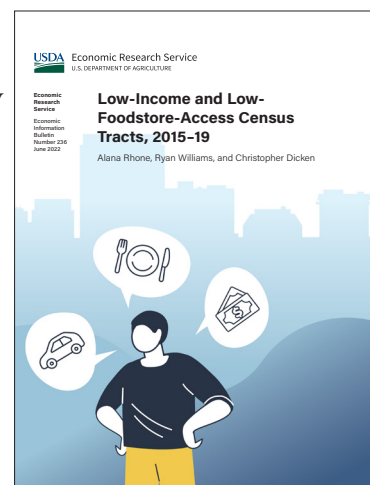# Low-Income and Low-Foodstore-Access Census Tracts, 2015–19

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What Is the Issue?

Limited access to foodstores and other sources of healthy and affordable food may constrain people in the United States who are trying to achieve a healthy diet. Distance, lack of transportation, and/or limited resources can impact peoples' choices of stores to shop for food, their frequency of shopping, and the time and money it takes to travel to the nearest store. In 2019, 11 to 27 percent of the U.S. population lived in low-income (LI) and low-access (LA) census tracts. The Food Access Research Atlas (FARA) is a web-based mapping tool that allows users to investigate access to foodstores at the census-tract level. A census tract is a small statistical subdivision of a county that usually contains between 1,200 and 8,000 people. Individuals may use FARA to understand foodstore access in communities, examine the consequences for limited food access, and target interventions to improve access. Because FARA is a key tool for individual researchers, regular data updates help ensure users have access to the latest available data. Accordingly, this report updates previously reported 2015 data estimates with new 2019 estimates. Subsequently, it compares those estimates to assess changes over time in stores by store type and for low-income and low-access census tracts across four different measures of low income and low access (LILA). The report then breaks down these changes into shares that can be explained by changes in tract income versus changes in store access.

What Did the Study Find?

Low-income and low-access census-tract statuses are measured separately, with the overlap of both LI and LA tracts comprising low-income, low-access (LILA) tracts. Low-income status is given to census tracts that have a poverty rate of at least 20 percent or a median family income at or below 80 percent of the metropolitan area or State median income level. The study found:

- The number of census tracts classified as LI decreased from 30,870 in 2015 to 30,287 in 2019—by approximately 2 percent.

Low-access status is measured four ways for census tracts. Three of these measures are solely based on proximity to the nearest store, demarcated by using different distance thresholds for urban (0.5 or 1 mile) and rural (10 or

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20 miles) areas. The fourth measure of low-access (LA Vehicle Access and 20 miles)—which is equally applied to urban and rural areas—calculates the number of households without a vehicle located more than 0.5 mile from the nearest store, as well as the number and percent of people residing more than 20 miles from the nearest store. The ERS researchers found that the number of census tracts classified as LA decreased for the 0.5- (urban) and 10-mile (rural) and 1- (urban) and 20-mile (rural) measures, as well as for tracts without vehicle access or measuring more than 20 miles from a store. The time comparison showed:

- The number of census tracts classified as LA by the 1- and 10-mile measure increased slightly from 27,527 in 2015 to 27,548 in 2019.

Overlapping the LI and LA tract data found decreases from 2015 to 2019 in the number of LILA tracts for two measures and increases in the number of LILA tracts for two measures:

- With the 0.5- and 10-mile definition, there was a decrease of 309 LILA tracts (1.5 percent).

- With the 1- and 10-mile definition, there was an increase of 48 LILA tracts (0.5 percent).

- With the 1- and 20-mile definition, there was an increase of 35 LILA tracts (0.4 percent).

- With the LILA vehicle access and 20-mile definition, there was a decrease of 743 LILA tracts (6.8 percent).

In 2019, 40 percent of the U.S. population lived more than 1 mile from a foodstore; 30 percent lived within 0.5 miles; and 30 percent lived between 0.5 and 1 mile away. Analysis of the 2019 data by subpopulation showed minimal changes from the 2010 and 2015 estimates of distance to the nearest foodstore:

- Most racial and ethnic minorities lived closer to foodstores than White individuals. These estimates likely mirrored differences in the ethnic and racial composition in urban and rural areas.

- People with low incomes were closer to foodstores than those with moderate and high income at the 20th, median (0.69 mile to the nearest foodstore for low-income versus 0.88 mile to the nearest food store for moderate/high incomes), and 80th percentiles.

- Supplemental Nutrition Assistance Program (SNAP)-participating households were more likely than non-SNAP-participating households to be within 0.5 miles of the nearest foodstore and less likely to be more than 1 mile from the nearest store.

How Was the Study Conducted?

Updated estimates of LILA census tracts are based on a list of foodstores from 2019. This list is generated from two independent directories of stores—TDLinx (a proprietary source) and the Store Tracking and Redemption System (STARS), which has a directory of stores authorized to accept SNAP benefits. Income and vehicle-access data are from the U.S. Department of Commerce, Bureau of the Census 2014–2018 American Community Survey, and population data are from the U.S. Department of Commerce, Bureau of the Census 2010 Decennial Census. Methods for estimating foodstore access for the U.S. population and aggregating these estimates to census tracts are similar to those used in Rhone et al. (2017), Ver Ploeg et al. (2012), and published in the Food Access Research Atlas (USDA, ERS, 2013). Because census tract boundaries in this report are identical to those used in the previous version of FARA, the new 2019 estimates can be compared with the 2015 estimates to understand which tracts changed in low-income, low-access status, or both across the years.