

# Project proposal

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## Setup

```
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")
```

## Section 1. Introduction

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 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, FA...
## \$ search_conducted	<lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## \$ search_person	<lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## \$ search_vehicle	<lgl> 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..."