Supplementary Materials for

**Kim, H. (2023). Community child care availability and child maltreatment report rates, Illinois zip codes, 2011-2018. Available at SSRN:** [**http://dx.doi.org/10.2139/ssrn.4608687**](http://dx.doi.org/10.2139/ssrn.4608687)

This file includes

Guidance on How to Use the Enclosed Supplementary Materials for Replication

**Guidance on How to Use the Enclosed Supplementary Materials for Replication**

This study used data linking multiple Illinois-statewide datasets at the zip code level for all zip codes in Illinois from 2011 to 2018. The data had been constructed by a larger project funded by the Centers for Disease Control and Prevention (CDC), K01CE003229.

The purpose of this document is to provide guidance on how to use the enclosed supplementary materials (the SAS programs and the R scripts) to replicate this study’s data and analysis results.

The child maltreatment report data are available to eligible researchers with no cost. All other data are open to the public with no cost. Table S1 lists the datasets, their sources (locations), and the SAS programs for importing, managing, and merging the datasets.

**Table S1.** SAS Programs, Raw Datasets, and Sources to Construct the Present Study’s Data.

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| --- | --- | --- |
| SAS Program | Dataset | Source |
| 01 CAN\_Input.sas | Child maltreatment report data | <https://www2.illinois.gov/dcfs/aboutus/policy/Pages/com_communications_IRB.aspx> |
| 02 Census\_Input.sas | Census ACS data | <https://www.socialexplorer.com/explore-tables> |
| 03 NCHS\_RUC\_Input.sas | NCHS rural-urban codes | <https://www.cdc.gov/nchs/data_access/urban_rural.htm> |
| 04 USDA\_RUC\_Input.sas | USDA rural-urban codes | <https://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx> |
| 05 Spatial\_Input.sas | Census gazetteer files | <https://www.census.gov/geographies/reference-files/time-series/geo/gazetteer-files.html> |
| 06 IECAM\_Input.sas | U of Illinois IECAM data | <https://iecam.illinois.edu/database/> |
| 07 MHV\_Input.sas | U of Illinois CPRD data | <https://cprd.illinois.edu/expertise/child-and-family-programs/miechv/> |
| 08 Food\_Input.sas | Food insecurity data | <https://map.feedingamerica.org/> |
| 09 Grand\_Merge.sas | This program merges all datasets. | |

After obtaining the raw datasets, running all enclosed SAS programs from “01 CAN\_Input.sas” to “09 Grand\_Merge.sas” will produce a merged dataset (“cdck01zip\_census2.sas7bdat”). The “Dataset Contents.htm” reports the summary information about the contents of the merged dataset, including the variables’ names and descriptions.

After constructing the merged data set, one needs to run the R script for analysis. “Analysis\_ZIP\_Service02\_Model\_new.R” will prepare analysis data and estimate models that replicate this study’s analysis results.

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