

Local Food Indicators

A Checklist for Assessing Local Food Systems

A Resilient Communities Project—GreenStep Cities Guide



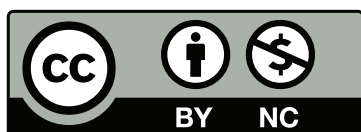
Resilient Communities Project

UNIVERSITY OF MINNESOTA

Driven to DiscoverSM

This report was produced by the Resilient Communities Project (RCP), a program at the University of Minnesota whose mission is to connect communities in Minnesota with U of MN faculty and students to advance local sustainability and resilience through collaborative, course-based projects. RCP is a program of the Center for Urban and Regional Affairs (CURA). More information at <http://rcp.umn.edu>. Funding for the report was provided by GreenStep Cities, a program of the Minnesota Pollution Control Agency, through a grant from the McKnight Foundation. More information at <https://greenstep.pca.state.mn.us>.

This work is licensed under the Creative Commons Attribution-NonCommercial 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/3.0> or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA. Any reproduction, distribution, or derivative use of this work under this license






must be accompanied by the following attribution: "Produced by the Resilient Communities Project at the University of Minnesota, 2016. Reproduced under a Creative Commons Attribution-NonCommercial 3.0 Unported License."

This publication may be available in alternate formats upon request.



Resilient Communities Project

University of Minnesota
330 HHHSPA
301—19th Avenue South
Minneapolis, Minnesota 55455
Phone: (612) 625-7501
E-mail: rcp@umn.edu
Website: <http://rcp.umn.edu>
 @RCPumn
 RCPumn
 Resilient Communities



Minnesota GreenStep Cities

Minnesota GreenStep Cities

Minnesota Pollution Control Agency—
Assistance Division
520 Lafayette Rd. N
St. Paul, MN 55155
Phone: (651) 757-2594
Website: <http://www.MnGreenStep.org>
 @GreenStepCities
 @mngreenstep

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

Acknowledgements

This document was prepared by the University of Minnesota's Resilient Communities Project (RCP) for the Minnesota GreenStep Cities Program. This resource was adapted from student work completed in partnership with RCP and the City of Rosemount during the 2014–2015 academic year. Although the original report was developed for a specific community, students' findings and recommendations have been synthesized and generalized, and additional research has been conducted where necessary, to produce a resource that is relevant to communities throughout Minnesota.

Rooted in Rosemount: Promoting Urban Agriculture Systems

UMN Course: PA 5242: Environmental Planning, Policy, and Decision Making

UMN Student Authors: Laurelyn Sandkamp and Emily Jorgensen

City Project Lead: Eric Zweber, Senior Planner, City of Rosemount

UMN Course Instructor: Carissa Schively Slotterback, Humphrey School of Public Affairs

Original Student Report: <https://conservancy.umn.edu/handle/11299/180435>

INTRODUCTION

Encouraging a successful local food system is a step that cities can take to build more resilient communities. Providing more local produce options gives residents the opportunity to consume more fruits and vegetables, which can in turn decrease the prevalence of several chronic diseases, including hypertension and cancer.¹



In addition to the physical health benefits associated with improving access to fruits and vegetables, strengthening the local food system can help support the local economy. When residents buy local food, those dollars remain in the community. Local food can be sourced to local restaurants, benefiting both the grower and the restaurant owner.

Opportunities for community gardening encourage residents to come together and socialize, strengthening social connections and engagement with the community. Community gardening also builds more resident investment in the community.

This local food indicator checklist is meant to provide communities with measures to assess their current local food system. The checklist may be used at the beginning of an initiative to strengthen the local food system, and again at the end to measure progress.

Local Food Indicators

Key indicators can be used to measure the success of the local food system on an annual, or other regularly determined, basis. Initial measurements should be taken to determine a baseline for where the local food system is currently operating. Subsequent measurements can then be compared to baseline measures to assess changes over time.

The indicators are organized by components of a food system to encourage systems-level thinking.² Components of the food system are connected, and changes in one area will have consequences in another. When assessing the indicators listed below, the food system should be thought of as an integrated cycle rather than as individual components.

Not all the indicators listed below will be applicable to all communities. Some indicators, such as number of farmers retiring with a succession plan, are intended for more rural communities. Others, such as the number of food insecure households, are applicable to all communities. These indicators are provided as examples. Cities are encouraged to tailor the indicators to their specific contexts.



Local Food Indicator Checklist

Listed by food system component:

RESOURCE ORIGIN

Social/Health Indicators

Economic Indicators

- Percent of crops lost as a result of disease or pests _____

Data Sources: _____

FARM INPUTS AND PRODUCTION

Social/Health Indicators

- Number and distribution of city parks offering community gardening space _____
- Square feet of community gardening space allotted by the city _____
- Average age of farmers _____
- Number of primary farm operators also working off the farm (farmers with more than one job) _____
- Number of farmers retiring with a succession plan* _____
- Number of new farmers entering the market* _____

Economic Indicators

- Number of local farming operations and food manufacturers _____
- Acres of land in the "Agricultural" and "Agricultural - Preserve" zoning designation _____
- Farm revenue and farm expenditure _____
- Dollar amount of small business grants and loans awarded to food-related businesses _____
- Percentage of people employed in agriculture (both primary farm operators and part time/migrant labor force) _____
- Loss of farmland/land under significant development pressure _____
- Agricultural revenue in the county _____

Data Sources: _____



*This measure should be collected through interviews with farmers as an additional measure when needed. Focus should be placed on the average age of farmers as this data is more readily available.

**It is difficult to measure the economic costs associated with poor nutrition, but an understanding of the impacts beyond the physical health effects is important. The economic costs of poor nutrition and obesity include direct medical costs, productivity costs, transportation costs, and human capital costs.³

PROCESSING AND DISTRIBUTION

Social/Health Indicators

- Number of students taught basic cooking skills in the school district and through community classes _____

Economic Indicators

- Number of hours commercial kitchen space is rented and number of entities kitchen space is rented to _____
- Amount of locally-grown or locally-produced food sold in local stores _____
- Dollars spent on locally-grown or locally-produced food by local school district _____
- Pounds of locally-grown or locally-produced food served in local school district _____
- Revenue from food processors and food distributors (as a part of the county's economy) _____
- Percentage of people employed in the food industry _____

Data Sources: _____

CONSUMPTION AND DEMAND

Social/Health Indicators

- Fruit and vegetable consumption _____
- Prevalence of diabetes and obesity _____
- Number of food insecure households (also look specifically at number of food insecure households within the farming community itself) _____
- Percentage of population that qualifies for social safety net programs (SNAP, WIC, etc.) _____
- Percentage of population that uses social safety net programs (SNAP, WIC, etc.) _____
- Percentage of students that qualify for federal free and reduced lunch programs _____

Economic Indicators

- Number of Supplemental Nutrition Assistance Program (SNAP) benefit dollars spent at local farmers market _____
- Number of days locally-grown or locally-produced food served in local school district _____
- Number of restaurants committed to sourcing locally-grown or locally-produced food _____
- Economic costs associated with poor nutrition** _____

Data Sources: _____

WASTE MANAGEMENT

Social/Health Indicators

- Amount of food donated to food shelves rather than thrown away _____
- Food waste reduction measures put in place at the source (in the fields, during processing, etc.) _____

Economic Indicators

- Number of restaurants and institutions who compost their waste _____
- Creation of municipal composting program _____

Data Sources: _____

Methods of Preserving Land for Agricultural Use

Preservation of agricultural land is an integral component of building a strong food system. The following strategies are examples of methods through which to preserve land for agricultural use.

OVERLAY/FLOATING ZONES

An additional layer of requirements on top of existing zoning regulations. These zones are intended to provide extra regulation in areas that are particularly sensitive to the effects of development.

CONSERVATION EASEMENTS

In most cases, permanent and binding contracts in which the owner turns over development rights to the land to a qualified organization that will hold them, as well as monitor and enforce the ban against development.

PURCHASE OF DEVELOPMENT RIGHTS (PDR)

A PDR program pays landowners for the development rights associated with their land. The landowner retains full ownership of the land, but the right to develop it is retired and a conservation easement is placed on it to assure compliance.

TRANSFER OF DEVELOPMENT RIGHTS (TDR)

TDR programs move development rights from high-quality open space to areas that are designated for urban development. Landowners in sending zones voluntarily choose to sell development rights to developers who use the rights to develop at increased densities in receiving zones. Landowners who sell their development rights place a permanent conservation easement on their property.

References

1. Design for Health (2013) Food Access. Retrieved from: <http://designforhealth.net/food-access/>
2. Conceptualization of the food system is based on the following resources:
Carter, R. (2015) "What is the food system and why does it matter?" Food Solutions New England. Retrieved from: <http://www.foodsolutionsne.org/vermont/what-food-system-and-why-does-it-matter>
Heller, M., Keoleian G. (2000) Life Cycle-Based Sustainability Indicators for Assessment of the U.S. Food System. Center for Sustainable Systems, University of Michigan. Retrieved from: http://css.snre.umich.edu/css_doc/CSS00-04.pdf
King, R., Anderson, M., DiGiacomo, G., Mulla, D., Wallinga, D. (2012) State Level Food System Indicators. Healthy Foods, Healthy Lives Institute, University of Minnesota. Retrieved from: https://www.hfhl.umn.edu/sites/hfhl.umn.edu/files/state_level_food_system_indicators_report_2012.pdf
3. Hammond, R., Levine, R. (2010) The economic impact of obesity in the United States *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy* 2010(3) 285-295 doi:10.2147/DMSOTT.S7384

Additional technical assistance was provided by Jennifer Whittaker in the Urban and Regional Planning Department at the University at Buffalo, The State University of New York.

Center for Urban and
Regional Affairs (CURA)


UNIVERSITY OF MINNESOTA

RCP.UMN.EDU

330 HHHSPA, 301 19th Avenue South, Minneapolis, MN 55455 | 612-625-1551



© 2016 Regents of the University of Minnesota. All rights reserved. The University of Minnesota is an equal opportunity educator and employer.
This publication/material is available in alternative formats upon request. Direct requests to cura@umn.edu or 612-625-1551.

 Printed on recycled and recyclable paper with at least 10 percent postconsumer waste material.