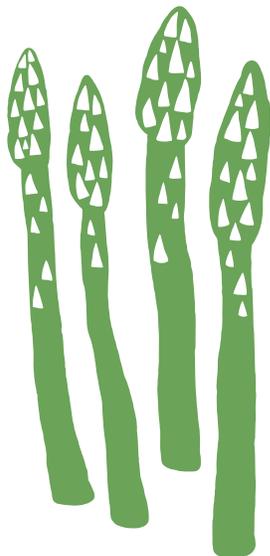
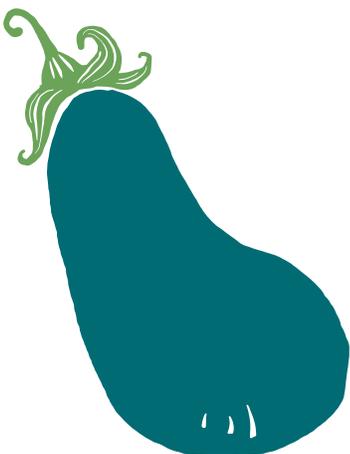


BIG
GREEN
REAL FOOD GROWS HERE



IMPACT MAP GUIDE





BIG GREEN IMPACT MAP

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BIG GREEN IMPACT MAP

INTRODUCTION

Welcome to Big Green's Impact Map! The Impact Map is an interactive mapping platform combined with data about our Learning Gardens and schools, the local food environment, and public health metrics.

The idea for the Impact Map arose from our team's desire to create a tool that could be used for research and evaluation and serve as a resource for our community partners. Users can explore and manipulate six food environment and public health layers, search for locations and filter data based on a desired address, map directions between points of interest, zoom between county-level and street-level data, and view individual profiles and photos for each of Big Green's Learning Gardens.



BIG GREEN IMPACT MAP

IMPACT MAP GLOSSARY

Below are some key mapping, public health, and food environment terms important to the Impact Map.

ArcGIS Online: An online, collaborative mapping software that allows you to use, create, and share maps, scenes, apps, layers, analytics, and data. ArcGIS is hosted by the platform ESRI.

Basemap: A map depicting background reference information such as landforms, roads, landmarks, and political boundaries, onto which other thematic information is placed.

GIS: A geographic information system (or GIS) is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data.

Layers: The visual representation of a geographic dataset in any digital map environment.

Metadata: Information that describes and provides details about data types (e.g. zip codes).

Open Data: Data publicly available for download, typically as an entire dataset or as a subset.

Pop-up (hotlink): An individual legend for a single data point that provides specific information.

Service Credits: The currency for ArcGIS Online. Service credits are consumed when using certain functions.

Social Determinants of Health: Conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risk.



BIG GREEN IMPACT MAP

DATA DESCRIPTIONS AND IMPORTANCE

Each layer and point of interest is described below, including the definition, a link to data source, and the relevance of that data to Big Green's work.

LAYERS

Children, Low Access To Store

Definition: Percentage of children (age <18) in a county living more than 1 mile from a supermarket, supercenter or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area.

Importance: Research indicates that food access is linked to children's health, academic, performance, and emotional/social development.

Data Source: Data are from the 2012 report, Access to Affordable and Nutritious Food: Updated Estimates of Distances to Supermarkets Using 2010 Data.

Farmers' Markets Locations

Description: The USDA National Farmers Market Directory, maintained by AMS Marketing Services, is designed to provide members of the public with convenient access to information about U.S. farmers market locations, directions, operating times, product offerings, and accepted forms of payment. Market information included in the Directory is voluntary and self-reported to AMS by market managers, representatives from State farmers market agencies and associations, and other key market personnel.

Importance: Understanding the local food shed landscape (positive attributes of the food environment) can help us understand the availability and accessibility of real food in a community and highlight opportunities for real food entrepreneurship.

Data Sources: National Farmers Market Directory, compiled USDA's Agricultural Marketing Service, Marketing Services Division.

Low Income & Low Access To Store

Definition: Percentage of people in a county with low income and living more than 1 mile from a supermarket, supercenter or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area.

Importance: The environmental and social challenges associated with poverty may be exacerbated by the additional challenges associated with low food access (see "Children, low access to store" on p.1).

Data Sources: Data are from the 2012 report, Access to Affordable and Nutritious Food: Updated Estimates of Distances to Supermarkets Using 2010 Data.



BIG GREEN IMPACT MAP

DATA DESCRIPTIONS AND IMPORTANCE CONT'D

Low-Income Preschool Obesity Rate

Definition: Estimate of the prevalence of obesity among children 2-4 years of age in households with income up to 200 percent of the poverty threshold based on family size. For children 2-4 years of age, obesity is defined as BMI-for-age >95th percentile based on the 2000 Centers for Disease Control and Prevention's (CDC) sex-specific growth charts.

Importance: Health status in childhood is a strong predictor of adult health. Obesity and related conditions are the leading causes of preventable death.

Data Sources: From the USDA Economic Research Service [Food Environment Atlas](#).

SNAP Retailers

Definition: The Supplemental Nutrition Assistance Program (SNAP) Retailer Locator is designed to help recipients find SNAP local stores that welcome SNAP benefits. The tool is intended to offer assistance to program recipients, State eligibility workers, community organizations - such as food banks - and others providing assistance to those in need. SNAP Retail Locator tool will make it easier for SNAP participants, especially those who may be new and unfamiliar with the program, to gain access to food.

Importance: SNAP receipt is often used by schools as an indicator for subsidized meals eligibility. Healthy foods tend to be more expensive and a family with a low food budget that may struggle to buy nutritious, culturally suitable foods.

Data Source: [USDA Food and Nutrition Service SNAP Retailer Locator](#)

See Farmers' Markets Locations above.

FOOD SHED POINTS OF INTEREST

Food Bank/Pantry Locations

Definition: Food distribution center; this dataset omits pantries strictly offering services to seniors, vets, or those with HIV/AIDS. Compiled on a city basis.

Importance: Research indicates that urban food systems, including the food safety net, contribute to overall community health and well-being.

Data Source: Collected by Jenna Sampson, Big Green's consultant, using [Ample Harvest Pantry Finder](#) and Feeding America, Local Food Bank Finder.



BIG GREEN IMPACT MAP

FOOD SHED POINTS OF INTEREST CONT'D

Summer Meal Programs

Description: Nutritious free meals are available for children and teens 18 and younger at many locations throughout the nation throughout the summer while school is out of session. These programs are largely sponsored by the USDA.

Importance: Food insecurity can be seasonal and is often at higher prevalence for school-age children during the summer months in states that have smaller summer meal program offerings. Students that would normally have access to nutritious food through subsidized school breakfast, lunch, and snack programs during the school year risk losing access throughout the summer.

Source: USDA Food and Nutrition Service Summer Meal Locator.

See also SNAP Retailers above.

LEARNING GARDEN POP-UPS

Free and Reduced Lunch

Definition: Any child at a participating school may purchase a meal through the National School Lunch Program. Children from families with incomes at or below 130 percent of the federal poverty level are eligible for free meals. Those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals, for which students can be charged no more than 40 cents. (For the period July 1, 2013, through June 30, 2014, 130 percent of the poverty level is \$30,615 for a family of four; 185 percent is \$43,568). Children from families with incomes over 185 percent of poverty pay a full price, though their meals are still subsidized to some extent. Local school food authorities set their own prices for full-price (paid) meals, but must operate their meal services as non-profit programs.

Importance: Research shows that low-income students are more likely to attend underserved schools and have lower access to healthy food.

Data Sources: State departments of education databases (see Section IV).

Title I Status

Definition: Title I, Part A (Title I) of the Elementary and Secondary Education Act, as amended (ESEA) provides financial assistance to local educational agencies (LEAs) and schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging state academic standards. Federal funds are currently allocated through four statutory formulas that are based primarily on census poverty estimates and the cost of education in each state.

Importance: Title I status is an indicator of low income student population at a given school.

Data Sources: State departments of education databases and federal guidelines (see Section IV).



BIG GREEN IMPACT MAP

LEARNING GARDEN POP-UPS CONT'D

Median Family Income

Description: Median family income includes the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. Because many households consist of only one person, average household income is usually less than average family income. The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median. For households and families, the median income is based on the distribution of the total number of households and families including those with no income.

Importance: Low-income neighborhoods are more likely to lack access to affordable, healthy foods and lower performing schools.

Data Sources: Census Explorer (from the American Community Survey)



BIG GREEN IMPACT MAP

DATA SOURCES

Below is detailed metadata for each dataset included in the Impact Map.

Variable	Source(s) and Notes	Collection Dates
School %FRL, Enrollment, and Grade Levels	CA California DataQuest http://data1.cde.ca.gov/dataquest/	2015 - 2016
	CO Colorado Department of Education Pupil Membership Sheets http://www.cde.state.co.us/cdereval/pupilcurrentschool	2016 - 2017
	IL² Illinois Report Card https://www.illinoisreportcard.com/	2016 - 2017
	IN DOE Compass https://compass.doe.in.gov/dashboard/enrollment.aspx?type=corp&id=5385	
	PA³ Pennsylvania School Performance Profile http://www.paschoolperformance.org/	2016 - 2017
TN⁴ Tennessee State Report Card http://www.tennessee.gov/education/topic/re-	2014 - 2016	
School Title I Status	National Center for Education Statistics, Public School Search https://nces.ed.gov/ccd/schoolsearch/	2014 - 2015
Median Family Income	U.S. Census Explorer https://www.census.gov/censusexplorer/censusexplorer.html	2013 American Community Survey; 2012 County Business Patterns

¹ Only PK – 12 public schools were included in the 2017 map version in accordance with TKC’s current program theory.

² Chicago Public Schools uses the metric ‘Low-Income’ which “encompasses percentage of students in families receiving public aid, living in substitute care, or eligible to receive free or reduced-price lunches (Illinois State Report Card, 2017).”

³ Uses ‘Economically Disadvantaged’ defined by the PA DOE as “data element indicates the percent of students who are considered economically disadvantaged in the district based on October Student Snapshot enrollment. It equals the number of students identified as economically disadvantaged in the district divided by total district enrollment. It is at the discretion of the District to determine if a student is economically disadvantaged. Poverty data sources such as Temporary Assistance for Needy Families cases, census poor, Medicaid, children living in institutions that are neglected or delinquent, those supported in foster homes or free/reduced price lunch eligibility may be used (PA School Performance Glossary, 2017).”

⁴ Defined as ‘Economically Disadvantaged,’ “[students] directly identified as receiving Supplemental Nutrition Assistance Program benefits (or food stamps), those whose families participate in the Temporary Assistance for Needy Families program, 43 students who experience homelessness and are on the local school district liaison’s list of homeless students, Head Start participants, migrant youth, runaways, foster children, and others who may be certified by state or local officials (<https://www.comptroller.tn.gov/orea/PDF/Glossary.pdf>).”



BIG GREEN IMPACT MAP

DATA SOURCES CONT'D

Variable	Source(s) and Notes	Collection Dates
Children, Low Access To Store	USDA Food Environment Atlas https://www.ers.usda.gov/data-products/food-environment-atlas/	2010
Low Income & Low Access To Store	USDA Food Environment Atlas https://www.ers.usda.gov/data-products/food-environment-atlas/	2010
Low-Income Preschool Obesity Rate	USDA Food Environment Atlas https://www.ers.usda.gov/data-products/food-environment-atlas/	2009 - 2011
SNAP Retail Locator	USDA Food and Nutrition Service https://catalog.data.gov/dataset/snap-retail-locator	2017
Farmers' Markets Locations	USDA Agricultural Marketing Service https://catalog.data.gov/dataset/national-farmers-market-directory-port-card	2017
Summer Meal Programs	USDA Food and Nutrition Service https://catalog.data.gov/dataset/find-summer-meals-in-your-commu-	2017
Food Pantry/Banks	Feeding America Local Food Bank Finder http://www.feedingamerica.org/find-your-local-foodbank/?referrer=https://www.google.com/ Ample Harvest Pantry Map http://ampleharvest.org/pantry-map/	2016