

Tri-COG Food Ecosystem Economic Development Strategy (FEEDS): The Case for Local Government Investment in Food Systems Infrastructure

May 2024





















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#### This analysis is...

- Intended to inform conversations about food systems-driven economic development and related infrastructure between councils of government and local government officials
- A snapshot of food system infrastructure in 17 counties in central and eastern North Carolina using data available as of December 2023.

#### This analysis is not...

- A comprehensive assessment of all facets of the Tri-COG region's food system.
- A blanket recommendation about the kinds of projects any one local government should undertake. Every community has individual characteristics and dynamics, and considering those is essential for effective policymaking.

Disclaimer: This report is a good faith effort by RTI International and partners to accurately represent information available via secondary and primary sources at the time of the information compilation. This report is not intended for re-use or publication without the approval of RTI International.

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- This project builds on the many notable food systems projects that have been conducted in North Carolina in recent years. A few that were especially influential include the Upper Coastal Plain Healthy Food Access Mapping Project (2021), Piedmont Regional Triad Council Food System Assessment (2020), Croatan Institute's Racial Equity Economics, Finance, and Sustainability (REEFS) and Organic Agriculture Revitalization Strategy (OARS) Projects, and Community Food Lab's Project 40 (2018).

## **Executive Summary**

The goal of the Tri-COG Food Ecosystem Economic Development Strategy (FEEDS) was to identify the infrastructure needed to shorten food supply chains, drive economic development, enhance resilient practices, foster equity, and increase rural-urban connectivity in the region served by three councils of government (COGs) in Central and Eastern North Carolina. The project brought together government, community, research, business, and foundation partners to take a regional approach to food systems-driven economic development.

The aspirational future state of the Tri-COG food system is equitable and resilient. Achieving these dual goals by regionalizing value chains presents economic and social opportunities for the region. Increasing the amount of direct-to-consumer food sales from \$54 million (current) to \$6.6 billion (65% of the region's total food spending) would have a total economic impact of \$10.7 billion on the Tri-COG region. The evidence overwhelmingly suggests that the current state of the food system is not equitable along the dimensions of race and ethnicity, which presents an opportunity for focusing future policies and investments on that goal.

An infrastructure assessment based on the Community Capitals framework found that rural and urban regions tend to have different infrastructure strengths, so working together across geopolitical boundaries is beneficial. The types of infrastructure or capital that were examined included built, natural, financial, social, cultural, and human. Grower focus groups recommended community capital investments. When there is strong alignment between recommended grower investments and the types of community capital local governments can lean into the areas of community capital cultivation. When there is weak alignment between recommended grower investments and the types of community capital local government is well-suited to support, local governments can support organizations in their communities that do cultivate the recommended type of capital.

Recommended strategies for local government investment in food systems economic development by type of community capital include:

<u>Social Capital</u>: Lead with social capital. Serve as a convener: build relationships FIRST to leverage other capital types more effectively. Reach out to community members, particularly those who have had less of a public voice in the past, to meet them where they are and involve them in decision-making processes. Tailor communication strategies to specific groups.

<u>Cultural Capital</u>: Acknowledge that inequity exists in the food system and commit to adopting policies that move toward equity and investing in groups that historically have been underinvested in. Collectively examine how your community's values show up in decisions about food systems.

<u>Human Capital</u>: Explore opportunities for joint funding of staffing positions. Dedicated staff who work on these issues across county boundaries are key. Ensure that workforce development strategies support agriculture and food entrepreneurship endeavors. Connect well-matched organizations and individuals in this space.

<u>Built Capital</u> Advocate for public financing of built infrastructure for food systems just as you would for roads and broadband. They are an important part of your government's economic development strategy. Identify and support organizations already working to build infrastructure in your area. Focus on unlocking the full potential of existing and new built by ensuring they have the other types of capital they need.

<u>Natural Capital</u>: Integrate protection of farmland and water sources into your economic development strategy and land use plan. Provide support for farmers related to succession planning and navigating heirs' property laws. Align zoning ordinances with intended land uses that support a wealth creation approach to economic development.

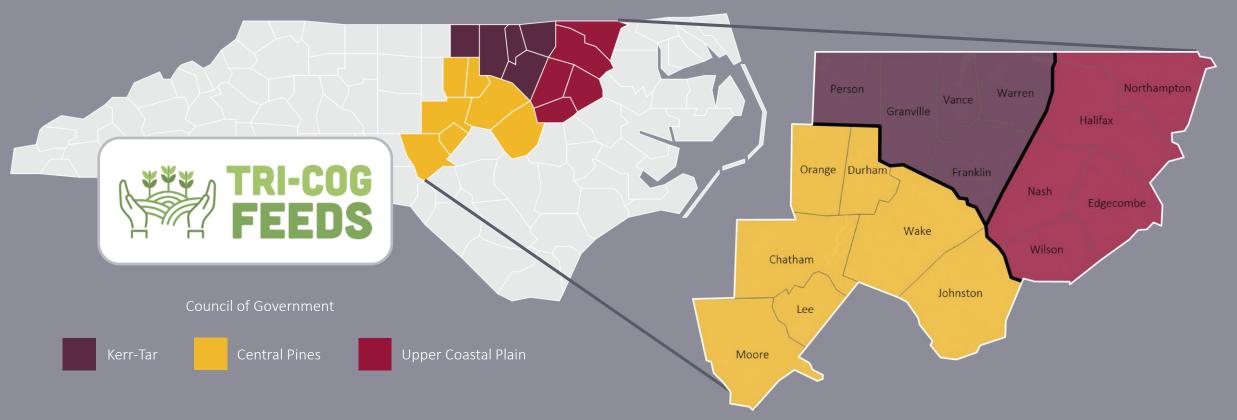
Financial Capital: Familiarize yourself with creative financing mechanisms and connect organizations and individuals to appropriate options for their goals. Advocate for policies that enable easier direction of public funds, such as institutional procurement and emergency food dollars, toward regional and equitable food value chains in ways that put community-based organizations in control of decision-making.

Food systems-driven economic development is an opportunity for the Tri-COG region of North Carolina

## Project overview

- The goal of Tri-COG FEEDS is to support a regional food planning initiative that identifies the infrastructure needed to shorten food supply chains, drive economic development, enhance resilient practices, foster equity, and increase rural-urban connectivity in the region served by three councils of government (COGs) in Central and Eastern North Carolina.
- Analysis of quantitative secondary data is coupled with qualitative data collected via interviews and focus groups by Tri-COG partners. The findings are meant to inform food systems infrastructure policy decisions made by local government officials.

#### North Carolina Counties That Comprise Each of the Three Tri-COG Council of Government Sub-Regions



## Key partners

- A consortium of three councils of government (COGs) that serve a 17-county area in Central and Eastern North Carolina led the project: Upper Coastal Plain Council of Government, Kerr-Tar Council of Government, and Central Pines Regional Council. They were advised by the project's advisory committee.
- Community Food Strategies, North Carolina Community Action Association, and Seed Change Strategies provided community engagement support. They were advised by the Grower Advisory Committee.
- Community Food Strategies, North Carolina Community Action Association, and RTI International provided quantitative and qualitative research support, including compiling this report.
- Kate B. Reynolds Charitable Trust and the Economic Development Administration funded the project.



#### Tri-COG FEEDS Sponsor and Partner Organizations

Leadership







Advisory Committee

Community Engagement







Grower Advisory Committee

Research







Funding





## Advisory Committee

- The Tri-COG core partners appreciate the complex and nuanced nature of agri-food systems change, including the variety of perspectives and interests that shape agri-food systems. As such, the core partners engaged an advisory committee of agri-food systems actors representing different roles and perspectives in an attempt to ensure well-rounded, well-informed project outputs. An effort was made to invite people with a variety of racial and ethnic backgrounds and roles in the food system to join the advisory committee.
- RTI interviewed advisory committee members and their referrals at the outset of the project. They provided the following thematic insights that served to guide the work. They also provided the insights presented in the Voices from the Community sections in the infrastructure assessment.

#### Voices at the table

- Long-term, historically marginalized groups in food and agriculture have been left out of the conversation.
- We need to move beyond the "usual suspects," engage the "unusual suspects," and build trust across the food system.

#### Public attention and momentum towards food systems work

- The COVID pandemic hit food entrepreneurs and farmers hard but generated more public attention towards food systems.
- New federal resources are available; how do we best use them?

#### Action-oriented approach

• Barriers are well understood, especially land use and capital challenges. We need to move towards actionable solutions.

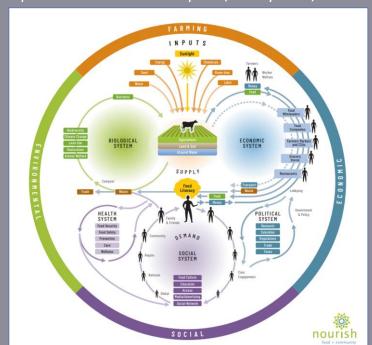
#### Regional approach

- There is a geographic and economic disconnect between the urban Triangle area and the rural northeastern and eastern counties. Working together across traditional geographic and county boundaries should be a goal.
- Farmers, producers, distributors, buyers, other food entrepreneurs, and final consumers are often siloed, and communication/coordination is poor. Convening people working on the same problems would be useful.

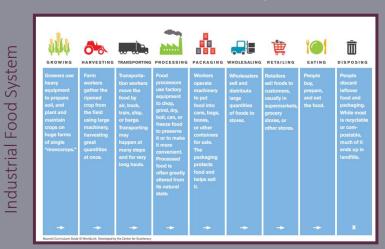
## The food system is a complex web of social, environmental, and economic processes

- The food system consists of interactions among many different systems: biological, economic, social, political, and health. This analysis primarily examines the economic, social, and political systems.
- The local food system is an alternative to the industrial food system.<sup>2</sup> While the industrial food system is efficient, it is lacking in terms of resilience and equity outcomes.
- The industrial and local food systems differ in many ways, including scale, profit margins, and relationships among actors in the value chain.

Visual Representation of the Food System, Sub-Systems, and Processes<sup>1</sup>



Industrial vs. Local Food Systems<sup>2</sup>



Communities collect kitchen scraps for composing to add to find packaging means less in the landiti.

RETAILING

Firm setalaring covers, or local store owners set flood to customers.

Firm workers put flood in resusable boxes or bags for transport.

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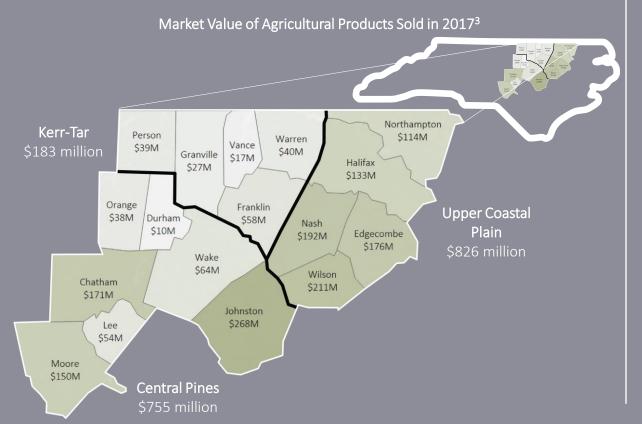
Firm workers put flood in resusable boxes or bags for transport.

Firm workers put flood in resusable boxes or bags for transport.

Local Food System

## Agriculture and agribusiness play an important role in North Carolina's economy

- Statewide, agriculture and agribusiness industries contributed \$103.2 billion to North Carolina's economy in 2021, \$12.9 billion of which was agricultural products sold.<sup>3-4</sup>
- The 17-county Tri-COG region contributed \$1.8 billion in agricultural products sold (14% of the state total), or \$1.5 billion in agricultural food products.\* The region contains 18% of all farms in North Carolina and 21% of farmland in the state.



#### Data Considerations for the Census of Agriculture

Data from the Census of Agriculture are presented throughout this report. The data source, while one of the most comprehensive available, has substantial limitations.

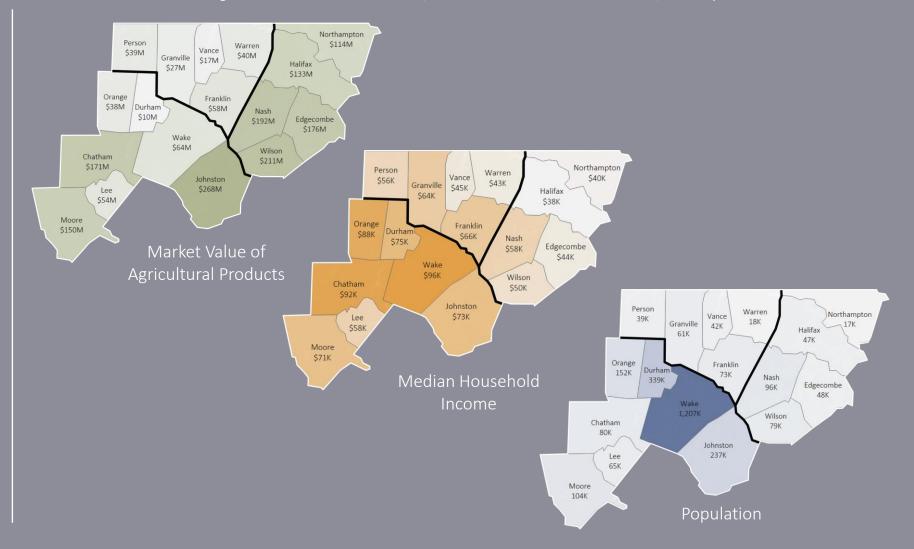
- Its stated goal is to account for "any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year," omitting many smaller-scale growers.
- There is underrepresentation of growers of color, among other types of growers or farm activities, due to mistrust of USDA after a history of discrimination and marginalization.
- Error measurements are reported and publicly available online.

Therefore, the Census of Agriculture data provide a starting point to inform the community engagement process, not a comprehensive understanding of the full picture of agriculture in the region.

# Tri-COG sub-regions have complementary strengths so working together Is beneficial and can improve rural-urban connectivity

- The 17-county Tri-COG region is diverse and changing quickly.
  - Combination of urban, suburban, and rural counties.
  - Racial and ethnic diversity.
  - Rapid population growth and development pressures.
- Population and purchasing power tend to be concentrated in different areas than agricultural production. A regional approach allows counties to benefit from each other's strengths.
- We explore the relative strengths of the Tri-COG regions to provide a better understanding of how each region can contribute to the development of regional supply chains.

Market Value of Agricultural Products Sold in 2017,4 Median Household Income in 2023,5 and Population in 20235



## The aspirational future state of the Tri-COG food ecosystem is resilient and equitable

- RTI International interviewed members of the Tri-COG FEEDS Advisory Committee and synthesized themes from those conversations to develop a definition of the aspirational future state of the Tri-COG region's food system.
- Tri-COG community members described the aspirational future state of their food system as equitable and resilient.

#### Equitable

Equitable participation and asset ownership along the dimensions of race, ethnicity, geography, and position in the value chain (e.g., grower, aggregator, purchaser).



#### Resilient

Economically and ecologically sustainable, adaptive regional value chains that function well after a disturbance.<sup>6</sup>

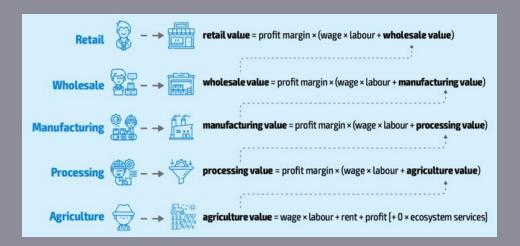


The Tri-COG region can improve the resilience of its food system and realize an economic opportunity of up to \$6.6 billion by regionalizing value chains and supporting smaller-scale agriculture

## Value chains have evolved to move agri-food products efficiently and generate value at each step of the chain

- Value chains are the collection of agents that transform and move food from producer to consumer. Agricultural products move through value chains, and value is added at each
- As value chain efficiency has increased, the distribution of revenues along longer, more complex agri-food value chains has changed.<sup>7-8</sup>
- Every dollar spent by consumers at the retail level must be divided amongst all the parties that contributed to the production, processing, distribution, and retailing of the final product.9
- Value chains may have multiple priorities other than efficiency and cost-effectiveness,<sup>4</sup> such as regional purchasing, environmental sustainability, or racial equity (overinvesting in farms and food businesses that have historically been underinvested in).<sup>11</sup>
- The Tri-COG FEEDS project explores enabling infrastructure for multiple-priority value

Steps and Value-Added Calculations in an Example Value Chain<sup>12</sup>



## The Tri-COG region's local food spending potential is \$6.6 billion annually

- There is ample opportunity to regionalize value chains in the Tri-COG region.
- Spending on all local and non-local groceries, specialty food (retail and service), and restaurants in the Tri-COG region totaled \$10.2 billion in 2021.<sup>5</sup>
- Of Tri-COG's \$1.5 billion in agricultural food production in 2017, only <u>\$54 million</u> was direct-to-consumer or intermediated sales\* in the region.<sup>4</sup> This number represents current local food sales, although it is likely an underestimate.
- The USDA Economic Research Service Thrifty Food Plan's expenditure shares of vegetables, whole fruits, dairy, meats, and legumes average 65% for adults aged 19-50 years. Assuming 65% of total food spending could be satisfied with food products grown and/or manufactured in the Tri-COG region once regional supply chains and infrastructure are fully built out, the local food spending potential of the Tri-COG region is \$6.6 billion.

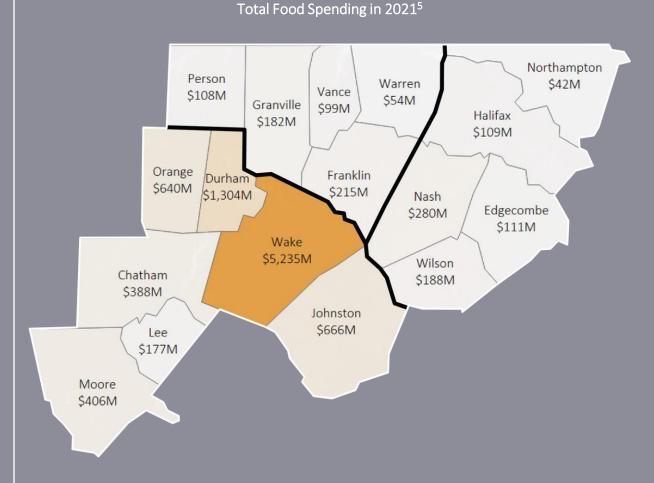


\$10.2 billion Current Local and Non-Local Food Spending in Tri-COG Region



\$54 million
Current Local
Food Spending

\$6.6 billion
Local Food
Spending Potential



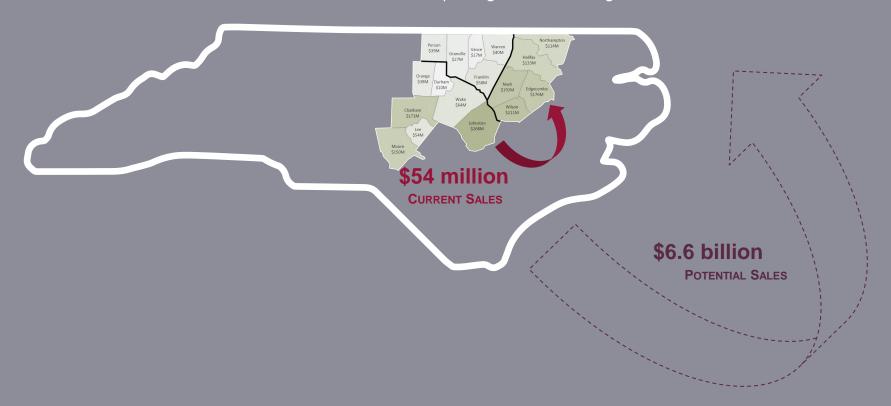
\*Note: The Census defines direct-to-consumer and intermediated sales as "sales of edible agricultural products that are both produced and sold by the operation directly to consumers (farmers markets, on farm stores or farm stand, roadside stands or stores, u-pick, CSA, online marketplaces, etc.) or retail markets, institutions, or food hubs for local or regionally branding. Retail and institutional establishments include supermarkets, supercenters, restaurants, cateriers, independently owned grocery stores, food cooperatives, K-12 schools, colleges or universities, hospitals, workplace cafeterias, prisons, foodbanks, etc."

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## Investing in regional food systems is a multi billion-dollar opportunity

- The difference between the region's current local food spending (\$54 million<sup>4</sup>) and potential local food spending (\$6.6 billion<sup>5</sup>) represents a substantial opportunity to encourage food systems-driven economic development by building regional value chains.
- Reaching the \$6.6 billion local food spending potential would require substantial public and private investments in regional food systems infrastructure, increased demand for food produced within the Tri-COG region, and alignment between types of food that are produced and consumed in the vegetables, fruits, dairy, meats, and legumes food categories in the Tri-COG region.

#### Current Local Food Spending in the Tri-COG Region



## Increasing local sales to \$6.6 billion would have an economic impact of \$10.7 billion

- Increasing the current \$54 million4 in local spending to \$6.6 billion5 would have an economic impact of \$10.7 billion economy-wide in the Tri-COG region.
- The economy-wide impact was calculated by subtracting the current local food spending from the potential local food spending to find the size of the economic "shock" that would occur with the sales increase (\$6.58 billion). Then a customized local food system economic impact multiplier was applied to the economic "shock" amount to get the economy-wide impact.<sup>14</sup>
- The economic impact estimate assumes that the economic "shock" is a new influx of money into the economic system being considered (in this case the Tri-COG region's economy).\*

## Potential Local Food Spending and Associated Economic Impact in the Tri-COG Region \$54 million **CURRENT SALES** \$6.6 billion \$10.7 billion POTENTIAL SALES POTENTIAL ECONOMIC IMPACT FOR THE TRI-COG REGION

## Regionalizing value chains would allow more money to stay in the Tri-COG region and in North Carolina

- Every dollar that is spent on food by consumers can be broken out into its value chain components. 15 The value chain framework has been used to explore the possibility increasing value retained by producers and early stages of the supply chain compared to how the typical food dollar is currently spent. 15-16
- The \$6.6 billion in regional food spending potential represents different levels of local spending for different sectors of the value chain. Altering value chain structure can alter the opportunities for different parts of the value chain.



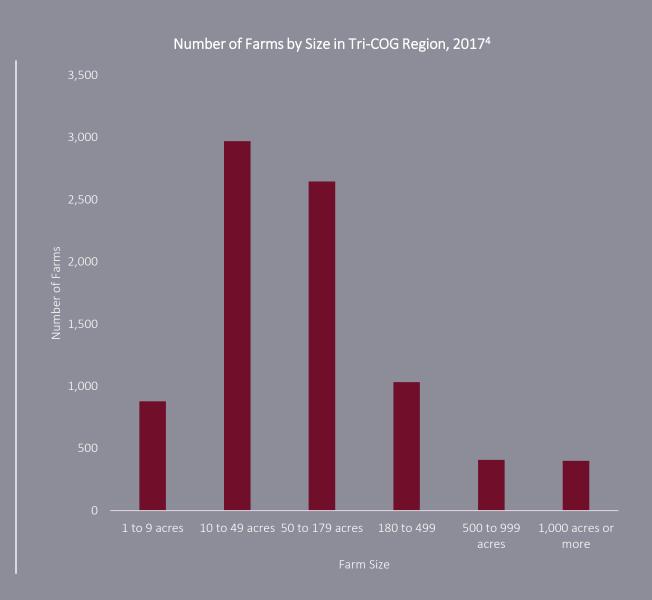
#### Breakdown of a Typical Food Dollar<sup>13</sup>

Tri-COG Regional Spending Potential by Value Chain Sector for a Regional Food Spending Amount of \$6.6 Billion<sup>5,15</sup>

Industry Group	Farm Share	Food Processing	Transportation	Wholesale Trade	Food Services	Retail Trade	Other
Local Spending Potential	\$709.5 M	\$987.1 M	\$197.7M	\$737.3 M	\$2,100 M	\$828.0 M	\$992.7 M

## Supporting regional, smaller-scale agriculture is an investment in resilience

- Smaller-scale farms make up the majority of farms in the Tri-COG region. <sup>4</sup> The proportion of farms in each category is very similar for North Carolina overall. <sup>4</sup> Supporting regional agriculture means supporting small- and medium-scale operations (collectively we call these operations "smaller-scale" for brevity).
- Profitability is a challenge for many smaller-scale farms in North Carolina.<sup>17</sup>
- Value-added products can increase the viability of small farms. 11,18 Clark et al. proposed "a new definition for the value(s)-added food and agriculture sector as (1) a portfolio of food and agricultural businesses that have a demonstrated commitment to the community, (2) with business arrangements and shared principles that facilitate the fair distribution of price premiums to both owners and employees, (3) which is derived from changing consumer preferences for products that embody environmental, social, or quality attributes that are not explicitly present in conventional agricultural commodities."
- Investing in smaller-scale farms can contribute to community resilience and the sustainability of the food system, as well as improving equity outcomes. 11,17-18 Smaller-scale operations may have higher crop and non-crop biodiversity. 19



The Tri-COG region can improve racial and ethnic equity outcomes in its food system by investing in groups that have experienced historical underinvestment

# The Tri-COG sub-regions' racial and ethnic compositions differ from each other and from North Carolina's

- Understanding the current state of ownership and decision-making power along the dimensions of race and ethnicity is a helpful starting point for improving equity outcomes. We must know where we are starting to understand when progress has been made.
- To start it is helpful to understand the racial and ethnic composition of the Tri-COG region's (and three sub-regions') population in the context of North Carolina and the United States.<sup>20</sup>
- The Tri-COG region has a lower proportion of Hispanic or Latino people and Asian people than the U.S. overall and a slightly higher proportion than North Carolina. It has a lower proportion of White people and a higher proportion of Black or African American people than the U.S. and North Carolina. It has approximately the same proportion of American Indian or Alaska Native and Native Hawaiian or Pacific Islander as the U.S. and North Carolina.

#### Racial and Ethnic Composition of the United States, North Carolina, the Tri-COG Region Overall, and Each of its Sub-Regions<sup>20</sup>

	Hispanic or Latino	Not Hispanic or Latino	White	Black or African American	American Indian or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Another Race	Two or More Races
United States	19%	81%	62%	12%	1%	6%	<1%	8%	10%
North Carolina	11%	89%	62%	21%	1%	3%	<1%	6%	7%
Tri-COG	12%	88%	57%	23%	1%	5%	<1%	7%	7%
Upper Coastal Plain	7%	93%	45%	45%	1%	1%	<1%	5%	4%
Kerr-Tar	9%	91%	55%	33%	1%	1%	<1%	5%	5%
Central Pines	13%	87%	59%	19%	1%	6%	<1%	7%	8%

## Principal producers are disproportionately White

- Data from the USDA Census of Agriculture shows a disproportionately low share of principal producers\* and operation of farmland among People of Color relative to the general North Carolina population. Despite making up only 57% of the region's population, White farmers make up 95% of principal producers and 97% of operations by acreage.
- There are historic, multigenerational structural barriers to ownership for farmers of color.
- Underrepresentation in the Census of Agriculture contribute to higher data uncertainty around farmer demographics for People of Color.

Racial and Ethnic Composition of Principal Producers, Share of Principal Producers, Farmland Operated, and General Tri-COG Population 4, 20

Racial or Ethnic Group	Share of Principal Producers in Tri-COG Region <sup>4</sup>	Share of Principal Producers in NC⁴	Share of Farmland in NC (acres) <sup>4</sup>	Share of Tri-COG Population <sup>20</sup>
White	93%	95%	97%	57%
Black or African American	5%**	3%	2%	23%
Hispanic, Latino, or Spanish Origin	1%	1%	N/A	12%
Asian	<1%	1%	<1%	5%
American Indian or Alaska Native	1%	1%	1%	1%
All Other	1%	<1%	<1%	2%

<sup>\*</sup>Note: Principal producer refers to the primary person involved in making decisions for the farm operation. They may be the owner, member of the owner's household, hired manager, tenant, or renter.

<sup>\*\*</sup>Note: Black or African American farmers are likely underrepresented in the Census of Agriculture. The Census estimates an error margin of 8.5% for this demographic group on p. A-21 of its methodology document. If we use this percentage to estimate an upper estimate for the number of Black or African American farmers in the Tri-COG region, we get 601 principal producers (the current estimate of 554 Black or African American farmers would increase by 8.5% = 47 farmers). Re-calculating the percentage of Black or African American farmers in the Tri-COG region as 601 (the new upper estimate) divided by the total of 10,815 gives 5.6%.

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# There is a stark demographic disparity between U.S. farm laborers, U.S. farm managers, and Tri-COG principal producers

- Despite making up 63% of farm laborers in the United States, Hispanic people represent only 26% of all farm managers in the country and only 1% of all principal producers on farms in the Tri-COG region.<sup>21</sup>
- This community serves a vitally important role in the agricultural economy but often does not receive the opportunities that come with principal producer or ownership roles.

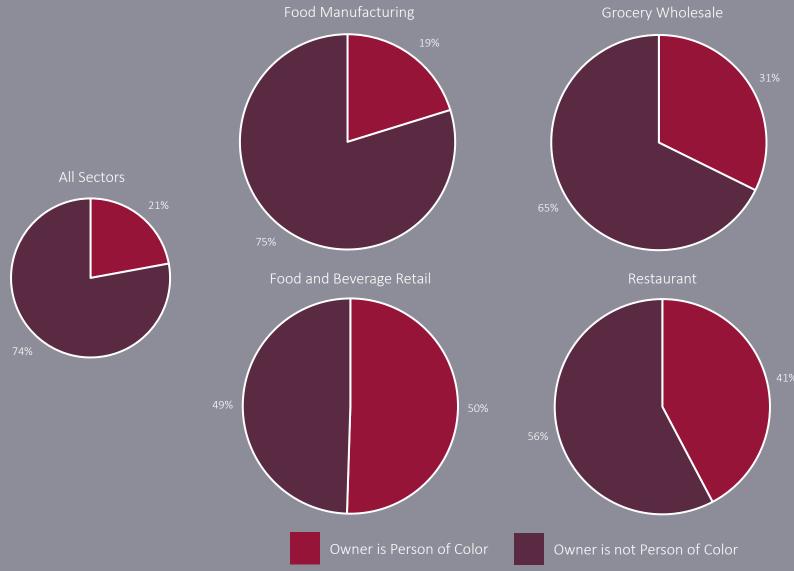
## Racial and Ethnic Composition of Agricultural Workforce<sup>21</sup>

Racial or Ethnic Group	Farm Laborers, Graders, and Sorters	Farm Managers, Inspectors, and Supervisors	Agriculture: All Occupations	All U.S. Private Wage and Salary Workers
White non-Hispanic	31%	65%	45%	59%
Black or African American non-Hispanic	3%	2%	3%	11%
Another race non-Hispanic	4%	6%	5%	11%
Hispanic	63%	26%	47%	20%

# Some food sectors have a higher proportion of owners who are People of Color than businesses in all sectors

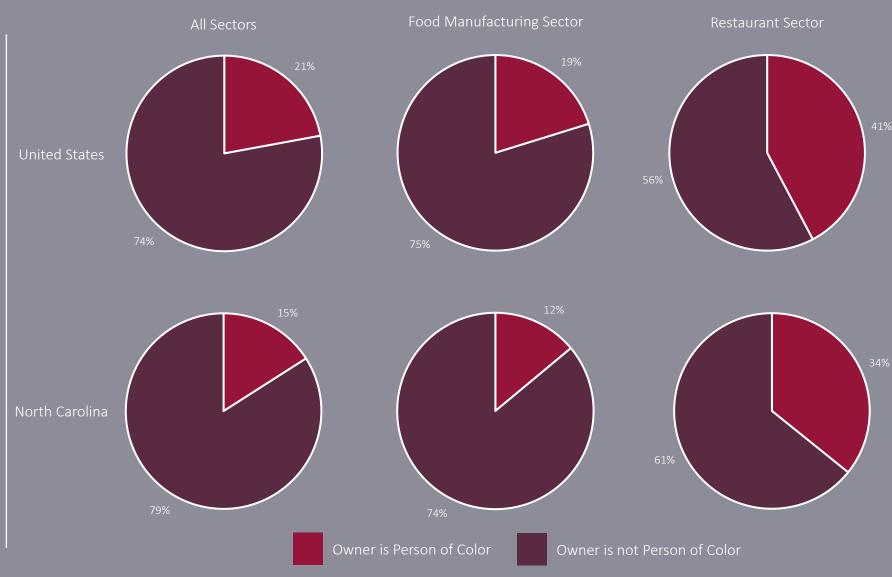
- People of Color are more likely to be owners of grocery wholesale, food and beverage retail, and restaurant businesses and less likely to be owners of food manufacturing businesses compared to businesses in all sectors of the U.S economy.<sup>22</sup>
- Investing in sectors that are more likely to be owned by people of color than the average U.S. business can contribute to more equitable outcomes.
- Investments in food manufacturing need to intentionally prioritize equity. Otherwise, they will likely reinforce the status quo of disproportionately low ownership by people of color in this sector.





# North Carolina has a lower proportion of food businesses owned by People of Color than the United States in general

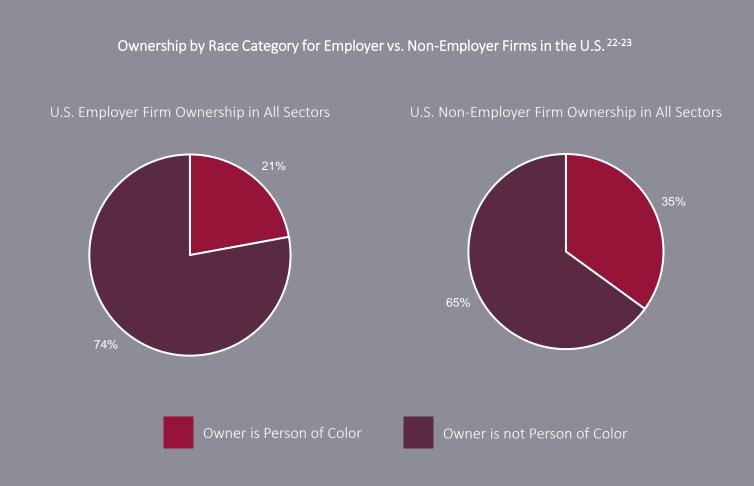
- North Carolina has lower representation of People of Color in business ownership roles than the United States overall, including in the food manufacturing and restaurants sectors.<sup>22</sup>
- Local governments can play a role in improving business-supporting infrastructure for food systems businesses in North Carolina.
- Investment in North Carolina food businesses in areas where there is currently underinvestment can also improve food access outcomes.



Ownership by Race Category for Selected Food Business Sectors in the U.S. vs. North Carolina<sup>22</sup>

## Supporting smaller-scale food and farm businesses is an investment in equity

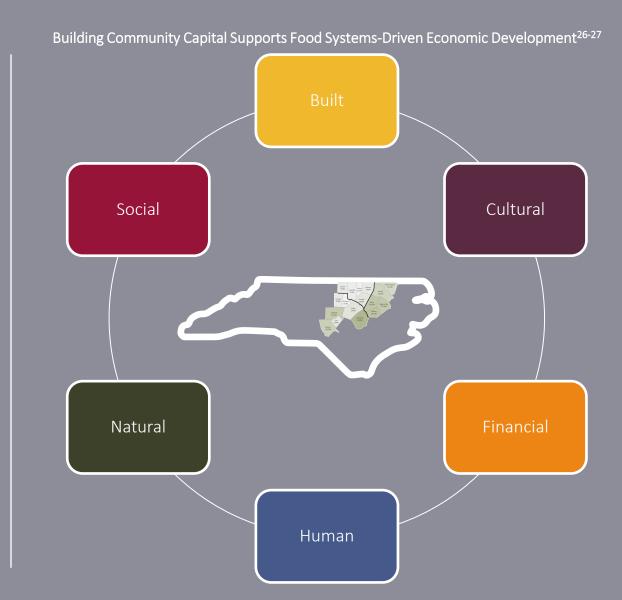
- People of Color are much more likely to own establishments without employees (self-employment operations), which tend to be smaller.<sup>22-23</sup>
- Businesses with under 50 employees comprise 96% of all businesses and 40% of all employment in the United States.<sup>24</sup>
- Investing in infrastructure to support small businesses is important for economic development and improving equitable outcomes.



Community capital infrastructure unlocks opportunity in food systems-driven economic development

## Community capital unlocks opportunity in food systems-driven economic development

- Value chains rely on many types of infrastructure or capital—the basic facilities and systems serving a geographic area—to function.
- Infrastructure can be "hard," like buildings or roads, or "soft," like social networks or a culture of entrepreneurship.
- Wealth creation approaches to economic development, such as the WealthWorks and community capitals frameworks, recognize various types of community capital.<sup>25-27</sup>



## The community capitals framework encourages cultivation of many capital types<sup>26-27</sup>

#### **Built Capital**

Includes outputs produced by firms, infrastructure to reduce costs of commerce, and durable goods used by households for either production or consumption; sometimes referred to as physical or produced capital.<sup>28</sup>



## **Social Capital**

The stock of trust, relationships, and networks that support civil society.<sup>28</sup>



## **Natural Capital**

The stock of natural resources that yields a flow of valuable goods and services into the future.<sup>29</sup>



## **Cultural Capital**

The stock of practices that reflect values and identifies rooted in place, class, and/or ethnicity.<sup>28</sup>



#### Financial Capital

Includes the stock of money and other financial assets (net of liabilities) that can be readily converted to money.<sup>28</sup>



## **Human Capital**

The resources embedded in people; includes knowledge as an input to increase human productivity.<sup>30-31</sup>



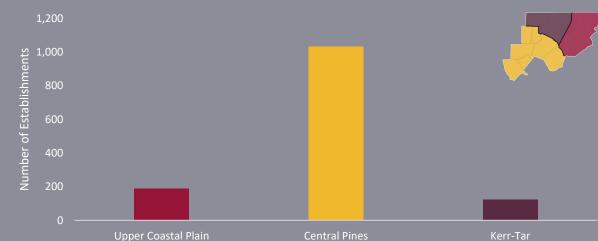
## Built capital is plentiful in conventional value chains

Social Cultural
Natural
Human

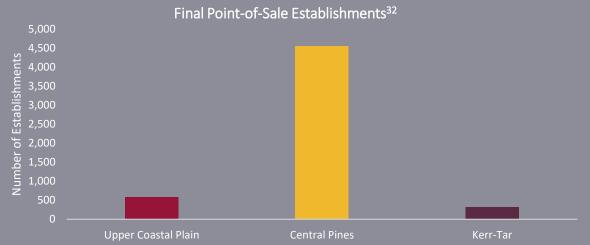
- Central Pines has the most middle-of-supply-chain establishments and final point-of-sale establishments, following by Upper Coastal Plain and Kerr-Tar.
- Middle-of-supply-chain establishments are slightly more evenly spread among the three sub-regions compared to final point-of-sale establishments. This makes sense, since consumers are more concentrated in Central Pines, and production is spread out.
- Availability of built capital in conventional food value chains does not necessarily equate to availability of built capital in regional food value chains.
- Right-sizing and right-timing the built elements of the value chain (equipment, buildings, cold storage) and making them accessible and easy-to-use is a key challenge in regional food system development.

#### Voices from the Community and Equity Considerations\*

- Food-specific built infrastructure, particularly that which supports aggregation and distribution (cold storage, processing capacity, shared kitchen space, on-farm storage, trucks that connect rural and urban areas), is a constraint, especially in rural areas.
- Additional truck capacity (and related labor and routes that connect remote areas to distribution channels) is an important way to open up market access.
- Food aggregators and hubs are creating pathways between markets (rural production and urban consumers) by trying to match the scale and structure of infrastructure needed—how can we leverage the built capital that already exists?
- A lot of the infrastructure for distribution is centered in the urban areas. A lot of rural people are served by those urban food distribution hubs. Kerr-Tar and UCP are dependent on urban trucks.



Middle-of-Supply-Chain Establishments<sup>32</sup>



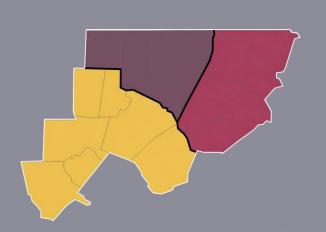
\*Note: Content in the "Voices from the Community and Equity Considerations" sections in the next several slides was provided by Tri-COG community members. RTI International conducted focus groups and interviews with advisory committee members and their referrals early in the project. Focus groups were conducted under Chatham House Rules (share the information you receive but not the identity of the person who provided it), and interviews were conducted with the understanding that identities of participants would not be shared unless requested by the participant (which no one did).

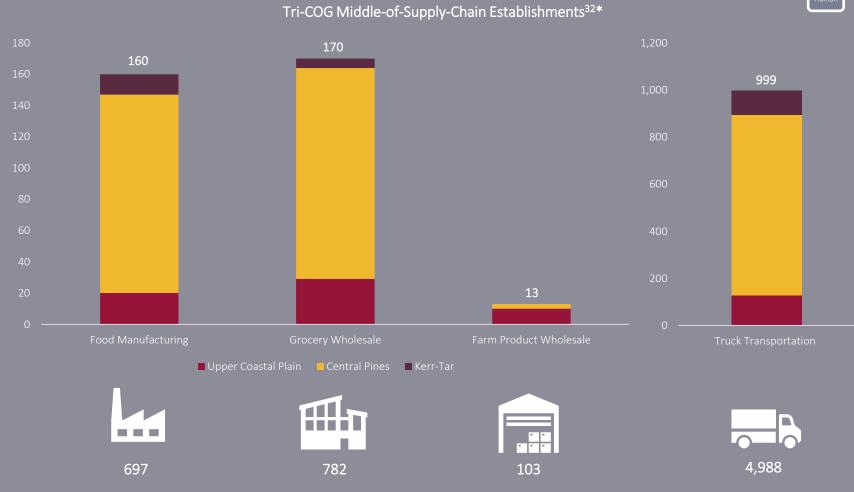
Tri-COG FEEDS 2024 | 30

# Middle-of-supply-chain establishments are unbalanced across Tri-COG sub-regions<sup>32</sup>

Social Cultural
Natural Financial

- The Tri-COG region has almost 1,000 truck transportation establishments, although these do not necessarily service the food system. It has just under 200 grocery wholesale and food manufacturing establishments. It has fewer than 20 farm product wholesale businesses.\*
- Central Pines has the most middle-of-supplychain establishments, despite Upper Coastal Plain having a higher value of agricultural production (measured in market value of sales



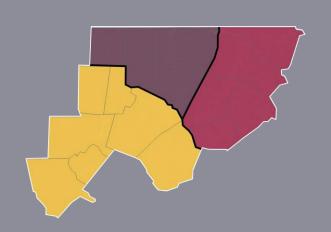


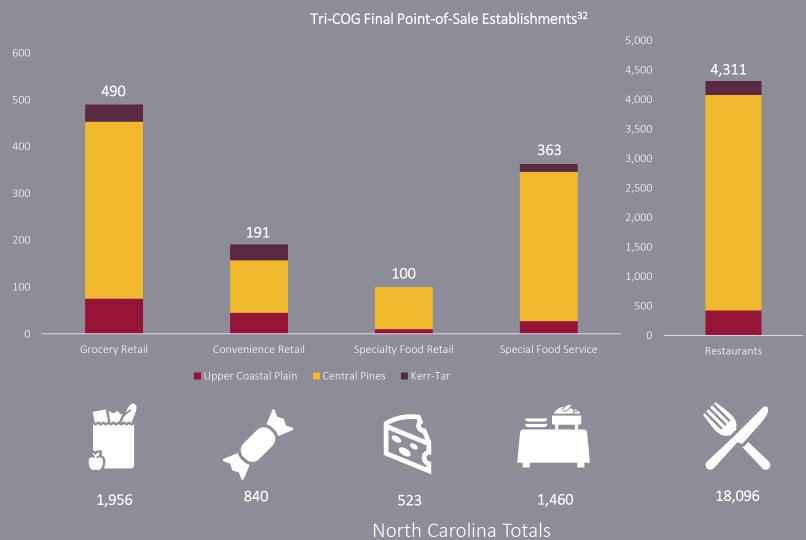
North Carolina Totals

# Final point-of-sale establishments are concentrated in more populous areas<sup>32</sup>

Social Cultural
Natural Human

- Final point-of-sale establishments predictably are more common in areas with higher populations.
- Restaurants are by far the most common type of final point-of-sale establishment totaling over 4,000 regionwide.
- Grocery stores are the next most common, followed by special food service establishments (e.g., catering companies), convenience retail, and specialty food retail.
- Kerr-Tar and Upper Coastal Plain have a disproportionately high number of convenience retail stores compared to final point-of-sale establishments overall.





## Built capital is developing in regional value chains



- Food hubs are important built capital for regional value chains. There are many definitions of food hubs. One definition cited by Cleary et al.<sup>33</sup> is "food hubs aggregate, distribute, and market source-identified food products from multiple farms, providing more costeffective and dependable solutions for farmers seeking to sell in intermediated markets."
- Higher population levels are required to sustain food hubs compared to traditional fruit and vegetable merchant wholesalers.<sup>33</sup> Each additional food hub requires an even higher population than the first due to competition. Communities with certain characteristics can sustain food hubs with lower populations.
- According to these estimates, in theory, none of the counties in Kerr-Tar and Upper Coastal Plain sub-regions could support a food hub alone. When a regional approach is taken, each of those regions could support a food hub.<sup>34</sup>
- The Tri-COG region could support an additional food hub AND the food hubs would be distributed across the three sub-regions rather than only located in Central Pines.
- It is important to remember that these calculations are estimates and should not alone determine where food hubs are located. The takeaway is that food hubs are a developing type of built capital in the Tri-COG region and many factors, not just population, should be considered when communities decide how to invest in them.

#### Estimated Number of Food Hubs Sub-Regions Could Support Based on Population<sup>33\*</sup>

	Number of Food Hubs Region Could Support Using County-Level Approach	Number of Food Hubs Region Could Support Using Regional Approach
Upper Coastal Plain	0	1
Kerr-Tar	0	1
Central Pines	4	3

#### Characteristics that Lower the Population Necessary to Sustain a Food Hub<sup>33</sup>

- Mobile food business
- Community food service
- Higher social capital
- Direct farm sales
- Small restaurants

Grocery stores and large restaurants increase the minimum population required to sustain a food hub.

## Natural capital ensures space is available for food production

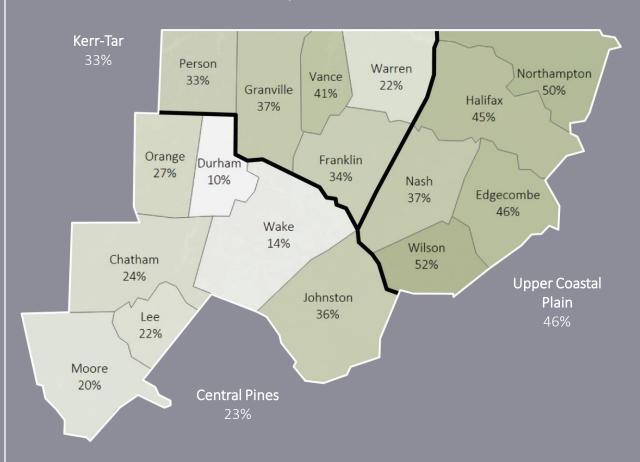


- Natural capital provides the environmental inputs for food production.
- Farmland is one type of natural capital, and it tends to be located in less populous areas, although that is not exclusively true. It also plays a role in climate adaptation and has many other benefits.
- Other types of natural capital include clean water, rich soil, and climatic factors. North Carolina ranks second nationally in projected pace of farmland loss by 2040.<sup>36</sup>

#### Voices from the Community and Equity Considerations

- Farmland is more available in the Kerr-Tar and Upper Coastal Plain regions, but preserving farmland amidst development pressures is a critical and time-sensitive challenge.
- Food production in urban areas is often overlooked and may not be as visible in traditional data sources (such as the Census of Agriculture).
- The region has a long growing season, variety of soils, and an environment suitable for a diversity of crops.
- Black and indigenous communities have experienced high levels of land loss due to discrimination, injustice, and violence.
- Understanding the implications of heirs' property laws is important for Black, Indigenous, and People of Color (BIPOC) family land retention.

## Percent of County Area in Farmland, 2017<sup>4,26</sup>



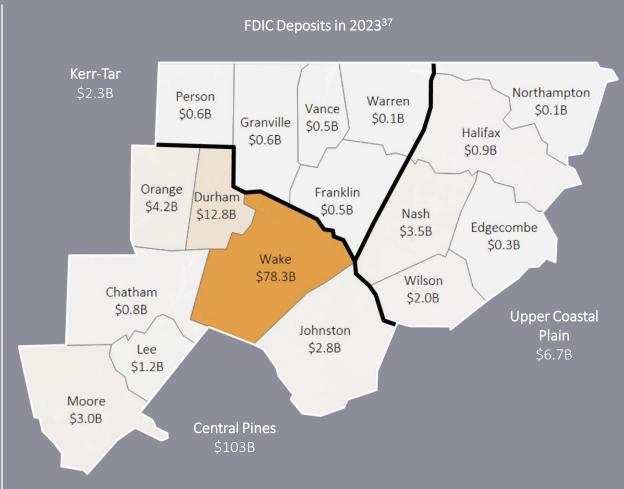
# Financial capital allows business owners the freedom to make decisions in alignment with their goals and values



- Cash deposits in banking institutions are one type of **financial capital**, although not the only type.
- Financial capital opens doors for farm and food business owners.
- Creative financing of agriculture and food value chain enterprises is key.

#### Voices from the Community and Equity Considerations

- Financing is under analyzed, underrepresented, obscure, and challenging in the food system. Flexible, creative, low barrier-to-entry financing mechanisms are needed to fund agriculture and food entrepreneurship endeavors.
- When there are funds [available in local government], there tend to be higher priorities for those funds than farm and food infrastructure. There is always competition for the allocation of money.
- We have seen a recent uptick in funding available for food system and infrastructure projects. Purchasing power and strong demand for regional food products in the Triangle, as well as ongoing partnerships between the regional food system and health care sector, are financial strengths that the region can leverage.
- We're not seeing a lot of benefit returning to the Black community and farmers of color even though institutional buyers want to support farmers of color. During COVID, we saw a lot of the aggregators be very White dominated. We do have a good network of Black farmers in the region, and they got squeezed out of new aggregation channels that opened during COVID.
- New organizations should be receiving funds to do the work that previous organizations were supposed to do but didn't accomplish. We don't need more pilot programs or data collection; we need to rebuild the infrastructure for farmers to feed families and communities sustainably.

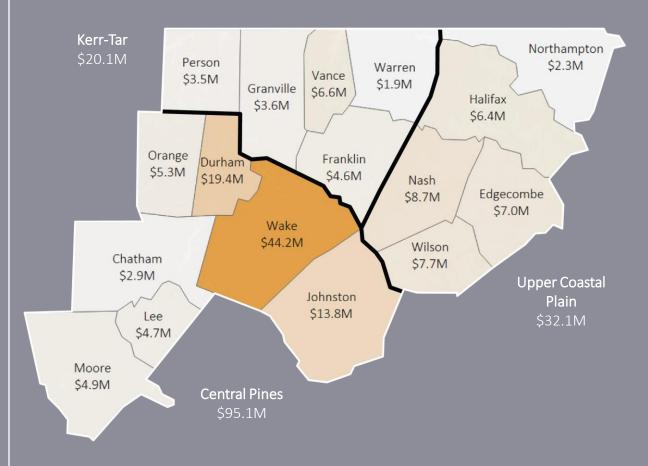


## Creativity in identifying financial capital sources is critical



- Another type of financial capital is Supplemental Nutrition Assistance Program (SNAP) spending.<sup>38</sup> Scaling the monthly benefits up to an annual scale shows an approximate annual SNAP benefit amount of \$1.8 billion total, which is on par with the farmgate value of agricultural production.
- When SNAP recipients spend money in their local communities, they generate wealth that can help prevent future food insecurity.
- Local governments can ensure mechanisms are in place for SNAP users to spend their benefits in the regional food system if they choose to do so. There have been efforts to do this in North Carolina through programs such as Double Up Food Bucks.<sup>39</sup>

## Monthly SNAP Benefits in 2022<sup>38</sup>



## Social capital encourages improved communication and coordination



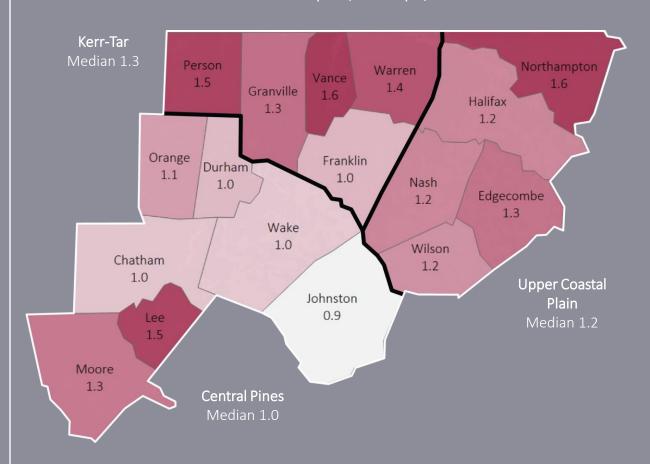
- "Social [capital] is critical for building support for, and attention to, opportunities to develop connections, networks and partnerships for change within the food system and beyond."<sup>40</sup>
- Social capital and strong relationships are often strengths of rural areas. "There is no shortcut to developing value(s)-based supply chain relationships....Relational infrastructure development is a potential policy opportunity for community economic development." Social capital can often unlock other types of capital.

#### Voices from the Community and Equity Considerations

- Networks can be siloed within the food system. We need more cohesive activity among food systems actors. We need to find ways to increase awareness of and connect similar efforts. Food system practitioners are thinking more regionally about what they want to do and what relationship opportunities are out there.
- There are divisions between big agriculture and small agriculture, as well as rural and urban policy. Building dialogue across these divisions would increase collective well-being.
   A lot of conversations from past few years have been difficult to translate into action at the local level.
- Communities in smaller, more rural places, such as those found in Kerr-Tar and Upper Coastal Plain, tend to be more tightly knit.

The equity considerations for building social capital are extensive. We have dedicated the next slide to sharing insights from Tri-COG community members on this topic.

## Social Establishments per 1,000 People, 2014<sup>26</sup>



## Building social capital plays an important role in improving equity outcomes



#### Voices from the Community: Equity Considerations for Social Capital

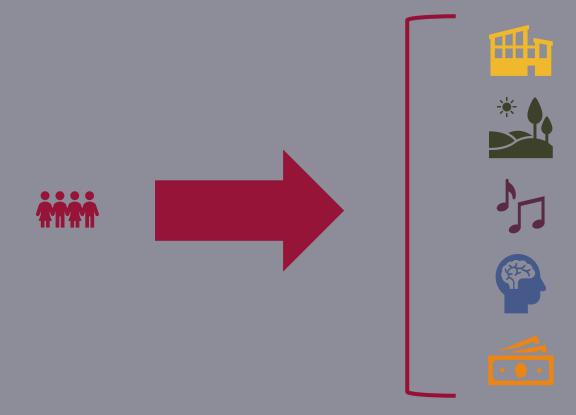
- We need to ensure the voices of leaders in underserved communities are heard. Grassroots organizations and leaders are often absent from decision making. There would be more intentional planning of sustainable changes to the food system if more underrepresented voices were heard. That is also how to reduce the negative impact, as so often, those not heard are negatively impacted. The farmers should be designing the programs, so they benefit. We need farmer-led organizations and to hear the voices of farmers about how they would like to build. I have not seen it yet.
- We must get the Black and Brown farmers to the table. That will only move at the speed of trust. There is distrust among institutions and individuals due to historical discrimination, injustice, violence. Start with establishing trust. There is a history of marginalization and underrepresentation. We can not promise more than we can deliver because that has happened so many times. Start with very simple measurable outcomes. Too many times have there been focus groups and surveys, and nothing happens—or things happen in urban areas. People in rural counties never see what happens as a result. Circle back to those communities with results.
- We need to make sure we have non-White farmers involved in new marketing channels. Even as new options get created, those farmers are not necessarily proportionally participating.

  Urgency kind of screws up equity efforts. There's a tendency to say, "this is what we've got lined up." Guess what. The same people are lined up because those are the connections we've already got.
- How do we find the prospective farmers? Extension doesn't have the best name recognition with the population they're trying to interact with. Finding a way to channel people to our existing resources would be great. We need to develop contacts with networks of Black and Brown farmers.
- On a local level in terms of this work that's happening here, we've got to have some boots on the ground. We've got to have some folks that look like Black and Brown farmers who are reaching out. We've got to meet these folks where they are. We've got to ask the questions to be able to move farmers of color into these spaces and help them understand that what they're doing is a business and it needs to be operated as such.

## Social capital is a gateway to other types of capital



- Many Tri-COG advisory committee members pointed out that there is confusion about how to access appropriate resources. This lack of clarity can often be alleviated by increasing social capital and building social networks, making it more likely that people will become aware of resources that are relevant to them.
- Community capitals are interconnected. There are often constraints on one type of capital that can only be addressed by enabling another type of capital. Sometimes one capital type needs to be present to fully leverage another type of capital's full potential.
- Research suggests that strong stocks of social capital can enable more effective leveraging of other capital types. 11, 40-41



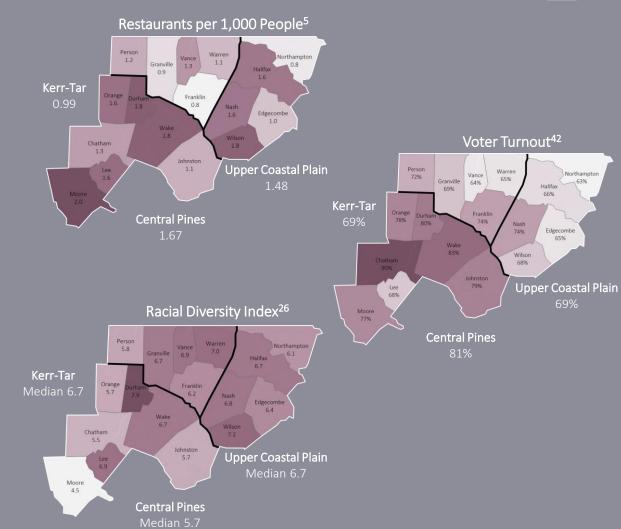
## Cultural capital allows us to engage with our values



- A broader transformation of the food system requires communities to more formally engage with their values.<sup>11</sup>
- Racial diversity, food culture (measured by restaurants per capita), and political participation (measured by voter turnout) are all related to **cultural capital** or expressions of values.
- Cultural capital is exceptionally complex and not easily distilled to measurable factors. It can be place-based or community-based, and rural-urban connections and barriers can play a role in shaping it.

#### Voices from the Community and Equity Considerations

- Encouraging a culture of entrepreneurship in the agriculture and food business community and helping farmers see their operations as businesses is important.
- COVID shifted the collective consciousness about food. A lot of experimentation occurred during that time; it is time to assess what worked and did not work and decide which approaches to carry forward.
- We need to focus on policies over programs. Because if we don't have policy then we'll see the ebb and flow of programs coming and going. Restructuring language is a big step in creating actual impact. Changing policy to include that new language.
- There is inequity. Get that 101 understanding and stop fighting about the definition. If we're not bringing a new consciousness to the work, we won't move the ball forward. Let's use the data to bring about equity. White people need to get comfortable with being uncomfortable. Let's move beyond "is this inequitable?" to "it is inequitable, and this is the new consciousness we're bringing to working for equity for everyone."



## Human capital supports critical knowledge transfer

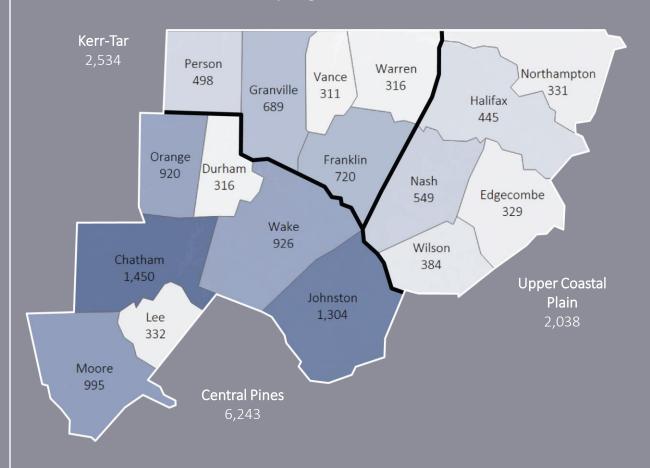


- Principal agricultural producers are an important representation of **human capital**. The farmer population is a wealth of knowledge about production and marketing practices.
- Technical assistance can augment the human capital already present in a community, especially with an aging farmer population, and help growers and food entrepreneurs adopt new business strategies.<sup>43</sup>

## Voices from the Community and Equity Considerations

- Technical assistance from trusted institutions or networks is important. Small-scale producers and entrepreneurs need a knowledge navigator to access funding, opportunities, and markets. Knowledge transfer between agriculture and food entrepreneurs who have been in business for a long time and newcomers is critical to people succeeding.
- We need champions for geographic and topic area coordination across the food system.
- When people do not know how to contribute specifically, they may tend toward inaction. Ensuring that people know who is responsible for doing what next is important.
- There is a wealth of educational institutions (colleges, universities, professional schools, community colleges, vocational and technical schools) in the Tri-COG region. They can provide the structure needed for knowledge transfer—can we focus these institutions' efforts on food systems topics?
- We need more education about why equity should be at the center of food systems development.

## Number of Principal Agricultural Producers, 2017<sup>4</sup>



## Tri-COG sub-regions have different strengths and can benefit from working together

- The table below summarizes some of the metrics used to assess Tri-COG infrastructure. The metrics provide a helpful snapshot but not a comprehensive picture of the complex realities of the Tri-COG region's infrastructure.
- Rural and urban areas tend to have different strengths. Working together across geopolitical boundaries can improve access to community capital and strengthen rural-urban connectivity.
- Understanding infrastructure strengths and gaps is important, but community members should drive decisions about future investments.

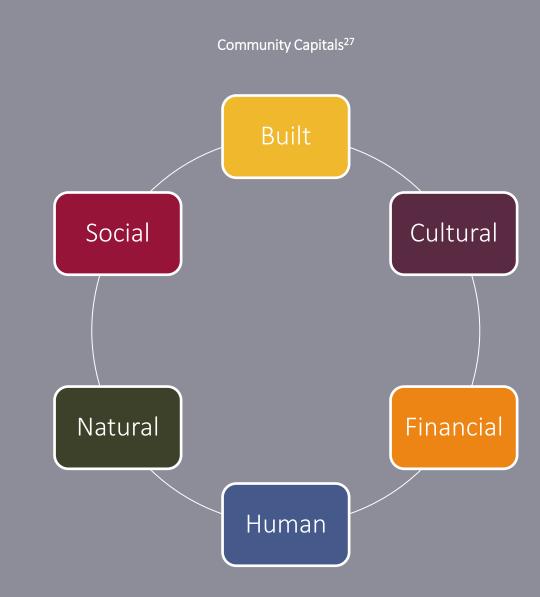
#### Snapshot of Community Capital Metrics by Tri-COG Sub-Region

Community Capital Type	Selected Metric	Upper Coastal Plain	Kerr-Tar	Central Pines
Built	Total middle-of-supply-chain and final point-of-sale food system establishments <sup>32</sup>	769	445	5,597
Natural	Percent area in farmland <sup>4, 26</sup>	46%	33%	23%
Financial	FDIC deposits <sup>37</sup>	\$6.7B	\$2.3B	\$103B
Social	Social establishments per 1,000 people (median of counties in region) <sup>26</sup>	1.2	1.3	1.0
Cultural	Voter turnout (2020) <sup>42</sup>	69%	69%	81%
Human	Number of principal agricultural producers <sup>4</sup>	2,038	2,534	6,243

Local governments can implement public policies that encourage grower-recommended investments in community capital creation

## Enhancing a traditional economic development approach with a community capital-based wealth creation approach

- Local economic development has traditionally focused on bolstering local government tax dollars by attracting large business operations and development projects. Moving from a traditional economic development approach to a wealth creation approach requires recognizing and cultivating various types of community capital.<sup>27</sup>
- Investing in food systems-driven economic development is a way for local governments to support entrepreneurship, community wealth building, and more resilient economic development opportunities.
- Many of the activities local governments already do, such as land use planning and workforce development, are relevant to food systems-driven economic development.
- The question of "who benefits" from food systems-driven economic development is addressed by Clark et al. 11 They posed several questions that may be helpful for local governments to consider as they try to improve equitable outcomes in the Tri-COG food system:
  - "Whose values are embedded in business relationships?
  - Whose values are excluded?
  - What is a "fair" distribution of price premiums?
  - How are trade-offs in the sector negotiated?
  - What assets are most critical in the development of this sector and at what
    points are they most impactful? "11



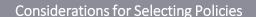
Local government has an important role to play in moving the Tri-COG food system toward a more resilient, equitable state

"The degree to which [alternative food networks] become potentially transformatory will partly depend upon the continued adjustments and actions of the dominant regulatory structures and the degree to which [alternative food networks] can become more embedded and institutionalized without losing their inherent integrity and autonomy...Forms of coalition-building and future visioning become important for [alternative food networks], because...they can be seen as fragmented and in competition with one another. Some level of translocal coordination between a range of different [actors] becomes an important challenge...Government support is needed in fostering these coordinating mechanisms...All of this takes political will and requires recognition on the part of established state structures that they can no longer marginalize food policy concerns."<sup>44</sup>



# Public policy is an important tool local governments can use to transform food systems and considering community impact, feasibility, and economic impact is an important step in selecting policies

- "Public policy" refers to a wide array of government actions at any level of government (e.g., federal, state, tribal, local) that can include laws, executive orders, and regulations, as well as government plans, programs, and initiatives.<sup>45</sup>
- Effective policies...<sup>45</sup>
  - -Are informed by input from the community and other affected stakeholders.
  - -Balance progress and feasibility.
  - -Set affected entities up for success.
  - -Promote equity and ensure no group or community is unduly burdened.
  - -Are evidence-based and reflect current best practices.
- Example policies include hosting a shared-used facility or equipment (built), cooperative models (financial), technical assistance for growers (human), farmland preservation (natural), and communication/coordination across value chains (socio-cultural).
- Local governments often face trade-offs in community impact, feasibility, and economic impact. There may also be win-win-win scenarios.
- Local governments should consider whose values are reflected in decisions to prioritize certain considerations over others.
- The next several slides walk through assessments of the economic impacts, community impacts, and feasibility of policies that support certain community capitals.





## Some policy actions have a higher economic impact than others

- Economic impacts should always be interpreted as estimates and with caution. It is difficult to estimate economic impacts without specific policy details. Therefore, economic impact analysis may be used in a later stage of policy development to compare several options.
- RTI conducted an economic impact analysis of three example policies using customized local food system economic impact multipliers. The examples were chosen for the capital types local government officials named as most feasible for local government to build.
- The size of the economic impact is directly related to the size of the initial investment.

#### Buil



An additional food hub in the Tri-COG region with \$200,000 in sales the first year, \$500,000 in sales in years 2 and 3, and \$820,000<sup>46</sup> in sales in years 4-10 would have a total economic impact of \$11.2 million on the region's economy.

#### Natural



Each Tri-COG county receiving the maximum Local AGZ grant amount (\$2 million) from the NC Agricultural Development and Farmland Preservation Trust Fund<sup>47</sup> would have a total annual economic impact of \$53.4 million (\$55.3 million if the region works collectively instead of on a county-by-county basis).

## Human/Social



Investing \$100,000 annually in one staff position per Tri-COG region focused on food systems-driven economic development would have a 10-year total economic impact of at least \$4.9 million (likely more via unlocking additional capital).

## Grower Advisory Committee development and recommendations

- To ensure BIPOC voices were at the decision-making table and improve equity outcomes of the project, the core partners convened a Growers' Advisory Committee composed of farmers and growers of color in the Tri-COG region in the summer of 2023.
- A group of 7-8 community advocates specializing in growers' perspectives from the region met four times to advise project partners on the grower engagement process, which was implemented by Community Food Strategies and North Carolina Community Action Association.

#### Grower Advisory Committee Recommendations

- There are lots of resources out there, but it is unclear who they are for and how to access them. Use sessions to highlight resources that exist while recording barriers to accessing these resources and potential strategies to ensure resources are tailored to growers' needs.
- Monetary and non-monetary benefits organizations and individuals participating in various parts of the project will receive should be clear.
- Information about institutional commitments to equity for the COGs, RTI International, community organizations, and others involved in the project should be shared.
- Project partners need to leverage their power and privilege to benefit participants and be mutually accountable to the strategies to address the expressed issues. COG partners should use the platform with a local government audience to highlight issues and strategies proposed by growers as well as leverage relationships with funders to introduce community groups to potential funding opportunities and if needed/desired, capacity with grant writing and administration.
- Long-term engagement with and accountability to the community with whom you want to engage are important.

#### Councils of Governments' Long-Term Commitments

Each COG is committed to continuing engagement on food system strategies after the closing of Tri-COG FEEDS in partnership with their community. COGs hope to do this by integrating strategies from this project into regional work plans and workforce development strategies in the following ways.

- Tie their Comprehensive Economic Development Strategy (CEDS) back to Tri-COG FEEDS objectives. The CEDS guides their work throughout the year and gives them capacity to work in partnership towards the named strategies.
- Develop a communication pathway to have a consistent, meaningful engagement with both growers that participate in the listening sessions and the advisory group to ensure strategies are grounded and relevant to the needs of the community.
- Drive investment from the EDA to the Tri-COG region and local organizations.
- Facilitate relationships between local community organizations and funders.
- Partner on grants with community organizations if further capacity is needed.

## Grower session goals and process

- The COG staff and community engagement partners, North Carolina Community Action Association and Community Food Strategies, convened three grower groups in early 2024: rural, urban, and youth growers from around the Tri-COG region. More information on group composition is provided in the summary table.
- Project partners had several goals for the grower groups.
  - Highlight needed infrastructure, using the community capital framework, to facilitate equitable food value chains and provide economic data to support infrastructural needs.
  - Ensure outcomes are informed and in the community's best interest and that the process in which this information is gathered and shared is responsible.
  - Connect growers with existing resources and encourage information-sharing among participants. Offer tangible benefits to participants during the duration of the project and be accountable to the strategies proposed after the project ends.
  - Increase collaboration and understanding between food system sectors and players and identify means for local governments to support.
- Each group followed the process outlined below to prioritize the community capitals they felt were most needed in their operations and recommended investments for each capital type.

#### **Grower Session Process**

Convened and provided information about community capital framework

Brainstormed infrastructure strengths and weaknesses based on personal experience in breakout groups

Conversed across groups and narrowed the list of infrastructure needs

Generated a list of accompanying policy actions or investments

Prioritized infrastructure needs and recommended investments by voting

## Grower session and participant summary

- Grower sessions were held in Henderson, Halifax, and virtually with participation from residents of many of the counties in the Tri-COG region.
- Size of the sessions ranged from one organization to 18 individuals.
- Participants were BIPOC and White with the rural and youth grower sessions having higher BIPOC representation and the urban grower sessions having higher White representation.

## Summary of Grower Sessions and Participants

	Rural Growers	Urban Growers	Youth Growers
Location	Perry Memorial Library in Henderson, NC	Virtual (via Zoom)	Southeast Prep Academy in Halifax, NC
Date	February 20, 2024	Four sessions in April 2024	February 26, 2024
Number of Participants	18 individuals – also attending were 10 representatives from support organizations such as Cooperative Extension, COGs, food hubs, and nonprofits	6 groups	9 individuals
Geographic Representation	Warren, Vance, Franklin, Halifax, and Edgecombe Counties	Raleigh, Durham, Rocky Mount, Tarboro, and Wilson	Youth were from three different high schools in Halifax and Edgecombe Counties
Racial Representation	In the room, there were 17 BIPOC growers and one White grower.	Two of the urban grower groups were BIPOC led and four were White led.	The majority of the students were BIPOC, and one was a White student.
Other Details	The majority of the growers were vegetable producers with some meal and one grain producers. Ms. Eva Clayton from the Eva Clayton Rural Food Institute spoke about her experience in advocacy and supporting rural farmers over her career as a U.S. Congresswoman and is partnering to inform the institute's mission.	N/A	Participants attended agriculture classes or worked on the school farm.

## Grower-prioritized capitals and recommended investments

- Financial and human capitals were in the top three prioritized capitals for all three grower groups. Natural and built capitals also appeared in the top three lists for some groups.
- Growers recommended investment in equipment, funding, and training programs. They also requested support accessing affordable land, water, and labor.
- The top recommended investments reflected the most pressing constraints faced by each group.

## Summary of Prioritized Capitals and Recommended Investments

	Rural Growers	Urban Growers	Youth Growers
Prioritized Capitals	<ol> <li>Built</li> <li>Financial</li> <li>Human</li> </ol>	<ol> <li>Natural</li> <li>Financial</li> <li>Human</li> </ol>	<ol> <li>Financial</li> <li>Natural</li> <li>Human</li> </ol>
Recommended Investments	<ol> <li>Shared equipment program</li> <li>Access to startup/expansion financial capital</li> <li>Access to market outlets for small growers</li> <li>In-depth business training</li> <li>Affordable labor</li> </ol>	<ol> <li>Affordable land/water</li> <li>Flexible funding streams</li> <li>Community programs</li> <li>Knowledge sharing (especially intergenerational)</li> <li>Affordable labor</li> <li>Equipment and materials</li> </ol>	<ol> <li>Financial support</li> <li>Land</li> <li>Teachers, training, workshops, and continuing education</li> <li>Equipment and on-farm structures</li> </ol>

## Some policy actions are more feasible than others for local governments to implement

RTI invited local government officials who responded to the Tri-COG Government Official Survey to participate in working sessions about the feasibility of local government building various types of community capital. Examples of local government entities' involvement in food system initiatives include zoning boards' influence over built infrastructure placement, planning departments' development of land use plans that drive local official decision-making, and economic development departments' distribution of grant-funded infrastructure initiatives.

- Government officials said **social**, **human**, **built**, and **natural** were the four types of capital they felt local government was in the best place to support. They felt that local government's capacity to provide traditional **financial** capital was constrained, although they acknowledged that need for financial capital usually arises before the resources arrive. They did not see a large role for local government in shaping **cultural** capital.
- There was a tension between feeling that local government could provide support in the areas listed above and challenges tied to a lack of social capital and equity: community mistrust of government, communication, cooperation, and lack of community input into projects.
- By hiring dedicated staff to build relationships and serving as a social connector in the region, local governments can unlock existing human capital present among organizations already working in food systems-driven economic development. This would elevate existing community assets, so they are more effectively utilized to fill other capital gaps.

## Grower-recommended investments partially align with local government capacity

- When there is strong alignment between recommended grower investments and the types of community capital local government is well-suited to support, local governments can lean into the areas of community capital cultivation.
- When there is weak alignment between recommended grower investments and the types of community capital local government is well-suited to support, local governments can support organizations in their communities that do cultivate the recommended type of capital. They can play the role of convener and build social capital across the food system so other types of capital flow more freely.
- Financial capital is a high-priority for grower-recommended investments, and yet local government officials feel constrained in their capacity to build that type of community
- Financial capital can be a bottleneck for accessing other types of capital (e.g., natural, built, human), so it is important for local governments to find ways to support the development of financial capital in Tri-COG.

## Alignment Between Grower-Prioritized Capitals and Local Government Capacity

Rural Growers: Prioritized Capitals







Human

Built

**Urban Growers:** Prioritized Capitals

- Natural
- **1** Financial
- Human

Youth Growers: Prioritized Capitals

- Financial
- Natural
- Human



Social

Capacity

- Human
- Built
- Natural



## Local governments, allied organizations, and community members all have a role to play in transforming the food system

- Local governments cannot do this work alone. Community members and allied organizations have important roles to play too.
- Allies and community members can be particularly helpful by building community capital in areas where local governments feel they can be less effective, such as financial and cultural capital.
- They can also bring BIPOC voices to the local governance table to improve equity outcomes, including ensuring that policymakers understand the full extent of community impacts of proposed policies.
- Anchor institutions, such as hospitals and universities, can play a coordination role alongside local governments. Because anchor institutions' well-being is tied to that of their communities, they can benefit from investing in their communities.<sup>48</sup>
- Based on the high priority of financial capital in grower-recommended investments and low capacity of local government to support these types of community capital cultivation directly, allied organizations working on that topics (e.g., credit unions, foundations) may have an exceptionally important role to play in building food system infrastructure in the Tri-COG region. Local governments can offer to support to these organizations.

#### Allied Organizations by Community Capital Type

Community Capital		Example Allied Organizations and Individuals		
Social	***	Formal and informal networks (associations, collaboratives, co-operatives)		
Cultural	77	Chefs, growers, individuals who take an active role in the food system		
Human		Farmer co-operatives, cooperative extension, higher education institutions		
Built	<b>#</b>	Food hubs, value chain businesses, Chambers of Commerce		
Natural	*4	Land trusts, conservation associations		
Financial	•••	Credit unions, foundations		

Collaboratively building regional community capital can help the Tri-COG region move toward a more equitable, resilient food system

## Building community capital can move the Tri-COG region closer to its aspirational future state

The aspirational future state of the Tri-COG food system is equitable and resilient.

#### Equitable

Equitable participation and asset ownership along the dimensions of race, ethnicity, geography, and position in the value chain (e.g., grower, aggregator, purchaser).



#### Resilient

Economically and ecologically sustainable, adaptive regional value chains that function well after a disturbance.<sup>6</sup>



Signs the regional food system is moving toward the aspirational future state include investments in the following.

## Social and Cultural Capital

Abundant, high-quality, and diverse ruralurban and cross-sector connections, founded on strong knowledge of the Tri-COG food system, social capital, alignment between production and consumption of food types and quantities across the Tri-COG region, and a desire to leverage their collective voice on a larger platform for change.

## **Human Capital**

Appropriate technical assistance, financing mechanisms, and business development support for growers and food entrepreneurs of varying business sizes, models, and stages of development—including increased support for underrepresented groups.

## Built, Natural, and Financial Capital

Financially and logistically accessible production, aggregation, processing, distribution, and transportation infrastructure for growers and food entrepreneurs of varying business sizes, models, and stages of development.

## Start somewhere: moving the needle where there is momentum

- Some efforts are already underway to regionalize value chains. Recognizing and leveraging these efforts for future action is a helpful starting point. Assessing how resilience and equity outcomes can be improved in efforts that are already underway is also important.
- Smaller-scale farms sell through a variety of marketing channels. In addition to direct-to-consumer sales, they also sell to aggregators, such as wholesale distributors and food hubs. There have been efforts to encourage larger-volume institutional purchasers, such as schools, early care or senior care facilities, and hospitals, to participate in regional value chains by buying from a farmer directly or from a food hub.
- Among School Food Authorities responding to the Farm-to-School Census in the Tri-COG region,\* \$7.1 million (17%) of their total budgets of \$40.5 million was spent on local food and milk during the 2018-19 school year.<sup>49</sup>
- Billions of dollars in emergency food funding are available nationwide. There have been efforts to direct more emergency food spending to regional value chains via food hubs and other institutions. For example, emergency food spending from The Emergency Food Assistance Program (TEFAP) Reach and Resiliency Grant funding totaled \$1.4 M for NC in the most recent round. For Local Food Purchase Assistance Cooperative Agreement Funding totaled \$6.2 M for the Carolina Farm Stewardship Association's NC Farms SHARE program.

## Local governments can use the following strategies to build food systems community capital



### **Social Capital**

Lead with social capital. Serve as a convener: build relationships FIRST to leverage other capital types more effectively. Reach out to community members, particularly those who have had less of a public voice in the past, to meet them where they are and involve them in decision-making processes. Tailor communication strategies to specific groups.



## **Cultural Capital**

Acknowledge that inequity exists in the food system and commit to adopting policies that move toward equity and investing in groups that historically have been underinvested in. Collectively examine how your community's values show up in decisions about food systems.



#### **Human Capital**

Explore opportunities for joint funding of staffing positions. Dedicated staff who work on these issues across county boundaries are key. Ensure workforce development strategies support agriculture and food entrepreneurship endeavors. Connect well-matched organizations and individuals in this space.



#### Built Capital

Advocate for public financing of built infrastructure for food systems just as you would for roads and broadband. They are an important part of your government's economic development strategy. Identify and support organizations already working to build infrastructure in your area. Focus on unlocking the full potential of existing and new built by ensuring they have the other types of capital they need.



## **Natural Capital**

Integrate protection of farmland and water sources into your economic development strategy and land use plan. Provide support for farmers related to succession planning and navigating heirs' property laws. Align zoning ordinances with intended land uses that support a wealth creation approach to economic development.



#### **Financial Capital**

Familiarize yourself with creative financing mechanisms and connect organizations and individuals to appropriate options for their goals. Advocate for policies that enable easier direction of public funds, such as institutional procurement and emergency food dollars, toward regional and equitable food value chains in ways that put community-based organizations in control of decision-making.

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