```
  -------------------------------------------------------------------------------
> -------------------------------------------------------------------------------
> -----
      name:  <unnamed>
       log:  C:\KY-SNAP-ABAWD-Waivers/Log_Files/Data_Cleaning.log
  log type:  text
 opened on:  24 Aug 2025, 22:54:21

.
. /***********************************************
> FILE NAME: Data_Cleaning
> AUTHOR: Dylan Craig
> DATE CREATED: November 24, 2024
> DATE MODIFIED: November 26, 2024
>
> PURPOSE: Merge all .dta files from specified folders by COUNTY, Year, and Month.
> ***********************************************/
.
. // Echo header into log
. di as txt "***********************************************"
***********************************************

. di as txt "FILE NAME: Data_Cleaning"
FILE NAME: Data_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: Merge all .dta files from specified folders by COUNTY, Year, and
>  Month."
PURPOSE: Merge all .dta files from specified folders by COUNTY, Year, and Month.

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

.
. // ----------------------- Step 1: Load Population Data -------------------------
. // Start with ACS population dataset
. use "$base_path/Data_Outputs/ACS_Population/ACS_Population_Cleaned.dta", clear

.
. // Append Census Bureau County Population data
. append using "$base_path/Data_Outputs/Census_Bureau_County_Population_Data/County_Po
> pulation.dta"
(variable COUNTY was str12, now str380 to accommodate using data's values)
(variable Month was byte, now float to accommodate using data's values)

.
. // ---------------------- Step 2: Sequential Merges ----------------------------
. // ACS Education
. merge 1:1 COUNTY Year Month using "$base_path/Data_Outputs/ACS_Education/ACS_Educati
> on_Cleaned.dta", keepusing(*) nogen

    Result                      Number of obs
    -----------------------------------------
    Not matched                         1,440
        from master                     1,440
        from using                          0

    Matched                             8,640
    -----------------------------------------
```

```
.
. // ACS Poverty
. merge 1:1 COUNTY Year Month using "$base_path/Data_Outputs/ACS_Poverty/ACS_Poverty_C
> leaned.dta", keepusing(*) nogen

    Result                           Number of obs
    -----------------------------------------
    Not matched                              1,440
        from master                          1,440
        from using                               0

    Matched                                  8,640
    -----------------------------------------


.
. // ACS Race
. merge 1:1 COUNTY Year Month using "$base_path/Data_Outputs/ACS_Race/ACS_Race_Cleaned
> .dta", keepusing(*) nogen

    Result                           Number of obs
    -----------------------------------------
    Not matched                              1,500
        from master                          1,440
        from using                              60

    Matched                                  8,640
    -----------------------------------------


.
. // County Health Rankings
. merge 1:1 COUNTY Year Month using "$base_path/Data_Outputs/County_Health_Rankings_Ro
> admaps_Data/Cleaned_FoodInsecurity_Data.dta", keepusing(*) nogen

    Result                           Number of obs
    -----------------------------------------
    Not matched                              1,500
        from master                             60
        from using                           1,440

    Matched                                 10,080
    -----------------------------------------


.
. // Kentucky County ABAWD
. merge 1:1 COUNTY Year Month using "$base_path/Data_Outputs/Kentucky_County_ABAWD_Dat
> a/Cleaned_ABAWD_Data.dta", keepusing(*) nogen

    Result                           Number of obs
    -----------------------------------------
    Not matched                                896
        from master                            660
        from using                             236

    Matched                                 10,920
    -----------------------------------------


.
. // Kentucky Waiver Status
. merge 1:1 COUNTY Year Month using "$base_path/Data_Outputs/Kentucky_Waiver_Status/Fi
> nal_Waiver_Status.dta", keepusing(*) nogen

    Result                           Number of obs
    -----------------------------------------
    Not matched                                416
        from master                            416
        from using                               0

    Matched                                 11,400
    -----------------------------------------
```

```
.
. // LAUS County Data
. merge 1:1 COUNTY Year Month using "$base_path/Data_Outputs/LAUS_County_Data/Cleaned_
> LAUS_Data.dta", keepusing(*) nogen

    Result                           Number of obs
    -----------------------------------------
    Not matched                             656
        from master                         656
        from using                            0

    Matched                              11,160
    -----------------------------------------


.
. // QCEW County Data
. merge 1:1 COUNTY Year Month using "$base_path/Data_Outputs/QCEW_County_Data/Cleaned_
> QCEW_Data.dta", keepusing(*) nogen

    Result                           Number of obs
    -----------------------------------------
    Not matched                           1,376
        from master                       1,376
        from using                            0

    Matched                              10,440
    -----------------------------------------


.
. // ---------------------- Step 3: Variable Creation ---------------------------
. // Make sure numeric fields are numeric (avoids type mismatch issues)
. destring Ann_Below_Poverty Ann_NH_White Ann_NH_Black Ann_NH_AIAN Ann_NH_Asian ///
>         Ann_NH_NHOPI Ann_NH_Other Ann_NH_TwoOrMore Ann_Hispanic_Latino, replace for
> ce
Ann_Below_Poverty already numeric; no replace
Ann_NH_White: contains nonnumeric characters; replaced as long
(3176 missing values generated)
Ann_NH_Black: contains nonnumeric characters; replaced as long
(3176 missing values generated)
Ann_NH_AIAN: contains nonnumeric characters; replaced as int
(3176 missing values generated)
Ann_NH_Asian: contains nonnumeric characters; replaced as int
(3176 missing values generated)
Ann_NH_NHOPI: contains nonnumeric characters; replaced as int
(3176 missing values generated)
Ann_NH_Other: contains nonnumeric characters; replaced as int
(3176 missing values generated)
Ann_NH_TwoOrMore: contains nonnumeric characters; replaced as int
(3176 missing values generated)
Ann_Hispanic_Latino: contains nonnumeric characters; replaced as long
(3176 missing values generated)


.
. // Poverty percentage
. gen Ann_Perc_Below_Poverty = (Ann_Below_Poverty / Ann_Population) * 100
(3,176 missing values generated)

. label variable Ann_Perc_Below_Poverty "Annual Percentage of population below poverty
>  level"
```

```
.
. // Race/Ethnicity percentages
. gen Ann_Perc_NH_White        = (Ann_NH_White     / Ann_Population) * 100
(3,176 missing values generated)

. gen Ann_Perc_NH_Black        = (Ann_NH_Black     / Ann_Population) * 100
(3,176 missing values generated)

. gen Ann_Perc_NH_AIAN         = (Ann_NH_AIAN      / Ann_Population) * 100
(3,176 missing values generated)

. gen Ann_Perc_NH_Asian        = (Ann_NH_Asian     / Ann_Population) * 100
(3,176 missing values generated)

. gen Ann_Perc_NH_NHOPI        = (Ann_NH_NHOPI     / Ann_Population) * 100
(3,176 missing values generated)

. gen Ann_Perc_NH_Other        = (Ann_NH_Other     / Ann_Population) * 100
(3,176 missing values generated)

. gen Ann_Perc_NH_TwoOrMore    = (Ann_NH_TwoOrMore / Ann_Population) * 100
(3,176 missing values generated)

. gen Ann_Perc_Hispanic_Latino = (Ann_Hispanic_Latino / Ann_Population) * 100
(3,176 missing values generated)

.
. // Labels
. label variable Ann_Perc_NH_White        "Annual % Non-Hispanic White"

. label variable Ann_Perc_NH_Black        "Annual % Non-Hispanic Black"

. label variable Ann_Perc_NH_AIAN         "Annual % Non-Hispanic AIAN"

. label variable Ann_Perc_NH_Asian        "Annual % Non-Hispanic Asian"

. label variable Ann_Perc_NH_NHOPI        "Annual % Non-Hispanic NHOPI"

. label variable Ann_Perc_NH_Other        "Annual % Non-Hispanic Other"

. label variable Ann_Perc_NH_TwoOrMore    "Annual % Non-Hispanic Two or More Races"

. label variable Ann_Perc_Hispanic_Latino  "Annual % Hispanic or Latino"

.
. // Replace invalid values with missing
. foreach var in Ann_Perc_Below_Poverty Ann_Perc_NH_White Ann_Perc_NH_Black Ann_Perc_N
> H_AIAN ///
>                 Ann_Perc_NH_Asian Ann_Perc_NH_NHOPI Ann_Perc_NH_Other ///
>                 Ann_Perc_NH_TwoOrMore Ann_Perc_Hispanic_Latino {
  2.     replace `var' = . if missing(Ann_Population) | Ann_Population == 0
  3. }
(0 real changes made)
(0 real changes made)
(0 real changes made)
(0 real changes made)
(0 real changes made)
(0 real changes made)
(0 real changes made)
(0 real changes made)
(0 real changes made)
```

```
.
. // ---------------------- Step 4: Convert Percentages to Proportions -------------
> -
. local percent_vars Ann_Perc_HS_25_Over Ann_Perc_Bach_25_Over Ann_Perc_Below_Poverty
> ///
>       Ann_Perc_NH_White Ann_Perc_NH_Black Ann_Perc_NH_AIAN Ann_Perc_NH_Asian Ann_Perc_
> NH_NHOPI ///
>       Ann_Perc_NH_Other Ann_Perc_NH_TwoOrMore Ann_Perc_Hispanic_Latino Ann_FoodInsecur
> ePerc ///
>       Ann_RuralPopPerc Mnthly_Unemployment_Rate

.
. foreach var of local percent_vars {
  2.       replace `var' = `var' / 100
  3. }
(8,640 real changes made)
(8,640 real changes made)
(8,640 real changes made)
(8,640 real changes made)
(8,604 real changes made)
(7,056 real changes made)
(7,680 real changes made)
(3,084 real changes made)
(5,148 real changes made)
(8,580 real changes made)
(8,532 real changes made)
(11,520 real changes made)
(11,520 real changes made)
(11,160 real changes made)

.
. // ---------------------- Step 5: Final Adjustments ---------------------------
> -
. order COUNTY REGION Year Month WaiverStatus Ann_Population

. sort COUNTY Year Month

.
. save "$base_path/Data_Outputs/Final_Cleaned_Data/Final_Cleaned_Data.dta", replace
file C:\KY-SNAP-ABAWD-Waivers/Data_Outputs/Final_Cleaned_Data/Final_Cleaned_Data.dta s
> aved

. di "All files successfully merged and saved."
All files successfully merged and saved.

.
. // Close log
. log close
      name:  <unnamed>
       log:  C:\KY-SNAP-ABAWD-Waivers/Log_Files/Data_Cleaning.log
  log type:  text
 closed on:  24 Aug 2025, 22:54:21
--------------------------------------------------------------------------------
> --------------------------------------------------------------------------------
> -----
```