Final Project (Tesla Death)

Group 4 (CDS 101)

2025-12-08

```
library(tidyverse)
```

```
## Warning: package 'tidyverse' was built under R version 4.5.2

## Warning: package 'ggplot2' was built under R version 4.5.2

## Warning: package 'tibble' was built under R version 4.5.2

## Warning: package 'tidyr' was built under R version 4.5.2

## Warning: package 'readr' was built under R version 4.5.2

## Warning: package 'purrr' was built under R version 4.5.2

## Warning: package 'dplyr' was built under R version 4.5.2

## Warning: package 'stringr' was built under R version 4.5.2

## Warning: package 'forcats' was built under R version 4.5.2

## Warning: package 'lubridate' was built under R version 4.5.2

## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.1     v stringr   1.6.0
## v ggplot2   4.0.0     v tibble    3.3.0
## v lubridate 1.9.4     v tidyr     1.3.1
## v purrr     1.2.0
## -- 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 errors
```

```
library(dplyr)
```

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

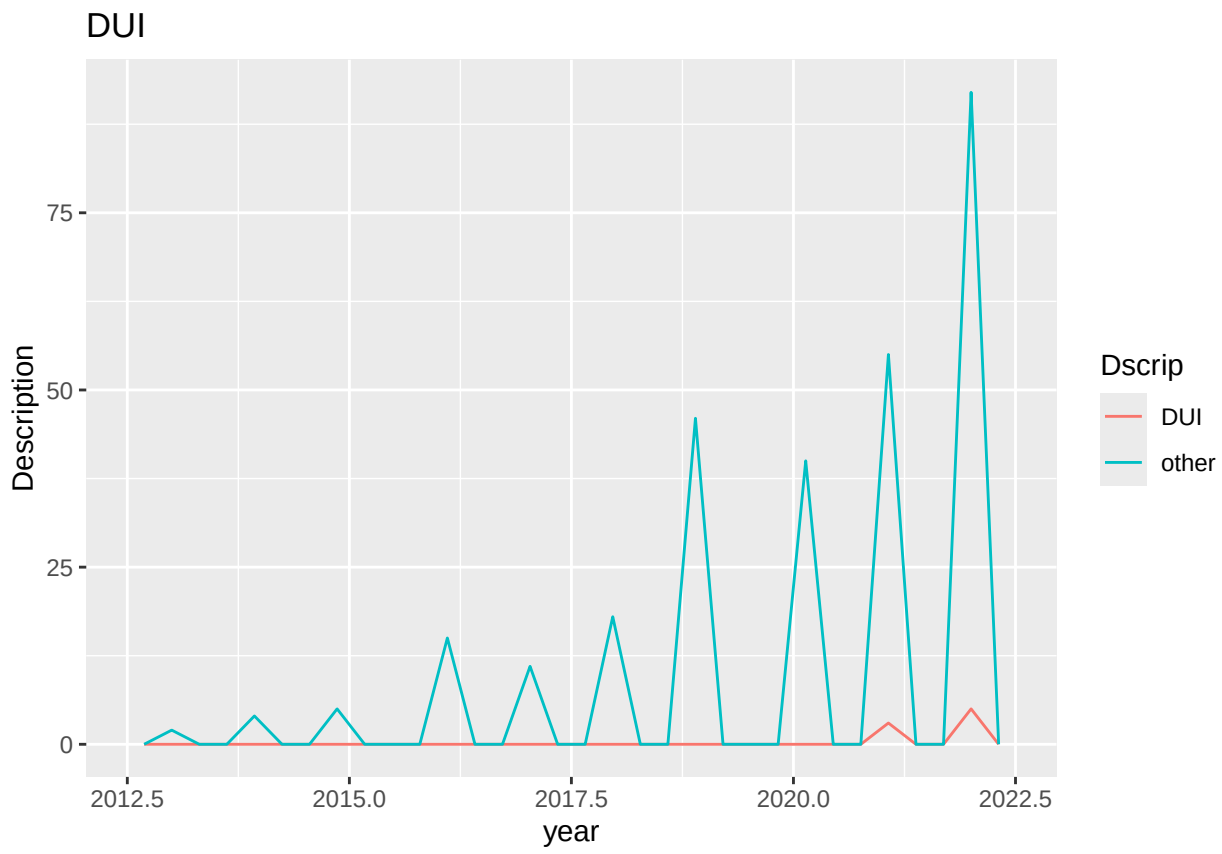
```
## New names:
## Rows: 296 Columns: 24
## -- Column specification
## -------------------------------------------------------- Delimiter: "," chr
## (20): Date, Country, State, Description, Tesla driver, Tesla occupant, O... dbl
## (3): Case #, Year, Deaths lgl (1): Deceased 4
## i Use `spec()` to 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`
```

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

view(New_Tesla)

```
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 `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.