

Wake County Local Food Supply Chain and Food Hub Feasibility Study: Strategy and Action Plan

September 2022



Why Focus on Food Hubs? An Expression of Need

COVID-19 exposed the fragility in our food system, nationally and here in Wake County. Demand at food pantries soared. Grocery stores ran short on key staples. Families struggled to access shelf-stable staples, culturally appropriate food and to access fresh, healthy, nutritious options that are fundamental to health and well-being. Global forces are pushing inflation, and at the same time climate change threatens the industrial agriculture in the western US that so many of us rely on every day. **The global food system is becoming less secure, and local food systems lack the infrastructure to source local and regional food to fill the gaps.**

Wake County has the opportunity to learn from these multiple challenges and construct a food future that links farms, food access, and Racial Equity together in resilient supply chains and community networks. In order to establish a more resilient food system, we need to expand access and enhance equity across the whole supply chain. **Local food hubs are a powerful tool in achieving this resilient future.**

Food hubs are connectors. They are middle infrastructure to aggregate and distribute local food, connecting farmers to sales, and providing large customers with organized access to a local food supply. They fit in between the large and smallest scales of economic elements of our global food system. Hubs open critical financial opportunities for new, urban, small, specialty, and diversified farms - the same farm types that will be the foundation of Wake County's future farm community.

Wake County consumers spend billions of dollars annually on food, but only a fraction of that on regional or County-grown food. With new market opportunity and sales channels, more of this massive food spending could be steered to Wake's farmers. Greater farm profitability supports farmland and open space protection.

Food hubs are also an important tool to grow equitable community health and inclusive economies. If designed intentionally around anti-racist practice, food hub initiatives can push back against systemic racism, center marginalized voices, and build urgently needed equity for BIPOC farmers, entrepreneurs, and community members.

Food hub initiatives can recognize the traumatic heritage of many BIPOC farmers and food entrepreneurs. These voices can be centered in the creation of resilient local food supply chains that respond to the impacts of COVID. Diversity and inclusion are fundamental to resilience. **The greater the diversity of our farming and food hub community the greater the resilience of our food system.**

COVID-19 has shown the fragility of Wake County's food system, and it has exposed the **disproportionate vulnerability of Wake County's BIPOC communities in the face of disaster.** It has also spurred new dialogue and attention for the urgently needed change around race and racism in our communities. Wake County has the opportunity to leverage local food systems for equity, resilience, and health for all of its citizens.

How might resilience to future shocks be delivered through food supply chains? How might increased food production for local communities grow economic opportunity and fresh food access? How might increases in food hub activities such as local aggregation and distribution support Wake County's resilience, health, and equity?

This report seeks to answer these questions.

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Acknowledgements

This report made possible with funding from the American Rescue Plan, allocated by the Wake County Board of Commissioners to support resilient communities and recovery from the COVID-19 pandemic. The authors are grateful for being included in this important investment.

We would also like to recognize the commitment and forward thinking of Wake County Cooperative Extension in leading the way towards inclusion and equity in County-led food systems conversations and planning.

Throughout this project, community members contributed time and expertise. Our group of Racial Equity Advisors are due heartfelt gratitude for offering their insights, experiences, and trust in this project. Your time and energy opened the door for this project to make a real difference.

We would also like to thank the many farmers and food systems professionals who gave time through interviews and online surveys. Without your perspectives we would never have built the plan that we did.

This study and report produced by Erin White and LaShauna Austria.

Summary

In Wake County, food hubs are a capital-ready, organisable engine for change in the existing food supply chain. Linking local customers to local and regional farms, food hubs are an emerging model for effective food supply chain resilience, connectivity, and diversity. Food hubs open markets for small and medium-sized farms, shorten travel distances for food, and offer flexible sourcing for customers seeking fresh, nutritional food. In Wake County a number of hubs, from very small to large, are already working to expand local food infrastructure.

A research study of food hubs during the pandemic concluded that:

“The performance of the hubs in response to the multiple challenges accompanying the pandemic demonstrates their key role in food system resilience through features of diversity, functional redundancy, and connectivity, suggesting that disaster preparation should consider local food hubs a necessary service.”¹

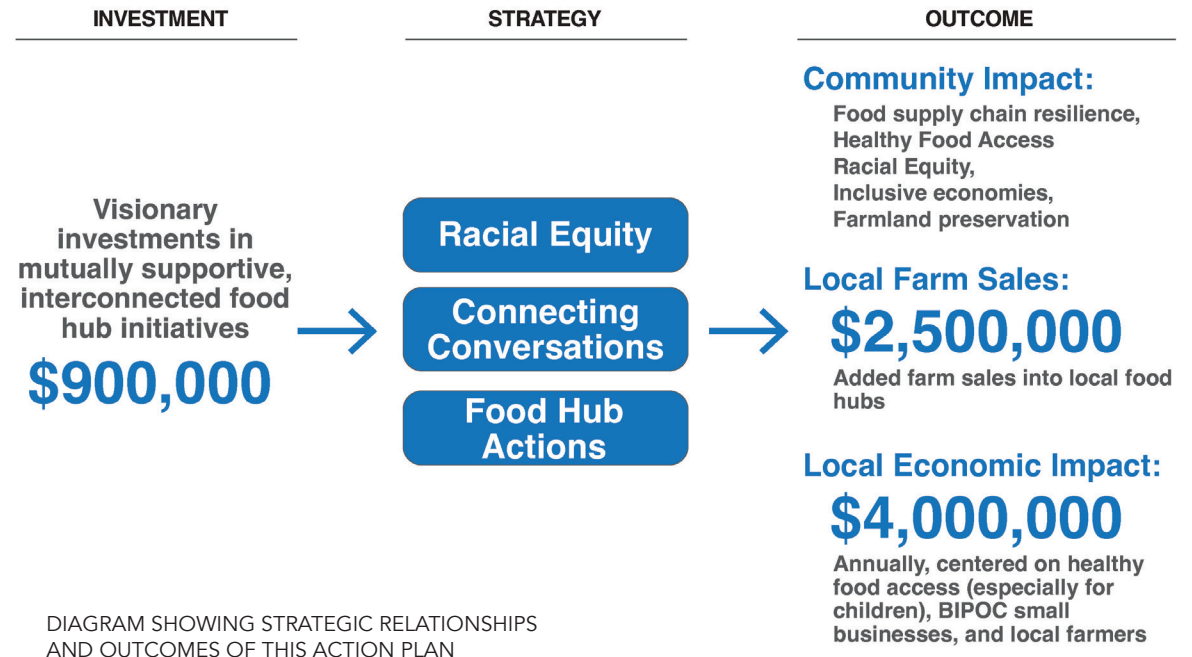
Through interconnected investments, existing food hubs in Wake can bring additional value to the local food system along with real-world economic, equity, and resilience benefits. These hubs should be encouraged to stay diverse, responsive to local voices, and self-empowered while they take on new funding partnerships and collective capacity building. **This will require coordinated funding in multiple areas to transform the current state of disconnected, sometimes informal food hubs into a connected, sustainable network.**

¹ Azizi Fardkhales, S., & Lincoln, N. K. (2021). Food hubs play an essential role in the COVID-19 response in Hawai'i. Journal of Agriculture, Food Systems, and Community Development, 10 (20), 53–70 .<https://doi.org/10.5304/jafscd.2021.10 2.036>

Our findings show that there are actionable, feasible strategies to invest in Wake County food hubs that will move the needle on critical needs and leverage significant assets and opportunities.

We propose action in three mutually-supporting strategy areas:

- Racial Equity
- Connecting Food Conversations
- Food Hub Action



What is a Food Hub?

A food hub is a business that buys food from multiple farms in order to aggregate and sell it at larger volume to wholesale or retail customers. A local hub focuses on local or regional farms and food producers, and on local customers. The most important roles a local food hub can play, besides the economic impact, are in building trusting relationships in the local food system, and working with farmers in planning what to grow and how to market it.

The business model of a food hub can be a difficult balance between serving farmers by offering the best prices for their products, and keeping wholesale and retail costs low to stay competitive against much larger distributors. Some hubs scale up to grow their efficiency, some organize as cooperatives or non-profits, and some focus exclusively on higher-paying customers able to pay a premium for fresh, local food. Diverse hub models are a key to a diverse supply chain, capable of moving many types of farm products and serving many different types of customers.

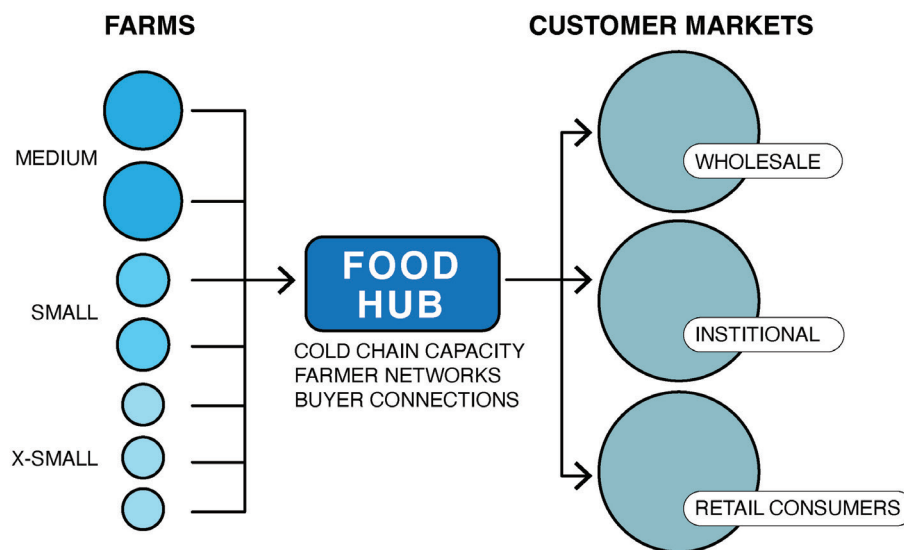
Here is a more detailed definition for the purposes of this Wake County-based study:

A Local Food Hub is a business or organization that manages the aggregation, distribution, and marketing of local farm and food products in order to:

- expand resilient local and regional farm to table supply chains,
- facilitate equitable, inclusive, and just outcomes within the local food system,
- increase revenue for small and medium-scale agribusinesses through new market opportunities, and
- improve accessibility of local and regional food for residents.

Food hubs are “innovations in local food systems that help connect small farmers with local markets.”¹

¹ Azizi Fardkhales, S., & Lincoln, N. K. (2021). Food hubs play an essential role in the COVID-19 response in Hawai'i. *Journal of Agriculture, Food Systems, and Community Development*, 10 (20), 53–70 .<https://doi.org/10.5304/jafscd.2021.10.2.036>



SIMPLIFIED DIAGRAM SHOWING HOW FOOD HUBS RELATE TO FARMS AND LARGER BUYERS THROUGH FLOWS OF FOOD

Our Process and Key Findings

Between January and August 2022, Community Food Lab and Seeds of Change partnered to explore food hubs in Wake County. Community Food Lab led the project team, contributing key insights into Wake County's food system as well as experience in strategic planning for local food resilience. Seeds of Change, led by LaShuana Austria, brought a depth of food system knowledge as well as critical skills in Racial Equity advising, training, and practice.

While the project was referred to as a food hub feasibility study, in fact it centered on a wider question:

“What strategic investments in local food aggregation and distribution will best enhance and expand our local food supply chain while growing equity for BIPOC communities and increasing effectiveness for emergency food distribution?”

Typical food hub feasibility studies begin with a narrow question, asking how a single food hub enterprise would craft a feasible business. Such an analysis would include high-level agricultural market data, operational costs, and food market research, and conclude with a top-line sales target for that hub to break even.

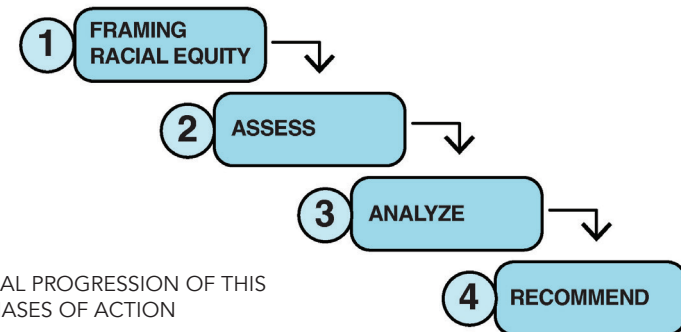
This study, instead, was less about planning a single hub and more about using food hubs as an investment approach for resilient food systems.

In answering this key question, our study avoided preconceptions and opened the door to broad conversations as a way to understand the landscapes and flows of local food in Wake. We looked at how food hubs, playing multi-functional food systems roles, could be strengthened as a segment of food supply chains and community resilience vehicles. By investigating how the middle supply chain infrastructure of food hubs could best benefit farmers, BIPOC communities, and food system sustainability

and food access, we uncovered strategies for diversity, shifts in power structures, and the need for intersectional planning and investment.

Our project team worked closely with Wake County Extension to develop an appropriate process to frame this study, and a Racial Equity Guide to provide a clear, actionable lens onto equity both within our project and in its outcomes.

Over 6 months the project moved through multiple phases of work.



CONCEPTUAL PROGRESSION OF THIS STUDY'S PHASES OF ACTION

We began by establishing our Racial Equity Guide, and moved into a wide-ranging assessment phase of data collection from multiple, diverse sources. As data began to take shape, we began finding patterns and opportunities. Our third phase of analysis consisted of pulling forward ideas and scenarios, testing them with follow up research and feedback from our advisors. Finally, we compiled our findings into actionable strategies and recommendations.

For much of the project, our team engaged with a Racial Equity Advisory Group, made up of local food practitioners and activists, mostly

people of color. This group met three times over three months, sharing experiences, insights, cautions, and feedback as the project moved forward. A small group of only 7 people, it does not represent an actual community engagement process. Rather, by working with the same small group across the whole project we were able to develop relationships, test ideas with food system experts, and center voices of color at key moments in the project. The Advisory Group members were asked to bring their own perspectives and lived experiences to help us ask the right questions in our research, interpret our findings, and prioritize key directions for actions.

By incorporating a Racial Equity lens from the earliest phase of the project and making space for voices of color as Advisors, this work was able to move forward from a recognition of structural racism towards strategies to connect intention to outcomes.

Running alongside our Racial Equity framework, our research work covered a wide set of data meant to uncover key barriers, opportunities, and impact for food hubs in Wake County. Our research fell into three primary areas: unstructured interviews of food systems practitioners, an online survey of farmers, and mixed research into food hubs generally, and into Wake County’s food hub community, agricultural economy, and demographics. Detailed results and descriptions of these methods can be found in the Appendix.

ENGAGEMENT APPROACHES				
	TYPE	Racial Equity Advisory Group	Key Interviews	Online Farmer Survey
	METHODS	Series of three three-hour meetings	Unstructured 60 minute interviews	Voluntary survey on farm practices and food hub interest
	PARTICIPATION	5 community food leaders of color; 2 Capital Area Food Network members	15 interview subjects	36 unique, valid responses

KEY RESEARCH SOURCES

USDA 2017 Agricultural Census
“Wake County in Focus” 2022 Wake County Demographic Presentation
2020 Wake County Agricultural Assessment
2017 Wake County Food Security Plan
2016 Triangle Farms for Food Strategy and Action Plan

As results from these multiple investigations were combined, patterns emerged that we refined into the following **key directions for food hub investment**:

The power of listening. Our advisory group reminded us that listening to community is very important in this work of racial equity. Community voice and lived experience are often undervalued in this work. Narratives shift when we listen to those most impacted by racial inequities.

Invest in existing enterprises instead of standing up a new food hub organization. Wake County has many food hubs or similar enterprises already that could be leveraged to meet goals.

Invest in BIPOC community and enterprises. Structural racism in the food system still affects communities of color, limiting economic opportunities and causing lasting trauma.

Invest in diverse food hub capacity that targets underserved parts of the local food supply chain (such as marginalized farmers, or small-volume purchasers like childcare centers).

Consider clustered food justice initiatives, where diversity and cooperative energy may grow emergent solutions for resilience. Potentially a food hub, farm, grocery coop, innovation center, education program, etc organized as a (loose) web of interrelated efforts.

Prepare for future crises through supply chain diversity, functional redundancy, and connectivity.

Develop coordination and connectivity across a producer-buyer network.

Build new food hub volume around uncrowded and flexible markets such as: Wake County Farm to Child Care, nutrition-focused food pantries, other wholesale food buyers, farmstands in need of more local product lines, and Emergency Food Hubs spending on local food sources.

Work with Wake County trends of high population growth and smaller farms. The right size agriculture for a rapidly urbanizing county will lead to viable farms and land preservation.

Working with this list of early conclusions, we began imagining actionable solutions that built off of them and fit with our project's goals around resilience, local farms, and equity. We engaged the Racial Equity Advisory Group to help us create and sort through a list of potential actions aligned with our goals, and evaluated through a Racial Equity lens. After revising our list and evaluating the possible solutions for impact, readiness, and feasibility, we finalized a set of recommended actions, organized into three strategy areas. This formed the basis for our **Strategic Vision**.

Strategic Vision:

A diverse network of food hubs in Wake County will support resilient food systems, a thriving farm economy, and equitable communities.

We propose achieving this vision through 3 intersecting and mutually-supporting strategy areas. This approach resulted from understanding the ways each strategy area worked on multiple levels.

First, while **Racial Equity threads into the recommended actions of the other strategies, it also belongs as an entire area of focus.** Racial Equity serves as both top-level strategy and driver of intentionally equitable details of new policy.

Strategy 1. Racial Equity

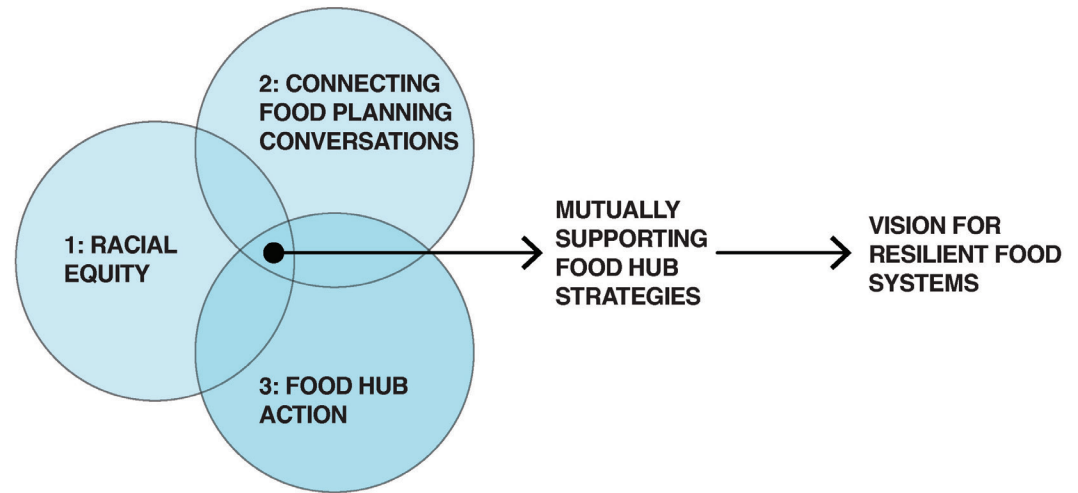
- Recognizing and combating structural racism
- Centering diverse voices and experiences
- Encouraging learning, change and adaptation
- Fostering authentic relationships and presence

Second, **food by its nature acts as a system.**

Connecting the outcomes of this study to other food planning work will accelerate resilience and grow the synergistic capacity of Wake County’s food system. Systems-level insights developed here should inform comprehensive food planning, community action, and networks of change for sustainable food projects.

Strategy 2. Connecting Food Planning Conversations

- Encouraging coordination, continuity, and transparent interactions across food systems planning
- Making food systems conversations accessible and more equitable



Finally, **food hubs are engines for equitable, resilient food and farm economies.** Smart investment in food hubs builds connections to scale up local food markets and flexible supply chains. In this plan, food hub investments respond to existing Wake County local food strengths and weaknesses, and target growth for key parts of Wake’s farm economy while increasing regional food access for Wake County.

Strategy 3. Food Hub Action

- Investing in numerous and diverse existing food hub businesses and community organizations
- Building the social and economic web of relationships needed for a resilient food system
- Growing a place-based agricultural economy for Wake County, responsive to the needs of the land and communities of this place
- Creating capacity in local infrastructure to aggregate greater amounts of food from regional NC farms to Wake County consumers

Strategy 1: Racial Equity

The resilience of Wake County's local food supply chains depends on diversity, equity and inclusion. The diverse communities, businesses, and people of Wake County must all be invited to participate in and own local food systems, to bring their knowledge, energy, and love to growing, selling, cooking, and eating food. This inclusivity, however, must be constructed with an awareness and empathy of how racist structures disproportionately impact BIPOC communities. A Racial Equity strategy is a powerful tool to move diversity and inclusivity forward.

Our contemporary food system is built, literally, upon centuries of slavery, land theft, and racist policies and practice. BIPOC communities still face the trauma and injustice of systematized oppression within the food system - whether as farmers, food business owners, or community members hoping to access nutritious food for their families.

The systems of racism built into our society are not the responsibility of any one individual. They were constructed layer upon layer, through decades of injustice. And while our society has taken strides towards dismantling them and establishing actual equality for all, structures of racism persist.

Racial Equity depends upon commitment by leaders to eradicate inequities in the food system and improve outcomes for all Wake County residents.

This Racial Equity strategy must recognize the urgency to fight structural racism and the necessity to frame this work as a process or journey that we all must share. Racial Equity must be incorporated as an element in our decisions and actions. We must constantly measure our work, engage with accountability, and stay aware of the ongoing trauma caused by racist structures if left unchallenged. These principles will help guide us to equitable action and the dismantling of structural racism.

Goal 1

Center conversations and strategies around BIPOC perspectives in Wake County's food system. Recognize that authentic engagement will be difficult with entirely white-led processes.

Racial Equity in project outcomes rely on an equitable, inclusive process that seeks insights and ideas from those typically left out of white-led power structures. By seeking out and listening to experiences and lived perspectives of BIPOC food system practitioners, we open up opportunities to build new solutions that emerge from intentional, equitable dialogue.

ACTIONS:

1. Specify the involvement of leaders of color in designing, facilitating, interpreting, and communicating this work.
2. Include participation stipends and other practical allowances in budgets for planning projects, allowing people to participate in discussion and decision-making.
3. Design surveys, engagements, and meetings that are culturally appropriate and inclusive. (For instance, consider accessibility of language, different abilities to access technology, and the locations, times, and support such as food and childcare for successful meetings)

MEASURES:

1. Has there been broad inclusion in decision-making?
2. Have BIPOC community members been engaged successfully? This can be measured by assessing whether the proportion of BIPOC participation reflects the BIPOC population in Wake County, and also measured through multiple phases of engagement including feedback surveys.
3. Does a project ask specifically about power structures in engagement, and what changes a Racial Equity lens might lead to?

What is a white-led process?

Through our work in this plan, a white-led process has been imagined as:

- Managed by all or a majority of actual white people - project instigators, managers, and team members; or
- A process that incorporates status quo approaches to engagement, approvals, and implementation. Our “status quo” has been built on centuries of exclusion and white supremacy. A white-led process can operate without awareness of the potentially racist structures that a status quo approach would perpetuate. In this case, the project team may actually be diverse, but if it is not intentionally looking for ways to build inclusive, equitable, or anti-racist approaches, it may still be understood as a white-led process; or
- A process with an inclusive, diverse team and white leadership, but where candid input and shared decision-making are not encouraged.

It is important to note that a racially diverse team could still run a white-led process. It’s also important to note that a group of mostly white people could lead a process that is intentionally not “white-led.” **The key idea is the intentional incorporation of anti-racist principles, which can be embraced by all people.**

Goal 2

Create space for ongoing Racial Equity dialogue, project advising, and training. Build relationships. Convene.

Relationships are fundamental to resilience. By convening partners and community members around Racial Equity in the food system, long-term value for community resilience can be nurtured while simultaneously working to dismantle structural racism.

ACTIONS:

1. Work with the Capital Area Food Network to plan and create a joint, stipend-supported Racial Equity panel for food systems dialogue and project advising. This might be a role for the CAFN Racial Equity Circle, or a new multi-stakeholder group that CAFN helps facilitate.
2. Engage community members around equity in food, providing the resources to make the engagement meaningful and responsive to their needs and priorities.
3. Stay engaged and invest in personal relationships.

MEASURES:

1. How often does a Racial Equity group convene?
2. How much funding is there to support the Racial Equity group?
3. How often is Racial Equity group invited to advise on food systems projects?

Goal 3

Embrace learning and change on every project

A strategy alone is not Racial Equity. Through implementation, food system practitioners have the opportunity to put a strategy in action, but also to keep learning as they go. Every food system project in Wake county should explore ways to intentionally listen to participants and, during the course of a project, reflect on how the project might successfully adapt in response to new ideas and insights. When writing a new project RFP or description, moments can be defined for listening and reflecting, thus embracing emergent ideas and input from key stakeholder groups. A stiff adherence to a project plan can limit how new voices engage and stifle the valuable equity found in inclusive stakeholder engagement.

ACTIONS:

1. Include time for reflection and allow for redirection in any project
2. Listen to all voices and follow up on input and feedback
3. Enlist Racial Equity consultant(s) to advise and train around Racial Equity awareness, training, and tools creation.

MEASURES:

1. How much time have you scheduled for reflection during the course of the project? Who leads the reflection?
2. Are BIPOC team members empowered to suggest changes to scope or approach?
3. Is there a post-project reflection process to discuss Racial Equity goals and opportunities?

Strategy 2: Connecting Food Planning Conversations

As multiple food planning projects move forward in Wake County, it is essential to recognize that **every project or conversation exists in a broader system of food planning.**

The process of research and engagement in this food hub report uncovered ideas and information less relevant to food hubs but very relevant to food security work or the community food system. Passing ideas and energy between multiple efforts would serve to strengthen the whole system.

Greater visibility of food planning work in Wake County would build transparency, accessibility, and trust. Finding ways to better publicize food planning progress would allow stronger participation and ownership, and would improve accountability and community impact.

Goal 1

Help valuable ideas flow between relevant food planning projects, aligning the planning projects and taking advantage of all insights and input

ACTION: Wake County Extension passes specific ideas from this Food Hub project forward to the 2022 Comprehensive Food Plan Update, and other partners such as NCSU College of Design.

The following three ideas emerged from the Food Hub work, but are not directly related to food hubs. Instead of letting these ideas go, they are offered here in hopes that the Food Security Planning team can consider them:

Food Justice Cluster, or People's Food Sovereignty Center: A project that collects a number of aligned food justice enterprises and initiatives together in a vertical alignment, where mutually-supportive relationships can flourish. For instance, an urban farm, food hub, shared kitchen, grocery cooperative, and community educational programs could co-locate in a single block or district and develop direct relationships and collaborations around holistic food justice creation. As one example: The Detroit Black Community Food Security Network.

Urban agriculture support: Explore zoning changes to make more types of agriculture legal in more urban areas, and create supporting employment, educational and resource programs for sustainable, impactful urban agriculture.

Shifting metrics: Investigate how we measure progress and successful investment in food systems, and how changes to these metrics might shift how we choose to invest. One example: food pantries may measure the number of people served or pounds of food distributed - more meaningful might be number of nutritious meals distributed.

Goal 2

Make food planning transparent and accessible

ACTION: Find collaborators to create a web-based dashboard and a simple email listserv to keep community members up to date on food planning and projects in Wake County. A dashboard could include past, current, and planned food systems projects, with status of each such as final products or opportunities to participate. A listserv could be a place for partners to post project announcements and updates to interested community members. Any tool such as these could be designed to connect to diverse communities, cultures, and abilities in Wake County.

These ideas might be further explored through the 2022 Comprehensive Food Plan Update, and evaluated as one opportunity to build community infrastructure that aligns with emerging project values such as transparency, accountability, and inclusion.

Strategy 3: Food Hub Action

We are recommending six fundable actions that move three interdependent elements of food hub capacity forward around resilience, Racial Equity, and the local farm economy. These three elements work together to create a fabric of support and capacity building, leading to impactful scale and growth. We propose active communication and coordination, increased physical capacity and the staff needed to make it run, and a first direction to capture new cash flow for a local food hub and for local farmers. Communication, capacity, and cash flow.

Three interdependent elements for developing resilient, equitable food hub capacity in Wake County:

3.1 Build a Network.

Grow a Food Hub Coalition as connecting infrastructure to link producers and buyers, and supporting tools and programs to maintain energy and value for participants

Action 3.1.1: Supply Chain Coordinator

Action 3.1.2: Interactive Online Database

Action 3.1.3: Coalition-Supporting Event Series

3.2 Grow the Cold Chain.

Invest in local food hub capacity for existing local food aggregators (both cold chain equipment and support staffing)

Action 3.2.1: Equipment Grants

Action 3.2.2: Staffing Grants

3.3 Expand Local Food Sales.

Identify new customer markets to be served by local food hubs, beginning with Wake County Smart Start's farm to childcare program (F2CC)

Action 3.3.1: Farm to Child Care

These elements and supporting actions are designed to strengthen the networks of food hub buyers and farmers and food producers across Wake County and the region. This strong network will support increased farmer sales connections and marketing options, build the connectivity among buyers to facilitate trading and cross-hub transactions, and increase the local supply chain relationships that provide key resilience for our food system.

Strategy 3.1: Build A Network

Action 3.1.1 Supply Chain Coordinator

Objectives:

- Provide essential backbone support for food hub coalition
- Act as collaborative supply chain connector

Timeline: Two years of County funding, beginning July 2023

Description:

A two-year full-time position, to be funded by Wake County and placed with a qualifying community host organization. The Supply Chain Coordinator will work closely with Wake County Extension's Local Food Coordinator while staying accountable to and managed by their host organization. The purpose of this position will be to facilitate and empower a diverse food hub coalition in Wake County, capable of self-definition by Year 2.

Ideal Host Organization:

- Wake County-based independent community organization
- Leadership includes women and BIPOC individuals
- Administrative capacity to manage and oversee a full-time contract position (in-house or through fiscal sponsor)
- Broad relationships across Wake County local food systems and experience in food systems and supply chains
- Track record of commitment to Racial Equity and anti-racist practice

Potential Responsibilities of Coordinator:

- Work with community stakeholders to share and further define food hub coalition, allowing emergent discoveries to shape coalition directions
- Actively seek connections to BIPOC farmers, food producers, and buyers
- Facilitate introductions and relationships among farmers, food producers, and food hub buyers
- Act as proactive sales agent with goals of increasing any and all local food sales to Wake County food hubs, and building lasting producer-buyer relationships
- Actively support new farmers in developing understanding of food hub sales options

- Assist development of online database through promotion and farmer and buyer recruitment
- Provide marketing and communications among food hub coalition members and stakeholders
- Support Extension Agent in delivering coalition-building programs (Action 1.3)
- Act as creative instigator for new concepts to increase local farm sales, food access, and racial equity
- Collect data among coalition members and provide to Extension Agent for communicating findings and reports
- Participate in the collaborative creation of a defining strategy for the continued action of the Food Hub Coalition (Year 2)

Equity Approaches:

- Hosting community organization should have an equity framework in place
- Coordinator should specifically track and evaluate outreach and engagement with BIPOC food producers and buyers

Costs: 1 FTE for two years

Funding Strategy:

It is recommended that Wake County allocate funding for the two-year position. By the start of Year 2, the host organization will need to have finalized a strategy for ongoing operations that will include continued funding plan for this Coordinator. (continued funding strategy should be included as a part of the RFP submission)

Outcomes and Measures:

- Robust network of producers, buyers, and stakeholders in Wake County's local food supply chain
- Annual surveys and data reports to describe participation levels, quality and impact of coalition activity, and network maps of local food supply chain.
- Evaluation of BIPOC participation in coordination efforts
- Strategy for future directions and sustainability of food hub coalition

Strategy 3.1: Build A Network

Action 3.1.2 Interactive Online Database

Objectives:

Increase local food supply chain inter-connectivity and sales by:

- raising awareness of diverse sales options for farmers
- helping food hub and wholesale buyers access a wider community of farmers
- Connecting buyers to each other to support cross-hub trading and farmer referrals

Timeline: Launch Spring 2023

Description:

An online, searchable network tool showing farmer and food producer profiles and general offerings, and buyer profiles and purchasing needs. Not meant as a real-time inventory listing or sales platform, instead it is meant to provide leads and connections for diverse sales relationships. The database will focus on Wake County food producers and buyers with an emphasis on BIPOC enterprises, though should not be exclusive to that. Participation and listing on the site will be supported through active Wake County recruitment, open marketing and invitation, and promotion through regular events. Farmer profiles would typically include product types and volumes, any certifications, ability to deliver and maintain continuous cold chain, and demographic profile. Buyer listings might include details such as regular product needs, certification or tracking requirements, packing preferences, and logistical considerations. Listing on the database should be free to farmers, food producers, and buyers.

Equity Approaches:

- Include at least one independent advisor of color in the database planning and design team

- Recruitment of farmers and buyers of color to the database
- Prioritize open access to database across multiple technology platforms, and include access support when needed

Costs:

- Database and interactive website creation
- Web hosting
- Recruitment of food producers and buyers, mostly included in Supply Chain Coordinator's role
- Promotion of database across the regional food supply chain

Funding Strategy:

We recommend that Wake County contract with a software developer to create the interactive database. Promotional material for the website can be created by Wake County Extension, and pushed out by partners in Wake County and regionally. The web hosting and ongoing maintenance costs for the site should be assumed by Wake County and performed by software contractor as needed. Database content should be kept updated and verified by Supply Chain Coordinator.

Outcomes and Measures:

- Food producer and buyer participation levels
- Volume of traffic on database
- Agricultural economic activity (surveys to collect on participant experiences, as well as automated impact analysis and reports)

Strategy 3.1: Build A Network

Action 3.1.3 Coalition-supporting Extension Event Series

Objectives:

- Energize the food hub coalition framework
- Build critical supply chain skills and knowledge among food hub practitioners and community food activists

Timeline: Begin events Fall/Winter 2022

Description:

Wake County Extension to lead a diverse range of events through the year. This series will provide marketing opportunities for Wake County's food supply chain work, create networking spaces, and allow skill-building and knowledge sharing to reinforce food hub and supply chain investments. Wake County Extension should explore partnerships with other county's Extension offices, and with other aligned organizations such as CAFN whenever possible - strong partners will help ensure the success of these programs. Some events themselves will be Wake County-focused, while others such as food hub trainings may be collaborations among multiple counties. Possible event types include:

- Knowledge sharing events (such as a presentation on developing farmer coop's or marketing extra produce)
- Producer-Buyer Meetups
- Supply Chain Logistics Training
- New farmer marketing workshops
- Creative Workshops to identify innovative new supply chain concepts
- Grant development workshops and mentoring

By spacing events out throughout the year and working with community partners such as CAFN, audience interest can be sustained (not burned out) and Extension staff can find ways to weave these events into existing staff responsibilities. As a ballpark, hosting 4-6 events per year might be a

manageable, impactful number to consider.

Equity Approaches:

- Center the experience and voice of BIPOC food supply chain leaders in events
- Make events accessible across schedules, locations, and technologies
- Invite feedback and input from local food supply chain community on what future events would be most valuable

Costs:

- Marketing and materials budget to host roughly five events per year of +/- 30 participants
- Existing Extension staff time to lead the development of events
- In kind partner resources to help plan, promote, and host events

Funding Strategy:

We have designed this action to align with the Wake County Extension mission and existing staff capabilities. As such, needed financial support for continued programming may largely be in place already. For many events, organizing and production costs may be shared among in-kind partners.

Outcomes and Measures:

- Number of events
- Number of attendees
- Number of Wake County farmers involved
- Number of BIPOC farmers involved

Strategy 3.2: Grow the Cold Chain

The physical capacity of the cold chain - the continuous linkage of cold storage and handling spaces from field to customer - is a critical element of the food system. The cold chain helps ensure food safety and lengthens the shelf life of farm products. Limits on cold chain capacity, such as not enough refrigerated trucks or cold storage warehouses, limits the amount of local food that can be successfully harvested and marketed. Limited cold storage capacity will indirectly impact what a farmer chooses to plant and who they plan on selling it to.

In our work, we found that **bottlenecks in cold chain capacity were limiting factors for expansion of local food hubs**. Certainly, some warehouses had excess capacity that could be available for partnerships (an opportunity to be explored by the Food Hub Coalition), but limited cold chain infrastructure across a diverse range of food hubs is limiting those hubs' ability to grow.

In addition, **small and emerging hubs may lack staff trained in sales and logistics to maximize the performance of new infrastructure. Simply adding new equipment will not ensure growth in local food volume.**

The following two grant programs, Action 3.2.1 and Action 3.2.2, should be made available to eligible businesses through a competitive application process. Eligible entities will include food hubs located in Wake County, that manage the aggregation, distribution, and marketing of local farm and food products in order to:

- expand resilient local and regional farm to table supply chains,
- facilitate equitable, inclusive, and just outcomes within the local food system,
- increase revenue for small and medium-scale agribusinesses through new
- market opportunities and source-identified local price premiums, and improve accessibility of local and regional food for residents.

Funding priority should be given to hubs that meet some or all of the following:

- Can demonstrate the ability to make purchases from small farms, BIPOC-owned farms, and women-owned farms (“Target Farms and Food Producers”)
- Operate as “small hubs,” with preference given to start-up or informal

- operations with sales volumes under \$1 million annually;
- Are cooperative, or work with farmer cooperatives

These grants are designed to be awarded in conjunction with each other, and in coordination with Supply Chain Logistics Training to be developed in Action 3, above. A food hub receiving a new cooler may also need added staff to grow sales volume to match the new cold storage capacity. This new staff person (and their business) may also benefit from food hub logistics training. The programs will have the most impact when working together.

The following table shows a simplified financial analysis and economic impact of a hypothetical food hub that might receive these grants. Financial assumptions based on inflation-adjusted findings of a 2016 study of NC food hubs. The target \$1 million in sales represents a likely target for a viable hub. As shown in this table, the Year 1 grants together are designed to allow hubs to quickly scale towards this level of viability. The table also indicates the total local economic impact of four of these hypothetical food hubs.

	Year 0	Year 1	Year 2	Year 3
Gross Sales	\$400,000	\$700,000	\$850,000	\$1,000,000
Operating Revenue				
Markup: 25% of sales	\$100,000	\$175,000	\$212,500	\$250,000
Staffing Grant		\$45,000		
Subtotal	\$100,000	\$220,000	\$212,500	\$250,000
Equipment Grant		\$75,000		
Operational Expenses				
Staffing	\$40,000	\$115,000	\$85,000	\$100,000
Overhead (set at 15% of sales)	\$60,000	\$105,000	\$127,500	\$150,000
Subtotal	\$100,000	\$220,000	\$212,500	\$250,000
COG Sold (75% of sales)	\$300,000	\$525,000	\$637,500	\$750,000
Local Economic Impact (\$1.63 per \$1.00 in local sales)	\$489,000	\$855,750	\$1,039,125	\$1,222,500
If 4 Hubs follow this average model to Year 3, local economic impact could be:				\$4,890,000

TABLE: SIMPLIFIED FINANCIAL ANALYSIS OF HYPOTHETICAL “AVERAGE” FOOD HUB SCALE OPPORTUNITY AS RESULT OF GRANT AWARDS.¹

¹ Citation: Rysin, O., & Dunning, R. (2016). Economic viability of a food hub business: Assessment of annual operational expenses and revenues. Journal of Agriculture, Food Systems, and Community Development, 6(4), 7–20. <http://dx.doi.org/10.5304/jafscd.2016.064.002>

Strategy 3.2: Grow the Cold Chain

Action 3.2.1 Equipment Grants

Objectives:

- Support local food supply chain resilience
- Build cold chain capacity of small food hubs

Timeline: Publish application in Fall/Winter 2022, make awards Spring 2023

Description:

A County-funded grant program designed to provide one-time capital costs to Wake County-based food hub enterprises. Funds should be made available for equipment related to the cold chain elements of the local food supply chain (including walk-in or mobile coolers, refrigerated trucks, inventory tracking software, and supporting equipment such as shelving or pallet jacks). Grant amounts in the range of \$50,000 to \$100,000 are recommended. Justification for requested amount should be tied to a business plan for the applicant, showing how critical grant-funded equipment will unlock greater purchasing levels from target farmers and food producers. Based on research into Wake County local supply chains and the prevalence of local food hubs, 4 to 6 awards is an appropriate target for this program.

Equity Approaches:

- Invite at least three community food system activists of color to participate in grant language development and review process
- Invest in capacity-building for diverse food hubs
- Open new economic access for start-up and small food hubs
- Tie grant funding to food hub purchasing from small scale, BIPOC, and/or women farmers and food producers
- Offer application assistance and a flexible window to allow time to send applications back with requests for additional information and meeting time to review application with applicant

Cost:

- Grant program administration and overhead
- \$400,000 in capital cost awards

Funding Strategy:

Our recommendation is that Wake County allocate funding for the grant awards. Once the equipment is purchased and operational, each hub is expected to integrate maintenance and operational costs into its working budget. Part of the grant application will include business projections that show how operational costs will be managed.

Outcomes and Measures:

- Increased sales of Wake County farm and food products to food hubs
- Growth in small food hubs in Wake County
- Increased number of economically viable food hubs in Wake County
- Increased number of BIPOC farmers selling into food hubs

Strategy 3.2: Grow the Cold Chain

Action 3.2.2 Staffing Grants

Objectives:

- Support local food supply chain resilience
- Invest in skilled operational staff to take advantage of new equipment capacity at small food hubs
- Co-invest in equipment and the human resource needed to leverage it
- Support small food hubs' business health by providing front-end staffing resources for sales growth

Timeline: Post application in Fall/Winter 2022, make awards Spring 2023

Description:

Because equipment without skilled staff is not useful, this staffing grant program allows food hubs to pair new cold chain capacity of the Equipment Grant with a one-year staff resource to grow the food hub operations into the new capacity. This grant is designed to allow a food hub business to immediately take advantage of the new equipment capacity, with new staff to push sales and volume through a growth curve quickly, reaching towards staffing viability by the end of the 1-year grant period. It is also hoped that as new staff are brought on at small food hubs that they can participate in the Supply Chain Logistics training workshops discussed in Action 3.1.3, above.

Equity Approaches:

- Invite at least three community food system activists of color to participate in grant language development and review process
- Assist small, diverse food hubs in accessing business growth
- Support food hubs that focus business relationships on small scale, BIPOC, and/or women farmers and food producers

Cost:

- Grant program administration and overhead
- 4 to 6 positions, 1 year each. Positions may range from 0.5 to 1 FTE depending on food hub sales projections.

Funding Strategy:

Our recommendation is that Wake County allocate funding for the grant awards.

After Year 1 each hub should be able to sustain its own staffing needs. Part of the grant application will include business projections that show the revenue needed to sustain appropriate staffing levels beyond Year 1.

Outcomes and Measures:

- New jobs established in Wake County's local food supply chain
- Increased sales of Wake County farm and food products to food hubs
- Growth in small food hubs in Wake County
- Increased number of economically viable food hubs in Wake County
- Increased number of BIPOC farmers selling into food hubs

Strategy 3.3: Expand Local Food Sales

Small, local food hubs can position themselves as responsive, creative brokers of small volumes of food, unpredictable harvests from small and startup farms, “leftover” farm produce such as extra or mis-timed harvests, ugly or misshapen food, or even leftover lots from larger wholesalers. When food hubs can operate viably in these areas, it supports important small and informal levels of our local food system.

When new customer segments are identified who can use these products, attention should be paid to thoughtful business growth and building sustainable scale in operations. Food hubs capable of developing multiple customers for these less regular products should be able to assemble a viable sales volume, with profit margins available in between second quality farm prices and what potential lower-cost customer segments can afford to pay. Customer segments to look towards include Farm to Childcare programs (Action below), food pantries, food makers, and other customers not well served by current wholesale system or home-delivery produce box models. These customers typically do not require GAP certified produce, are able to be somewhat flexible, and may be able to fundraise to support fresh, local food purchasing.

As one target, the Farm to Childcare program managed by Wake County Smart Start is suggested as an example of how the local food aggregation and distribution function of a small food hub could provide enough scale to feasibly serve a diverse network of small customers.

Strategy 3.3: Expand Local Food Sales

Action 3.3.1 Connect a local food hub to Wake County Smart Start Farm to Childcare (F2CC)

Objectives:

- Establish a reliable source of local food for childcare centers in Wake County
- Eliminate the usual challenges faced by childcare centers trying to source from local farms
- Increase fresh local food served to Wake County children and their families
- Increase sales for local farmers

Timeline: Launch in Spring 2023

Background:

Wake County Smart Start has existing relationships with hundreds of childcare centers in Wake County. Through their Healthy Initiatives program they work to develop healthy food education and access for children. One of their efforts has been F2CC, a program designed to bring Wake County farm products into childcare kitchens, provide culinary training to best utilize this fresh produce, and educate children and staff on food and nutrition. Currently, about 25 centers participate in the F2CC program, ordering from roughly seven local farms. The F2CC program has faced challenges in finding enough Wake County farmers, farmers willing to deliver small quantities of food, and creating consistent food sourcing practices to fit childcare center needs.

Through analysis of the F2CC program and research into other similar initiatives across NC, it appears that a local food hub could help overcome most of these challenges. A food hub could provide a single contact point for a childcare center, and a food hub could deliver food to each site. By working with Wake County Smart Start and their relationships with hundreds of Wake County's childcare centers, optimized delivery routes could take advantage of geographic proximity of many centers. A food hub, working with multiple farmers, could expand offerings to a childcare center and help

them incorporate more local products, including fruits, vegetables, eggs, and meats. In addition, as a way to increase food hub profitability, a weekly produce box could be offered for parents to pick up at the center.

Description:

Identify a single food hub as the preferred local food provider for F2CC in Wake County. Wake County and Wake County Smart Start can collaboratively seek and offer an agreement to this "preferred vendor," who would take on a three-year agreement to provide fresh local food to childcare centers, as well as a produce box program for parents.

Wake County Smart Start estimates that over the course of two years, approximately 100 centers could be actively engaged in this food hub model of F2CC, building the necessary scale for financial viability. A simple business thumbnail is included below, showing the anticipated annual local food sales once the project is up and running. The preferred vendor would agree to:

- Purchase as much as possible from Wake County farms and other small farms, and BIPOC and women food producers;
- Be capable of servicing the number of centers expected; and
- Have the ability to provide value-add services to F2CC (such as hosting educational events, helping train cooks, or facilitating farm tours).

As part of the start-up investment, Wake County could invest in two ways. First, Wake County could provide funding or support for needed software systems for inventory, food ordering, and/or delivery logistics. Second, Wake County could provide a small starting local food budget for childcare centers to test out the new program. Wake County Smart Start could administer the starting food budgets, as a way to reinforce their central role in F2CC. In return for Wake County's investment, outcomes should include greater sales to Wake County farms, more fresh local food for Wake County children, and increased data for Wake County around childhood food access.

Equity Approaches:

- Winning food hub vendor will show how their work targets BIPOC farmers, with targets set by Wake County Smart Start
- Vendor will provide fresh food access for lower-income parents, through a weekly fresh produce pickup program made more affordable through
- SNAP/EBT inclusion, fresh produce matching dollars, donations, or other creative means

Cost:

- Time spent developing a preferred vendor program
- \$50,000 for start-up local food budgets (suggested \$500 per childcare center, with up to 100 centers), to be distributed by Wake County Smart Start

Funding Strategy:

Our recommendation is that Wake County allocate funding for the start-up

local food budgets. After the trial budgets are used by each center, they will rely on their typical food budgets to purchase local products. This project should be self-sustaining at a market level by providing convenience with ongoing program support by Smart Start. We expect the food hub to find ways to offer lower price points to centers by using B-grade produce, extra produce, or mis-timed harvests. We also expect the food hub to generate a higher profit level on its produce box sales, helping balance out overall project returns. Project support will continue to be provided by Wake County Smart Start, as it is now.

Outcomes and Measures:

- Number of children impacted
- Number of Wake County farms participating
- Dollars spent on Wake County farm products by Wake County centers
- Percent of participating Wake County childcare centers
- Increased number of BIPOC farmers selling into food hubs

TABLE: THUMBNAIL SALES PROJECTIONS FOR A FOOD HUB, IN PROPOSED FARM TO CHILDCARE VENDOR AGREEMENT. WORKING ASSUMPTIONS BUILT FROM INTERVIEWS WITH LYNN POLICASTRO OF WAKE COUNTY SMART START, AND FROM PRIOR EXPERIENCE IN LOCAL FOOD SYSTEMS

		Year 1	Year 2	Year 3
Number of Participating Centers		25	75	100
Average Children per Center	50			
Average local food servings (1/4 cup) per week per child	8			
Local food servings per week		10,000	30,000	40,000
Local food servings per year		500,000	1,500,000	2,000,000
Weight of Local food sales per year (in pounds)		90,000	270,000	360,000
Rough estimate, local food wholesale cost per dollar	\$ 0.50			
Anticipated Fruit/Vegetable Sales to Center Kitchens		\$ 45,000	\$ 135,000	\$ 180,000
Target box sales by % of parents at a center	8%			
Boxes sold per week		100.00	300.00	400.00
Boxes sold per year		5,000.00	15,000.00	20,000.00
Sales price per box (with SNAP/WIC available)	\$25			
Box sales to parents		\$125,000	\$375,000	\$500,000
Total Potential Revenue to Food Hub		\$ 170,000	\$ 510,000	\$ 680,000

Appendices

1. Summary of Findings
2. Racial Equity Guide
3. Wake County Agricultural Assessment