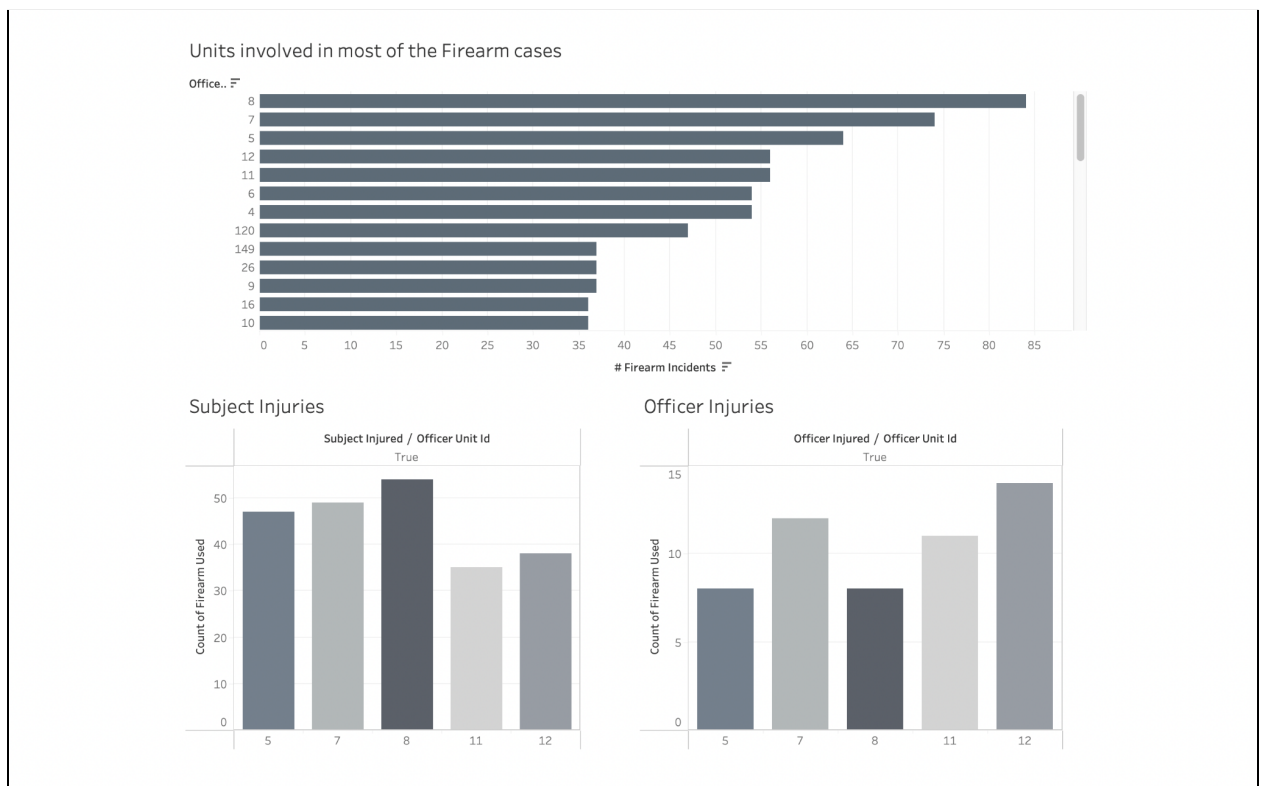


Checkpoint 2 : Data Exploration

Theme: Who shot first? - *A closer look at police officers who have fired their weapon on duty*

This checkpoint is to identify if there is a particular demographic where these incidents are common. We will be considering units who are involved in most of the firearm cases.

1. Which police unit were involved in most of the firearms cases? For the most involved Units, compare the number of officer and subject injuries in the firearm cases.



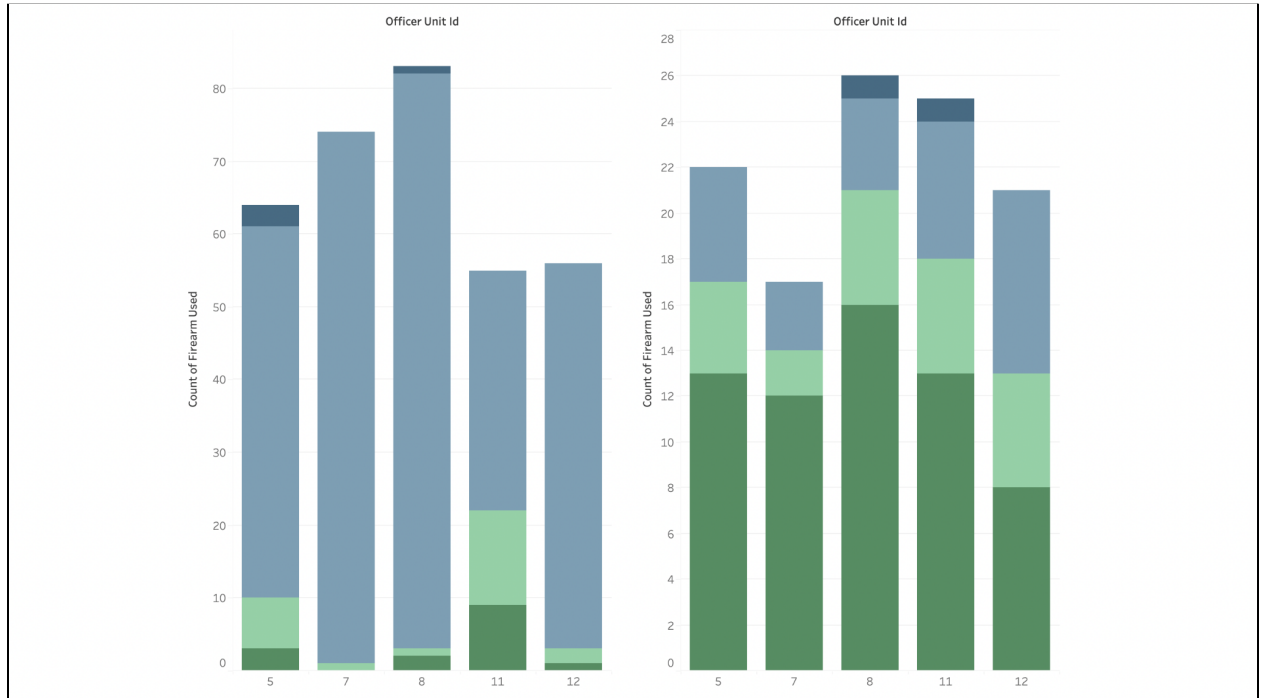
Dashboard1: Subject injuries vs Officers Injuries

From the above graph, we notice that the Police Units involved in the most of the firearms cases are Unit-8 (84 cases), Unit-7 (74 cases), Unit-5 (64 cases), Unit-11 and Unit-12 (56 cases each).

Considering these five Units, we then moved on to compare the number Subject Injuries vs Officers Injuries in all of the firearm cases.

We found that the Subject injuries for the above mentioned Units was much higher than the Officers injuries.

2. Vertical bars to visualize the distribution of races across the firearms incidents

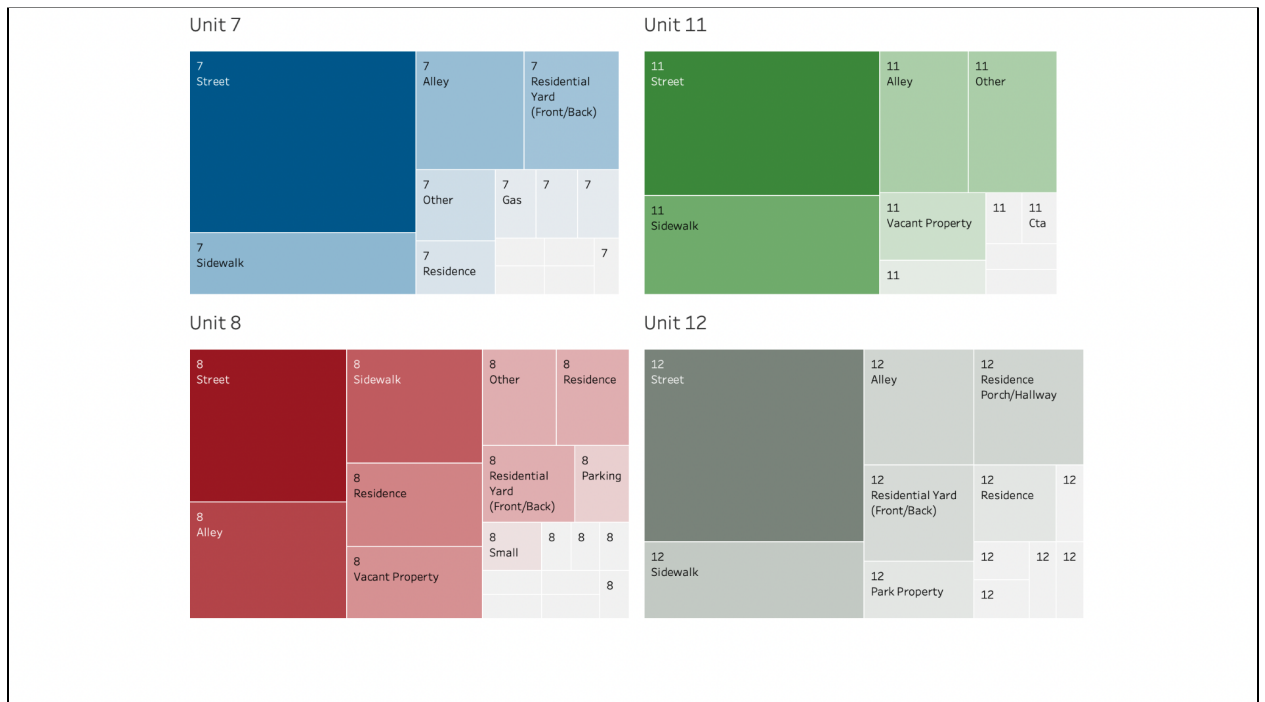


Dashboard2: Race distribution of the officers and the subject involved in the firearm cases

To build more on our analysis, we then compared the race distribution among the officers and the subjects involved in the firearm cases.

We observe that the subjects mostly belong to the black community whereas the officers that are on duty are mostly from white community.

3. Treemap to compare the locations for each of the five Units where the firearm incidents have happened frequently.



Dashboard3: Neighbourhoods where most of the firearm cases took place

Next, we identified the neighbourhoods where most of the firearm cases were taking place.

For this, we prepared a separate treemap for each Unit (identified in Question1) and combined them together to compare and point the places where the firearm incidents are happening the most.