```
-------------------------------------------------------------------------------
> -------------------------------------------------------------------------------
> -----
      name:  <unnamed>
       log:  C:\KY-SNAP-ABAWD-Waivers/Log_Files/Census_Bureau_Population_Cleaning.log
  log type:  text
 opened on:  24 Aug 2025, 22:53:56

.
. /*********************************************
> FILE NAME: Census_Bureau_Population_Cleaning
> AUTHOR: Dylan Craig
> DATE CREATED: November 24, 2024
> DATE MODIFIED: November 26, 2024
>
> PURPOSE: Process and clean Census Bureau county population data for analysis.
> *********************************************/
.
. // Echo header into log
. di as txt "*********************************************"
*********************************************

. di as txt "FILE NAME: Census_Bureau_Population_Cleaning"
FILE NAME: Census_Bureau_Population_Cleaning

. di as txt "AUTHOR: Dylan Craig"
AUTHOR: Dylan Craig

. di as txt "DATE CREATED: November 24, 2024"
DATE CREATED: November 24, 2024

. di as txt "DATE MODIFIED: November 26, 2024"
DATE MODIFIED: November 26, 2024

. di as txt "PURPOSE: Process and clean Census Bureau county population data for analy
> sis."
PURPOSE: Process and clean Census Bureau county population data for analysis.

. di as txt "*********************************************"
*********************************************

.
. // ------------------------ Step 1: Set Up --------------------------
. local raw_folder "$base_path/Raw_Data/Census_Bureau_County_Population_Data"

. local file "co-est2023-pop-21.xlsx"

.
. // ----------------------- Step 2: Import Data --------------------
. clear

. di "Processing file: `file'"
Processing file: co-est2023-pop-21.xlsx

.
. local filepath "`raw_folder'/`file'"

. capture import excel "`filepath'", cellrange(A4) firstrow clear

. if _rc {
```

```
.     di "Error importing `file'. Exiting."
.     exit
. }

.
. // ------------------------ Step 3: Clean Data ----------------------
. drop if _n == 1 | inrange(_n, 122, 127)
(7 observations deleted)

.
. rename A County

. replace County = subinstr(County, ".", "", .)
(120 real changes made)

. replace County = subinstr(County, "County, Kentucky", "", .)
(120 real changes made)

. replace County = proper(trim(lower(County)))
(120 real changes made)

. rename County COUNTY

. label variable COUNTY "County Name"

.
. drop B

.
. rename C Ann_Population_2020

. rename D Ann_Population_2021

. rename E Ann_Population_2022

. rename F Ann_Population_2023

.
. reshape long Ann_Population_, i(COUNTY) j(Year)
(j = 2020 2021 2022 2023)

Data                               Wide   ->   Long
-----------------------------------------------------------------------------
Number of observations              120   ->   480
Number of variables                   5   ->   3
j variable (4 values)                     ->   Year
xij variables:
Ann_Population_2020 Ann_Population_2021 ... Ann_Population_2023->Ann_Population_
-----------------------------------------------------------------------------

. rename Ann_Population_ Ann_Population

. label variable Ann_Population "Annual Population"

. label variable Year "Year"

.
. // ------------------------ Step 4: Add Month Variable ---------------
. expand 12
(5,280 observations created)
```

```
. bysort COUNTY Year: gen Month = _n

. label variable Month "Month"

.
. order COUNTY Year Month Ann_Population

.
. // ------------------------ Step 5: Save Cleaned Data ----------------
. save "$base_path/Data_Outputs/Census_Bureau_County_Population_Data/County_Population
> .dta", replace
file C:\KY-SNAP-ABAWD-Waivers/Data_Outputs/Census_Bureau_County_Population_Data/County
> _Population.dta saved

. di "Census Bureau county population data successfully processed and saved."
Census Bureau county population data successfully processed and saved.

.
. // Close the log
. log close
      name:  <unnamed>
       log:  C:\KY-SNAP-ABAWD-Waivers/Log_Files/Census_Bureau_Population_Cleaning.log
  log type:  text
 closed on:  24 Aug 2025, 22:53:56
-------------------------------------------------------------------------------
> -------------------------------------------------------------------------------
> -----
```