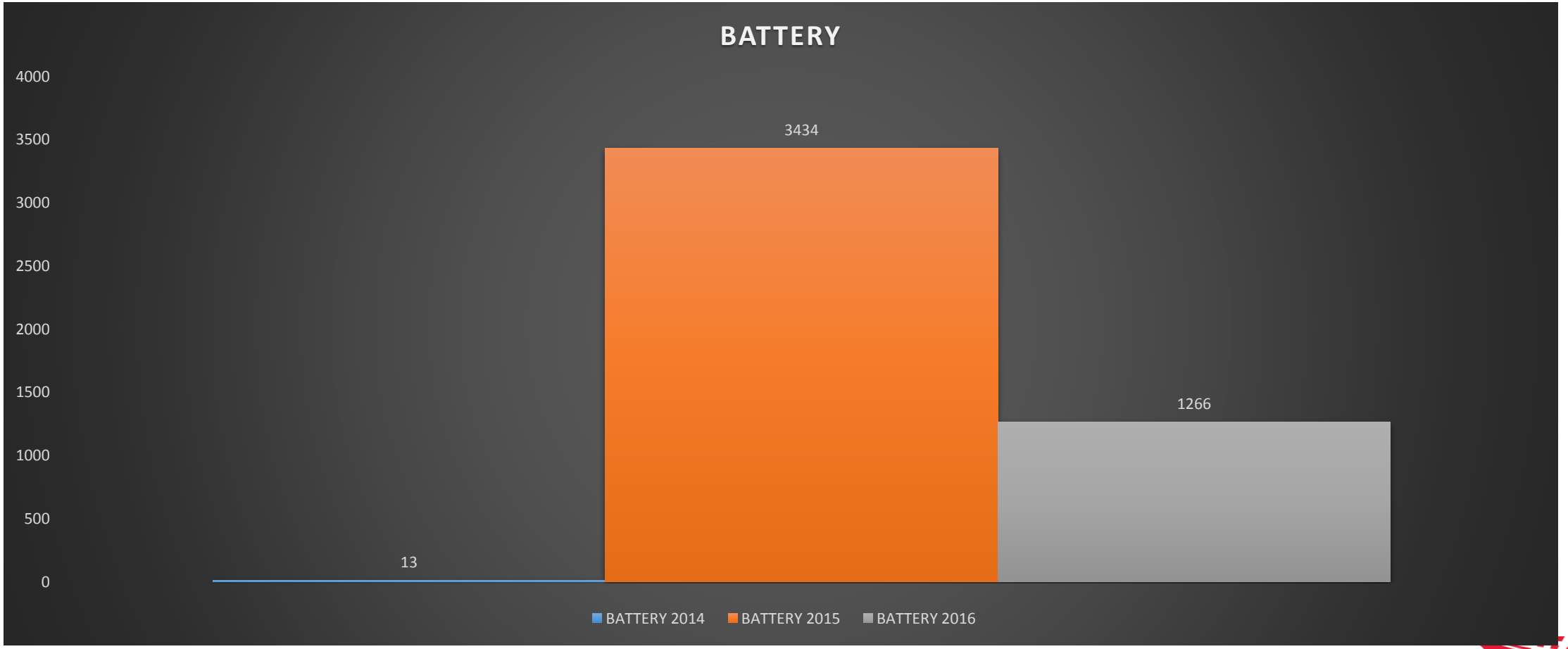

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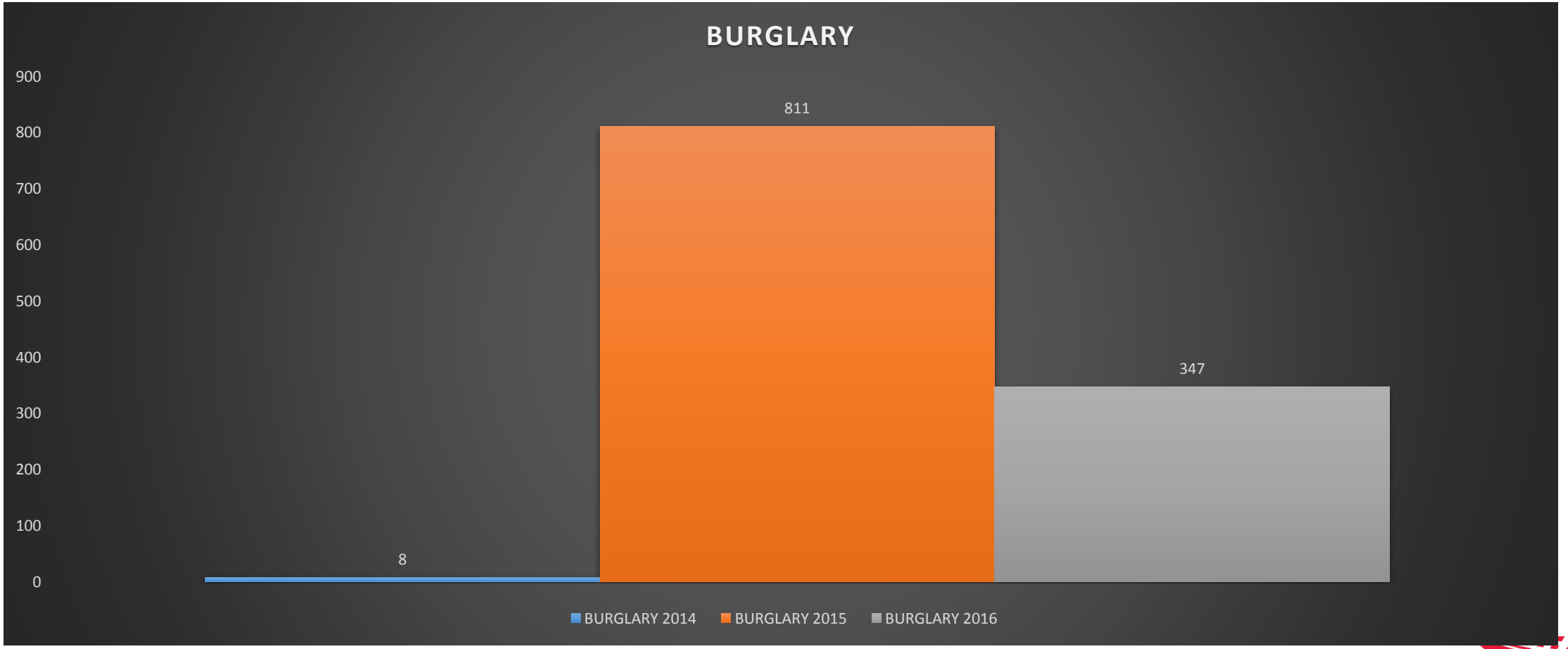

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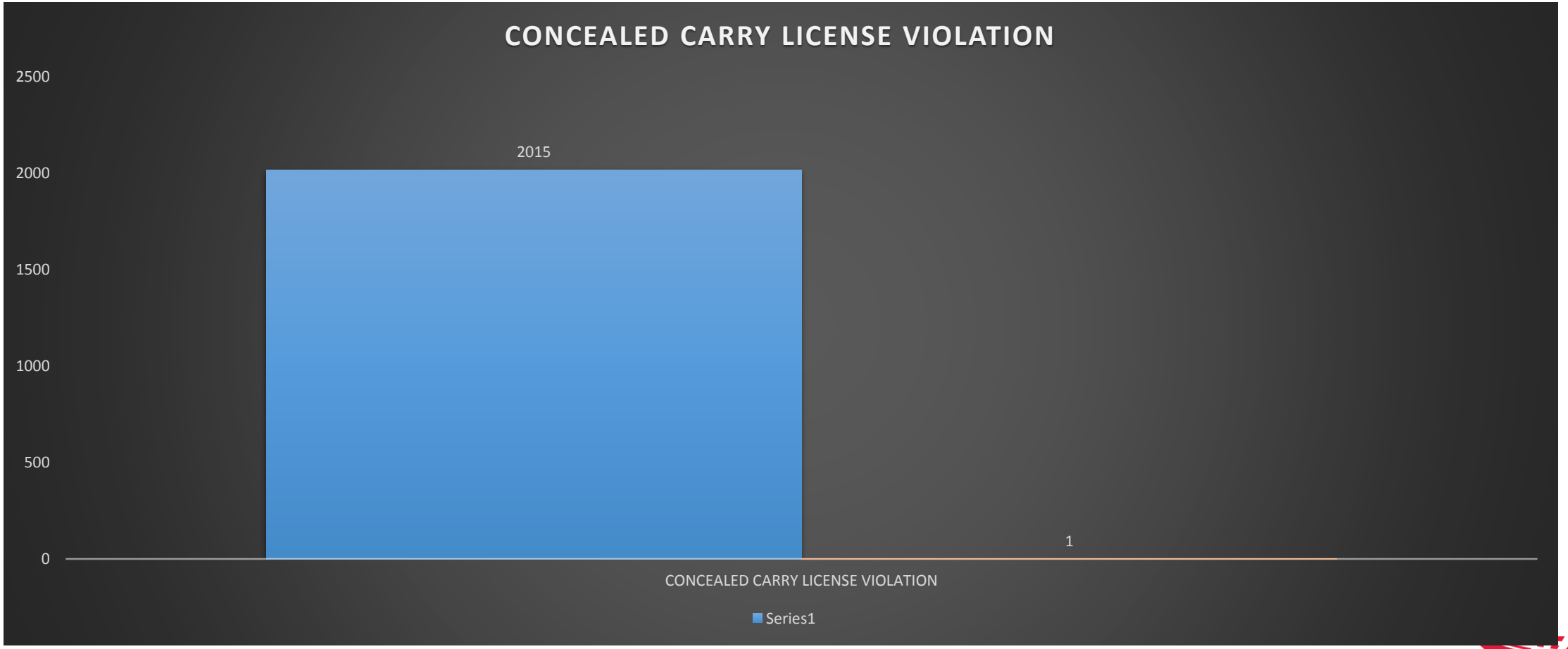

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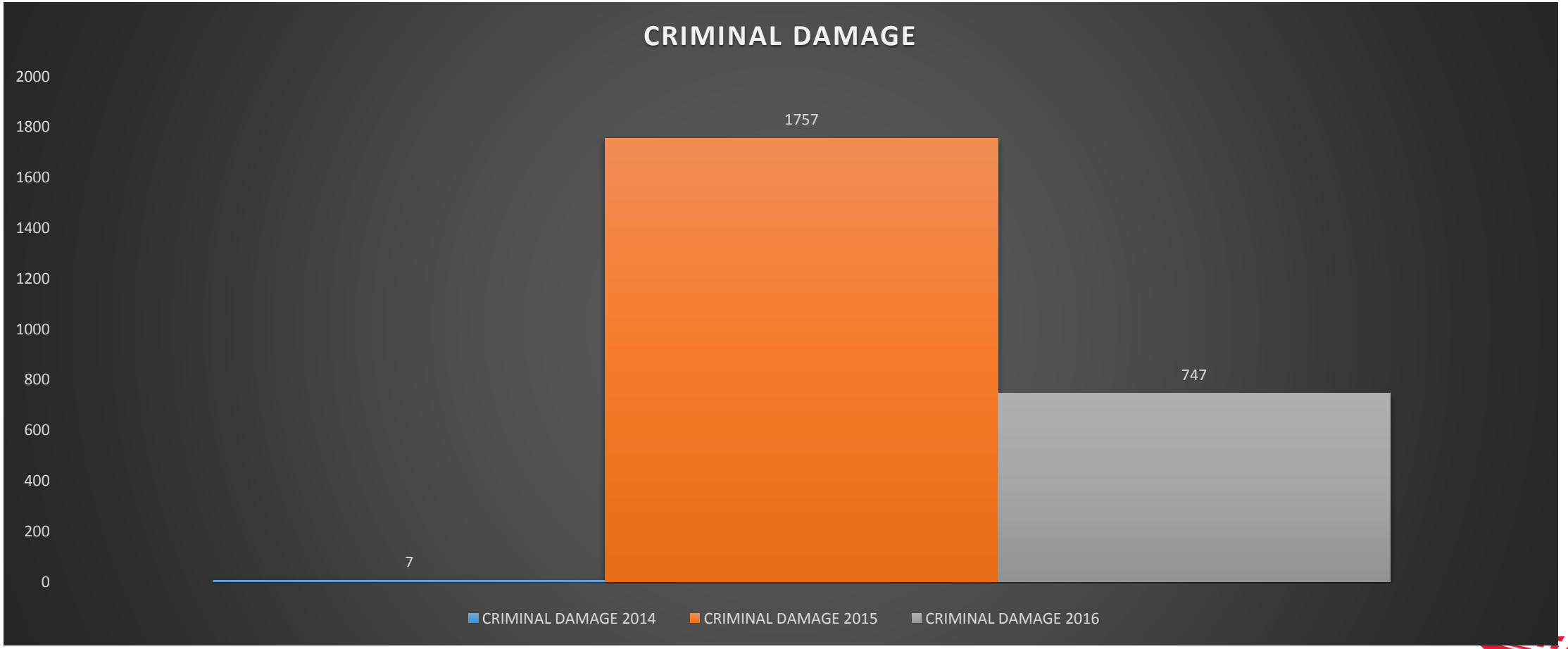

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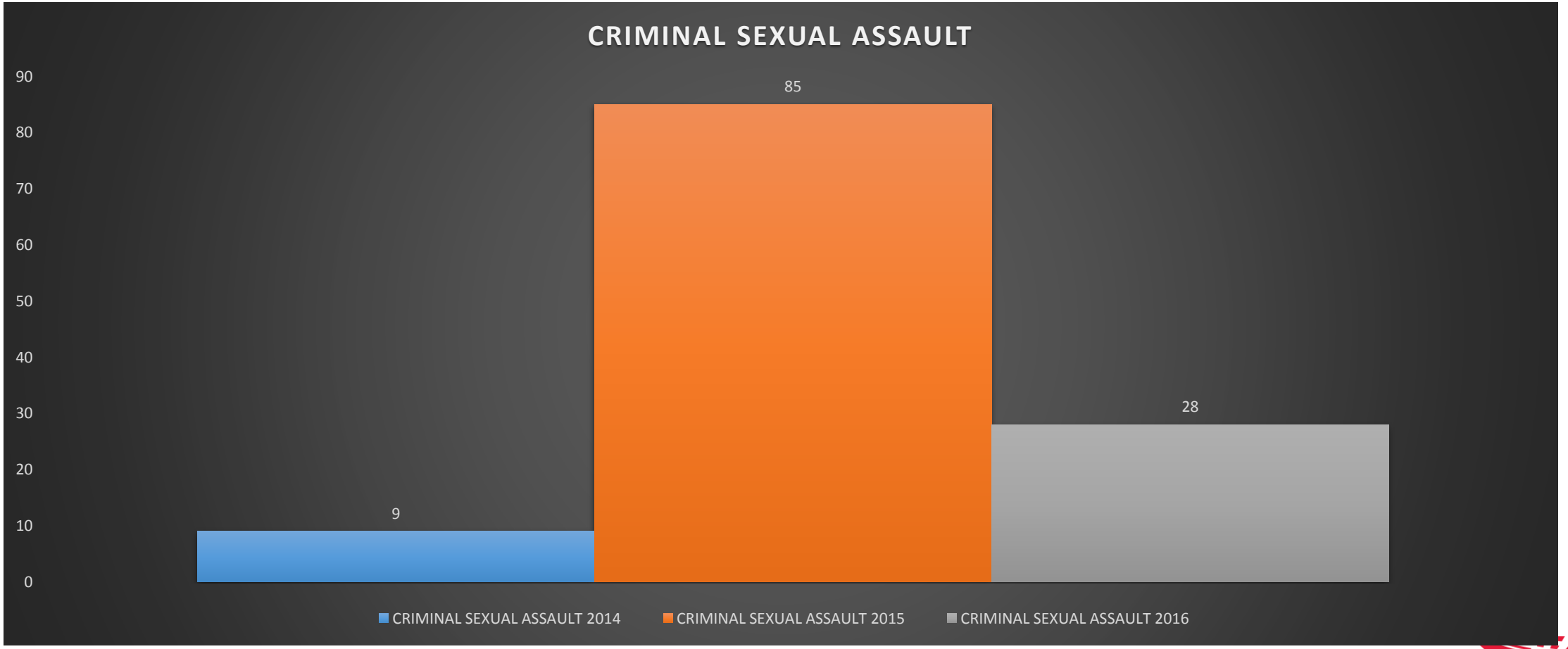

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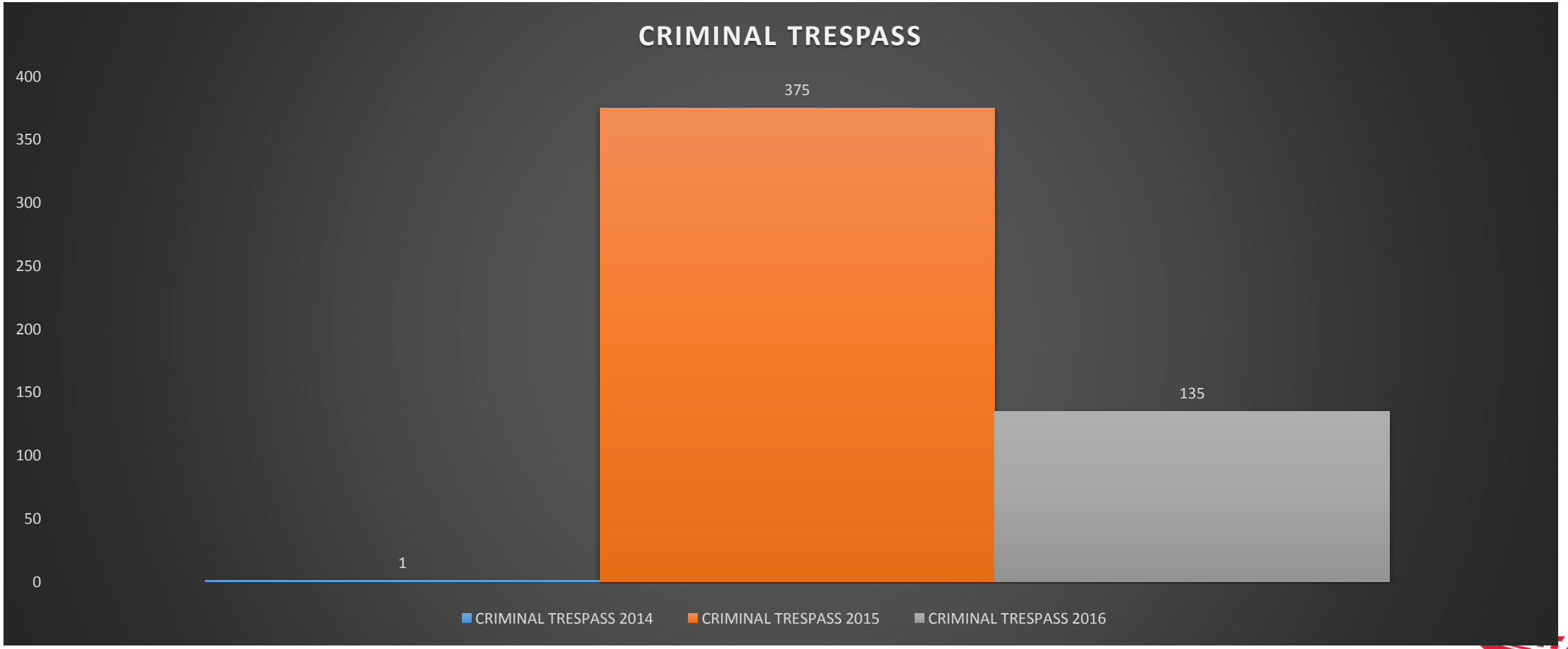

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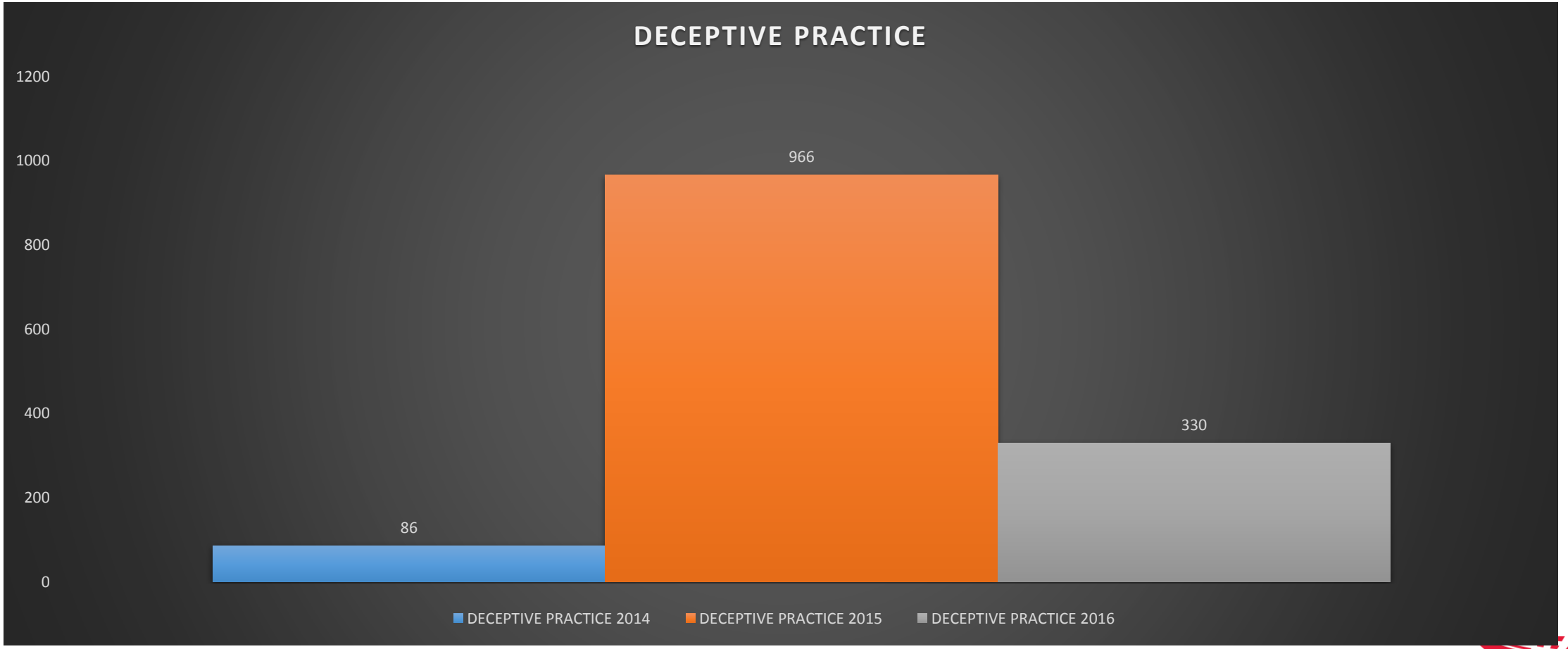

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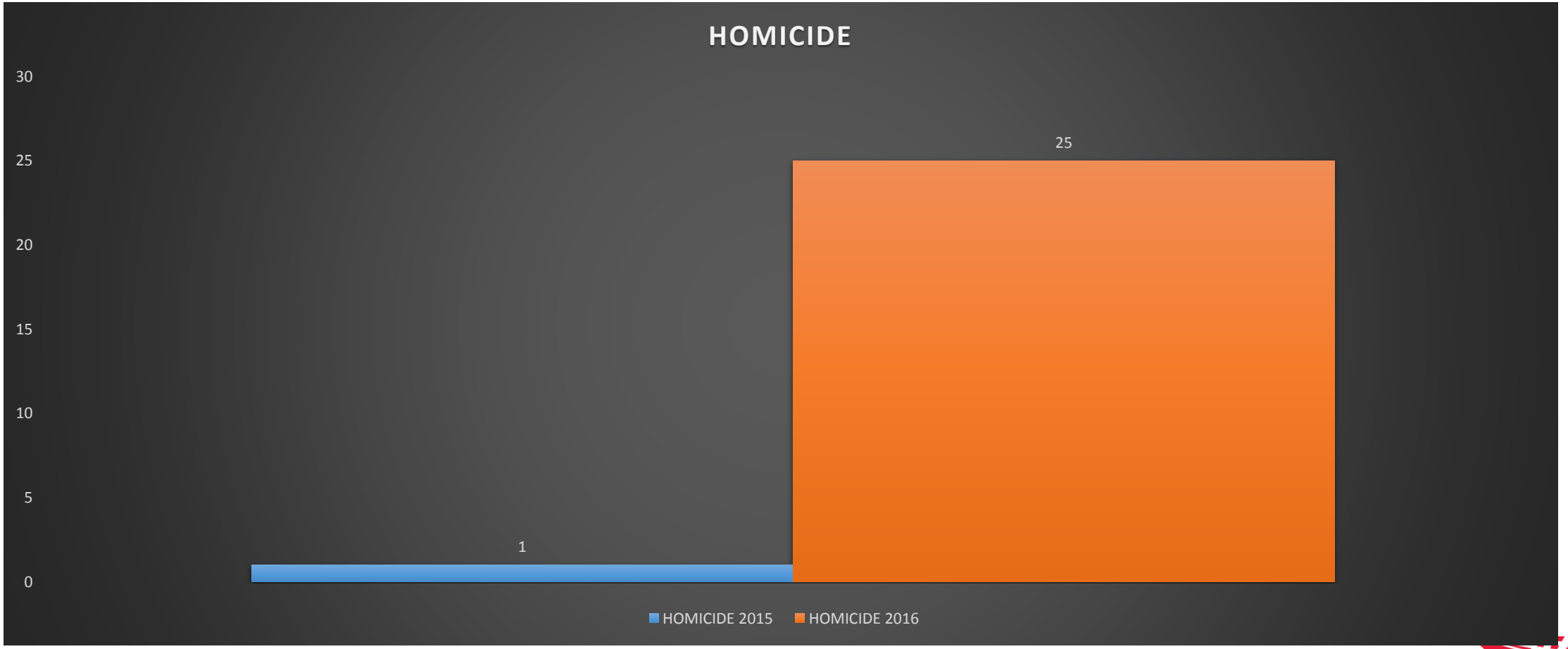

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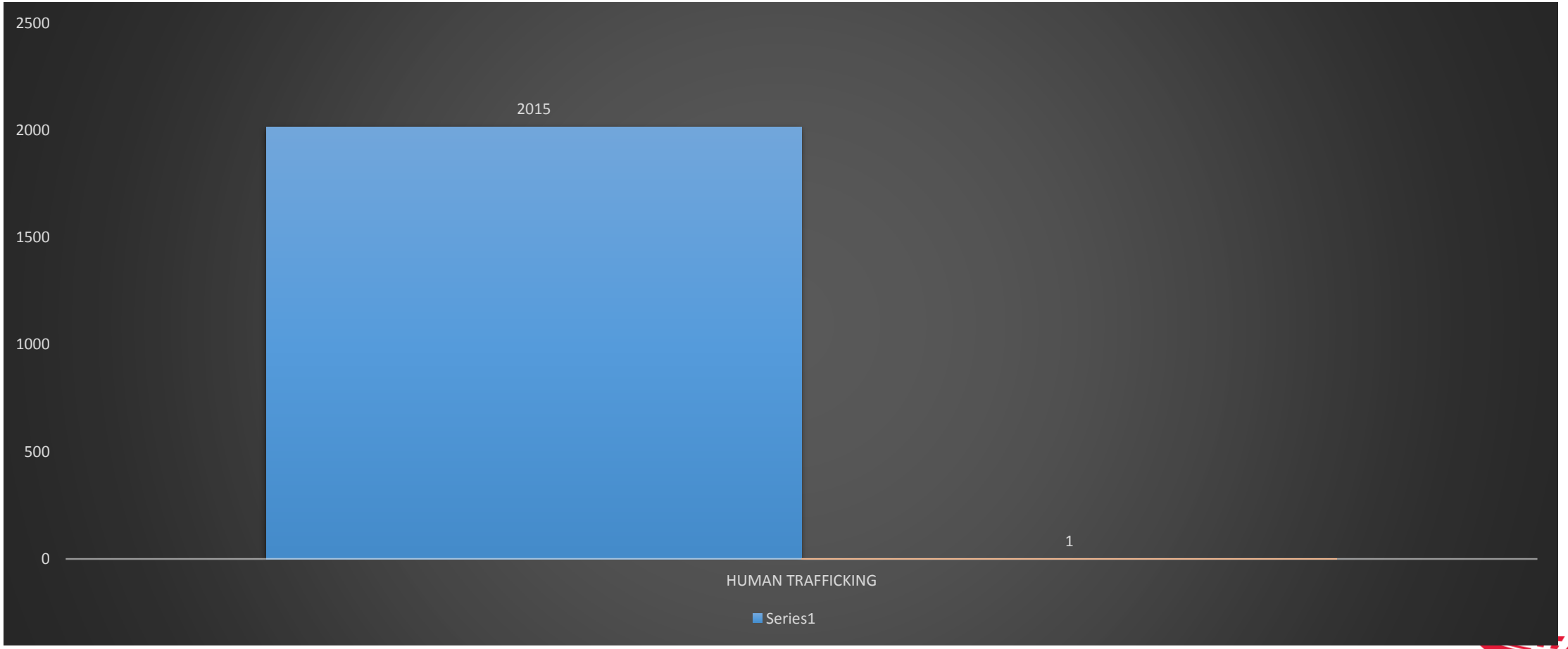

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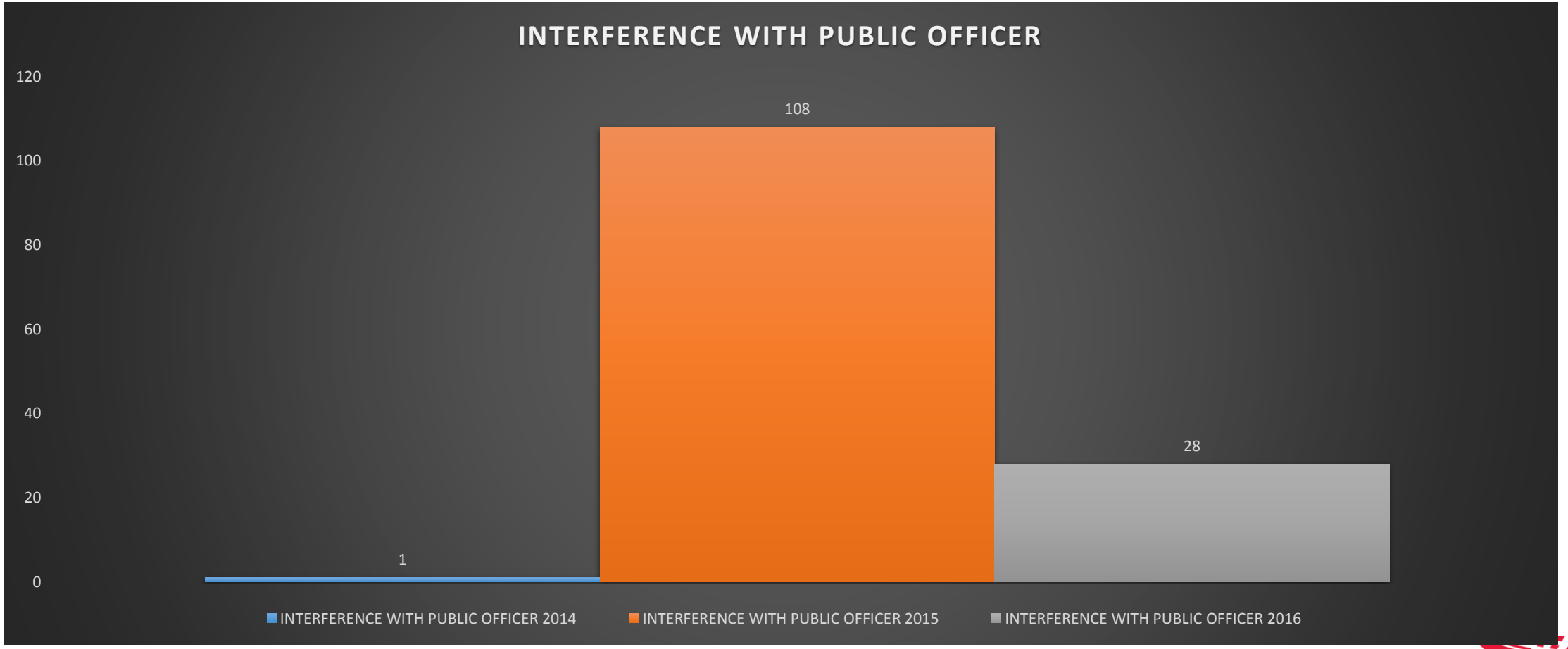

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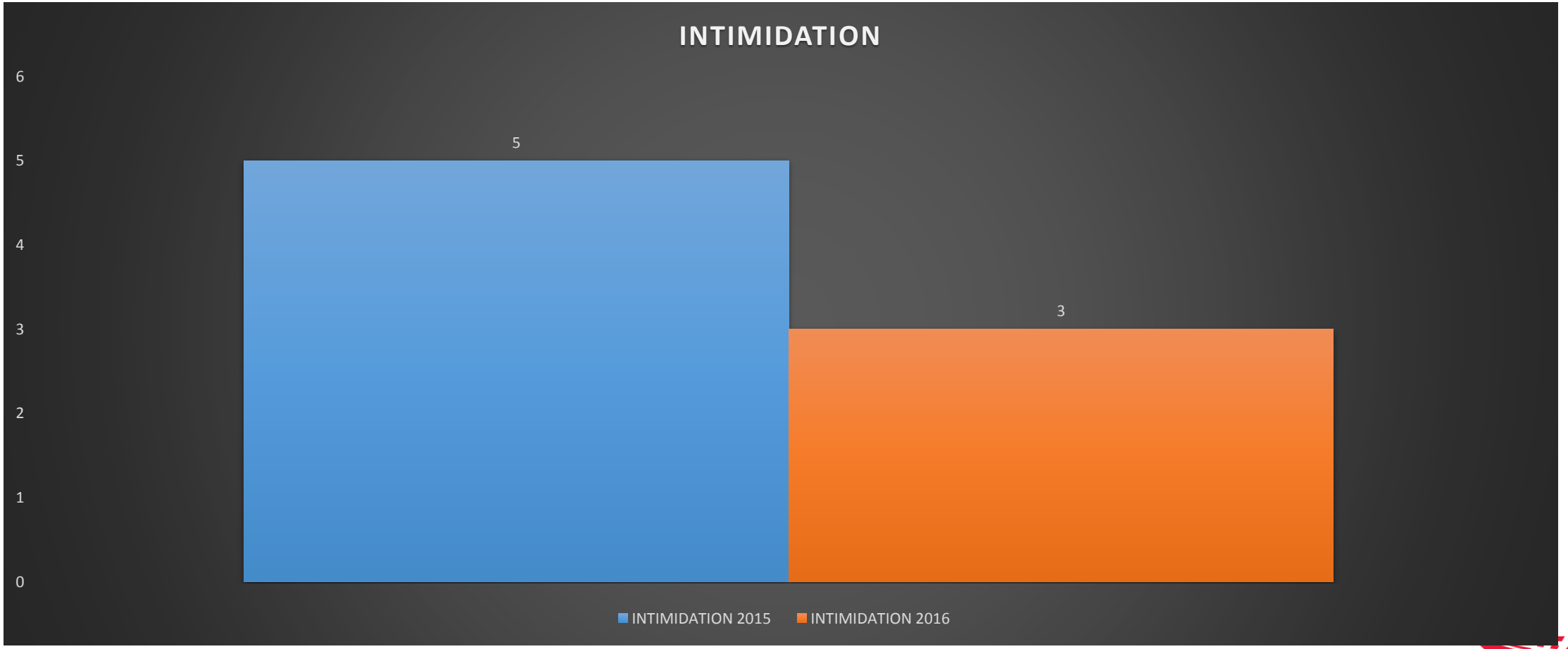

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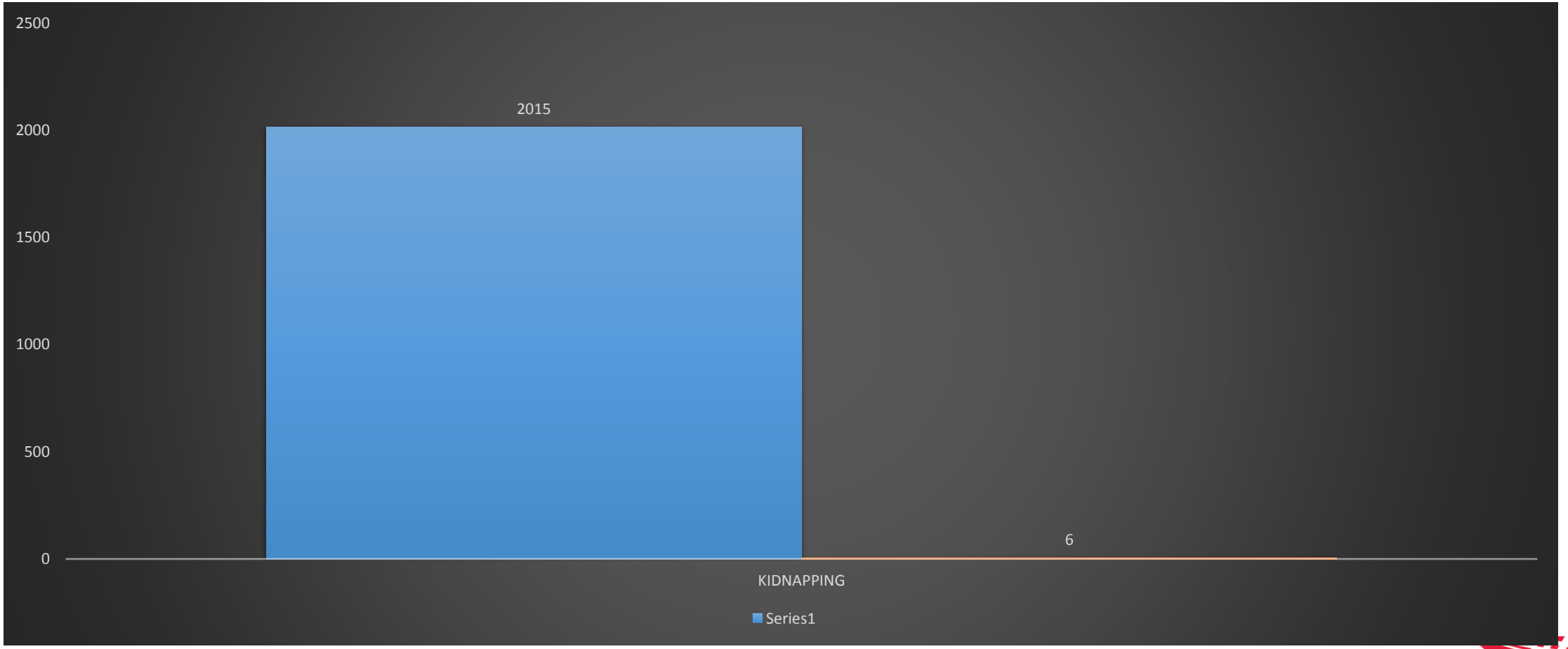

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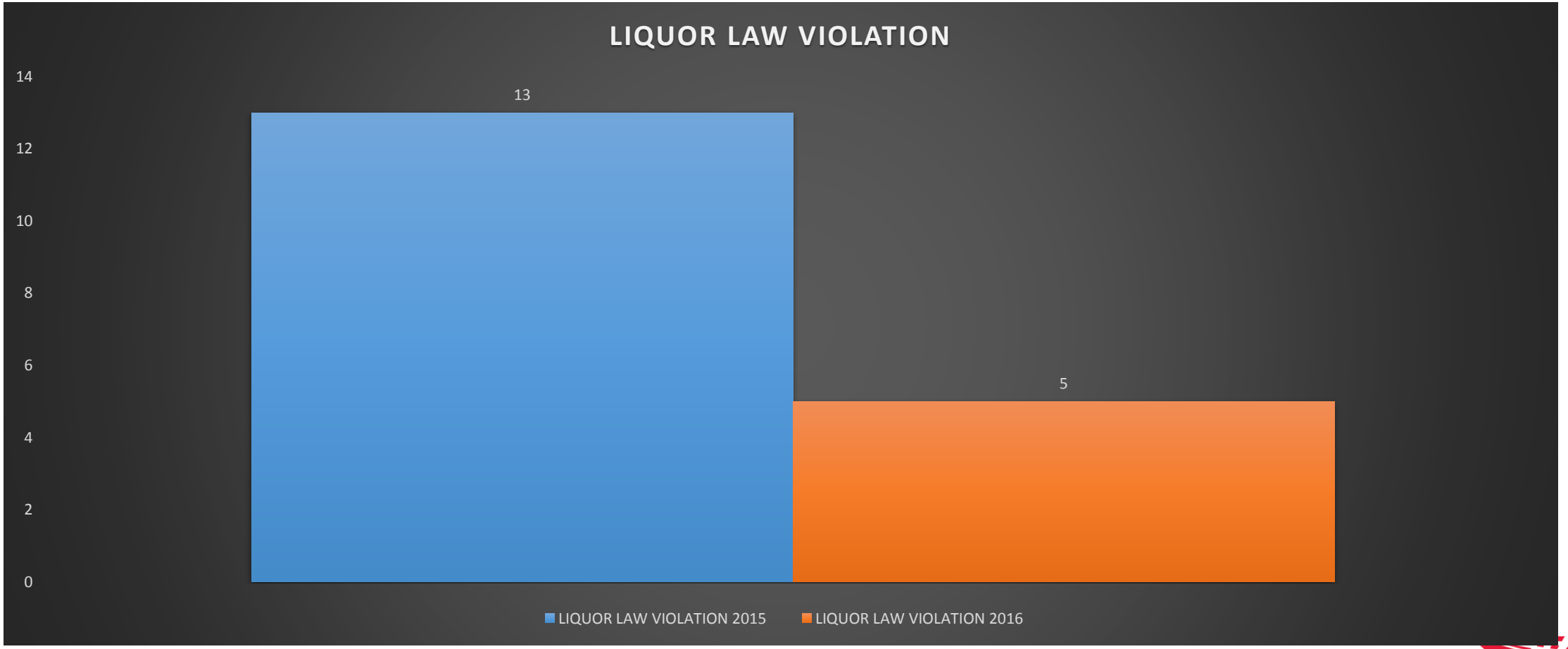

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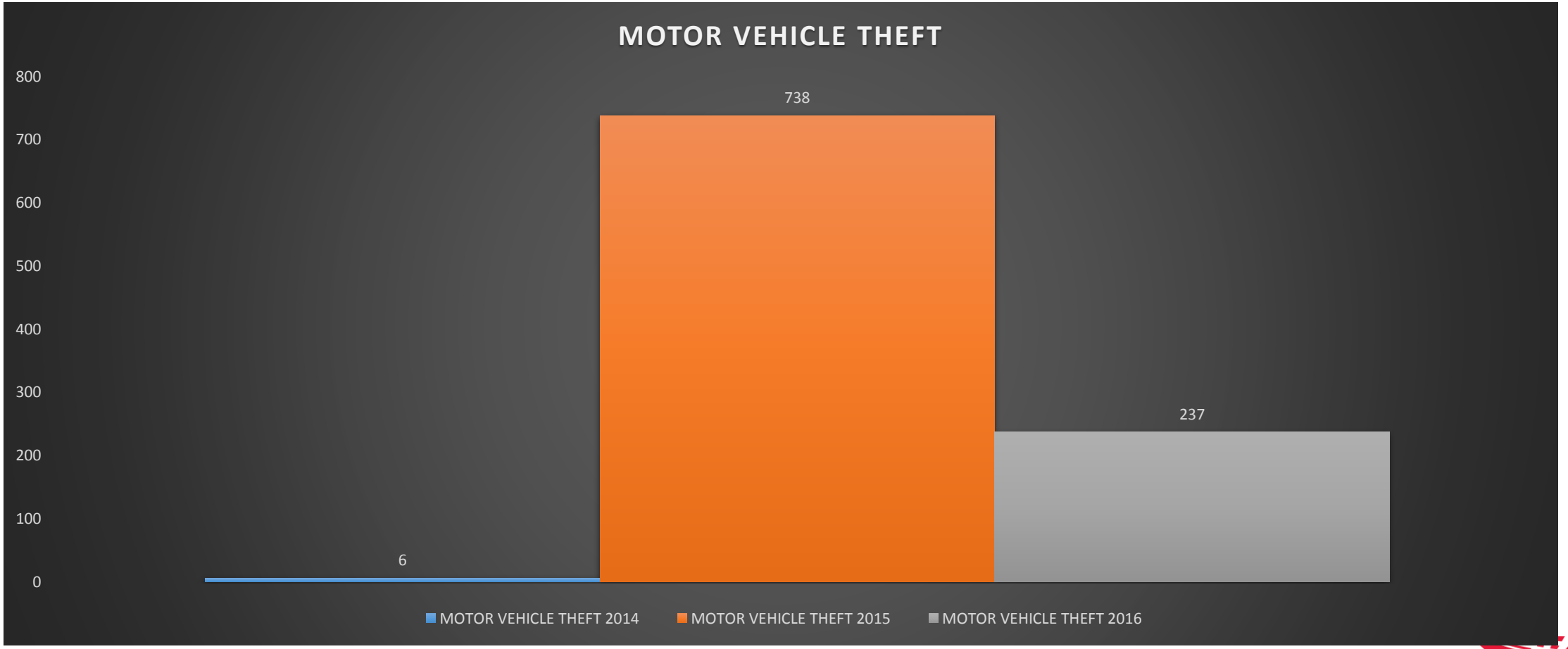

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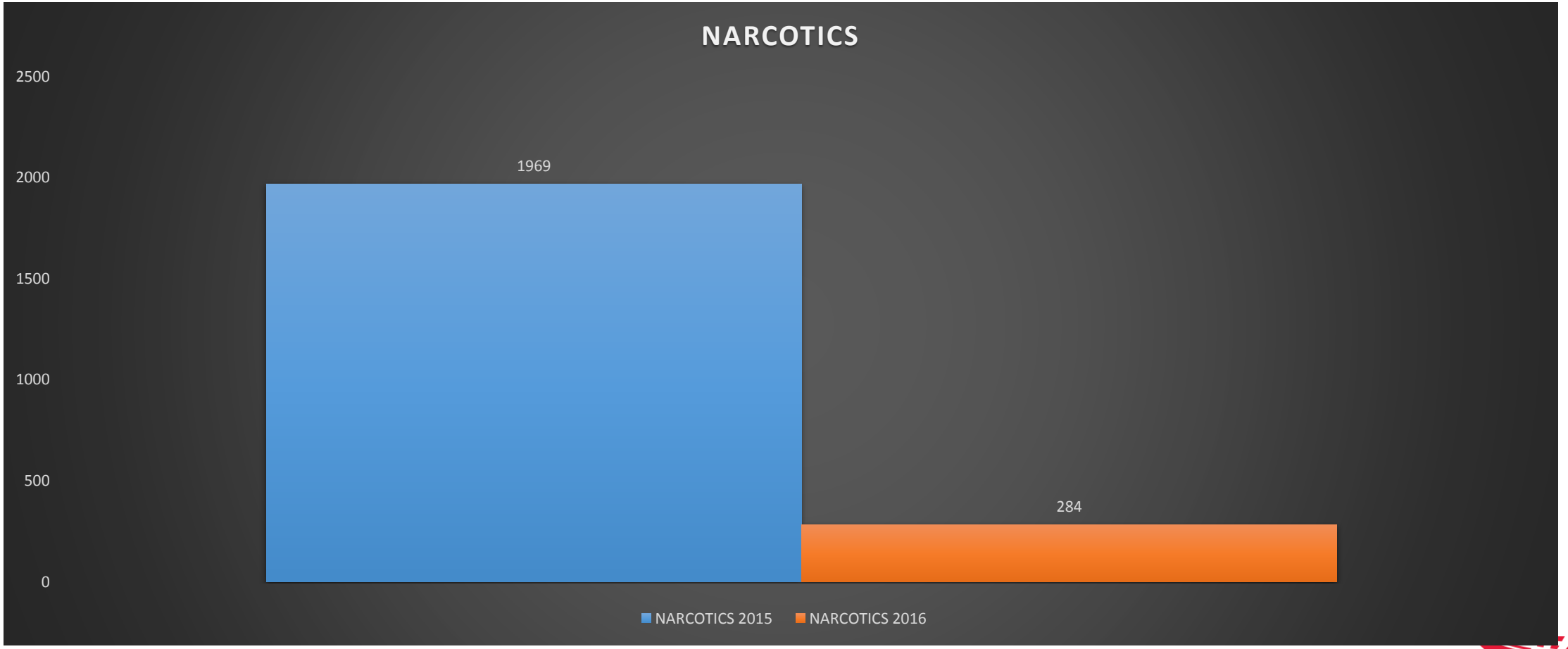

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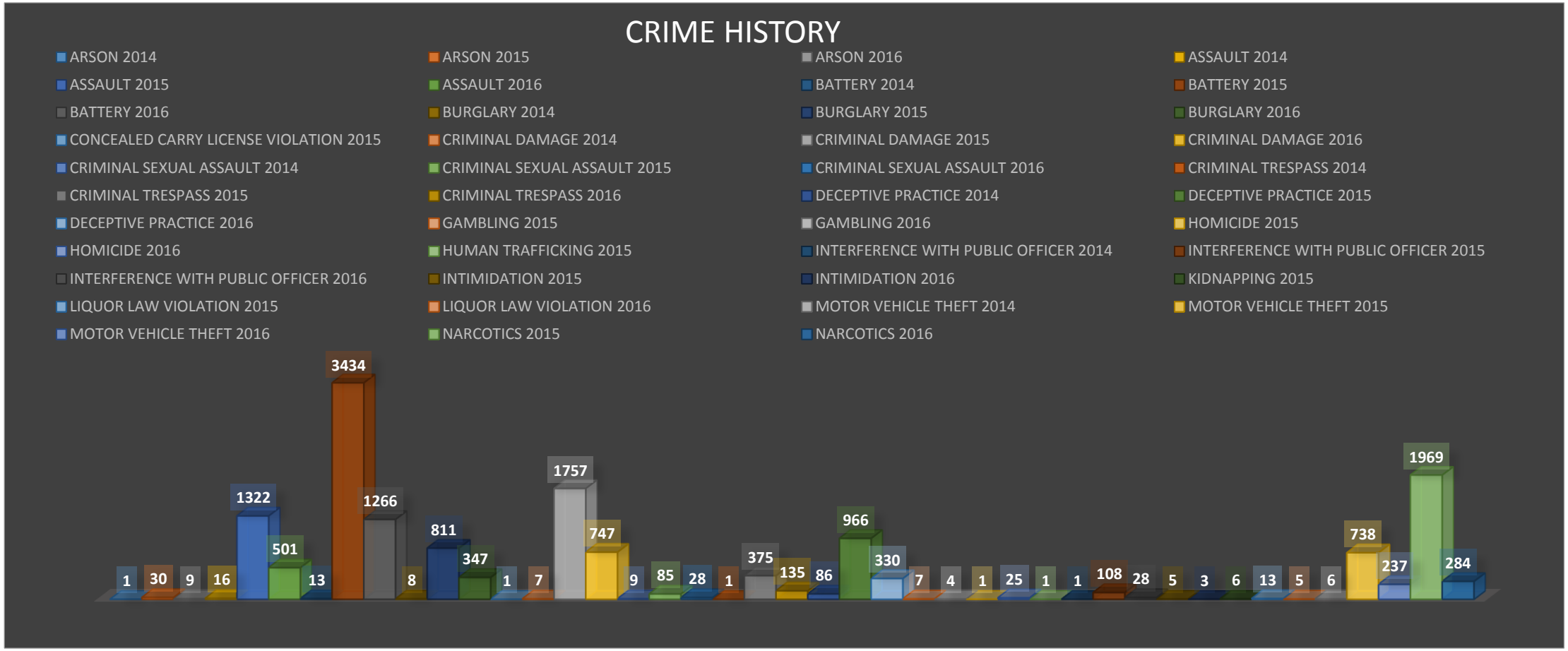

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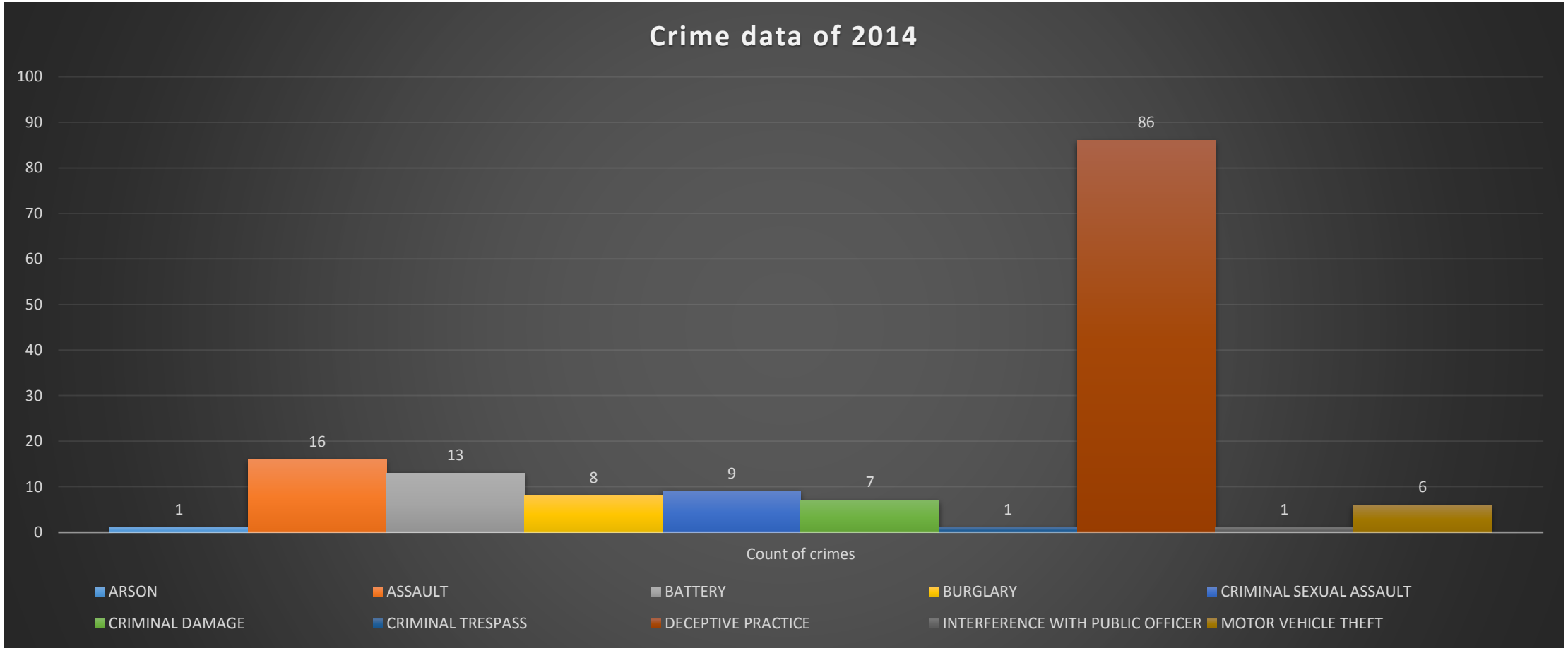

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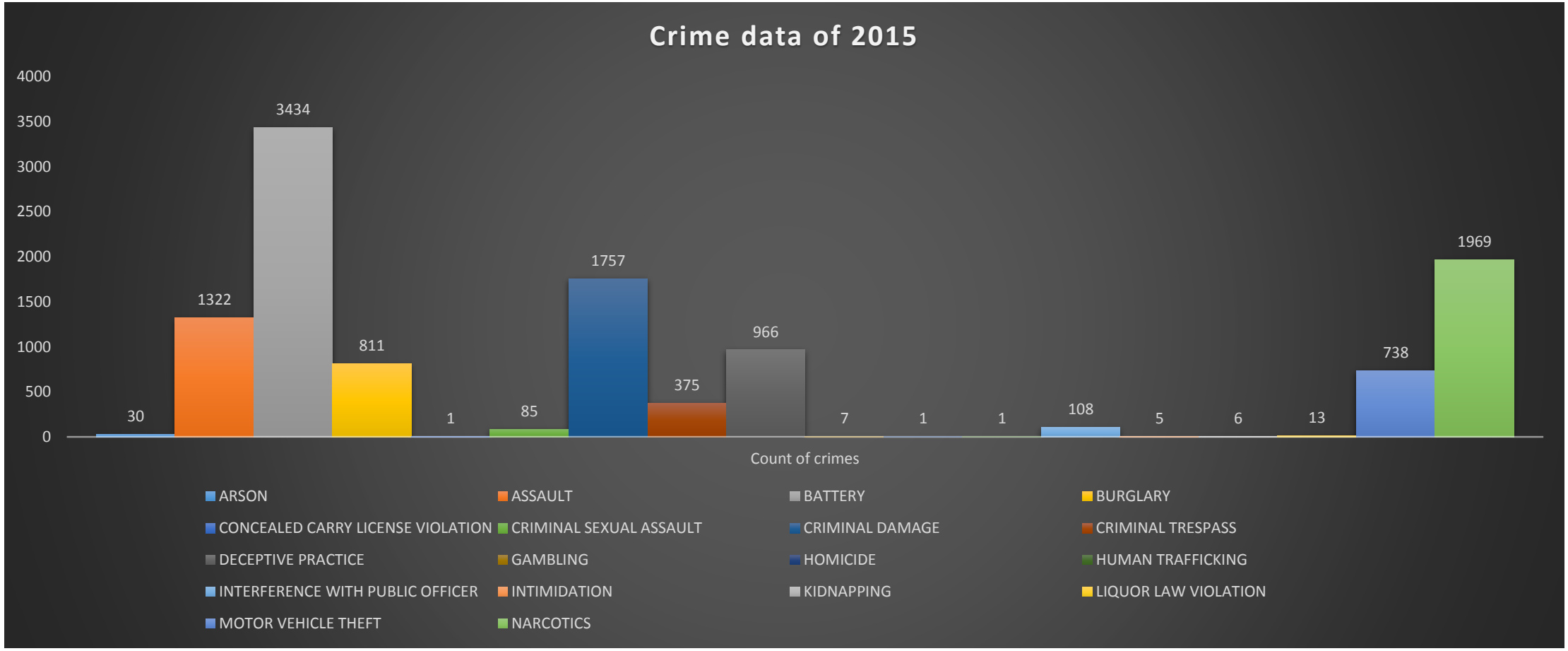

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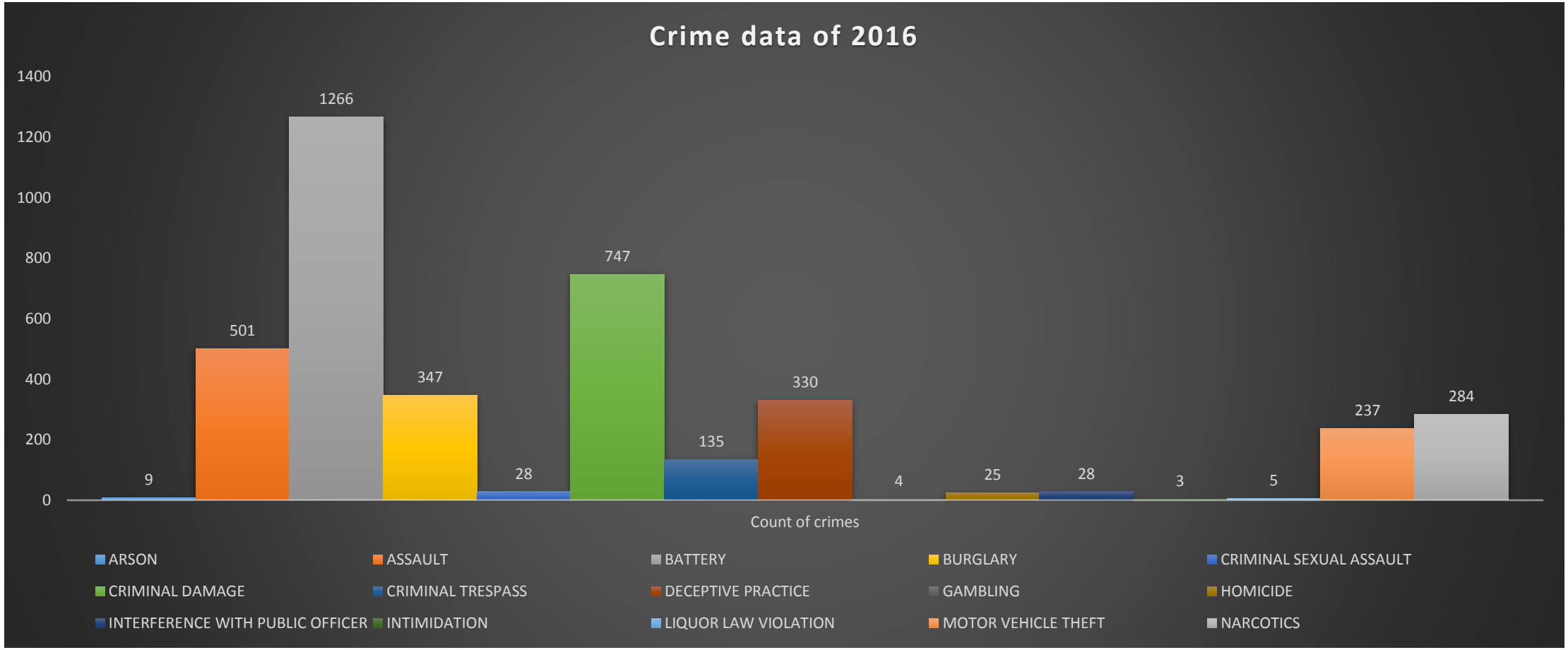

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Application of Coursework

- Usage of Database Helper
- Implementation of List View for display of Top fatal crime records
- Implementation of Intent to call other pages and services

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Application of Concepts beyond Coursework

- Google Maps API
- Customized Map marker
- Customized Snippet
- Implementation of phone numbers and hyperlinks for websites.

Future Enhancements

- Currently, we are using real time offline data which is manually fed into database. We are planning to change the same by using live data from the server in JSON format.
- We have implemented the app for Chicago, we would in future, expand the same to many other locations.
- We have loaded data from the year 2014 till 2016. We plan on loading data for 10 years.

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