

Project proposal

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Section 1. Introduction

```
library(tidyverse)

## -- Attaching packages -----
## v tibble 3.0.3      v purrr 0.3.4
## v tidyr 1.1.1      v dplyr 1.0.1
## v readr 1.3.1      v forcats 0.5.0

## -- Conflicts -----
## x lubridate::as.difftime() masks base::as.difftime()
## x lubridate::date()       masks base::date()
## x dplyr::filter()         masks stats::filter()
## x readr::guess_encoding() masks rvest::guess_encoding()
## x lubridate::intersect()  masks base::intersect()
## x dplyr::lag()            masks stats::lag()
## x purrr::pluck()          masks rvest::pluck()
## x lubridate::setdiff()    masks base::setdiff()
## x lubridate::union()      masks base::union()

police <- read.csv("data/nc_durham_2020_04_01.csv")
```

General research question:

What is the relationship between a subject's demographic attributes (gender, race, or age) and the likelihood of being stopped by police in traffic or receiving a traffic citation in Durham?

Section 2. Data description

Section 3. Glimpse of data

```
glimpse(police)

## Rows: 326,024
## Columns: 29
## $ raw_row_number    <int> 1219541, 1221117, 1221124, 1221133, 1221146, ...
## $ date              <chr> "2001-12-28", "2002-01-02", "2002-01-02", "2...
## $ time              <chr> NA, "04:00:00", NA, "19:50:00", "20:45:00", ...
## $ location          <chr> "Durham, Durham County", "Durham, Durham Cou...
## $ county_name        <chr> "Durham County", "Durham County", "Durham Co...
## $ subject_age        <int> 22, 28, 21, 28, 36, 68, 24, 30, 38, 56, 28, ...
## $ subject_race       <chr> "black", "hispanic", "black", "black", "blac...
## $ subject_sex        <chr> "female", "male", "male", "female", "female"...
## $ officer_id_hash    <chr> "5b9908c1a5", "0c140e68b5", "0c140e68b5", "4...
```

```

## $ department_name      <chr> "Durham Police Department", "Durham Police D...
## $ type                 <chr> "vehicular", "vehicular", "vehicular", "vehi...
## $ arrest_made          <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ citation_issued      <lgl> FALSE, TRUE, FALSE, TRUE, FALSE, FALSE, FALS...
## $ warning_issued       <lgl> TRUE, FALSE, TRUE, FALSE, TRUE, TRUE, FALSE,...
## $ outcome              <chr> "warning", "citation", "warning", "citation"...
## $ contraband_found     <lgl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ contraband_drugs     <lgl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ contraband_weapons   <lgl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ frisk_performed      <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_conducted     <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_person        <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_vehicle       <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ search_basis         <chr> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ reason_for_frisk     <chr> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ reason_for_search    <chr> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, ...
## $ reason_for_stop      <chr> "Investigation", "Stop Light/Sign Violation"...
## $ raw_Ethnicity        <chr> "N", "H", "N", "N", "N", "N", "H", "N", "N",...
## $ raw_Race             <chr> "B", "W", "B", "B", "B", "B", "B", "W", "B",...
## $ raw_action_description <chr> "Verbal Warning", "Citation Issued", "Verbal..."

```