

Input/
 "Census data by block (2000)"
 Census/nhgis0042_ds172_2000_block.csv
 "Census data by block (2010)"
 Census/nhgis0043_ds172_2010_block.csv
 "Median Income data by block group (2010)"
 Census/nhgis0044_ds152_2000_block_grp.csv
 "Median Income data by block group (2010)"
 Census/nhgis0043_ds176_20105_2010_block_grp.csv
 "NO2 concentration by census block"
 Pollutant/NO2_2000.csv
 Pollutant/NO2_2010.csv
 "PM10 and PM2.5 concentration by census block"
 Pollutant/CACES_2000.csv
 Pollutant/CACES_2010.csv
 "Asthma IR (2006-2009)"
 As a variable
 "Asthma PR 2006-2009)"
 As a variable

Script/1_DataSets.R
 Inputs:
 -Census data with population counts,
 -Living location, and median income group.
 -Pollutant data by census block.
 -Asthma IR and PR.
 -Modeling variables CRF and CRF unit.
 Output:
 burden "data set"

variable:
 burden

Script/2_AirPollutionPlots.R
 Inputs:
 -burden
 Output:
 Produce the boxplots of pollutant concentrations for each census block by year and state.

Output/Plots/
 NO2_state_year.png
 PM2.5_state_year.png
 PM10_state_year.png

Script/3_AirPollutionTables.R
 Inputs:
 -burden
 Output:
 Produce tables of pollutant concentrations by year at national and state level.

Output/Tables/
 Pollutant.csv
 Pollutant_state.csv

Script/4_BurdenEstimate.R
 Inputs:
 -burden
 Output:
 Produce tables of the number of incident cases, attributable cases (AC), and attributable fraction (AF) by year and state.

Output/Tables/
 IncidentCases.csv
 IncidentCases_State.csv
 AC.csv
 AC_State.csv
 AF.csv
 AF_state.csv

Script/5_DemographicTables.R
 Inputs:
 -burden
 Output:
 Produce summary tables of demographics ;population count and children count, by year and state

Output/Tables/
 childTotal.csv
 childTotal_State.csv
 popTotal.csv
 popTotal_State.csv

Script/6_GeographicTables.R
 Inputs:
 -burden
 Output:
 Produce counts of total census block by year, income level, and living location.

Output/Tables/
 n.csv
 n_State.csv

Script/7_Counterfactual.R
 Inputs:
 -burden
 Output:
 Produce tables for burden results using two counterfactual scenarios.
 Scenario 1: WHO guidelines
 Scenario 2: Lowest concentration

Output/Tables/
 CounterScenario1.csv
 CounterScenario2.csv

Script/8_Plots_AttributableFraction.R
 Inputs:
 -burden
 Output:
 Produce AF plots by pollutants, years, state, income and living location

Output/Plots
 ALL_AF_state_year.png
 All_AF_Urban_year.png
 NO2_AF_Urban_year.png
 PM10_AF_Urban_year.png
 PM25_AF_Urban_year.png
 NO2_AF_Urban_state_year.png
 PM10_AF_Urban_state_year.png
 PM25_AF_Urban_state_year.png
 All_AF_Income_year.png
 NO2_AF_Income_year.png
 PM10_AF_Income_year.png
 PM25_AF_Income_year.png
 NO2_AF_Income_state_year.png
 PM10_AF_Income_state_year.png
 PM25_AF_Income_state_year.png

Script/9_SensitivityAnalysis.R
 Inputs:
 -burden
 Output:
 Produce the sensitivity analysis matrix of AC

Output/Table/
 Sensitivity_AC.csv