

NCGT Local Food Supply Chain Apprenticeship

Working Landscapes
Farmer Foodshare

CLAIRE MCLENDON

UNC GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH

MPH CLASS OF 2017

About Me

UNC Gillings School of Global Public Health – MPH

Bachelor's in Sustainable Development from Appstate

Volunteered with coffee farmers in Honduras,
Farmworker Health Program of Watauga County,
Interfaith Council for Social Services

Worked for eight years in a library before going back to
school

Loves policy & procurement, spreadsheets, and
understanding structural impediments!



Mentorship Team



“The apprentice will work with both Farmer Foodshare and Working Landscapes to facilitate the Farm to School chopped produce initiative in Triangle based schools and childcare centers. The apprentice will assist with production planning, ordering, delivery of whole product to the processing center, and distribution of finished product to Triangle based institutional customers to support the growth and sustainability of the food hub operation.”

Karla Capacetti, Manager, Farmer Foodshare POP Market
Gabriel Cumming, PhD, Associate Director of Working Landscapes

Working Landscapes Chopped Produce Initiative

“The Chopped Produce Initiative is a new way to get vegetables grown by local farmers into schools in Warren County and the surrounding region, thereby increasing students’ access to fresh, healthy, local produce.”

“The apprentice will work with both Farmer Foodshare and Working Landscapes to facilitate the Farm to School chopped produce initiative in Triangle based schools and childcare centers. The apprentice will assist with production planning, ordering, delivery of whole product to the processing center, and distribution of finished product to Triangle based institutional customers to support the growth and sustainability of the food hub operation.”





FARMER FOODSHARE

“Farmer Foodshare connects people who grow food with people who need food. Simply put, we strive to make fresh, local food available to everyone in the community, and to make sure farmers growing it make a healthy living.”



What I worked on:

- HAACP/HARP-C Plan
- Value-Added Product Research
- Distribution

HAACP/HARP-C



GAP



Value-Added Product Research

- Researched processing facilities and coprocessors in North Carolina
- Interviewed Bryan Cohn at Seal the Seasons about processing
- Attended meeting between Farmer Foodshare and Durham Public Schools cafeteria managers to hear feedback and plan for year
- Helped coordinate meeting between Brenda Camp of Weaver Street Market and Farmer Foodshare to tour processing facilities



Distribution Route Research

- Delivery and distribution is a major hurdle for our users
- One of the many special things about Farmer Foodshare: they bring it to you!
- Worked on developing a tool for mapping and assessing distribution routes
- Fuel costs and labor costs of transportation add up!
- Recruiting new customers on the routes we drive already?



Distribution Tool

- Used existing data: mileage sheets, local food market place
- Available, free platforms
- Settled on Google Sheets and Google Maps

Distribution Tool Walkthrough

Step One: Make Mileage Easier!

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Date		Destination 1	Destination 2	Destination 3	Destination 4	Destination 5	Destination 6	Destination 7	Destination 8	Destin:	Destin	Destin:	Destin	Start mileage	End mileage	Start time	End Time
7/1/2015														400807	400892	7:00 AM	1:00 PM
7/4/2015	Small Farmer																
7/6/2015	Family Farmers R Us																
7/7/2015	Daycare Client																
7/8/2015	Private School																
7/11/2015	Eldercare Facility																
7/13/2015	Group Home																
7/14/2015	Pete's Local Bread Bakery																
7/15/2015	Grace's Greenhouses																
7/18/2015																	
7/20/2015																	
7/21/2015																	

- We created a Google sheet that autosuggested existing producers and customers to take the tedium out of data entry
- Heroic interns Nesia and Caroline did a lot of data entry!

Distribution Tool Walkthrough

Step Two: Match Clients to Addresses

A	B	C	D	E	F	G	H	I
Date		Destination 1	Destination 2	Destination 3	Destination 4	Destination 5	Destination 6	Destination 7
7/1/2015	Bull City Cool	Small Farmer: 102 Bunny Lane, Pittsboro, NC	Private School: 301 Waldorf Lane, Chapel Hill, NC	Daycare Client: 401 Stork Avenue, Durham, NC	Pete's Local Bread Bakery: 305 Rye Drive, Durham, NC	Grace's Greenhouses: 471 Lark Avenue, Raleigh, NC	Bull City Cool: 902 North Mangum Street, Durham, NC	
7/4/2015	Bull City Cool	Grace's Greenhouses: 471 Lark Avenue, Raleigh, NC	Eldercare Facility: 203 Terrier Drive, Hillsborough, NC	Group Home: 101 Meadow Lane, Carrboro, NC	Bull City Cool: 902 North Mangum Street, Durham, NC			
7/6/2015	Bull City Cool	Private School: 301 Waldorf Lane, Chapel Hill, NC	Family Farmers R Us: 105 Crawdad Creek Street, Mebane, NC	Daycare Client: 401 Stork Avenue, Durham, NC	Grace's Greenhouses: 471 Lark Avenue, Raleigh, NC	Pete's Local Bread Bakery: 305 Rye Drive, Durham, NC	Bull City Cool: 902 North Mangum Street, Durham, NC	
7/7/2015	Bull City Cool	Family Farmers R Us: 105 Crawdad Creek Street, Mebane, NC	Food Pantry: 101 Daffodil Lane, Carrboro, NC	Eldercare Facility: 203 Terrier Drive, Hillsborough, NC	Group Home: 101 Meadow Lane, Carrboro, NC	Bull City Cool: 902 North Mangum Street, Durham, NC		
7/8/2015	Bull City Cool	Food Pantry: 101 Daffodil Lane, Carrboro, NC	Family Farmers R Us: 105 Crawdad Creek Street, Mebane, NC	Pete's Local Bread Bakery: 305 Rye Drive, Durham, NC	Daycare Client: 401 Stork Avenue, Durham, NC	Eldercare Facility: 203 Terrier Drive, Hillsborough, NC	Bull City Cool: 902 North Mangum Street, Durham, NC	

- The Google Sheet uses a list of customers, producers, and addresses exported from Local Food Marketplace to return the addresses visited during the delivery trip

Distribution Tool Walkthrough

Step Three: Quantify!

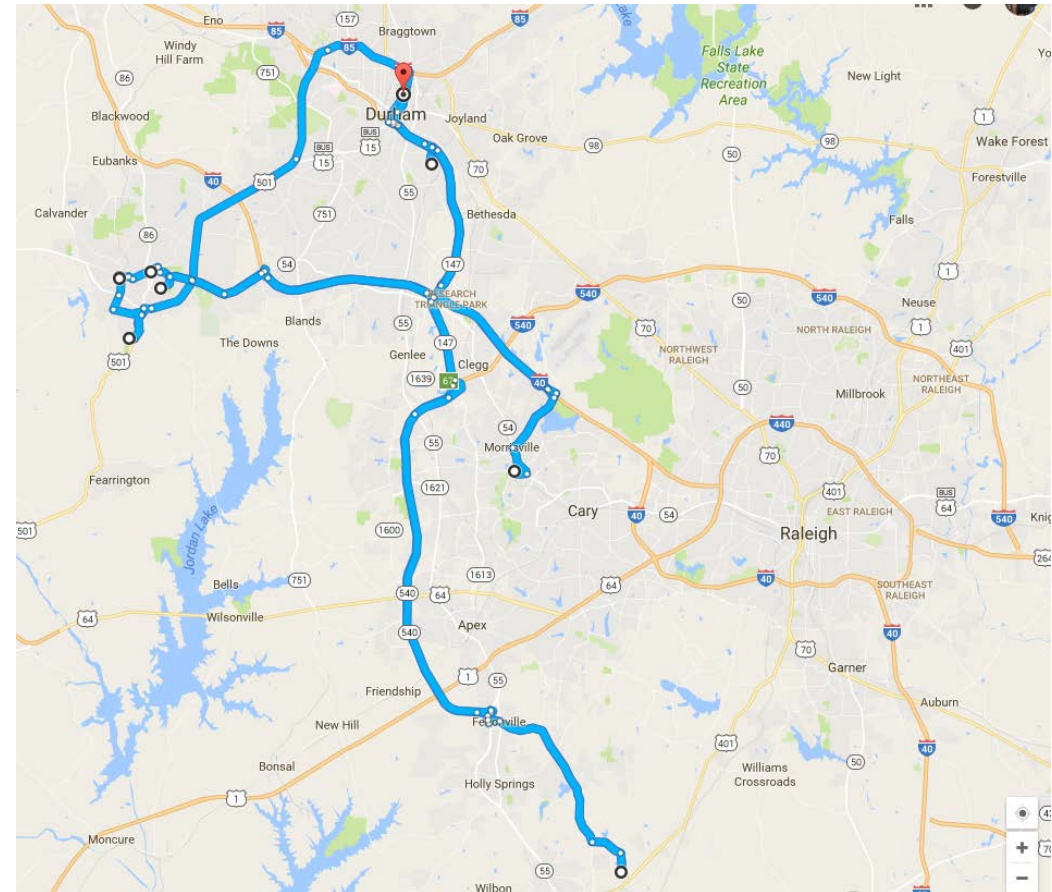
O	P	Q	R	S	T	U	V	W	X	Y	Z
Google Maps URL	Start mileage	End mileage	Start time	End Time	Total Miles	Trip Duration	Gas Cost	Wage Cost	Gas and wage price of trip	Total value of deliveries	Total value of pickups
https://www.google.com/maps/dir/Bull City Cool/Small Farr	400807	400892	7:00 AM	1:00 PM	85	6:00 AM	\$13.04	\$68.84	\$81.88	\$267	\$47
https://www.google.com/maps/dir/Bull City Cool/Grace's Gr	400892	400949	7:15 AM	10:45 AM	57	3:30 AM	\$8.19	\$49.11	\$57.31	\$214	\$54
https://www.google.com/maps/dir/Bull City Cool/Private Se	400949	401005	6:55 AM	2:45 PM	56	7:50 AM	\$7.89	\$41.51	\$49.40	\$187	\$63
https://www.google.com/maps/dir/Bull City Cool/Family Far	401005	401084	7:05 AM	1:15 PM	79	6:10 AM	\$15.16	\$65.55	\$80.71	\$160	\$88
https://www.google.com/maps/dir/Bull City Cool/Food Pant	401084	401115	7:06 AM	2:55 PM	31	7:49 AM	\$14.16	\$91.65	\$105.81	\$299	\$22

- The spreadsheet retrieves the cost of gas from the U.S. Energy Information Administration and calculates the cost of gas and the cost of paying the driver (you have to tell it how much you pay the driver)
- You can then compare the cost of making the trip to the totals for sales made and goods picked up from farmers
- If some routes are more expensive than others, you can use the mapping function to find out why and find other potential nearby customers!

Distribution Tool Walkthrough

Step Four: Map it Out!

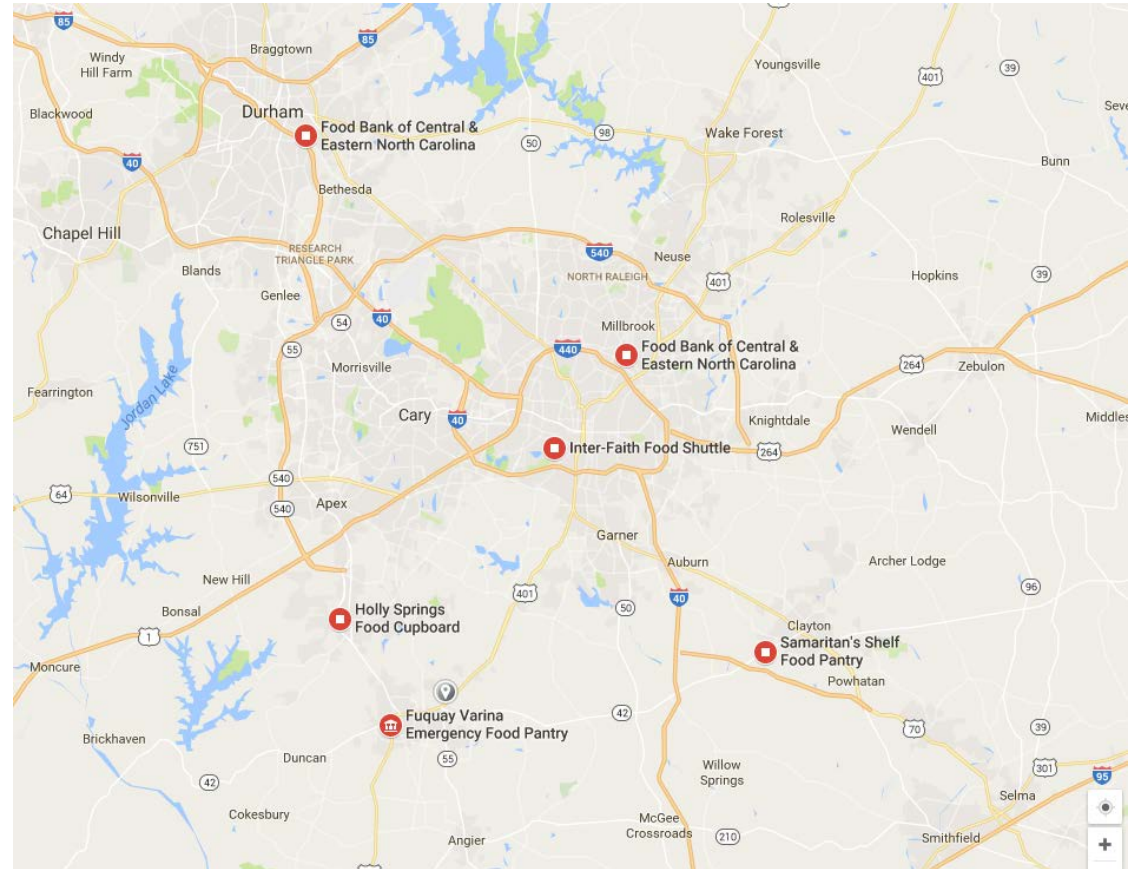
- For each line in the mileage log, a map URL is dynamically generated, allowing you to visualize your delivery routes and understand which customers or producers require the most travel



Distribution Tool Walkthrough

Step Four: Map it Out!

- By using the “nearby” function in Google maps, you can search for potential clients near to your existing routes

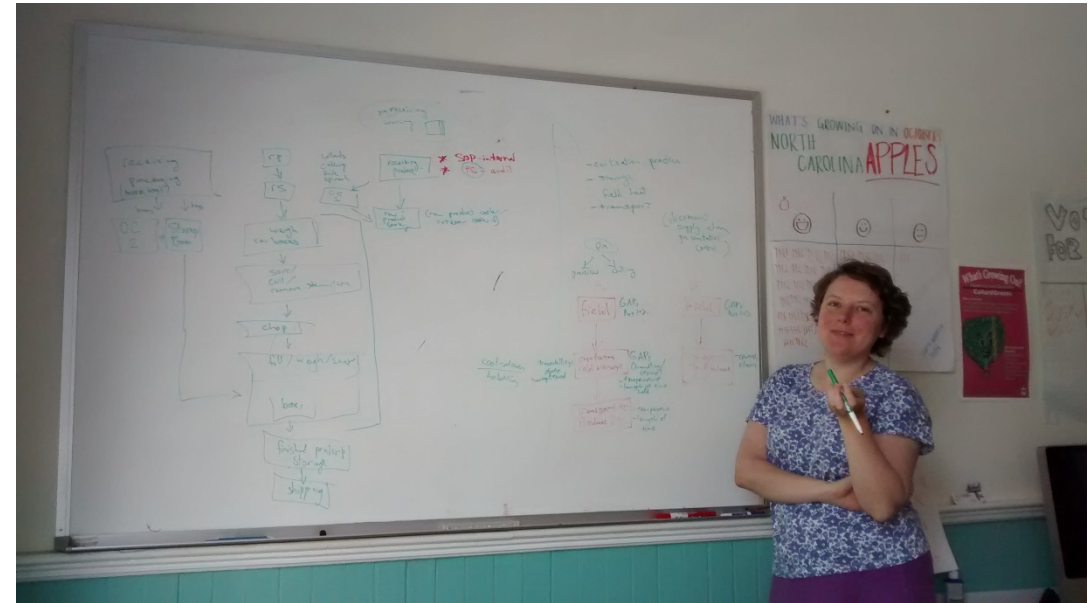


Lessons Learned!

- The place of a spreadsheet enthusiast in the local food movement!
- So many food safety regulations. So much need for support to help farmers with food safety regulations!
- We are just at the start of the local lightly-processed food movement in North Carolina and it's very exciting
- Got to meet amazing, passionate people (and spend a lot of time in Warrenton, a beautiful place that I recommend visiting)
- Lots of life skills about project management

The road ahead!

- Institutional markets are key to the future of local foods
- Keep making flowcharts for the greater good



Thank you Gabe and Karla!

