

A foodshed describes the area from which you and your city get food. It answers the question, “where does my food come from?” Recent growth in interest in local food and the sustainability of the food system has led to another question being asked: “where *could* my food come from?” One critical factor related to this question is the capacity of local agriculture to meet the food needs of local people — could the farms in your region produce all the food the people in your city need? Could we all eat local foods?

To answer this question, we need to consider three factors:

1. What food do the people in your city need?
2. Where can that food be produced?
3. How can we all get local food?

WHAT FOOD DO THE PEOPLE IN YOUR CITY NEED?

The basic answer to this question is that your city needs the amount of food someone consumes in a year, multiplied by the number of people in the city. Diets are made up of different food groups: protein foods (beans and legumes, eggs, meats and fish), dairy foods (milk, cheese, yogurts and other products), grains and cereals, fruits, vegetables and oils. The current obesity prevalence is a reminder that Americans consume a substantial amount of solid fats and added sugars, too. Of course, our food and nutritional needs vary from person to person and depend on a number of factors — such as age, gender, physical activity level and weight goals — and are shaped by personal preference, family or cultural influences, and special health conditions. To estimate the amounts of different foods your city will need, we generally start with a typical person and diet based on census and food consumption data (information about typical dietary patterns in the U.S. is available in the [USDA Dietary Guidelines for Americans 2010](#), page 51).

WHERE CAN THAT FOOD BE PRODUCED?

Farms produce commodities, such as wheat, that are processed into the foods we eat. Food production includes not only farms and ranches, but a whole system of infrastructure, including storage facilities, mills, processing plants (for canning and freezing), slaughterhouses, bakeries (and other secondary food processors), wholesalers and distributors, retail outlets and millions of homes, restaurants and institutions that prepare food. While all of these steps are critical parts of the food system, our focus is on the capacity of land to produce food and farm commodities.

Not all farms are able to produce all types of foods. Climate, soil quality, water availability and topography all affect the variety and quantity of food a piece of land can produce. In general, crops that are suitable for human consumption require high-quality land, which has the right combination of soil, sun and water. Forage crops, such as hay, that are suitable for animal consumption, do not have the same requirements and can be produced on land without the perfect combination of variables. In New York state, data is available about the location of land available for agriculture, the types of soil across the state and the potential productivity of the soil types. Combining these data allow us to estimate just how much of these crops could be produced at different locations throughout the state.

HOW CAN WE ALL GET LOCAL FOOD?

When considering your potential local foodshed, you must determine the types and amounts of foods your city needs and what your regional farms are able to produce. It is also important to consider the other cities in your area, what foods they will need and what their local farms could produce. If a neighboring city is close by, has a lot of people and does not have much farmland, it may be necessary to coordinate with that city so that everyone can eat local food. It may be that *your* food needs to travel a little farther in order to keep the total distance travelled by *all* food small. In New York state, for example, New York City, in the southeast corner of the state, has a large population and not much land available for agriculture. In order for New York City to have access to locally produced food, Albany, a smaller city north of New York City, would need to buy food produced on northern farms, instead of the closer southern farms. Albany’s food would travel a little farther, but the total distance travelled by *all* food in New York would be reduced.