CBP - Example

Datasets

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Contents

Preamble

```
rm(list = ls())
pklist <- c("tidyverse", "choroplethr", "choroplethrMaps")
source("https://fgeerolf.github.io/datasets/load-packages.R")
options(tibble.print_max = 100)
```

Loading Datasets

Information: https://www2.census.gov/programs-surveys/cbp/datasets/

```
load("cbp.2000.RData")
load("cbp.2016.RData")
```

Examples

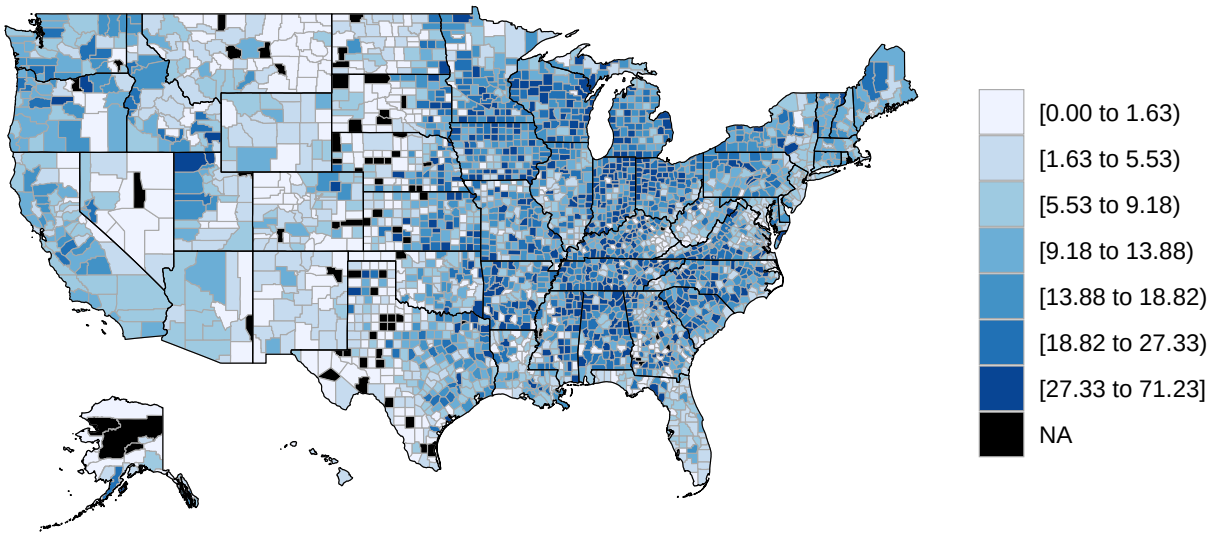
Manuacturing Share 2016

```
cbp.2016 %>%
  as.tibble %>%
  head
```

```
## # A tibble: 6 x 26
##   fipstate fipscty naics empflag emp_nf   emp qp1_nf   qp1 ap_nf     ap
##      <int>   <int> <fct> <fct>   <fct>  <int> <fct>  <int> <fct>  <int>
## 1        1       1 -----~ ""      G      10790 G      79369 G     332497
## 2        1       1 11---~ ""      G         87 H        989 H       4270
## 3        1       1 113/~ ""      G         83 G        952 H       4061
## 4        1       1 1133~ ""      G         83 G        952 H       4061
## 5        1       1 1133~ ""      G         83 G        952 H       4061
```

```
## 6        1       1 1133~ ""      G         83 G        952 H       4061
## # ... with 16 more variables: est <int>, n1_4 <int>, n5_9 <int>,
## #   n10_19 <int>, n20_49 <int>, n50_99 <int>, n100_249 <int>,
## #   n250_499 <int>, n500_999 <int>, n1000 <int>, n1000_1 <int>,
## #   n1000_2 <int>, n1000_3 <int>, n1000_4 <int>, censtate <int>,
## #   cencty <int>
```

```
cbp.2016 %>%
  mutate(fips = fipstate*1000 + fipscty) %>%
  filter(naics %in% c("------", "31----")) %>%
  select(fips, naics, emp) %>%
  spread(naics, emp) %>%
  mutate(manuf_share = 100* `31----` / `------`) %>%
  rename(region = fips, value = manuf_share) %>%
  county_choropleth()
```

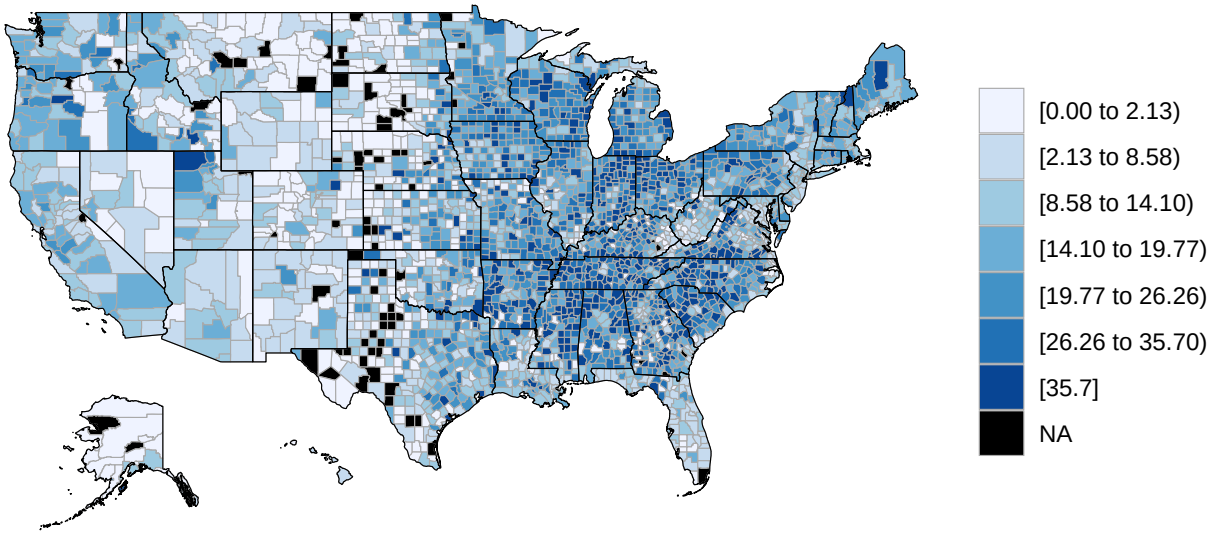


Manuacturing Share 2000

```
cbp.2000 %>%
  as.tibble %>%
  head
```

```
## # A tibble: 6 x 23
##   fipstate fipscty naics empflag   emp   qp1     ap   est  n1_4  n5_9
##      <int>   <int> <fct> <fct>   <int> <int>  <int> <int> <int> <int>
## 1        1       1 ----- ""       9115 48004 196839   769   417   163
## 2        1       1 11--- ""         36   226    880     9     6     2
## 3        1       1 113/~ ""         11    57    223     4     3     1
## 4        1       1 1131~ A           0     0      0     1     1     0
## 5        1       1 1131~ A           0     0      0     1     1     0
## 6        1       1 1131~ A           0     0      0     1     1     0
## # ... with 13 more variables: n10_19 <int>, n20_49 <int>, n50_99 <int>,
## #   n100_249 <int>, n250_499 <int>, n500_999 <int>, n1000 <int>,
## #   n1000_1 <int>, n1000_2 <int>, n1000_3 <int>, n1000_4 <int>,
## #   censtate <int>, cencty <int>
```

```
cbp.2000 %>%
  mutate(fips = fipstate*1000 + fipscty) %>%
  filter(naics %in% c("------", "31----")) %>%
  select(fips, naics, emp) %>%
  spread(naics, emp) %>%
  mutate(manuf_share = 100* `31----` / `------`) %>%
  rename(region = fips, value = manuf_share) %>%
  county_choropleth()
```



Computing Environment

```
Sys.time()
```

```
## [1] "2018-09-25 19:05:21 PDT"
```

```
sessionInfo()
```

```
## R version 3.5.1 (2018-07-02)
## Platform: x86_64-apple-darwin15.6.0 (64-bit)
## Running under: macOS High Sierra 10.13.6
##
## Matrix products: default
## BLAS: /Library/Frameworks/R.framework/Versions/3.5/Resources/lib/libRblas.0.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/3.5/Resources/lib/libRlapack.dylib
##
## locale:
## [1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
##  [1] bindrcpp_0.2.2        choroplethrMaps_1.0.1 choroplethr_3.6.3
##  [4] acs_2.1.3             XML_3.98-1.16         forcats_0.3.0
##  [7] stringr_1.3.1         dplyr_0.7.6           purrr_0.2.5
```

```
## [10] readr_1.1.1           tidyr_0.8.1           tibble_1.4.2
## [13] ggplot2_3.0.0         tidyverse_1.2.1
##
## loaded via a namespace (and not attached):
##  [1] nlme_3.1-137        sf_0.6-3            lubridate_1.7.4
##  [4] RColorBrewer_1.1-2  httr_1.3.1          rprojroot_1.3-2
##  [7] tools_3.5.1         backports_1.1.2     utf8_1.1.4
## [10] rgdal_1.3-4         R6_2.2.2            rpart_4.1-13
## [13] spData_0.2.9.3      Hmisc_4.1-1         DBI_1.0.0
## [16] lazyeval_0.2.1      colorspace_1.3-2    nnet_7.3-12
## [19] withr_2.1.2         sp_1.3-1            tidyselect_0.2.4
## [22] gridExtra_2.3       compiler_3.5.1      cli_1.0.0
## [25] rvest_0.3.2         htmlTable_1.12      xml2_1.2.0
## [28] labeling_0.3        scales_1.0.0        checkmate_1.8.5
## [31] classInt_0.2-3      rappdirs_0.3.1      digest_0.6.15
## [34] foreign_0.8-70      rmarkdown_1.10      base64enc_0.1-3
## [37] jpeg_0.1-8          pkgconfig_2.0.2     htmltools_0.3.6
## [40] maps_3.3.0          htmlwidgets_1.2     rlang_0.2.2
## [43] readxl_1.1.0        rstudioapi_0.7      bindr_0.1.1
## [46] jsonlite_1.5        acepack_1.4.1       magrittr_1.5
## [49] Formula_1.2-3       geosphere_1.5-7     Matrix_1.2-14
## [52] fansi_0.3.0         Rcpp_0.12.18        munsell_0.5.0
## [55] proto_1.0.0         stringi_1.2.4       yaml_2.2.0
## [58] RJSONIO_1.3-0       plyr_1.8.4          grid_3.5.1
## [61] maptools_0.9-3      WDI_2.5             crayon_1.3.4
## [64] lattice_0.20-35     haven_1.1.2         splines_3.5.1
## [67] mapproj_1.2.6       hms_0.4.2           knitr_1.20
## [70] pillar_1.3.0        uuid_0.1-2          rjson_0.2.20
## [73] reshape2_1.4.3      glue_1.3.0          evaluate_0.11
## [76] latticeExtra_0.6-28 data.table_1.11.4   modelr_0.1.2
## [79] png_0.1-7           RgoogleMaps_1.4.2   cellranger_1.1.0
## [82] gtable_0.2.0        assertthat_0.2.0    broom_0.5.0
## [85] e1071_1.7-0         class_7.3-14        survival_2.42-3
## [88] tigris_0.7          units_0.6-0         cluster_2.0.7-1
## [91] ggmap_2.6.1
```