Getting Started with ipd_2017

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Before getting started

1. Download the code.

There are two ways to do it:

- 1. From online, visit https://github.com/addisonlarson/ipd_2017, click Clone or Download, save the ZIP file somewhere on your PC, and unzip it.
- 2. From Git BASH, clone the repository with https://github.com/addisonlarson/ipd_2017.git or git@github.com:addisonlarson/ipd_2017.git. The few lines of sample code below create a folder called "ipd" in My Documents and download the repository's contents there.

```
_ 0
MINGW64:/c/Users/alarson/Documents/ipd
alarson@ALarson01 MINGW64 ~ (master)
$ cd ~/Documents
alarson@ALarson01 MINGW64 ~/Documents (master)
$ mkdir ipd
alarson@ALarson01 MINGW64 ~/Documents (master)
$ cd ~/Documents/ipd
alarson@ALarson01 MINGW64 ~/Documents/ipd (master)
$ git clone https://github.com/addisonlarson/ipd_2017.git
Cloning into 'ipd_2017'...
remote: Enumerating objects: 200, done.
remote: Counting objects: 100% (200/200), done.
remote: Compressing objects: 100% (132/132), done.
remote: Total 200 (delta 108), reused 157 (delta 65), pack-reused 0
Receiving objects: 100% (200/200), 5.50 MiB | 4.54 MiB/s, done.
Resolving deltas: 100% (108/108), done.
alarson@ALarson01 MINGW64 ~/Documents/ipd (master)
```

2. Download and install software.

- 1. Get R from https://www.r-project.org/.
- 2. Get RStudio from https://www.rstudio.com/products/rstudio/#Desktop.

Next steps

Now that you have the code and software:

- 1. Open RStudio.
- 2. Open ipd_2017.Rproj from File -> Open Project -> <Folder where you saved the repository>
 -> ipd_2017.Rproj.
- 3. Open script.R.
- 4. Check that the input fields listed under Fields are up to date by verifying the newest data schemata on American FactFinder and Census Developers.
- 5. Check that the ACS data year is up to date under Year, e.g. ipd_year <- 2011.
- 6. Run the code by clicking the Source button or Ctrl+A followed by Ctrl+Enter. If you see the error message Error in library(<name of package>): there is no package called '<name of package>', go to Package Dependencies below.
- 7. Outputs are saved in <Folder where you saved the repository>/outputs.

Package dependencies

The error message Error in library (<name of package>): there is no package called '<name of package>' appears when the required packages aren't installed. script.R has five package dependencies:

```
library(plyr); library(here); library(sf); library(summarytools);
library(tidycensus); library(tidyverse); library(tigris)
```

It's easy to install packages. Open RStudio if it's not open already, go to the console (typically it's shown on the bottom of the screen), and type install.packages('<name of package>'). One package at a time; quotation marks required. You may have to do this seven times—once for each package—if you've never run R before.