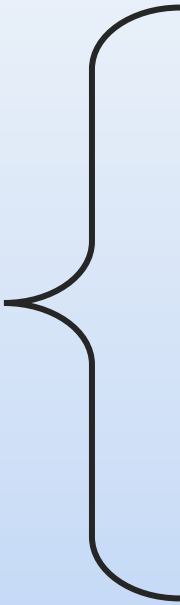# Crime Data Analysis

Dataset: Individual_Incident_2020.csv
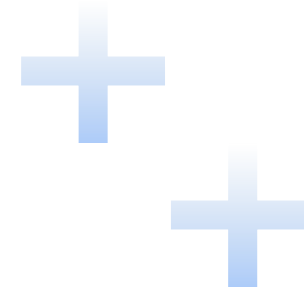
Presented By: Alamaara Kazi

CONTENT

1. Introduction
2. Problem Statement
3. Methodology
4. Results
5. Analysis & Insights

INTRODUCTION

- The file Individual_Incident_2020.csv has crime incident data for the year 2020.

- It contains 53 columns such as state, incident_number, total_offense and total_victim.

- The dataset includes different offense types like theft_offense, violence_offense and drug_offense.

- It also has details about gun_involvement, property_value and victim information.

PROBLEM STATEMENT
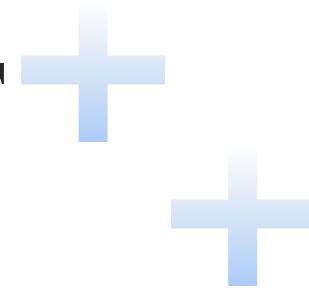
- To load and clean the Individual_Incident_2020.csv dataset.

- The dataset contains 53 columns with different data types such as string and float.

- The file size and processing caused issues while exporting the cleaned dataset.
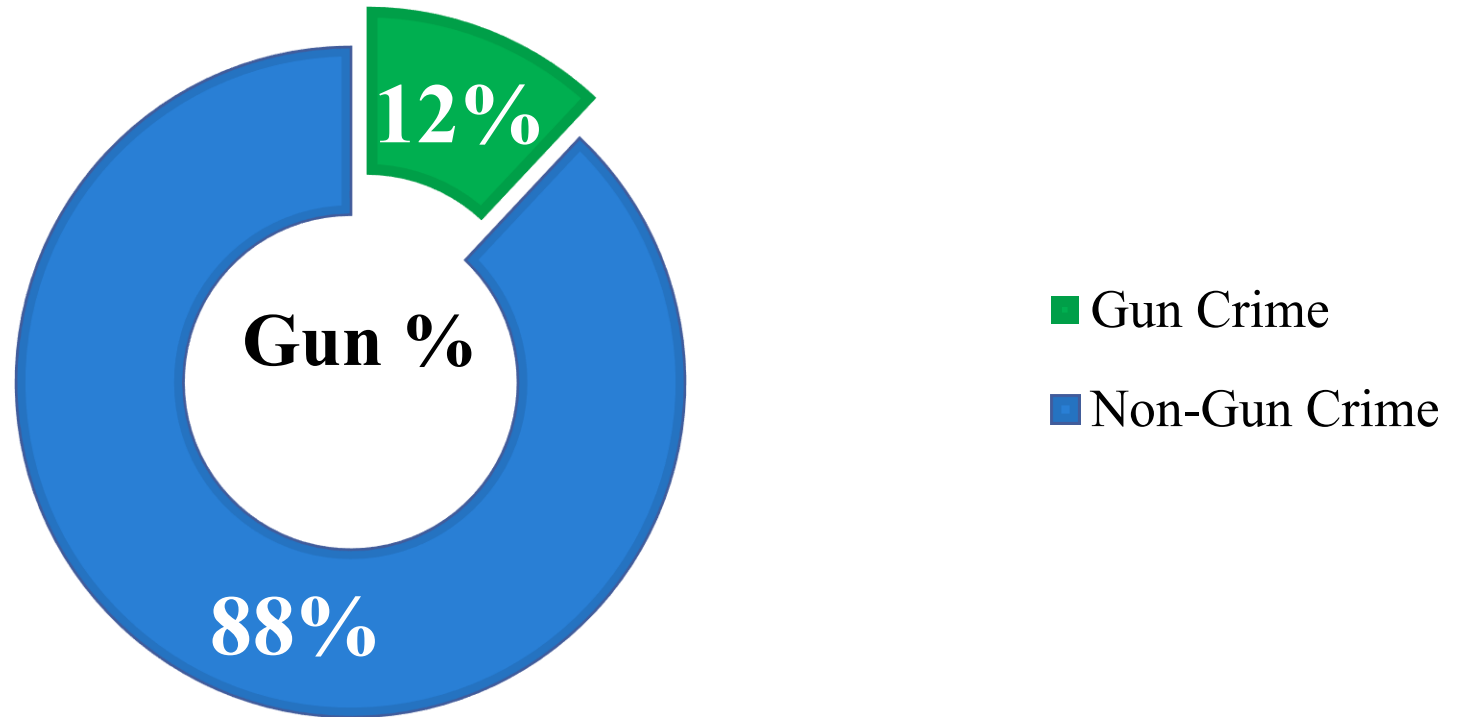
METHODOLOGY
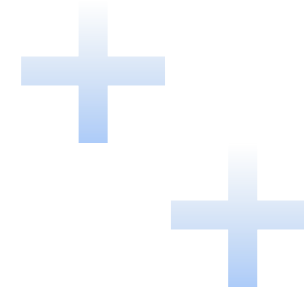
- Data cleaning and analysis was done using **Anaconda Navigator (Jupyter Notebook)**.

- To view the data columns and create pivot charts, **MS-Excel** was used.

- Interactive dashboard was created using **Power BI Desktop**.

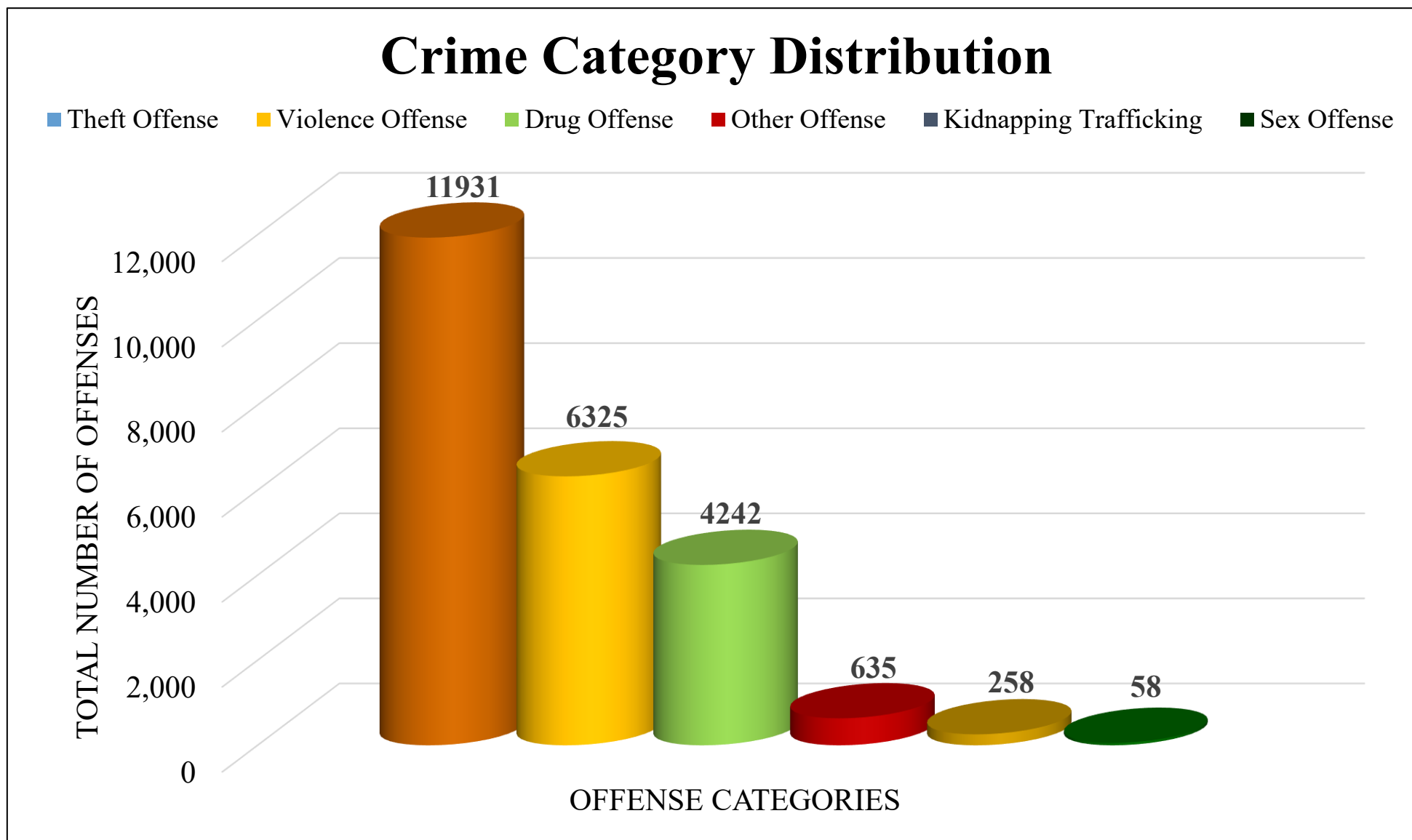- SQL queries were executed in **MySQL Workbench**.

RESULTS

- The data clearly shows that non-gun crimes are much higher than gun-related crimes in 2020.

PERCENTAGE OF CRIMES INVOLVING GUNS

- ■ Gun Crime
- ■ Non-Gun Crime

- The data shows that theft_offense is much higher than all other offense types.

Crime Category Distribution

Theft Offense ■ Violence Offense ■ Drug Offense ■ Other Offense ■ Kidnapping Trafficking ■ Sex Offense

- This means crime impact is not equal across all states.

Total Victims by State

States (y-axis)

Total Number of Victims (x-axis: 0, 500, 1000, 1500, 2000, 2500, 3000, 3500, 4000)

Legend:
- OH-Ohio
- MI-Michigan
- VA-Virginia
- MO-Missouri
- WI-Wiscousin
- TN-Tennessee
- TX-Texas
- CO-Colorado
- WA-Washington
- KY-Kentucky
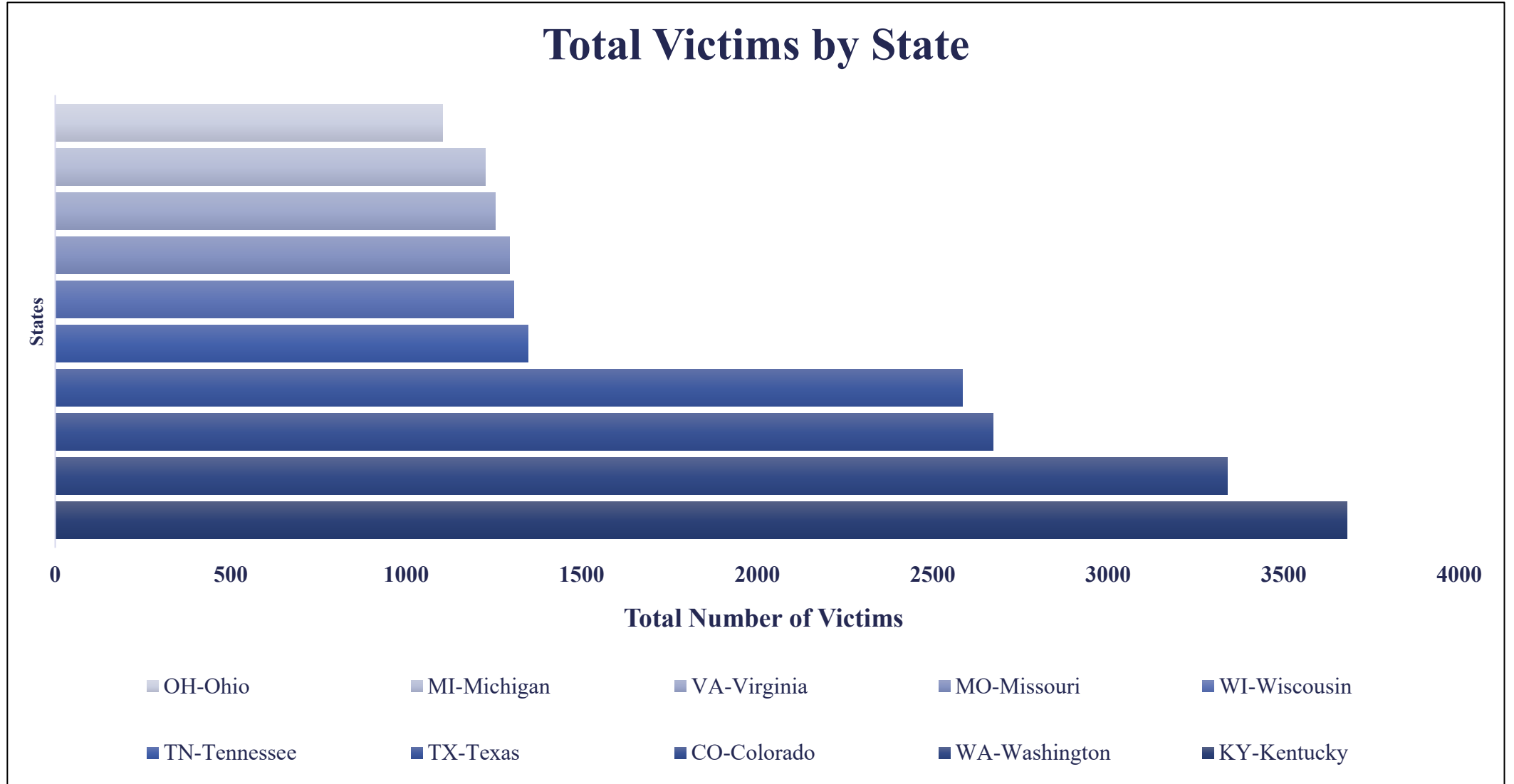
- This **Power bi dashboard** shows a complete view of crime data by showing total incidents, victims, gun involvement, property loss, and monthly patterns.
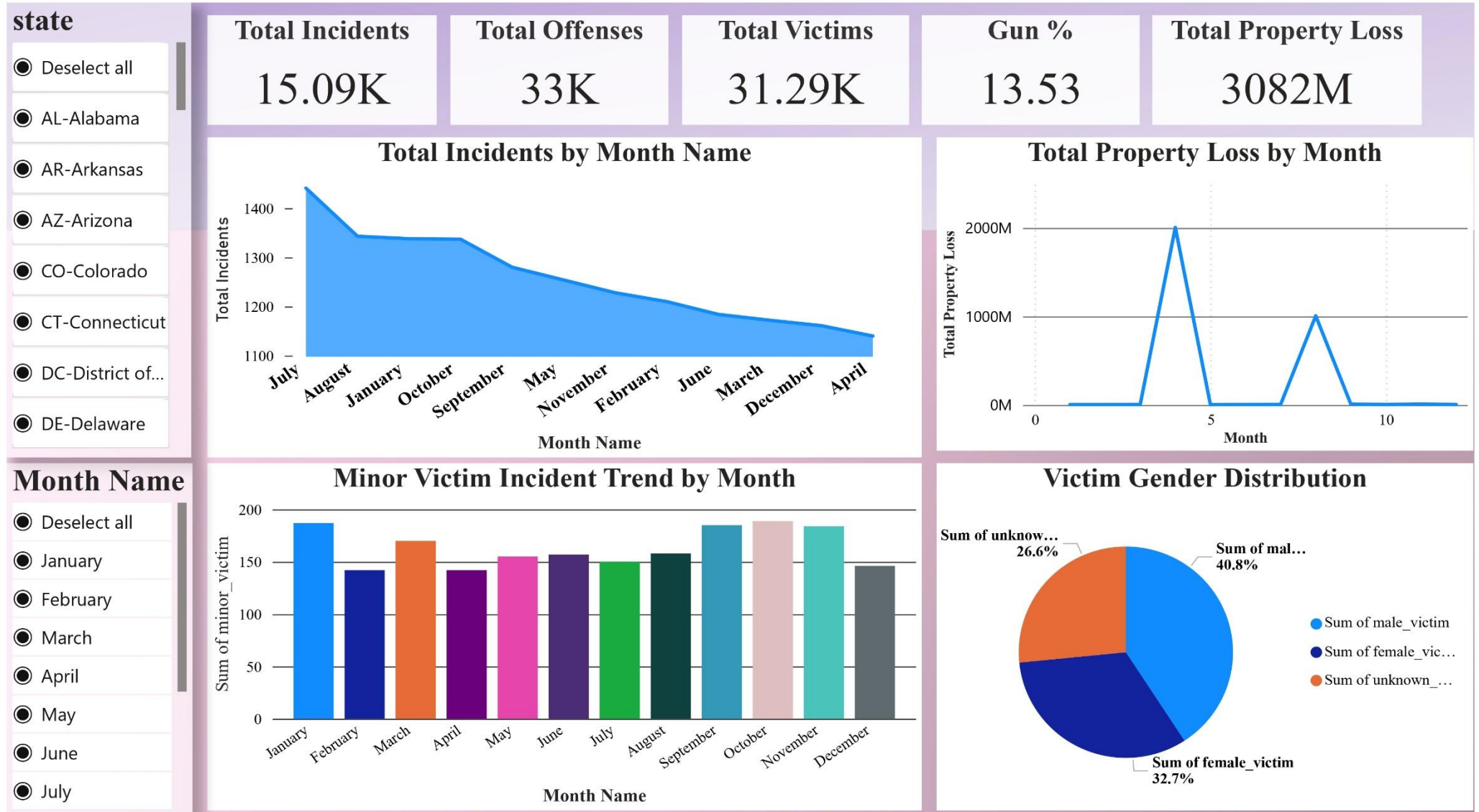
ANALYSIS AND INSIGHT

- **Which victim group is mostly affected?**
  → male_victim count is higher than female_victim and unknown_sex_victim.

- **What is the percentage of gun_involvement?**
  → Around 12–13% of total incidents involve gun_involvement.

- **Which states have more total_victim cases?**
  → States like Texas and Washington show higher total_victim numbers.

- **Is property_value loss significant?**
  → property_value shows high loss in some months, especially mid-year.

- **Are all offenders known?**
  → No. Many cases are marked as offender_not_known.

THANK YOU

Alamaara Kazi

+91 9860939091

https://github.com/alamaara1725

alamaara.ds25@gmail.com