## Analysis of 66 Strikes

## 2024-09-27

```
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr 1.1.4
                       v readr
                                   2.1.5
                        v stringr 1.5.1
## v forcats 1.0.0
## v ggplot2 3.5.1
                       v tibble
                                    3.2.1
## v lubridate 1.9.3
                        v tidyr
                                    1.3.1
## v purrr
              1.0.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()
                    masks stats::lag()
## i Use the conflicted package (<a href="http://conflicted.r-lib.org/">http://conflicted.r-lib.org/</a>) to force all conflicts to become error
## Attaching package: 'scales'
##
## The following object is masked from 'package:purrr':
##
##
       discard
##
##
## The following object is masked from 'package:readr':
##
##
      col factor
##
##
##
## Attaching package: 'maps'
##
##
## The following object is masked from 'package:purrr':
##
      map
## Warning: There was 1 warning in 'mutate()'.
## i In argument: 'hours_lost = *...'.
## Caused by warning in 'replace_na()':
## ! NAs introduced by coercion
## Warning: NAs introduced by coercion
```

Table 1: Summary of Total Strikes, Total Strikes, Total Strike Length, and Total Hours Lost

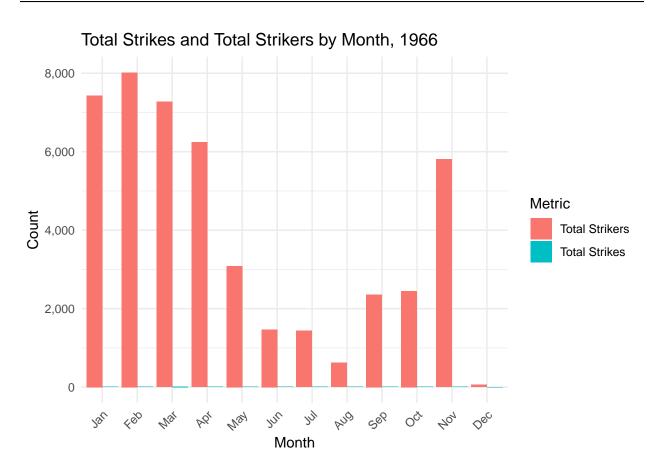
| total_strikes | total_strikers | total_strike_length | total_hours_lost |
|---------------|----------------|---------------------|------------------|
| 102           | 46,264         | 2,378               | 18,863,736       |

Table 2: More Summary

| mean_strikensned | lian_strik | e <b>ss</b> l_strikers m | in_strikersmax | _strike | er <b>s</b> nean_l | engthedian_lengthi | in_length | max_length |
|------------------|------------|--------------------------|----------------|---------|--------------------|--------------------|-----------|------------|
| 771.0667         | 385        | 1017.322                 | 3              | 5200    | 25.8478            | 33 13.5            | 0         | 183        |

Table 3: Total Strikes and Total Strikers by Month, 1966

| Metric         | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep  | Oct  | Nov  | Dec |
|----------------|------|------|------|------|------|------|------|-----|------|------|------|-----|
| Total Strikes  | 6    | 9    | 13   | 12   | 6    | 12   | 10   | 7   | 10   | 8    | 6    | 3   |
| Total Strikers | 7433 | 8020 | 7274 | 6244 | 3089 | 1468 | 1433 | 623 | 2360 | 2452 | 5808 | 60  |



## Rustbelt Strikes

## # A tibble: 13 x 2

| ## |    | State           | ${\tt total\_strikers}$ |
|----|----|-----------------|-------------------------|
| ## |    | <chr></chr>     | <dbl></dbl>             |
| ## | 1  | alabama         | 65                      |
| ## | 2  | california      | 1456                    |
| ## | 3  | connecticut     | 4000                    |
| ## | 4  | illinois        | 5082                    |
| ## | 5  | indiana         | 9245                    |
| ## | 6  | kentucky        | 3400                    |
| ## | 7  | michigan:south  | 3444                    |
| ## | 8  | minnesota       | 675                     |
| ## | 9  | new york:main   | 1380                    |
| ## | 10 | ohio            | 10483                   |
| ## | 11 | pennsylvania    | 690                     |
| ## | 12 | washington:main | 184                     |
| ## | 13 | wisconsin       | 2410                    |
|    |    |                 |                         |

## Warning in validateCoords(lng, lat, funcName): Data contains 5 rows with either
## missing or invalid lat/lon values and will be ignored

## What cities are in the data?

Table 4: Top 10 Cities by Number of Strikes

| Location             | total_strikes | total_strikers |
|----------------------|---------------|----------------|
| Detroit, Michigan    | 5             | 350            |
| Lima, Ohio           | 4             | 2029           |
| Chicago, Illinois    | 3             | 2413           |
| Dayton, Ohio         | 3             | 600            |
| Milwaukee, Wisconsin | 3             | 450            |
| Akron, Ohio          | 2             | 1600           |
| Buffalo, New York    | 2             | 150            |
| Elyria, Ohio         | 2             | 0              |
| Fort Wayne, Indiana  | 2             | 1065           |
| San Jose, California | 2             | 1219           |

Table 5: Top 10 Cities by Number of Strikers

| Location               | $total\_strikes$ | total_strikers |
|------------------------|------------------|----------------|
| Columbus, Indiana      | 1                | 5200           |
| Stratford, Connecticut | 1                | 4000           |
| Newark, Ohio           | 1                | 2500           |
| Chicago, Illinois      | 3                | 2413           |
| Northlake, Illinois    | 1                | 2105           |
| Lima, Ohio             | 4                | 2029           |
| Marion, Indiana        | 1                | 1839           |
| Akron, Ohio            | 2                | 1600           |
| Columbus, Ohio         | 1                | 1350           |
| Milwaukee, WIsconsin   | 1                | 1250           |

Table 6: Summary of Strikes and Employees on Strike by City

| Columbus, Indiana          | 1 |      |
|----------------------------|---|------|
|                            |   | 5200 |
| Stratford, Connecticut     | 1 | 4000 |
| Newark, Ohio               | 1 | 2500 |
| Chicago, Illinois          | 3 | 2413 |
| Northlake, Illinois        | 1 | 2105 |
| Lima, Ohio                 | 4 | 2029 |
| Marion, Indiana            | 1 | 1839 |
| Akron, Ohio                | 2 | 1600 |
| Columbus, Ohio             | 1 | 1350 |
| Milwaukee, WIsconsin       | 1 | 1250 |
| San Jose, California       | 2 | 1219 |
| Horseheads, New York       | 1 | 1200 |
| Kalamazoo, Michigan        | 1 | 1130 |
| Warren, Michigan           | 1 | 1100 |
| Fort Wayne, Indiana        | 2 | 1065 |
| Wausau, Wisconsin          | 1 | 680  |
| Minneapolis, Minnesota     | 1 | 675  |
| Dayton, Ohio               | 3 | 600  |
| Kent, Ohio                 | 1 | 550  |
| Maple Heights, Ohio        | 1 | 512  |
| Evansville, Indiana        | 1 | 500  |
| Lebanon, Pennsylvania      | 1 | 500  |
| Princeton, Indiana         | 1 | 451  |
| Milwaukee, Wisconsin       | 3 | 450  |
| Detroit, Michigan          | 5 | 350  |
| Manistee, Michigan         | 1 | 320  |
| Mattoon, Illinois          | 1 | 302  |
| Rock Falls, Illinois       | 1 | 262  |
| Coldwater, Michigan        | 1 | 217  |
| Springfield, Ohio          | 1 | 217  |
| Delphos, Ohio              | 1 | 210  |
| Galion, Ohio               | 1 | 200  |
| Jeannette, Pennsylvania    | 1 | 190  |
| Renton, Washington         | 1 | 184  |
| Buffalo, New York          | 2 | 150  |
| Cincinnati, Ohio           | 1 | 135  |
| Traverse City, Michigan    | 1 | 135  |
| Hayward, California        | 1 | 134  |
| Lansing, Michigan          | 1 | 120  |
| Claremont, California      | 1 | 100  |
| Toledo, Ohio               | 1 | 80   |
| Wisconsin Dells, Wisconsin | 1 | 80   |
| Anniston, Alabama          | 1 | 65   |
| Oak Park, Michigan         | 1 | 50   |
| Long Island, New York      | 1 | 30   |
| Livonia, Michigan          | 1 | 22   |
| Alameda, California        | 1 | 3    |
| Elyria, Ohio               | 2 | 0    |
| Tulsa, Oklahoma            | 2 | 0    |
| Atlanta, Georgia           | 1 | 0    |

| Location                                     | total_strikes | total_strikers |
|--|---------------|----------------|
| Bucyrus, Ohio                                | 1             | 0              |
| California                                   | 1             | 0              |
| Carrollton, Texas                            | 1             | 0              |
| Charleston, West Virginia                    | 1             | 0              |
| Cleveland, Ohio                              | 1             | 0              |
| Edison, New Jersey                           | 1             | 0              |
| Elba, Alabama                                | 1             | 0              |
| Elmira, New York                             | 1             | 0              |
| Erie, Pennsylvania                           | 1             | 0              |
| Fostoria, Ohio                               | 1             | 0              |
| Fullerton, California                        | 1             | 0              |
| Highland, Illinois                           | 1             | 0              |
| LaPorte, Indiana                             | 1             | 0              |
| Louisville, Kentucky                         | 1             | 0              |
| Lynn, Massachusetts & Everett, Massachusetts | 1             | 0              |
| Massillon, Ohio                              | 1             | 0              |
| New Haven, Connecticut                       | 1             | 0              |
| Oshkosh, Wisconsin                           | 1             | 0              |
| Pontiac, Michigan                            | 1             | 0              |
| Port Huron, Michigan                         | 1             | 0              |
| Roseville, Michigan                          | 1             | 0              |
| South Bend, Indiana                          | 1             | 0              |
| St Marys, Ohio                               | 1             | 0              |
| St Paul, Minnesota                           | 1             | 0              |
| Troy, New York                               | 1             | 0              |
| Watertown, New YOrk                          | 1             | 0              |

Table 7: Number of 1-Strike Cities

| num_ | _cities_ | _once |
|------|----------|-------|
|      |          | 65    |