

# Econ 216 Final Project

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```
data = read.csv(".\\uswtb_v4_3_20220114.csv")
```

```
summary(data)
```

```
##      case_id      faa_ors      faa_asn      usgs_pr_id
## Min.   :3000001  Length:70808  Length:70808  Min.    :    1
## 1st Qu.:3032230  Class :character  Class :character  1st Qu.:18626
## Median :3050979  Mode  :character  Mode  :character  Median :28598
## Mean   :3058490                      Mean   :27524
## 3rd Qu.:3090448                      3rd Qu.:38720
## Max.   :3118671                      Max.   :49135
##                                     NA's   :32545
##      eia_id      t_state      t_county      t_fips
## Min.   :    90  Length:70808  Length:70808  Min.   : 2013
## 1st Qu.:56763  Class :character  Class :character  1st Qu.:19081
## Median :57752  Mode  :character  Mode  :character  Median :35057
## Mean   :57878                      Mean   :32244
## 3rd Qu.:60338                      3rd Qu.:48141
## Max.   :65270                      Max.   :72133
## NA's   :5793
##      p_name      p_year      p_tnum      p_cap
## Length:70808  Min.   :1981  Min.   : 1.0  Min.   : 0.05
## Class :character  1st Qu.:2008  1st Qu.: 56.0  1st Qu.: 99.00
## Mode  :character  Median :2012  Median : 85.0  Median :158.00
##                      Mean   :2012  Mean   :104.4  Mean   :170.18
##                      3rd Qu.:2018  3rd Qu.:121.0  3rd Qu.:211.22
##                      Max.   :2021  Max.   :731.0  Max.   :525.02
##                      NA's   :613    NA's   :4482
##      t_manu      t_model      t_cap      t_hh
## Length:70808  Length:70808  Min.   : 50  Min.   : 19.00
## Class :character  Class :character  1st Qu.:1500  1st Qu.: 80.00
## Mode  :character  Mode  :character  Median :2000  Median : 80.00
##                      Mean   :1964  Mean   : 81.06
##                      3rd Qu.:2300  3rd Qu.: 87.00
##                      Max.   :6000  Max.   :131.00
##                      NA's   :5480  NA's   :6180
##      t_rd      t_rsa      t_ttlh      retrofit
## Min.   : 13.40  Min.   : 141  Min.   : 30.4  Min.   :0.00000
## 1st Qu.: 82.00  1st Qu.: 5281  1st Qu.:121.0  1st Qu.:0.00000
## Median :100.00  Median : 7854  Median :130.1  Median :0.00000
## Mean   : 95.66  Mean   : 7619  Mean   :129.1  Mean   :0.08454
## 3rd Qu.:110.00  3rd Qu.: 9503  3rd Qu.:145.1  3rd Qu.:0.00000
## Max.   :155.00  Max.   :18869  Max.   :199.6  Max.   :1.00000
```

```

## NA's :5934      NA's :5934      NA's :6180
## retrofit_year   t_conf_atr      t_conf_loc      t_img_date
## Min. :2015      Min. :1.000      Min. :1.000      Length:70808
## 1st Qu.:2018     1st Qu.:3.000      1st Qu.:3.000      Class :character
## Median :2019     Median :3.000      Median :3.000      Mode  :character
## Mean :2019       Mean :2.767       Mean :2.884
## 3rd Qu.:2020     3rd Qu.:3.000      3rd Qu.:3.000
## Max. :2020       Max. :3.000       Max. :3.000
## NA's :64822
## t_img_srce      xlong          ylat
## Length:70808    Min. : -171.71    Min. :13.39
## Class :character 1st Qu.: -103.04  1st Qu.:34.43
## Mode :character  Median : -99.39   Median :39.05
##                  Mean : -100.09   Mean :38.48
##                  3rd Qu.: -95.20   3rd Qu.:42.81
##                  Max. : 144.72   Max. :66.84
##

```