

Local Food Economies as a Strategy for Rural Development



Rural Economic & Community Development
through Local Food System Expansion in North Carolina

Emily Edmonds | CEFS – NCGT | May 19, 2017

Presented to APA-NC Section 5: Edenton, NC

www.ncgrowingtogether.org | www.localfoodeconomies.org

North Carolina Growing Together is a five-year USDA-funded project aiming to strengthen and expand local and regional food supply chains and to model this work for other geographies in the U.S.



Farmer capacity

- Food safety, market channels, production techniques, buyer connections



Supply chain expansion

- Wholesale and institutional partner connections, infrastructure assessment and business feasibility



Producer & processor capacity

- Resource development for meat, dairy, seafood, produce, and value-added products



Supportive business environments

- Local government integration; small business development and support for food-based entrepreneurs



ranks 8th in the nation for agricultural receipts



accounts for more than 1/6 of the state's jobs and income



is the #1 industry in North Carolina



brings in more than \$84 billion to the state's economy

Today's Session

- Overview of agriculture & food business development in North Carolina
 - Local Food Economies & Supply Chains
 - NC & National Ag Statistics
 - Partners
- NCGT Models for expanding food systems & supply chains
 - Working with wholesale chains & institutional buyers
 - Working with business developers
 - Working in local & regional governments
- Examples from NC towns, counties, and councils of government
- Resources and tools



Local Food Economies

Local food economies encompass everything that is associated with a local food system.

This includes the entire food supply chain – from production to consumption – as well as affiliated businesses and structures.

PRODUCTION

Land use, land protections, the business of farming

Suppliers' suppliers
Direct suppliers
Farmers & producers

STORAGE & PROCESSING

Cold storage, value-added food products, food manufacturing

Food hubs/aggregation
Cold storage units
Processing centers
Commercial kitchens

Local
Food
Economy

DISTRIBUTION & SALES

Wholesale and retail supply chains, transportation channels, warehousing

Trucking companies
Grocery warehouses
Sales teams

CONSUMPTION & ACCESS

Wholesale, retail, direct-to-consumer sales, food security initiatives

Restaurants, specialty markets, institutions, CSAs, farmers' markets, grocery stores, food banks/pantries



Local Food Supply Chains

Producer Inputs

seeds, equipment, stock, land, water



Production

land, water, the business of farming, technique, methods, labor, certifications



Storage & Processing

harvest, cooling & storage, packing, processing, food manufacturing, aggregation



Distribution & Sales

wholesale/retail, institutional buyers, chefs, trucking, warehousing, sales teams



Consumption & Access

grocery & retail outlets, foodservice, food banks/pantries, farmers markets



Common food system terms and definitions



- ▶ **Agricultural Economic Development**
 - ▶ Encompasses financial and regulatory structures that encourage farm success
 - ▶ Includes policies that impact food processors and other supply chain businesses, including transportation
- ▶ **Aggregation**
 - ▶ Popular “food hub” and other ag center function, pulling together smaller volumes of agricultural products into larger orders for wholesale markets
 - ▶ Some food hubs serve additional purposes
- ▶ **Food Access & Consumption**
 - ▶ Covers emergency and non-emergency food access for people at all income levels
 - ▶ Includes front-line food services like pantries and kitchens
 - ▶ Also includes topics like access to healthy foods, food desert prevalence, distance to food sources, and other factors
- ▶ **GAP & FSMA**
 - ▶ GAP: Good Agricultural Practices, voluntary USDA certification program (req. by some buyers)
 - ▶ GHP: Good Handling Practices (similar, but for food processing facilities)
 - ▶ FSMA: update to ancient food safety regulations; not connected to GAP
- ▶ **The Great Variety of Kitchens**
 - ▶ Shared-use kitchens, commercial kitchens, co-op kitchens...

NATIONAL AG STATISTICS



of American consumers **prefer food grown in the U.S.** from regional sources



13 million acres of farmland

needed to produce the minimum daily requirement of fruits and veggies in the US for US consumers by 2020



US Farmers' markets have increased

350%
since 1994



USDA has maintained farm-to-fork initiatives since 2000

N.C. AG STATISTICS



Agriculture & agribusiness account for **1/6 of NC's income and employees.**



Total income in Agriculture and Food industries in NC is **\$84.5 billion (a 14.6% share of NC income).**



NC ranks **8th in the nation** for agricultural production. More than **17% of gross state product** is contributed by food, forest and fiber industries.



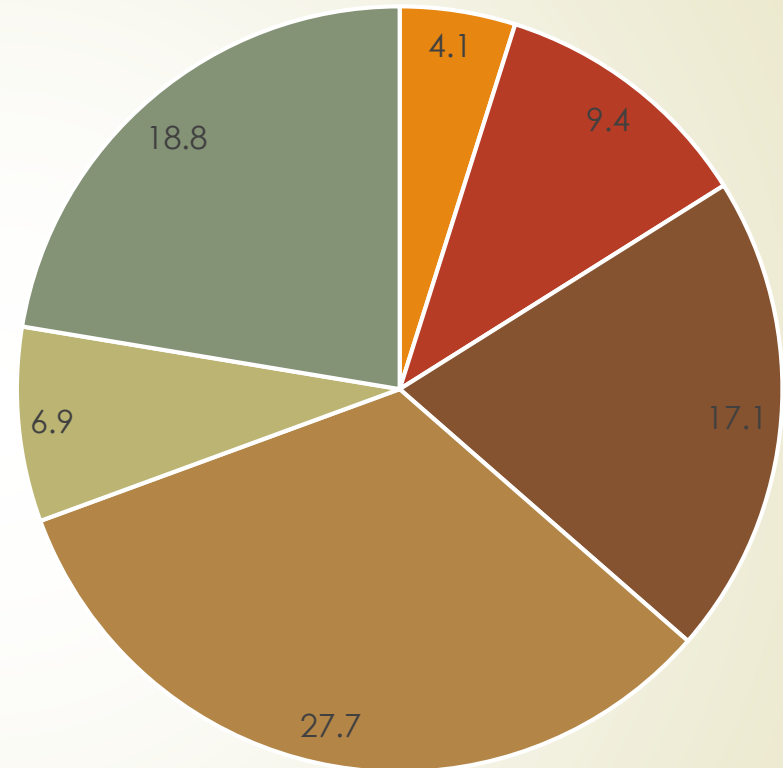
Of all NC farms, almost 75% are family-owned small to medium-sized businesses reporting less than \$100,000 in farm revenue per year.

So, what's local?

Food systems are unique to the geographic, cultural, and market attributes of their regions. Local and regional governments are encouraged to create their own definitions of "local" foods for use in branding and marketing efforts.

NORTH CAROLINA'S FOOD ECONOMY

\$84 billion in Agriculture, Food, and Forestry Industries
(Sept. 2016)



- Fiber
- Forestry
- Farming & production
- Food manufacturing
- Wholesaling
- Retailing

Data provided by Mike Walden, Reynolds Distinguished Professor and Extension Economist, N.C. State University, College of Agriculture and Life Sciences

**Data sources are provided on the final slide.*

COMMON ISSUES IN DEVELOPING FARM AND FOOD BUSINESSES

Succession

Who farms next?

- Average age of NC farmer: 59
- Average age of US farmer: 55
- Opportunities for rural youth (countering the “brain drain” problem)

Land Loss

Prioritizing farm-conscious growth

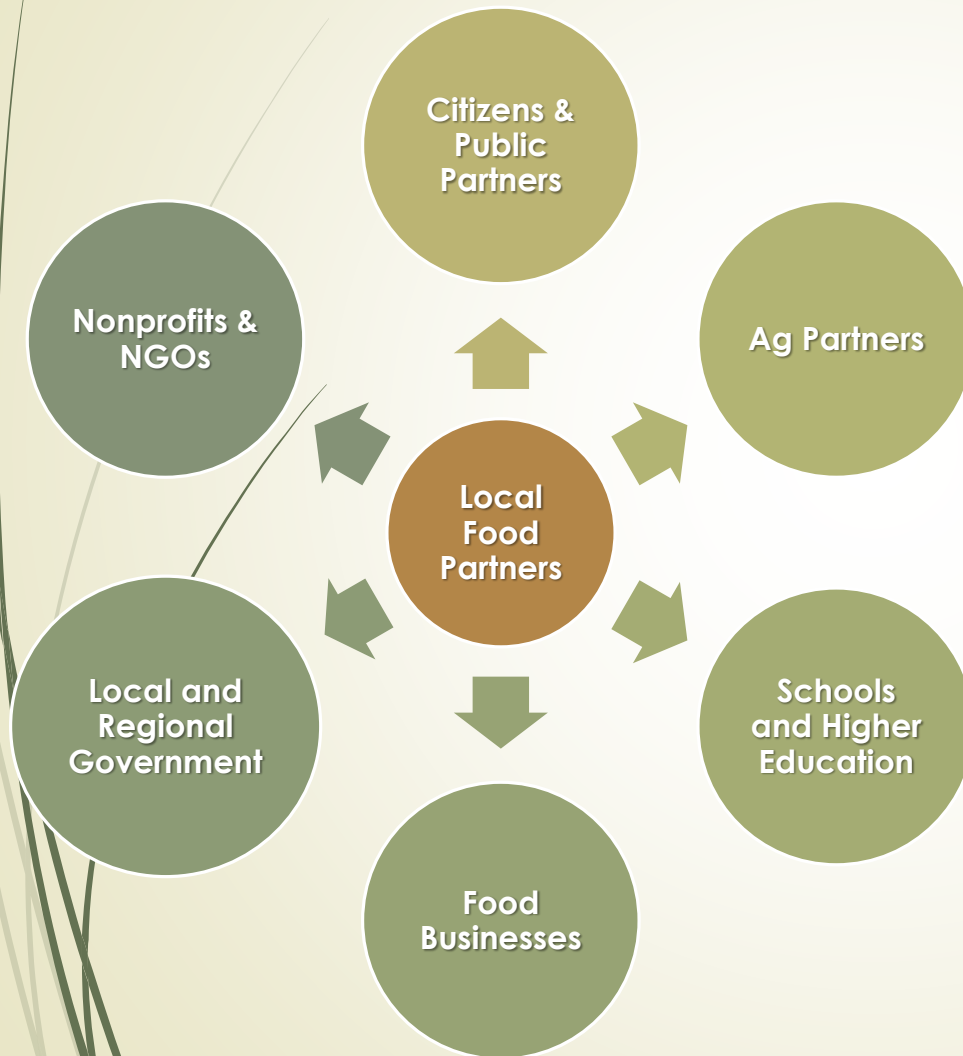
- 2016: 40 acres per hour
- Prime soils & water access

Economics

Regional impacts

- Economic impact of agriculture & food entrepreneurship
- Entrepreneurship & the resiliency of small- and mid-scale business networks
- Rural-urban market relationships
- Revitalization of downtowns, vacant land, and urban centers
- Systems approach: private-sector opportunities across multiple industries
- Agritourism

COLLABORATIVE OPPORTUNITIES IN LOCAL FOOD ECONOMIES



Leveraging Collaboration for Successful Projects

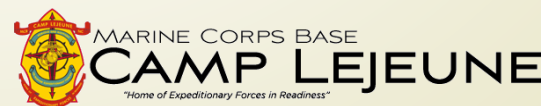
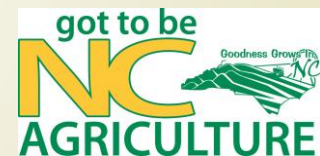
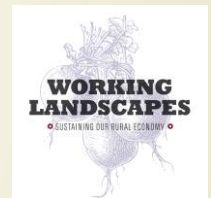
The development of local food economies relies on nontraditional partners and a regional approach to infrastructure, transportation and land use.

PARTNERS

- ▶ Traditional partners (other local government staff, councils of government)
- ▶ Ag partners (Extension Service, NCDA)
- ▶ Nontraditional partners (public health, transportation & infrastructure, small business centers & workforce development, SWCDs)
- ▶ Community partners (food councils, nonprofits, faith-based groups)
- ▶ Higher education partners (universities and community colleges)
- ▶ Nonprofits & NGOs
- ▶ Social networks

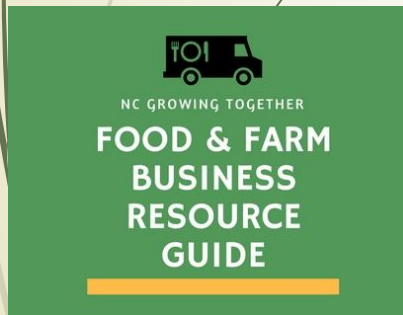
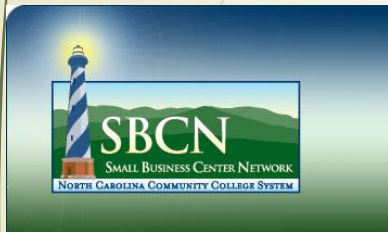
Working with Supply Chain Partners

- ▶ NCGT model: Partner with supply chain actors to determine needs & opportunities.
 - ▶ Opportunities to backhaul products
 - ▶ Infrastructure and storage needs
 - ▶ Market opportunities and research
 - ▶ Distribution considerations
 - ▶ Training and certifications
 - ▶ Packaging and handling needs



Working with Business Developers

sbtcdc



- ▶ NCGT Model: Understand & fill capacity needs for existing, on-the-ground networks that support farm & food networks.
 - ▶ Identify training needs for counselors
 - ▶ Legal issues in food & farm businesses
 - ▶ Labor laws for farms
 - ▶ Family business & estate / succession planning; heirs property
 - ▶ Food safety & compliance
 - ▶ Accounting & tax laws; recordkeeping
 - ▶ Zoning exemptions: agricultural & commercial considerations
 - ▶ Provide training opportunities
 - ▶ NC REAL Certification
 - ▶ Legal training
 - ▶ Webinar series
 - ▶ Work with lenders & financing agencies

June 20, 2017 | 11 a.m.-noon

HEIRS PROPERTY AND SUCCESSION PLANNING FOR FARMERS AND LANDOWNERS IN NORTH CAROLINA

A Webinar for Small Business Counselors and Cooperative Extension

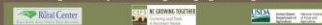
PRESENTED BY THE NORTH CAROLINA GROWING TOGETHER PROJECT AT THE CENTER FOR ENTREPRENEURSHIP, FINANCING, SYSTEMS & THE NORTH CAROLINA RURAL CENTER

What you'll learn: This webinar will provide an overview of the importance of succession and estate planning to landowners and farmers around the state, with a special emphasis on the challenges and opportunities for their property assets. You'll also hear about ways that landowners can maximize their investments from land that is no longer in agricultural production, including through forestry management plans, conservation easements, hunting and wildlife leases, and more.

Originally from Jack Maxson, NC, Allen graduated from UNC-Chapel Hill and Pepperdine School of Law, a leader in being a lawyer. Maxson has extensive experience in family businesses and a Master of Business Administration degree. He has worked with many businesses for professional representation as a lawyer and executor and has focused on helping individuals and families maximize and grow wealth. His concentration is in advising for estate planning for clients with estate planning, estate administration, and non-property interests. Maxson is a frequent speaker at the university, state, and national level of legal seminars, speaking about all providing community members with a greater understanding about legal issues that impact them and the economy who work on their assets. He speaks on the basis of research by UNC-Chapel Hill, North Carolina Commissioner of Higher Education, and Cooper Institute Center and an advisory board for the Center for Entrepreneurship, Systems, and the North Carolina Rural Center and an advisory board for the Center for Entrepreneurship, Systems, and the North Carolina Rural Center of the Good Home Fund, which provides residential and other financial opportunities for young people.

SPACE IS LIMITED!

Register today at www.ncgrowingtogether.org/events.



Working in Local & Regional Governments

A Guide for Governments on Building Local Food Economies

A guide for planners, economic developers, and local government professionals

Published by the Center for Environmental Farming Systems, 2016.

The Center for Environmental Farming Systems is a partnership between North Carolina Agricultural and Technological University (N.C. A&T), North Carolina State University (NCSU), and the North Carolina Department of Agriculture and Consumer Sciences (NCDACS).



Sustainable Farms. Local Foods. Healthy Communities.
www.cefs.ncsu.edu | www.localfoodeconomies.org

- ▶ **Planning & Land Use for Local Food Economies**
 - ▶ planning, land use, and zoning issues that directly impact farms, food businesses, and other contributors to the local food economy
- ▶ **Economic & Community Development for Local Food Economies**
 - ▶ strategies for the retention, creation, expansion, and recruitment of farm and food businesses
- ▶ **Collaborating for Growth**
 - ▶ recommendations for non-traditional partnerships and inclusive planning strategies that bring together disparate elements of local food economies



URBAN AGRICULTURE *in Winston-Salem*



Winston-Salem Planning & Development Services
 100 E. First Street
 Winston-Salem, NC 27101
www.cityofws.org/planning

STEP BY STEP QUESTION & ANSWERS

- Does your urban agriculture project require a permit?
 - If your project is located on the same lot as your house and is within the City of Winston-Salem – No.
 - If your project was developed after May 4, 2015, is located in the City of Winston-Salem, and is on land that is not where your home is located – Yes.
- Contact the Inspections Division to determine your property zoning designation.
- Fill out an application and pay the \$25 application fee.
- Depending on your location, you may be required to go before the Board of Adjustment.
- If required, attend the public hearing.
- If approved, contact the Inspections Division and purchase all necessary permits.
- The Urban Agriculture Ordinance applies *only* to plant cultivation. Livestock is regulated under Chapter 6 of the City Code.

GENERAL STANDARDS FOR URBAN AGRICULTURE

- This ordinance only applies to properties within the City of Winston-Salem.
- The application cost for all gardens is \$25.
- The on-site sale and distribution of produce, grown on site, is allowed.
- A minimum setback of 5 feet from neighboring property lines and rights-of-way is required.
- Certain structures (such as greenhouses and storage buildings) will require additional permits and fees as determined by the Inspections Division. Contact Inspections staff for more information.
- Site plans may be required for projects within non-residential zoning districts.
- One parking space is required per 20,000 square feet of lot area for sites in nonresidential districts.
- Parking requirements will be determined on a case-by-case basis by the Board of Adjustment for sites in residential zoning districts.

Zoning Districts Which Allow Urban Agriculture

Single-Family Residential Zoning Districts	Multifamily Zoning Districts	Nonresidential Zoning Districts
RS-40 RS-30 RS-20 RS-15 RS-12 RS-9 RS-7 MH	RSQ RM-5 RM-8 RM-12 RM-16 RMU	PB LB HB GB LI GI CI MU-S IP C AG

Residential zoning districts require Board of Adjustment Special Use Permit (Requires public hearing, see back of brochure)

Nonresidential zoning districts require a permit from the Zoning Officer



DEFINITION OF URBAN AGRICULTURE

Legacy 2030, the comprehensive plan for Winston-Salem and Forsyth County, recommends encouraging healthy food production in urban areas as well as rural areas. It also calls for removing barriers to using urban land and buildings for various forms of urban agriculture production. The Winston-Salem City Council adopted an Urban Agriculture Ordinance to encourage urban food production and gardens in areas throughout the city.

Urban Agriculture is the growing, processing, and distribution of food and other agricultural products through plant cultivation. It may include plant cultivation and the growing of non-food crops such as herbs and ornamentals. This use may include accessory structures and buildings used for agriculture-related storage or field packing. Urban Agriculture does not include the consumption or sale of produce grown on residential property by the owner/occupants of the property.

AGRICULTURE TYPE EXAMPLES



Raised Bed Garden: A form of gardening in which soil is formed in a bed which can be of any shape or length. The soil is raised above the surrounding soil, and is sometimes enclosed by a frame, generally made of wood, rock, or concrete blocks.



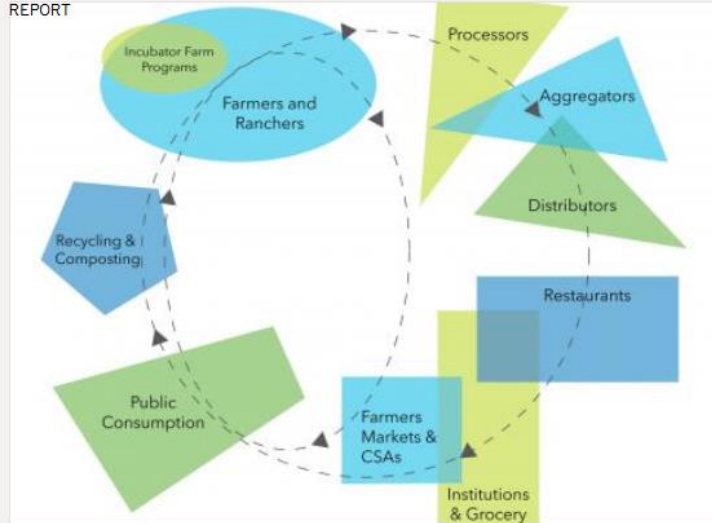
Aquaponics: Any system that combines conventional agriculture with hydroponics (cultivating plants in water) in a symbiotic environment.



Greenhouse/glasshouse: A structure with walls and roof made chiefly of transparent materials, in which plants requiring regulated climatic conditions are grown.

Zoning and land use strategies & policies
Town of Matthews (Unified Development Ordinance)
City of Winston-Salem/Forsyth County

REPORT



Planning for a Networked Produce Storage and Aggregation System for the Piedmont Triad Region

4/17/2014

Mission

Our mission is to promote the economic development of agriculture and agribusiness in Henderson County. We are a public and privately funded non-profit organization assisting new and existing operations to foster growth in the industry through identifying production and market opportunities, promotion, education, advocacy, utilization of financial resources, gathering and sharing of pertinent information and by coordinating ag-related development.

How we Support the Mission

- Identifying production and marketing opportunities for our members
- Promoting the industry, educating producers, and the public, and providing legislative advocacy
- Locating resources and facilities for existing and potential growers and producers
- Connecting individuals and coordinating ag-related projects



Comprehensive & Strategic Planning: Agricultural Economic Development Plans

[Henderson County Agricultural Economic Development Strategy](#)

[Durham County Agricultural Economic Development Plan](#)
[Piedmont Triad Piedmont Together Health & Food Strategy](#)

Healthy, Fresh, Local Food:
An Action Plan for
Increasing Availability and Access
in Beaufort County, North Carolina



November 2013

Prepared by:

Mid-East Commission
www.mideastcom.org

and

Carolina Farm Stewardship Association
www.carolinafarmstewards.org



With the generous support of:
Kate B. Reynolds Charitable Trust



SENC Regional Food Systems Assessment:
Local Food, Food Insecurity, and Healthy Eating & Nutrition



Southeastern North Carolina
Regional Health Collaborative

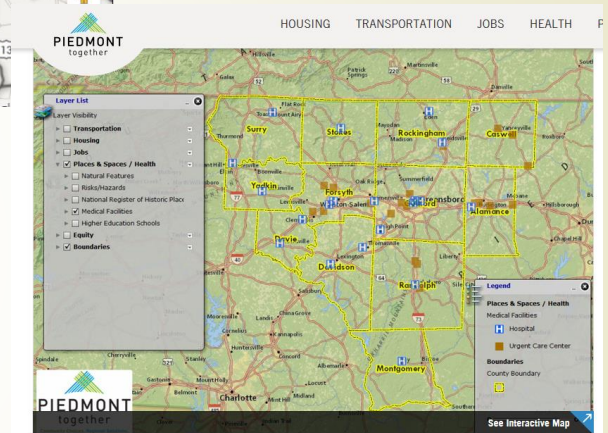
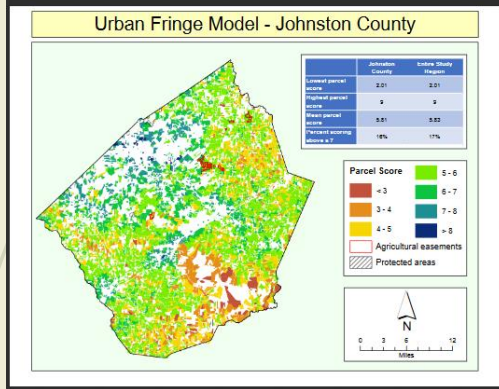
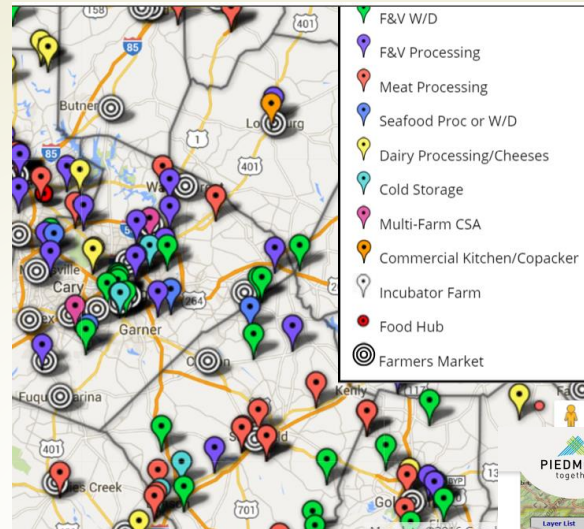
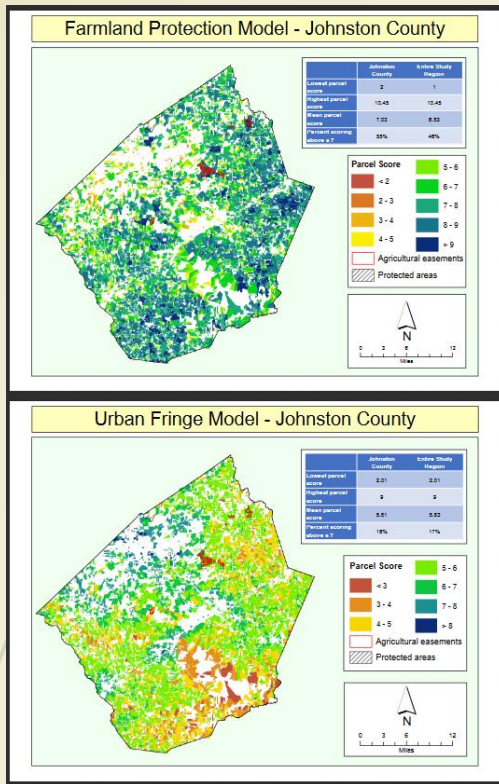


November 2015
h c p
HEALTHY COMMUNITIES PROMOTED

Community Food System Assessments

Cape Fear Council Of Governments

Mid-East Commission & CFSA for Beaufort County



This interactive map compiles all project data from around the Piedmont Triad region. Expand the categories in the Layer List to see all available data layers. The links below also provides a list of all data layers within each data group and a more detailed list of data sources for each layer. A mobile version is also available through ArcGIS Online and the ArcGIS App for smartphones and tablets.

Regional infrastructure & supply chain analysis

Local Food Infrastructure Map

Piedmont Triad Regional Council

Triangle Farms for Food Report (CTNC & Triangle J)



**PIEDMONT FOOD & AG
PROCESSING CENTER**
HILLSBOROUGH, NORTH CAROLINA



Orange County Farms



ORANGE COUNTY ECONOMIC DEVELOPMENT AGRICULTURAL GRANTS ARE AVAILABLE

Need money for your farm operation?

Agriculture Economic Development Grant



Tri-Hishtil

Mills River, NC
Henderson County had the perfect blend of location, climate and infrastructure to make it our East Coast home.



Bitwater Farms

Hendersonville, NC
Our business is about technology and sustainability...both were welcome in Henderson County!



Flat Rock Ciderworks

Flat Rock, NC
The ag-friendly and business-friendly nature of this area made it easy to vertically integrate.



Bold Rock Hard Cider

Mills River, NC
We were up and running months faster because of AgHC's local knowledge and support.



POLK COUNTY FARMS

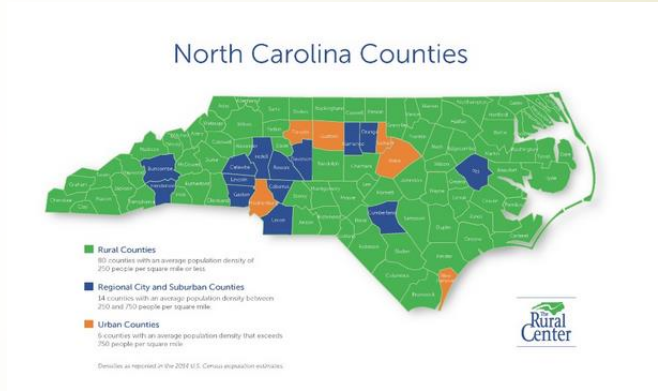
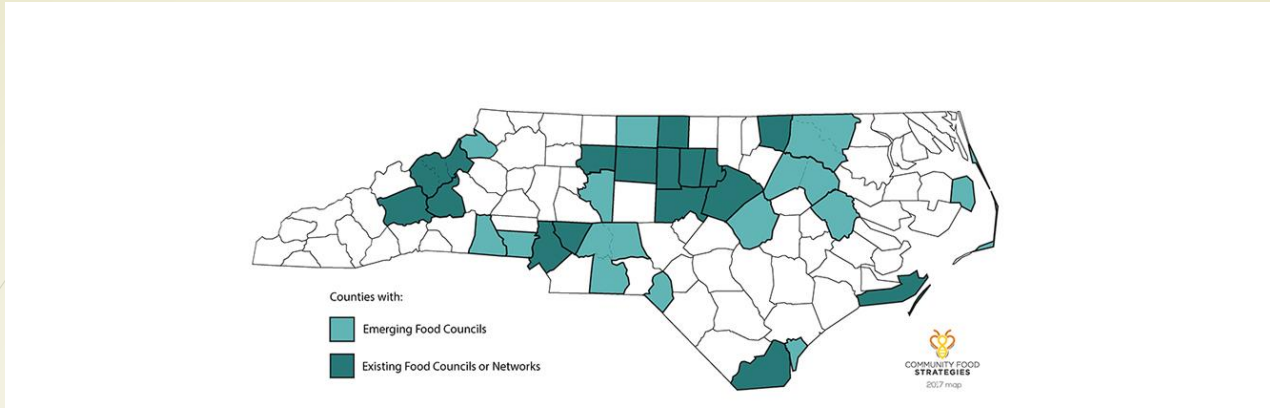
Agricultural economic development director positions (county/town employees)

[Durham County](#)

[Henderson County](#)

[Polk County](#)

[Orange County](#)



Regional support & coordination for food policy and/or food collaborative efforts

Community Food Strategies

NC Rural Center



"I'm not a farming expert, but I can help them with their business model and access to capital," she points out. "When they need help with harvesting or pesticides, that's where Extension comes in. We've got to stop thinking that each of our independent organizations has all the answers. It takes a team to help small farmers move forward and become sustainable businesses that can grow over time."

Tiffany Henry, SBC Director, Southwestern Community College



Business development & entrepreneurship

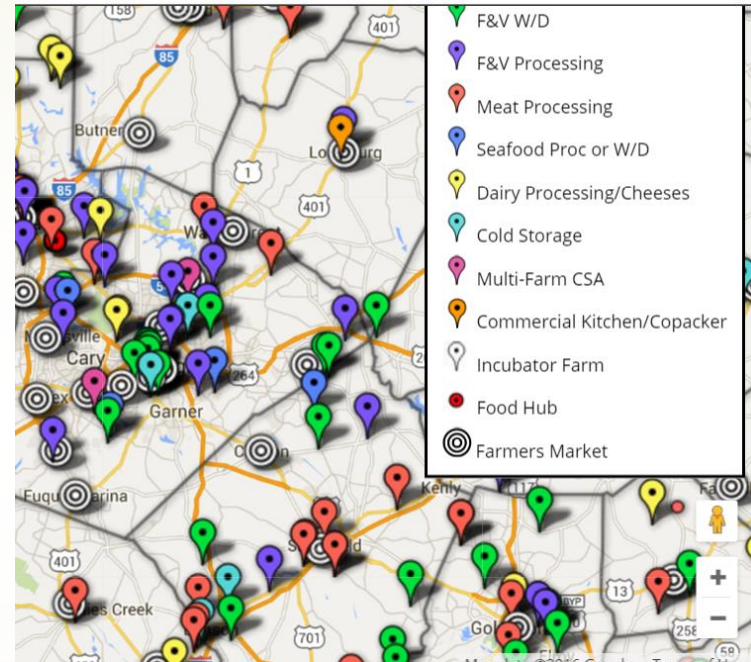
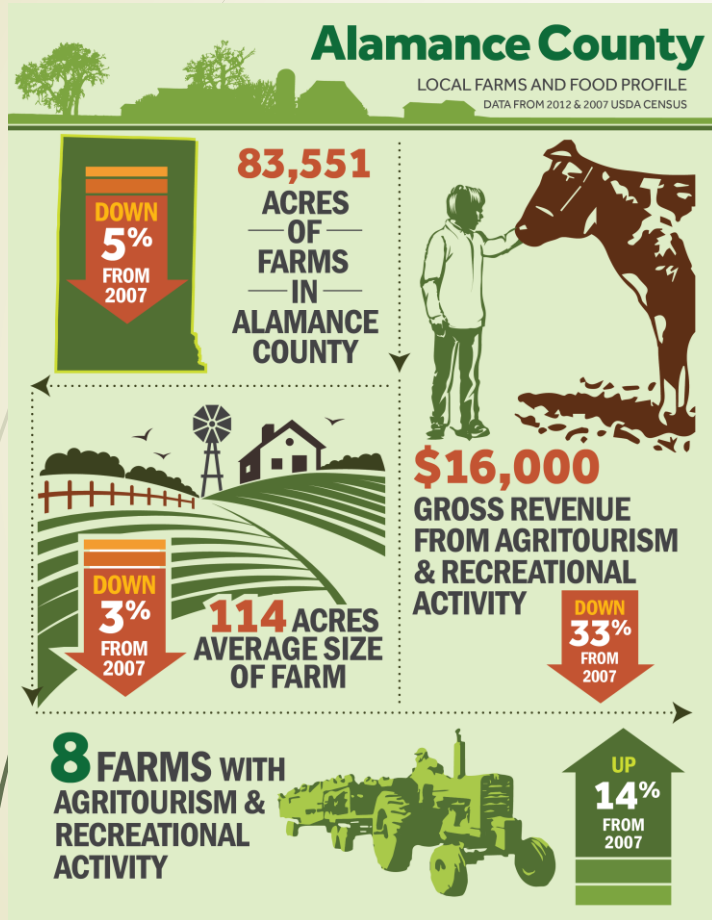
[Appalachian Farm School](#)

[Vance-Granville Ag Entrepreneurship Program](#)

[Piedmont Food & Ag Processing Center](#)

[Eastern Carolina Food Ventures](#)

NCGT & CEFS: RESOURCES AND TOOLS



COMMUNITY FOOD STRATEGIES



NATIONAL & STATE RESOURCES AND TOOLS

USDA's [Economic Impact of Local Foods Toolkit](#)

USDA's [Farm to Fork](#) Resources

[American Planning Association](#)

[Southern SAWG](#)

[National Institutes of Health](#)

Food Environment Database (resources by county): <http://www.ers.usda.gov/data-products/food-environment-atlas.aspx>

USDA Economic Impact of Local Foods Toolkit: www.localfoodeconomics.com

NC Department of Agriculture

www.ncagr.gov

NC Cooperative Extension

<https://www.ces.ncsu.edu/local-county-center/>

NORTH CAROLINA SUCCESS STORIES

Comprehensive & Strategic Planning: Agricultural Economic Development Plans

- Example: [Henderson County](#), [Durham County](#)

Community Food System Assessments

- Example: [Cape Fear COG](#)

Infrastructure/supply chain mapping analysis

- Example: [LFI Map](#); [Piedmont Triad Regional Council](#)

Regional agricultural economic development directors

- Examples: [Durham](#), Henderson, Polk, [Orange](#)

Regional support & coordination for food policy councils and/or food collaboratives

- See [Community Food Strategies](#)' work with councils of government

Business development & entrepreneurship

- Examples: [Appalachian Farm School](#), [Vance-Granville Ag Entrepreneurship Program](#), [Piedmont Food & Ag Processing Center](#)

Zoning and land use strategies & policies

- Examples: [Town of Matthews](#), [City of Winston-Salem/Forsyth County](#)

QUESTIONS?

www.localfoodeconomies.org

www.ncgrowingtogether.org

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Data sources used in this presentation include:

- NC Agriculture & Agribusiness Statistics, NCSU, 2016: https://www.cals.ncsu.edu/agcomm/news-center/wp-content/uploads/2016/05/2015_083-WaldenAgBusinessReport-051116.pdf
- USDA ERS & AMS, 2011-2016, citations from Community & Local Government Guide to Developing Local Food Systems, CEFS, NCSU: <https://cefs.ncsu.edu/resources/a-community-and-local-government-guide-to-developing-local-food-systems-in-north-carolina-2013/>
- Growing Food Connections Policy Database, SUNY-Buffalo, 2016: <http://growingfoodconnections.org/tools-resources/policy-database/general-search-policy-database/>
- UNC School of Government Local Food Resources: <https://www.sog.unc.edu/search/#!/search/local%20food>
- Farmland Information Center, 2016: <http://www.farmlandinfo.org/statistics>
- APA Food Systems Planning Working Group: <https://www.linkedin.com/groups/3930672/profile>
- National Farmland Trust, 2016: <https://www.farmland.org/our-work/areas-of-focus/farmland>

Special thanks to Donald Belk, AICP, [N-Focus Planning](#); Erin Sullivan White, [Community Food Lab](#); Debbie Hamrick, [NC Farm Bureau](#); and Jonathan Q. Morgan, Associate Professor of Public Administration and Government, [UNC School of Government](#), for their time and expertise in assisting the Resilient Local Food Economies initiative.