

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)
```

```
library(readr)
```

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

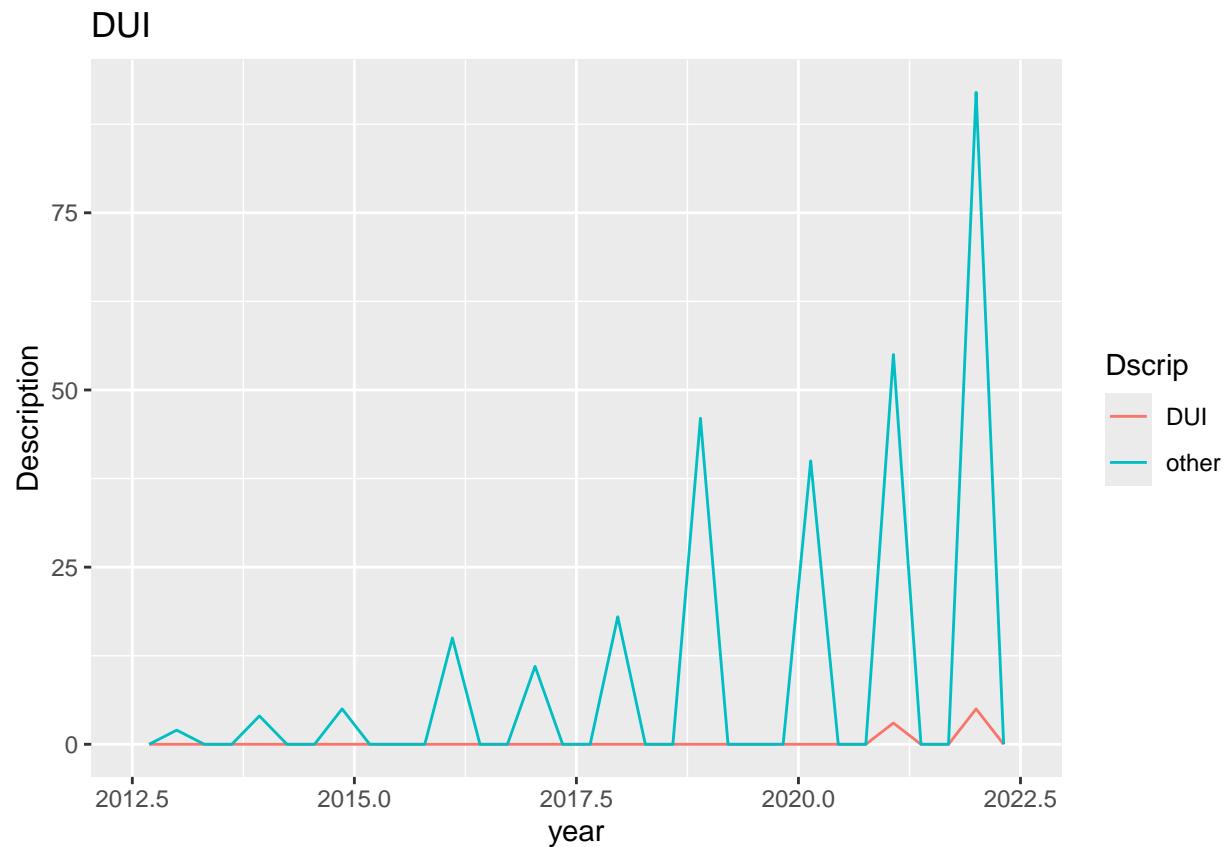
```
## New names:
## Rows: 296 Columns: 24
## -- Column specification
## ----- Delimiter: "," chr
## (20): Date, Country, State, Description, Tesla driver, Tesla occupant, 0... dbl
## (3): Case #, Year, Deaths lgl (1): Deceased 4
## i Use 'spec()' to retrieve the full column specification for this data. 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.