



BLOOMINGTON

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# FOOD SYSTEMS ROADMAPPING

An Analysis of the Food System  
& Community Resiliency in  
Dubois County, Indiana

Indiana University Bloomington  
O'Neill School of Public and Environmental Affairs  
SPEA-R 519 Food Systems and Community Resilience  
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## Executive Summary

Food systems throughout the United States today are becoming increasingly consolidated and dominated by monopolies. Only a handful of powerful companies hold a monopoly over the American food system. On average, only 15 cents of every dollar spent in the grocery store goes to farmers (Lakhani et al., 2021). Consolidation of the food system leaves communities that rely on the agricultural economy at risk of food insecurity if one element of the food system fails. A resilient food system is one that can withstand and overcome economic, political, and natural disturbances while considering social repercussions and encouraging public participation. The literature suggests that to build resiliency within a food system, local self-organization is necessary (Worstell & Green, 2017). Community-based organizations (CBOs) are a common way that communities assess and implement the needs of the public. CBOs focused on food security and diversification are major stakeholders as they are managed by local residents who find solutions to build resiliency within the food system.

In addition, there are several elements of the food system that we must acknowledge in a post-pandemic society. Across the United States, communities are still rebuilding after the COVID-19 pandemic. Every part of the food system was compromised in 2020, including restaurants, agricultural producers, manufacturers, distributors, migrant workers, and consumers. Common solutions that arose out of the pandemic were the increase in the need for local food councils, COVID-19 relief funding, and farmer delivery services.

Dubois County, Indiana is a small county with a large proportion of agricultural producers. Their agricultural industry is economically beneficial to the residents of Dubois County, as they are ranked first in the state in poultry and egg production in 2015.

Partnerships between Purdue Extension and Indiana University's Center for Rural Engagement have begun to detect gaps in the food system of Dubois County. The objective of this report was to further identify gaps in the food chain, food security needs, and potential barriers to diversification, while paying special attention to the needs of the growing Latino population in the county.

The recommendations resulting from this analysis are as follows:

1. Establish a Local Food Council
2. Consider a partnership with IU through a Capstone Course

3. Hold a Food Summit
4. Switch Current Food Equity Programs from Opt-In to Opt-Out
5. Conduct a Food Assessment Survey
6. Partner with Local Health Providers
7. Develop Organizational Channels to Support & Promote Farm Diversification
8. Develop Value Chain Coordination
9. Strengthen & Diversify Market Channels to Accommodate Diversified Producers
10. Capitalize on Social Media Use for Information-Sharing
11. Increase Offerings of Food Pantries Within Latino Places of Worship
12. Increase Community-School Collaborations

In addition, we have created a survey to assess the state of food insecurity in Dubois County, available in the appendix. The survey is presented in English and Spanish to increase the survey response rate. We created the survey with the intention to pass the suite of recommendations and relevant research to Indiana University Spring 2024 Graduate Capstone Project students. A capstone project at Indiana University is a culminating experience for students to integrate their education in public policy, policy analysis, management, and technology into a problem-solving simulation for either a public, private, or non-profit client organization. The capstone project, along with establishing a local food council to bring together diverse Dubois County stakeholders across the food system, are the two principal, cross-system recommendations made by this report.

# 1. About Dubois County

## 1.1 History of Dubois County

Dubois County is located in southwest Indiana. According to the U.S. Census Bureau, the population of Dubois County in 2022 was 43,632.

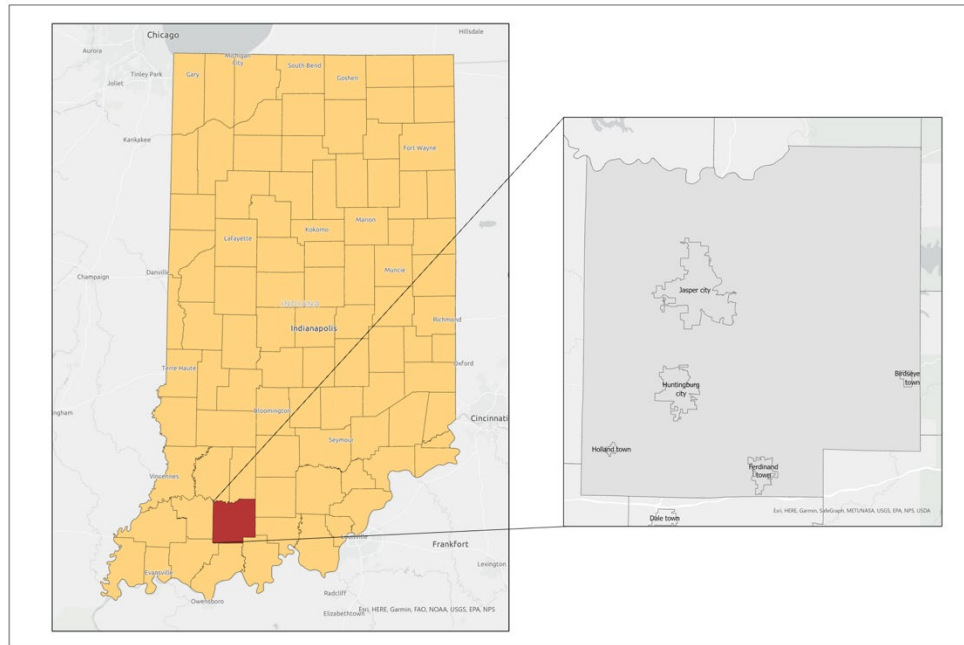


Figure 1: Dubois County Location and Incorporated Areas

Dubois County was originally populated by the Short Piankishaw/Shawnee Native American tribe. Leading up to the Indian Removal Act in 1830, the Native American tribes lost sovereignty over their land in Indiana (Indiana Department of Natural Resources, 2022). In 1816, Indiana became the 19<sup>th</sup> state of the Union and what now is Dubois County was originally a part of Knox County (*Short History of Dubois County*, n.d.). This territory originally included 6 townships. Later, Knox County was subdivided into Gibson and Pike counties. Dubois County was established on February 1, 1818 (*Short History of Dubois County*, n.d.).

Dubois County’s prime location on established Native American trails, the White River, the Patoka River, and the Buffalo Trace enhanced early development and attracted European settlers. The first white settlers in Dubois County, John and William McDonald, settled in Boone Township between 1801 and 1802 respectively (Genealogy Trails History Group, 2023). The house of William McDonald became a frequent stopping place for travelers and was named “Fort

McDonald” for this reason for many years. Fort McDonald was a frequent visiting place of former President William Henry Harrison (*Short History of Dubois County*, n.d.).

The county is named after Toussaint Dubois of Vincennes, a captain and chief in scouts in the Indian War of 1911, originally settled in the county in 1807 (*Short History of Dubois County*, n.d.). Settlements began near the current Ireland and Portersville communities after Toussaint Dubois arrived, followed by Haysville in 1818, and Jasper in the mid-1820s. In 1835, the first record of German Catholic settlers arrived in Dubois County (Holy Family Church, n.d.). As the area became more populated with residents who identified as Catholic, more religious services and churches erupted.

In 1850, the Patoka Township Census reported that there were 13 African Americans, 12 in 1860, and 30 in 1870. Audrey Werle, an early resident of Dubois County, reported five African American families in her Head of Household Index; three with the surname of Pinkston and the other two named Martin and Adams (Indiana Historical Society, 2018). The Pinkston family settled in present day Ferdinand and Cass Townships, after traveling from Georgia. In May of 1857, Emanuel Pinkston bought 40-acres of land in the SE-NE in section 14-3S-5W for \$365 and proceeded to buy more land in 1870 and 1871 (Indiana Historical Society, 2018). In 1875, Emanuel Pinkston set aside land for a church and a school. Ben Hagen, an African American farmer and minister at the Missionary Baptist Church, owned land next to the Pinkston farm and reportedly raised tobacco and watermelon (Indiana Historical Society, 2018). It is reported that the last farmers at the settlement were Ben Hagen and Larkin Pinkston.

Portersville was the first county seat of government in Dubois County. Initial government meetings were held at Fort McDonald (*Short History of Dubois County*, n.d.). In 1830, the state legislature moved the county seat of government to Jasper. In 1839, the Jasper courthouse was destroyed in a fire and almost all county records were lost.

Currently, Dubois County is governed by an elected, three-member Board of Commissioners. The Board has both legislative and executive authority over all county real and personal property and roads. The County finance authority is shared between the Board and the County Council. The County Council is an elected, seven-member council that has sole authority to levy taxes, approve budgets, approve the public sale of lands, and appropriate funds throughout the county. Dubois County is divided into 12 townships, 2 cities, and 3 incorporated towns that are each governed by a separate governing body or official.



## 1.2 Demographics of Dubois County

The total population in the county has continuously increased since 1930. However, the growth rate of the county is stagnating. As shown in figure 2, the total population increased by just 4.2% between 2010 & 2020, the lowest percentage increase in population the county has experienced in the last 100 years.

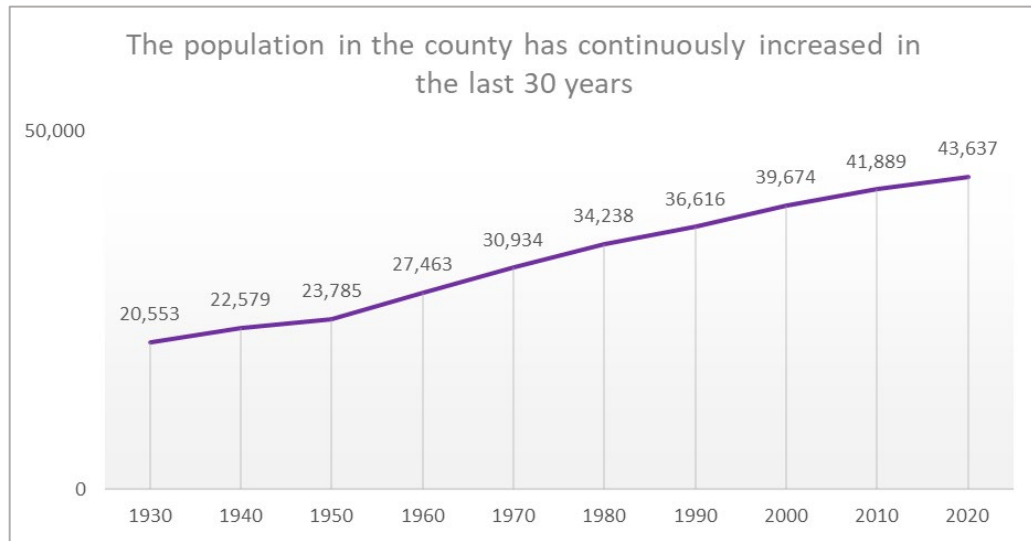


Figure 2: Dubois County total population between 1930 and 2020. Source: STATS Indiana

The county's population is evenly split between male and female, with the former comprising just slightly over half (50.2%). As shown in figure 3, almost a quarter (24.6%) of the county's population are children under the age of 18, which provides good population sustainability outcomes for the county. However, over a sixth (17.3%) of the population are seniors over the age of 65, and almost another sixth (15.2%) are older adults between the ages of 55 and 64, which means the county is facing significant aging, and soon will have a much reduce workforce.

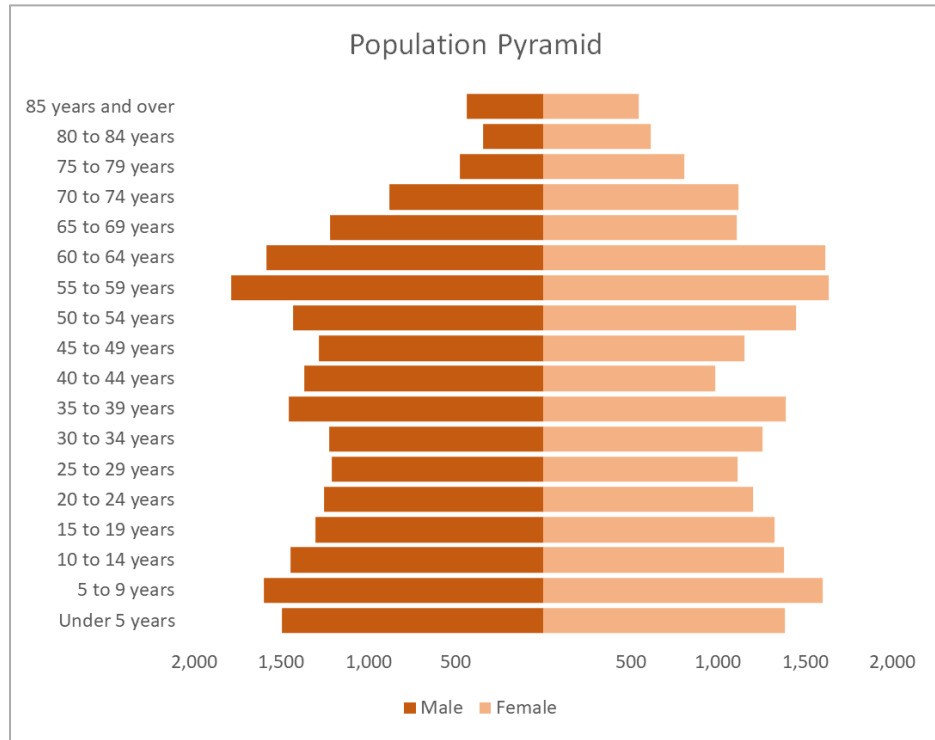


Figure 3: Dubois County population by gender and age. Source: 2021 ACS 5-year estimates

Based on 2021 ACS 5-year averages, most of the county’s population identifies as white. In fact, as shown in figure 4, nine out of ten (89%) individuals of the county are white non-Hispanic. The second largest population are Latino (8.3%), follow by individuals from other races and/or multi-racial. Black individuals make less than one percent of the population, and Asian make up less than half of a percent.

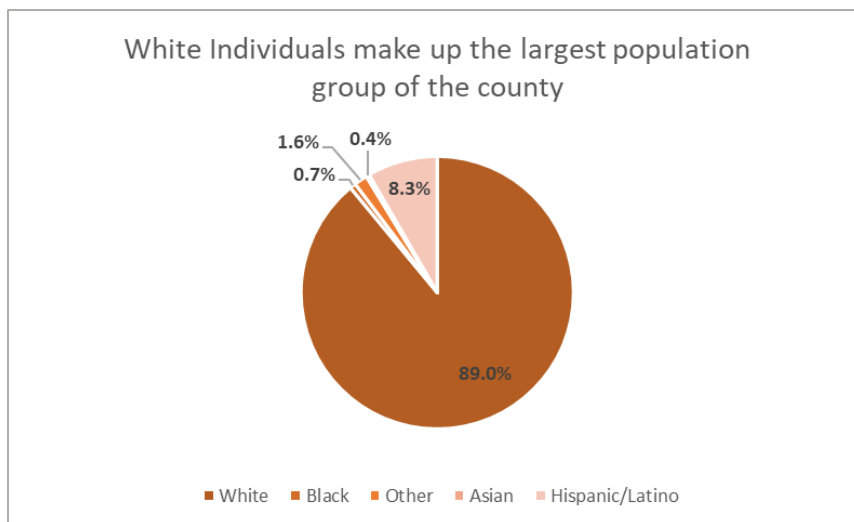


Figure 4: Percent of Dubois County population by race and ethnicity. Source: 2021 ACS 5-year estimates

Based on 2021 ACS 5-year averages, of the almost 34,000 individuals over the age of 16 in the county, only an estimated 23,000 (67.7%) are part of the labor force. Of those in the labor force, 2.2% are unemployed. As shown in figure 5, unemployment in the county is not equal for all groups, with minority populations in the labor force being far more likely to be unemployed than white individuals. Similarly, based on 2021 ACS 5-year averages, individuals under poverty are almost five times more likely to be unemployed than individuals above poverty (8.5% vs 1.8%).

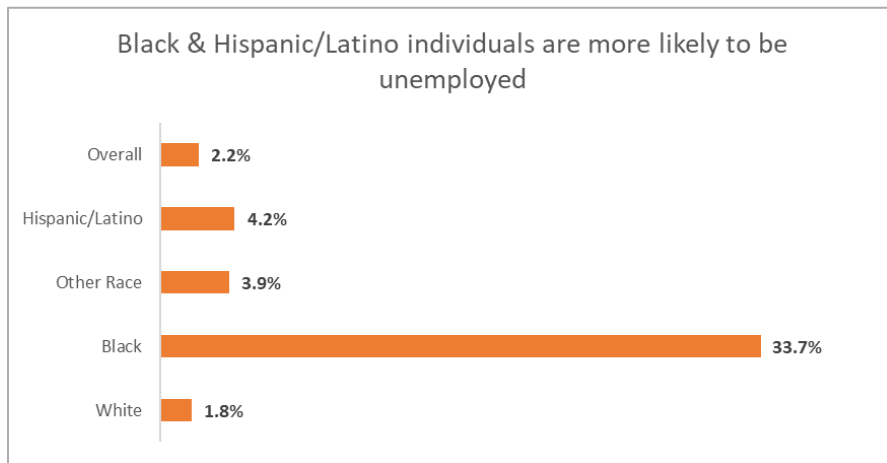


Figure 5: Percent of Dubois County population over the age of 16 unemployed by race and ethnicity. Source : 2021 ACS 5-year estimates

As shown in figure 6, based on 2020 tax returns, 18.6% of the workers in Dubois County commute from other counties. On the contrary, only a small percentage (6.1%) of the resident workers of the county work outside of it (STATS Indiana, 2022).

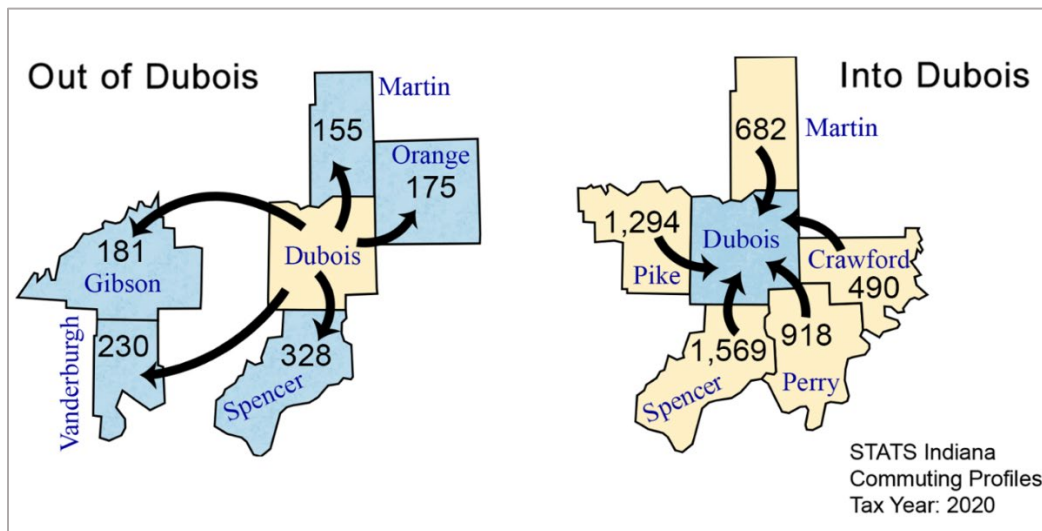


Figure 6: Into and out of Dubois County work commuting patterns. Source: STATS Indiana

## 2. Dubois County Food Landscape

This section discusses the Dubois County food system. Subsection 2.1 provides a general overview of what production systems currently exist within the county. This will focus on farms and the food products that are produced within the county. Subsection 2.2 delves into food access and security within the county, in which we highlight relevant food insecurity data and existing gaps related to food insecurity in the county.

### 2.1 Production Systems

Number of Farms	757
Land Acreage in Farming	178,989
Average Farm Size (acres)	236
Median Farm Size (acres)	81
Total Cropland (acres)	133,395

*Table 1: Overview of the production scene in Dubois County based on farm size. Source: USDA Agricultural Census 2017*

Dubois County currently has a very successful commercial agricultural system. The biggest strength is livestock production, primarily poultry, beef, and pork (Ellet et al., 2020). Overall hog production is decreasing while an increasing number of producers are moving to poultry, where there are higher potential profits. Collectively, poultry and egg production provided around 430 jobs in the county in 2012. Notably, the county also hosts processing plants, which provides significant benefits to producers and farmers continue to produce more specialized meat products. In 2015, the county ranked first in the state in poultry and egg production and animal processing (Kinghorn and Ortuzar, 2015).

In contrast to the substantial commercial livestock industry, the county has 10 or fewer farms that produce vegetables. The difference between livestock and poultry production and other crop production, such as vegetables, can be seen in table 2 (a snapshot of the 2017 US Agricultural Census).

Market Value of Agricultural Products Sold		
	Sales (\$1,000)	Rank in State <sup>b</sup>
<b>Total</b>	<b>248,818</b>	<b>10</b>
<b>Crops</b>	<b>69,883</b>	<b>52</b>
Grains, oilseeds, dry beans, dry peas	67,998	51
Tobacco	-	-
Cotton and cottonseed	-	-
Vegetables, melons, potatoes, sweet potatoes	56	67
Fruits, tree nuts, berries	8	74
Nursery, greenhouse, floriculture, sod	(D)	(D)
Cultivated Christmas trees, short rotation woody crops	(D)	32
Other crops and hay	1,263	24
<b>Livestock, poultry, and products</b>	<b>178,935</b>	<b>5</b>
Poultry and eggs	138,751	2
Cattle and calves	12,346	9
Milk from cows	11,342	18
Hogs and pigs	16,388	23
Sheep, goats, wool, mohair, milk	56	63
Horses, ponies, mules, burros, donkeys	(D)	78
Aquaculture	(D)	17
Other animals and animal products	(D)	(D)

Table 2: Market value of different agricultural products in Dubois County. Source: USDA Agricultural Census 2017

By value of sales, the majority of farms in Dubois County are either small (making less than \$2,500) or very large (making \$100,000 or more). This is typical of many farm production landscapes across the US, where small and mid-sized farms are shrinking as American farms have become increasingly larger and more consolidated (MacDonald et al., 2013). Indeed, many of the former dairy and livestock co-ops in Dubois County are now part of larger farming operations (K. Eck, personal communication, April 06, 2023). This “shrinking middle” is demonstrated by the shape of the bar graph below.

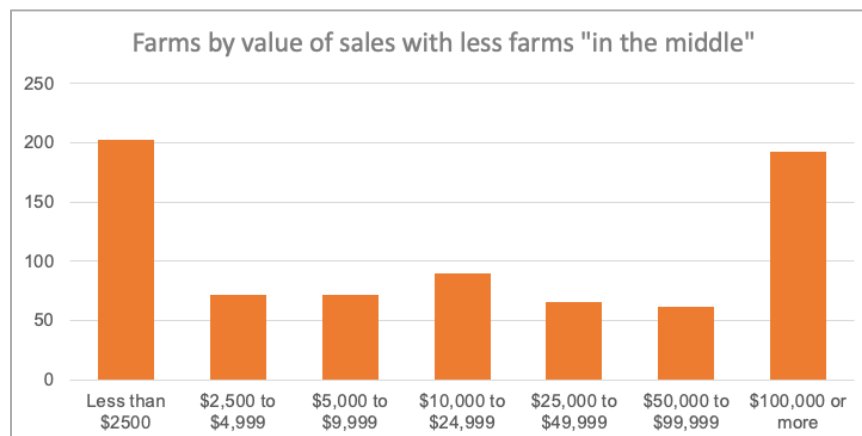


Figure 7: Number of farms in Dubois County by the value of their sales. Source: USDA Agricultural Census 2017

Although Dubois County has seen success in commercial livestock and other conventional agricultural ventures, a lack of production diversity can cause problems. Large-scale industrial agricultural systems present challenges in times of crisis, as was demonstrated during the COVID-19 pandemic. Farmers suffered due to the inability of seasonal workers to travel, and consumers struggled to access food due to supply chain limitations. More recently, due to a nationwide bird flu outbreak and high feed costs, poultry and egg producers suffered losses. Diversified farming systems can support smallholder agriculture systems, help people to feed themselves, and create a more resilient food system overall (Hawkes & Squires, 2021; Klassen & Murphy, 2020; Thilmany et al., 2020).

To diversify successfully, farmers need motivation, support channels, incentives, and local infrastructure. Infrastructure includes the farms, markets, and businesses that support the farms within a given area. Currently, both infrastructure and support channels are not widely available. Farmers in the county who are interested in diversifying mostly do so as a side practice. It is likely that they are interested in selling in the local farmers' market or are passionate about growing crops and hope to transform it into a profitable business. Most farmers in Dubois County are comfortable with continuing family-farm-based large-scale production. There is also a lack of associations or other groups to promote diversified farming. The farmers' market and local Farm Bureau do not have the strongest governance structure, and they struggle to engage with potential new farmers (K. Eck, personal communication, April 06, 2023). The Dubois County Cattleman's Association is perhaps the only strong agricultural group in the county. A lack of greenhouses and other tools to extend the season may also contribute to less opportunities to diversify.

General research demonstrates that the incentives to diversify are constrained by the current US agricultural structure (Hayden et al., 2018; Valiant et al., 2017). US farm policy creates a competitive advantage for a smaller number of crops through commodity crop programs. Commodity payments only encourage the concentration of farmland and therefore reduce the diversity of farming systems (Key and Roberts, 2007). This system constrains the choices and decisions that farmers and producers have. The pressure makes it difficult for them to step out of the norm and experiment with diverse farming systems (Hayden et al., 2018). Valliant et al. (2017) identify some reasons that farmers diversify, such as: family goals and values, long-term planning, and side niches to obtain more profit. While these insights are

important and could help us understand the farming system in Dubois County, it is essential to look at the county specifically to identify barriers and motivations to diversify. Our recommendations at the end of this report outline priority methods to achieve this.

## 2.2 Food Access & Security

Food insecurity describes the condition of having limited or uncertain ability to acquire sufficient quality, nutritionally adequate, and safe foods, to meet one’s basic needs. Food insecurity can be seasonal, temporary, or chronic and long-term (Food and Agriculture Organization, 2008). According to the 2020 Feeding American Map the Gap data, almost 1 in 10 individuals (9.2%) in Dubois County experience food insecurity. While the overall food insecurity in the county—as well for most of the subgroups that data is available for—is below the state food insecurity level, the Latino food insecurity rate is an exception. As shown in figure 8, in Dubois County, Latinos are food insecure at twice the rates of the rest of the county, with an insecurity rate of almost 1 in every 5 individuals (18%).

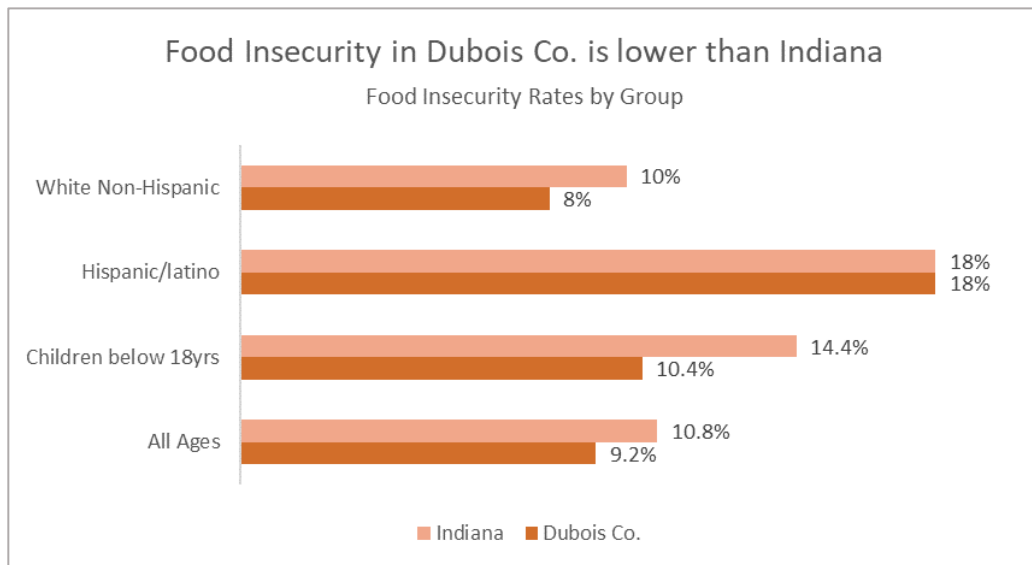


Figure 8: Dubois County food insecurity rates by groups. Source: 2020 Feeding America

As of November 2022, there were 44 SNAP approved retailers in the county. However, the vast majority of those (31) are gas stations, pharmacies, and convenience stores, all of which are locations that normally do not carry healthy food items. Of the remaining 13 stores, only 10 could be used to acquire a full healthy diet shopping basket; the other three are butcher shops that do not have vegetables, fruits or other pantry staples.

Store Type	Number of locations
Butcher	3
Convenience	11
Gas Station	16
Grocery Store	9
Pharmacy	4
Supermarket	1

Table 3: Store types in Dubois County.

As of 2022, there were 1,062 individuals (2.4%) living in food deserts in the county. Latino individuals live in food deserts at slightly higher rates (3.2%) than white individuals (2.4%).

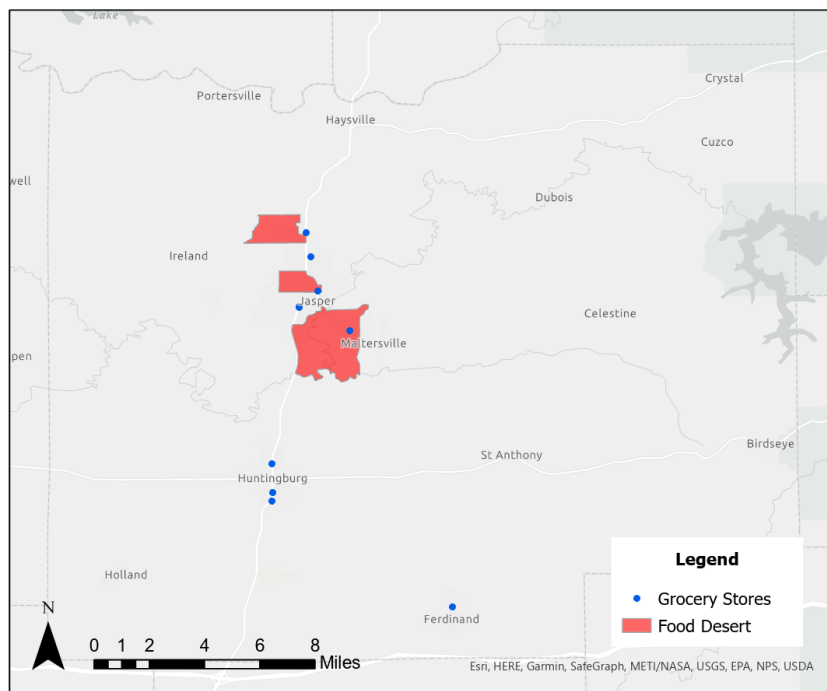


Figure 9: : Dubois County 2022 food desert map

In the State of Indiana, at the beginning of the school year, families are sent applications for free and reduced-price meals. However, families can also submit this application at any time during the year (FSSA, 2023). Free and reduced priced meals are crucial in providing access to food during the school session (breakfast & lunch) for children that come from lower income households. As shown in figure 10, based on the IDEO 2022-2023 school enrollment data,



almost 2 in 5 (38.5%) of students attending one of the schools in Dubois County are receiving free or reduced-price (F/R) meals. Schools with a higher share of Latino students have a higher percentage of individuals with F/R meals. In fact, as shown in figure 11, percentage of Latino students in the school predicts 80 percent of F/R students in it.

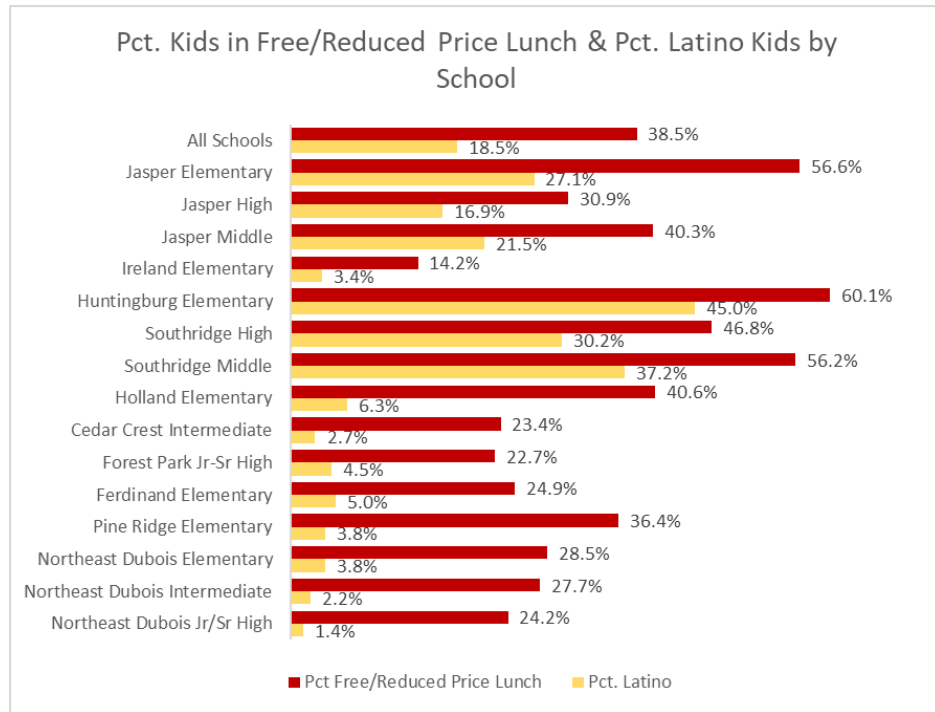


Figure 10: Percent of Free and Reduced-price lunch students and Percentage of Latino students by schools. Source: IDOE 2022-2-23 school year enrollment data

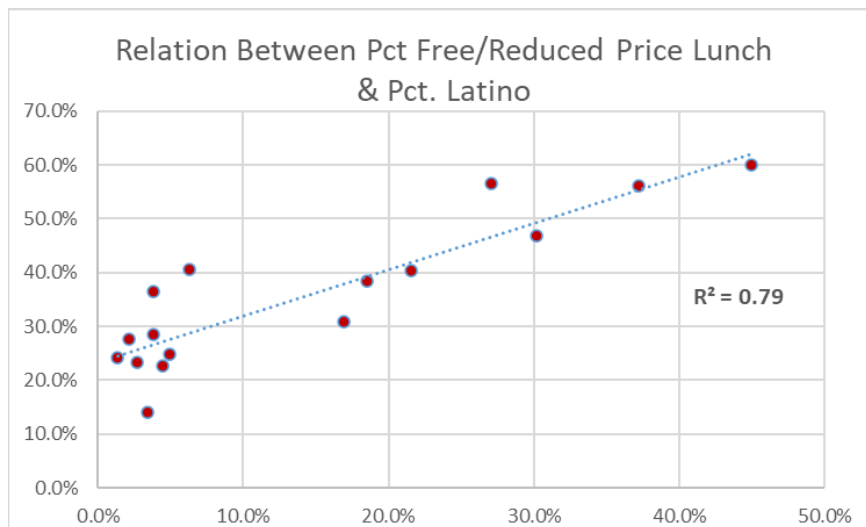


Figure 11: Correlation between free and reduced lunch and Latino students in schools. Source: IDOE 2022-2-23 school year enrollment data

Dubois County emergency food providers include the Community Food Bank Inc., the largest county food pantry, which is located in Jasper and Shared Abundance, a Christian-affiliated food pantry located in Huntingburg. In Lynnville, in neighboring Warrick County, there is also the Bread of Life food pantry. The Generations Meals on Wheels program, affiliated with Vincennes University, serves the elderly and individuals with disabilities in Dubois County. However, the most robust food support programs are directed at students and their families, such as the school backpack program and a community service organization, Community C.H.E.W.

Possible gaps in food services include families of students who have not opted-in to the school food programs, despite eligibility, the Hispanic population of Dubois County, which is at higher risk of food insecurity, and those who do not have reliable transport. Dubois County does not have public transportation, and the limited locations of the food pantries may prevent many residents from accessing them.

### **2.3 Latino<sup>1</sup> Community Profile**

Dubois County is home to a vibrant Latino community. It is critical to examine the current Latino community as this demographic makes up a significant portion of the county's population. Although many organizations, initiatives, and collaborations have grown to provide support to this community, there is still a lack of data and resources specifically concerning food needs for Latino folks in Dubois County. It is difficult to address specific food-related needs without data, but this gap that can be closed with further research and action, especially in conjunction with the growing presence of Latino groups and resources. This specific community likely faces additional barriers in accessing food resources and it is necessary to determine solutions pathways to ensure that Latino families are able to access assistance that they may require. These barriers and solutions will be discussed in the following sections. Most importantly, the Latino community deserves to be elevated and celebrated as contributing invaluable assets to the county.

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<sup>1</sup> The term, "Latino" is used to reflect emphasis on people born in Latin America or with ancestors or culture from Latin American countries. "Latino" was chosen over "Latinx" to reflect how the community most commonly refers to themselves.

### ***Needs Assessment Data***

A recent [report](#) by Indiana University's Center for Rural Engagement analyzed the demographics of the Latino community in Dubois County using a survey. The report found that Latino people make up 8.2% of Indiana's population, and 9.5% of Dubois County, with the majority living in either Huntingburg or Jasper. Fifty percent of survey participants moved to Dubois County for work or education opportunities, while others moved to be closer to friends and families or to raise their children in a better environment. Two thirds of Latino people surveyed stated that they immigrated to the United States, with the majority coming from El Salvador, Mexico, or Honduras. 62.3% percent are U.S. citizens, 14.4 % are non-residents, 11% are residents, and 5.5% preferred not to answer. Almost all respondents speak Spanish, with 65.8% speaking both English and Spanish and 29.1% speaking only Spanish. The majority of respondents stated that they prefer to speak in only Spanish. Most respondents said that their institution or workplace used their preferred language all or most of the time (36.2%) or sometimes (35.3%). Others reported that their preferred language was rarely (18.1%) or never (6.9%) used. 7.8% of respondents said that they have no internet access at home. One respondent reported experiencing homelessness, while the majority say they had access to housing through owning or renting. Respondents ranked access to public resources as the third most important priority for community improvements, while public health was ranked as their first priority. Lastly, the survey found that the majority of respondents primarily use social media as the main way to receive information, followed by family and friends, places of worship, and work (*Latinx Needs Assessment, 2022*).

### ***Available Resources***

As the previous demographics demonstrate, the Latino community makes up a significant portion of Dubois County, and the offerings of resources to address the needs of this community reflects this. It is important to examine food-related and community-based resources available to the Latino community to assess both gaps and strengths of these resources.

The Association of Latin Americans in Southern Indiana (ALASI) has played a significant role in supporting Dubois County's Latino community. This group recently helped produce the aforementioned Latinx Needs Assessment and is credited for facilitating many events, gatherings, and providing invaluable resources (ALASI, n.d.). Due to ALASI's presence,

many other initiatives have grown that offers aid and resources to the Latino community. Southwest Dubois County School Corporation offers a dual immersion program that provides bilingual Spanish/English education and promotes cultural literacy and appreciation (*Dual Language Immersion*). Another significant event is the annual Latino Cultural Fest, put on by ALASI, which brings together the Hispanic community, allows for celebrations and recognition of the community's accomplishments, and exposes non-Hispanic community members to this vibrant culture (ALASI, n.d.). Latino school advocacy groups like Latinx Dubois empower Hispanic youth by offering translation resources, providing leadership trainings, and organizing workshops (Latinx Dubois, n.d.). The group, Juntos 4H, also provides resources for students and families by creating a support system based out of the schools, to raise graduation rates and provide more opportunities to Latinos (Ambrose, 2021). Lastly, the Latino Collaboration Table is an informal group that meets to address needs of the Latino community and collaborates with ALASI and Vincennes University. There is a diverse array of collaborations and resources available to the Latino community and these are continuing to grow through increasing partnerships. Though at this time, there do not appear to be any Latino community resources that explicitly address food and nutrition needs.

### ***Potential Barriers***

Resources like the community food pantries in Dubois County are regularly utilized by hundreds of families and the pantry shelves often go empty. At this time, there is no clear way to determine who is accessing this resource and how many are part of the Latino community. But it is undeniable that in the United States, including Indiana, "racial prejudice and language, education, and cultural barriers create inequalities that make Latino communities more impacted by food insecurity" (*Feeding America*, n.d.). Although a significant number of resources exist in Dubois County that support Latino individuals, there are inherent barriers that exist nationwide that may also be influencing how the Latino community in Dubois County access these resources.

Because the majority of the Latino community speaks Spanish, a language barrier may make interpretation of food assistance documents and descriptions difficult. "Immigrant families often face language barriers and discrimination when accessing federal nutrition and food programs" (*Food over fear*, 2020). This language barrier may deter Latino individuals in Dubois

County from engaging in initiatives and taking advantage of what is being offered to the county as a whole.

Fear of participating in food assistance programs may be another significant barrier for Latino people in Dubois County. As detailed by one stakeholder working with the Latino community, “while immigrant families expressed more fear about accessing SNAP than other federal nutrition and food programs, there are still concerns about participating in such programs, e.g., school meals, WIC, or emergency food” (*Food over fear*, 2020). Those who have immigrated may be afraid to participate in programs due to immigration-related concerns. These fears are often due to the fear of the documentation required and that their information will be shared with immigration agencies (*Food over fear*, 2020).

An additional barrier to accessing food assistance and other resources may be that some Latino individuals are simply unaware that they are available to them in the first place. “When asked about their awareness of ALASI, about two-thirds of respondents reported being aware of the organization (67.3%). Others said they were only somewhat aware of ALASI (19.6%) or not familiar at all (13.1%)” (*Latinx Needs Assessment*, 2022). Though this barrier is difficult to address without specific data, outreach efforts should be increased to raise awareness of resources offered in Dubois County.

Many of these barriers will be addressed in the recommendations section, where suggestions for closing these data and accessibility gaps will be presented.

## 1. Recommendations

Focus Area	Need	Recommendation	Timeline
All	Cross system collaboration	Establish a Local Food Council	Short to Medium-Term
All	Team Research Capacity	Engage with IU Capstone Course	Medium-Term
Food Insecurity	Expand Food Access	Health System Partnerships	Long-Term
Food Insecurity	Expand Food Access	Opt-In Structure for School Food Program	Medium-Term
Food Insecurity	Information Gathering	Target Food Security Survey	Medium to Long-Term
Food Insecurity	Knowledge Sharing/Collaboration	Food Summit: Community Food Security Conversations	Short-Term
Production	Farm Diversification	Develop Organizational Channels to Support & Promote Farm Diversification	Medium-Term
Production	Expand markets for local, diversified producers	Develop Value-Chain Coordination	Long-Term
Latino	Increase Awareness of Food Resources (Community Based Decision Making)	Increase Collaborations Within Schools and Latino Student Groups	Long-Term
Latino	Increase Awareness of Food Resources	Capitalize on Social Media Use for Information-Sharing	Short-Term
Latino	Improve Food Assistance Accessibility for Latino Folks	Increase Offerings of Food Pantries Within Hispanic Places of Worship	Medium-Term
Latino	Gather Latino/Food Data	Latino Food Needs Survey	Medium-Term

### 3.1 Overall Recommendations

#### **Recommendation 1: Establish a Local Food Council**

We recommend that Dubois County stakeholders consider establishing a local food council within the region.

A local food council (also sometimes called a food policy council, food coalition, board, network, or charter) is an increasingly popular tool used by local or regional groups to address food system needs in their area. Generally, it is a group made up of stakeholders from diverse organizations and sectors who work together to address needs systematically.

Local food councils can be particularly useful in rural communities that struggle with food access. In Dubois County, networks for food insecure residents to access food and places for growers to collaborate are currently disparate or even nonexistent. A local food council would create a central organization for stakeholders to organize. Council activities can range from organizing food assistance programs, suggesting legislation to policymakers, creating markets and hubs, and fostering entrepreneurship among growers. Local food councils can also singularly apply for grant programs to fund projects. Initiatives started by other local food councils have goals of increasing food security, improving community stability and resilience, and enhancing the health and well-being of residents.

The following are best practices to follow when establishing a local food council:

#### **Include stakeholders from each part of the food system**

The food system contains many elements and is commonly divided into the five sections shown below. A healthy and sustainable food system integrates all these elements together. A local food council should strive to have representation of every segment of the food system in it. Common members of a local food council include farmers, food distributors, grocers, public health officials, chefs, educators, non-profit advocates, and community members. It is often helpful to have someone from a governmental body on the council as well, so that relationships can be built to influence future policies. Members can be elected, nominated, or even self-selected.



Figure 12: Five sections of the food system and the types of stakeholders from each.

### Assess Needs through a Food Systems Assessment and Create Vision/Goals

A local food council should begin by assessing the community's needs through a food systems assessment (FSA). The surveys developed in this report can be a part of the food systems assessment. Additionally, systematic tools and assessments exist that can be utilized by Dubois County. The Community Agricultural and Resilience Audit Tool (CARAT) is one such assessment. The CARAT tool measures the food system across seven themes:

1. Agricultural and Ecological Sustainability
2. Community Health
3. Community Self-Reliance
4. Distributive and Democratic Leadership
5. Focus on the Farmer and Food Maker
6. Food Justice
7. Place-Based Economics

Along with the surveys and other production-based focus groups referenced in this report, the FSA can serve as foundational information from which to ground the council's platform. After conducting the FSA, stakeholders can set a vision and goals for the organization. Establishing clear priorities and agreeing on a plan from the outset will increase the likelihood of success.



Below is an example of goals and values set by the Elkhart County Food Council, which can be used as a model or starting point. Read more here: <https://www.elkhartfood.org/values>

1. **Food Access:** Ensure that all residents of Elkhart County have access to healthy and affordable food within close proximity to their place of residence.
  - a. Expand healthy food retail options
  - b. Convene stakeholders
2. **Health & Food Education:** Support local programs with a focus on improving healthy eating in Elkhart County.
  - a. Ensure every eligible resident gets access to food assistance
  - b. Support organizations through data and materials to market health initiatives.
  - c. Reduce health problems associated with poor quality diets.
  - d. Increase knowledge about healthy eating and its benefits, especially among children and young people.
3. **Production & Food Economics:** Promote and support sustainable, local food producers and local food businesses in Elkhart County.
  - a. Increase broader community awareness of existing farms, markets, and food businesses that focus on sustainable, local food.
  - b. Support collaborative local food infrastructure and marketing projects.
  - c. Provide ways for local food producers, food entrepreneurs, and markets to connect.

### **Put Community Engagement at the forefront**

Developing relationships with the people most affected by the food system is key. The FSA can kick off this process. However, building trust with the community is an ongoing process.

Existing community networks can be tapped into to gain support. For example, in Dubois County, the Cattleman's Association is an active group of producers. The local food council can reach out to this group to gain input on what issues should be focused on. Community engagement should also involve working with groups that are less represented, such as people with a lower socio-economic status or those who are unable to access regular information channels. The community should also be a part of the goal setting process. Community

engagement can take many forms, including education, surveys, and focus groups. The International Association for Public Participation’s spectrum of participation can assist with the selection of activities. Dubois County’s Local Food Council should eventually aim to work toward the participation on the far right side of the chart. When participation focuses more on collaboration and empowerment over simply informing, a local food council will gain more credibility and community buy in. This will ensure the impact is long term and meaningful.

		INCREASING IMPACT ON THE DECISION				
		INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL		To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC		We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

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Figure 13: The IAP2 Spectrum of public participation designed to assist with selection of the level of participation in processes. Source: IAP2.org

### Partner and learn from other food councils

There is no one organizational model for local food councils, but Dubois County can glean information by looking at what has worked in other communities. The [Johns Hopkins Center for a Livable Future](#) maintains a repository of food councils across the country. In addition, Sustainable Food Systems Science (SFSS) at Indiana University coordinates the [Indiana Food Council Network](#). They connect monthly to share information with one another. It is important to recognize that many of the issues of the food system may be addressed regionally through new partnerships. Thus, working closely with other food councils across Indiana will be invaluable for Dubois County. Finally, John Hopkins Center for a Livable Future has put together a list of consultants that can provide expertise on organizational development of food council. The list can be accessed here: <https://airtable.com/shrbYVL42xZO31LtY>

### **Recommendation 2: Consider Partnership with IU through a Capstone Course**

Dubois County, especially if united under one food coalition or council, should partner with the O’Neill School of Public and Environmental Affairs to complete a semester long capstone project focused on food sustainability needs. Recently, O’Neill was again ranked the nation’s best public affairs graduate program in the country. In the past, information and reports provided by capstone groups have proved invaluable for clients in Indiana, across the county, and beyond the US.

A [capstone project](#) brings together O’Neill graduate students from across different disciplines. Students perform consultive roles and could assist with much of the work outlined throughout this report, such as administering surveys, conducting focus groups, and better engaging the Latino community. Since Dubois County already works closely with the IU Center for Rural Engagement, the partnerships necessary to begin the capstone are already in place. Especially due to its proximity to the university, Dubois County should make use of the resources of O’Neill and Indiana University more often. A capstone project represents the ideal opportunity to do so.

## **3.2 Food Security Recommendations**

### **Recommendation 3: Hold a Food Summit**

In the short term, we recommend DuBois County’s next food summit focuses on food security. Food summits provide stakeholders with a chance to discuss the challenges and opportunities present within their food system. Summits are used to address issues within all aspects and levels of the food system, from global sustainability at the United Nations (United Nations, n.d.) to local food production in Muncie, Indiana (“Local Food Summit,” 2018).

A food security summit has the potential to provide several benefits for DuBois County. First, it can spur action-oriented collaboration by connecting people, producers, businesses, nonprofits, and governments that have unique skillsets and share an interest in improving the county's food system. This opportunity to connect is particularly important, as it provides a forum for knowledge sharing and can ensure that services are not duplicated unnecessarily. A food security summit can also bring new community members into the conversation by highlighting an issue that they may have felt disconnected from previously, which may motivate

them to contribute to solutions. Finally, the food summit can serve as the starting point for the Local Food Council discussed in Recommendation 11.

To maximize potential benefits, we recommend that the food security summit be included as part of the 2023 DuBois County Local Foods Expo. We feel that this event is the best opportunity to execute this in the short-term, as all relevant stakeholders will already be present. However, doing so will require event planners to make adjustments to the current expo schedule. We recommend that the food summit includes a one-hour breakout session focused on addressing food insecurity within the county. This will be most effective if the breakout session occurs within the first half of the expo, because this will allow more time for stakeholders to connect informally throughout the event. While the food summit should be included in all food expo marketing materials, it should also be promoted independently from the expo.

#### **Recommendation 4: Opt-In vs. Opt-Out**

We suggest changing the current food equity programs, starting with school backpack programs, to opt-out of programs instead of opt-in. Since almost 2 in 5 schooled kids in the county are currently in free or reduced lunch, we suggest that the future local food council works with the school corporations in to ensure that anyone who takes the time to fill out the application and qualifies for the free & reduce lunch program, is automatically enrolled in any of their respective backpack meal programs, unless they opt-out of them.

The current system for getting involved with programs is the opt-in method which requires users to perform some kind of action before they become can participate. This method is less equitable. Opt-in methods across the board require individuals to go out of their way to be part of a program. The most common examples are organ donation and social safety nets. Both programs require extra administrative burden and effort on the part of individuals to participate. On the other hand, opt-out programs are easier for the common individual, have a lower barrier to access, and can be used in a more equitable manner. The question of opt-in vs opt-out switches from who has the time to opt-in to a program to who has the desire to not participate.

There are three common major objections to opt-out or automatic enrollment practices: labor usage, fairness, and equity. Arguments that opt-out programs are not equitable do not come from the recipients. These arguments can be summed up as; why are they getting assistance, I didn't. Instead of individuals being able to ignore an issue and feign ignorance, opt-out programs

forces them to consider the issue and do some work to not participate. To some, switching to an opt-out model can seem like taking individual choice. However, studies show that it is actually transferring the burden from individuals with less agency to individuals with more. The idea of fairness and equity are interestingly linked. There is an argument that it is unfair that one individual is getting a benefit that another is not. The people who object in this manner are from two different camps, the “I have it worse camp” and the “It was worse in my day” camp. The worse in my day camp type of individual will not change their mind. The I have it worse camp is not wrong. These individuals have it worse than the minimum threshold and are afraid that if too many people participate in these types of programs, they will not have enough resources to serve them. This is a reasonable fear but can be alleviated based on long-term success. The final objection is that this type of program will have an increased labor cost since more people will be needed to run these programs. This is simply a misunderstanding of how government services run. Most of the labor costs come from checking if an individual is eligible for that program. If the process is flipped and instead an individual needs to say I have enough and do not need that service, this should decrease the administrative labor costs per individual served.

### **Recommendation 5: Conduct a Survey**

In our initial discussions with relevant stakeholders, one concern was that there was a general lack of data on food insecurity in Dubois County. Better data regarding food insecurity would afford more targeted efforts to address food insecurity and may better afford funding acquisition and allocation for food security.

To begin collecting better data on the status of Dubois County residents relating to food insecurity, we have developed a brief survey to gather relevant data. The English language survey can be found in Appendix 1 and the Spanish language survey can be found in Appendix 2. Each survey includes 11 items in total, with four questions focused on household demographics, two questions focused on overall residents’ needs, a question focused on residents’ food security in the last 12 months (modeled after the USDA’s food security short-form survey), and four questions focused on residents’ knowledge and use of food assistance resources in Dubois County.

As has been discussed, there remains a data gap in relation to Latino communities in Dubois County and their food needs. To begin addressing this data gap, we have included a

Spanish language version of the survey. Additionally, the survey includes questions that specifically target Latino communities by asking about their knowledge and use of food assistance programs located in predominantly Latino communities. The Spanish language version of the survey is intended to be distributed alongside the English language version.

Most survey items were developed specifically for this report. Survey items N3 and N4 were adapted from the U.S. Household Food Security Module (Bickel et al., 2000).

### **Survey Implementation**

Distributing the survey items to the residents of Dubois County is expected to be one of the more challenging aspects of the recommendations in this report. The simplest survey dissemination solution is to contract a survey service. One example of this type of survey distribution is discussed in Miner et al.'s (2014) report on food assistance needs in Marion County, Indiana. Miner et al. (2014) contracted with the Center for Public Interest Polling at the Eagleton Institute of Politics to conduct their survey, which was conducted using random digit dialing in Marion County to complete 856 interviews. Miner et al. (2014) did not discuss the financial cost of purchasing a contract service with the Center for Public Interest Polling and the estimated financial costs of contracting a survey service were not readily accessible. An ideal partner for contracting this work would be affiliated with a regional university because of easily accessible expertise and because a connection to a local university on survey documents has been shown to increase response rates among participants (Dillman et al., 2009). Possible partners include the Sustainable Food Systems Sciences Program at the Ostrom Workshop (Indiana University, 2023) or an Indiana University capstone project through the O'Neil School of Public and Environmental Affairs (J. Farmer, personal communication, April 28, 2023).

If practical constraints mean that the survey must be administered by county officials rather than contracting the survey administration, some guidelines can be followed to improve the overall quality of the survey results. These guidelines are drawn from Dillman et al.'s (2009) *Internet, Mail and Mixed-Modes Surveys: The Tailored Design Method*. The Tailored Design Method is an approach to survey development and administration that focuses on reducing survey error, developing survey items and procedures that complement each other, and viewing social exchange as a critical context of the survey. Dillman et al. (2009) suggest three key questions about survey design and implementation to motivate people to better respond to the survey:

1. How can the perceived rewards for responding be increased?
2. How can the perceived costs of responding be reduced?
3. How can trust be established so that people believe the rewards will outweigh the costs of responding? (p. 23)

We will provide a summary of Dillman et al.'s (2009) guidelines, but a complete description of the Tailored Design Method is beyond the scope of this report. We recommend that anyone who wishes to better understand the Tailored Design Method acquire Dillman et al.'s book for further study.

### **Survey Implementation: Mail or Online Distribution**

One of the most important decisions that needs to be made regarding survey implementation is the survey format. The two major categories of implementation are mailed surveys and online surveys. Each format has its own advantages and disadvantages. Mail distribution surveys are more expensive than online surveys but are less subject to coverage error resulting from segments of the population who do not have internet access. Both survey types suffer from a high risk of non-response error where participants do not respond to the survey in adequate numbers to make robust statistical claims. The response rate for online surveys is generally considered to be much lower for online surveys as compared to surveys distributed through the mail (Dillman et al., 2009).

In both survey types, contact with participants should be made as personalized as possible, a token of appreciation should be included with the initial survey contact, and multiple contacts with participants is recommended for higher response rates. In both survey types, the timing of the survey contact should be carefully considered to avoid major conflicts (Dillman et al., 2009). For a survey in Dubois County, we recommend a survey distribution timing that falls between the start of the calendar year and when major crop planting cycles begin. This will avoid much of the divided attention many of the county residents experience related to agricultural cycles.

In both survey types, care should be taken to avoid making the messages look like junk mail or spam and being quickly or autonomously discarded. Additionally, procedures should be in place to deal with undeliverable mail, returned incentives, respondent inquires, and for dealing with problems that arise during data collection (Dillman et al., 2009).

Mail distributed surveys have some unique considerations for successful implementation. For example, the mailer itself should be visually appealing both on the outside and when it is opened. Inside the mailer, all information should be accessible exactly where it is needed, such as survey response numbers. The weight of the mailing materials should also be accounted for when calculating the cost to distribute surveys. Additionally, all addresses should be written such that they comply with postal regulations (Dillman et al., 2009).

Online distributed surveys have their own unique considerations as well. For example, when possible, potential respondents should be contacted in more than one way such as mail in addition to email or social media. Instructions for accessing the survey should be especially clear and concise because some degree of technical expertise is needed to access online surveys. Additionally, the capacity of the web servers that would host an online survey should be accounted for to make sure that a sudden influx of survey responses does not overwhelm servers (Dillman et al., 2009).

One concern that may arise with implementing the survey without contracting a survey service is that response rates may be too low to make meaningful statistical claims. We acknowledge this concern and wish to highlight how preliminary data might be used to advocate for grants or other funding from county, state, or federal sources in order to obtain better data.

Even if a social media survey does not produce enough data to support arguments for changes in food security policies in Dubois County, an early social media survey might be used to justify the allocation of funds from county, state, or federal organizations to seek better data as described earlier.

### **Recommendation 6: Partnerships with Health Providers**

Hospitals and other health care providers are increasingly realizing that nonmedical factors shape the conditions of daily life, affect how people are born, grow, work, live, and age, and have an outsize role in their health outcomes. Recent research found that only 20 percent of health can be attributed to medical care, while social and economic factors account for 40 percent (Health Research & Educational Trust, 2017). One of these socioeconomic factors is food insecurity, which increases the risk of chronic diseases from obesity to malnutrition, hypertension, asthma, tooth decay, infection, birth defects, and behavioral health issues. Major health organizations including American Hospital Association (AHA), Health Research and Educational Trust and the American Hospital Association's Association for Community Health



Improvement have identified partnering with communities to address food insecurity as a key priority for hospitals.

We recommend that Purdue Extension partner with health care providers in Dubois County directly or as a broker to address food insecurity.

Potential actions, in line with best practices suggested by Health Research & Educational Trust (2017) include:

1. Classes led by health educators:
  - Educate hospital staff about food insecurity and community resources
  - Educate patients about low-cost strategies for healthy food choices
  - Provide services to connect to food resources
  - Provide on-site help and applications for SNAP, WIC, TANF benefits
  - Provide referrals to local food pantries, emergency food organizations, and local departments of health and human services
  - Provide free, on-site nutrition education
  - Create social support groups
2. Encourage health care providers to:
  - Screen for food insecurity
  - Educate their patients about available federal nutrition programs
  - Guide patients and families to local departments of human services during wellness check-ups or visits
  - Connect patients and families with dietitians and nutritionists for counseling services
  - Provide free food or healthy snacks at clinics, on-site food pantries, or host summer or year-round feeding programs
  - Enlist patients in free onsite education classes
  - Promote existing resources such as food trucks, food shelves, food pantries, emergency food programs, and more
  - Develop on-site food pharmacies, food pantries and community gardens »  
Collaborate with existing grocery stores and farmers markets
3. Work with the hospital to establish co-programing

### **Eskenazi and Meals on Wheels in Indy (Case Study)**

One example of health care providers partnering with food providers in Indiana is Eskenazi Health, which serves Marion County at eleven outpatient health centers and downtown Indianapolis through a hospital there. Eskenazi Health participates in the following initiatives related to food insecurity:

- Eskenazi Health and Meals on Wheels (MOW) of Central Indiana partner to provide recently discharged patients of all ages with 30 days of medically tailored meals for free
- MOW, Eskenazi Health and the Central Indiana Senior Fund created a Head Start Nutrition Program for Seniors which offers 30 days of medically tailored meals to seniors.
- Eskenazi Health, St. Luke's United Methodist Church, Dow AgroSciences and Gleaners Food Bank operate food pantries located at two Eskenazi Health Centers in disadvantaged areas with food deserts. These locations are in walking distance for most area residents and are stocked by community members and faith-based organizations. Health care providers at the clinic ask patients to let others know about the pantry as a stigma-reducing way to ensure patients are aware of it.
- Eskenazi Health Center Pecar and Gleaners Food Bank partner to provide the Senior Shopping Day program that provides residents over age 55 an extra day to shop at the food bank with Health Center dietitian assistance in food education, nutrition, and food item selection appropriate for senior health needs.
- The Sidney & Lois Eskenazi Hospital has a rooftop community garden available 24/7 that provides fresh produce for the hospital as well as space for community members to grow their own produce (American Heart Association, 2018).

We encourage exploring similar possibilities for partnerships with the Memorial Hospital and Health Care System, such as their Diabetes Management and Nutrition Clinic, alongside community food providers such as Generations, the Meals on Wheels provider for Dubois County.

### 3.3 Market Production Recommendations

#### **Recommendation 7: Develop Organizational Channels to Support & Promote Farm Diversification**

We recommend that Dubois County implements organizational channels to engage aspiring, beginning, and existing diversified farmers in Dubois County. As of now, engagement with this group is limited, and there is no strong community agricultural group to ensure continuous flows of information with and between smaller, more diversified farmers. Small-scale farms meetings have been focused on short-run informal education with no opportunities for this group to give their feedback or input. While this is a great start, it is crucial that these opportunities exist to ensure the long-term sustainability of these aspiring, beginning, and existing diversified farms.

Focus groups are a qualitative research method that can be defined as a “carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment” (Krueger, 1994, p. 6). This method is commonly used in social science research and is recognized as more cost-effective than interviews. Interviews are often more time-consuming, expensive, and limited by the skills of the interviewer (Côté-Arsenault and Morrison-Beedy, 1999). While focus groups are still guided by an interviewer or moderator, they include multiple subjects or participants and provide a space for them to share their ideas and perceptions related to the topic at hand. Participants influence each other by responding to each other’s ideas and comments, making the conversation more insightful (Côté-Arsenault and Morrison-Beedy, 1999). Focus groups create a space for in-depth exploration of social issues, uncovering participant interactions and cultural and social norms within the group (Warr, 2005).

Focus groups can be used for many different purposes, including assessing a group’s needs or gaining insights into a particular group of people (Côté-Arsenault and Morrison-Beedy, 1999). Côté-Arsenault and Morrison-Beedy (1999) identify 7 crucial factors to consider when implementing a focus group: recruitment, site selection, interview guide, moderators, recording and documentation, session, and post-session. With recruitment, most focus groups utilize snowball sampling methods. During recruitment, it may be useful for facilitators to place members of similar backgrounds within the same focus group. This is because participants may feel more comfortable to openly express their views and opinions when they share similar

backgrounds or experiences with other group members. Côté-Arsenault and Morrison-Beedy (1999) suggest 6-12 participants per focus group and state that over-recruitment may be smart if no-shows are expected. Given the specifics of the focus group recommendation for Dubois County, we assume that the first step would be identifying these beginning and existing diversified farmers. After contacting them, facilitators could, if desired and applicable, have participants with similar farming backgrounds comprise separate focus groups. Ideally, focus groups are conducted with as many different groups of farmers as possible.

With site selection, facilitators should choose an accessible location. When creating the interview guides, or list of questions, facilitators should order these questions from general to specific. The first few questions asked should be simple and neutral, allowing participants to get comfortable. Questions should be flexible and addressed to all participants. Successful focus groups allow and encourage natural conversation. Côté-Arsenault and Morrison-Beedy (1999) suggest asking around 12 questions. Based on our production landscape analysis and conversations with our consultants, interview questions can include, but are not limited to:

- What is keeping these farmers from diversifying?
- What do they need to diversify? Loans, funding?
- What type of farm management would they employ after these needs are met?
- What do they need to know to help manage that?
- What do they need to know about regulations?
- How could they move their produce to consumers?

Moderators play an extremely important role in focus groups. Their actions and attitude set the tone for the rest of the session. Moderators should be sure to make eye contact, call participants by their names, and speak clearly. Focus groups will be more successful if the moderator is familiar with the topic as well as the group dynamics. Next, it is helpful to have recorders and notetakers throughout the process. The session itself should begin with introductions to the facilitators and attendees. Facilitators can outline the purpose of the focus group as well as the process, and even begin with a short presentation, if applicable. The moderator must be sure to emphasize the importance of all voices, that there are no right or

wrong answers, and that everyone's input is critical for the success of the focus group (Côté-Arsenault and Morrison-Beedy, 1999).

When conducting a focus group in Dubois County, post-session action is one of the most important steps. Facilitators should debrief after the session to organize findings and identify next steps. Additionally, it is crucial that participant's contact information is collected for follow-up and for future conversations. This data can be used for other aspects of the Dubois County Food Assessment and will hopefully allow for the creation of stronger community agricultural groups.

Our team has identified case studies related to agricultural focus groups to demonstrate how they might work, identify major lessons learned, and provide resources for future research. Roesch-McNally et al. (2018) conducted four focus groups across the state of Iowa to better understand farmer barriers to adopting cover crops. The research team hoped to gain a detailed understanding of what factors go into a farmer's decision to use/adopt cover crops. They identified focus groups as the most effective method since it allowed them to facilitate guided discussions about cover crops with groups of farmers. Researchers utilized the snowball sampling method and attempted to include a mix of row crop farmers in the focus groups. The sessions themselves were around two hours and began with an educational presentation about cover crops. Facilitators wanted feedback on the information provided and to know if the information had any effect on their decision-making. The focus groups were successful, and the researchers were able to uncover broader themes. Overall, they gained a deeper understanding of the barriers faced by farmers and methods to overcome these barriers. We feel that similar methods could apply for farm diversification in Dubois County. One important limitation to consider, as outlined by Roesch-McNally et al. (2018), is self-selection bias among participating farmers.

Another helpful study conducted focus groups in Illinois to identify farmer barriers and motivations for adopting perennial cropping systems (Mattia et al., 2018). This focus group followed a survey, which could be implemented for Dubois County as well, in tandem with our suggested survey. In this case, researchers wanted to gain deeper insights into farmer attitudes towards implementing a new cropping system. The target population was landowners with property within the project area, and researchers gained landowner addresses through the county assessor's offices. Mattia et al. (2018) notes that the focus groups created a space for unrestricted

discussion; something the interview portion of the study could not provide. Within the focus groups, participants touched on topics identified as important in the survey. The focus group consisted of 5 landowners, one Extension Specialist, and one nongovernmental member. Like the Iowa case study, researchers noted that the focus group led to a deeper understanding of barriers and motivations.

### **Recommendation 8: Develop value chain coordination in Dubois County**

To truly transform the local food system in Dubois County, efforts to diversify agricultural outputs on the producer side should be accompanied by efforts to develop robust value chain coordination amongst food system stakeholders.

Food value chains are an emerging business strategy that takes a more cooperative approach to seller/buyer relationships. Unlike traditional value chains which focus on infrastructure, food value chains emphasize collaborative relationships among individuals, businesses, and organizations along the food supply chain. This strategy, also called "value web" or "value network," is grounded in the principle that risk, responsibility, and rewards can be more equitably distributed among food system partners (MSU Center for Regional Food Systems, 2012).

The process of leveraging these relationships, creating networks, and cultivating conditions for skill-sharing is called **value chain coordination** (Wallace Center, 2023). These coordination efforts are grounded in transparency and often elevate the importance of shared environmental and social values in building partnerships. Bolstering the collaborative ties among food system actors, including producers, retailers, restaurants, distributors, and marketing agents, is crucial to enhancing local food system resilience. It can also facilitate individuals' and organizations' ability to acquire and build the hard infrastructure needed to support diversified production.

Food system actors in Dubois County can work to develop their own value chain within and surrounding the county and can tap into established value chain networks and resources. The [Indiana Value Chain Network](#), a project within IU's Sustainable Food Systems Science (SFSS) program and established in 2019, could represent a valuable resource in this area. This grant funded project serves as a hub for existing value chain coordinators to connect with other food businesses around the state.

Value chain coordination can be carried out by people from nonprofit, public, and private sectors. However, SFSS notes that having a dedicated professional to step into the coordinator role can significantly improve efficiency, long-term network development, and promote equity within the field. A value chain professional (VCP) functions as a point person to connect producers, suppliers, distributors, and customers. This can build a solid, resilient foundation for long-term social and economic wellbeing.

As Dubois County moves forward in their efforts to diversify production, understanding who in the region can fill a VCP role and how best to support these individuals and/or organizations should be one of the goals of the future local food council and explored in subsequent focus groups.

Joseph Fischer of Fischer Farms is one example of a Dubois County producer that fills the role of a value chain coordinator and has partnered with other coordinators throughout the state through the Indiana Value Chain Network. Fischer works with local meat and vegetable producers to bring their products to a wider, regional customer base, such as retailers, restaurants and individuals. The insights gained from their current role as a coordinator could provide valuable knowledge and understanding about what already exists in the system, as well as identifying any gaps that may exist.

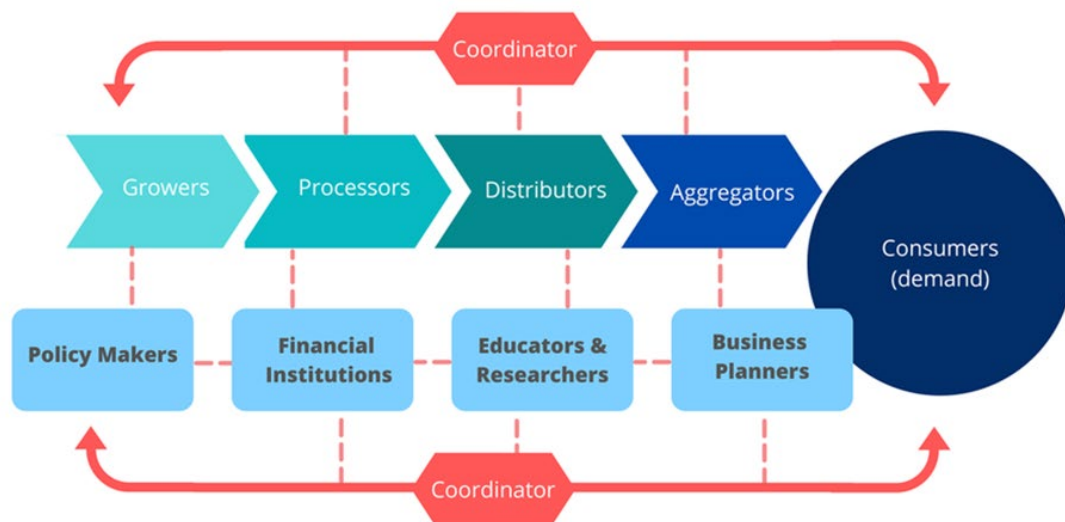


Figure 14: A visual representation the role a value chain coordinator would play in connecting food system actors.  
Source: Penn State Extension

The USDA assembled a report, [Food Value Chains Creating Shared Value to Enhance Marketing Success.pdf \(usda.gov\)](#), which functions as a guide for developing successful value chain coordination and could be used to further frame this recommendation.

***Recommendation 9: Strengthen & Diversify Market Channels to Accommodate Diversified Agricultural Producers.***

Developing a variety of market channels that accommodate local, small, moderate, and large-scale diversified producers is an integral step in supporting and sustaining long-term diversification in Dubois County's agricultural production.

As previously discussed, mid-sized producers in Dubois County are scarce, with most being very small or very large-scale operations. Perhaps as a reflection of this, agricultural processing, distribution, and marketing channels in the county are largely tailored to large-scale, specialized, production of mostly animal proteins. While there is a small farmers market presence in Jasper and a smattering of local farm stands around the county, outlets to sell produce and value-added products are limited and there are few opportunities to aggregate non-meat produce. To further illustrate the situation, as of 2017, only 23 out of the 757 farms in Dubois County were involved in direct-to-consumer sales (Local Food Local Good Report, 2020). Though this number has likely shifted since the Covid-19 pandemic, it still suggests that while the county is a state leader in agricultural production, most of the farms in the area are geared towards serving larger regional or even global markets.

Improving market infrastructure begins with identifying the marketing channels most suitable for existing and new producers seeking to expand their product diversity in Dubois County. Similar to value chain development, understanding how to support new and alternative markets can be a focus area for local food council members. Focus groups, surveys, and community outreach initiatives should also explicitly explore opportunities, challenges, and interests associated with various marketing and distribution models. The work of understanding and developing these channels would also be appropriate for a Value Chain Professional to take on.

There are a variety of market channels that can be established and expanded to better support non-meat, diversified, and mid-sized producers. In the following section, we provide an overview of some of the primary marketing, distribution, and aggregation models that could be



developed and adapted in Dubois County. These models fall into two broad categories:

**Direct-to-consumer models include:**

1. Community supported agriculture (CSA)
2. Farmers' Markets

**Wholesale market structures include:**

1. Cooperatives
2. Food Hubs
3. Commercial retail
4. Non-commercial retail

To supplement these descriptions, we have included further case studies that offer insight into how these models can be adapted and the strengths and challenges associated with each. In some cases, we have identified existing organizations, actors, and markets that could be important links in the growing food supply chain.

**Direct-to-Consumer Models**

Direct-to-consumer market models can be valuable to small and mid-sized producers and local consumers. These models eliminate the need for a third party go-between and help foster connection between consumers and producers. These models, such as CSAs and online sales, have blossomed since the Covid-19 outbreak as they presented alternative markets which were less impacted by regional and global supply chain failures. Currently, Dubois County's local, direct-to-consumer market is limited. However, there are opportunities to help increase the viability of these market systems through financial, educational, and policy supports.

1. Farmers' Markets

Farmers' Markets offer an important outlet for local, small, and mid-sized producers and encourage personalized interactions with one's food system. These spaces offer an opportunity for producers to connect with each other and build relationships with customers. They can also be focal points for local food pantries and non-profits seeking to partner with local producers or redirect produce that may go to waste toward local food security initiatives.

Farmers' markets also have their drawbacks. They are labor and time-intensive for vendors and their sales volumes are often limited due to seasonality and restrictive scheduling times. Further, their reliance on good weather conditions can make sales unpredictable and unreliable.

Currently, Jasper Farmers Market is, ostensibly, the county's sole official, consistent farmers' market. Joe Huddleston, the market manager, has reportedly been a singular force in its maintenance and organization for several years. However, relying on one person or a small group of individuals is not ideal for long-term sustainability. It can limit the market's growth and hinder its ability to directly address potential inequities within the system.

The Farmers Market Coalition hosts an abundance of research, network partners, toolkits, and directories related to farmers markets in their [Resource Library](#).

## 2. Community Supported Agriculture (CSA)

Community-supported agriculture, or CSA, is a direct-to-consumer marketing model in which community members subscribe to a set number of produce boxes by paying a subscription fee before the season starts. The farmer can then use this investment to fund infrastructure projects and cover other capital expenses while sharing the financial risk with the consumer. A CSA program can be initiated by a variety of actors including an individual producer, multiple producers, interested consumers, or existing organizations such as churches, businesses, or schools.

In addition to a marketing and distribution strategy, CSAs fundamentally function as a financing mechanism that can, in some cases, supplement or substitute loans from more traditional sources (Matthews et al., 2012). This may appeal to small, diversified, or beginning farmers, as well as farmers of color or undocumented farmers who face additional structural barriers to accessing federal, state, or private loans.

Another strength of CSA systems is that they can be integrated with other marketing channels. It is common for producers that have a CSA to also sell their produce through other channels, particularly to restaurants, retailers, or food hubs. Notably, operating a CSA can facilitate entry into these other markets and can serve as a launch point by helping farmers develop a strong customer base, grow brand awareness, and understand local market dynamics (Woods, Earnst & Tropp, 2017).

The Sustainable Agriculture Research and Education program created a [Multifarm CSA Handbook](#) which offers a toolkit for developing a multifarm CSA strategy.

### 3. Individual vs Multi-Farm CSAs

While it is common for individual farms to have a CSA program, multi-farm CSAs are becoming an increasingly common distribution method. This more cooperative model can be an effective entry point for small and beginning producers who may not have enough diversity, consistency, or quantity to support their own CSA box. These multi-farm collaborations can also include value-added products, meats, dairy, and other non-produce items, offering entry points for beginning and cottage industries. A multi-farm CSA approach may be well-suited to Dubois County, particularly as the local producer base expands.

To enhance the viability of a multi-farm CSA, stakeholders in the food system should create additional avenues for producers to connect and collaborate. For instance, establishing official drop-off/pick-up sites in convenient central locations can minimize logistical challenges for farmers and customers alike. Moreover, partnering with food retailers, grocery stores, churches, and other high-traffic organizations can serve as valuable marketing spaces. Additionally, developing a user-friendly online platform accessible to Dubois County residents would further promote the CSA. If there is a noticeable interest in CSA development, Purdue Extension can provide focused workshops on CSA establishment and upkeep.

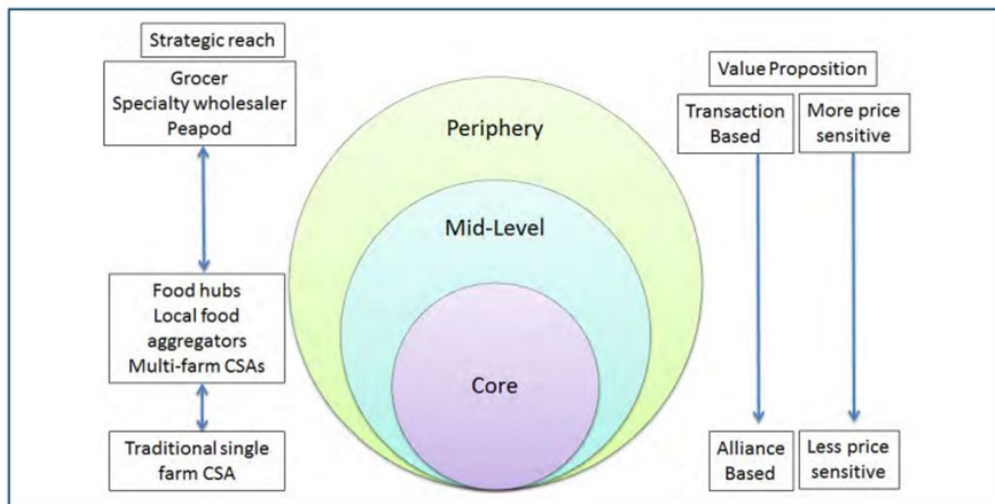


Figure 15: A visual representation the role a value chain coordinator would play in connecting food system actors.  
Source: Penn State Extension

## **Good Hope Farm in North Carolina (Case Study)**

Good Hope Farm is a collaboration between the town and four non-profit organizations in the Town of Cary, North Carolina developed with the goal to preserve the town's agricultural history. They license plots up to two acres to new and expanding farmers, with all necessary equipment and infrastructure available on site. In addition to a farm stand and individual ventures and partnerships, farmers can sell their produce in the Good Home Farm CSA program, which distributes boxes around Cary and nearby Raleigh, Charlotte, and Chapel Hill.

This multi-farm, low-cost leasing approach could potentially be adapted to Dubois County, offering an entry point for beginning farmers by decreasing capital investments and offering direct entry points into a pre-established market network. More information on this farm can be found on their website Good Hope Farm at <http://goodhopefarm.org/>.

## **Wholesale Market Structures**

Wholesale market structures such as cooperatives, food hubs, and commercial and non-commercial outlets offer opportunities for farmers to step back from direct-to-consumer sales, engage in ongoing contractual relationships with buyers, and in some cases, aggregate their produce to be able to reach new markets.

### 1. Cooperatives

The primary purpose of a food and agricultural cooperative is to enhance the economic position of its members by collectively pooling resources such as produce, processing facilities, distribution networks, and marketing expertise. By working together, farmers can achieve economies of scale, reduce costs, and gain better access to markets that would be difficult to reach individually. Cooperatives also help distribute risk among producers, reducing the negative impacts of fluctuations in market prices, input costs, and weather conditions.

Cooperatives also facilitate knowledge exchange and can function as collective learning spaces where farmers can swap ideas, practices, technical expertise, and market intelligence. As farmers are generally most receptive to peer-to-peer forms of communication, supporting these spaces can be a valuable strategy to build a local knowledge base and mutual support system for producers.

Lastly, as Dubois County works to build a network of diversified farmers, cooperatives can promote solidarity among farmers, fostering a sense of community and collective decision-

making. They can also contribute to rural development by supporting local economies and creating employment opportunities.

[The Food Coop Initiative](#) is a valuable resource for exploring strategies and best practices associated with agri-food coops. The initiative functions as a library with access to case studies, toolkits for starting cooperatives, business development tools, existing cooperative networks, and other resources.

## 2. Food Hubs

Food hubs are centrally located businesses that coordinate the aggregation, storage, processing, distribution and marketing of local and regional food products that increase producers' profitability and competitiveness. They can be characterized as a hybrid between direct-to-consumer marketing and large-scale or global hubs such as general grocery stores. Local and regional food hubs can support small and mid-sized farmers and ranchers, particularly those with annual gross sales between \$50,000 and \$250,000, by providing access to larger-scale, mainstream markets. These producers are often too large to rely solely on direct-to-consumer sales but too small to compete with larger commodity markets (Diamond and Barham, 2012).

Generally, food hubs are distinguished from traditional food distribution services in a few key ways. First, they are typically driven by a mission or set of values, integrating their goal of supporting local food markets with other intentions related to ecological sustainability or social justice. As a result, food hubs come in many shapes and sizes according to what values, goals, and contexts motivate the way they're run.

Second, food hubs may take on different legal structures. They can operate as privately-owned businesses, non-profits, or producer and consumer cooperatives. Transformation Holdings offers examples of these various legal structures and their corresponding operational models (Transformation Holdings, 2021).

The ATTRA publication [Food Hubs: A Producer Guide](#) offers a starting place for those who want to dive deeper into how food hubs work. This report also includes several case studies specifically focused on how food hubs function as marketing outlets. Examples of the three most common legal structures food hubs adopt are outlined in [The Viability of Food Hubs: Case Studies to Consider](#). Dubois County stakeholders may also want to consider looking at Rose Hill Farmstop in Bloomington, IN and the Iowa Food Hub in Decorah, IA. These are two

midwestern food hubs that demonstrate how different management styles can support local and regional producers while bringing local, fresh food to the community.

### 3. Commercial & Non-Commercial Wholesale

Non-commercial and commercial outlets such as grocery stores, restaurants, schools, and hospitals also serve as important wholesale markets for mid-sized producers.

Existing food retail and grocery stores can be valuable markets for local producers looking to enter into wholesale supply, secure consistent long-term revenue sources, and occupy a specific niche within the local or regional market. As demand for local food grows, conventional grocery store chains can address this demand by intentionally sourcing produce from local vendors. Identifying local and regional individual and franchise grocery stores and creating collaborative partnerships with them to bring in these local producers can serve the interests of the consumer, producer, and retailer.

Farmers can develop partnerships with retailers directly or through a third-party distributor. One distributor of interest is [What Chefs Want](#), a midwestern restaurant supplier that sources local food products. By functioning as the primary communicator with restaurants, What Chefs Want can bridge the information gap between customers and suppliers, reducing the logistical demand. They require no minimum order sizes, meaning small and mid-sized producers stand to enter this market on their own or by aggregating produce with other local producers.

Dubois County can also implement policies that can structurally support local wholesale producers. For example, the county could mandate that public institutions, including hospitals, correctional facilities, and public schools, procure a designated percentage of their produce from local producers. However, it is important to note that this objective should be pursued in the long term, ideally after establishing a robust local vegetable and specialized crop production system.

## **3.3 Latino Community Recommendations**

### **Recommendation 10: Capitalize on Social Media Use for Information-Sharing**

As identified by the Latinx Needs Assessment, social media is the primary way Latino folks in Dubois County receive information (*Latinx Needs Assessment*, 2022). To combat the potential issues of language barriers and unawareness of resources and assistance related to food,

we recommend capitalizing on social media’s power to share information and to specifically create bilingual content targeted to the Latino community. During the height of the COVID-19 pandemic, a study revealed that social media was the most effective outreach strategy for Latino workers. “In fact, 70% of Hispanic/Latino adults in the United States (U.S.) regularly use at least one social media site, and Facebook is the leader among social media sites with nearly 60% of Hispanic/Latino users accessing it at least daily (Ramos et al., 2020, p. 353). Facebook posts have been used by many of the Latino-led organizations, but we also encourage the community to take advantage of this site even more, and also share information on other platforms like Instagram and WhatsApp. It may be beneficial to hire or recruit youth interns for school-based Latino groups to take charge on this recommendation. Social media use can be quickly improved and increased and offers a short-term option of raising awareness of food resources available especially for the Latino community.

**Recommendation 11: Increase Offerings of Food Pantries Within Latino Places of Worship**

Shared Abundance is a Christian-based food pantry that is able to reach many families within Dubois County. But it is unclear who are the primary users of this resource. To improve accessibility to food assistance for Latino folks, churches that offer Spanish mass or services should be targeted for food assistance and outreach. Churches are well-known for their ability to reach and connect many people and is where many Latino people receive information (*Latinx Needs Assessment*, 2022). Establishing food pantries at a church that is dominated by Latino folks could offer a more comfortable environment for people to access food assistance. Establishing a Latino church pantry could also help develop a site of community-building and foster further collaborations and support for this community. The creation of this type of pantry could be undertaken with the guidance of ALASI and potentially other academic groups and is considered a medium-term recommendation.

**Recommendation 12: Increase Community-School Collaborations (Long-term)**

Dubois County school corporations and individual schools currently offer an array of helpful resources for the Latino community and should continue to be utilized as a base for family outreach. Community to school and school to community collaborations should be

increased to improve awareness and accessibility of food resources available to the Latino community. It is important to take advantage of the Latino student groups and committees to spread word about available food assistance available both within and outside of the schools. This type of collaboration can be described as a community school, which is “a place and a set of partnerships connecting a school, the families of students, and the surrounding community” (Blank et al., 2012, p.1). We recommend this type of collaboration be fostered to reach Latino folks in a more holistic way and to integrate the community’s focus on academics, health and social services, family support, and community development. “By sharing resources, expertise, and accountability, community schools can address challenges related to economic hardship and create essential conditions for learning by concentrating on a single access point—public schools—to effectively target their efforts” (Blank et al., 2012, p.1). By increasing community-school collaborations, food resources can be more easily developed to aid Latino families and provide another site of important outreach and community growth opportunities.



## **4. Conclusion**

The food system is an “incredibly and increasingly entangled network of people, organizations, states, regulations, ecosystems, and values” (Carolan, 2021). Increasing consolidation of our food system as well as issues exposed by the COVID-19 pandemic make it imperative that we seek to improve the resiliency of these systems. Local community-based organizations can help take on this role.

Given the importance of enhancing local food system resiliency, our team has identified gaps in Dubois County’s food system and drafted appropriate recommendations. These recommendations were crafted as solutions to food security issues, market production needs, and inequities faced by Dubois County’s Latino population. Furthermore, the recommendations provided lean on the creation of a local food council as well as a partnership with Indiana University’s O’Neill School of Public and Environmental Affairs for a capstone project. The local food council would bring together stakeholders from different parts of the food system to work toward common goals for the future of their community. The capstone course will involve master's students, who will enhance the work within this report to conduct a food assessment of Dubois County and be able to administer the survey created by our team. Additionally, capstone students will aid Purdue Extension and Dubois County in implementing the more medium and long-term recommendations outlined within this report. Through intentional work, partnerships, and planning, Dubois County can work toward ensuring a high quality of success for producers and maintaining a sufficient supply of accessible food for all people.

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## Appendix 1: English Language Survey Items

1. How many adults (18 years and older) including yourself live in your household?

\_\_\_\_\_

2. How many children (under 18 years old) live in your household?

\_\_\_\_\_

3. If there are any school-aged children in your household, what school do the attend?

- |  |   |
|--|---|
| <input type="checkbox"/> Northeast Dubois Jr/Sr High   | <input type="checkbox"/> Huntingburg Elementary |
| <input type="checkbox"/> Northeast Dubois Intermediate | <input type="checkbox"/> Ireland Elementary     |
| <input type="checkbox"/> Northeast Dubois Elementary   | <input type="checkbox"/> Jasper Middle          |
| <input type="checkbox"/> Pine Ridge Elementary         | <input type="checkbox"/> Jasper High            |
| <input type="checkbox"/> Ferdinand Elementary          | <input type="checkbox"/> Jasper Elementary      |
| <input type="checkbox"/> Forest Park Jr-Sr High        | <input type="checkbox"/> Private School         |
| <input type="checkbox"/> Cedar Crest Intermediate      | <input type="checkbox"/> Home School            |
| <input type="checkbox"/> Holland Elementary            | <input type="checkbox"/> Other                  |
| <input type="checkbox"/> Southridge Middle             | <input type="checkbox"/> Not Applicable         |
| <input type="checkbox"/> Southridge High               |   |

4. Do you own or have access to reliable transportation that could get you to any location in the county? (Circle one)

YES

NO



5. If you had easily accessible transportation (or if you already have transportation), how comfortable would you be with obtaining all or part of your weekly food needs from a food bank or pantry?

Not at All	A Little	Somewhat	Fairly	Very
Comfortable	Comfortable	Comfortable	Comfortable	Comfortable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Apart from transportation, what other barriers do you have to accessing food?

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7. Please identify how often the following statements were true in the last 12 months:

	Often True	Sometimes True	Never true	Don't know
The food that we bought just didn't last, and we didn't have money to get more.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We couldn't afford to eat balanced meals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I cut the size of my meals or skipped meals because there wasn't enough money for food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I ate less than I felt I should have because there wasn't enough money for food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was hungry but didn't eat because there wasn't enough money for food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. How familiar are you with Community Food Bank (1404 S Meridian Rd, Jasper)?

Not at All	A Little	Somewhat	Fairly	Very
Familiar	Familiar	Familiar	Familiar	Familiar
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. How familiar are you with Jasper Apostolic – Food Distribution (231 Hillside Dr, Jasper)?

Not at All	A Little	Somewhat	Fairly	Very
Familiar	Familiar	Familiar	Familiar	Familiar
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. How familiar are you with Shared Abundance (321 E 4<sup>th</sup> St, Huntingburg)?

Not at All	A Little	Somewhat	Fairly	Very
Familiar	Familiar	Familiar	Familiar	Familiar
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. How frequently do you currently access services from the above-mentioned resources?

Every	A Few Times	About Once	A Couple	Don't
Week	A Month	a Month	Times a Year	know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix 2: Spanish Language Survey Items

(Apéndice 2: Elementos de la encuesta en español)

1. ¿Cuántos adultos (mayores de 18 años), incluido usted, viven en su hogar?

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2. ¿Cuántos niños (menores de 18 años) viven en su hogar?

\_\_\_\_\_

3. Si hay niños en edad escolar en su hogar, ¿a qué escuela asisten?

- |  |   |
|--|---|
| <input type="checkbox"/> Northeast Dubois Jr/Sr High   | <input type="checkbox"/> Escuela Primaria Huntingburg |
| <input type="checkbox"/> Northeast Dubois Intermediate | <input type="checkbox"/> Primaria Irlanda             |
| <input type="checkbox"/> Northeast Dubois Elementary   | <input type="checkbox"/> Jasper Medio                 |
| <input type="checkbox"/> Escuela Primaria Pine Ridge   | <input type="checkbox"/> Jasper High                  |
| <input type="checkbox"/> Escuela Primaria Ferdinand    | <input type="checkbox"/> Escuela Primaria Jasper      |
| <input type="checkbox"/> Parque Forestal Jr-Sr High    | <input type="checkbox"/> Escuela privada              |
| <input type="checkbox"/> Cedar Crest Intermedio        | <input type="checkbox"/> Escuela en casa              |
| <input type="checkbox"/> Escuela Primaria Holland      | <input type="checkbox"/> Otros                        |
| <input type="checkbox"/> Southridge Medio              | <input type="checkbox"/> No aplicable                 |
| <input type="checkbox"/> Southridge High               |   |

4. ¿Posee o tiene acceso a un transporte confiable que podría llevarlo a cualquier lugar del condado? (Circule uno)

SÍ

NO

5. Si tuviera fácil acceso a transporte (o si ya tiene transporte), ¿Cómo de cómodo se sentiría con obtener la totalidad o parte de sus alimentos necesarios para la semana de un banco de alimentos o de una despensa de alimentos?

Nada cómodo	Un poco cómodo	Algo cómodo	Bastante cómodo	Muy cómodo
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Además del transporte, ¿Qué otras barreras tiene para acceder a los alimentos?

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7. Identifique con qué frecuencia las siguientes afirmaciones fueron ciertas para usted o su familia en los últimos 12 meses:

	Siempre cierto	A menudo cierto	Nunca cierto	No lo sé
La comida que compramos simplemente no duró, y no teníamos dinero para obtener más.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No podíamos permitirnos comer comidas balanceadas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduje el tamaño de mis comidas o me las salté porque tenía dinero suficiente.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comí menos de lo que debería porque no tenía dinero suficiente.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tenía hambre, pero no comí porque no tenía dinero suficiente.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. ¿Qué tan familiarizado está con Community Food Bank (1404 S Meridian Rd, Jasper)?

Nada familiar	Un poco familiar	Algo familiar	Bastante familiar	Muy familiar
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. ¿Qué tan familiarizado está con Jasper Apostolic – Food Distribution (231 Hillside Dr, Jasper)?

Nada familiar	Un poco familiar	Algo familiar	Bastante familiar	Muy familiar
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. ¿Qué tan familiarizado está con Shared Abundance (321 E 4<sup>th</sup> St, Huntingburg)?

Nada familiar	Un poco familiar	Algo familiar	Bastante familiar	Muy familiar
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. ¿Con qué frecuencia accede actualmente a los servicios mencionados anteriormente?

Cada semana	Un par de veces al mes	Aproximadamente una vez al mes	Un par de veces al año	No lo sé
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>