

WA NIBRS Trends

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```
library(readtext)
library(tidyverse)

## -- Attaching packages -----
## v ggplot2 3.1.1      v purrr  0.3.2
## v tibble  2.1.1      v dplyr  0.8.0.1
## v tidyr   0.8.3      v stringr 1.4.0
## v readr   1.3.1      v forcats 0.4.0

## -- Conflicts -----
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()

library(stringi)
library(data.table)

##
## Attaching package: 'data.table'
##
## The following objects are masked from 'package:dplyr':
##
##   between, first, last
##
## The following object is masked from 'package:purrr':
##
##   transpose

library(doParallel)

## Loading required package: foreach
##
## Attaching package: 'foreach'
##
## The following objects are masked from 'package:purrr':
##
##   accumulate, when
##
## Loading required package: iterators
## Loading required package: parallel

library(knitr)
knitr::opts_chunk$set(
  echo = FALSE,
  message = FALSE,
  fig.pos = 'h',
  fig.align = 'center',
  collapse = TRUE,
  results = 'asis',
  dpi = 400,
  fig.path = './figures/',
```

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dev=c('pdf', 'png')
)

# Multi-core
cl <- makePSOCKcluster(4)
registerDoParallel(cl)

source("./data_import.R")

## Parsed with column specification:
## cols(
##   agency_id = col_double(),
##   incident_id = col_double(),
##   nibrs_month_id = col_double(),
##   incident_number = col_character(),
##   cargo_theft_flag = col_logical(),
##   submission_date = col_logical(),
##   incident_date = col_datetime(format = ""),
##   report_date_flag = col_logical(),
##   incident_hour = col_double(),
##   cleared_except_id = col_double(),
##   cleared_except_date = col_datetime(format = ""),
##   incident_status = col_double(),
##   data_home = col_character(),
##   ddocname = col_character(),
##   orig_format = col_logical(),
##   ff_line_number = col_logical(),
##   did = col_logical()
## )

## Warning: 23881 parsing failures.
##   row      col      expected actual      file
## 1144 cargo_theft_flag 1/0/T/F/TRUE/FALSE      N 'nibrs_incident_2012.csv'
## 1373 cargo_theft_flag 1/0/T/F/TRUE/FALSE      N 'nibrs_incident_2012.csv'
## 1375 cargo_theft_flag 1/0/T/F/TRUE/FALSE      N 'nibrs_incident_2012.csv'
## 1428 cargo_theft_flag 1/0/T/F/TRUE/FALSE      N 'nibrs_incident_2012.csv'
## 4397 report_date_flag 1/0/T/F/TRUE/FALSE      R 'nibrs_incident_2012.csv'
## ....
## See problems(...) for more details.

## Parsed with column specification:
## cols(
##   agency_id = col_double(),
##   incident_id = col_double(),
##   nibrs_month_id = col_double(),
##   incident_number = col_character(),
##   cargo_theft_flag = col_character(),
##   submission_date = col_logical(),
##   incident_date = col_datetime(format = ""),
##   report_date_flag = col_logical(),
##   incident_hour = col_double(),
##   cleared_except_id = col_double(),
##   cleared_except_date = col_datetime(format = ""),
##   incident_status = col_double(),
##   data_home = col_character(),

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##   ddocname = col_character(),
##   orig_format = col_logical(),
##   ff_line_number = col_logical(),
##   did = col_logical()
## )

## Warning: 21267 parsing failures.
##   row      col      expected actual      file
## 3212 report_date_flag 1/0/T/F/TRUE/FALSE      R 'nibrs_incident_2013.csv'
## 3333 report_date_flag 1/0/T/F/TRUE/FALSE      R 'nibrs_incident_2013.csv'
## 3634 report_date_flag 1/0/T/F/TRUE/FALSE      R 'nibrs_incident_2013.csv'
## 3677 report_date_flag 1/0/T/F/TRUE/FALSE      R 'nibrs_incident_2013.csv'
## 3719 report_date_flag 1/0/T/F/TRUE/FALSE      R 'nibrs_incident_2013.csv'
## ....
## See problems(...) for more details.

## Parsed with column specification:
## cols(
##   agency_id = col_double(),
##   incident_id = col_double(),
##   nibrs_month_id = col_double(),
##   incident_number = col_character(),
##   cargo_theft_flag = col_logical(),
##   submission_date = col_logical(),
##   incident_date = col_datetime(format = ""),
##   report_date_flag = col_character(),
##   incident_hour = col_double(),
##   cleared_except_id = col_double(),
##   cleared_except_date = col_datetime(format = ""),
##   incident_status = col_double(),
##   data_home = col_character(),
##   ddocname = col_character(),
##   orig_format = col_logical(),
##   ff_line_number = col_logical(),
##   did = col_logical()
## )

## Parsed with column specification:
## cols(
##   agency_id = col_double(),
##   incident_id = col_double(),
##   nibrs_month_id = col_double(),
##   incident_number = col_character(),
##   cargo_theft_flag = col_logical(),
##   submission_date = col_datetime(format = ""),
##   incident_date = col_datetime(format = ""),
##   report_date_flag = col_logical(),
##   incident_hour = col_double(),
##   cleared_except_id = col_double(),
##   cleared_except_date = col_datetime(format = ""),
##   incident_status = col_double(),
##   data_home = col_character(),
##   ddocname = col_character(),
##   orig_format = col_logical(),
##   ff_line_number = col_logical(),

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## did = col_double()
## )

## Warning: 23378 parsing failures.
## row col expected actual file
## 2306 report_date_flag 1/0/T/F/TRUE/FALSE R 'nibrs_incident_2015.csv'
## 2444 report_date_flag 1/0/T/F/TRUE/FALSE R 'nibrs_incident_2015.csv'
## 2606 report_date_flag 1/0/T/F/TRUE/FALSE R 'nibrs_incident_2015.csv'
## 5446 report_date_flag 1/0/T/F/TRUE/FALSE R 'nibrs_incident_2015.csv'
## 6132 report_date_flag 1/0/T/F/TRUE/FALSE R 'nibrs_incident_2015.csv'
## .....
## See problems(...) for more details.

## Parsed with column specification:
## cols(
## DATA_YEAR = col_double(),
## AGENCY_ID = col_double(),
## INCIDENT_ID = col_double(),
## NIBRS_MONTH_ID = col_double(),
## CARGO_THEFT_FLAG = col_logical(),
## SUBMISSION_DATE = col_character(),
## INCIDENT_DATE = col_character(),
## REPORT_DATE_FLAG = col_character(),
## INCIDENT_HOUR = col_double(),
## CLEARED_EXCEPT_ID = col_double(),
## CLEARED_EXCEPT_DATE = col_character(),
## INCIDENT_STATUS = col_double(),
## DATA_HOME = col_character(),
## ORIG_FORMAT = col_logical(),
## DID = col_double()
## )

## Warning: 82 parsing failures.
## row col expected actual file
## 13544 CARGO_THEFT_FLAG 1/0/T/F/TRUE/FALSE N 'nibrs_incident_2016.csv'
## 22138 CARGO_THEFT_FLAG 1/0/T/F/TRUE/FALSE N 'nibrs_incident_2016.csv'
## 35852 CARGO_THEFT_FLAG 1/0/T/F/TRUE/FALSE N 'nibrs_incident_2016.csv'
## 35853 CARGO_THEFT_FLAG 1/0/T/F/TRUE/FALSE N 'nibrs_incident_2016.csv'
## 170783 CARGO_THEFT_FLAG 1/0/T/F/TRUE/FALSE N 'nibrs_incident_2016.csv'
## .....
## See problems(...) for more details.

## Parsed with column specification:
## cols(
## DATA_YEAR = col_double(),
## AGENCY_ID = col_double(),
## INCIDENT_ID = col_double(),
## NIBRS_MONTH_ID = col_double(),
## CARGO_THEFT_FLAG = col_character(),
## SUBMISSION_DATE = col_character(),
## INCIDENT_DATE = col_character(),
## REPORT_DATE_FLAG = col_character(),
## INCIDENT_HOUR = col_double(),
## CLEARED_EXCEPT_ID = col_double(),
## CLEARED_EXCEPT_DATE = col_logical(),
## INCIDENT_STATUS = col_double(),

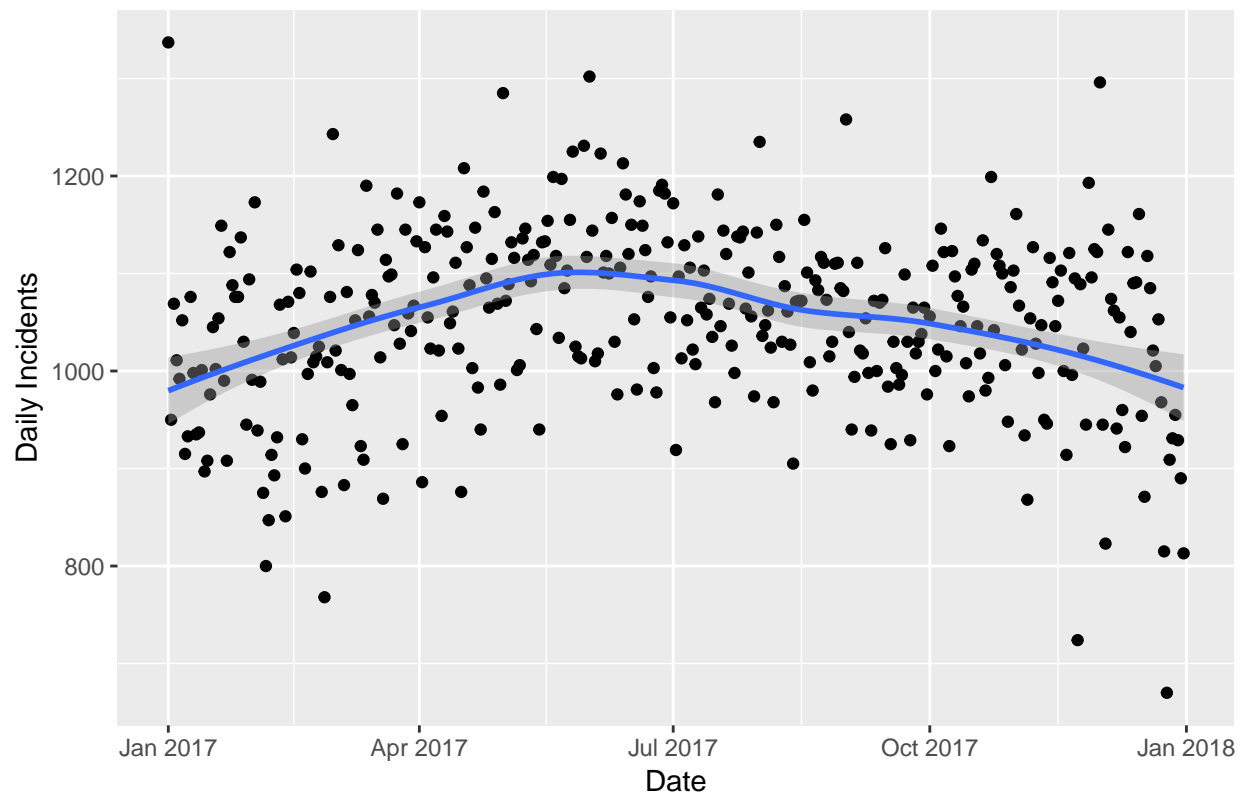
```

```
## DATA_HOME = col_character(),
## ORIG_FORMAT = col_logical(),
## DID = col_double()
## )

## Warning: 4301 parsing failures.
## row      col      expected  actual      file
## 1964 CLEARED_EXCEPT_DATE 1/0/T/F/TRUE/FALSE 6-Apr-17 'nibrs_incident_2017.csv'
## 3699 CLEARED_EXCEPT_DATE 1/0/T/F/TRUE/FALSE 24-Sep-17 'nibrs_incident_2017.csv'
## 3927 CLEARED_EXCEPT_DATE 1/0/T/F/TRUE/FALSE 30-Jul-17 'nibrs_incident_2017.csv'
## 4940 CLEARED_EXCEPT_DATE 1/0/T/F/TRUE/FALSE 6-Oct-17 'nibrs_incident_2017.csv'
## 5305 CLEARED_EXCEPT_DATE 1/0/T/F/TRUE/FALSE 28-Sep-17 'nibrs_incident_2017.csv'
## .....
## See problems(...) for more details.
```

```
stopCluster(cl)
```

WA State NIBRS Incidents (2017)



WA State NIBRS Incident Hours (2017)

