**DSPG 2022 - AgMRC Commodity Reports - ESRI Consumer Spending Documentation**

**Dataset**

**Data Source:** ESRI Consumer Spending

**Data Files:**

* *esri\_food\_prefs\_2000\_2010.csv*
* *esri\_food\_data\_2021\_2026.csv*
* *esri\_food\_prefs\_2000\_2010\_2021\_2026\_cleaned\_long.csv*
* *esri\_food\_prefs\_2000\_2010\_2021\_2026\_cleaned\_wide.csv*

**Data Acquisition:**

* 2000/2010 ESRI data acquired from previous teams work.
* New 2021/2026 ESRI data acquired by getting access to ArcGIS Pro and respective box folders with ESRI ArcGIS data files from Josh Obrecht ([jobrecht@iastate.edu](mailto:jobrecht@iastate.edu)) GIS Support and Research Facility at Iowa State University.
* After connecting to respective ESRI files from Box, exported needed variables into *esri\_food\_data\_2021\_2026.csv* file.

**Cleaning/Transforming**

Original 2000/2010 data is in a wide format where each column was a category such as 2000\_beef\_expenditure. 2021/2026 exported data was also in this format.

**R Script:** *esri\_data\_cleaning\_and\_transformation\_to\_wide\_and\_long.R*

**Primary Changes** (Please see R script for more detailed changes)

* Updated 2000/2010 ESRI food data column names to match 2021/2026 ESRI column names. Likewise changed 2021/2026 ESRI geographic column names to match 2000/2010 geographic column names.
* Changed 2000/2010 ESRI data from tract to county level since the 2021/2026 data is at the county level.
* Updated 2021/2026 state abbreviations to full state names.
* Converted cleaned wide data into long format.
  + Parsed out year from column names and created new year column from the parsed years.