Final Project (Tesla Death)

Group 4 (CDS 101)

2025-12-06

```r
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ---------------------- tidyverse 2.0.0 --
## v dplyr     1.1.4      v readr      2.1.5
## v forcats   1.0.0      v stringr    1.5.1
## v ggplot2   3.5.2      v tibble     3.3.0
## v lubridate 1.9.4      v tidyr      1.3.1
## v purrr     1.1.0
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become error
```

```r
library(dplyr)
```

```r
Tesla_Deaths_Deaths_1_ <- read_csv("Tesla_Deaths_Deaths_1_.csv")
```

```
## New names:
## Rows: 296 Columns: 24
## -- Column specification
## ------------------------------------------------------- Delimiter: "," chr
## (20): Date, Country, State, Description, Tesla driver, Tesla occupant, O... dbl
## (3): Case #, Year, Deaths lgl (1): Deceased 4
## i Use `spec()` to retrieve the full column specification for this data. i
## Specify the column types or set `show_col_types = FALSE` to quiet this message.
## * `` -> `...17`
## * `` -> `...18`
```

```r
New_Tesla <- Tesla_Deaths_Deaths_1_ %>%
mutate(
Dscrip = if_else(
str_detect(Description, "DUI"),
"DUI",
"other"
)
)
```

view(New_Tesla)

1

```
New_Tesla %>%
ggplot() +
geom_freqpoly(aes(x = Year, color = Dscrip, )) +
labs(
title = "DUI",
x = "year",
y = "Description"
)
```

`stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
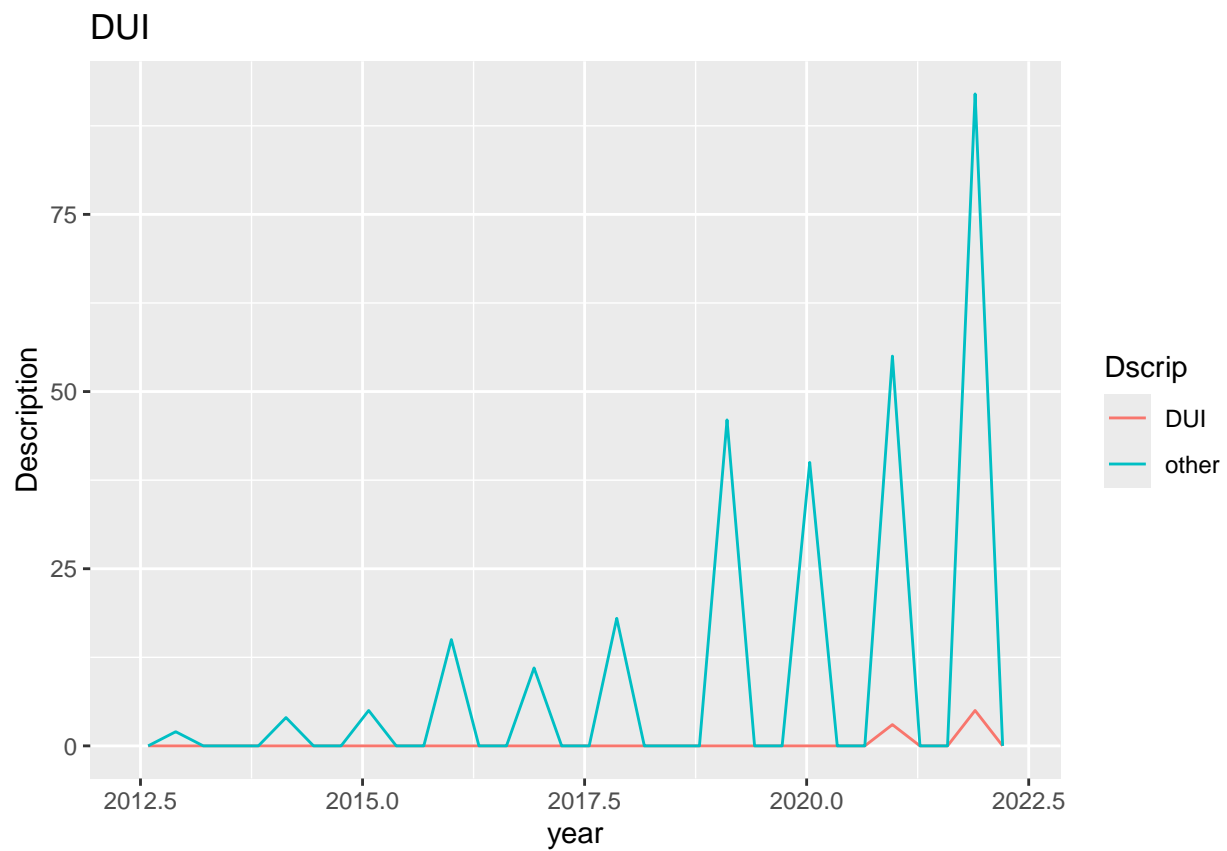

```
New_Tesla %>%
  count(Dscrip)
```

```
## # A tibble: 2 x 2
##   Dscrip      n
##   <chr>   <int>
## 1 DUI         8
## 2 other     288
```

```
New_Tesla %>%
  count(Dscrip) %>%
  mutate(percent = n / sum(n) * 100)
```

```
## # A tibble: 2 x 3
##   Dscrip      n percent
##   <chr> <int>   <dbl>
## 1 DUI       8    2.70
## 2 other   288   97.3
```

DUI make up 2.5 percent of the Tesla deaths in the years 2013 - 2022.