Final Project 'Visualizations

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11/28/2021

Visualizations

SUMMARY STATISTICS

```
##
          X1
                           X
                                         state
                                                               cases
                                      Length: 30978
                     Min.
                                                           Min.
##
    1st Qu.: 8617
                     1st Qu.: 8617
                                      Class : character
                                                           1st Qu.:
                                                                     25681
    Median :17209
                     Median :17209
                                      Mode : character
                                                           Median: 135894
##
##
    Mean
            :17330
                     Mean
                             :17330
                                                           Mean
                                                                  : 386504
##
    3rd Qu.:26028
                     3rd Qu.:26028
                                                           3rd Qu.: 477354
            :34953
                                                                  :5060365
##
    Max.
                     Max.
                             :34953
                                                           Max.
##
##
                                                          mask_mandate
        deaths
                       new_cases
                                        new_deaths
##
    Min.
           :
                 0
                     Min.
                                  1
                                      Min.
                                              :-598.00
                                                         Length: 30978
    1st Qu.:
##
              519
                     1st Qu.:
                                157
                                      1st Qu.:
                                                  1.00
                                                          Class : character
##
    Median: 2546
                     Median :
                               572
                                      Median :
                                                  7.00
                                                          Mode :character
##
    Mean
            : 7287
                     Mean
                             : 1557
                                      Mean
                                                 25.43
##
    3rd Qu.: 8592
                     3rd Qu.: 1629
                                      3rd Qu.:
                                                 25.00
##
    Max.
            :74327
                     Max.
                             :64986
                                      Max.
                                              :2559.00
    NA's
##
            :568
                                      NA's
                                              :568
##
         date
                          fine_enforced
                                            charge_enforced not_enforced
##
            :2020-01-26
                          Mode :logical
                                           Mode :logical
                                                             Mode :logical
    Min.
##
    1st Qu.:2020-08-04
                          FALSE: 11633
                                            FALSE: 15956
                                                             FALSE: 19619
    Median :2020-12-29
                                            TRUE :13481
                                                             TRUE: 9818
##
                          TRUE: 17804
                                           NA's :1541
    Mean
           :2021-01-03
                          NA's :1541
                                                             NA's :1541
    3rd Qu.:2021-05-31
##
##
    Max.
            :2021-11-26
##
##
    mandate_start
                          mandate_start_2
                                                  mandate_end
    Min.
            :2020-04-08
                                  :2020-10-05
##
                          Min.
                                                 Min.
                                                         :2020-05-01
##
    1st Qu.:2020-05-06
                          1st Qu.:2020-11-09
                                                 1st Qu.:2021-03-25
##
    Median :2020-07-01
                          Median :2021-08-04
                                                 Median :2021-05-04
##
            :2020-06-30
                                  :2021-04-16
                                                         :2021-04-02
    Mean
                          Mean
                                                 Mean
##
    3rd Qu.:2020-07-25
                          3rd Qu.:2021-08-13
                                                 3rd Qu.:2021-05-28
            :2020-12-09
                                  :2021-08-30
##
    Max.
                          Max.
                                                         :2021-07-06
                                                 Max.
##
    NA's
            :4947
                          NA's
                                  :28160
                                                 NA's
                                                         :9577
    mandate_end_2
##
##
    Min.
            :2021-04-10
##
    1st Qu.:2021-04-10
   Median :2021-06-22
            :2021-07-05
##
    Mean
```

```
##
          X1
                          X
                                       state
                                                           cases
##
                    Min. : 1.0
                                    Length:592
                                                       Min. :
   Min.
          : 1.0
                                                                   12
##
   1st Qu.:173.8
                    1st Qu.:173.8
                                    Class :character
                                                       1st Qu.:101044
   Median :322.5
                    Median :322.5
                                    Mode :character
                                                       Median :373015
##
  Mean :320.3
                    Mean :320.3
                                                              :358779
                                                       Mean
##
   3rd Qu.:471.2
                    3rd Qu.:471.2
                                                       3rd Qu.:546378
##
   Max.
          :624.0
                   Max.
                          :624.0
                                                       Max.
                                                              :844594
##
##
                                        new_deaths
                                                       mask_mandate
        deaths
                      new_cases
                                      Min. :-15.00
                                                       Length: 592
##
   Min.
                0
                    Min. :
                                6.0
   1st Qu.: 1765
                    1st Qu.: 408.8
                                      1st Qu.: 2.00
                                                       Class : character
   Median: 4876
                    Median: 926.0
                                      Median : 13.00
                                                       Mode :character
   Mean : 6644
                    Mean : 1426.7
                                      Mean : 27.22
##
##
   3rd Qu.:11218
                    3rd Qu.: 1958.8
                                      3rd Qu.: 32.00
                                             :309.00
##
   Max.
         :16115
                    Max.
                           :11142.0
                                      Max.
##
##
        date
                         fine_enforced
                                         charge_enforced not_enforced
##
   Min.
           :2020-03-14
                         Mode :logical
                                         Mode :logical
                                                         Mode:logical
   1st Qu.:2020-08-08
                         FALSE:592
                                         FALSE:592
                                                         TRUE:592
   Median :2021-01-03
##
   Mean
         :2021-01-10
   3rd Qu.:2021-06-07
##
   Max.
           :2021-11-25
##
##
   mandate_start
                         mandate_start_2 mandate_end
                                                              mandate_end_2
##
   Min.
          :2020-07-16
                         Min.
                               :NA
                                         Min.
                                                :2021-04-09
                                                              Min.
                                                                     :NA
   1st Qu.:2020-07-16
                         1st Qu.:NA
                                         1st Qu.:2021-04-09
                                                              1st Qu.:NA
## Median :2020-07-16
                         Median :NA
                                         Median :2021-04-09
                                                              Median :NA
   Mean
           :2020-07-16
                         Mean
                                :NA
                                         Mean
                                                :2021-04-09
                                                              Mean
                                                                     :NA
##
   3rd Qu.:2020-07-16
                         3rd Qu.:NA
                                         3rd Qu.:2021-04-09
                                                              3rd Qu.:NA
##
   Max.
           :2020-07-16
                         Max.
                                :NA
                                         Max.
                                                :2021-04-09
                                                              Max.
                                                                     :NA
##
                         NA's
                                :592
                                                              NA's
                                                                     :592
##
        days
   Length: 592
##
   Class : difftime
##
   Mode :numeric
##
##
##
##
```

3rd Qu.:2021-10-27

:2021-10-27

:29327

Max.

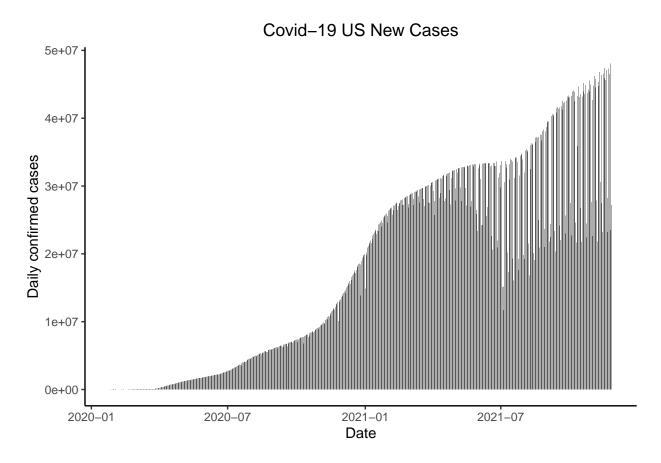
##

NA's

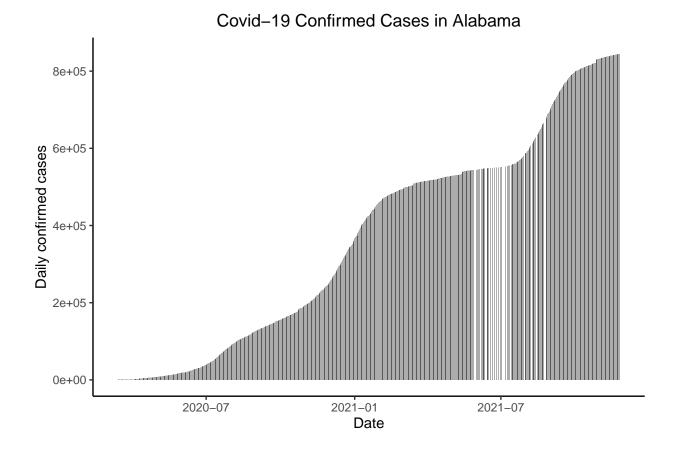
GRAPHS

Barchart of cases over time

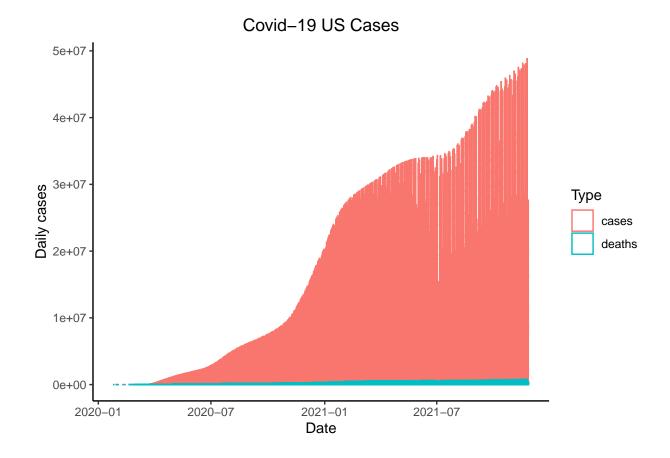
 ${\bf covid_data\ new_cases}$



Alabama Daily Cases



${\bf covid_data\ new_cases,\ new_deaths}$



Line graph of cases over time covid_data new_cases

