

Colorado Food Assessment Framework

Module: Food Security, Resiliency & Access

2012

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Developed by [Spark Policy Institute](#) and [WPM Consulting](#) for LiveWell Colorado.

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Please contact Lyn Kathlene, lyn@sparkpolicy.com, or Wendy Peters Moschetti, wendy@wpmconsulting.net, with any questions or feedback.

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I. BRIEF INTRODUCTION & OVERVIEW

BACKGROUND

In early 2010, the Colorado Department of Public Health and Environment (CDPHE) received a competitive (ARRA Component II) state-based award to advance food systems policy in Colorado. Much of this work was subcontracted to LiveWell Colorado to oversee implementation. One of the primary goals of the state's ARRA grant is to: Support the enhancement and integration of urban, suburban, and rural policies in order to build a permanent farm to school program that supplies fresh and healthy food to Colorado's students while benefiting Colorado's agriculture economy.

An early task in developing farm to school (or any farm to institution) programs, is to better understand the state's food system, and the state's ability to produce, process, transport, sell, and consume a greater degree of state- and locally-grown fresh, healthy foods.

A specific task to achieve the ARRA goals is to develop a "Food Assessment Framework" – the FAF – which will collect information about every aspect of the state's food system in one place and better equip local communities to do the same about their own food systems.

VISION OF THE FOOD ASSESSMENT FRAMEWORK

The FAF will ultimately be a web-based, interactive tool that communities, regions, or state-level stakeholders could "mine" for information about certain aspects of the food system. The vision is to develop a comprehensive series of indicators, from which a community can select to best meet their needs, which provide information about the state's capacity to produce, process, and transport healthy foods. Additionally, and equally as important, the FAF will provide detailed information about where data is kept, who manages it, how to access it, how to use it and talk about it, who might care about it, and other guidance.

Recently, the University of Missouri's Center for Applied Research and Environment Systems (CARES) released an integrated online database platform, the [CARES National Reporting Tool](#) (NRT), the [CARES National Interactive Maps](#) (NIM), and the [Community Commons](#)¹, which have over 7,000 indicators pulled from many of the databases identified in the Colorado FAF's four modules. For many communities, the NRT can serve as a "one-stop" site to pull down the secondary indicators in GIS maps and reports.

The online version of the FAF includes access to models, resources, and primary data collection instruments for all aspects of assessing the food system. The tool will enable communities across Colorado to conduct their own local food assessment. Communities will be better equipped to begin such a process, will see other completed models and examples, and will be guided to collect some of the same information as other communities across the state, therefore contributing to a strong, common body of knowledge about the food system across the state of Colorado.

¹ The Community Commons, launched on October 31, 2011, is a more recent version of NIM, which similarly has the capability to create personalized GIS maps with over 7,000 GIS layers to select among. Throughout the remainder of the Colorado FAF Overview, and the Production, Transportation, Processing, and Access reports, when the NIM is referred to, the Community Commons is interchangeable as a data source.

MORE INFORMATION ON THE FAF

To get started on your community food assessment (CFA), see the [Colorado Food Assessment Framework: An Overview and How to Get Started](#). Once you have completed the initial organizing and planning activities, choose this module or one or more of the other modules to dig into those aspects of the food system that are important to your community.

II. FOCUS ON FOOD SECURITY, RESILIENCY & ACCESS

The Food Security, Resiliency & Access Module includes a variety of indicators that capture the ability of residents within a community to access *and* secure healthy foods on a frequent and consistent basis. This module is intended to arm the state of Colorado as well as communities within the state with comprehensive measures to understand issues of food access, food security, and community resiliency.

THE ORIGINS OF FOOD INSECURITY

Despite the high productivity of American farmers, our current food system is not resulting in an abundance of healthy affordable food. More than a century of U.S. agricultural policy has promoted increased production of commodities – corn, cotton, milk, rice, soybeans and wheat (Wallinga, 2010) leading to an overabundance of cheap calories in the form of fats and sugars incorporated into almost all processed food found in grocery stores, local restaurants, and school cafeterias. By 2007, the inclusion of these cheap calories in our food stuffs have led to an average caloric increase of 600 calories per day compared to the average American diet in 1970 (ERS, 2009, as cited in Wallinga, 2010).

At the same time, our diets have shifted away from fresh fruits and vegetables to the point where fewer than one in ten Americans meet the recommended daily consumption (U.S. Department of Health and Human Services (USDHHS) & U.S. Department of Agriculture (USDA), 2005). Perhaps most telling about the current state of affairs is the calculation that if Americans suddenly started adhering to a healthy diet, our food system would be unable to supply it. For example, USDA data indicates there would be a 50 percent shortfall of dark green vegetables, 63 percent shortfall of orange vegetables, and a 75 percent shortfall of legumes (Buzby, Wells, & Vocke, 2006, as cited in Wallinga, 2010).

These shifts have disproportionately affected lower socioeconomic populations where low income neighborhoods tend to have an excess of high calorie, low nutrient-dense cheap foods that are most commonly available at convenience stores and fast food restaurants (Morland, Wing, & Diez Roux, 2002; Morland, Wing, & Diez Roux, & Poole, 2002; Galvez et al., 2008). Consequently, millions of Americans are food insecure and tens of millions suffer from diet-related diseases including adult and childhood obesity, Type II diabetes, cardiovascular disease, hypertension, osteoporosis, some types of cancer, and more (USDHHS & USDA, 2005).

DEFINING ACCESS, SECURITY AND RESILIENCY

There are several concepts that can be illuminated with the types of data and information in this module. Depending on the goals of a community (e.g., a focus on use of food assistance programs, or a focus on increasing the consumption of local, fresh foods for lower-income populations, etc.), the

indicators can be assessed to convey a variety of concepts. Some of the concepts that may be important to communities include those defined here. An important early step for any state or community is to identify and agree on what concept is critical to convey – in other words, what are the primary (or at least initial) values and goals of the process? A state or community could focus in on understanding a variety of these concepts.

If you want to understand the **food security level of households** in your community, you will want to conduct an assessment that addresses these components:

Food Insecurity has been defined as limited or uncertain access to nutritious, safe foods necessary to lead a healthy lifestyle; households that experience food insecurity have reduced quality or variety of meals and may have irregular food intake (USDA / Life Research Office).

Food Security has been defined as access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum: 1) ready availability of nutritionally adequate and safe foods, and 2) an assured ability to acquire acceptable foods in socially acceptable ways (WHY Hunger, 2008).

If you are interested in understanding the **structural elements that affect access and sustainability**, you will want to conduct an assessment that addresses these components:

Community Food Security (CFS) occurs when all community residents are able to obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice (WHY Hunger, 2008). There are six basic principles of community food security: Low Income Food Needs, Broad Goals, Community Focus, Self-reliance/empowerment, Local Agriculture, and a Systems Orientation (Hamm & Bellows, n.d.). CFS is a regionally based movement focusing on food security at a community level, considering influences such as availability, cost, and quality of food to households, schools, nutrition service providers, and commercial food operations, especially in lower income neighborhoods. This movement dates back to 1994 and is now practiced across the U.S. CFS takes a systems approach to meeting hunger and nutrition needs, intertwining different fields, stakeholders, producers, consumers, and markets (e.g. urban and rural) together (Glossary of Food Systems (GoFS), 2010).

Food Deserts are areas where food is non-existent, not healthy or overly expensive. It is an issue of access and can be defined by distance and/or transportation obstacles in obtaining adequate amounts of healthy food. *Fresh food deserts* refer to a community with limited or no access to fresh fruits and vegetables (University of Leeds School of Geography).

Food Swamps are places with an abundance of less healthy foods available from convenience stores and fast food restaurants. Professor Donald Rose at Tulane University has used the term “food swamps” for neighborhoods that have relatively easy access to less healthy, energy-dense foods, particularly if they are convenient and cheap, where they may swamp out healthier choices.

Nutrition Security is the provision of an environment that encourages and motivates society to make food choices consistent with short- and long-term good health (WHY Hunger, 2008).

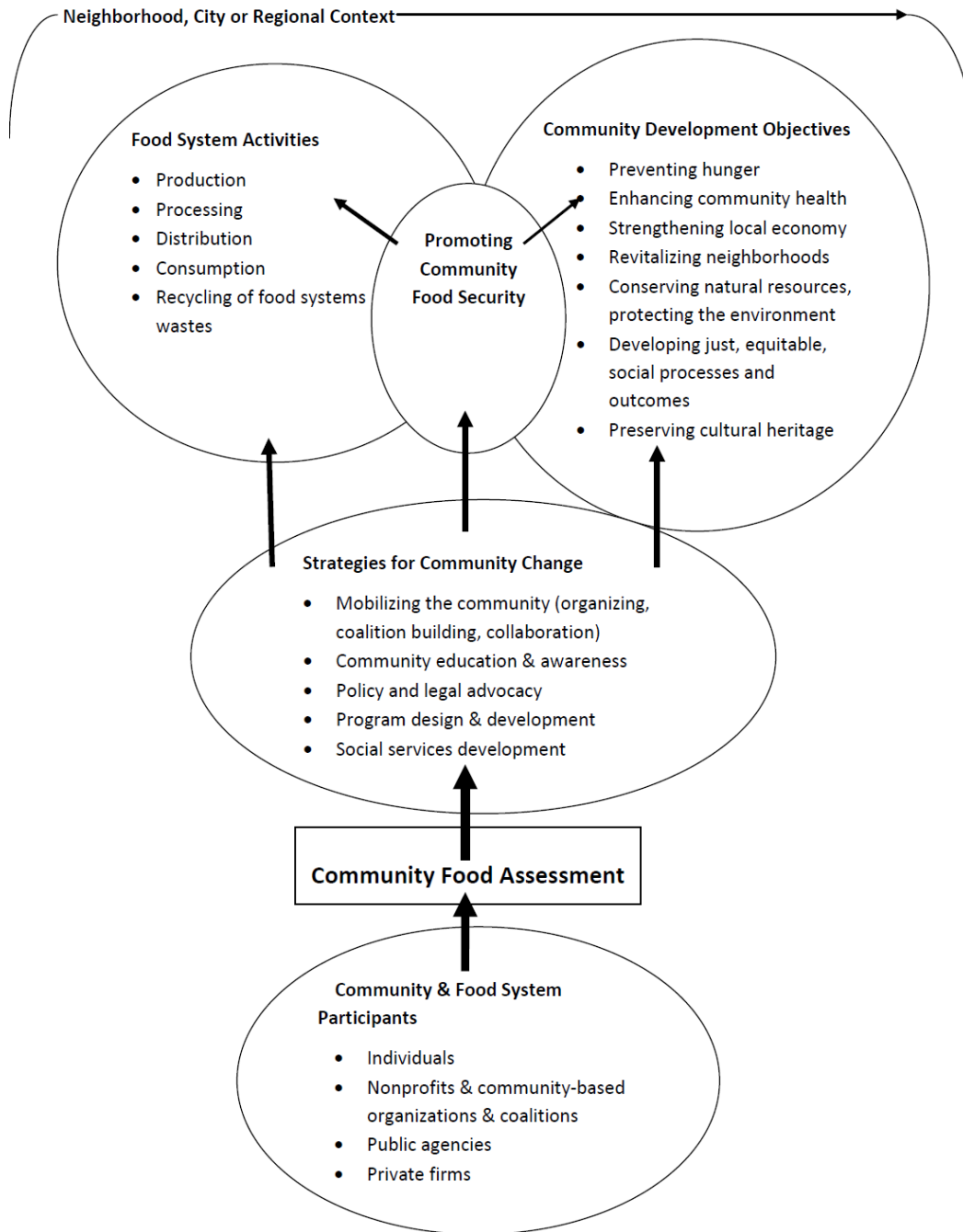
Whether you are interested in the community level or the household level of food security, you'll want to examine some aspects of **accessibility to nutritious food**:

Access to Healthy Foods includes four distinct aspects:

1. *Physical access*: Do the residents live close to a food store or have consistent transportation to reach one?
2. *Financial access*: Is the food affordable for the residents?
3. *Nutritional access*: Is enough food available to provide the residents with a balanced, healthy diet?
4. *Cultural access*: Is the food provided culturally relevant? Do the residents know what the food is and how to cook it?

Figure 1 provides a roadmap for understanding the relationship between community food security goals and community food assessments.

Figure 1. Relationship between Community Food Security Goals and a Community Food Assessment²



The above Figure illustrates that community food assessments can be initiated by individuals or public or private organizations, and the scope can be as small as a neighborhood to as large as a regional or statewide assessment. Information gathered from a CFA can be used to affect change through building community awareness, mobilizing stakeholders for action, and policy and programmatic change.

² Pothukuchi, K., Joseph, H., Burton, H. & Fisher, A. (2002). What’s cooking in your food system? A guide to community food assessment. Venice, CA: Community Food Security Coalition. p.7.

III. FOOD SECURITY, RESILIENCY & ACCESS INDICATORS

A food system is made up of many components from the consumers who eat the food to the availability and accessibility of different types of food. In 2002, the USDA released its *Community Food Security Assessment Toolkit*, which is still considered the most comprehensive guide to conducting a food security assessment. Using the USDA report as a starting point, this module discusses food security, resiliency and access through the following five assessment areas:³

- 1. What is our Food Environment?** A profile of community food resources
- 2. Are our Residents Food Secure?** Assessment of household food security
- 3. How Do We Get to Our Food?** Assessment of food resource geographical accessibility
- 4. How much does Food Cost in Our Community?** Assessment of food affordability
- 5. Government & Community Food Support Programs.** Assessment of government policies and community programs that support food access and local food production

A comprehensive community food security assessment will delve into all five areas; however, it is the goal of the Colorado Food Assessment Framework (CFAF) to provide communities with guidance as to which areas and indicators are most useful at a given point in time. So, for example, a community may want to pursue financial support (e.g., grants) to conduct a full assessment. Collecting data on community characteristics indicators (under “Getting Started”) and household food security indicators (#2 above) can demonstrate to potential funders the importance of your project. Importantly, both these areas are largely composed of indicators based on existing data that is easily accessed through the CFAF.

1. WHAT IS OUR FOOD ENVIRONMENT?

The ability to acquire nutritious food is dependent not only upon adequate financial resources but also the availability fresh produce in a community. Low income neighborhoods are often food deserts and fresh food deserts, leaving residents with few to no opportunities to buy healthy food. Understanding a community’s food environment is an important first step for determining a food market’s existing deficits and assets.



To map or pull reports of the Food Atlas data, use the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) or the [Community Commons](#). [CARES video tutorials](#) are available online. The data can also be accessed directly through the [USDA Food Atlas database](#).

Retail Stores

Strategies and policies to improve the food environment can include increased access to healthier foods such as through retail vendors. Supermarkets and grocery stores typically sell a higher proportion of

³ The CFAF differs somewhat from Cohen, B. (2002). *Community food security assessment toolkit*. Washington, DC: USDA. <http://www.ers.usda.gov/Publications/EFAN02013/>

fruits and vegetables compared to convenience stores, gas marts and small corner stores. Research finds that adult fruit and vegetable intake increases with the addition of new supermarkets – specifically observing African Americans’ consumption increase by 32% for each additional supermarket and Caucasians’ increase by 11% with the presence of one or more supermarkets (Morland, Wing, & Diez Roux, 2002); yet, there are fewer supermarkets in minority and low income communities than Caucasian and higher socioeconomic neighborhoods (Morland, Wing, & Diez Roux, 2002; Morland, Wing, & Diez Roux, & Poole, 2002; Galvez et al., 2008). The lack of easy access to fresh and nutritious food is considered to be a contributing factor to comparatively poorer health outcomes among minority and poor populations in the U.S. (Glanz & Yaroch, 2004).

Strategies and policies to improve the food environment can include increased healthy food options, such as fresh fruit and vegetables through retail stores in the community. This can include increasing the number of supermarkets and larger grocery stores and/or improving the availability of fresh food in small retail stores including neighborhood corner stores and convenience stores. However, research finds that supermarkets and large grocery stores have lower prices than small stores, so to the extent that access to nutritious fresh food is an income barrier (rather than a transportation barrier), large grocery stores may be more beneficial (Ver Ploeg et al., 2009). However, important “lessons learned” are arising out of pilot projects that bring fresh fruit and vegetables into convenience stores (Jetter & Cassady, 2010).

Understanding the community’s food retail store food environment is the first step toward improving access.

SECONDARY DATA

Indicators for types of stores MORE likely to carry fresh fruit and vegetables:

Twelve indicators provide a snapshot of the likely availability of fresh produce. Each indicator is measured at the county level and available through the [USDA Food Environment Atlas](#) under “Availability of Food Stores.” All food atlas data are also available on the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) database and the [Community Commons](#).

- **Number of Grocery Stores** (county level indicator): The number of supermarkets and grocery stores in the county. Grocery stores include establishments generally known as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry.
- **Percent Change in Number of Grocery Stores** (county level indicator): The percent change in the number of supermarkets and grocery stores in the county.
- **Grocery Stores per 1,000 Population** (county level indicator): The number of supermarkets and grocery stores in the county per 1,000 county residents.
- **Percent of Change in Grocery Stores per 1,000 Population** (county level indicator): The percent change in the number of supermarkets and grocery stores in the county per 1,000 county residents.
- **Number of Supercenters and Club Stores** (county level indicator): The number of supercenters and warehouse club stores in the county. Warehouse clubs and supercenters are primarily engaged in

retailing a general line of groceries in combination with general lines of new merchandise, such as apparel, furniture, and appliances.

- **Percent Change in Number of Supercenters and Club Stores** (county level indicator): The percent change in the number of supermarkets and grocery stores in the county per 1,000 county residents.
- **Supercenters and Club Stores per 1,000 Population** (county level indicator): The number of supercenters and warehouse club stores in the county per 1,000 county residents.
- **Percent of Change in Supercenters and Club Stores per 1,000 Population** (county level indicator): Percent change in the number of supercenters and warehouse club stores in the county per 1,000 residents.
- **Number of Specialized Food Stores** (county level indicator): The number of specialized food stores in the county. Specialized food stores include establishments primarily engaged in retailing specialized lines of food such as retail bakeries, meat and seafood markets, dairy stores, and produce markets.
- **Percent Change in Number of Specialized Food Stores** (county level indicator): The percent change in the number of specialized food stores in the county.
- **Specialized Food Stores per 1,000 Population** (county level indicator): The number of specialized food stores in the county per 1,000 county residents. Specialized food stores include establishments primarily engaged in retailing specialized lines of food such as retail bakeries, meat and seafood markets, dairy stores, and produce markets.
- **Percent Change in Specialized Food Stores per 1,000 Population** (county level indicator): The percent change in the number of specialized food stores in the county per 1,000 residents.

Indicators for types of stores LESS likely to carry fresh fruit and vegetables:

Eight indicators provide a snapshot of the likely availability of fresh produce. Each indicator is measured at the county level and available through the [USDA Food Environment Atlas](#) under “Availability of Food Stores.” All food atlas data are also available on the [CARES National Reporting Tool](#) and the [CARES National Interactive Maps](#) and the [Community Commons](#)

- **Number of Convenience Stores, No Gas** (county level indicator): The number of convenience stores in the county. Establishments known as convenience stores or food marts (except those with fuel pumps) are primarily engaged in retailing a limited line of goods that generally includes milk, bread, soda, and snacks.
- **Percent Change in Number of Convenience Stores, No Gas** (county level indicator): Percent change in the number of convenience stores in the county.
- **Convenience Stores, No Gas/1,000 Population** (county level indicator): The number of convenience stores in the county per 1,000 county residents.
- **Percent Change in Convenience Stores, No Gas/1,000 Population** (county level indicator): Percent change in the number of convenience stores in the county per 1,000 county residents.
- **Number of Convenience Stores with Gas** (county level indicator): The number of gasoline-convenience stores in the county. Establishments known as gasoline-convenience stores are engaged in

retailing automotive fuels (for example, diesel fuel, gasohol, and gasoline) in combination with convenience store or food mart items. These establishments can either be in a convenience store (food mart) setting or a gasoline station setting.

- **Percent Change in Number of Convenience Stores with Gas** (county level indicator): Percent change in the number of gasoline-convenience stores in the county.
- **Convenience Stores with Gas per 1,000 Population** (county level indicator): The number of gasoline-convenience stores in the county per 1,000 county residents.
- **Percent Change in Convenience Stores with Gas per 1,000 Population** (county level indicator): Percent change in the number of gasoline-convenience stores in the county per 1,000 county residents.

PRIMARY DATA

Neighborhoods in cities across the U.S. have discovered that the best way to quickly increase availability of healthy fresh food is to work with existing store owners. For food deserts that lack grocery stores and supercenters, this means working with owners of corner stores and convenience stores to stock healthy fresh food.



For primary data collection instruments to assess **food environment data in retail food stores**, go to [1. What Is Our Food Environment: Tools for Collecting Primary Data](#) in the *Primary Data Collection Instruments* section of this document.

Restaurants

SECONDARY DATA

Indicators for types of stores MORE likely to carry fresh fruit and vegetables:

Four indicators provide a snapshot of establishments that are more likely to offer fresh food and residents' patronage of these establishments. All indicators are available through the [USDA Food Environment Atlas](#). The first two indicators are accessed under "Availability of Restaurants." The last indicator is found under "Expenditures on Food Restaurants." All Food Atlas data are also available on the [CARES National Reporting Tool](#) database and the [Community Commons](#).

- **Number of Full-Service Restaurants** (county level indicator): The number of full-service restaurants in the county. Full-service restaurants include establishments primarily engaged in providing food services to patrons who order and are served while seated (i.e., waiter/waitress service) and pay after eating.
- **Full Service Restaurants per 1,000 Population** (county level indicator): The number of full-service restaurants in the county per 1,000 county residents.
- **Percent Change in Full Service Restaurants per 1000 population** (county level indicator): Percent change in the number of full-service restaurants in the county per 1,000 county residents.

- **Restaurant Expenditures per Capita** (state level indicator): Average expenditures on food purchased at limited-service restaurants per person per year.

Indicators for types of restaurants LESS likely to carry fresh fruit and vegetables:

Five indicators provide a snapshot of establishments that are less likely to offer fresh food and residents' patronage of these establishments. All indicators are available through the [USDA Food Environment Atlas](#). The first two indicators are accessed under "Availability of Restaurants." The last indicator is found under "Expenditures on Food Restaurants." All Food Atlas data are also available on the [CARES National Reporting Tool](#) database and the [Community Commons](#).

- **Number of Fast Food Restaurants** (county level indicator): The number of limited-service restaurants in the county. Limited-service restaurants include establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating.
- **Percent Change in Number of Fast Food Restaurants** (county level indicator): Percent change in the number of limited-service restaurants in the county per 1,000 county residents.
- **Fast Food Restaurants per 1,000 Population** (county level indicator): The number of limited-service restaurants in the county per 1,000 county residents.
- **Percent Change in Fast Food Restaurants per 1000 Population** (county level indicator): Percent change in limited-service restaurants in the county per 1,000 county residents.
- **Fast Food Expenditures per Capita** (state level indicator): Average expenditures on food purchased at limited-service restaurants per person per year.

PRIMARY DATA

Over the last few decades, Americans have significantly increased their food consumption through dining out. Understanding the nutritional offerings of your community's restaurants is important to learn about the choices for healthy food, or lack thereof, that are available to residents.



For primary data collection instruments to assess the **nutritional value of food offered in restaurants**, go to **1. What Is Our Food Environment: Tools for Collecting Primary Data** in the *Primary Data Collection Instruments* section of this document.

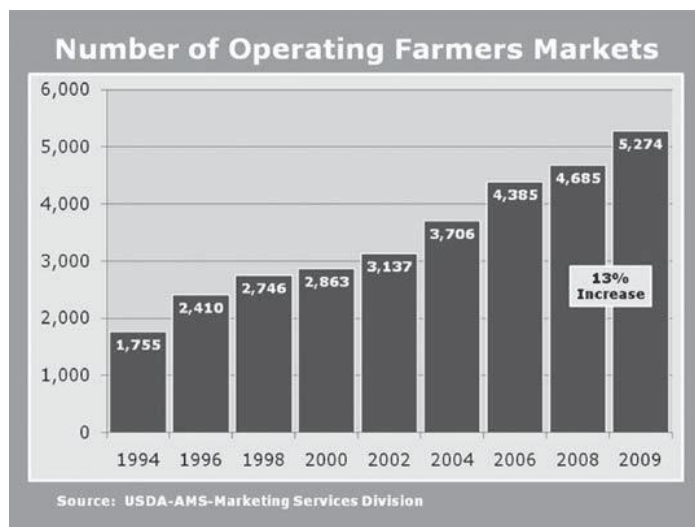
Direct Markets

Direct markets cut out the "middle man" or in food system terminology, the wholesaler or distributor is not needed. Consumers buy directly from the producer or are themselves part of the production system through gardening programs.

Farmers Markets

Farmers markets connect farmers (or their employees/representatives) directly with the consumer to sell fresh food products. Farmers markets have freshly harvested local produce, food products such as fish and meat, and many also sell prepared foods usually made by local restaurants. Some farmers markets include nonfood items, have informational booths (e.g., Master Gardeners providing information on backyard composting), and live music. Farmers markets are often considered not only an outlet for bringing fresh local produce into a community but also a venue that helps build social capital and increases food systems literacy through conversations between the farmer and buyer.

Figure 2. Growth of Farmers Markets, 1994-2009⁴



Farmers markets have been steadily increasing in the U.S. for the past 15 years (See Figure 2). As in other states, Colorado continues to see a growth in farmers markets. In Colorado, each farmers market is independently owned and operated under its own rules. The state level [Colorado Farmers Market Association](#) is a nonprofit that provides technical assistance including up-to-date information on regulatory issues for Colorado farmers markets, safety guidelines, and liability insurance in addition to advocacy and educational functions to promote the markets. Since CFMA is a

voluntary association, not all Colorado Farmers Markets are members; however, those that are members are listed on the [CFMA website](#) along with information about the individual markets. Like full service grocery stores, farmers markets are not evenly distributed across communities. Low-income and minority communities are less likely to have farmers markets even though purchasing directly from producers is an inexpensive method for increasing access to fresh fruits and vegetables in food deserts.

Indicators for Farmers Markets:

Four indicators track farmers markets. These indicators are available through the [USDA Food Environment Atlas](#) under “Local Foods” and at the [USDA Agricultural Marketing Service Farmers Market Search](#). All food atlas data are also available on the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) database. Another database is the [Colorado Farmers Market Association](#), although membership is voluntary the list is not exhaustive.

- **Locations of Farmers markets** (locational point data): Location of farmers markets in the state by counties.
- **Number of Farmers markets** (county level indicator): Number of farmers markets in the county. A farmers market is a retail outlet in which two or more vendors sell agricultural products directly to

⁴ From Briggs et al. (2010). Real food, real choice: Connecting SNAP Recipients with Farmers Markets. Portland, OR: Community Food Security Coalition, p.1.

customers through a common marketing channel. At least 51 percent of farmers markets retail sales are derived directly from consumers.

- **Farmers market per 1,000 Population** (county level indicator): Number of farmers markets in the county per 1,000 county residents. A farmers market is a retail outlet in which two or more vendors sell agricultural products directly to customers through a common marketing channel. At least 51 percent of their retail sales are derived directly from consumers.
- **Percent Change in Number of Farmers markets** (county level indicator): Percent change in the number of farmers markets in the county. Percent change indicators are calculated as $[(\text{Year 2} - \text{Year 1}) / \text{Year 1}] * 100$.

Direct Farm Sales

Community supported agriculture (CSA) is a direct buying relationship between the consumer and farmer. Consumers buy “shares” in advance of the growing season in exchange for a regular delivery (weekly, biweekly, monthly) of in-season crops produced by the farm. Farm products are generally delivered by the farm to drop off sites in one or more neighborhoods. CSAs provide income stability for farmers, which can be particularly important for the viability of small farms. CSAs are the most common arrangement of direct farm sales. However, other methods include roadside stands and Neighborhood Supported Agriculture (NSA), the latter still in its infancy.⁵

Indicators for Direct Farm Sales:

Five indicators track direct farm sales. The first five indicators are available through the [USDA Food Environment Atlas](#) under “Local Foods.” All food atlas data are also on the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) and the [Community Commons](#). The CSA indicator comes from the Colorado Department of Agriculture [CSA list](#) (which may not be exhaustive).

- **Number of Farms with Direct Sales** (county level indicator): Number of farms in the county that sell directly to final consumers.
- **Percent of Local Farms with Direct Sales** (county level indicator): Percent of farms in the county that sell directly to final consumers.
- **Percent of Farm Income from Sales Directly to Consumers** (county level indicator): Percent of the total value of farm sales in the county sold directly to final consumers.
- **Total Direct Farm Sales** (county level indicator): Value of direct farm sales in the county.
- **Direct Farm Sales per Capita, in Dollars** (county level indicator): Value of direct farm sales in the county divided by the residents of the county.
- **Number of Community Supported Agriculture (CSA) Programs** (directory of registered CSAs in Colorado): Searchable by name, county location, and cities served. Includes phone numbers and farm website links, if any.

⁵ Agriburbia is another type of direct farm sales model. For information click on [Agriburbia](#) and the Denver Post article about [Agriburbia on Colorado's Front Range](#)

Farm to School Programs

Farm to School programs bring local produce (fruit and vegetables) and products (dairy, eggs, meat) into school meal and snack programs. There has been a recent uptick in the number of FTS programs across the country, Colorado included. FTS programs go hand in hand with improvements in school nutritional offerings, an important dietary shift for children of all income brackets but especially critical for children and teens from low income households whose only nutritious meals may be at school. FTS and related activities like [Farm to Institution](#) (e.g., hospitals, prisons, produce wholesalers, processing operations, grocery stores buying local produce) and [Colorado Crop to Cuisine](#) (local restaurants sourcing local produce and ingredients) are opening up new agricultural markets for local farmers and ranchers.

The [National Farm to School Network](#) is a clearinghouse of information related to FTS as well as links to activities in each state. The [Colorado Farm to School](#) information hub is a one-stop website for all things farm to school in Colorado. It includes assessment tools, marketing tools, resource and evaluation toolkits, policy guidance, and event calendar, Ask and Expert forum, and a blog. In 2010, the Colorado General Assembly passed the “[Farm to School Healthy Kids Act](#)” that establishes an interagency farm to school taskforce to develop farm to school program policies.

SECONDARY DATA

Indicators of School Food:

There are several databases that have information about farm to school programs. However, none are exhaustive and the national databases tend to be the least accurate because schools are not required to report their farm to school efforts. There are over 200 school districts in Colorado, all largely autonomous with only overarching policy guidance from the Colorado Department of Education. Until 2010, there has been no state level FTS program in Colorado. A starting place for determining the presence of FTS programs is through the [USDA Food Environment Atlas](#) under “Local Foods.” All food atlas data are also available on the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) database and the [Community Commons](#). Another source is the [Colorado Farm to School](#) (CO-FTS) project, which conducted a survey of food nutrition directors in 2010. Contact the project director by going to the CFTS website for more information. CDC’s 2008 School Health Profiles provides data on produce offered; local districts are a source for the same at the district level.

- **Farm to School Program** (county level indicator – Food Atlas; locational – CO-FTS): Counties with one or more farm-to-school programs where “farm-to-school” programs include: direct sourcing from local producers, local sourcing through the Department of Defense procurement system (known as “DOD Fresh”), school gardens, farm tours, farm-related nutrition education or other classroom activities, and school menus and snacks highlighting locally-sourced or locally-available foods.
- **Number of Schools with Educational Gardens** (locational – CO-FTS): School gardens serve educational functions to teach children about food production. Some schools serve their garden’s produce in cafeteria meals.
- **Percentage of Middle and High Schools that Offer Fruits and Non-Fried Vegetables as Competitive Foods** (state level indicator – CDC; district indicator - local school district food services): Proportion of middle and high school lunch programs that serve fruits and vegetables along with the standard hot lunch.

PRIMARY DATA



For primary data collection instruments to assess the **farm to school programs** go to **1. What Is Our Food Environment: Tools for Collecting Primary Data** in the *Primary Data Collection Instruments* section of this document.

2. ARE OUR RESIDENTS FOOD SECURE?

Household Food Security

Beginning in 1995, the US Census included in the annual Current Population Survey (CPS) a Food Security Supplement consisting of 18 questions that are the basis for the household food security scale. The core questions ask about the following types of household experiences:

- *Anxiety that the household food budget or food supply may be insufficient to meet basic needs;*
- *Experience of running out of food, without money to obtain more;*
- *Perceptions that the food eaten by household members was inadequate in quality or quantity;*
- *Adjustments to normal food use, substituting fewer and cheaper foods than usual;*
- *Instances of reduced food intake by adults in the household, or consequences of reduced intake such as the physical sensation of hunger or loss of weight; and*
- *Instances of reduced food intake or consequences of reduced intake, for children in the household.*⁶

The set of food security questions are combined into a single overall measure called the *food security scale*. The scale measures the degree of severity of food insecurity/hunger at the household (not individual) level. The scale value ranges from 0 to 10, with zero indicating a household did not experience any food insecurity conditions and a score of ten indicating a household experienced all food insecurity conditions. The scale is simplified into four categories as shown in Table 3 below.

Table 3. USDA revised food security labels.⁷

General Categories (old and new labels fall under same categories)	Detailed Categories		
	Old label (pre- 2006)	New label (2006 – present)	Description of conditions in the household
Food security	Food security	High food security	No reported indications of food-access problems or limitations
		Marginal food security	One or two reported indications—typically of anxiety over food sufficiency or shortage of

⁶ Bickel et al. (2000). Guide to measuring household food security. Washington, DC: USDA. p.8.
<http://www.fns.usda.gov/FSEC/FILES/FSGuide.pdf>

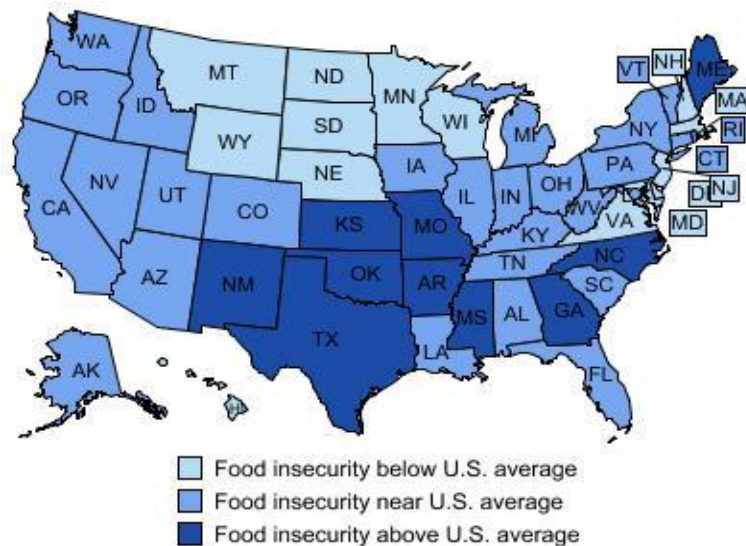
⁷ USDA (2009). Food security in the United States: Definitions of hunger and food security.
<http://www.ers.usda.gov/Briefing/FoodSecurity/labels.htm#labels>. These are revised definitions, introduced in 2006. Although the definitions and labels are new, the questions and methods to assess household food security are unchanged; therefore earlier data is directly comparable to corresponding categories.

General Categories (old and new labels fall under same categories)	Detailed Categories		
	Old label (pre- 2006)	New label (2006 – present)	Description of conditions in the household
			food in the house. Little or no indication of changes in diets or food intake
Food insecurity	Food insecurity without hunger	Low food security	Reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake
	Food insecurity with hunger	Very low food security	Reports of multiple indications of disrupted eating patterns and reduced food intake

The USDA’s latest figures for food insecurity finds that Colorado mirrors the national average, with 11.6% of the state’s population experiencing food insecurity (low or very low food security), and 5% fall into the very low food security category.⁸

Figure 3. Food Insecurity in the U.S.

Prevalence of food insecurity, average 2006-08



Source: Calculated by ERS based on Current Population Survey Food Security Supplemental data.

Child Food Insecurity is a measure of low or very low food insecurity among children in households. It is assessed by responses from a subset of questions in the CPS Food Security Supplement. Research finds that children who do not have adequate access to food experience a multitude of problems, including a wide range of difficulties in school to poor health:

- *Poorer health of children, as reported by parents*
- *More stomach aches, frequent headaches, and colds among children*

⁸ Nord, M., Andrews, M., & Carlson, S. (2009). Household food security in the United States, 2008. Washington, DC: USDA. <http://ers.usda.gov/Publications/ERR83/ERR83.pdf>. Figures are based 2005-07 data; Also see Coleman-Jensen, A., Nord, M., Andrews, M., & Carlson, S. (2012). Household food security in the United States in 2011. Washington, DC: USDA. <http://www.ers.usda.gov/media/884525/err141.pdf>

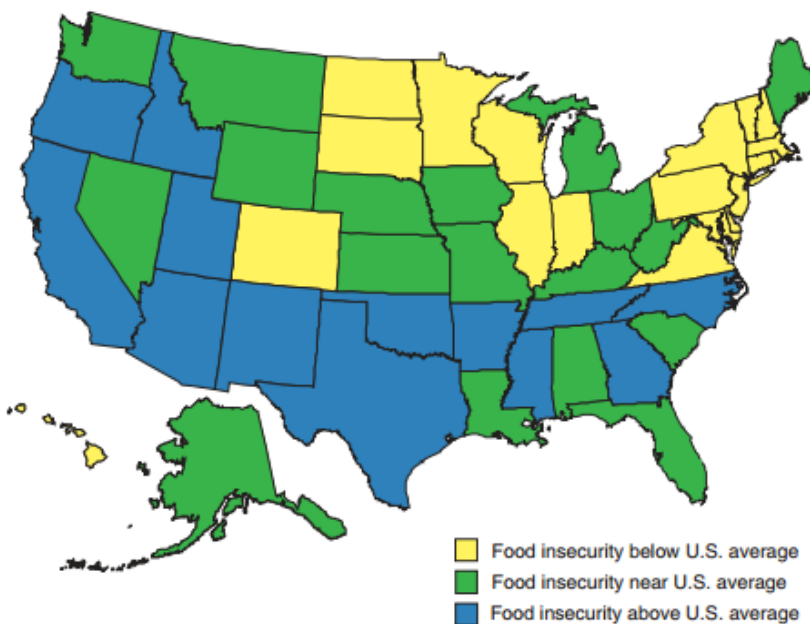
- Higher hospitalization rates of young children
- Iron deficiency anemia in young children
- Behavioral problems in 3-year-olds
- Lower physical function in children ages 3-8
- Poorer psychosocial function and psychosocial development in school age children
- Higher rates of depressive disorder and suicidal symptoms in adolescents
- More anxiety and depression in school-age children
- Higher numbers of chronic health conditions in children
- More “internalizing” behavior problems in children
- Lower math achievement and other achievement gains in kindergarteners
- Lower math and reading gains from kindergarten to third grade
- Lower arithmetic scores and higher likelihood of repeating a grade for children ages 6-11⁹

The USDA’s latest figures for child food insecurity find that Colorado is somewhat lower than the national average, with 8% of households reporting food insecurity (low or very low food security) among children, and a total of 14.5% of households indicating that either children or adults are food insecure.¹⁰

Figure 4. Prevalence of Food Insecurity in the U.S.¹¹

Figure 15

Prevalence of food insecurity (adults or children) in households with children, 2001-07 average



Source: Calculated by Economic Research Service using Current Population Survey Food Security Supplement data.

⁹ Nord, M. (2009). Food insecurity in households with children: Prevalence, severity, and household characteristics. USDA. p.7. <http://ers.usda.gov/Publications/EIB56/EIB56.pdf>

¹⁰ These figures are based on the average of the years 2001-2007.



To map or pull reports of the Food Atlas data, use the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) or the [Community Commons](#). [CARES video tutorials](#) are available online. The data can also be accessed directly through the [USDA Food Atlas database](#).

SECONDARY DATA

Indicators of Food Security:

Both indicators are available from the USDA Economic Research Service. Both the [Food Security Scale](#) and the [Child Food Insecurity](#) is reported at the state level and the latest report can be found under Publications <http://ers.usda.gov/Publications/>. Use the search term “food insecurity” to find the first measure and the search term “food insecurity children” to find the second measure. You will find the latest reports on the USDA site. The indicators can also be pulled off the [USDA Food Environment Atlas](#) under “Food Insecurity.” All food atlas data are also available on the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) and the [Community Commons](#).

- **Food Security Scale** (state level indicator): Prevalence of household-level food insecurity (includes households with low and very low food security) relative to national average. Food-insecure households are classified as having either low food security or very low food security. Households classified as having low food security reported multiple indications of food access problems, but typically reported few, if any, indications of reduced food intake. Households classified as having very low food security reported multiple indications of reduced food intake and disrupted eating patterns due to inadequate resources for food. In most, but not all, households with very low food security, the survey respondent reported that he or she was hungry at some time during the year but did not eat because there was not enough money for food.
- **Child Food Insecurity** (state level indicator): Prevalence of low or very low food insecurity among children in households with children relative to national average. Households with low (but not very low) food insecurity among children mainly reported reductions in the quality and variety of children’s meals. Only a minority reported any reduction in the amount of food the children ate, and then usually only a single indication of reduced intake. Households with very low food security among children all reported multiple indications of reduced food intake. Almost 80 percent reported (along with four other indicators of food-insecure conditions among children) that at some time during the year a child had been hungry, but the household just could not afford more food. Those that did not report that a child had been hungry reported either that a child had skipped a meal or not eaten for a whole day because there was not enough money for food.

¹¹ Ibid. p. 27.

PRIMARY DATA



For primary data collection on **food security**, go to **2. Are Our Residents Food Secure: Tools for Collecting Primary Data** in the *Primary Data Collection Instruments* section of this document.

3. HOW DO WE GET TO OUR FOOD?

The actual act of getting to a store, restaurant, farmers market, or other food venues compounds the problem of geographical location of food outlets. A significant barrier to healthy food exists when a neighborhood does not have a grocery store AND the resident does not have a car OR public transportation is not available to the food location.



To map or pull reports of the Food Atlas data, use the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) or the [Community Commons](#). [CARES video tutorials](#) are available online. The data can also be accessed directly through the [USDA Food Atlas database](#).

SECONDARY DATA

Indicators of Transportation:

There are eight indicators under the section “Access and Proximity to Grocery Store” in the [USDA Food Environment Atlas](#) that measure transportation access. All transportation Food Atlas Data is also available on the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) and the [Community Commons](#).

- **Number of Households with No Car and > 1 Mile from a Store** (county level indicator): Number of housing units in a county that are more than one mile from a supermarket or large grocery store and have no car.
- **Percent of Households with No Car and > 1 Mile from a Store** (county level indicator): Percentage of housing units in a county that are more than one mile from a supermarket or large grocery store and have no car.
- **Number of Households with No Car and > 10 Miles from a Store** (county level indicator): Number of housing units in a county that are more than ten miles from a supermarket or large grocery store and have no car.
- **Percent of Households with No Car and > 10 Miles from a Store** (county level indicator): Percentage of housing units in a county that are more than ten miles from a supermarket or large grocery store and have no car.

- **Number of Low Income and > 1 Mile from a Store** (county level indicator): Number of the total population in a county that is low income and lives more than one mile from a supermarket or large grocery store.
- **Percent Low Income and > 1 Mile from a Store** (county level indicator): Percentage of the total population in a county that are low income and live more than one mile from a supermarket or large grocery store.
- **Number of Low income and > 10 Miles from a Store** (county level indicator): Number of the total population in a county that is low income and lives more than ten miles from a supermarket or large grocery store.
- **Percent Low Income and > 10 Miles from a Store** (county level indicator): Percentage of the total population in a county that are low income and live more than ten miles from a supermarket or large grocery store.

4. HOW MUCH DOES FOOD COST IN OUR COMMUNITY?

The higher cost of fresh and nutritious food compared to high caloric processed food is a major factor contributing to the higher risk of low income households for poor health outcomes including obesity, Type II diabetes, and related complications. Moreover, as discussed earlier, poor and minority neighborhoods are less likely to have grocery stores or superstores, which affect not only food availability but also the price of the food. The same gallon of milk is likely to cost more at a convenience store than a grocery store.

To paint a picture of the difference in prices related to healthy and unhealthy food items, you can begin by collecting regional data on key food groups. To get an in-depth understanding of what food costs in your own community, you will want to conduct a “food basket” survey. Examples of the latter are provided below under Primary Data.



To map or pull reports of the Food Atlas data, use the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) or the [Community Commons](#). [CARES video tutorials](#) are available online. The data can also be accessed directly through the [USDA Food Atlas database](#).

SECONDARY DATA

Indicators of the cost of food:

Indicators of the relative price of key food groups are available at the [USDA Food Environment Atlas](#) under “Food Prices.” All food atlas data are also available on the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) database and the [Community Commons](#).

- **Relative Price of Low-Fat Milk** (regional indicator): Regional average price of low-fat milk relative to the national average price. Low-fat milk includes nonfat and 1% milk.

- **Relative Price of Sodas** (regional indicator): Regional average price of sodas relative to the national average price. Sodas include carbonated diet and caloric-sweetened beverages.
- **Relative Price Ratio Low-Fat Milk/Sodas** (regional indicator): Ratio of the regional average price of low-fat milk to the regional average price of sodas relative to the national average price ratio.
- **Price Ratio Green-Leafy/Starchy Vegetables** (regional indicator): Ratio of the regional average price of dark green vegetables to the regional average price of starchy vegetables. Dark green vegetables include, but are not limited to fresh and frozen bok choy, broccoli, collard greens, dark-green-leafy lettuce, kale, mesclun, mustard greens, romaine lettuce, spinach, turnip greens, and watercress. Starchy vegetables include, but are not limited to fresh and frozen corn, green peas, lima beans (green), and potatoes.
- **Price Ratio Fruit/Package Sweet Snacks** (regional indicator): Fruit includes fresh, frozen, and canned, but does not include fruit juice. Packaged sweet snacks include cookies, candy bars, and bars.
- **Price Ratio Fruit/Package Savory Snacks** (regional indicator): Ratio of the regional average price of fruit to the regional average price of packaged savory snacks. Fruit includes fresh, frozen, and canned. It does not include fruit juice. Packaged savory snacks include potato chips, pretzels, and crackers.
- **Price Ratio Wholegrain/Refined Grain** (regional indicator): Ratio of the regional average price of wholegrain products to the regional average price of refined-grain products. Grain products, either whole or refined, include packaged bread, rolls, pita, rice, pasta, cereal; flour and mixes; and frozen and ready to eat grain products.

PRIMARY DATA



The USDA has developed a *Food Store Survey Instrument* to help communities assess the availability and affordability of food in their retail outlets. It includes instructions for how to conduct the survey and analyze the data. See Appendix C of the [USDA Community Food Security Assessment Toolkit](#).

Other survey instruments can be found in the **3. How Much Does Food Cost in Our Community: Tools for Collecting Primary Data** in the *Primary Data Collection Instruments* section of this document.

5. GOVERNMENT & COMMUNITY FOOD SUPPORT PROGRAMS

The food safety net in the U.S. is a complex web of numerous government programs, state and foundation supported community-based programs, and anti-hunger advocacy groups.

Government Food Assistance Programs

There are a variety of food assistance programs targeted to special populations. Many of the programs have served dual purposes: to alleviate food insecurity and to support agricultural production. Table 4 below describes each program.

Table 4. U.S. Government Food Programs and Services

Program	Description
<u>Child and Adult Care Food Program (CACFP)</u>	Each day, 2.6 million children receive nutritious meals and snacks through CACFP. The program also provides meals and snacks to 74,000 adults who receive care in nonresidential adult day care centers. CACFP reaches even further to provide meals to children residing in homeless shelters, and snacks and suppers to youths participating in eligible afterschool care programs.
<u>Commodity Supplemental Food Program (CSFP)</u>	CSFP works to improve the health of low-income pregnant and breastfeeding women, other new mothers up to one year postpartum, infants, children up to age six, and elderly people at least 60 years of age by supplementing their diets with nutritious USDA commodity foods. It provides food and administrative funds to States to supplement the diets of these groups.
<u>Farmers Market Nutrition Program (FMNP)</u>	The WIC Farmers Market Nutrition Program (FMNP) provides fresh, unprepared, locally grown fruits and vegetables from local farmers markets to Women, Infants and Children (WIC) recipients.
<u>Food Distribution Program on Indian Reservations (FDPIR)</u>	FDPIR is a Federal program that provides commodity foods to low-income households, including the elderly, living on Indian reservations, and to Native American families residing in designated areas near reservations.
<u>Fresh Fruit and Vegetable Program</u>	The Fresh Fruit and Vegetable Program provides free fresh fruits and vegetables in select low-income elementary schools nationwide. The purpose of the Program is to increase children’s fresh fruit and vegetable consumption and at the same time combat childhood obesity by improving children’s overall diet and create healthier eating habits to impact their present and future health.
<u>National School Lunch Program (NSLP)</u>	School districts and independent schools that choose to take part in the lunch program get cash subsidies and donated commodities from the USDA for each meal they serve. In return, they must serve lunches that meet Federal requirements, and they must offer free or reduced price lunches to eligible children. School food authorities can also be reimbursed for snacks served to children through age 18 in afterschool educational or enrichment programs.
<u>School Breakfast Program (SBP)</u>	The School Breakfast Program operates in the same manner as the National School Lunch Program. School districts and independent schools that choose to take part in the breakfast program receive cash subsidies from the USDA for each meal they serve. In return, they must serve breakfasts that meet Federal requirements, and they must offer free or reduced price breakfasts to eligible children.

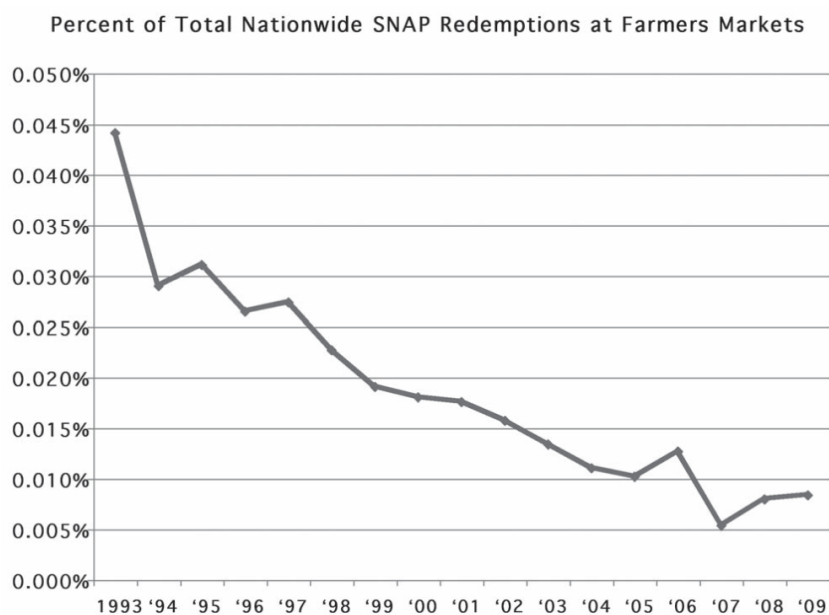
Program	Description
<u>Senior Farmers Market Nutrition Program (SFMNP)</u>	<p>The Senior Farmers market Nutrition Program awards grants to States, United States territories, and federally-recognized Indian tribal governments to provide low-income seniors with coupons that can be exchanged for eligible foods at farmers markets, roadside stands, and community supported agriculture programs.</p>
<u>Special Milk Program (SMP)</u>	<p>Participating schools and institutions receive reimbursement from the USDA for each half pint of milk served. They must operate their milk programs on a non-profit basis, and agree to use the Federal reimbursement to reduce the selling price of milk to all children.</p>
<u>State Commodity Processing Program</u>	<p>The State Processing Program allows States and eligible recipient agencies such as school districts to contract with commercial food processors to convert bulk or raw USDA commodities into more convenient ready-to-use end products. Most of the commodities processed through this program go to schools participating in the National School Lunch Program. Once the donated food is made available to States, the overall organization and administration of the State Processing Program become the responsibilities of the State agency.</p>
<u>Summer Food Service Program (SFSP)</u>	<p>SFSP is the single largest Federal resource available for local sponsors who want to integrate food service into a summer activity program. Children in your community do not need to go hungry this summer. During the school year, nutritious meals are available through the National School Lunch and School Breakfast Programs. But those programs end when school ends for the summer. The Summer Food Service Program helps fill the hunger gap.</p>
<u>Supplemental Nutrition Assistance Program (SNAP)</u>	<p>SNAP (formerly the Food Stamp Program) puts healthy food within reach for 28 million people each month via an EBT card used to purchase food at most grocery stores. Through nutrition education partners, SNAP helps clients learn to make healthy eating and active lifestyle choices</p>
<u>Team Nutrition</u>	<p>Team Nutrition is a USDA initiative to provide training and technical assistance for foodservice, nutrition education for children and their caregivers, and school and community support for healthy eating and physical activity. Team Nutrition's Goal is to improve children's lifelong eating and physical activity habits by using the principles of the Dietary Guidelines for Americans and My Plate (formerly the Food Guide Pyramid).</p>
<u>The Emergency Food Assistance Program (TEFAP)</u>	<p>Under TEFAP, commodity foods are made available by the U.S. Department of Agriculture to States. States provide the food to local agencies that they have selected, usually food banks, which in turn, distribute the food to soup kitchens and food pantries that directly serve the public.</p>

Program	Description
Women, Infants and Children (WIC)	The Special Supplemental Nutrition Program for Women, Infants, and Children - better known as the WIC Program - serves to safeguard the health of low-income women, infants, and children up to age 5 who are at nutritional risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care.

Source: USDA Food and Nutrition Service (2010). Programs & Services. <http://www.fns.usda.gov/fns/services.htm>

There are at least two parts to participation all programs. One is for the person or entity to apply and receive benefits. The other is to locate food outlets that accept these benefits. For example, not all stores accept SNAP coupons or EBT (Electronic Benefits Transfer) payments. There is a dearth of direct food venues such as farmers markets, CSAs, etc., that accept government food subsidy payments. While the location of farmers markets is important, so, too, is the method of payment accepted at the markets. Most markets run on a cash-only basis, although some accept debit/credit cards. But for those households receiving government food benefits, farmers markets – even if geographically accessible – need to accept these government program payments. Each program has its own reimbursement method thereby complicating farmers market participation; and, in fact, payment methods have changed over the years. For example, the food stamp program was revamped and renamed the Supplemental Nutrition Assistance Program (SNAP) and payment changed from paper coupons to the Electronic Benefits Transfer (EBT) “debit card” payment method.

Figure 5: Decline in SNAP Redemptions at Farmers Markets, 1993-2009¹²



With this change came important benefits -- the system became more efficient, there was less confusion at grocery store checkouts about how to process payments since it worked like a debit/credit card, and it reduced stigma that sometimes came from the public knowing a person was using government food program money. However, an unintended consequence of transitioning from coupons to EBT was the reduction of SNAP redemptions used at Farmers Markets. Accepting SNAP benefits at a farmers market now requires some

¹² From Briggs et al. (2010). Real food, real choice: Connecting SNAP Recipients with Farmers Markets. Portland, OR: Community Food Security Coalition, p.11.

type of electronic equipment ([POS device and/or phone](#)). Figure 5 above shows clearly how this change of payment method decreased the use of SNAP redemptions at farmers markets.

In addition to SNAP, there are two other food assistance programs relevant to farmers markets. These are Women, Infants, and Children Farmers Market Nutrition Program ([WIC-FMNP](#)) established in 1992 by Congress, and the Senior Farmers Market Nutrition Program ([SFMNP](#)) established by Congress in the 2008 Farm Bill. Not all states participate in these programs. As of September 2012, [Colorado participates](#) in the SFMNP but not the WIC-FMNP.



To map or pull reports of the Food Atlas data, use the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) or the [Community Commons](#). [CARES video tutorials](#) are available online.

The data can also be accessed directly through the [USDA Food Atlas database](#).

To access current listings of farmers markets, and types of payments accepted, use the [USDA Farmers Market Search](#).

SECONDARY DATA

Indicators of government food assistance programs:

Indicators of the food assistance program participation rates is available at the [USDA Food Environment Atlas](#) under “Food Assistance” for individuals enrolled and under “Availability of Food Stores” for indicators on stores accepting government food program vouchers/payments. All food atlas data are also available on the [CARES National Reporting Tool](#) and [CARES National Interactive Maps](#) database and the [Community Commons](#). To determine which farmers markets accept which types of government food assistance benefits, go to [USDA Agricultural Marketing Service Farmers Market Search](#).

Under the [USDA Food Environment Atlas](#) section “Food Assistance”:

- **Average Monthly Number of SNAP Participants** (state level indicator): The number of monthly SNAP (Supplemental Nutrition Assistance Program, previously called Food Stamp Program) participants.
- **Total SNAP Benefits (\$1,000)** (county level indicator): The total dollar amount of SNAP food benefits in a county.
- **Average Monthly SNAP Dollar Benefits** (county level indicator): The average monthly SNAP food benefits per participants in a county.
- **SNAP Participation Rate** (state level indicator): Estimate of the number of people in the State that participated in SNAP divided by the number of people eligible to participate in the State.
- **Percent Low-Income Receiving Snap** (county level indicator): The number of SNAP participants as a share of low-income persons, where low-income persons are defined as members of households in which household income is at or below 200 percent of the Federal Poverty Level.

- **Average Monthly Number of School Lunch Participants** (state level indicator): The average monthly number of total participants in the National School Lunch Program (excludes June, July, and August).
- **Percent Students Free Lunch Eligible** (county level indicator): The percent of total students eligible to participate in the National School Lunch Program under the Free Lunch Program.
- **Percent Students Reduce Price Lunch Eligible** (county level indicator): The percent of total students eligible to participate in the National School Lunch Program under the Reduced-price Lunch Program.
- **Average Monthly Number of School Breakfasts Participants** (state level indicator): The average monthly number of total participants in the School Breakfast Program (excludes June, July, and August).
- **Average Daily Number of Summer Food Participants** (state level indicator): The average daily attendance in the Summer Food Service Program, June, July, and August.
- **Number of Summer Food Program Sites** (county level indicator): The number of Summer Food Program sites.
- **Average Number of Meals Served at Summer Food Sites** (county level indicator): The total number of meals served by summer food program sponsors by county, divided by the number of summer food program sites by county.
- **Average Monthly Number of WIC Participants** (state level indicator): The number of individuals (infants, children, and mothers) who received at least one WIC food instrument or food during the report month or are breastfed by a participating mother.
- **WIC Total Redemptions** (county level indicator): The total dollar amount of WIC redemptions in a county. WIC stores include food stores and other retail establishments that carry designated WIC foods and food categories.
- **Percent Change in WIC Dollar Redemptions** (county level indicator): Percent change in the total dollar amount of WIC redemptions in a county. WIC stores include food stores and other retail establishments that carry designated WIC foods and food categories. Percent change indicators are calculated as $[(\text{Year 2} - \text{Year 1}) / \text{Year 1}] * 100$.
- **Average Daily Served Child-&Adult Care** (state level indicator): The average daily attendance for all child care centers participating in the Child-&Adult-Care Feeding Program.

Under the [USDA Food Environment Atlas](#) section “Availability of Food Stores”:

- **Number of SNAP-Authorized Stores** (county level indicator): The number of stores in the county authorized to accept SNAP benefits. Stores authorized for SNAP include: supermarkets; large, medium and small grocery stores and convenience stores; super stores and supercenters; warehouse club stores; specialized food stores (retail bakeries, meat and seafood markets, and produce markets); and meal service providers that serve eligible persons.
- **Percent Change in Number of SNAP-Authorized Stores** (county level indicator): Percent change in the number of stores in the county authorized to accept SNAP (Supplemental Nutrition Assistance

Program, previously called Food Stamp Program) benefits. Percent change indicators are calculated as $[(\text{Year 2} - \text{Year 1}) / \text{Year 1}] * 100$.

- **SNAP-Authorized Stores per 1,000 Population** (county level indicator): The number of stores in the county certified to accept SNAP per 1,000 county residents.
- **Percent Change in SNAP-Authorized Stores per 1,000 Population** (county level indicator): The percent change in the number of stores in the county certified to accept SNAP (Supplemental Nutrition Assistance Program, previously called Food Stamp Program) per 1,000 county residents. Percent change indicators are calculated as $[(\text{Year 2} - \text{Year 1}) / \text{Year 1}] * 100$.
- **SNAP Redemptions per SNAP-Authorized Stores** (county level indicator): The average SNAP redemption amount per SNAP-authorized store in a county.
- **Percent Change in Snap Redemptions per Snap Authorized Stores** (county level indicator): Percent change in the average SNAP (Supplemental Nutrition Assistance Program, previously called Food Stamp Program) redemption amount per SNAP-authorized store in a county. Percent change indicators are calculated as $[(\text{Year 2} - \text{Year 1}) / \text{Year 1}] * 100$.
- **Number of WIC Authorized Stores** (county level indicator): The number of food stores in a county that are authorized to accept WIC Program (Special Supplemental Nutrition Program for Women, Infants, and Children) benefits. WIC-authorized stores include food stores and other retail establishments that carry designated WIC foods and food categories.
- **Percent Change in Number WIC-Authorized Stores** (county level indicator): Percent change in the number of food stores in a county that are authorized to accept WIC Program (Special Supplemental Nutrition Program for Women, Infants, and Children) benefits. Percent change indicators are calculated as $[(\text{Year 2} - \text{Year 1}) / \text{Year 1}] * 100$.
- **WIC-Authorized Stores per 1,000 Population** (county level indicator): The total number of WIC Program stores in a county per 1,000 population.
- **Percent Change in WIC-Authorized Stores per 1,000 Population** (county level indicator): Percent change in the total number of WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) Program stores in a county per 1,000 population. Percent change indicators are calculated as $[(\text{Year 2} - \text{Year 1}) / \text{Year 1}] * 100$.
- **WIC Redemptions per WIC-Authorized Stores** (county level indicator): The average WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) redemption amount per WIC-authorized store.
- **Percent Change WIC Redemptions per WIC-Authorized Stores** (county level indicator): Percent change in the average WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) redemption amount per WIC-authorized store. Percent change indicators are calculated as $[(\text{Year 2} - \text{Year 1}) / \text{Year 1}] * 100$.

[CARES National Report Tool Database](#) and the [Community Commons](#):

- **SNAP Retailer Locations** (geographic point location): The SNAP (Supplemental Nutrition Assistance Program, previously called Food Stamp Program) redemption locations. SNAP stores include:

supermarkets; large, medium and small grocery stores and convenience stores; super stores and supercenters; warehouse club stores; specialized food stores (retail bakeries, meat and seafood markets, and produce markets); and meal service providers that serve eligible persons. Store locations are from the SNAP Benefits Redemption Division, Food and Nutrition Service, USDA.

- **Food Deserts** (census tract indicator): Food deserts are defined as urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food. Instead of supermarkets and grocery stores, these communities may have no food access or are served only by fast food restaurants and convenience stores that offer few healthy, affordable food options. The lack of access contributes to a poor diet and can lead to higher levels of obesity and other diet-related diseases, such as diabetes and heart disease (Data from the [U.S. Department of Agriculture](#)).

[USDA Farmers Market Database](#): Search by geography on the following forms of payment. Hint: Do one payment method per search.

- **WIC Vouchers**
- **WIC Cash Vouchers**
- **SFMNP Vouchers**
- **SNAP Redemptions**
- **Credit/Debit**

PRIMARY DATA



The USDA Food and Nutrition Service is working on options to increase SNAP participation at farmers markets. See [USDA's EBT Project](#) for more information.

Read the [Supplemental nutrition assistance program \(SNAP\) at farmers markets: A how-to handbook](#), also in the *Implementation Tools* section of this document, for guidance on how to help your local farmers market set up methods to accept public assistance program money.

Community Food Programs

Local food programs fill an important void for food insecure households. Many people must forego essentials or not pay all their monthly bills. Even for households receiving government food assistance, the benefits are not always sufficient to meet their basic food needs. Community resources such as food banks, food pantries, and non-profit food assistance programs bridge the help gap.



To record **community food program** for your community, click on [Appendix B: Indicators of Community Food Programs Worksheet](#)

SECONDARY DATA

Indicators of community food programs:

Data on community food programs is dispersed. There is no one best database; therefore you will need to track it down through a variety of sources. Below is a list of databases to get you started:

Databases:

1. [US Department of Housing and Urban Development: Homes & Communities](#) – Food Banks in Colorado covers 35 counties across Colorado.
2. [FoodPantries.org](#) has a list of food pantries, food banks, and soup kitchens across Colorado.
3. [Homeless Shelter Directory: Colorado Emergency Food Programs](#) is a searchable database by city locations of soup kitchens, food banks and pantries.
4. [Feeding America: Colorado Food Banks](#) lists their network members. The list, therefore, is not exhaustive. However, one additional feature not available on the other sites is state statistics related to food insecurity (food insecurity rate, poverty rate, child food insecurity rate, child poverty rate, population, and unemployment rate).

Indicators:

- **Number of Food Banks or Food Pantries** (state, county, city indicator): count of emergency food assistance banks/pantries in a given area.
- **Percent of Food Banks or Food Pantries Per Capita** (state, county, city indicator): ratio of the number of emergency food assistance banks/pantries divided by the population of the area.
- **Number of Soup Kitchens** (state, county, city indicator): count of the number of soup kitchens in a given area.
- **Number Soup Kitchens Per Capita** (state, county, city indicator): ratio of the number of soup kitchens divided by the population of the area.

PRIMARY DATA



For primary data collection on community food programs, go to [4. Government & Community Food Support Programs: Tools for Collecting Primary Data](#) in the *Primary Data Collection Instruments* section of this document.

IV. IMPLEMENTATION TOOLS

This section provides a collection of tools and reports that will help you implement your food assessment.

RECENT REPORTS AND RESEARCH EXAMINING FOOD DESERTS

Ver Ploeg, M., Breneman, V., Farrigan, T., Hamrick, K., Hopkins, D., Kaufman, P., et al. (2009). Access to affordable and nutritious food – measuring and understanding food deserts and their consequences: Report to Congress. Administrative Publication No. (AP-036). Washington, DC: USDA Economic Research Service. <http://www.ers.usda.gov/publications/ap-administrative-publication/ap-036.aspx>

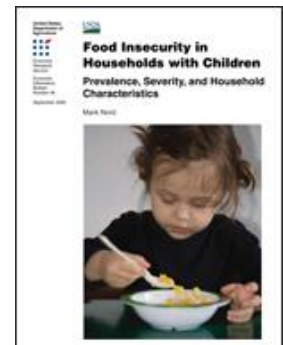


This [USDA report to Congress](http://www.ers.usda.gov/publications/ap-administrative-publication/ap-036.aspx) fills a request for a study of food deserts—areas with limited access to affordable and nutritious food—from the Food, Conservation, and Energy Act of 2008. The report summarizes findings of a national-level assessment of the extent and characteristics of food deserts, analysis of the consequences of food deserts, lessons learned from related Federal programs, and a discussion of policy options for alleviating the effects of food deserts. Overall, findings show that a small percentage of consumers are constrained in their ability to access affordable nutritious food because they live far from a supermarket or large grocery store and do not have easy access to transportation.

Nord, M. (2009). Food insecurity in households with children: Prevalence, severity, and household characteristics. Washington, D. C.: The U.S. Department of Agriculture.

This [2009 report](http://www.ers.usda.gov/publications/eib-economic-information-bulletin/eib56.aspx) documents the incidence of food insecure households with children with low or very low food security, most of which (70%) have a full-time working adult.

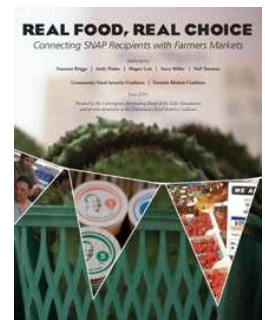
Available at: <http://www.ers.usda.gov/publications/eib-economic-information-bulletin/eib56.aspx>



Briggs, S., Fisher, A., Lott, M., Miller, S., & Tessman, N. (2010, June). Real food, real choice: Connecting SNAP recipients with farmers markets. Portland, OR: Community Food Security Coalition.

http://www.foodsecurity.org/pub/RealFoodRealChoice_SNAP_FarmersMarkets.pdf

This [2010 report](http://www.foodsecurity.org/pub/RealFoodRealChoice_SNAP_FarmersMarkets.pdf) is a product of a ten month process that examines SNAP participation in farmers markets from a variety of perspectives, including the capacity of farmers markets to operate programs that accept EBT (electronic benefits transfer) cards; the types of programs that markets have created; the barriers low-income shoppers face in patronizing farmers markets; and state and federal level policies that affect the usage of EBT cards at farmers markets. The report concludes with a road map for change, which features primary and secondary tiers of recommendations. An extensive list of resources and reports can be found in the reference section.



Haering, S. A., & Syed, S. B. (2009). *Community food security in United States cities: A survey of the relevant scientific literature*. Baltimore: John Hopkins Center for a Livable Future. http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/research/clf_publications/pub_rep_desc/CFS_USA.html

An examination of various food security frameworks is presented in [this report](#), along with several food insecurity measurement scales. Scope, predictors, and consequences of food insecurity are also discussed, as well as related issues of poverty, obesity, human rights, health care, and agriculture.

USDA (2010, June). Supplemental nutrition assistance program (SNAP) at farmers markets: A how-to handbook. From <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5085298>

The Supplemental Nutrition Assistance Program (SNAP) (formerly the Food Stamp Program) is the Nation's largest nutritional assistance program and the cornerstone of the Federal Government efforts to alleviate hunger in the United States and its territories. This [handbook](#) is a how-to guide for accepting SNAP benefits at farmers markets. Topics include:

- Why to accept SNAP benefits
- How to install EBT systems at farmers markets
- How to use Scrip Projects to accept SNAP benefits at farmers markets
- How to become an FNS SNAP retailer
- What equipment is required to accept SNAP benefits

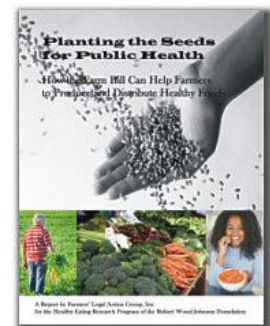
Krueger, J.E., Krub, K.R., & Hayes, L.A. (2010). *Planting the seeds for public health: How the farm bill can help farmers to produce and distribute healthy food*. St. Paul, MN: Farmers' Legal Action Group, Inc.

Full report at

<http://www.rwjf.org/content/dam/farm/reports/reports/2010/rwjf63424>

Download the 2-page policy highlight:

<http://www.flaginc.org/topics/pubs/arts/PlantingTheSeedsChap1.pdf>



This [2010 report](#) strives to explain the key agriculture and nutrition programs included in the 2008 Farm Bill and makes recommendations for policy change in these programs to encourage farmers' production and to facilitate their strategic marketing of fruits and vegetables to make them more accessible to children. The principal questions that guide the discussion are: (1) "What are the ways in which Farm Bill programs currently discourage farmers from producing and strategically marketing fruits and vegetables?" and (2) "What policy changes could be made that would encourage farmers to do so?" The goal of this report is to provide information to both the farm and public health communities that will further the understanding of existing federal agriculture and nutrition programs and recommended policy changes. As these diverse constituencies seek to form alliances to address shared goals, it is critical to develop shared language and understanding of these policies.

Winne, M., Joseph, H., & Fisher, A. (1997). [Community food security. A guide to concept, design, and implementation](#). Venice, CA: Community Food Security Coalition.

This guidebook details such issues as the concept of community food security, community food planning, needs assessments, building collaborations and coalitions, project implementation, entrepreneurship, funding, program sustainability, case studies, and multiple attachments. Also available at: <http://www.foodsecurity.org/CFSguidebook1997.PDF>

Conroy, D., & McDavis-Conway, S. (2006). [Healthy food, healthy communities: An assessment and scorecard of community food security in the District of Columbia](#). Washington D.C.: D.C. Hunger Solutions.

This report examines access to nutritional food in the District of Columbia by Ward. Recommendations and strategies to aid in safeguarding food security to individuals through increased access to healthy and affordable food are offered. Also available at: <http://www.dchunger.org/pdf/healthfoodcomm.pdf>

PRIMARY DATA COLLECTION INSTRUMENTS

1. What Is Our Food Environment: Tools for Collecting Primary Data

Tools from Colorado:

[Colorado Farm to School Food Service Nutrition Directors Survey \(2010\)](#)

Six page survey to assess farm to school activities in school districts including procurement practices.

[Neighborhood and Environment Health Survey](#) (2006). A project by the University of Colorado Health Sciences Center, sponsored by Gardens for Growing Healthy Communities Partners.

A 30-page in-person interview survey that collects information about people's perceptions and experiences in their neighborhood including social capital measures, gardening activities including backyard and community gardening, physical activity, general health, food and nutrition, food environment, and demographics.

[La Plata County Food Assessment](#) (2007). In October 2005, the U.S. Department of Agriculture awarded the Growing Partners of Southwest Colorado with funding to complete a yearlong food study to assess food security in La Plata County. The final report along with appendices of data collected through an extensive primary data collection effort can also be viewed at

http://www.sustainableswcolorado.org/la_plata_county_food_assessment

The Tool Kit of Primary Data Collection Instruments includes:

Farmer/Producer Interview

*[Agency Survey](#) (instrument is available)

School Survey on Food Related Programs

School Food Services Survey

*[Restaurant Survey](#) (instrument is available)

*[Consumer Survey](#) (instrument is available)

Youth Survey

4H Youth Interview

Hispanic Interview

*[Grocery Store Survey](#) (instrument is available)

Nutrition Expert Interview

Farms to School Planning Survey

Agency Survey for Seniors

[LiveWell Longmont Access to Fruit & Vegetable Survey](#)

This survey was distributed to community members to determine where respondents purchase fruits and vegetables, how respondents choose distributors and foods, and their attitudes toward changing access to healthy foods. Adherence to food safety measures is also assessed.

[LiveWell Longmont Community Food Assessment Focus Group Process](#)

Six page facilitator guide containing focus group questions regarding types of food participants eat, where food is accessed, and how decisions are made about the food that is eaten.

[Northern Colorado Regional Food Assessment](#): The assessment provides baseline data of the regional food system in Boulder, Larimer and Weld counties. Specific data collection tools include questions for focus groups and interviews with community members and key stakeholders in the food system. Food system areas covered include: production, processing, and access.

[Guidance for Conducting a Food Assessment](#)

[Inputs to Agriculture: Labor and Purchases](#)

[Inputs to Agriculture: Natural Resources](#)

[Agricultural Production: Crops and Livestock](#)

[Agricultural Production: Evolution of Farms](#)

[Processing, Distribution, and Marketing: Consumer Buying Preferences](#)

[Processing, Distribution, and Marketing: Where do we Shop and Eat](#)

[Public Health & Nutrition: Role of Food in Health](#)

[October Open House Questionnaire](#)

[Online Survey](#)

[San Miguel Community Food Assessment](#). The New Community Coalition was awarded a grant to conduct a Community Food Assessment of the region. It is critical to know what products are currently being produced, what the market demand is for local products, and what infrastructure and/or organizational aspects are missing that would make the community's food system more robust and secure. Five surveys were crafted to provide baseline information about the production and consumption of food in the San Miguel Watershed that will be used to develop a plan for an improved food system that benefits both consumers and producers:

[Institution Survey](#)

[Grocery Survey](#)

[Restaurant Survey](#)

[Consumer Survey](#)

[Value-Added Survey](#)

Tools from Across the Country:

Food Security Consumer Surveys. Ten surveys regarding consumer behaviors and preferences in the food market are available at: http://www.foodsecurity.org/cfa_survey.html. One of the ten surveys is available in both English and Spanish.

[Alameda County Consumer Survey](#)

[Calaveras County Consumer Survey](#)

[Central City East Consumer Survey](#)

[Central Coast Consumer Survey](#)

[Food Access Survey – Shasta County](#)

[Fresno County Consumer Survey](#)

[Hollywood Consumer Survey](#)

[Sacramento Consumer Survey – Oral](#)

[Sacramento Survey Explanation - English](#)

[Sacramento Consumer Survey – English](#)

[Sacramento Survey Explanation – Spanish](#)

[Sacramento Consumer Survey – Spanish](#)

[WIC Fruit & Vegetable Consumption Survey - English](#)

Nutrition Environment Measures Survey in Stores (NEMS-S)

The survey instrument gathers availability of food types and costs in retail food outlets. These measures are designed to rate the nutrition environment of grocery and convenience stores. See the journal article, [Nutrition Environment Measures Survey in Stores \(NEMS-S\)](#) reporting inter-rater and test-retest reliability on the NEMS-S Tool, which was found to have high reliability in both measures.

[Nutrition Environment Measures Survey in Stores \(NEMS-S\) Data Collection Instrument](#)

Nutrition Environment Measures Survey in Restaurants (NEMS-R)

The measures are designed to rate the nutrition environments of restaurants serving either lunch or dinner. See the journal article, [Nutrition Environment Measures Study in Restaurants \(NEMS-R\)](#) reporting on the assessment of the tool, finding it has evidence of reliability, and can discriminate restaurant types. The NEMS-R can be used in research and practice to characterize restaurant environments.

[Nutrition Environment Measures Study in Restaurants \(NEMS-R\) Data Collection Instrument](#)

Your Neighborhood Community Food Assessment Survey Tool (2010) from Johns Hopkins University.

The six page survey collects data on neighborhood food environment, eating behavior, health status, and demographics.

Michigan Health Tools

The [Michigan Healthy Communities Collaborative](#) has developed has a series of tools to evaluate health environments, including communities, workplaces, schools, and places of worship.

[Healthy Community Checklist](#)

This is a 40 question measure that assesses community promotion and support regarding physical activity, healthy eating and weight, and smoke and tobacco free environments.

[Nutrition Environment Assessment Tool \(NEAT\)](#)

The NEAT evaluates community support for healthy eating through variables such as: community policies and environment, workplace policies and environment, and school policies and environment.

[Designing Healthy Environments at Work \(DHEW\)](#)

The DHEW evaluates worksites regarding support for physical activity, nutrition, and tobacco-free lifestyles.

[Michigan Healthy School Action Tools \(HSAT\)](#)

The HSAT comprises 8 modules that assess school health and safety policies, health education, physical education, nutrition services, school health services, school counseling, health and safety promotion for staff, and family and community involvement.

[HSAT Module 1: School Health & Safety Policies & Environment](#)

[HSAT Module 2: Health Education](#)

[HSAT Module 3: Physical Education & Other Physical Activity Opportunities](#)

[HSAT Module 4: Nutrition Services](#)

[HSAT Module 5: School Health Services](#)

[HSAT Module 6: School Counseling & Psychological Services](#)

[HSAT Module 7: Health & Safety Promotion for Staff](#)

[HSAT Module 8: Family & Community Involvement](#)

[HSAT Summary Questions](#)

[Walk by Faith Promoting Healthy Congregations \(PHC\) Assessment](#)

The PHC measures the degree to which faith-based organizations are promoting healthy lifestyles through infrastructure and policy.

[Checklist of Health Promotion Environments at Worksites \(CHEW\)](#)

The CHEW is a 112 item checklist assessing workplace environmental features related to physical activity, healthy eating, alcohol consumption, and smoking. The physical components of the worksite, health references in the information environment, and the neighborhood surrounding the worksite are all measured.

[Assessment & Planning Tool for School Nutrition by Design](#)

Developed by the California Department of Education, this assessment tool evaluates a school's nutrition environment, and may be used in conjunction the [School Nutrition...by Design!](#) to develop a healthy school nutrition environment.

[Food and Fitness for Children and Families: A Rapid Assessment Tool](#)

This field tool is intended to guide users in data collection regarding the resources, challenges, attitudes, and goals of those impacted by childhood obesity. The methods include observation, interviewing, and focus groups. It is considered a "rapid" assessment tool because it is tailored to the language, social environment, and cultures of the users and respondents. Presently, users may register and download the "Food & Fitness RAP Manual."

Food Stores Survey

The [Food Stores Survey](#) examines neighborhoods with regards to eating and physical activity access. This survey was created as a part of the Girls Health Enrichment Multi-site Studies (GEMS).

[Washington State Nutrition and Physical Activity Plan. Healthy Communities Tool Kit Resource Website.](#) Numerous data collection instruments for measuring access to healthy foods in stores, assessing farmers markets, and community gardens.

Healthy Eating Index

The [Healthy Eating Index](#) measure assesses compliance with the Departments of Agriculture (USDA) and Health and Human Services (HHS) Dietary Guidelines. Components include fruit, whole fruit, vegetables, dark green and orange vegetables and legumes, total grains, whole grains, milk, meat and beans, oils, saturated fat, sodium, and calories from solid fat, alcohol, and added sugar.

Healthy Corner Stores Network is a national effort to bring ideas, best practices, and research to develop successful healthy corner store projects. Available at: www.healthycornerstores.org

The section *Tools and Resources for Corner*



Stores Initiatives focuses on how-to information and materials that can be used in corner store initiatives. Publications include:

- Toolkits and manuals
- Store surveys, assessments, and contracts
- Educational and promotional materials
- Evaluation tools
- Funding sources
- Produce/food handling tips

For information, see <http://www.healthycornerstores.org/category/resources/tools>

Martin, K. & Born, B. (2009). [Delridge healthy corner store project: A toolkit for community organizers and store owners](#). Seattle, WA: Delridge Neighborhoods Development Association. Also found at http://healthycornerstores.org/wp-content/uploads/resources/Delridge_HCS_Toolkit.pdf

This manual includes technical, educational and marketing information and templates for bringing fresh fruits and vegetables into small neighborhood stores that previously did not stock these foods. The manual includes two toolkits – one for the community organizer and one for the participating store. The *Community Organizer Toolkit* has materials focused on the project's implementation and ongoing management. The *Healthy Corner Store Toolkit* is designed specifically for the storeowner as they begin to implement the tools and strategies agreed upon in the project plan. The toolkit provides tools and techniques for how to stock and market healthy food, as well as contains an educational guide for identifying healthy food items.

99 Ways to Make Your After-School Program Even Healthier

This toolkit is an [interactive booklet](#) with nutrition and physical activity lesson plans with the intent of improving after-school programs' promotion of health.

Website access: <http://canfit.org/99ways/>

2. Are Our Residents Food Secure: Tools for Collecting Primary Data

Tools from Colorado:

[Food Security Assessment: Adams County, Colorado](#) (October 18, 2006). This Assessment was initiated as part of the strategic planning process for the Adams County Food Distribution Center (FDC), a program of Adams County Community Development (ACCD). The purpose of the study was to:

- Gain a better understanding of the food security issues and challenges faced by the low income population of Adams County;
- Uncover trends that may indicate the growth in need for food assistance and/or needs for changes in both how and what is delivered in food assistance;
- Gain a better understanding of the complex food assistance systems working in Adams County;
- Identify resources and gaps in food assistance and other areas that will assist FDC planning;
- Develop an information base that can be used by ACCD, FDC, other players in food assistance and the non-profit community for better coordination of efforts, planning and resource generation.

The [report](#) includes two primary data collection instruments in the Appendices.

- Appendix 2: *Food Security Questionnaire*, adapted from USDA, pp.79
- Appendix 3: *Facilitator's Guide: ACCD/FDC Security Focus Groups* instructions and questions, pp. 80-83.

Tools from Across the Country:

The USDA Economic Research Service provides a variety of food security household survey tools. The surveys listed below can be accessed at <http://www.ers.usda.gov/briefing/foodsecurity/surveytools.htm>

Farmworker Food Security Survey

This survey is available in both Spanish and English to assess the food security of farmworkers, based on whether respondents make sufficient wages to afford and have access to food.

- [Farmworker Food Security – English](#)
- [Farmworker Food Security - Spanish](#)

Both versions may also be found at: http://www.foodsecurity.org/cfa_survey.html

U.S. Household Food Security Survey Module

(18-items) Three-stage design with screeners. Screening keeps respondent burden to the minimum needed to get reliable data. Most households in a general population survey are asked only three questions (five if there are children in the household). The questionnaire has been modified slightly from that in the Guide, and the questions have been re-ordered to group the child-referenced questions after the adult-referenced questions; download it in the format that works for you: [PDF](#) or [Microsoft Word](#)

U.S. Adult Food Security Survey Module

(10 items) Three-stage design with screeners. This survey focuses on households with children to assess food security. Screening keeps respondent burden to the minimum needed to get reliable data. Most households in a general population survey are asked only three questions. The questionnaire has been modified very slightly from that specified for households without children in the Guide; download it in the format that works for you: [PDF](#) or [Microsoft Word](#).

Advantages

- Less respondent burden.
- Improves comparability of food security statistics between households with and without children and among households with children in different age ranges.
- Avoids asking questions about children’s food security, which can be sensitive in some survey contexts.

Limitations

- Does not provide specific information on food security of children.

Six-item Short Form of the Food Security Survey Module

For surveys that cannot implement the 18-item or 10-item measures, this “Short Form” 6-item scale provides a reasonably reliable substitute. It uses a subset of the standard 18 items. This is the same six-item questionnaire that is in the Guide; download it in the format that works for you: [PDF](#) or [Microsoft Word](#).

Advantages

- Less respondent burden for food-insecure households. Can be screened after three items to reduce burden for households with no food access problems.
- Prevalence estimates of food insecurity and very low food security are only minimally biased relative to those based on 18-item or 10-item modules.

- Standard short form with known relationship to full module.

Limitations

- Less precise and somewhat less reliable than 18-item measure.
- Does not measure the most severe levels of food insecurity.
- Does not ask about conditions of children in the household.

Self-Administered Food Security Survey Module for Youth Ages 12 and Older

This survey module was adapted from the U.S. Household Food Security Survey Module for self-administration by children ages 12 and older. Development and assessment of the module is described in Carol L. Connell, Mark Nord, Kristi L. Lofton, and Kathy Yadrick, 2004, "Food Security of Older Children Can Be Assessed Using a Standardized Survey Instrument," *The Journal of Nutrition* 134:2566-72. Download the questionnaire in the format that works for you: [PDF](#) or [Microsoft Word](#).

Spanish Translation of the U.S. Food Security Survey Module

A Spanish translation of the U.S. Household Food Security Survey Module developed by UCLA researchers is available on-line from the *Journal of Nutrition*. This work was funded through a grant from ERS's Food Assistance and Nutrition Research Program, and ERS recommends this translation for use among Spanish-speaking populations within the United States. The *Journal* has made the entire article, "[Development of a Spanish-Language Version of the U.S. Household Food Security Survey Module](#)," including the [Spanish-language module](#) and a description of its development and testing, publicly available at no cost from their website.

3. How Much Does Food Cost in Our Community: Tools for Collecting Primary Data

Tools from Colorado:

La Plata County Food Assessment (2006). [Grocery Store Survey](#)

One page food item survey that collects prices for dairy, protein foods, bread and cereal, and fruits and vegetables in three categories: commercial, local in season, and organic.

Tools from Across the Country:

Nutrition Environment Measures Survey in Stores (NEMS-S)

The survey instrument gathers availability of food types and costs in retail food outlets. These measures are designed to rate the nutrition environment of grocery and convenience stores.

4. Government & Community Food Support Programs: Tools for Collecting Primary Data

Tools from Colorado:

La Plata County Food Assessment (2007) [Community Agency Survey](#)

Three page mail survey to collect baseline data about agencies that offer food related programs or have an interest in participating in community food projects.

Tools from Across the Country:

The Environmental Nutrition and Activity Community Tool (ENACT) Local Policy Database

This tool is a database of local policies that improve food and activity environments. Searches may be conducted at: <http://eatbettermovemore.org/sa/policies/>

OTHER INVENTORIES OF ASSESSMENT TOOLS

Emory University, Nutrition Environment Measures Surveys: *Validated assessment tools for restaurants, convenience stores, and grocery stores*: www.sph.emory.edu/NEMS/

University of California, Davis, Center for Advanced Study in Nutrition and Social Marketing:
Links to assessment tools to measure nutrition environment:
<http://cwh.berkeley.edu/resource/center-advanced-studies-nutrition-and-social-marketing/>

University of Washington, Center for Public Health Nutrition: Assessment tools for communities, schools and worksites: https://depts.washington.edu/teameval/eval_tools/community.shtml

Washington State University, King County Extension: Collection of Assessment and Observation Tools: <http://king.wsu.edu/foodandfarms/KCFFICommunityAssessment.html>

APPENDIX A: FOOD SECURITY, RESILIENCY AND ACCESS INDICATORS MATRIX

The following matrix recaps the indicators discussed in detail in Access module but also include indicators identified in the literature as important for understanding the food environment that are currently not collected in a publically-accessible database. The matrix includes information about availability and location of the indicators on the two publically-available CARES platforms: (1) the [National Interactive Maps](http://ims2.missouri.edu/tool/maps/Default.aspx) (<http://ims2.missouri.edu/tool/maps/Default.aspx>) and (2) the [National Reporting Tool](http://ims2.missouri.edu/tool/reports/default.aspx) (<http://ims2.missouri.edu/tool/reports/default.aspx>).

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
Food Insecurity	HH food insecurity (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Insecurity/"Household Food Insecurity, By State (2009,USDA)"	Not available		
	Child food insecurity (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Insecurity/"Child Food Insecurity 2001-2007, By State (2007,USDA)"	Not available		
School Food	Districts participating in Farm to School (location)	Colorado Farm to School, www.coloradofarmtoschool.org ; National Farm to School Network, and Colorado Farm to School Colorado Profile, http://www.farmtoschool	Not available. Must be uploaded by community	Not available. Must be uploaded by community		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		.org/state-home.php?id=48 . Food Service Nutrition Director Survey (primary data collection instrument)				
	Farm To School Program (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx . Not locational data. Counties are coded 1=one or more FTS programs, and 0 = otherwise.	Food Environment/Food Atlas 2011/Local Foods/"Farm To School Program (2009, USDA)"	Not available		
	School wellness policies with fresh food focus	Colorado Farm to School Food Service Nutrition Director Survey (primary data collection instrument)	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	District nutritional profiles	No known source. Requires primary data collection.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Percentage of middle and high schools that offer fruits	State data available from CDC's 2008 School Health Profiles, Table 28 http://www.cdc.gov/HealthyYouth/profiles/2008/p	Not available. Must be uploaded by community	Not available. Must be uploaded by community		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	(not juice) and non-fried vegetables as competitive foods	rofiles_report.pdf . District data potentially available upon request, see Data Files & Documentation at http://www.cdc.gov/HealthyYouth/profiles/ Copy of the survey for primary data collection is available at http://www.cdc.gov/healthyYouth/profiles/2008/QuestionnaireP.rtf				
	Number of schools with educational gardens	Colorado Farm to School Food Service Nutrition Director Survey (primary data collection instrument). Colorado Farm to School project, www.coloradofarmtoschool.org . Contact Director.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
Restaurants	# fast food restaurants (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"Fast-food Restaurants 2007-2008 (2008, USDA)"	# Fast-Food Restaurants 2007 # Fast-Food Restaurants 2008	
	Pct. Change in # of Fast-food Restaurants	USDA Food Environment Atlas, http://www.ers.usda.gov/data-	Not available	Food Environment/Food Atlas 2011/Access to Food/"Fast-food	Pct. Change in Fast-Food Restaurants 07-08	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		products/food-environment-atlas.aspx		Restaurants 2007-2008 (2008, USDA)”		
Fast food restaurants/1,000 population (state, county)	For county level and maps: USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx For county and statewide level: US Census County Business Patterns, select NAICS code 7222, http://www.census.gov/econ/cbp/index.html	Food Environment/Food Atlas 2011/Access to Food/”Fast-food Restaurants Per 1000 Pop. (2008, USDA)”	Food Environment/Food Atlas 2011/Access to Food/”Fast-food Restaurants 2007-2008 (2008, USDA)”		Fast-Food Restaurants, per 1000 Pop. 2007 Fast-Food Restaurants, per 1000 Pop. 2008	
Pct. Change in Fast-food Restaurants Per 1000 Pop	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/”Pct. Change in Fast-food Restaurants Per 1000 Pop. 2007-2008 (2008, USDA)”	Food Environment/Food Atlas 2011/Access to Food/”Fast-food Restaurants 2007-2008 (2008, USDA)”		Pct. Change in Fast-food Restaurants Per 1000 Pop. 07-08	
# full service restaurants (state, county)	For county level and maps: USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/”Full-Service Restaurants 2007-2008 (2008, USDA)”	# Full-Service Restaurants 2007 # Full-Service Restaurants 2008		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		For county and statewide level: US Census County Business Patterns, select NAICS code 7221, http://www.census.gov/econ/cbp/index.html				
	Full service restaurants/1,000 population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Full-service Restaurants Per 1000 Pop. (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Full-Service Restaurants 2007-2008 (2008, USDA)"		Full-Service Restaurants, per 1000 Pop. 2007 Full-Service Restaurants, per 1000 Pop. 2008
	Pct. Change in Full-service Restaurants Per 1000	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Pct. Change in Full-service Restaurants Per 1000 Pop. 2007-2008 (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Full-Service Restaurants 2007-2008 (2008, USDA)"	Pct. Change in Full-Service Restaurants 07-08	
Food Retail	# grocery stores (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"Grocery Stores, 2007-08 (2008, USDA)	# Grocery Stores 2007 # Grocery Stores 2008	
	Percent Of Change In # of Grocery	USDA Food Environment Atlas, http://www.ers.usda.gov	Not available	Food Environment/Food Atlas 2011/Access	Pct. Change in Grocery Stores 2007-08	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Stores	ov/data-products/food-environment-atlas.aspx		to Food/"Grocery Stores, 2007-08 (2008, USDA)		
	Grocery stores/1,000 population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Grocery Stores, per 1000 Pop. (2008, USDA)	Food Environment/Food Atlas 2011/Access to Food/"Grocery Stores, 2007-08 (2008, USDA)		Grocery Stores, per 1000 Pop. 2007 Grocery Stores, per 1000 Pop. 2008
	Percent Of Change In Grocery Stores Per Thousand People	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Percent Change In Grocery Stores Per 1000 Pop. 2007-08 (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Grocery Stores, 2007-08 (2008, USDA)		Pct. Change in Grocery Stores, per 100 Pop. 2007-08
	# Supercenters and club stores (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"Supercenters and Club Stores 2007-08 (2008, USDA)	# Supercenters and Club Stores 2007 # Supercenters and Club Stores 2008	
	Pct. Change in # of Supercenters And Club	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Pct. Change in Number of	Food Environment/Food Atlas 2011/Access to Food/"Supercenters	Pct. Change in Supercenters and Club Stores 2007-08	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Stores	products/food-environment-atlas.aspx	Supercenters and Club Stores (2008, USDA)”	and Club Stores 2007-08 (2008, USDA)		
	Supercenters and club stores/1,000 population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/”Supercenters And Club Stores, per 1000 Pop. (2008, USDA)”	Food Environment/Food Atlas 2011/Access to Food/”Supercenters and Club Stores 2007-08 (2008, USDA)		Supercenters and Club Stores, per 1000 Pop. 2007 Supercenters and Club Stores, per 1000 Pop. 2008
	Percent Of Change In Supercenters & Club Stores Per Thousand People (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/”Percent Of Change In Supercenters And Club Stores Per 1000 Pop 2007-08 (2008, USDA)”	Food Environment/Food Atlas 2011/Access to Food/”Supercenters and Club Stores 2007-08 (2008, USDA)		Pct. Change in Supercenters and Club Stores, per 100 Pop. 2007-08
	# of Specialized Food Stores (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/”Specialized Food Stores 2007-08 (2008, USDA)”	# Specialized Food Stores 2007 # Specialized Food Stores 2008	
	Pct. Change in # of Specialized	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to	Food Environment/Food Atlas 2011/Access	Pct. Change in Specialized Food Stores 2007-08	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Food Stores (county)	ov/data-products/food-environment-atlas.aspx	Food/" Pct. Change in Number of Specialized Food Stores 2007-08 (2008, USDA)"	to Food/"Specialized Food Stores 2007-08 (2008, USDA)"		
	Specialized Food Stores, per 1000 Population	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Specialized Food Stores. Per 1000 Pop. (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Specialized Food Stores 2007-08 (2008, USDA)"		Specialized Food Stores, per 1000 Pop. 2007 Specialized Food Stores, per 1000 Pop. 2008
	Pct. Change in Specialized Food Stores Per 1000 Population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Pct. Change in Specialized Food Stores, per 1000 Pop. 2007-08 (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Specialized Food Stores 2007-08 (2008, USDA)"		Pct. Change in Specialized Food Stores, per 100 Pop. 2007-08
	# Convenience stores no gas (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores with No Gas 2007-08"	# Convenience Stores with No Gas 2007 # Convenience Stores with No Gas 2008	
	Pct. Change in # of	USDA Food Environment Atlas,	Food Environment/Food	Food Environment/Food	Pct. Change in Convenience	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Convenience Stores With No Gas (county)	http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Atlas 2011/Access to Food/"Pct. Change in Convenience Stores With No Gas, per 1000 Pop. 2007-08 (2008, USDA)"	Atlas 2011/Access to Food/"Convenience Stores with No Gas 2007-08"	Stores with No Gas 2007-08	
	Convenience stores no gas/1,000 population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores With No Gas, per 1000 Pop. (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores with No Gas 2007-08"		Convenience Stores with No Gas, per 1000 Pop. 2007 Convenience Stores with No Gas, per 1000 Pop. 2008
	Pct. Change in Convenience Stores With No Gas Per 1000 Pop. (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/" Pct. Change in Number of Convenience Stores With No Gas 2007-08 (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores with No Gas 2007-08"		Pct. Change in Convenience Stores with No Gas, per 100 Pop. 2007-08
	# Convenience stores with gas (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores with Gas	# Convenience Stores with Gas 2007 # Convenience Stores with Gas	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
				2007-08 (2008, USDA)	2008	
	Pct. Change in # of Convenience Stores With Gas (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Pct. Change in Number of Convenience Stores With Gas 2007-08 (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores with Gas 2007-08 (2008, USDA)	Pct. Change in Convenience Stores with Gas 2007-08	
	Convenience stores with gas/1,000 population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores With Gas Per 1000 Pop. (2008, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores with Gas 2007-08 (2008, USDA)		Convenience Stores with Gas, per 1000 Pop. 2007 Convenience Stores with Gas, per 1000 Pop. 2008
	Pct. Change in Convenience Stores With Gas, per 1,000 Population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"Convenience Stores with Gas 2007-08 (2008, USDA)		Pct. Change in Convenience Stores with Gas, per 100 Pop. 2007-08
	SNAP	http://www.ers.usda.gov/data-products/food-	Food Environment/ /Food	Food Environment /Food	# of Records	Individual Records: Name and address

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Retailer Locations (location)	environment-atlas.aspx	Assistance/"Supplemental Nutrition Assistance Program (SNAP) Retailer Locations (2011, USDA)	Assistance/"Supplemental Nutrition Assistance Program (SNAP) Retailer Locations (2011, USDA)		of SNAP Retailers
	# SNAP - authorized stores (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"SNAP-Authorized Stores, 2008-09 (2009, USDA)	# SNAP-Authorized Stores 2008 # SNAP-Authorized Stores 2009	
	Pct. Change in # of SNAP-Authorized (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"SNAP-Authorized Stores, 2008-09 (2009, USDA)	Pct. Change in SNAP-Authorized Stores 2008-09	
	SNAP - authorized stores/1,000 population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"SNAP-Authorized Stores Per 1000 Pop. (2009, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"SNAP-Authorized Stores, 2008-09 (2009, USDA)		SNAP-Authorized Stores, per 1000 Pop. 2008 SNAP-Authorized Stores, per 1000 Pop. 2009
	Pct. Change	USDA Food Environment	Food	Food		Pct. Change in

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	in SNAP-Authorized Stores Per 1000 Pop. (county)	Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Environment/Food Atlas 2011/Access to Food/" Pct. Change in SNAP-Authorized Stores Per 1000 Pop. 2008-2009 (2009, USDA)"	Environment/Food Atlas 2011/Access to Food/"SNAP-Authorized Stores, 2008-09 (2009, USDA)		SNAP-Authorized Stores, per 100 Pop. 2008-09
	SNAP redemption/ SNAP authorized stores (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"SNAP-Authorized Stores, 2008-09 (2009, USDA)		SNAP Redemptions per SNAP-Authorized Stores, 2008 SNAP Redemptions per SNAP-Authorized Stores, 2009
	Pct. Change in Number of SNAP Redemptions Per SNAP-Authorized Stores (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Pct. Change in Number of SNAP Redemptions Per SNAP-Authorized Stores 2008-09 (2009, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"SNAP-Authorized Stores, 2008-09 (2009, USDA)		Pct, Change in SNAP Redemptions per SNAP-Authorized Stores, 2008-09
	# WIC-authorized stores	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized	# WIC-Authorized Stores 2008 # WIC-Authorized Stores 2009	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		environment-atlas.aspx		Stores/Redemptions , 2008-09 (2009, USDA)		
	Pct. Change in # WIC-Authorized Stores (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009, USDA)	Pct. Change in WIC-Authorized Stores 2008-09	
	WIC-authorized stores/1,000 population (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores Per 1000 Pop. (2009, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009, USDA)		WIC-Authorized Stores, per 1,000 Pop. 2008 WIC-Authorized Stores, per 1,000 Pop. 2009
	Pct. Change in WIC-Authorized Stores Per 1000 Pop. (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Pct. Change in WIC-Authorized Stores Per 1000 Pop. 2008-2009 (2009, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009, USDA)		Pct. Change in WIC-Authorized Stores, per 1,000 Pop. 2008-09
	WIC redemptions /WIC-	USDA Food Environment Atlas, http://www.ers.usda.gov	Not available	Food Environment/Food Atlas 2011/Access		WIC Redemptions per WIC-Authorized Stores

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	authorized stores (county)	ov/data-products/food-environment-atlas.aspx		to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009, USDA)		2008 WIC Redemptions per WIC-Authorized Stores 2009
	Pct. Change in # of WIC Redemptions Per WIC-Authorized Stores (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Pct. Change in Number of WIC Redemptions per WIC-Authorized Stores 2008-09 (2009, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009, USDA)		Pct. Change in WIC Redemptions per WIC-Authorized Stores, 2008-09
	WIC Dollar Redemptions (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"WIC \$ Redemption"	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009, USDA)		WIC Dollar Redemptions 2008 WIC Dollar Redemptions 200p
	Pct. Change in WIC Dollar Redemptions	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009,		Pct. Change in WIC Dollar Redemptions 2008-09

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
				USDA)		
	Food Deserts (Census Tract)	US Department of Agriculture Website: http://www.usda.gov/wps/portal/usdahome	Food Environment/Access to Food/"Food Desert Census Tracts (2006, USDA)	Not available		
	Percentage of census tracts that have healthier food retailers located within the tract or within 1/2-mile of tract boundaries	The 2007 North American Industry Classification Codes descriptions. Available at http://www.census.gov/eos/www/naics/ Denominator: Census Tract Information, 2000 United States Census Bureau. Available at http://www.census.gov/geo/www/tractez.html	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Selling area (# of square feet) of fresh fruits and vegetables	No known source; see Bertrand, Therien, and Cloutier (2008) for more information on collecting this data: http://journal.cpha.ca/index.php/cjph/article/view/File/1582/1772	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Selling area of fresh fruits and	No known source; see Bertrand, Therien, and Cloutier (2008) for more	Not available. Must be uploaded by community	Not available. Must be uploaded by community		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	vegetables within 500 meter walking distance	information on collecting this data: http://journal.cpha.ca/index.php/cjph/article/view/1582/1772				
	Shelf space of fresh fruits and vegetables in small food stores	No known source; See Farley et al. (2009) for more information on collecting this data: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2729874/	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Number of food retailers (county)	US Economic Census, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml	Not currently available. Could be added by CARES for FAF project.	Not currently available. Could be added by CARES for FAF project		
	Number of food wholesalers (county)	US Economic Census, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml and Local Harvest (Select “wholesale” under “What are you looking for?”): (http://www.localharvest.org/)	Not currently available. Could be added by CARES for FAF project	Not currently available. Could be added by CARES for FAF project		
	Number of Food Servers including	US Economic Census, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml	Not currently available. Could be added by CARES for FAF project	Not currently available. Could be added by CARES for FAF project		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	restaurants (county)					
	Food Wholesalers, Retailers, and Servers Gross Receipts (county)	US Economic Census, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml	Not currently available. Could be added by CARES for FAF project	Not currently available. Could be added by CARES for FAF project		
	Ratio, food consumed home vs away (county)	US Economic Census, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml	Not currently available. Could be added by CARES for FAF project	Not currently available. Could be added by CARES for FAF project		
Direct Food Markets (Farmers, CSA's, NSA's, etc.)	Location of farmers markets (county)	The most up-to-date data is available through the USDA Agricultural Marketing Service Farmers Market Search, http://apps.ams.usda.gov/FarmersMarkets/Default.aspx . Another source to check is the Colorado Farmers market Association database, http://www.coloradofarmers.org/marketfind.htm The USDA Food Environment Atlas, http://www.ers.usda.g	Food Environment/Access to Food/"Locations of Farmers markets Nationwide"	Food Environment/Access to Food/"Locations of Farmers markets Nationwide"	Number of Farmers Markets link to individual Records	Each Record contains Individual Farmers market Name and Address

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		ov/data-products/food-environment-atlas.aspx data may or may not be the most recent available. Additionally Local Harvest (http://www.localharvest.org/farmers-markets/) and Map Muse (http://find.mapmuse.com/interest/farmers-markets) provide maps of farmers markets, although their total numbers are lower than the USDA's.				
	Number of farmers markets (county)	USDA Agricultural Marketing Service Farmers Market Search, http://apps.ams.usda.gov/FarmersMarkets/Default.aspx ; Colorado Farmers market Association database, http://www.coloradofarmers.org/marketfind.htm ; USDA Food Environment Atlas, http://www.ers.usda.g	Can count the locational point data (see above indicator) but better to use the National Reporting Tool	Food Environment/Food Atlas 2011/Local Foods/Farmers markets, 2009-10 (2010, USDA)	Farmers markets 2009 Farmers markets 2010	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		products/food-environment-atlas.aspx Additionally Local Harvest (http://www.localharvest.org/farmers-markets/) and Map Muse (http://find.mapmuse.com/interest/farmer-markets) provide maps of farmers markets, although their total numbers are lower than the USDA's.				
	Farmers markets per 1,000 population	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Local Foods/"Farmers markets, Per 1000 Pop. (2009, USDA)"	Food Environment/Food Atlas 2011/Local Foods/"Farmers markets, 2009-10 (2010, USDA)	Related indicators: Farmers markets, 2009 Farmers markets, 2010 Pct. Change Farmers markets 2009-2010	Farmers Markets, per 1000, Pop. 2009
	Pct. Change in Number of Farmers markets, (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Local Foods/"Pct. Change in Number of Farmers markets, 2009-10 (2010, USDA)"	Food Environment/Food Atlas 2011/Local Foods/"Farmers markets, 2009-10 (2010, USDA)"	Pct. Change Farmers Markets 2009-10	Pct. Change Farmers Markets 2009-10

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Farmers markets per 100,000 state residents	Farmers Market listing available from USDA Farmers Market listing, http://apps.ams.usda.gov/FarmersMarkets/ ; population statistics available from United States Census Bureau, http://www.census.gov/popest/				
	Percentage of farmers markets that accept electronic benefits transfer (EBT)	Numerator: Farmers markets that accept EBT. United States Department of Agriculture, Agricultural Marketing Services. Released August 2008. Farmers market Search at http://apps.ams.usda.gov/FarmersMarkets/ Denominator: Total farmers markets. United States Department of Agriculture, Agricultural Marketing Services. Released August 2008. Farmers market Search at http://apps.ams.usda.gov/FarmersMarkets/	Not currently available. Could be added by CARES for FAF project	Not currently available. Could be added by CARES for FAF project		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Percentage of farmers markets that accept WIC Farmers Market Nutrition Program coupons	Numerator: United States Department of Agriculture, Agricultural Marketing Services. Released August 2008. Farmers market Search at http://apps.ams.usda.gov/FarmersMarkets/ Denominator: Total farmers markets in the area. United States Department of Agriculture, Agricultural Marketing Services. Released August 2008. Farmers market Search at http://apps.ams.usda.gov/FarmersMarkets/	Not currently available. Could be added by CARES for FAF project	Not currently available. Could be added by CARES for FAF project		
	Percentage of farmers markets that accept Senior Farmers Market Nutrition Program (SFMNP) vouchers	USDA Agricultural Marketing Service Farmers Market Search, http://apps.ams.usda.gov/FarmersMarkets/Default.aspx ; also, Colorado Farmers market Association database, http://www.coloradofarmers.org/marketfind.htm	Not currently available. Could be added by CARES for FAF project	Not currently available. Could be added by CARES for FAF project		
	Sales at	No known sources. Requires primary data	Not available. Must be uploaded by	Not available. Must be uploaded by		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	farmers markets using SNAP EBT and WIC FMNP	collection.	community	community		
	Grocery Cooperatives Buying Clubs	Local Harvest (http://www.localharvest.org/food-coops/) and the Coop Directory (http://www.coopdirectory.org/directory.htm) list coops, although Local Harvest's total is slightly higher.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Number of Community Supported Agriculture (CSA's)	Colorado Department of Agriculture, Farm Fresh Directory and CSA listing, http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1178305859691 (may not be exhaustive). Local Harvest additionally has a listing, that has around the same total number as CDAG: http://www.localharvest.org/csa/	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Number of Neighborhood Supported	No known sources. Requires primary data collection.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Agriculture (NSA's)					
	Number & geographical location of community gardens	Colorado Department of Agriculture, Farm Fresh Directory, http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1178305859691 (may not be exhaustive)	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Number of Roadside Stands	No known sources. Requires primary data collection.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	# Farms with Direct Sales (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Local Foods/Farms that Sell Direct to Consumers/\$ Direct Farm Sales (2007, USDA)	Farms with Direct Sales 2007	
	Pct. of Farms that Sell Direct to Consumers	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Local Foods/"Pct. of Farms that Sell Direct to Consumers (2007, USDA)"	Food Environment/Food Atlas 2011/Local Foods/Farms that Sell Direct to Consumers/\$ Direct Farm Sales (2007, USDA)		Pct. Local Farms with Direct Sales, 2007
	\$ Direct	USDA Food Environment	Not Available	Food	Direct Farm Sales	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Farms Sales (county)	Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx		Environment/Food Atlas 2011/Local Foods/Farms that Sell Direct to Consumers/\$ Direct Farm Sales (2007, USDA)	(Dollars)	
	Direct Farm Sales Per Capita, in Dollars	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Local Foods/"Direct Farm Sales Per Capita, in Dollars (2007, USDA)"	Food Environment/Food Atlas 2011/Local Foods/Farms that Sell Direct to Consumers/\$ Direct Farm Sales (2007, USDA)		Direct Farm Sales, per Capita (Dollars) 2007
	Pct. of Farm Income from Sales Directly to Consumers	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Local Foods/"Pct. of Farm Income from Sales Directly to Consumers (2007, USDA)"	Food Environment/Food Atlas 2011/Local Foods/Farms that Sell Direct to Consumers/\$ Direct Farm Sales (2007, USDA)		Pct. Of Farm Sales (Dollars) Direct to Consumer 2007
	Estimated Dollar Value, Farmers Market Sales	The USDA Farmers Market Survey (http://www.farmersmarketsurvey.com/) has data on sales in US regions (\$90,000 for the Rocky Mountain region in 2006),	Not currently available. Could be added by CARES for FAF project	Not currently available. Could be added by CARES for FAF project		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		but no known sources exist for county- or state-level data.				
	Estimated Dollar Value, CSA sales	No known sources. Requires primary data collection.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Estimated Dollar Value, Roadside Stand Sales	No known sources, Requires primary data collection.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Number of Community Gardens	No known sources Requires primary data collection.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
Food Assistance	Avg monthly # SNAP participants (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Avg. Monthly Number Of SNAP Participants, By State (2010,USDA)"			
	Pct. Change in Average Monthly Number of SNAP Participants (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Pct. Change in Average Monthly Number of SNAP Participants, By State 2009-10 (2010,USDA)"			

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Total SNAP benefits (\$1,000) (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Assistance/"Total SNAP Benefits (\$1000)"	Food Environment/Food Atlas 2011/Food Assistance/"Total SNAP Benefits (\$1,000) 2007-08 (2008, USDA)		
	Pct. Change in Total SNAP Benefits in \$1,000s (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Pct. Change in Total SNAP Benefits (\$1,000) 2007-08 (2008, USDA)"			
	Avg monthly SNAP \$ benefits (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available			
	% Low income receiving SNAP (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Pct. Of Low-Income Population Receiving SNAP (2007, USDA)"			
	Avg monthly # WIC	USDA Food Environment Atlas,	Food Environment/Food			

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	participants (state)	http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Atlas 2011/Food Assistance/"Avg. Monthly Number of WIC Participants, By State (2010,USDA)"			
	WIC \$ redemptions (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"WIC Redemptions in dollars (2009, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009, USDA)	WIC Dollar Redemptions 2008 WIC Dollar Redemptions 2008	
	Pct. Change in WIC Dollar Redemptions (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"WIC-Authorized Stores/Redemptions , 2008-09 (2009, USDA)"	Pct. Change in WIC Dollar Redemptions 2008-09	
	# Food pantries & food banks (location)	Feeding America: http://feedingamerica.org/foodbank-results.aspx	Not available. Must be uploaded by community	Not available. Must be uploaded by community	Not available. Must be uploaded by community	Not available. Must be uploaded by community
	Avg monthly # School-lunch participants	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx				

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name		
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool	
				Drop Down Menu Path	First Screen indicators
	(state)	environment-atlas.aspx			
	Avg. Daily Number of School-Lunch Participants (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Avg. Daily Number of School-Lunch Participants, By State (2010,USDA)"		
	Pct. Change in Average Daily Number of School-Lunch Participants (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Pct. Change in Average Daily Number of School-Lunch Participants, By State 2009-10 (2010,USDA)"		
	% students enrolled in free lunch program (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx			
	Percent of Students Free-Lunch Eligible (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Percent of Students Free-Lunch Eligible (2008,		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		environment-atlas.aspx	USDA)”			
	% students enrolled in reduced lunch program (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx				
	Percent of Students Reduced-Price-Lunch Eligible (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/”Percent of Students Reduced-Price-Lunch Eligible (2008, USDA)”			
	Avg monthly # School-breakfast participants (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx				
	Avg. Daily Number of School-Breakfast Participants (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/”Avg. Daily Number of School-Breakfast Participants, By State (2010,USDA)”			
	Pct. Change	USDA Food Environment	Food			

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	in Avg. Daily Number of School-Breakfast Participants (state)	Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Environment/Food Atlas 2011/Food Assistance/"Pct. Change in Avg. Daily Number of School-Breakfast Participants, By State 2009-10 (2010,USDA)"			
	Avg daily # Summer-food participants (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Avg. Daily Number of Summer-Food Participants, By State (2010,USDA)"			
	# Summer-Food program sites (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Assistance/Number of Summer Food Program Sites"	Food Environment/Food Assistance/Number of Summer Food Program Sites"	Number of Summer Food Sites	
	Avg daily meals at Summer-Food sites (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx				
	% of seniors (60+)	No known source; list of senior meal programs available at	Not available. Must be uploaded by community	Not available. Must be uploaded by community	Not available. Must be uploaded by community	Not available. Must be uploaded by community

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	receiving Senior Meals	http://www.mealcall.org/meals-on-wheels/index.htm				
	Avg daily served Child and Adult Care Food Program (CACFP) (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Avg. Daily Served Child and Adult Care, By State (2010,USDA)"	Food Environment/Food Atlas 2011/Food Assistance/"Avg. Daily Served Child and Adult Care, By State 2009-10 (2010,USDA)"		
	Pct. Change in Avg. Daily Served Child and Adult Care (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Assistance/"Pct. Change in Avg. Daily Served Child and Adult Care, By State 2009-10 (2010,USDA)"			
	Number of Community Kitchens (county)	No known source. Requires primary data collection.	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Number of gleaning programs (location)	No known source; some gleaning programs are listed at http://www.usda.gov/news/pubs/gleaning/appb.htm	Not available. Must be uploaded by community	Not available. Must be uploaded by community		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	SNAP participation rate (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx				
Food Eaten at Home	Ratio per capita fruit & vegetables/p prepared food (region)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Eaten at Home/"Ratio Per Capita of Fruits and Vegetables By Prepared Food (2006, USDA)"	Not available		
	Lbs per capita packaged sweet snacks (region)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Eaten at Home/"Lbs. of Pkg. Sweetsnacks Per Capita (2006, USDA)"	Not available		
	Gals per capita soft drinks (region)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Eaten at Home/"Gals. of Soft Drinks Per Capita (2006, USDA)"	Not available		
	Lbs per capita meat	USDA Food Environment Atlas,	Food Environment/Food Atlas 2011/Food	Not available		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	& poultry (region)	http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Eaten at Home/"Lbs. of Meat and Poultry Per Capita (2006, USDA)"			
	Lbs per capita solid fats (region)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Eaten at Home/"Lbs. of Solid Fats Per Capita (2006, USDA)"	Not available		
	Lbs per capita prepared food (region)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Food Eaten at Home/"Lbs. of Prepared Foods Per Capita (2006, USDA)"	Not available		
	Lbs per capita fruit & vegetables (region)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx		Not available		
Food Prices & Expenditures	Relative price of low-fat milk (regional)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Relative Price of Low-Fat Milk (2006,	Not available		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
			USDA)			
	Relative price of sodas (regional)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Relative Price Of Sodas (2006, USDA)	Not available		
	Relative \$ ratio low fat milk/sodas (regional)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Relative Price of Low-Fat Milk Per Sodas (2006, USDA)	Not available		
	Price ratio green-leafy/starchy vegetable (regional)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Price Ratio of Green-Leafy Per Starchy Vegetables (2006, USDA)	Not available		
	Price ratio fruit/package sweet snacks (regional)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-	Food Environment/Food Atlas 2011/Expenditures on	Not available		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		products/food-environment-atlas.aspx	Food/Food Prices/"Price Ratio of Fruit Per Pkg. Sweet Snacks (2006, USDA)			
	Price ratio fruit/package savory snacks (regional)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Price Ratio of Fruit Per Pkg. Savory Snacks (2006, USDA)	Not available		
	Price ratio whole grain/refined grain (regional)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Price Ratio of Wholegrain Per Refined grain (2006, USDA)	Not available		
	Fast-food expenditures per capita (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Fast-food Expenditures Per Capita, By State (2007,USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Fast-food Restaurants 2007-2008 (2008, USDA)"		Fast-Food Expenditures, per Capita, By State 2002 Fast-Food Expenditures, per Capita, By State 2007

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Restaurant expenditures per capita (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Full-service Restaurant Expenditures Per Capita, By State (2007,USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Full-Service Restaurants 2007-2008 (2008, USDA)"		Full-Service Restaurant Expenditures, per Capita, By State 2002 Full-Service Restaurant Expenditures, per Capita, By State 2007
	Chip and Pretzel Sales Tax Vending (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Chip and Pretzel Sales Tax Vending, By State (2008,USDA)"	Not available		
	General Food Sales Tax Retail Stores (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"General Food Sales Tax Retail Stores, By State (2008,USDA)"	Not available		
	Soda Sales	USDA Food Environment	Food	Not available		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Tax Retail Stores (state)	Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Soda Sales Tax Retail Stores, By State (2008,USDA)"			
	Soda Sales Tax Vending (state)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Expenditures on Food/Food Prices/"Soda Sales Tax Vending, By State (2008,USDA)"	Not available		
Transportation Infrastructure	Motorization rate/ % of households owning at least one car	Data on households owning no cars is available from the USDA Food Environment Atlas, http://maps.ers.usda.gov/FoodAtlas/ . Data on the number of cars owned by each household are available from the housing characteristics section of the US Census' American Factfinder, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml	Not available			

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	# HH no car & > 1 mile to store (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"Households with No Car and > 1 Mile from a Store (2006, USDA)"	Number of Household w/o Car and > 1 Miles from a Store (2006, USDA)	
	% HH no car & > 1 mile to store (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/"Pct. of Households With No Car And >1 Mile From a Store (2006, USDA)"	Food Environment/Food Atlas 2011/Access to Food/"Households with No Car and > 1 Mile from a Store (2006, USDA)"		Pct. of Households w/o Car and >1 Mile from a Store
	# Households w/o Car & >10 miles from a Store (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/"Households with No Car and > 10 Miles from a Store (2006, USDA)"	Households W/O Car and >10 Miles From a Store	
	Pct. of Households With No Car & >10 Mile From a Store (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/" Pct. of Households With No Car And >10 Miles	Food Environment/Food Atlas 2011/Access to Food/"Households with No Car and >		Pct. of Households W/O Car and >10 Miles From a Store

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
			From a Store (2006, USDA)”	10 Miles from a Store (2006, USDA)”		
	# Low Income Population Living > 1 Mile from a Store (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/” Households with No Car and > 1 Mile from a Store (2006, USDA)”	Low Income Pop Living >1 Mile From a Store	
	% Low Income HH no car & > 1 mile to store (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx				
	Pct. of Low Income Population Living >1 Mile From a Store (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/”Pct. of Low Income Population Living >1 Mile From a Store (2006, USDA)”	Food Environment/Food Atlas 2011/Access to Food/” Households with No Car and > 1 Miles from a Store (2006, USDA)”		Pct. of Low Income Pop. Living >1 Mile from a Store
	# Low Income Population Living > 10 Miles from a	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Not available	Food Environment/Food Atlas 2011/Access to Food/”Households with No Car and >	Low Income Pop. Living >10 Miles from a Store	

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
	Store (county)			10 Miles from a Store (2006, USDA)”		
	Pct. of Low Income Population Living >10 Miles From a Store (county)	USDA Food Environment Atlas, http://www.ers.usda.gov/data-products/food-environment-atlas.aspx	Food Environment/Food Atlas 2011/Access to Food/”Pct. of Low Income Population Living >10 Miles From a Store (2006, USDA)”	Food Environment/Food Atlas 2011/Access to Food/”Households with No Car and > 10 Miles from a Store (2006, USDA)”		Pct. of Low Income Pop. Living >10 Miles From a Store
	Public transportation access by geographical location	No known comprehensive source; list of public transportation agencies available at http://www.apta.com/resources/links/unitedstates/Pages/ColoradoTransitLinks.aspx	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Paratransit access by geographical location	No known comprehensive source; list of public transportation agencies available at http://www.apta.com/resources/links/unitedstates/Pages/ColoradoTransitLinks.aspx	Not available. Must be uploaded by community	Not available. Must be uploaded by community		
	Retail stores on public transportation routes	No known comprehensive source; list of public transportation agencies available at	Not available. Must be uploaded by community	Not available. Must be uploaded by community		

Category	Indicator (geographic level)	Data Source Location that CARES Accesses	Location on the CARES Platforms & Indicator Name			
			1. National Interactive MAPS – Drop Down Menu Path	2. National Reporting Tool		
				Drop Down Menu Path	First Screen indicators	Data Record Indicators
		http://www.apta.com/resources/links/unitedstates/Pages/ColoradoTransitLinks.aspx				
	Public transportation schedules	No known comprehensive source; list of public transportation agencies available at http://www.apta.com/resources/links/unitedstates/Pages/ColoradoTransitLinks.aspx	Not available. Must be uploaded by community	Not available. Must be uploaded by community		

APPENDIX B: INDICATORS OF COMMUNITY FOOD PROGRAMS WORKSHEET

Data on community food programs is dispersed. There is no one best database; therefore you will need to track it down through a variety of sources. Below is a list of databases to get you started:

Databases:

1. [US Department of Housing and Urban Development: Homes & Communities](#) – Food Banks in Colorado covers 35 counties across Colorado.
2. [FoodPantries.org](#) has a list of food pantries, food banks, and soup kitchens across Colorado.
3. [Homeless Shelter Directory: Colorado Emergency Food Programs](#) is a searchable database by city locations of soup kitchens, food banks and pantries.
4. [Feeding America: Colorado Food Banks](#) lists their network members. The list, therefore, is not exhaustive. However, one additional feature not available on the other sites is state statistics related to food insecurity (food insecurity rate, poverty rate, child food insecurity rate, child poverty rate, population, and unemployment rate).

Indicator	Value	Modules
# of food banks/food pantries		Access
% of food banks/food pantries per capita		Access
# soup kitchens		Access
# soup kitchens per capita		Access

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