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CS614 Group Module 2

Our RShiny app contains two separate pages of analysis for the user.

## **First Page**

The first page (when Show Correlation Graph is "No") allows the user to select two different counties in New Jersey and analyze the level of force used by police and civilians in those selected counties. Each density plot will provide a p-value from a t-test to confirm whether there is a statistical significance between the types of force used between the two counties.

There are four dropdowns in total: two for county selection, two for types of force. County selection dropdowns are self-explanatory. With the other dropdowns, the user can select a specific type of force used by police and by civilians. For example: when looking at counties x & y, the user can choose if they want to analyze the Pepper Spray (police use of force) frequency in those two counties. Similarly, they can choose if they would like to look at the frequency of Knife Attacks (civilians use of force) in those counties.

## **Second Page**

The second page displays the types of correlation (Pearson & Kendall) between police use of force vs. civilians use of force. The reason we wanted to show both is we were interested in seeing how the types of correlation differ if the two variables do not have a linear relationship.