ACMT Example: Calculating a Neighborhood Deprivation Index

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Introduction

The ACMT can also be used to generate interpolated measures based on standard neighborhood indices that use American Community Survey data. These indices provide useful and consistent ways for researchers to operationalize measures such as deprivation, social vulnerability, or social fragmentation. One example of an index measure such as this is the Neighborhood Deprivation Index (NDI) developed by Messer et al. (2006). The NDI is a composite measure using socioeconomic variables to describe the level of deprivation of a given area. The NDI relies on American Community Survey variables, all of which are built into the default list of variables in the ACMT. As such the NDI may be a useful tool in comparing interpolated neighborhood deprivation levels around given points of interest.

In this example, we will utilize a list of establishments in Seattle either with an active marijuana retailer license or with an active alcohol license and use the NDI to compare levels of neighborhood depravity around each type of establishment.

We take the following steps:

- 1. Download dispensary and alcohol retailer data and reformat into lists from WA Liquor and Cannabis Public Record website: https://lcb.wa.gov/records/frequently-requested-lists
- 2. Geocode dispensary and alcohol retailers
- 3. Designate the ACS measures relevant to the NDI measure
- 4. Create a function and loop to pull ACMT measures
- 5. Run a principal component analysis to find weights for each variable measure
- 6. Calculate the NDI measure
- 7. Create a boxplot to compare the NDI measures for dispensaries versus alcohol retailers
- 8. Calculate a t-test to statistically compare NDI measures

```
source("setup-acmt.R")
library(readxl)
library(tidyverse)
install.packages('janitor')
library(janitor)
```

1. Download data

Verify the urls below for the Dispensaries and Alcohol retailers below. The lists are updated regularly and can be found here: https://lcb.wa.gov/records/frequently-requested-lists. See urls for these lists: Cannabis License Applicants and Off Premises, Licensees

```
#Find URL For most up-tp-date lists:
download.file(url = "https://lcb.wa.gov/sites/default/files/publications/Public_Records/2019/CannabisAppendestfile = "external_data/downloaded_cannabis.xls") ##check records website if url is out
```

```
download.file(url = "https://lcb.wa.gov/sites/default/files/publications/Public_Records/2019/Off%20Prem
              destfile = "external data/downloaded alcohol.xlsx")
cannabis_dataframe <- read_excel("external_data/downloaded_cannabis.xls")</pre>
alcohol_dataframe<-read_excel("external_data/downloaded_alcohol.xlsx")
#limit to Seattle only dispensaries and create address field:
seattle dispensary<-cannabis dataframe %>%
  janitor::clean_names() %>%
  filter(city == "SEATTLE", priv_desc == "MARIJUANA RETAILER", (privilege_status=="ACTIVE (ISSUED)" | p
  mutate(full_address = paste(street_address, city, state, zip_code, sep = ", "), ID=paste(as.character
  subset(select=c(ID, tradename, status, full_address, license_type)) %>%
  mutate(privilege='marijuana retailer')
seattle_alcohol<-alcohol_dataframe %>%
  janitor::clean_names() %>%
  filter(loc_city == "SEATTLE", status == "ACTIVE (ISSUED)" | status == "PENDING (ISSUED)", privilege !
  mutate(full_address = paste(loc_address, loc_city, loc_st, loc_zip, sep = ", "),
        ID=paste(as.character(row_number()), 'alcohol', sep='.'),
         license_type='alcohol_offpremise') %>%
        subset(select=c(ID, tradename, status, full_address, license_type, privilege))
## Limiting list for speed of processing
seattle_alcohol_dispensary_list<-rbind(seattle_dispensary[1:100,], seattle_alcohol[1:200,])
head(seattle_alcohol_dispensary_list)
## # A tibble: 6 x 6
##
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           tradename
                           status
                                    full address
                                                           license_type privilege
     <chr> <chr>
                           <chr>
                                    <chr>
                                                           <chr>
                           ACTIVE ... 224 NICKERSON ST, SEA... dispensary
## 1 1.disp #HASHTAG
                                                                            marijuana ...
## 2 2.disp A GREENER TOD... PENDING... 5209 MARTIN LUTHER KI... dispensary
                                                                              marijuana ...
## 3 3.disp AMERICAN MARY ACTIVE ... 321 NE 45TH ST, SEATT... dispensary
                                                                            marijuana ...
## 4 4.disp AMERICAN MARY... ACTIVE ... 5300 17TH AVE NW STE ... dispensary
                                                                              marijuana ...
## 5 5.disp ARKY VANDELAY ACTIVE ... 2214 1ST AVE, SEATTLE... dispensary
                                                                            marijuana ...
## 6 6.disp CANNA WEST SE... ACTIVE ... 5440 CALIFORNIA AVE S... dispensary
                                                                              marijuana ...
```

2. Write a geocoding loop to geocode all addresses

```
address<-seattle_alcohol_dispensary_list$full_address
lat_long<-geocode(address[i])
seattle_alcohol_dispensary_list$lat[i]<-lat_long$latitude #add latitude to dataset
seattle_alcohol_dispensary_list$long[i]<-lat_long$longitude #add long to dataset
}</pre>
```

3. Designate the ACS measures relevant to the NDI measure

Once the addresses are all geocoded, we need to designate which variables will be pulled and create '_count' and '_proportion' versions of each relevant variable. Note that ACS variable names change from year to year. These variable names set below are for 2019. For other years, refer to the ACS Variables by Year spreadsheet to verify the variable names for the year you are interested in.

```
NDI_variables<-c("B23025_005", # males/females unemployed
                "C24030 019", #males in management
                "C24030_018", #males in professional occupations
                \verb|"C24030_002"|, \textit{\#total males employed}|\\
                "B17012_002", #households in poverty
                "B17012_001", #total households - poverty determined
                "B06009_002", #less than HS education
                "B06009_001", #total with education determined, 25 years and older
                "B23025_002", #total in the labor force
                "B23025\_001", #total population 16 and older
                "B25014_007", #owner-occupied housing 2+ ppl per room
                "B25014_013", #renter-occupied housing, 2+ people per room
                "B25014 001", #occupied housing units
                "B11012_010", #female-householder, own children < 18 years
                "B11012_001", #Total househods
                "B19001_006", #income 25-29.9k
                "B19001 005", #income 20-24.9k
                "B19001_004", #income 15-19.9k
                "B19001_003", \#income 10-14.0k
                "B19001_002", #income 5-9.9k
                "B19001_001", #income total income
                "B19058_002", #total residents public assistance
                  "B19058_001") #total households- assistance determined
acsvars<-read_csv('ACMT/ACSColumns.csv')
acsvars<-subset(acsvars, acs_col %in% NDI_variables)</pre>
##create 'count' versions of each variable name and 'proportion' versions for each #ACS variable where
acs_count_names<-paste(acsvars$var_name, "count", sep="_")</pre>
  if (length(acsvars$var_name[acsvars$universe_col != ""]) == 0) { # prevent having something that is e
  } else {
acs proportion names <- paste(acsvars$var name[!is.na(acsvars$universe col)], "proportion", sep=" ") }
#set year and radius and variable names
codes_of_acs_variables_to_get<-acsvars$acs_col</pre>
names_of_variable_to_get<-c(acs_count_names, acs_proportion_names)</pre>
radius<-1000
vear <- 2019
#add columns to dataset to add variables to
var.cols<-data.frame(matrix(nrow=nrow(seattle_alcohol_dispensary_list), ncol=length(names_of_variable_t
colnames(var.cols)<-names_of_variable_to_get #name the columns</pre>
```

4. Create a function and loop to pull ACMT measures

Once the variables are designated, we can write a loop to pull the designated variables for each location in our dataset

```
#run loop to pull variables
for(address in 1:nrow(seattle_alcohol_dispensary_list)) {
   tryCatch({if(!is.na(seattle_alcohol_dispensary_list[,1][address])) next #skip the row if the data is
  if(!is.na(seattle_alcohol_dispensary_list[,1][address])) next #skip the row if the data is already th
  print(address) #print the number to keep track of progress
  latitude<-seattle_alcohol_dispensary_list$lat[address] #set lat</pre>
  longitude<-seattle_alcohol_dispensary_list$long[address] #set long</pre>
  environmental_measures<-get_acmt_standard_array(long=longitude, lat=latitude, radius_meters = radius,</pre>
      for(name_of_variable in names_of_variable_to_get){ #for each measures, get the value and put it i
     value_of_variable <- environmental_measures[environmental_measures$names == name_of_variable, ]$va
     seattle_alcohol_dispensary_list[[name_of_variable]][address]<-value_of_variable
  }
for (name_of_variable in names_of_variable_to_get) {
        seattle_alcohol_dispensary_list[[name_of_variable]][address] <- environmental_measures[environm
}},error=function(e){cat("ERROR :", conditionMessage(e), "\n")}) #this will print any error messages
}
## [1] 1
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
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## [1] "Estimate for B06009_002, which is 242.969326541121 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012\_010, which is 116.787978787152 will be divided by estimate for B11012\_001,
## [1] "Estimate for B17012_002, which is 83.8761679851066 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 444.792605832137 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 308.784123445389 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 97.9288985508236 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 154.633033029263 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 252.723788122849 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 475.268007337997 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 345.151765042078 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4021.6
## [1] "Estimate for B25014_013, which is 9.92375168824025 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 1364.9075279616 will be divided by estimate for C24030_002, wi
## [1] "Estimate for C24030_019, which is 15.9155105783656 will be divided by estimate for C24030_002,
## [1] 2
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
\#\# [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1671.07304603775 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012 010, which is 171.699531167852 will be divided by estimate for B11012 001,
## [1] "Estimate for B17012_002, which is 397.025057340401 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 253.307699356052 will be divided by estimate for B19001_001,
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## [1] "Estimate for B19001_003, which is 206.718144324786 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 178.479619994152 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 127.420773407656 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 131.742586197691 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 823.300430053294 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 296.004872720689 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014_007, which is 8.7054595225588 will be divided by estimate for B25014_002, wi
## [1] "Estimate for B25014_013, which is 8.56696328885162 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 223.718982749002 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2130.8
## [1] 3
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 50.1630601491024 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 7.43267295291646 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 1.10943472369808 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 21.0831993362414 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 0.334023357672539 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 3.70407541903504 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 1.30030521379667 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 5.42919611046526 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 40.3405463662125 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 29.798941668651 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 208.93
## [1] "Estimate for B25014_013, which is 7.7368677670703 will be divided by estimate for B25014_008, wi
## [1] "Estimate for C24030_018, which is 105.24566848445 will be divided by estimate for C24030_002, wi
## [1] "Estimate for C24030_019, which is 0.16701167883627 will be divided by estimate for C24030_002,
## [1] 4
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 584.904812929521 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 168.26748896961 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 98.7723940063953 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 138.930916556822 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 54.0704138544167 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 57.9514605794502 will be divided by estimate for B19001_001,
```

[1] "Estimate for B19001_005, which is 59.808595479447 will be divided by estimate for B19001_001, w ## [1] "Estimate for B19001_006, which is 81.2004480955211 will be divided by estimate for B19001_001, ## [1] "Estimate for B19058_002, which is 378.439004025495 will be divided by estimate for B19058_001, ## [1] "Estimate for B23025 005, which is 141.92140681943 will be divided by estimate for B23025 001, w

```
## [1] "Estimate for B25014_007, which is 2.58336238306951 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 769.98
## [1] "Estimate for C24030 018, which is 190.512749755121 will be divided by estimate for C24030 002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1965.1
## [1] 5
## [1] "Read ACS columns"
  [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 92.6051425472715 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 94.4665182893002 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 87.0353997747704 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 75.7042543712628 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 41.7158083628963 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 77.5742156165806 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 122.412466565745 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 56.5984431330234 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 188.38661081481 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025_005, which is 241.331832463618 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1608.0
## [1] "Estimate for B25014_013, which is 29.4521998941481 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 675.569679473124 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 4.84105064149511 will be divided by estimate for C24030_002,
## [1] 6
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get statecounty tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 1748.25493634737 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 140.268204493256 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 240.136373104102 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1556.76316534039 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 676.858675082664 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 771.131009037036 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 471.250112194046 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 231.08792163652 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 2108.33500704173 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 610.028507692507 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2165.6
## [1] "Estimate for B25014_013, which is 35.1772264510805 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 1952.30529598556 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030 019, which is 27.3851262416508 will be divided by estimate for C24030 002,
## [1] 7
```

[1] "Read ACS columns"

```
[1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 790.683175341311 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 109.527608346465 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 119.334163639457 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 81.4982246312527 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 122.155680640258 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 62.197629153359 will be divided by estimate for B19001_001, w
## [1] "Estimate for B19001_005, which is 86.7798556802059 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 65.9219290808438 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 319.376577032132 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 129.666299424567 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 10.0405643797937 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 0.0594587000095774 will be divided by estimate for B25014_008
## [1] "Estimate for C24030_018, which is 35.4803672261584 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1392.3
## [1] 8
## [1] "Read ACS columns"
  [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 460.61345477682 will be divided by estimate for B06009_001, wi
## [1] "Estimate for B11012_010, which is 73.7764188535136 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 76.5424683727405 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 903.033361802401 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 536.335557508857 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_004, which is 150.328113930296 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 439.42681856388 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_006, which is 389.471039957682 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 813.640639553241 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 472.789231196535 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4245.5
## [1] "Estimate for B25014_013, which is 6.40709075164707 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 2129.02933042644 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 49.8451714308851 will be divided by estimate for C24030_002,
## [1] 9
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
```

[1] "53033"

```
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009 002, which is 239.094612783669 will be divided by estimate for B06009 001,
## [1] "Estimate for B11012_010, which is 125.47907328323 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 207.014937772112 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 1235.02149395238 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 003, which is 566.815042218728 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_004, which is 351.434051055196 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 306.649538718962 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 370.557239941601 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 544.874390396732 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 993.382472867583 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2101.1
## [1] "Estimate for B25014_013, which is 8.8070804282168 will be divided by estimate for B25014_008, w.
## [1] "Estimate for C24030_018, which is 1204.20944247649 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 3.77276371070893 will be divided by estimate for C24030_002,
## [1] 10
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
   [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 993.46392781864 will be divided by estimate for B06009_001, wi
## [1] "Estimate for B11012_010, which is 194.439607489442 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 297.352972466577 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 185.784088270982 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 190.847165509898 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 94.9087636058142 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 131.338895222291 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 106.050368447024 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 606.070393267595 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 269.364387131569 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 958.54
## [1] "Estimate for B25014_013, which is 1.77605835428947 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 51.1207626046838 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1722.1
## [1] 11
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 993.46392781864 will be divided by estimate for B06009_001, wi
```

[1] "Estimate for B11012_010, which is 194.439607489442 will be divided by estimate for B11012_001, ## [1] "Estimate for B17012_002, which is 297.352972466577 will be divided by estimate for B17012_001, ## [1] "Estimate for B19001 002, which is 185.784088270982 will be divided by estimate for B19001 001,

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## [1] "Estimate for B19001_004, which is 94.9087636058142 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 131.338895222291 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 106.050368447024 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 606.070393267595 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 269.364387131569 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014 007, which is 0 will be divided by estimate for B25014 002, which is 958.54
## [1] "Estimate for B25014_013, which is 1.77605835428947 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 51.1207626046838 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1722.1
## [1] 12
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 371.462063569568 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 181.909036151153 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 41.2808774492525 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 303.501006218451 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 39.2535738506165 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 172.311271376764 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 153.334971640432 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 265.522438704143 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 236.593312541919 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 244.037889454727 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3235.1
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 3416.3
## [1] "Estimate for C24030_018, which is 1048.82486099525 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 4.90846444205959 will be divided by estimate for C24030_002,
## [1] 13
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 167.516538734179 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 143.126486570063 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 128.526528422075 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 884.427730504852 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 216.765048041396 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 131.60223773824 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 200.438118270092 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 006, which is 143.885792973503 will be divided by estimate for B19001 001,
## [1] "Estimate for B19058_002, which is 434.121517712456 will be divided by estimate for B19058_001,
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[1] "Estimate for B19001_003, which is 190.847165509898 will be divided by estimate for B19001_001,

[1] "Estimate for B23025 005, which is 387.738335604008 will be divided by estimate for B23025 001,

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## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2508.2
## [1] "Estimate for B25014_013, which is 2.35539860998493 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030 018, which is 1075.24409040063 will be divided by estimate for C24030 002,
## [1] "Estimate for C24030_019, which is 10.9922753204599 will be divided by estimate for C24030_002,
## [1] 14
## [1] "Read ACS columns"
  [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 990.829295465328 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 181.056414905049 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 334.261561861183 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 345.31205164934 will be divided by estimate for B19001 001, w
## [1] "Estimate for B19001_003, which is 187.341684741133 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 105.557850446651 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 38.1040887916204 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 127.285142822167 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 757.397355231692 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 521.530616832767 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 8.21781519178505 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 1707.7
## [1] "Estimate for C24030_018, which is 395.757628861225 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 4.22381547284643 will be divided by estimate for C24030_002,
## [1] 15
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get statecounty tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 320.148243518714 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 158.40904314122 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012 002, which is 100.86888286939 will be divided by estimate for B17012 001, wi
## [1] "Estimate for B19001_002, which is 120.286808495249 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 27.3118959849222 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 88.7062910699573 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 65.0597867569438 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 79.5309371654811 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 272.590779178908 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 208.695308402467 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 9.93446697792704 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 34.7706344227446 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 293.474417458965 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2178.4
## [1] 16
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[1] "Read ACS columns"

```
[1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 1721.25320732556 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 123.023338044674 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 232.748552704184 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1441.13201186759 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 623.084233822395 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 705.41997247749 will be divided by estimate for B19001_001, w
## [1] "Estimate for B19001_005, which is 409.602103025424 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 198.782514936351 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 1989.41926374321 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 540.264700184108 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1850.1
## [1] "Estimate for B25014_013, which is 36.9966166948327 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 1607.13248870714 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 19.6376576260968 will be divided by estimate for C24030_002,
## [1] 17
## [1] "Read ACS columns"
    [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
    [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 288.100518172808 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 136.94522487785 will be divided by estimate for B11012_001, where the state of t
## [1] "Estimate for B17012_002, which is 205.586064154174 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1994.40306371145 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 623.777831975023 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_004, which is 295.004750598743 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 382.539761800882 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 285.091456693273 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 611.455989482249 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 970.98896066915 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1490.6
## [1] "Estimate for B25014_013, which is 17.9084032441698 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 1208.33934852567 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 6.73102897122475 will be divided by estimate for C24030_002,
## [1] 18
## [1] "Read ACS columns"
    [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
     [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
```

```
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009 002, which is 48.8632343352326 will be divided by estimate for B06009 001,
## [1] "Estimate for B11012_010, which is 9.92313709779064 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 2.45328387203093 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 21.3366161010451 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 003, which is 0.738623101256625 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_004, which is 4.74290661413826 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 2.87535421560615 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 5.87596356681811 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 45.1484114468215 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 31.0322074054307 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 214.91
## [1] "Estimate for B25014_013, which is 7.1479157169954 will be divided by estimate for B25014_008, w
## [1] "Estimate for C24030_018, which is 104.390943571761 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.369311550628312 will be divided by estimate for C24030_002,
## [1] 19
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
   [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 172.073163798453 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 118.255426369371 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 64.1758005171989 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 128.022055518295 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 32.1486552579601 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 90.1808555659794 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 85.1040930430764 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 101.433306172092 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 247.502564458079 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 179.036571199897 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014 007, which is 0 will be divided by estimate for B25014 002, which is 1765.1
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 1613.6
## [1] "Estimate for C24030_018, which is 526.859607459827 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 10.0552025583625 will be divided by estimate for C24030_002,
## [1] 20
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 572.294272571989 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 119.373873215297 will be divided by estimate for B11012_001,
```

[1] "Estimate for B17012_002, which is 101.415001454226 will be divided by estimate for B17012_001, ## [1] "Estimate for B19001 002, which is 199.466884787684 will be divided by estimate for B19001 001,

```
## [1] "Estimate for B19001_004, which is 145.873275815583 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 290.184011268104 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 123.397899157736 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 703.285083620797 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 299.356853438303 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014 007, which is 0 will be divided by estimate for B25014 002, which is 2256.3
## [1] "Estimate for B25014_013, which is 3.10014839246195 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 523.678522765487 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.415821578087014 will be divided by estimate for C24030_002,
## [1] 21
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 373.771721842079 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 113.753234734439 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 74.068005026784 will be divided by estimate for B17012_001, wi
## [1] "Estimate for B19001_002, which is 88.3259978983896 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 38.5005341567521 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 41.938205968405 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 44.4866310930125 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 56.4289260661214 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 241.485235805021 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 107.41671740693 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 867.51
## [1] "Estimate for B25014_013, which is 0.721716170892823 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 100.746683696236 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1158.8
## [1] 22
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 149.747816215687 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 173.428548576287 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 11.6033746707432 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 192.897231553676 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 101.057927207861 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 208.722528129868 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 88.2006844756674 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 006, which is 97.0075698012769 will be divided by estimate for B19001 001,
## [1] "Estimate for B19058_002, which is 193.025299380178 will be divided by estimate for B19058_001,
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[1] "Estimate for B19001_003, which is 251.327005140956 will be divided by estimate for B19001_001,

[1] "Estimate for B23025 005, which is 422.037159365709 will be divided by estimate for B23025 001,

```
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2467.5
## [1] "Estimate for B25014_013, which is 5.78507993217356 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030 018, which is 950.810466958842 will be divided by estimate for C24030 002,
## [1] "Estimate for C24030_019, which is 0.579417797811081 will be divided by estimate for C24030_002,
## [1] 23
## [1] "Read ACS columns"
  [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 560.712358019941 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 163.895508393093 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 102.14463585078 will be divided by estimate for B17012_001, wi
## [1] "Estimate for B19001_002, which is 330.382977300521 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 420.39751944913 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_004, which is 116.294056764616 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 257.275486427436 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 243.0553753008 will be divided by estimate for B19001_001, wh
## [1] "Estimate for B19058_002, which is 723.734536911776 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 186.378874204701 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1984.4
## [1] "Estimate for B25014_013, which is 3.16256163405375 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 372.999959107482 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2654.0
## [1] 24
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get statecounty tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 1022.84728816223 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 193.096476466338 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 248.499134529045 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 372.436043925447 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 184.630336018271 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 104.46329858675 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 78.7151719718619 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 186.765076260018 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 724.497213717559 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 372.083868439135 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2334.2
\#\# [1] "Estimate for B25014_013, which is 0.0464944748985727 will be divided by estimate for B25014_008
## [1] "Estimate for C24030_018, which is 636.543928830412 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 3734.1
## [1] 25
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[1] "Read ACS columns"

```
[1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 648.192679729394 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 61.0922175773631 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 121.440392780439 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1358.12397757147 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 670.585749668284 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 225.485279571593 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 609.219591251814 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 404.52625855359 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 1436.48090579366 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 666.25541590622 will be divided by estimate for B23025 001, w
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3612.1
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 13547.
## [1] "Estimate for C24030_018, which is 2983.08622199524 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 38.043971882926 will be divided by estimate for C24030_002, wi
## [1] 26
## [1] "Read ACS columns"
  [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 476.52357055458 will be divided by estimate for B06009_001, wi
## [1] "Estimate for B11012_010, which is 234.876194604815 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 62.7953881347705 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 303.38203282356 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001 003, which is 47.0493220300858 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_004, which is 200.904561021217 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 157.182298269639 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 255.250377075234 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 341.552277529782 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 237.997592105386 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3200.2
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 3422.4
## [1] "Estimate for C24030_018, which is 1026.253644658 will be divided by estimate for C24030_002, wh
## [1] "Estimate for C24030_019, which is 0.181579275794556 will be divided by estimate for C24030_002,
## [1] 27
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
```

[1] "53033"

```
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009 002, which is 120.780393982369 will be divided by estimate for B06009 001,
## [1] "Estimate for B11012_010, which is 57.4047038521504 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 45.3904679197864 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 43.4885813202665 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 003, which is 28.6604110819983 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_004, which is 78.4211478853909 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 51.6915843431366 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 62.2550955900691 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 169.920606643995 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 115.433329668035 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1265.6
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 832.52
## [1] "Estimate for C24030_018, which is 331.304923188651 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 7.04290218040678 will be divided by estimate for C24030_002,
## [1] 28
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
   [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 930.195781240462 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 168.866569602094 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 235.854214585449 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 168.422412409563 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 220.721429960835 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 176.327832132664 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 164.299555248762 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 141.03643885095 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 700.872046706765 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 226.604536514207 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014 007, which is 0 will be divided by estimate for B25014 002, which is 1668.9
## [1] "Estimate for B25014_013, which is 17.0846957239986 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 188.009956862448 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 2.68748829480395 will be divided by estimate for C24030_002,
## [1] 29
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 193.44629122408 will be divided by estimate for B06009_001, wi
## [1] "Estimate for B11012_010, which is 128.320874717932 will be divided by estimate for B11012_001,
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[1] "Estimate for B17012_002, which is 54.7005533308991 will be divided by estimate for B17012_001, ## [1] "Estimate for B19001 002, which is 228.737486881764 will be divided by estimate for B19001 001,

```
## [1] "Estimate for B19001_003, which is 176.30608662777 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_004, which is 231.208565944709 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 104.075406063985 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 84.9149871827342 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 359.895935884603 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 384.551908609885 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2750.0
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 4579.6
## [1] "Estimate for C24030_018, which is 1123.73768434208 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 5094.4
## [1] 30
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1155.26802684232 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 143.713899472155 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 148.237750544739 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1686.44398830288 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 728.288110900716 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 552.257650503897 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 730.20356580405 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_006, which is 407.685089191033 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 2034.15392928926 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 879.511392587466 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3314.8
## [1] "Estimate for B25014_013, which is 4.73452224633024 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 3412.77591239852 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 43.5841089857764 will be divided by estimate for C24030_002,
## [1] 31
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 1265.08200692787 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 285.225642838936 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 236.906702104909 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1719.38758913233 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 1092.52794664423 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 1009.26487493734 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 778.555775980136 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 006, which is 735.701674463579 will be divided by estimate for B19001 001,
## [1] "Estimate for B19058_002, which is 2150.839643318 will be divided by estimate for B19058_001, wh
## [1] "Estimate for B23025 005, which is 1031.88799443494 will be divided by estimate for B23025 001,
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## [1] "Estimate for B25014_013, which is 22.9268882211495 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 4037.39481869896 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 97.6034323697499 will be divided by estimate for C24030_002,
## [1] 32
## [1] "Read ACS columns"
  [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 568.643163971763 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 118.008757127406 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 100.648970027468 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 198.46582121915 will be divided by estimate for B19001 001, w
## [1] "Estimate for B19001_003, which is 249.450687971446 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 143.152547187306 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 289.583099904012 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 122.891576779089 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 698.609348727291 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 297.691270654701 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2235.5
## [1] "Estimate for B25014_013, which is 3.20247029225533 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 513.154725587706 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.376009689239797 will be divided by estimate for C24030_002,
## [1] 33
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get statecounty tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 111.039622663172 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 48.9009079647628 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 36.7189976394922 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 130.990791303415 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 86.4078943206955 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 47.1579201097655 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 69.6964708737185 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 80.619351121919 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 67.6636559903139 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 134.704888438506 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2568.4
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 1666.1
## [1] "Estimate for C24030_018, which is 871.848738773511 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 3439.7
## [1] 34
## [1] "Read ACS columns"
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[1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4245.9

```
[1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 924.417853092771 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 182.730959677703 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 192.519400945752 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 169.693012595655 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 227.001004095821 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 186.042545968647 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 158.025576855105 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 142.115610793508 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 741.888658027759 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 226.01200616015 will be divided by estimate for B23025 001, w
## [1] "Estimate for B25014_007, which is 0.255761163604404 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 17.8652724480221 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 238.357082095497 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 12.8456294510702 will be divided by estimate for C24030_002,
## [1] 35
## [1] "Read ACS columns"
    [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
    [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 503.198698639145 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 111.554384065906 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 134.90504839054 will be divided by estimate for B17012_001, wi
## [1] "Estimate for B19001_002, which is 869.252172382347 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 375.222939449995 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_004, which is 199.998432234234 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 600.902680279623 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 493.59935513053 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058 002, which is 1082.68486377464 will be divided by estimate for B19058 001,
## [1] "Estimate for B23025_005, which is 797.698541173743 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2655.8
## [1] "Estimate for B25014_013, which is 6.69810951713991 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 3124.27228034944 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 33.577916299815 will be divided by estimate for C24030_002, where the contract of th
## [1] 36
## [1] "Read ACS columns"
    [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
     [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
```

[1] "53033"

```
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009 002, which is 411.447275037 will be divided by estimate for B06009 001, whi
## [1] "Estimate for B11012_010, which is 86.7482196182395 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 112.748108454731 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 216.9761342605 will be divided by estimate for B19001 001, wh
## [1] "Estimate for B19001 003, which is 150.529973982067 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_004, which is 128.69574214602 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 206.438486241423 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 104.760552204911 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 594.960282624497 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 238.884199503276 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2355.7
## [1] "Estimate for B25014_013, which is 0.139165356975711 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 495.212508459718 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 3302.8
## [1] 37
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
   [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 111.610917662387 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 75.2618730949411 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 55.8766617973422 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 354.386999465247 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 206.494485493725 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 80.5809700478386 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 69.2184210933777 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 93.6420149221285 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 232.96401440347 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025_005, which is 373.832510885342 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014 007, which is 0 will be divided by estimate for B25014 002, which is 1905.1
## [1] "Estimate for B25014_013, which is 3.00262559295539 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 507.082051127121 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 15.1645597758877 will be divided by estimate for C24030_002,
## [1] 38
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53053"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 053"
##
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## [1] "Estimate for B06009_002, which is 124.012009163729 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 104.912980642219 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 57.7072786108606 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 21.9656286694619 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 8.47792563578872 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 41.6650211996801 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 18.1456442338085 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 13.1423577357559 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 132.554654890581 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 57.9950231092052 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 620.69
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 414.15
## [1] "Estimate for C24030_018, which is 35.7020240620933 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 5.76467421641103 will be divided by estimate for C24030_002,
## [1] 39
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1113.84496809216 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 166.900754830891 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 172.295103824849 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 1863.7736989217 will be divided by estimate for B19001 001, wi
## [1] "Estimate for B19001_003, which is 826.155769010621 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 600.69525567483 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 937.792444700883 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 662.620963619353 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 2237.65690555559 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 1100.0746933754 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3818.7
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 19738.
## [1] "Estimate for C24030_018, which is 4248.19241846989 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 44.7119276458086 will be divided by estimate for C24030_002,
## [1] 40
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
```

277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002

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## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 359.682398607879 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 117.303753305415 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012 002, which is 96.6346320335337 will be divided by estimate for B17012 001,
## [1] "Estimate for B19001 002, which is 200.538360876115 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_003, which is 155.704439417682 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 168.429333566153 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 121.015152054954 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 127.078314066382 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 322.904878081183 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 219.188283339095 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3411.9
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 2944.7
## [1] "Estimate for C24030_018, which is 1168.39930314399 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.392748319158909 will be divided by estimate for C24030_002,
## [1] 41
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 241.695977996209 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 162.74184037606 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 40.8616754654719 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 249.574367962778 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 185.557779361171 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 319.882010523933 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 103.863053886454 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 77.3429323825926 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 350.858338118289 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 558.635870363817 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2944.7
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 5492.6
## [1] "Estimate for C24030_018, which is 1347.87045136506 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030 019, which is 0.698502876443533 will be divided by estimate for C24030 002,
## [1] 42
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
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[1] "Estimate for B06009_002, which is 65.062462453761 will be divided by estimate for B06009_001, w ## [1] "Estimate for B11012_010, which is 8.29480534877849 will be divided by estimate for B11012_001, ## [1] "Estimate for B17012_002, which is 1.21934009298276 will be divided by estimate for B17012_001,

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## [1] "Estimate for B19001_004, which is 4.91544967285221 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 0.811946666891342 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 6.42074565222226 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058 002, which is 43.9826068121478 will be divided by estimate for B19058 001,
## [1] "Estimate for B23025_005, which is 31.64854316714 will be divided by estimate for B23025_001, wh
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 233.12
## [1] "Estimate for B25014_013, which is 8.5123424712688 will be divided by estimate for B25014_008, wi
## [1] "Estimate for C24030_018, which is 112.280446375886 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 498.99
## [1] 43
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 261.719304927099 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 41.6688277448888 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 51.1335362091901 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 49.3958626528193 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 59.713934144509 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_004, which is 179.966008939114 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 86.0404923641506 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 157.687072253225 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 171.893281730892 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 165.052945679432 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2680.2
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 1385.8
## [1] "Estimate for C24030_018, which is 657.891985751992 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 6.9496772048175 will be divided by estimate for C24030_002, wi
## [1] 44
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 584.904812929521 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 168.26748896961 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 98.7723940063953 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 138.930916556822 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 54.0704138544167 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 57.9514605794502 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 005, which is 59.808595479447 will be divided by estimate for B19001 001, wi
## [1] "Estimate for B19001_006, which is 81.2004480955211 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058 002, which is 378.439004025495 will be divided by estimate for B19058 001,
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[1] "Estimate for B19001_002, which is 22.5411970052137 will be divided by estimate for B19001_001, ## [1] "Estimate for B19001_003, which is 1.80698689727853 will be divided by estimate for B19001_001,

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## [1] "Estimate for B23025_005, which is 141.92140681943 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 2.58336238306951 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 769.98
## [1] "Estimate for C24030_018, which is 190.512749755121 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1965.1
## [1] 45
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 159.644605941349 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 62.5569649130961 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 86.5764410092484 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 182.143159368489 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 117.6836431923 will be divided by estimate for B19001_001, wh
## [1] "Estimate for B19001_004, which is 60.0152018853041 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 45.2474203344191 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 82.9000714494678 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 247.574815891236 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 225.508925183941 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2323.2
## [1] "Estimate for B25014_013, which is 1.62849355306375 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 569.362276641653 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 4.31058417718127 will be divided by estimate for C24030_002,
## [1] 46
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 111.610917662387 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 75.2618730949411 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 55.8766617973422 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 354.386999465247 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 206.494485493725 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 80.5809700478386 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 69.2184210933777 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 93.6420149221285 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 232.96401440347 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025_005, which is 373.832510885342 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1905.1
## [1] "Estimate for B25014_013, which is 3.00262559295539 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 507.082051127121 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 15.1645597758877 will be divided by estimate for C24030_002,
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[1] 47

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## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 533.853717093232 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 122.746453617865 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 151.192447889791 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 244.695358719805 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 63.552698636806 will be divided by estimate for B19001_001, w
## [1] "Estimate for B19001_004, which is 124.044217816942 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 101.242988308247 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 108.282192463561 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058 002, which is 333.030887889623 will be divided by estimate for B19058 001,
## [1] "Estimate for B23025_005, which is 279.522733188512 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 7.47772519902822 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 30.9050897118552 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 432.088820435693 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 9.14888689197797 will be divided by estimate for C24030_002,
## [1] 48
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53075"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 075"
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## [1] "Estimate for B11012_010, which is 0.354025632777658 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012 002, which is 0.389428196055424 will be divided by estimate for B17012 001,
## [1] "Estimate for B19001 002, which is 0.885064081944145 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_003, which is 0.584142294083136 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 0.814258955388613 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 0.67264870227755 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 0.619544857360901 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 2.06219931092986 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 0.283220506222126 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0.0885064081944145 will be divided by estimate for B25014_002
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 5.3015
## [1] "Estimate for C24030_018, which is 0.177012816388829 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 7.8062
## [1] 49
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1022.44071456785 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 261.465124429986 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 164.620375190104 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1709.89575755895 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 1153.00884998956 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 939.588301853157 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 905.688982320348 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 844.788708887135 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 2288.53489438622 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 1079.93996625507 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4201.5
## [1] "Estimate for B25014_013, which is 0.0182585257950588 will be divided by estimate for B25014_008
## [1] "Estimate for C24030_018, which is 4764.84203064654 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030 019, which is 104.209275095616 will be divided by estimate for C24030 002,
## [1] 50
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
```

[1] "Estimate for B06009_002, which is 1755.72826492311 will be divided by estimate for B06009_001, ## [1] "Estimate for B11012_010, which is 165.999481988658 will be divided by estimate for B11012_001, ## [1] "Estimate for B17012 002, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.79964926294 will be divided by estimate for B17012 001, which is 416.

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## [1] "Estimate for B19001_002, which is 196.348445864006 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 206.252647301758 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 004, which is 128.556282482353 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 179.067516855758 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 143.173301508716 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058 002, which is 724.666872401773 will be divided by estimate for B19058 001,
## [1] "Estimate for B23025 005, which is 342.026348422149 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014_007, which is 9.82206555838892 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 14.7003978258394 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 237.233279364484 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2522.9
## [1] 51
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53035"
## [1] "called get statecounty tracts"
## [1] "Looking up tracts for state 53, county 035"
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                       ## [1] "Estimate for B11012_010, which is 8.38423584725039 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 7.91233894443636 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 6.93860615379623 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 7.516283989796 will be divided by estimate for B19001_001, wh
## [1] "Estimate for B19001_004, which is 5.32037650501684 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 6.75912177136623 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 7.74521662526648 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 20.5383754335107 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 12.0909224790102 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014 007, which is 0 will be divided by estimate for B25014 002, which is 207.89
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 55.451
## [1] "Estimate for C24030_018, which is 12.1715103553593 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 150.46
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
  [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 100.132757642019 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 107.339899539977 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 65.1802791668634 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 145.279903898773 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 46.5552559487832 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 004, which is 71.8684434718052 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 84.4185424036068 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 103.411369350577 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 87.786018662658 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025 005, which is 295.40766210009 will be divided by estimate for B23025 001, w
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2806.4
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 2288.1
## [1] "Estimate for C24030_018, which is 940.126349552661 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 4.62634383241054 will be divided by estimate for C24030_002,
## [1] 53
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get statecounty tracts"
```

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## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 633.658272743232 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012 010, which is 63.1319785904156 will be divided by estimate for B11012 001,
## [1] "Estimate for B17012_002, which is 132.565797999781 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1363.98989398036 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 681.146203908054 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 004, which is 215.769646543041 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 653.757662656657 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 457.346673620736 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 1340.93052742636 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 648.677993456243 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4115.3
## [1] "Estimate for B25014_013, which is 1.59064414788781 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 3148.22362771331 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 49.6503859941396 will be divided by estimate for C24030_002,
## [1] 54
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 494.052517748966 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 100.663618851056 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 84.1461056059442 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 97.5629997260387 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 126.731828103255 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 94.3660221749676 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 99.0652109483843 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 86.2826342748674 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 359.232171442042 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 155.307214019829 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 4.48602976053003 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014 013, which is 4.76379360437762 will be divided by estimate for B25014 008,
## [1] "Estimate for C24030_018, which is 369.702669701501 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 2.8514966141779 will be divided by estimate for C24030_002, wi
## [1] 55
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
\#\# [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1207.16815476725 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 219.800371933832 will be divided by estimate for B11012_001,
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[1] "Estimate for B17012_002, which is 401.343315263442 will be divided by estimate for B17012_001, ## [1] "Estimate for B19001_002, which is 413.764584562069 will be divided by estimate for B19001_001, ## [1] "Estimate for B19001 003, which is 196.372983442103 will be divided by estimate for B19001 001,

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## [1] "Estimate for B19001_004, which is 145.381402651592 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 40.3553908273005 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 137.223694766125 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 884.752521984817 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 571.968198587345 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014 007, which is 9.32328726469182 will be divided by estimate for B25014 002,
## [1] "Estimate for B25014_013, which is 1.3834937447728 will be divided by estimate for B25014_008, wi
## [1] "Estimate for C24030_018, which is 416.75582603064 will be divided by estimate for C24030_002, wi
## [1] "Estimate for C24030_019, which is 0.133239189040253 will be divided by estimate for C24030_002,
## [1] 56
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 643.099116515232 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 129.930785786604 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 120.255707969581 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 151.685625279487 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 69.1240042751132 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 55.1410134510223 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 69.4076879840226 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 65.9159722652075 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 367.98984805454 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025_005, which is 235.017013530426 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0.221361535608115 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 3.03323882679895 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 135.567506824824 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1343.2
## [1] 57
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 621.208422045481 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 54.0512096087 will be divided by estimate for B11012_001, whi
## [1] "Estimate for B17012_002, which is 112.771237243219 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1300.08899063976 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 647.303211856668 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 220.357742790336 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 561.548495682645 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 374.7608565615 will be divided by estimate for B19001_001, wh
## [1] "Estimate for B19058_002, which is 1394.59575990124 will be divided by estimate for B19058_001,
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[1] "Estimate for B23025_005, which is 631.857817415129 will be divided by estimate for B23025_001, ## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3436.0

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## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 12618.
## [1] "Estimate for C24030_018, which is 2781.22517836672 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 32.7201126187894 will be divided by estimate for C24030_002,
## [1] 58
## [1] "Read ACS columns"
  [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 812.600851591761 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 76.4477273173323 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 142.556526140964 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1603.65689310507 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 755.900451931511 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 304.777378002987 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 707.314458175066 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 448.198427852323 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 1805.8213824723 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025_005, which is 871.892124386356 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3662.2
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 15507.
## [1] "Estimate for C24030_018, which is 3396.46053896382 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 31.333682807661 will be divided by estimate for C24030_002, wi
## [1] 59
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 130.120611593054 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 94.3147668065667 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 54.1714099104028 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 186.791945639228 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 148.445130393453 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 137.910065334022 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 100.400618758624 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 87.1238738804808 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 298.985430937186 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 181.776511900437 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2355.9
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 3207.2
## [1] "Estimate for C24030_018, which is 751.792604818704 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 3750.2
## [1] 60
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
```

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## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 933.12465758081 will be divided by estimate for B06009_001, wi
## [1] "Estimate for B11012_010, which is 195.457655240222 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 191.839673390068 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 310.364702643028 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 154.581097908965 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 110.15337365272 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 79.4152437638462 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 163.035409751003 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 688.697086062198 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 339.780053845689 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014 007, which is 0 will be divided by estimate for B25014 002, which is 2281.1
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 2080.7
## [1] "Estimate for C24030_018, which is 538.446925563032 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 3392.9
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
  [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 443.064291585249 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 185.427644378423 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 174.731379879511 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 963.164330338568 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 709.528896160551 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 004, which is 634.474934344013 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 508.601092751868 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 637.033619814239 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 1336.65102587172 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 732.951106504301 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3845.9
## [1] "Estimate for B25014_013, which is 23.0056921911377 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 3203.91172808683 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 72.9548274260979 will be divided by estimate for C24030_002,
## [1] 62
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
```

```
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 694.148389820794 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 139.909239872079 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 196.173713591404 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 300.035701079888 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 118.820181379704 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 004, which is 253.406876958328 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 174.859793203214 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 189.066336274828 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 588.61609344331 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025_005, which is 405.114593207321 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 4.69188081705972 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 20.7120369081238 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 517.714584186317 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 12.4339892047349 will be divided by estimate for C24030_002,
## [1] 63
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 405.213357532971 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 71.6241773769896 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 80.5395694199183 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 155.999220208798 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 91.7757858429808 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 86.0546849257672 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 106.860523874955 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 127.717077714343 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 288.308586128366 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 196.441407114843 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1723.6
## [1] "Estimate for B25014 013, which is 4.2144725106484 will be divided by estimate for B25014 008, w
## [1] "Estimate for C24030_018, which is 274.982157112839 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2324.1
## [1] 64
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 96.3604468827045 will be divided by estimate for B06009_001,
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[1] "Estimate for B11012_010, which is 46.831344428345 will be divided by estimate for B11012_001, which is 75.352108476651 will be divided by estimate for B17012_001, which is 75.352108476651 will be divided by estimate for B17012_001, which is 558.431204914712 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.123906777511 will be divided by estimate for B19001_001, which is 149.12390677911 will be divided by estimate for

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## [1] "Estimate for B19001_004, which is 58.095988463077 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 131.661315680247 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 92.2404222868047 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 245.699173921085 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 247.451905063818 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014 007, which is 20.8344926444252 will be divided by estimate for B25014 002,
## [1] "Estimate for B25014_013, which is 4.61795810177961 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 689.504601201838 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 3325.6
## [1] 65
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 450.853159151881 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 190.941322200204 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 267.94185019876 will be divided by estimate for B17012_001, wi
## [1] "Estimate for B19001_002, which is 934.848454842319 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 749.986874107806 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 518.30786183103 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 386.116803519867 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 473.05034027439 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 1218.13811376931 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 607.258006883568 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4302.5
## [1] "Estimate for B25014_013, which is 65.9990216436568 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 2961.34191160417 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 58.9278331299518 will be divided by estimate for C24030_002,
## [1] 66
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 501.843787364706 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 184.863520190082 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 112.613918944671 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 332.032627317139 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 265.887147569019 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 95.2693558665472 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 299.635797627853 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 111.754323669814 will be divided by estimate for B19001_001,
```

[1] "Estimate for B19058_002, which is 515.041500188153 will be divided by estimate for B19058_001, "## [1] "Estimate for B23025_005, which is 257.4646750032 will be divided by estimate for B23025_001, wh ## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1825.8

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## [1] "Estimate for B25014_013, which is 16.8486880091752 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 412.031622312605 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 1.3356872828484 will be divided by estimate for C24030_002, where the contract of th
## [1] 67
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 768.986742153802 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 273.251762645635 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 335.909044563334 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1306.8060507428 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_003, which is 1018.56633068729 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 693.948147454183 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 534.522816042616 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 647.317472765247 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 1692.69667108562 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 792.574774067286 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4535.8
## [1] "Estimate for B25014_013, which is 76.030415776197 will be divided by estimate for B25014_008, wi
## [1] "Estimate for C24030_018, which is 3492.79150606075 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 72.1691235098327 will be divided by estimate for C24030_002,
## [1] 68
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 653.178980207063 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 153.51569086744 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 122.003165121696 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 221.368605167777 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 281.797792820434 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 221.30814687307 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 279.816410729273 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 140.680774162871 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 781.014842064495 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 335.19031981704 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2787.2
## [1] "Estimate for B25014_013, which is 0.452247351589773 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 795.636103007245 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 1.23269151450891 will be divided by estimate for C24030_002,
## [1] 69
## [1] "Read ACS columns"
```

[1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002

```
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 176.569654352915 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 172.146536859656 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 7.93191690054466 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 212.912787896174 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 127.345285476909 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 259.815498065616 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 92.8081119420968 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 85.7872523581301 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 210.967157823515 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 447.747241924491 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2422.6
## [1] "Estimate for B25014_013, which is 3.51878923299666 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 971.777841390214 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.67461571407879 will be divided by estimate for C24030_002,
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
  [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 122.22943976569 will be divided by estimate for B06009_001, wi
## [1] "Estimate for B11012_010, which is 173.058269716049 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 61.0526509439745 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 136.698528435624 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 87.7965441923255 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 004, which is 73.7317830307938 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 91.0463436220469 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 124.533334081507 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 223.150063796737 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 329.56783491229 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2639.9
## [1] "Estimate for B25014_013, which is 21.8693972293665 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 1229.14905710326 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 4979.0
## [1] 71
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
```

```
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 648.192679729394 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 61.0922175773631 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 121.440392780439 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1358.12397757147 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 670.585749668284 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 004, which is 225.485279571593 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 609.219591251814 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 404.52625855359 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 1436.48090579366 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 666.25541590622 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3612.1
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 13547.
## [1] "Estimate for C24030_018, which is 2983.08622199524 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 38.043971882926 will be divided by estimate for C24030_002, wi
## [1] 72
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 294.943654243311 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 139.045371218349 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 200.03682606778 will be divided by estimate for B17012_001, wi
## [1] "Estimate for B19001_002, which is 1981.81623945616 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 672.090673654413 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 334.26604128703 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 373.571531732351 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 297.46207462631 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 601.555601900098 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 1070.72607719167 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1282.7
## [1] "Estimate for B25014 013, which is 18.5802533858432 will be divided by estimate for B25014 008,
## [1] "Estimate for C24030_018, which is 1133.35616368189 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 4.39513993234596 will be divided by estimate for C24030_002,
## [1] 73
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
\#\# [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1477.11521098284 will be divided by estimate for B06009_001,
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[1] "Estimate for B11012_010, which is 96.5477497575181 will be divided by estimate for B11012_001, ## [1] "Estimate for B17012_002, which is 205.300853579108 will be divided by estimate for B17012_001, ## [1] "Estimate for B19001_002, which is 1147.19407585117 will be divided by estimate for B19001_001, ## [1] "Estimate for B19001 003, which is 512.361723330094 will be divided by estimate for B19001 001,

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## [1] "Estimate for B19001_004, which is 562.910001572889 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 311.53340694065 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_006, which is 155.467054518067 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 1687.51329530733 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 408.417556543283 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1320.1
## [1] "Estimate for B25014 013, which is 33.812833667788 will be divided by estimate for B25014 008, w
## [1] "Estimate for C24030_018, which is 1132.49227119234 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 5.64717946179973 will be divided by estimate for C24030_002,
## [1] 74
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 560.712358019941 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 163.895508393093 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 102.14463585078 will be divided by estimate for B17012_001, wi
## [1] "Estimate for B19001_002, which is 330.382977300521 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 420.39751944913 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_004, which is 116.294056764616 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 257.275486427436 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 243.0553753008 will be divided by estimate for B19001_001, wh
## [1] "Estimate for B19058_002, which is 723.734536911776 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 186.378874204701 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1984.4
## [1] "Estimate for B25014_013, which is 3.16256163405375 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 372.999959107482 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2654.0
## [1] 75
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 812.600851591761 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 76.4477273173323 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 142.556526140964 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1603.65689310507 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 755.900451931511 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 304.777378002987 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 707.314458175066 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 448.198427852323 will be divided by estimate for B19001_001,
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[1] "Estimate for B19058_002, which is 1805.8213824723 will be divided by estimate for B19058_001, which is 871.892124386356 will be divided by estimate for B23025_001, which is 871.892124386356 will be divided by estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3662.2

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## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 15507.
## [1] "Estimate for C24030_018, which is 3396.46053896382 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 31.333682807661 will be divided by estimate for C24030_002, where the contract of th
## [1] 76
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 586.085287937489 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 186.07987530082 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 105.695906562815 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 365.858824534837 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 494.596558440772 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 124.089400575668 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 288.547818544078 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 266.030285592657 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 824.407022824603 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 176.702131200867 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2064.2
## [1] "Estimate for B25014_013, which is 2.58479870200473 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 389.698060993826 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2725.6
## [1] 77
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1207.16815476725 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 219.800371933832 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 401.343315263442 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 413.764584562069 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_003, which is 196.372983442103 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 145.381402651592 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 40.3553908273005 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 137.223694766125 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 884.752521984817 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 571.968198587345 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 9.32328726469182 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 1.3834937447728 will be divided by estimate for B25014_008, wi
## [1] "Estimate for C24030_019, which is 0.133239189040253 will be divided by estimate for C24030_002,
## [1] 78
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
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## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 152.844027924034 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 98.9988795981909 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 81.2573995087177 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 75.2065108243536 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 55.9173085679308 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 99.1704301397991 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 116.384722825913 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 88.219130071384 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 206.866471806438 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 194.066527592847 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3141.4
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 1310.4
## [1] "Estimate for C24030_018, which is 716.80186637838 will be divided by estimate for C24030_002, wi
## [1] "Estimate for C24030_019, which is 14.8830829374809 will be divided by estimate for C24030_002,
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
  [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 591.015733334483 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 57.9300452961744 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 122.645892914415 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1247.98052501795 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 649.941806679234 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 004, which is 197.547186222959 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 623.852072786267 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 448.615875554516 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 1167.31258117034 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 585.75312522885 will be divided by estimate for B23025 001, w
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4275.1
## [1] "Estimate for B25014_013, which is 2.54066167399883 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 2932.64492606842 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 49.5649498655029 will be divided by estimate for C24030_002,
## [1] 80
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
```

```
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 56.5469831227461 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 16.8557737573234 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 13.3931964667495 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 14.0671186878425 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 15.8957123147481 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 004, which is 31.8264574861079 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 7.66373566569903 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 11.8939334681506 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 51.2484149376004 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 31.033005175917 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 287.54
## [1] "Estimate for B25014_013, which is 2.72321772582179 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 71.4903974802844 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 411.14
## [1] 81
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 241.695977996209 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 162.74184037606 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 40.8616754654719 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 249.574367962778 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 185.557779361171 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 319.882010523933 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 103.863053886454 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 77.3429323825926 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 350.858338118289 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 558.635870363817 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2944.7
## [1] "Estimate for B25014 013, which is 0 will be divided by estimate for B25014 008, which is 5492.6
## [1] "Estimate for C24030_018, which is 1347.87045136506 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.698502876443533 will be divided by estimate for C24030_002,
## [1] 82
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 869.721849445736 will be divided by estimate for B06009_001,
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[1] "Estimate for B11012_010, which is 113.57527830749 will be divided by estimate for B11012_001, w ## [1] "Estimate for B17012_002, which is 134.416647673913 will be divided by estimate for B17012_001, ## [1] "Estimate for B19001_002, which is 81.2267730335588 will be divided by estimate for B19001_001, ## [1] "Estimate for B19001 003, which is 128.988216506283 will be divided by estimate for B19001 001,

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## [1] "Estimate for B19001_004, which is 61.5095892220874 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 94.4928374367936 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 81.3725152747694 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 334.065345309959 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 131.528374359398 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014 007, which is 11.1525122385959 will be divided by estimate for B25014 002,
## [1] "Estimate for B25014_013, which is 0.799856464654961 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 35.5143369125064 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1464.4
## [1] 83
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 869.721849445736 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 113.57527830749 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 134.416647673913 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 81.2267730335588 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 128.988216506283 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 61.5095892220874 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 94.4928374367936 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 81.3725152747694 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 334.065345309959 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 131.528374359398 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 11.1525122385959 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 0.799856464654961 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 35.5143369125064 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1464.4
## [1] 84
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 932.976942482096 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 171.211948739032 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 241.000351623137 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 167.479205067351 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 221.793091239084 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 172.244202027689 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 166.857644199683 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 143.831121284762 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058 002, which is 701.310738577303 will be divided by estimate for B19058 001,
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[1] "Estimate for B23025_005, which is 230.344276387948 will be divided by estimate for B23025_001, ## [1] "Estimate for B25014 007, which is 0 will be divided by estimate for B25014 002, which is 1619.2

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## [1] "Estimate for B25014_013, which is 17.8107240872012 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 179.343291755161 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 2.10732291574601 will be divided by estimate for C24030_002,
## [1] 85
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1160.34874456801 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 218.360137390901 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 395.612470756045 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 414.054066168838 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 191.323109779524 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 139.057417959127 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 36.6295464194546 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 135.046345529679 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 872.587118836045 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 573.994277267528 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 9.19480594861786 will be divided by estimate for B25014_002,
## [1] "Estimate for B25014_013, which is 1.09187044253421 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 418.858483101091 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.0994881124914005 will be divided by estimate for C24030_002
## [1] 86
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 183.048343061979 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 138.924770896951 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 88.5140576390211 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001 002, which is 328.912056975223 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_003, which is 220.649034481962 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 93.8922835312532 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 125.511124689283 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 194.273067500457 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 360.053337523074 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 329.092614274898 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3702.3
## [1] "Estimate for B25014_013, which is 12.6136656385781 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 1354.53069929769 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 13.7387100837396 will be divided by estimate for C24030_002,
## [1] 87
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
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## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 241.695977996209 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 162.74184037606 will be divided by estimate for B11012_001, wi
## [1] "Estimate for B17012_002, which is 40.8616754654719 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 249.574367962778 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 185.557779361171 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 319.882010523933 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 103.863053886454 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 77.3429323825926 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 350.858338118289 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 558.635870363817 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2944.7
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 5492.6
## [1] "Estimate for C24030_018, which is 1347.87045136506 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.698502876443533 will be divided by estimate for C24030_002,
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
  [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 1105.06296414559 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 232.025988820484 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 172.444650826922 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1767.95032960775 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 887.109412803436 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 004, which is 819.386785683894 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 1030.80289190954 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 844.837141537886 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 2214.25839549028 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 1123.0901907582 will be divided by estimate for B23025 001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4041.7
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 22165."
## [1] "Estimate for C24030_018, which is 4780.07588657761 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 71.6775762238672 will be divided by estimate for C24030_002,
## [1] 89
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
```

```
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 91.3655668252908 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012 010, which is 67.4998257727235 will be divided by estimate for B11012 001,
## [1] "Estimate for B17012_002, which is 50.0211177891601 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 136.259800633197 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 113.818898200398 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 004, which is 84.7351967522037 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 82.8131288936112 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 73.1334958361377 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 230.003689839637 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 89.0793812553906 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1972.3"
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 2158.8
## [1] "Estimate for C24030_018, which is 515.188756961733 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2758.8
## [1] 90
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058 001 B19058 002 B23025 001 B23025 005 B25014 001 B25014 007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 359.760415669466 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 117.670536695901 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 98.6529716723086 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 202.143808576331 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 156.782367186087 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 168.640491055189 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 119.552201042357 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 128.178283444811 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 323.770252481319 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 221.100525594305 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 3426.1
## [1] "Estimate for B25014 013, which is 0 will be divided by estimate for B25014 008, which is 2954.1
## [1] "Estimate for C24030_018, which is 1171.33916744883 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0.317891030978257 will be divided by estimate for C24030_002,
## [1] 91
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1819.98981364104 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 156.859817819873 will be divided by estimate for B11012_001,
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[1] "Estimate for B17012_002, which is 241.459672136962 will be divided by estimate for B17012_001, ## [1] "Estimate for B19001_002, which is 1628.49057791205 will be divided by estimate for B19001_001, ## [1] "Estimate for B19001 003, which is 701.144717520869 will be divided by estimate for B19001 001,

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## [1] "Estimate for B19001_004, which is 824.79521325009 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 514.128187638762 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 254.533330745684 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 2188.13285549298 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 686.96392787448 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2334.6
## [1] "Estimate for B25014_013, which is 35.0996055047015 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 2152.58699928369 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 29.0161368556406 will be divided by estimate for C24030_002,
## [1] 92
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 406.218411583064 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 106.809701349091 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 58.163639870228 will be divided by estimate for B17012_001, wi
## [1] "Estimate for B19001_002, which is 260.471936628084 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 287.866196250248 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 130.405215315425 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 177.42227545741 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_006, which is 200.773755386639 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 541.97070297681 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025_005, which is 211.441159294156 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1813.6
## [1] "Estimate for B25014_013, which is 0.445318885212976 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 358.840328906142 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 2321.9
## [1] 93
## [1] "Read ACS columns"
## [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 591.015733334483 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 57.9300452961744 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 122.645892914415 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1247.98052501795 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 649.941806679234 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 197.547186222959 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 623.852072786267 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 448.615875554516 will be divided by estimate for B19001_001,
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[1] "Estimate for B19058_002, which is 1167.31258117034 will be divided by estimate for B19058_001, "## [1] "Estimate for B23025_005, which is 585.75312522885 will be divided by estimate for B23025_001, which is 0 will be divided by estimate for B25014_002, which is 4275.1

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## [1] "Estimate for B25014_013, which is 2.54066167399883 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 2932.64492606842 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 49.5649498655029 will be divided by estimate for C24030_002,
## [1] 94
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
## [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 925.379725460434 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 126.994552874766 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 180.303763066463 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 106.816355641414 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 154.938491479629 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 55.4700785718244 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 98.6540505052895 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 64.4761885928249 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 421.77015797038 will be divided by estimate for B19058_001, wi
## [1] "Estimate for B23025_005, which is 202.287519103827 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1015.6
\#\# [1] "Estimate for B25014_013, which is 0.0237328999717105 will be divided by estimate for B25014_008
## [1] "Estimate for C24030_018, which is 35.1099027381072 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 0 will be divided by estimate for C24030_002, which is 1521.3
## [1] 95
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 1328.37618249761 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 286.244378939356 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 233.17041622558 will be divided by estimate for B17012_001, wi
## [1] "Estimate for B19001_002, which is 1716.03194938825 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 1030.50429257857 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 1003.7370240758 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 750.393743766885 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 693.53882147438 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 2134.43313491607 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 1045.56215591701 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 4043.1
## [1] "Estimate for B25014_013, which is 23.0453286163035 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 3805.21740649543 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 90.1310561497545 will be divided by estimate for C24030_002,
## [1] 96
## [1] "Read ACS columns"
## [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
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## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014 013 C24030 002 C24030 018 C24030 019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 822.826741253148 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 186.652008456489 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 166.395608596556 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 147.721926691063 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 219.723616704446 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 170.258506127227 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_005, which is 156.199447863303 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 157.23632286107 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 712.662708181012 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 219.446966587812 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 1771.9
## [1] "Estimate for B25014_013, which is 24.2003264175758 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 227.073061463249 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 15.4955975828637 will be divided by estimate for C24030_002,
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
  [7] B19001 001 B19001 002 B19001 003 B19001 004 B19001 005 B19001 006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 1283.55334510477 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 134.976512870314 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 168.834946981873 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1587.52923437642 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 688.454186552307 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 004, which is 591.287139013342 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001_005, which is 604.193834122005 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 303.128074419761 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 1994.33218116777 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025 005, which is 727.764272018887 will be divided by estimate for B23025 001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2865.2
## [1] "Estimate for B25014_013, which is 13.6392309488429 will be divided by estimate for B25014_008,
## [1] "Estimate for C24030_018, which is 2785.60470437452 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 40.1927849847585 will be divided by estimate for C24030_002,
## [1] 98
## [1] "Read ACS columns"
  [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
  [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001 001 B01001 002 B01001 003 B01001 004 ... C24060 002
## [1] "53033"
## [1] "called get_statecounty_tracts"
```

```
## [1] "Looking up tracts for state 53, county 033"
## [1] "Estimate for B06009_002, which is 85.8070818984131 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 79.5035778383866 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 69.9472664118298 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 169.166484751459 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001 003, which is 141.083896295728 will be divided by estimate for B19001 001,
## [1] "Estimate for B19001 004, which is 81.854353967337 will be divided by estimate for B19001 001, w
## [1] "Estimate for B19001_005, which is 117.226262463586 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 82.5990975316695 will be divided by estimate for B19001_001,
## [1] "Estimate for B19058_002, which is 189.137407222991 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 309.495210073296 will be divided by estimate for B23025_001,
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2974.6
## [1] "Estimate for B25014_013, which is 0 will be divided by estimate for B25014_008, which is 1550.7
## [1] "Estimate for C24030_018, which is 820.172264694124 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 8.09032207644193 will be divided by estimate for C24030_002,
## [1] 99
## [1] "Read ACS columns"
   [1] B06009 001 B06009 002 B11012 001 B11012 010 B17012 001 B17012 002
   [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
## [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 267.146805769887 will be divided by estimate for B06009_001,
## [1] "Estimate for B11012_010, which is 122.254135736526 will be divided by estimate for B11012_001,
## [1] "Estimate for B17012_002, which is 173.415939060188 will be divided by estimate for B17012_001,
## [1] "Estimate for B19001_002, which is 1960.20017120026 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_003, which is 632.104712504805 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_004, which is 280.71992175218 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19001_005, which is 338.658947167728 will be divided by estimate for B19001_001,
## [1] "Estimate for B19001_006, which is 240.66314725309 will be divided by estimate for B19001_001, wi
## [1] "Estimate for B19058_002, which is 548.878980958254 will be divided by estimate for B19058_001,
## [1] "Estimate for B23025_005, which is 966.72741091069 will be divided by estimate for B23025_001, wi
## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 933.35
## [1] "Estimate for B25014 013, which is 20.1275789866587 will be divided by estimate for B25014 008,
## [1] "Estimate for C24030_018, which is 913.167225991112 will be divided by estimate for C24030_002,
## [1] "Estimate for C24030_019, which is 2.09959856968258 will be divided by estimate for C24030_002,
## [1] 100
## [1] "Read ACS columns"
   [1] B06009_001 B06009_002 B11012_001 B11012_010 B17012_001 B17012_002
## [7] B19001_001 B19001_002 B19001_003 B19001_004 B19001_005 B19001_006
## [13] B19058_001 B19058_002 B23025_001 B23025_005 B25014_001 B25014_007
## [19] B25014_013 C24030_002 C24030_018 C24030_019
## 277 Levels: B01001_001 B01001_002 B01001_003 B01001_004 ... C24060_002
## [1] "53033"
## [1] "called get_statecounty_tracts"
\#\# [1] "Looking up tracts for state 53 , county 033"
## [1] "Estimate for B06009_002, which is 142.387547349891 will be divided by estimate for B06009_001,
```

[1] "Estimate for B11012_010, which is 172.14758381319 will be divided by estimate for B11012_001, w ## [1] "Estimate for B17012_002, which is 14.4383004414915 will be divided by estimate for B17012_001, ## [1] "Estimate for B19001_002, which is 186.74069760936 will be divided by estimate for B19001_001, w ## [1] "Estimate for B19001_003, which is 92.2785406624766 will be divided by estimate for B19001_001,

```
## [1] "Estimate for B19001_004, which is 184.135237548596 will be divided by estimate for B19001_001, ## [1] "Estimate for B19001_005, which is 87.3828073871299 will be divided by estimate for B19001_001, ## [1] "Estimate for B19001_006, which is 102.211505161688 will be divided by estimate for B19001_001, ## [1] "Estimate for B19058_002, which is 191.831821007227 will be divided by estimate for B19058_001, ## [1] "Estimate for B23025_005, which is 411.720214324826 will be divided by estimate for B23025_001, ## [1] "Estimate for B25014_007, which is 0 will be divided by estimate for B25014_002, which is 2480.6 ## [1] "Estimate for B25014_013, which is 6.75442112854738 will be divided by estimate for B25014_008, ## [1] "Estimate for C24030_018, which is 972.704680191046 will be divided by estimate for C24030_002, ## [1] "Estimate for C24030_019, which is 0.492708168903501 will be divided by estimate for C24030_002,
```

5. Run a principal component analysis to find weights for each variable measure

Now we can use the ACS measures that were just pulled to calculate the NDI score for the neighborhood around each dispensary. First we need to combine measures to calculate the total percent of residents with professional degrees and the total percent of housing that is crowded (2.01 or greater occupants per room), and total percent of households with an income less than \$30,000.

To create the composite NDI value, we first must get the weight for individual measure by conducting a principal component analysis of the eight designated NDI variables: (1) percent of males in professional occupations, (2) percent of households in poverty, (3) percent of residents with no high school diploma, (4) the percent of residents who are unemployed, (5) the percent of crowded housing, (6) the percent of households with income less than \$30,000, (7) the percent of female-headed households with dependents less than 18 years old, and (8) the percent of households on public assistance. The loadings generated by the PCA will be used to weight each measure in calculating the overall NDI summary measure for each tract. The resulting composite NDI measure is multiplied by -1 so that a higher NDI measure indicates a neighborhood with a higher level of deprivation. Finally, we standardize the NDI measures by subtracting the mean and dividing by the standard deviation so that the measure has a mean of 0 and a standard deviation of 1.

6. Calculate the NDI measure

Once the NDI score has been calculated and standardized, we can construct a boxplot to compare the mean and distribution of NDI scores for establishments with a marijuana retailer license to those with an off-premise alcohol license.

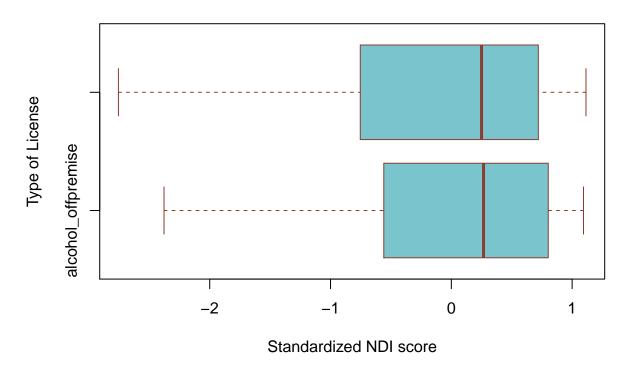
```
##assign loading values for each variable
percent_males_management_professional_loading<-ndi_pca$loadings[1]
households_in_poverty_proportion_loading<-ndi_pca$loadings[2]</pre>
```

```
no_hsdiploma_proportion_loading<-ndi_pca$loadings[3]
unemployed_proportion_loading<-ndi_pca$loadings[4]
percent_crowded_housing_loading<-ndi_pca$loadings[5]</pre>
percent_income_below_30k_loading<-ndi_pca$loadings[6]</pre>
female_head_kids_proportion_loading<-ndi_pca$loadings[7]</pre>
public_asst_proportion_loading<-ndi_pca$loadings[8]</pre>
#Calculated & standardize weighted NDI value using pca loadings
seattle_dispensary_ndi <-seattle_dispensary_ndi%>%
  mutate(ndi_value=((percent_males_management_professional*percent_males_management_professional_loadin
           (households_in_poverty_proportion*households_in_poverty_proportion_loading)+
           (no_hsdiploma_proportion*no_hsdiploma_proportion_loading)+
           (unemployed_proportion*unemployed_proportion_loading)+
           (percent_crowded_housing*percent_crowded_housing_loading)) +
           (percent_income_below_30k*percent_income_below_30k_loading) +
           (female_head_kids_proportion*female_head_kids_proportion_loading)+
           (public_asst_proportion*public_asst_proportion_loading)*-1) %>%
  mutate(ndi_standardized=(ndi_value-mean(ndi_value))/sd(ndi_value)) %>%
  mutate(dispensary_active=ifelse(status=="ACTIVE (ISSUED)" | status=="PENDING (ISSUED)", 1, 0))
```

7. Create a boxplot to compare the NDI measures for dispensaries versus alcohol retailers

Once the NDI score has been calculated and standardized, we can construct a boxplot to compare the mean and distribution of NDI scores for establishments with a marijuana retailer license to those with an off-premise alcohol license.

Neighborhood Deprivation Scores



8. Calculate a t-test to statistically compare NDI measures

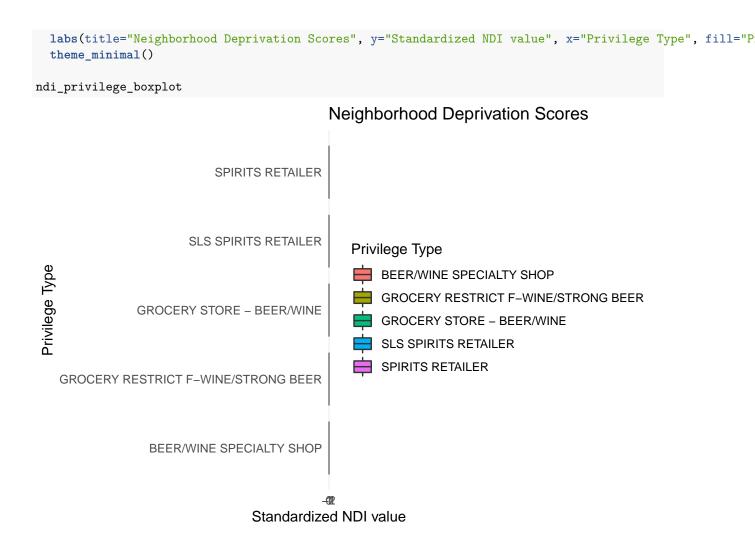
We can also statistically compare the NDI measures of neighborhoods around alcohol and marijuana retailers using an independent t-test.

```
ndi_ttest<-t.test(seattle_dispensary_ndi$ndi_value~seattle_dispensary_ndi$license_type, var.equal=TRUE)
ndi_ttest</pre>
```

Additional boxplot

In addition to the comparisons of marijuana and alcohol retailer NDI measures, we can also compare across multiple types of alcohol retailers by first constructing a boxplot by license type for alcohol retailers.

```
ndi_privilege_boxplot<- ggplot(seattle_dispensary_ndi[seattle_dispensary_ndi$license_type=='alcohol_off
geom_boxplot()+
coord_flip()+</pre>
```



Additional statistical analysis

3 GROCERY STORE - BEER/WINE

4 SLS SPIRITS RETAILER

5 SPIRITS RETAILER

We can also look at statistical differences between the deprivation level of neighborhoods around each alcohol establishment using an ANOVA test. First we will look at the mean and sd for NDI scores by privilege type.

```
#look at table of means:
ndi_mean_table<-seattle_dispensary_ndi[seattle_dispensary_ndi$license_type=='alcohol_offpremise',] %>%
  group_by(privilege) %>%
  summarise_at(vars(ndi_standardized), list(NDI_mean=mean, NDI_SD=sd))
ndi_aov<-aov(seattle_dispensary_ndi$ndi_standardized~seattle_dispensary_ndi$privilege, data=seattle_dis
print(ndi_mean_table)
## # A tibble: 5 x 3
##
                                         NDI_mean NDI_SD
     privilege
                                            <dbl>
                                                   <dbl>
##
     <chr>>
## 1 BEER/WINE SPECIALTY SHOP
                                           0.173
                                                   1.07
## 2 GROCERY RESTRICT F-WINE/STRONG BEER
                                           0.958 NA
```

-0.0495 0.963

NA

0.581

-2.15

0.535

summary(ndi_aov)

```
## seattle_dispensary_ndi$privilege 5 8.65 1.7309 1.801 0.12 ## Residuals 94 90.35 0.9611
```

References

Messer, L.C., Laraia, B.A., Kaufman, J.K., Eyster, J., Holzman, C., Culhane, J., Elo, I., Burke, J.G., & O'Campo, P. (2006). The Development of a Standardized Neighborhood Deprivation Index. Journal of Urban Health, 84(6): 1041-1062.