Championing Food Systems Policy Development and Change in Marquette County, Michigan
A key goal of the Growing Food Connections (GFC) project is to document ways in which local and regional governments adopt and implement policies and plans that simultaneously alleviate food insecurity and strengthen agricultural viability among small and medium-sized farmers. To that end, beginning in 2012, the GFC team conducted a national scan and identified 299 local governments across the United States that are developing and implementing a range of innovative plans, public programs, regulations, laws, financial investments and other policies to strengthen the food system. GFC defines the food system as the interconnected network of activities, resources, industries, public and private stakeholders, and policies that play a role in the production, processing, distribution, consumption and disposal of food. The GFC team conducted exploratory telephone interviews with stakeholders in 20 of these urban and rural local governments followed by in-depth, in-person interviews with stakeholders in four of these communities.

The GFC Story of Innovation Brief, “Private-Public Partnerships: Cornerstone of Food Systems Planning and Policy in Rural Marquette County, Michigan,” highlights innovative food systems related plans and policies in the county. This Innovation Deep Dive case study brief provides a more in-depth exploration of the process taken to develop and implement these plans and policies. For this brief, GFC project team members conducted six telephone interviews with key stakeholders in August and September 2015 to better understand the food systems planning and policy making process in Marquette County, Michigan, and document lessons for local and regional governments interested in using plans and policy to strengthen food systems.
INTRODUCTION
Marquette County, Michigan, is one of few rural communities across North America that is actively engaging in food systems planning and policy. Marquette County is located in the state’s remote Upper Peninsula, a region with challenging growing conditions and a lack of food production and transportation infrastructure. Yet the county and several municipal governments have recently integrated community food systems into local policy development as vital components of local sustainability, resiliency, economic, and health goals. The groundwork for food systems policy development has been laid by nongovernmental stakeholders, most significantly the Marquette Food Co-op, whose outreach and education efforts has raised awareness of local food production among residents and informed policy development among local governments. The county’s 2013 Local Food Supply Plan has led the way for the incorporation of food systems goals in the master plan updates for the City of Marquette and Chocolay Township. But none of this would have been possible without the personal initiative and passion of local planners who took these projects on and worked to build support for food systems planning among officials. This Deep Dive describes the geographic, social, and agricultural contexts at play in Marquette County and explores how both governmental and nongovernmental stakeholders can create significant community food system planning and policy development.

CONTEXT
Marquette County is a picturesque county located on the shores of Lake Superior in the northern part of Michigan’s Upper Peninsula (UP). At 1,808 square miles in size—larger than Rhode Island—it is the largest county in the state. The county’s population as recorded by the U.S. Census peaked in 1980 at 71,028 and has declined slightly since then; the 2016 population estimate was 74,101. Marquette County is home to 22 local units of government comprising three cities and 19 townships. The City of Marquette is the largest jurisdiction in the county, with a 2016 population of 20,570. It is home to Northern Michigan University, with an enrollment of around 7,500 students, and has been active in food systems planning work. Chocolay Township, another community with food systems planning activity, had a 2016 population of 5,903.

In 2010, the county’s population was 93.8 percent white, compared to the U.S. national average of 72.4 percent. African Americans and Native Americans both comprised 1.7 percent of the population, with Hispanics accounting for 1.1 percent; 1.6 percent of the population was foreign-born. The median household income from 2011 to 2015 was $45,409, compared to the national average of $53,889; the poverty rate was 15.0 percent, slightly higher than the national average of 13.5 percent.

FOOD SYSTEMS PLANNING AND POLICY
Interest in local foods and food systems among Marquette County residents has grown significantly over the past twenty years. Though some of this growth may be attributable to national trends of greater awareness of personal health habits and the benefits of local food production, a major contributor to local food system awareness in Marquette County has been the Marquette Food Co-op in the City of Marquette.
Since the early 1970s the Co-op has served as a hub for local, healthy foods in the community; a Marquette city planner has seen the Co-op transition over the past twenty years from being “very fringe” to “wildly successful.” Today the Co-op staffs a six-person education and outreach department that performs a great deal of local food advocacy and education to members and the community at large. This ranges from media advertising and presentations at schools and service clubs to activities such as hosting tours of local farms and providing customer service and education to customers about local foods and how to use them. Co-op staff have also been instrumental in providing information on community food systems to local government staff and review and feedback on policy development.

The general change in interest in local food among residents is being echoed by increasing interest among food retailers as well as food producers. Beyond the Co-op, more mainstream retailers are starting to sell and advertise local foods, and the city’s farmers market recently won a 2015 “best of” award from Lake Superior Magazine. Extension staff have seen an increase in interest in a United States Department of Agriculture (USDA) grant program to fund hoop houses for extension of the fruit and vegetable growing season, reporting that this concept has gone from “little known and little discussed” to “a pretty regular conversation.”

Nongovernmental stakeholders have also been instrumental in setting the stage for community food systems work. In the fall of 2012, the Marquette Food Co-op, Michigan State University Extension, and the Western UP Health Department collaborated to create the Upper Peninsula Food Exchange (UPFE). The UPFE established three regional food hubs to serve as resource and networking centers connecting farmers, businesses, policy makers, and individuals in developing community food systems; the Co-op staffs the Central food hub, which includes Marquette County within its jurisdiction.

The UPFE also formed a Food Policy Committee, tasked with ensuring policy is at the forefront of food system discussion and informing the work of decision makers and the choices of citizens in the UP. It meets monthly, and all local governments in Marquette County have standing invitations to participate. Regular participants include staff from the Marquette Food Co-op, which provides administrative support; planners from Marquette County, Chocolay Township and Negawee Township; and MSU Extension staff. In 2016, the Food Policy Committee published a community food systems guide for both policy makers and residents that “outlines the components of a local food system, the policies at play, and why engaging in this movement can be beneficial.”

Another element that has been instrumental in raising local awareness about the importance of food systems work in the context of local sustainability and resilience has been the Transition Marquette County group started in 2011 by a university professor to address the challenges of peak oil, climate change, and financial crisis in the UP. Participation in this group and exposure to concepts of local resilience was cited as an important impetus by several key food systems champions.

Agricultural Strengths and Challenges

Historically, most farming activity in Marquette County occurred during the first half of the 20th century, with dairy, livestock, small grain, hay, apples, and potatoes the main crops produced. Since the mid-1900s, however, farming has decreased. Today its contribution to the local economy is minor. Out of the state’s 83 counties, Marquette County is ranked 76th in total value of agricultural products sold. According to the 2012 U.S. Agriculture Census, farmland comprised 30,693 acres,
or 2.6 percent of the county’s land area; the majority of the county (83 percent) is forested. Many former farms have been allowed to revert to woodland, recreational areas, or hobby farms; however, because of these periods of inactivity and lack of inputs, such sites are suitable for conversion to organic production practices.16

In more recent years, however, statistics suggest some growth in a new agricultural model of growing food for local consumption. Though the average size of a farm in Marquette County decreased by 12 percent between 2007 and 2012, the number of farms in the county increased from 144 to 168.17 According to the U.S. Agricultural Census, the number of Marquette County farms selling directly to consumers more than doubled between 2002 and 2012, from 17 to 43 farms, and the value of those sales exponentially increased, from $15,000 in 2002 to $217,000 in 2012 (see table). In 2007, direct sales in the county were 4 percent of farm product sales, compared to the Michigan state average of less than 1 percent; in 2012, direct sales in the county had increased to 9 percent of all farm product sales, while the state average remained below 1 percent.18, 19

<table>
<thead>
<tr>
<th>Direct sales, Marquette County</th>
<th>2002</th>
<th>2007</th>
<th>2012</th>
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<tbody>
<tr>
<td>Number of farms</td>
<td>17</td>
<td>27</td>
<td>43</td>
</tr>
<tr>
<td>Value of sales</td>
<td>$15,000</td>
<td>$166,000</td>
<td>$217,000</td>
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However, Marquette County farmers face a number of challenges. The majority of farms (147 of the 168, or 87.5 percent) gross less than $20,000 per year; 73 percent of the county’s farms (123) gross less than $10,000 per year, and one-third of all farms (55) gross less than $1,000 per year.20 The growing season of June through September is very short, with the number of frost-free days ranging from about 140 along Lake Superior to as little as 70 at higher inland elevations.21 Many of the county’s soils are acidic; about 6 percent of the county’s soils are classified as prime farmland, but these lands are largely located in the forested southern parts of the county. In addition to these issues, the UP is vulnerable to drought.22

Due to the limited and scattered population in the region, transporting farm goods to population centers is also a challenge. Currently no organized transportation and distribution system for food exists in the UP. Beyond these challenges, the UP cannot sufficiently handle all the meat processing needs of UP farmers, especially for poultry and pork. Small and medium sized dairy farmers and vegetable growers also have no place to process and add value to their products.23

Marquette County is in the first phase of a light produce processing feasibility study. The first phase of the study was funded by the Central UP Regional Planning Commission’s Regional Prosperity Initiative and will be completed by the end of 2017.24

A recent meat processing feasibility study found insufficient volume to support a new multispecies processing facility in the UP, but did find a clear need for increased slaughter and processing capacity in the region. It recommended several targeted initiatives to invest in existing assets and incrementally increase capacity and throughput.25 As a result, an existing USDA inspected meat-processing facility successfully applied for a value-added grant to increase cold storage capacity and to replace outdated equipment. According to Marquette County government staff, these improvements will increase output.26

In addition, interviews with stakeholders identified several “mismatches” acting as challenges to community food system growth in the county. Mismatches exist between areas where food is being grown (the southern parts of the county) versus areas of population and therefore consumption (the northern parts of the county); traditional agricultural practices that focus on export products versus the new agricultural model of growing food for local production; the prices set by local farmers to make ends meet versus the prices local buyers are willing to pay; and the amounts and availability of locally produced food versus the year-round consistency and quantity needs of typical restaurants and food retailers.27, 28

Food Security
The Upper Peninsula as a whole is economically depressed due to its isolated, rural location. Within the six counties comprising the central UP, a full 44 percent of residents’ income comes from public sources (transfer payments such as pensions, medical benefits, unemployment, and veterans’ benefits, as well as government jobs).29 As the regional hub for services, including medical facilities, mining, and a state university, Marquette County is more affluent than other counties in the UP, but there are pockets of low-income populations.30 According to 2014 data, in Marquette County, 14 percent of the population was food insecure (the Michigan average was 16 percent, with county food insecurity rates ranging from 9 to 22 percent).31 A county study of food establishments concluded that “food deserts” were not an issue, though physical access to food can be challenging in remote, rural areas of the county and is largely dependent on access to personal automobiles.32

Role of Government and Nongovernmental Stakeholders
At the local government level, interest in and awareness of community food systems issues has grown within the past several years, but this varies among jurisdictions. Marquette County has taken a leadership role on this issue, consistent with the role of county government in the state, with the development of its Local Food Supply Plan.33 Within the county, Chocolay Township can be considered the most active and progressive local government on food systems planning issues; its 2015 master plan update addresses food systems, and the township proposed the idea of creating a “permaculture park” on township-owned farmland. The City of Marquette also included food systems goals within the public health section of its 2015 community master plan, asked the UPFE Food Policy Committee to prepare a community food systems section as an appendix to the city’s Community Master Plan, and has supported the growth of food retail within its jurisdiction.34
The Marquette County Local Food Supply Plan and the food systems components of Chocolay Township’s master plan have been held up by local stakeholders as main factors of success in raising awareness of and local activity around food systems planning and policy development, among both local governments and other counties within the state. According to Natasha Lantz of the Marquette Food Co-op, the county plan has “paved the way for all the rest of this food work. . . Just the fact that the county has a local food supply chapter of their comprehensive plan. . . gives you that support that you need and adds legitimacy.”

However, those same stakeholders emphasize that the development and adoption of food systems policy in all cases has been driven by local champions: staff planners with personal interests in the importance of this topic. These planners and their efforts have been supported through their involvement with the Upper Peninsula Food Exchange and Food Policy Committee (FPC), on which they serve along with staff from the Marquette Food Co-op and MSU Extension. The monthly meetings offer one of the only forums in which local government staff can meet with food system stakeholders that work with farmers and can share perspectives from the agricultural sector on planning-related topics. The Food Policy Committee strengthens relationships, fosters collaboration, and encourages partnerships among members. In addition, the FPC has reviewed and provided feedback on all the food systems policy documents thus far developed within the county, and is also working to raise awareness about incorporating food systems planning into local government decision making by presenting on this topic to various governmental organizations in the region.

Beyond those champions and the projects they have taken on, however, interest in and activity around food systems work is still largely absent among local government staff and officials. A lack of knowledge about the benefits and opportunities of community food systems, as well as a lack of staff capacity (many townships do not have planners on staff) and a lack of funding, were identified by stakeholders as the main challenges to local governments’ involvement in community food systems.

DEEP DIVE

Local governments in Marquette County have developed and adopted several significant food planning policy documents within the past several years. Chief among them is the Marquette County Local Food Supply Plan, adopted as a chapter of the county’s comprehensive plan. The plan’s objective is to raise awareness about local food supply and community food systems, and to set out goals and strategies that any local unit of government or public can adopt to help grow and improve local food systems. It establishes a vision of “a vibrant local food system in which agriculture is a valued and viable occupation that enhances the local economy, improves the health of residents, and increases food security”; sets goals of improving the economy, improving residents’ health, reducing dependencies on imported foods, and setting
an example for its citizens and other governments through developing local food systems; and offers more than 20 policies to implement these goals that encourage local agricultural production, support educational and outreach opportunities around local food systems, and foster connections among stakeholders within local food systems.\textsuperscript{42}

The main impetus behind the plan’s inception and development was county planner Thyra Karlstrom, who points to the Transition Marquette group as highlighting for her the importance of food systems as an elemental and accessible component of sustainability and resiliency with connections to the local economy.\textsuperscript{43} Evidence of growing national and local interest in food systems helped convince the county planning commission to support the plan’s development and allocate staff time to the project.\textsuperscript{44} Karlstrom led the two-year planning process, reaching out to and receiving feedback from entities such as the Marquette Food Co-op, County Extension, and other local governments. The plan was adopted by the planning commission in September 2013 and approved by the county board in early 2014.

Though funding for plan implementation has been a challenge, with the plan in place, Karlstrom has been able to engage in and support additional food systems work within the county. She represents the county on the UPPE’s Food Policy Committee and has helped create food systems planning resource guides for that group. With support from key food system stakeholders, Karlstrom applied for and won a Michigan Department of Agriculture and Rural Development Strategic Growth Initiative Grant for a feasibility study for a meat processing facility; the lack of such facilities has been identified as a barrier to local food development in the county.\textsuperscript{45} The study was completed in 2016 and offers a suite of recommendations for expanding existing facility capacity to further expand meat production in the UP.\textsuperscript{46} Karlstrom has also provided assistance on and letters of support for other food-related projects and programs within county boundaries, including health department grant applications for programs with local food components and the proposed permaculture park in Chocolay Township.\textsuperscript{47} A major way in which the county has implemented plan goals and policies, however, has been through its state-enabled role in local plan and ordinance review.

Michigan law requires municipalities to send their plans and zoning ordinances to their county government for review. County action is optional, but Marquette County takes advantage of this role to provide feedback to its jurisdictions. As Karlstrom explains, “Any time a local unit of government amends or updates their zoning or their plan, our planning commission has the opportunity to look at several topics, one being local food, to see if it’s been implemented. We get to provide feedback to those townships. If the opportunity presents itself, we can try to participate or actually implement some of those goals.” Karlstrom is the staff planner responsible for performing these reviews. The process acts as an educational opportunity for local jurisdictions, with the local food supply plan as the textbook. It has resulted in the planning commissions of other jurisdictions modifying the language of or adding new components to their policy and regulatory documents.\textsuperscript{48}

The Local Food Supply Plan has sparked additional food systems policy work in other jurisdictions that have either drawn information and data from the plan or used it as a template for developing their own food systems policies. Within Marquette County, Chocolay Township adopted the plan as a guiding document, and then integrated food systems planning into its most recent master plan update.

Again, the inclusion of food systems into the planning process came about through the actions of a local champion, in this case former township planner Kelly Drake Woodward. When Woodward arrived at the township as a new planner, the master plan was overdue for its state-required five-year update, so that was one of the first projects she took on. Similar to Karlstrom, Woodward cites her exposure to the Transition Marquette group in informing her decision to focus the master plan update on resiliency and sustainability values, and to incorporate community food systems as a component of those values.\textsuperscript{49} In writing the plan update, Woodward drew on a public opinion survey, information and data from the county’s Local Food Supply Plan, and review and feedback from the Food Policy Committee to develop the food systems components of the plan.\textsuperscript{50}

The plan was adopted by the planning commission in 2015. It identifies food systems as a critical system within the township alongside water supply, waste management, and the environment, noting its contribution to local economic activity, and establishes a policy statement of strengthening local food systems. It calls on the township to advocate for local food production, adopt policies and regulations to support local food systems, support agriculture as an interim use of public lands, and collaborate with other entities in public engagement and outreach processes around local foods. The plan’s section on economic development also calls for the township to pursue niche economic development opportunities associated with local food systems.\textsuperscript{51} One major implementation item of the plan was the update of the township animal control ordinance to allow the keeping of chickens.\textsuperscript{52}

On June 10, 2014, the Chocolay Township government entered into a 5-year land use agreement with the Chocolay Community Farm Collaborative to lease 14 acres of township property to the nonprofit for the purpose of preserving the land for public agricultural use or a permaculture park, including “farm incubator plots, large plot community gardens, hoop houses, public u-pick bramble patches, food forest, agricultural support structures, and associated public spaces including trails.”\textsuperscript{53} This concept envisions a self-sustaining food system based on permaculture principles that provides educational, recreational, and food production opportunities for community residents. Woodward suggested this use of the town’s parcel after learning about permaculture principles from the Transition Marquette group.\textsuperscript{54} The project’s fate is unclear and little forward movement has been made in the planning and development phase.\textsuperscript{55,56}

Chocolay Township has also developed two community gardens for local residents, both on land leased from local churches. The Township Board approved staff time and cost to coordinate the
community garden development, and the Department of Public Works drilled a shallow well to provide water for the gardens. Community groups are primarily responsible for garden development and management; one of the gardens was being worked on first by a Girl Scout troop, and then an Eagle Scout. The gardens are located next to a mobile home community. Woodward hoped that the lower-income community would take advantage of the gardens to raise their own healthy food there, though she acknowledged that outreach and education would be required for this to happen.57

The City of Marquette has also done some food systems planning work, integrating this topic into its most recent master plan update. The impetus for including food issues in the plan update came from both public input and staff input. Stakeholders from the Marquette Food Co-op and the UPFC’s food hub were involved in visioning sessions, residents in those sessions showed broad support for food-related issues, and planning staff felt that food systems were important components of community health and self-sufficiency goals.58

The City of Marquette’s Community Master Plan integrates food systems goals as part of the public health section, calling on the city to develop and amend regulatory documents to support the local food system; support urban food production and access through home gardening, community gardens, and food retail opportunities; and allow the use of public lands for food production. The plan discusses the importance of food systems in the contexts of public health, economic development, and resilience to vulnerabilities.59 In addition, the City of Marquette is also considering the adoption of a community food systems section as an appendix of the master plan.60

The City of Marquette has also supported the development of food retail within its boundaries. Under the Michigan State Commercial Rehabilitation Act 2005, the city passed a resolution to approve a 5-year property tax abatement for the expansion of the Marquette Food Co-op in downtown Marquette.61 The resolution acknowledges the need for increased food retail options in the city and supports earlier zoning updates by providing for a greater mix of food business uses downtown.62

DISCUSSION

Through interviews conducted with governmental and nongovernmental stakeholders, a portrait emerges of Marquette County as a largely rural county with less than ideal growing conditions and widely varying levels of awareness about and interest in community food systems. However the efforts of a few local champions and nongovernmental leaders have resulted in food systems planning gaining a foothold in local policy and regulatory discussions and documents.

A strong theme that emerged from Marquette County’s story is that of the importance of personal interest and passion and the significant impact that a few individuals can have on local policy and project outcomes. The local food advocacy of the outreach staff at the Marquette Food Co-op has made great strides in educating residents and building interest in local food among the more urban, progressive parts of the county (the city of Marquette and its university), but efforts to engage with this topic within local government have been successful due to the personal initiative of champions within Marquette County government and Chocolay Township. Though elected officials have been supportive, it has been the initiative of individual planning staff that has made policy change happen.

A related theme is the importance of networks and partnerships between governmental and nongovernmental sectors in making change happen. The UFPE Food Policy Committee plays a vital role in connecting local planning staff champions with each other and with food system stakeholders and advocates, including MSU Extension and the Marquette Food Co-op. It has also served as a key source of information and feedback in the development of food systems policy—the county’s Local Food Supply Plan and the master plan updates from Chocolay Township and the City of Marquette—and continues to reach out to local governments to advocate for and educate on community food systems. Additionally, staff at the Marquette Food Co-op have been instrumental in helping to raise awareness and interest in community food systems among residents and local government staff alike. Through its support of the UPFE’s food hub and through its extensive outreach and education efforts, the Co-op is also playing a major role in building the infrastructure needed to increase the capacity of local food producers and connect them to the local markets that they are helping to build. MSU Extension staff have also played supportive roles in pro-
viding information on agriculture and food systems to residents and local government staff and officials through their outreach and educational efforts.

Another theme that emerges is the impact that one policy document can have. One of the main drivers of community food system planning activity in Marquette County is the county’s local food supply plan, in concert with the proactive role the county has chosen to take in its state-enabled ability to review and provide feedback on city and township plans being made by its constituent jurisdictions. By using the local food supply plan as a guide against which to evaluate planning activity of the county’s cities and townships, county planners have been able to educate other local units of government about this issue and has seen plans and policies changed to be more supportive of community food systems as a result.

Case study research also identified and highlighted the various challenges that exist in building a community food system for local governments as well as producers. Knowledge, capacity, and funding emerged as significant barriers in engaging with food systems issues and implementing food system-supportive policies. Staff struggle with educating elected officials as to the importance of this issue, finding the time in their busy schedules to take on the extra work of food systems planning, and dealing with budget shortages and competing capital needs. Among the agricultural sector, small farmers struggle with meeting the needs of institutional and commercial buyers used to ordering large quantities of uniform produce at discounted wholesale prices year round. The UP Food Exchange’s online food hub is working to overcome some of those challenges.

CONCLUSION
With its far northern location and rural setting, and the agricultural and infrastructural challenges those factors produce, Marquette County at first glance does not seem to be fertile ground for the growth of community food systems. However, due to the efforts of local government staff planning champions, supported by partnerships with nongovernmental food systems stakeholders, significant food systems policy work has been accomplished within the county. The completion of Marquette County’s Local Food Supply Plan by a county planner passionate about resiliency and community food systems has provided a concrete example of food systems-supportive policy for other local governments to draw from or emulate. That plan supported the work of individual staff planners in Chocolay Township and the City of Marquette in integrating food-related goals and policies within those jurisdictions’ subsequent master plan updates.

Further, the county’s consideration of these community food systems policies in its ongoing state-enabled review of policy and regulatory development in its constituent jurisdictions is driving the growth of further awareness and change in those jurisdictions. All this work has been supported by governmental–nongovernmental connections fostered by the development of the local Food Policy Committee of the Upper Peninsula Food Exchange and underlain by decades of community food systems advocacy and outreach by the staff of the Marquette Food Co-op. Marquette County provides an example of the innovative policy and programmatic actions to grow community food systems that can occur in rural areas based on the personal initiative of just a few local food champions and strong collaborations both within and outside of local governments.

REFERENCES
1 Marquette County, Michigan, n.d. “Historical Information – Marquette County.” www.co.marquette.mi.us/help/marquette_county_history.php#.WabYMMiGO70
3 U.S. Census Bureau 2017.
4 U.S. Census Bureau 2017.
5 Interview with Local Government Representative in the City of Marquette, Michigan, (ID 127), September 1, 2015.
6 Interview with Farming and Agriculture Representative in Marquette County, Michigan, (ID 125), September 1, 2015.
7 Interview with Consumer Advocate in Marquette County, Michigan, (ID 124), September 22, 2015.
9 Interview with Farming and Agriculture Representative in Marquette County, Michigan, (ID 126), August 31, 2015.
10 Upper Peninsula Food Exchange, n.d. “Resources.” https://upfoodexchange.com/resources-2-
12 Telephone interview with Farming and Agriculture Representative in Marquette County, Michigan, (ID 121), January 29, 2015.
16 Schwennener 2007.
17 USDA 2012a.
20 USDA 2012a.
23 Hodgson and Mosher 2016.
24 Email correspondence with a Local Government Representative in Marquette County, Michigan, September 18, 2017.
Email correspondence with a Local Government Representative in Marquette County, Michigan, September 18, 2017.

Interview with Farming and Agriculture Representative in Marquette County, Michigan, (ID 126), August 31, 2015

Interview with Farming and Agriculture Representative in Marquette County, Michigan, (ID 125), September 1, 2015.

Telephone interview with Local Government Representative in Marquette County, Michigan, (ID 122), February 19, 2015.


Interview with Local Government Representative in Marquette County, Michigan, (ID 123), August 31, 2015.

Email correspondence with a Local Government Representative in Marquette County, Michigan, September 18, 2017.

Interview with Farming and Agriculture Representative in Marquette County, Michigan, (ID 125), September 1, 2015.

Interview with Farming and Agriculture Representative in Marquette County, Michigan, (ID 126), August 31, 2015

Growing Food Connections, Community of Innovation Exploratory Interview Write-Up, Marquette County, 2014, p. 15.

Interview with Local Government Representative in Marquette County, Michigan, (ID 123), August 31, 2015


Hodgson and Mosher 2016.

Innovation Deep Dive

Communities of Innovation

Championing Food Systems Policy Development and Change in Marquette County, Michigan   |   Growing Food Connections

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