

# voting-rights-v2

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3/30/2022

```
library(tidyverse)
library(janitor)
library(scales)
```

data from: <https://dl.ncsbe.gov/index.html?prefix=data/Snapshots/>

```
durham21 <- read_csv("data/duke_2021.csv")
```

```
## Warning: One or more parsing issues, see 'problems()' for details
```

```
## Rows: 11801 Columns: 92
```

```
## -- Column specification -----
## Delimiter: ","
## chr  (52): county_desc, voter_reg_num, ncid, status_cd, voter_status_desc, r...
## dbl  (12): county_id, house_num, zip_code, mail_zipcode, area_cd, phone_num,...
## lgl  (24): absent_ind, name_prefix_cd, half_code, street_dir, street_sufx_cd,...
## date  (4): snapshot_dt, registr_dt, cancellation_dt, load_dt
```

```
##
## 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.
```

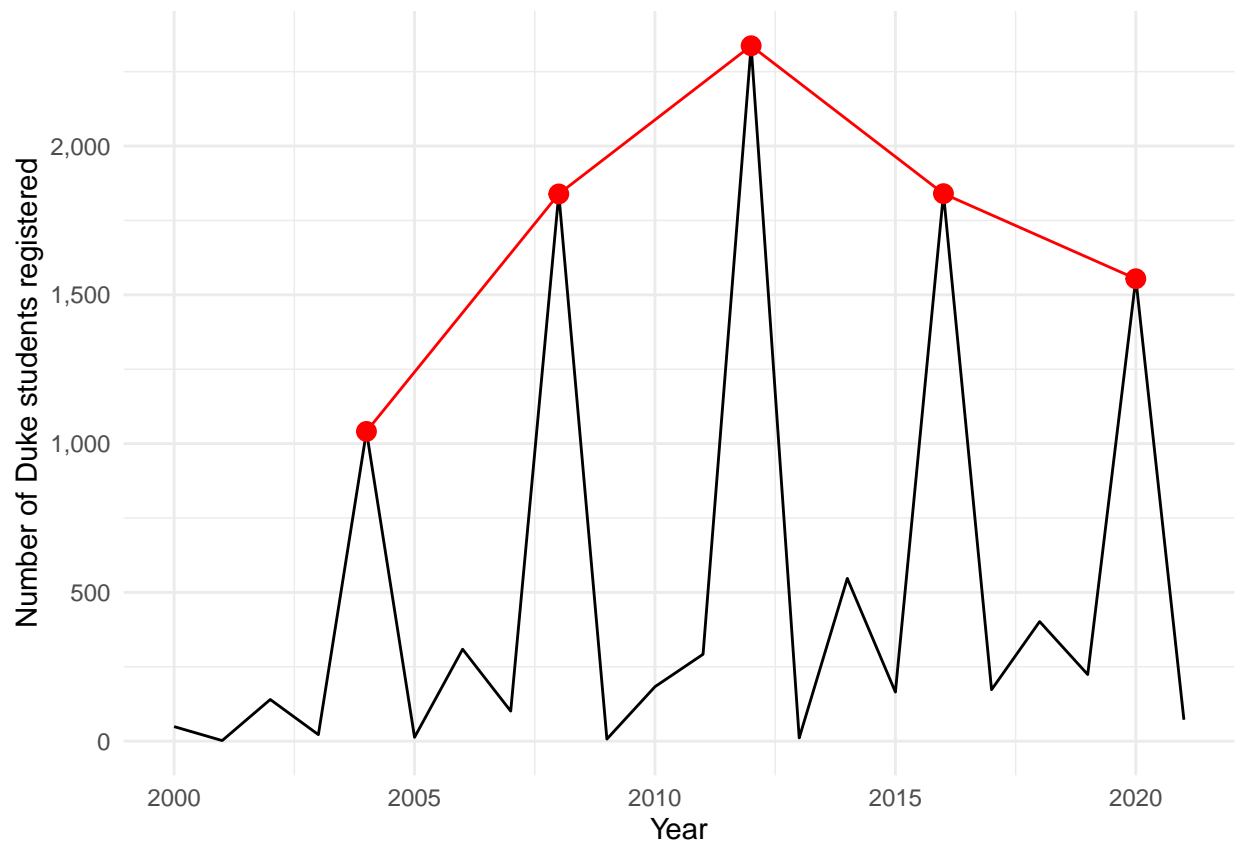
```
duke_students <- durham21 %>%
  filter(
    street_name %in% c("DUKE UNIVERSITY WEST CAMPUS", "DUKE UNIVERSITY EAST CAMPUS", "TOWERVIEW", "ALEXANDER",
      (street_name %in% c("BASSETT", "EPWORTH", "FEW QUAD", "GILBERT ADDOMS", "GILES", "JARVIS", "MAXWELL") &
        (street_name == "SWIFT" & house_num == "300") |
        (street_name == "CAMPUS" & str_detect(house_num, "13\\d\\d"))
  )
```

```
duke_students %>%
  filter(age < 50) %>%
  mutate(registr_yr = lubridate::year(registr_dt)) %>%
  count(registr_yr) %>%
  filter(registr_yr >= 2000) %>%
  ggplot(aes(x = registr_yr, y = n)) +
  geom_line() +
  geom_line()
```

```

data = duke_students %>%
filter(age < 50) %>%
mutate(registr_yr = lubridate::year(registr_dt)) %>%
count(registr_yr) %>%
filter(registr_yr %in% c(2004, 2008, 2012, 2016, 2020)),
color = "red"
) +
geom_point(
  data = duke_students %>%
  filter(age < 50) %>%
  mutate(registr_yr = lubridate::year(registr_dt)) %>%
  count(registr_yr) %>%
  filter(registr_yr %in% c(2004, 2008, 2012, 2016, 2020)),
  color = "red",
  size = 3
) +
scale_y_continuous(labels = scales::label_comma()) +
labs(
  x = "Year",
  y = "Number of Duke students registered"
) +
theme_minimal()

```



```

durham21 %>%
count(street_name, street_type_cd) %>%

```

```
arrange(desc(n))
```

```
## # A tibble: 17 x 3
##   street_name      street_type_cd      n
##   <chr>          <chr>      <int>
## 1 DUKE UNIVERSITY WEST CAMPUS <NA>      5551
## 2 DUKE UNIVERSITY EAST CAMPUS <NA>      3151
## 3 DUKE UNIVERSITY WEST CAMPUS DORM        929
## 4 DUKE UNIVERSITY EAST CAMPUS DORM        726
## 5 ALEXANDER      AVE         499
## 6 YEARBY         AVE         399
## 7 SWIFT          AVE         383
## 8 YEARBY         ST           58
## 9 CAMPUS         DR           39
## 10 TOWERVIEW     DR           35
## 11 ALEXANDER     ST           13
## 12 ALEXANDER     DR           10
## 13 ALEXANDER     <NA>         2
## 14 TOWERVIEW     RD           2
## 15 YEARBY        <NA>         2
## 16 ALEXANDER     DORM         1
## 17 YEARBY       RD           1
```