

# COMMUNITY FOOD ASSESSMENT

LEWISTON, MAINE 2013



Good Food Council of Lewiston-Auburn



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Compiled by the Good Food Council  
of Lewiston-Auburn  
2013



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# What We Believe:

- A healthy community food system is one in which all residents have access to nourishing, affordable and culturally appropriate food.
- Ensuring adequate access to healthy food will support a vibrant community, bring neighbors together, stimulate the local economy and improve the environment.
- There is much work to be done in Lewiston-Auburn to ensure that everyone has access to healthy food.
- Access to healthy food will happen when community members act together to identify and implement solutions, raise awareness and advocate for what is needed.

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## What is Good Food?

Throughout this document you will see the term *good food*. Our concept of what *good food* is composed of is at the heart of this report. To that end, we are italicizing the term throughout this document. Our understanding of *good food* is based upon the following.

### Ideally, we want to eat food that:

- provides us with the nutrients needed to lead healthy, active lives and to enable children to learn and play well
- fits our cultural and religious beliefs
- is grown in ways that treats producers and employees with respect and that provides them with a livable wage
- supports local businesses

- nourishes both our bodies and the Earth—so that our soil and water can provide the nutrients needed to grow food in the future
- comes from animals treated humanely

We are working to create a system where accessing the ideal *good food* is possible for everyone. However, we know that this is not the current reality; for some people the priority is just getting enough to eat.

We encourage you to consider your own circumstances and to create a personal definition of what *good food* means to you, and to be open to revising that definition. We encourage you to keep this definition in mind as you use this report to help make *good food* more accessible to everyone in Lewiston-Auburn or in your own community.



# Authors' Note

With the publication of this *Community Food Assessment* (CFA), we are finally able to honor the contributions of our many partners and friends. This project has been collaborative both in the nature of the research that went into it, and in the work to translate that information into the report.

The project's roots rest in a question we asked ourselves several years ago: If St. Mary's Nutrition Center and its partners continued their on-the-ground work on hunger and nutrition, or multiplied their efforts tenfold, would Lewiston have a thriving, secure and just food system?

Despite the important and devoted work done by numerous organizations throughout the city, our honest answer was "no." We realized that we needed a better understanding of the landscape of local food insecurity and food systems in order to create enduring, system-wide change. This report is designed to begin providing that better understanding.

When the assessment process started in 2008, we were called Good Food for Lewiston. We focused on Lewiston for many reasons, including the fact that funding for this assessment was limited and thus required choosing one municipality. However, after recognizing the need to expand our focus to the larger community in order to understand and improve our entire local food system, we changed our name to Good Food for Lewiston-Auburn (GFLA).

As the bulk of the work shifted from research to planning, our CFA workgroup worked alongside a Development Team to build the initial vision and structure of the Good Food Council of Lewiston-Auburn (GFCLA). The Development Team, a small

working group that met many times, consisted of representatives from a number of local organizations, including St. Mary's Health System's Development Office, the Bates Environmental Studies Program, Healthy Androscoggin, and St. Mary's Nutrition Center.

In June 2012, GFLA convened the Good Food Council of Lewiston-Auburn, which is charged with working on holistic solutions to the many challenges identified through the CFA and the community dialogs that followed. We hope the Council lives up to its great potential for improving the social, environmental, and economic equity of Lewiston-Auburn's food system. (For a list of Development Team and Council members, see Appendix A.)

The Council is made up of representatives from a variety of businesses, agencies, and sectors—including health care, education, business and economic development, downtown residents, municipal government, farmers, finance and public health. By bringing diverse perspectives and talents to bear, the Council's goal is to facilitate solutions that will result in long-term change.

This report is designed to serve a variety of purposes, including informing residents and decision makers of the specific challenges facing the area, focusing attention on long-standing problems, and bringing together diverse players in an effort to solve those problems. This report is for everyone: business owners, city councilors, parents, academics, philanthropists, volunteers, planners; in short, it is for every member of the community.

We hope people of all backgrounds will use this report to better understand the community and begin to think about how they can help. We especially hope that community leaders and decision makers will use this information to drive initiatives aimed at improving the food landscape.

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## Acknowledgements

The Downtown Education Collaborative, Harward Center for Community Partnerships at Bates College, Healthy Androscoggin, and the University of Southern Maine served as key partners for St. Mary's Nutrition Center in planning and conducting this research effort. Countless hours of student research were provided by Bates College students. A special thank you goes to the Harward Center for Community Partnership's Holly Lasagna, and Bates faculty and staff, including Holly Ewing, Emily Kane, Kathy Low and Camille Parrish, for their invaluable help.

David Harris of the University of Southern Maine supplied

insightful research into indicators and distribution of food insecurity in Lewiston. Dd Swan from Partners in Ending Hunger provided guidance for food insecurity research.

Funding for the CFA research was provided by grants awarded to St. Mary's Nutrition Center and significant in-kind support from the partners listed above. The grantors included the USDA Cooperative State Research, Education, and Extension Service Community Food Projects Competitive Grants Program, the Bingham Program and the Maine Health Access Foundation. Bates College generously provided the funding for this publication.

# INTRODUCTION



## Food Security: Why it Matters

This report examines Lewiston’s food security and the issues connected to it. Food security is commonly measured at the household level, and the United States has seen a rise in food insecurity since the economic downturn that began in 2008. Maine has followed a similar pattern. Not surprisingly, poverty and food insecurity are closely related, and Lewiston’s high poverty rate contributes to a high food insecurity rate.

Food insecurity also goes hand in hand with a host of health problems. Infants and toddlers living in food insecure households are twice as likely to have fair or poor health as opposed to good or excellent health, and are 33% more likely to have been hospitalized since birth.<sup>1</sup> Adults living in severely food insecure households are 38% more likely to have diabetes than those in food secure households, possibly because of the substitution of cheap, high-calorie foods

for more expensive foods such as fresh produce.<sup>2</sup> Food security is also related to obesity, especially for adult women. This may stem from women, acting as primary caregivers, changing (worsening) their diets to protect their children or partners from food insecurity—a behavior reported in CFA focus groups. These health issues translate to economic impacts such as more time away from work and increased medical expenses, which may in turn further degrade food security in a tragic cycle.

Finally, as this report underscores, a key to long-term food insecurity change is to understand how hunger relates to the intricate, overall food system. Building a healthy food system is more than a matter of public health. It holds the potential to improve social equity, the community’s economy, and civic engagement. In short, it can improve life in Lewiston-Auburn.

## What is Food Security?

According to the World Food Summit, held in Rome in 1996: “Food security, at the individual, household, national, regional and global levels (is achieved) when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.”<sup>3</sup>

## Acronym Guide

The following acronyms appear in this report:

- CFA:** Community food assessment
- CSA:** Community supported agriculture
- EBT:** Electronic benefits transfer  
(Supplemental Nutrition Assistance Program benefits are issued through a debit card that can be used to purchase food.)
- EFP:** Emergency food provider
- GFCLA:** Good Food Council of Lewiston-Auburn
- GFLA:** Good Food for Lewiston-Auburn
- GIS:** Geographic information system
- SNAP:** Supplemental Nutrition Assistance Program
- WIC:** Special Supplemental Nutrition Program for Women, Infants and Children

<sup>1</sup> Cook, et al, 2004

<sup>2</sup> Seligman, et al, 2007

<sup>3</sup> Food and Agriculture Organization of the United Nations, 1996

# A Portrait of Lewiston

## The City

The Androscoggin River runs between the twin cities of Lewiston and Auburn—Maine’s second largest urban area. Picturesque waterfalls act as a gateway to Lewiston, and historic brick mills line the river upstream and downstream from the falls. Single-family houses, apartments, businesses, and community buildings are concentrated along the river and stretch for several miles, until reaching a mix of open farmland and scattered homes. The mid-1800s saw the construction of the canal and, soon after, textile and shoe manufacturing businesses that provided Lewiston with an economic base, employing residents of diverse backgrounds including Irish, Polish, and French Canadian. However, by the early 1980s the city was suffering a slow decline in the manufacturing industries that had been its lifeblood and in its population base. For many years the only increase Lewiston experienced was in vacancy rates.

In the late 1990s a renewed interest and investment in the city began and continues to this day. While challenges still include old housing stock, high unemployment, and high rates of poverty, civic and social capital have increased at a steady rate over the last 15 years. Lewiston is more culturally diverse than ever, with a large increase in the immigrant and refugee population since 2000. There are now an estimated 6,000 Somali and Bantu immigrants living in Lewiston-Auburn.

Unfortunately, despite the increase in civic and social capital, poverty remains a serious problem. At the time of the 2010 United States Census there were 36,592 people living in Lewiston. Of this number, an estimated 7,653 (22.5%) are below the federal poverty level; 1,805 (12.1%) are single-parent households with children under 18, and 2,538 (17%) do not have a car. Up to half of households in some ar-



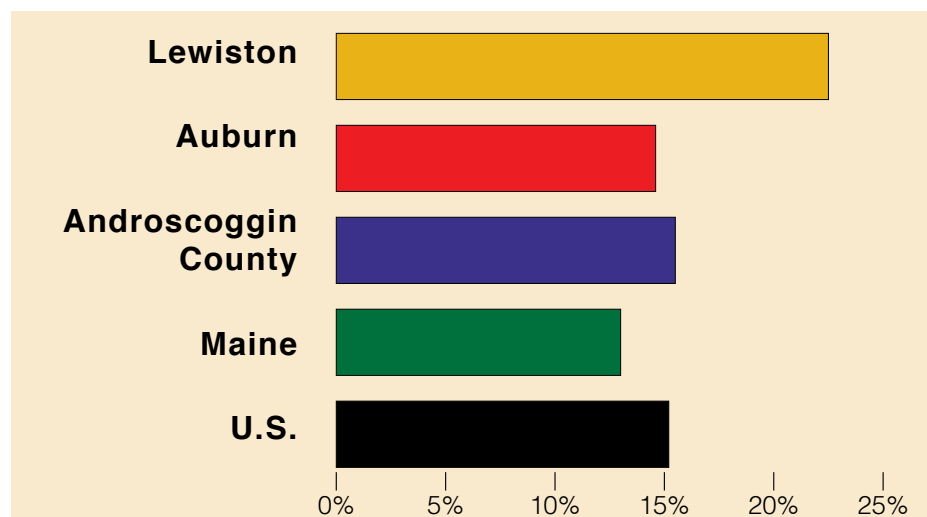
reas, including downtown neighborhoods, do not have access to a vehicle.<sup>4</sup>

Downtown Lewiston is home to three of the poorest census tracts in the state. The poverty level in these “extreme poverty tracts” reaches 67%.<sup>5</sup>

Since early 2000, downtown Lewiston, once deemed blighted,<sup>6</sup> has seen a leap in community and civic involvement

through local grassroots initiatives that include the Visible Community, Lots to Gardens, and the Neighborhood Housing League. Thanks in part to this community involvement and grassroots work, Lewiston has the unique opportunity to become a hub for community services while also maintaining a small-town feel where citizens know and care about each other.

## % of Population Below Poverty Line



Percentage of people whose income in the past 12 months was below the poverty level.

Source: U.S. Census Bureau, 2009–2011 American Community Survey 3-Year Estimates, Selected Economic Characteristics.

<sup>4</sup> U.S. Census Bureau, 2012

<sup>5</sup> Richardson, 2011

<sup>6</sup> Mayor’s Downtown Renaissance Task Force, 1999





## Lewiston's Community & Food

Lewiston is home to many valuable food and nutrition projects and food-related businesses. These resources, along with the commitment of numerous community members, have played a powerful role in fighting local hunger. But despite these resources there are clear indicators of sizable obstacles to obtaining nutritious food for many residents. In 2012, for example, 98.9% of children in the city's downtown elementary school were eligible for free/reduced meals.<sup>7</sup> Additionally, in 2012 the percentage of the Lewiston population utilizing the Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) was 35.96%, nearly twice the state average of 19.17%.<sup>8</sup>

One of the city's potential strengths in fighting hunger is that it is located in the middle of rich agricultural land. In Androscoggin County more than 350 farms, the majority of them small and diversified, supply the region with many food items, including vegetables, fruits, herbs, maple syrup, honey, meat and other animal products. However, development and an aging population of farmers are putting pressure on this resource. Efforts by the Androscoggin Land Trust and other organizations are being made to preserve and grow viable farming around Lewiston-Auburn.

<sup>7</sup> Maine Department of Education, 2012

<sup>8</sup> Data generated from the Automated Client Eligibility System of the Maine Office of Family Independence, upon request, on 2/27/2013

## CFA & Good Food for Lewiston

The Community Food Assessment was started in 2008 to better understand the resources and challenges related to the current food system and to increase access to *good food* for everyone. St. Mary's Nutrition Center initiated the CFA. Soon after, the Harward Center for Community Partnerships and the Downtown Education Collaborative joined the effort and linked the community with academic partners from local colleges. The assessment grew to include residents as researchers and participants in focus groups, along with numerous other stakeholders such as local market owners, school administrators, farmers, and local college students.

Realizing that the work would not stop after the research was complete, several organizations came together with the purpose of sustaining the work of increasing access to *good food* by initiating collaboration between municipal government, local agencies, educational institutions, hospitals, and local residents. This collaboration evolved into the Good Food Council of Lewiston-Auburn to develop solutions to improve the health of the Lewiston-Auburn community, and to support the implementation of these solutions. (For more detail about the evolution of the Good Food Council of Lewiston-Auburn see Appendix A.)

This report represents the voices of many Lewiston-Auburn residents and other members of the community who have taken part in CFA activities.

## The CFA Team

### Lead Partners

Downtown Education Collaborative  
Harward Center for Community  
Partnerships at Bates College  
Healthy Androscoggin  
St. Mary's Nutrition Center

### Primary Investigators

Bates College Academic Departments  
Community Action Researchers,  
composed of community members  
Muskie School of Public Service  
University of Southern Maine

## Good Food Council of Lewiston-Auburn

### 2013–2014 members:

Ginny Andrews, Western Maine  
Community Action  
Karen Bolduc, Food Joy/South Auburn  
Organic Farm  
Christine Bosse, Bangor Savings Bank  
Deborah Morrill Burd, St. Mary's  
Health System  
Erin Cinelli, Farmers' Gate Market \*  
Phil Doucette, Austin Associates  
Belinda Gerry, Auburn City Council  
Erin Guay, Healthy Androscoggin \*  
Emily Horton, Healthy Androscoggin  
Erica Madore, Training for Health, LLC  
David Moyer, SeniorsPlus  
Sitey Muktar, Lewiston High  
School Student  
Camille Parrish, Bates College  
Nancy Perry, Good Shepherd  
Food Bank  
Leelaine Picker, Retired  
Mia Poliquin Pross, Attorney  
Bob Thompson, Androscoggin Valley  
Council of Governments  
Daniel Wallace, CEI  
Kirsten Walter, St. Mary's  
Nutrition Center

\* – 2013

## Sustainable Food Systems

According to the American Public Health Association (2007), a sustainable food system: “provides healthy food to meet current food needs while maintaining healthy ecosystems that can also provide food for generations to come with minimal negative impact to the environment. A sustainable food system also encourages local production and distribution infrastructures and makes nutritious food available, accessible, and affordable to all. Further, it is humane and just, protecting farmers and other workers, consumers, and communities.”

## The Effect of Community Food Systems on Local Economies

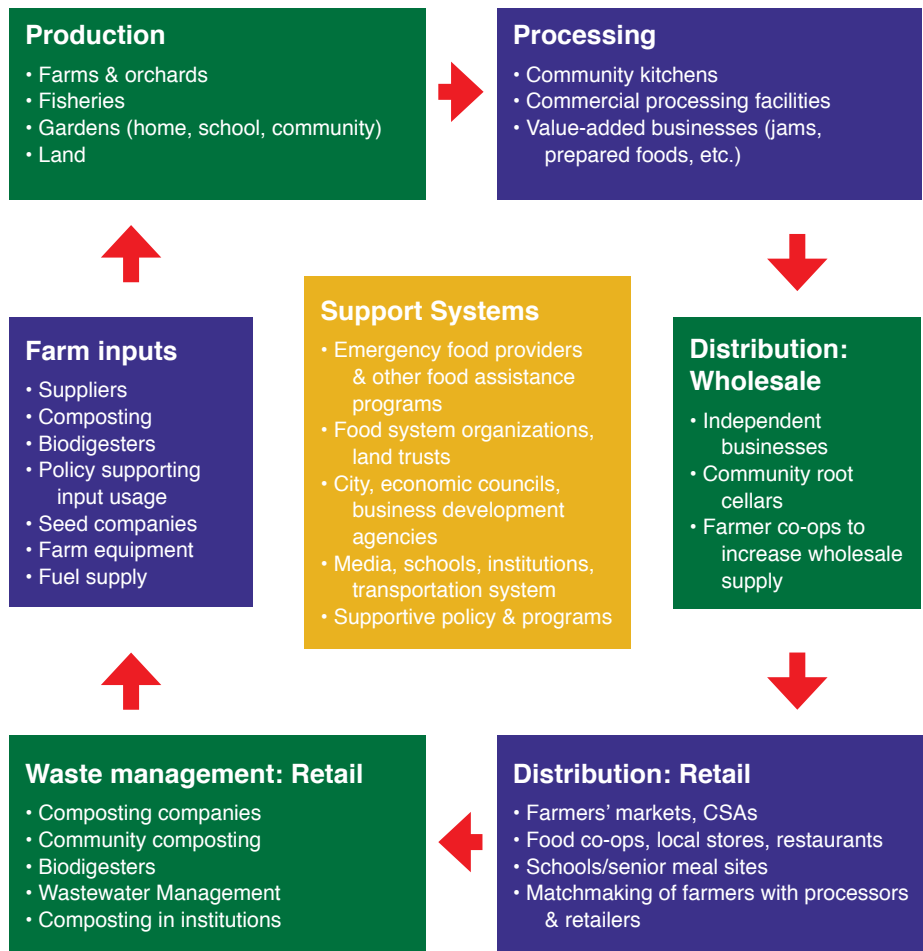
“Direct marketing channels, such as farmers’ markets, stimulate rural economies because a greater percentage of the sales revenue is retained locally . . . further expansion of local and regional food systems has the potential to create tens of thousands of additional jobs.”  
 –Union of Concerned Scientists (2011)

## For More About Food Systems

The above-right diagram is a simple representation of the steps in the food system supply chain, including the potential forms that some of those steps may take. What is missing from this diagram is how components of the supply chain are related to broader factors and values. There are many ways to illustrate this more complicated view. One helpful diagram was developed by the Community and Regional Food Systems Project, based at the University of Wisconsin-Madison. To see the model visit [www.goodfood4la.org/resources/las-food-system/](http://www.goodfood4la.org/resources/las-food-system/)

<sup>9</sup> Treuhaft and Karpyn, 2010

<sup>10</sup> University of Vermont, 2012



# Healthy Food Systems

A food system includes the many components of how a food item is produced and how that food item progresses from production site to consumption site and beyond. That system may include such aspects as production; processing; transportation; wholesale and retail distribution; waste management; and support systems such as education, government and emergency food providers.

Above all, a food system is a complex web that impacts the ecological, social, health, and economic conditions of a community/region. A food system dictates what is accessible, affordable, and available—and therefore dictates what people eat. Considering evidence that people eat greater amounts of healthy, fresh food if it is simply made available,<sup>9</sup> it is clear that a healthy food system is vi-

tal for healthy eating.

A healthy food system:

- **improves** the health of community members by making nutritious food accessible, affordable, and available to everyone in the community;
- **teaches** the value of eating healthily and how to do so;
- **creates** a unified community around the food system and healthy eating; and
- **enables** any child the ability to reach into a refrigerator or pantry and choose good food.

It is worth noting that food systems are complex entities that involve much more than diet and health. A food system also includes economic, food tradition, and environmental factors. (For a basic overview of food systems, the University of Vermont offers a useful primer: “What’s On Your Plate.”<sup>10</sup>)

# PURPOSE



## Why do a Community Food Assessment in Lewiston?

The reason for doing a Community Food Assessment in Lewiston is simple: to formulate effective ways to fight hunger and to promote *good food* we first need to understand the food landscape, which this CFA was designed to do. This assessment provides an invaluable tool for recognizing and understanding needs and opportunities

For more than 10 years, projects and programs have helped make healthy food more accessible in the Lewiston area, improving the quality of life for many residents. However, the needs that remain are so overwhelming that wider changes must be made to the overall food system that influences what food is available. The data and stories collected in the CFA will inform how these changes are carried out, allowing for a more widespread impact on the health of the community. Additionally, the CFA was designed to involve a wide array of community members, so that their engagement could continue after the assessment and carry into planning and implementing solutions.

Although we are endowed with a strong community, our food system clearly needs repairing. Access to *good*

*food* is a significant challenge for many Lewiston residents, which has a measurable, daily impact on health. As discussed on Page 3, children and adults suffer from such diet-related problems as obesity and diabetes. Unfortunately for many residents, financial challenges make it difficult for them to afford quality food. When the CFA began in 2008, the prevalence of food insecurity was evident in the fact that the percentage of Lewiston food stamp recipients (26.73%) was twice the state average (13.83%); as noted above, that trend endures.<sup>11</sup> The CFA workgroup recognized that the food system's impairments would continue to negatively impact the lives of Lewiston residents each day until the food system is better understood and improved.

Lewiston-Auburn's 6,000 Somali immigrants (about 10% of the twin cities' population) face additional challenges. As these refugees adapt to their new environment, many struggle to be well nourished. In fact, preliminary data show that 72% of Lewiston's recent Somali and Somali-Bantu immigrants have difficulty accessing culturally appropriate, nutritious food.<sup>12</sup>

In the face of these challenges, Lewiston-Auburn and the surrounding towns are tackling the issue of access to good food. This CFA is meant to provide the actionable data, both quantitative and qualitative, to maximize the impact of ongoing and new efforts.

## The CFA was Designed to:

- **Gather and analyze information** about resources in the community and critical needs, and to identify the challenges for making healthy food available, affordable and accessible to everyone in Lewiston;
- **Engage a wide array of community members, organizations and agencies** in the research, with many of these groups helping to determine and implement solutions; and
- **Act as a springboard for making change.** Now that there is more information about the community, a better understanding of needs, and supportive and engaged community members, we can better engage those already working on food issues. Together we can create a system-wide plan based on our findings for thoughtful and far-reaching change.

<sup>11</sup> Data generated from the Automated Client Eligibility System of the Maine Office of Family Independence, upon request, on 2/27/2013

<sup>12</sup> Dharod, Croom and Sady, 2013

# METHODS:

## How was the Information Gathered?

### Overview

The type of information we gathered was determined by a group of questions we set out to answer. The basic questions were:

- What is the portrait of our community in relation to food?
- What are the opportunities and barriers for/to accessing *good food* in Lewiston?
- How do all factors connect to influence access to *good food* in Lewiston?

We balanced qualitative and quantitative data so that stories from community members either supported or disputed the hard facts, giving us reason to delve deeper into certain issues. To carry out our purpose of engaging an array of community members, we involved more than 450 participants, including residents, leaders in the community and college students. To provide a comprehensive look at food in Lewiston, we used a wide array of tools including literature review, mapping, phone surveys, retailer and consumer surveys, focus groups, interviews and experiential research.

### The Process

Early in the process, we decided that the Community Food Assessment was not going to be a comprehensive, academic research project. Instead, it was flexibly built to engage a wide array of community members and to develop our understanding of food access by gathering stories from those who live and/or work in Lewiston. Mixing qualitative data with quantitative data provided a fuller picture of the economic and demographic influences on food access in Lewiston.

Over the course of three years of research, the CFA covered a range of topics, enabling college students, faculty, and community members to take part in and follow their interests and skills through community-based research and other engagement efforts. The assessment process proved to be a valuable teaching and learning tool, with a number of academic papers coming out of the project. (See Related Research on Page 42 for examples.)

Due to limited resources and the relative simplicity of collecting secondary data from only one city, data were gathered primarily from Lewiston. Going forward, Auburn community members and organizations are being included in the planning and implementation phases in order to connect and pool resources to create a more effective and robust food system.

### How Data were Analyzed

Several “Analysis Fests” were held with residents, Community Action Researchers, Good Food for Lewiston’s working group, and students and faculty at Bates College and the University of Southern Maine. (See Page 10 to learn more about

who was involved.) These events helped identify themes in the research as well as confirm that the data correlated with what residents actually experienced in Lewiston.

In May of 2010, after the first phase of research was complete, a charrette (an intensive planning session) was held at the Lewiston Public Library. More than 120 community members attended. The event was successful in bringing a diversity of voices to the table to learn about the CFA process, to give feedback on the information gathered, and to spark people’s engagement in the upcoming planning process. Information gathered at the charrette is included in this report.

## 3 Guiding Questions and Methodology

The following section outlines the guiding questions and methods employed to address these questions:

### 1 What is the portrait of our community in relation to food?

**Sub questions:** Who is at high risk for having limited access to healthy food and where do they live? To what extent do people have difficulty accessing *good food*?

#### Methods/topics

##### Literature review

- Identified which demographic groups are traditionally most at risk for limited access to *good food*: single-parent households, households without a car, and people in households with income below 150% of the federal poverty level (Nord et al., 2009).

##### Mapping

- Used publicly available 2000 Census data (U.S. Census Bureau, 2000) to determine where members of these demographic groups lived.
- Mapped this information using a geographic information system (GIS) and digital maps from the Maine Office of GIS (Maine Office of GIS, 2010).

##### Phone surveys

- Conducted a USDA Household Food Security Measure with more than 300 households in Lewiston to collect data on food access and the extent of hunger in Lewiston.

### 2 What are opportunities for and barriers to accessing *good food* in Lewiston?

**Sub questions:** What do we already have to work with to strengthen our food system? Where do people buy food?

What are the non-emergency, emergency, and food assistance programs? Where are they located, how well do they work for the community, and what are the gaps? Where can *good food* be found? Is a variety of *good food* available? Is *good food* affordable?

## Methods/topics

### Food retailer study

- Surveyed and mapped the 64 stores in Lewiston that sell food to find out what is offered, what the prices of healthy food are, and whether or not the stores accept federal nutrition benefits such as EBT or WIC.
- Surveyed and mapped fast food restaurants.

### Emergency Food Provider (EFP) study

- Surveyed and mapped providers to collect information on services offered, who the EFPs are serving, and where they are located.
- Interviewed EFP directors and observed operations and external conditions bearing on accessibility at EFP locations to gather more qualitative data.

### Inventory of Government and Community Programs

- Gathered data on government-sponsored food programs as well as community-based food assistance programs.

### Focus groups

- Conducted 10 focus groups with (primarily) downtown residents to gain a deeper understanding of how residents access food. Focus groups were led by Community Action Researchers. The discussions explored why some residents are unable to access good food.

#### Focus groups included:

- Elderly/less mobile
- Homeless and transitional youth
- Homeless and transitional adults
- Residents dealing with mental health and addiction issues
- Somali women
- Somali men
- Downtown parents
- Young professionals
- A mix of downtown residents
- A mix of Lewiston residents

### Consumer survey

- Collected information about where downtown residents are shopping and why, what healthy food they want to buy more of, and why they are not buying more of the healthy food they want.

### Transportation mapping

- Mapped the public bus system.
- Mapped prioritized sidewalk plowing routes.

### Agricultural research

- With Healthy Androscoggin, mapped small farms in Androscoggin County and what they produce.
- Mapped agriculturally suitable soils in Androscoggin County.
- Collected data on current and potential food production in Androscoggin County, and compared these data to the caloric need in Androscoggin County.

### Interviews

- Interviewed organizations and individuals in other food system sectors, such as the public bus system, city officials, the Androscoggin Land Trust, and the University of Maine Cooperative Extension.

## 3 How do all factors connect to influence access to *good food* in Lewiston?

**Sub questions:** How many people whose diet may lack healthy food live in locations that have limited access to public transportation or pedestrian access to food stores, emergency food distribution sites, and healthy food sources? What other factors influence access to *good food*?

## Methods/topics

### Focus groups

- Explored issues of access with groups listed above.

### Interviews

- Interviewed seven residents who had particular knowledge and/or experience with food access and 16 key influencers—people in positions of power or leadership (e.g. city council president, mayor, school committee chair, and the directors of the United Way and local chamber of commerce).
- Conducted interviews and collected demographic data on how the current food system influences families with children and elderly residents in Lewiston.

### Mapping

- Mapped key demographic data and paired it with the location of fast food restaurants, food stores, farmers' markets, emergency food providers, bus routes, etc.
- Mapped emergency food providers and food stores along with the public bus routes and prioritized sidewalk plowing routes.

### Experiential research

- Accompanied three different residents (a mother with her young child, an elderly resident, and a resident in a wheelchair) while traveling to grocery stores on the public bus. Created photo essays of their travels to highlight the benefits and challenges of the bus system.
- Had interview subjects photo-document daily experiences with food, capturing the food they buy, prepare, and eat.

## Who was Involved in the CFA?

- 2 colleges were involved in conducting research
- 3 Lewiston residents were hired as Community Action Researchers
- 6 organizations in Lewiston coordinated the study and analyzed the data
- 7 faculty from local colleges guided student research
- 11 emergency food providers were interviewed
- 27 key informants from organizations or agencies in Lewiston were interviewed
- 102 residents participated in focus groups
- 190 stakeholders participated in community charrettes
- 200-plus graduate and undergraduate students from local colleges conducted research in classes ranging from environmental studies to sociology to public health

## What is a Community Action Researcher?

Community Action Researchers were Lewiston residents who had broad networks, were respected in their community and had personal experience with the challenges of accessing healthy food. Their experience and relationships brought a much needed understanding of the assets and challenges that Lewiston residents face.

Community Action Researchers played several important roles, including informing research methodology/strategy, conducting focus groups and other research, and playing a critical role in outreach.

# FINDINGS:

## What Exists in Lewiston's Food System and What are the Challenges?



## OVERVIEW

Lewiston has a web of strong social networks, many residents with knowledge about nutrition and food preparation, neighborhood stores, Halal stores (see Page 35), and farmers' markets within close walking distance to the most populated areas; all support increased access to food. There is also the CityLink public bus system, numerous organizations that provide emergency food, community gardens, and cooking classes, along with small and large farms in Lewiston and surrounding towns.

However, there are also many challenges to accessing *good food*. In the downtown, healthy food is on average 40% more expensive than the same food in stores on Lewiston's outskirts. With the limited bus schedule some people have to shop at the more expensive stores that have far fewer options for *good food*. For this and other reasons, many people frequently run out of grocery funds by the end of the month.

There are many factors that affect what we eat:

- how far we have to travel to buy food, and at what prices;
- household income;
- knowledge of food preparation;
- how much time we have;

- our home environments;
- our health;
- our ability to get to food locations;
- our social networks;
- our knowledge and skills concerning shopping and preparing food;<sup>13</sup> and
- how much power we feel we have to change the food system.

The first step to enabling people to eat healthy food is to make it available where they live. However, this alone does not ensure a healthy diet. Education and incentives for making healthy food available can also help to improve eating habits in communities with high rates of diet-related illness and obesity.

With this understanding, we studied what food choices residents in Lewiston have and what other resources are available to access food. Research revealed that while numerous fast food restaurants and convenience stores offer high-calorie, low-cost, low-nutrition food, there is also a wealth of healthy food assets such as farms, markets, grocery stores, and cooking and nutrition education programs. Additionally, food assistance programs and emergency food providers enable better access to food, but not necessarily healthy food.

<sup>13</sup> Sharkey and Horel, 2009

## Where Lewiston Residents Buy Food

### Food Stores

We surveyed the majority of stores that sell food in Lewiston. Of these 64 stores, only three supermarkets and four neighborhood markets had at least six out of seven types of food identified as healthy. (See “Store Types” and “Healthy Food Basket” at right for definitions.)

Lewiston has several long-standing neighborhood stores and other newer stores within walking distance of where most residents live. Many of these stores offer healthy food options. However, of the seven food stores in the city with the most options for healthy food, the four neighborhood stores in the downtown have the most expensive food—healthy food items on average were 40% more expensive. The three supermarkets, located outside of downtown, were less ex-

pensive, but more difficult to get to.

Of the 64 stores surveyed, 59 sell prepackaged foods. All of the stores sell soda, 40 sell alcohol and 18 sell tobacco products. There is a high concentration of stores selling soda and beer in limited-income neighborhoods. However, of these 64 stores, 11 accept Special Supplemental Nutrition Program for Women (WIC) vouchers and 34 accept Supplemental Nutrition Assistance Program (SNAP) benefits, making food more accessible to families with limited incomes.

A Bates student research project in the fall of 2011 examined the role of neighborhood stores as food access points for Lewiston community members.<sup>14</sup> At the time of survey administration, only 30.2% of survey respondents acknowledged shopping at neighborhood stores

### Store Types

- **Supermarket:** a large retail store that sells food and/or household items.
- **Convenience store:** a small retail store (usually with extended hours) that sells a limited selection of groceries, snacks, and household items.
- **Neighborhood store:** a retail store meant to fit in with the community and offer a selection of items that community members need and want; some are owned by local community members.

### Healthy Food Basket Categories Identified for the Food Store Survey

For the purposes of this CFA, researchers adapted a commonly used USDA measurement tool,<sup>15</sup> the healthy food basket, in which the following categories were included:

- Fresh fruit
- Fresh vegetables
- Whole grains
- Frozen vegetables
- Lean meats
- Low-fat dairy
- Canned/dry vegetables

### Least Expensive Food Stores in Relationship to Single-Parent Households

Note: The single-parent household with children designation is often used as a proxy for low-income when working with census data. According to Beverly (2009), “The number and distribution of single-parent households in a community is important because people who live in single-parent households are nearly three times as likely to experience material hardship as are those in two-parent households.”

**Source:** Harris et al. Characterization of the built food environment for single-parent households in an older industrial city—Lewiston, Maine



<sup>14</sup> Dugan, 2011

<sup>15</sup> Carlson et al, 2007

## On Buying Food

“If you want to get organic food . . . forget it. All the organic stuff, the healthy stuff is so high priced, what you buy [is] chemical stuff.”

– Homeless/Transitional Adults Focus Group Participant

“You go to Walmart and you buy the biggest thing of ramen you could possibly buy and you hope to God it lasts.”

– Homeless/Transitional Youth Focus Group Participant

“I have to go to the bigger stores. They don’t even sell whole pasta, zucchini, or squash in the little stores.”

– Parent Focus Group Participant



Kristen Wheatley photo

for groceries. Many indicated better prices (68.3%), better quality (41.3%), and improved selection (41.3%) as necessary changes in order to consider purchasing food items at neighborhood stores. (See maps below for the distribution of stores by number of healthy food categories and by cost.) In the event that a food type was available in neighborhood stores, residents indicated they would “very likely” purchase fruits (66.7%), vegetables (66.7%), eggs (57.1%), and whole grains (57.1%).

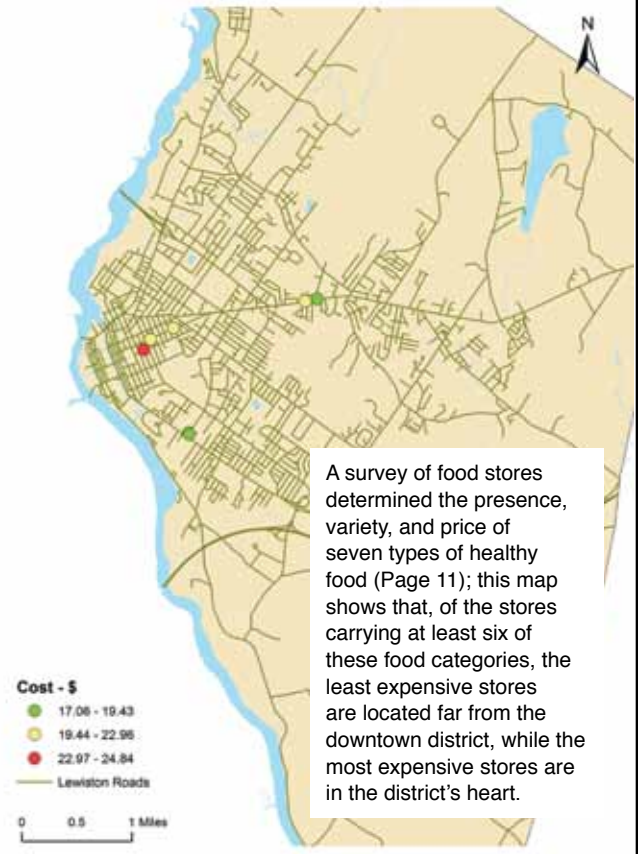
Challenges such as cost and unproven consumer demand highlight a few difficulties for increasing the amount of healthy food options in neighborhood stores. Suggested solutions such as storeowner buying cooperatives, partnerships between neighborhood stores and local farmers or urban gardening projects, and marketing and advertising of produce could help improve price, quality, and selection, while also building consumer demand and improving access to healthy foods.

### Number of Healthy Categories Found in Stores



Note: See Page 11 for a breakdown of food categories.

### Stores with the Most Categories Compared by Cost



A survey of food stores determined the presence, variety, and price of seven types of healthy food (Page 11); this map shows that, of the stores carrying at least six of these food categories, the least expensive stores are located far from the downtown district, while the most expensive stores are in the district’s heart.

Source: Harris, et al. Mapping Food Stores & People At Risk for Food Insecurity in Lewiston, Maine. Journal of Extension (online). 2010. Available at: <http://www.joe.org/joe/2010december/rb3.php>





### Fast Food Restaurants

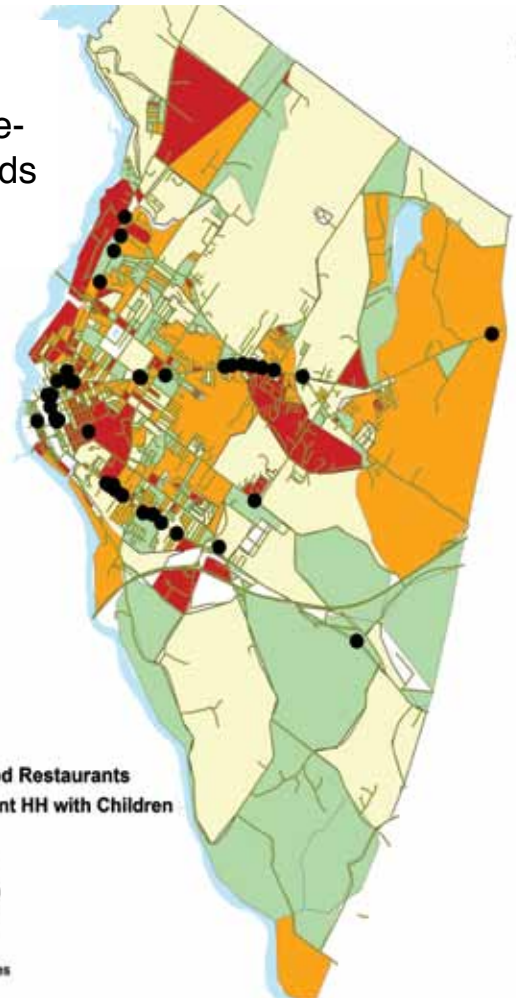
Research focused on fast food restaurants because they are an important part of the local food environment. Fast food restaurants typically offer inexpensive and fast, yet unhealthy food. There are 43 fast food restaurants in Lewiston.

89% of single-parent households live within 0.5 miles of at least three fast food restaurants. These restaurants are the quickest and closest sources of prepared food for Lewiston residents, often making it a difficult choice to buy more expensive, yet healthier food. In the map at right, the areas in red and gold indicate where most single-parent families live. The map shows that fast food restaurants are concentrated in these areas.

### Fast Food Restaurants in Relation to Single-Parent Households

Note: See explanation of single-parent designation on map on Page 11.

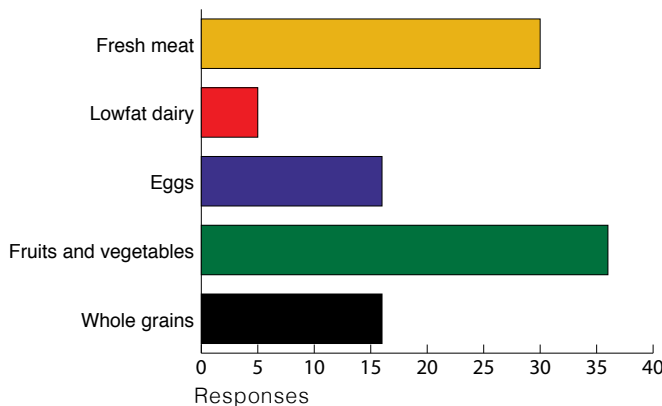
Source: Neil Reid; Jay D. Gatrell; Paula S. Ross. 2012. 13 Characterization of the Built Food Environment for Single Parent Households in an Older Industrial City, Lewiston, Maine. In Local Food Systems in Old Industrial Regions, 252-274. Farnham, Surrey: Ashgate.



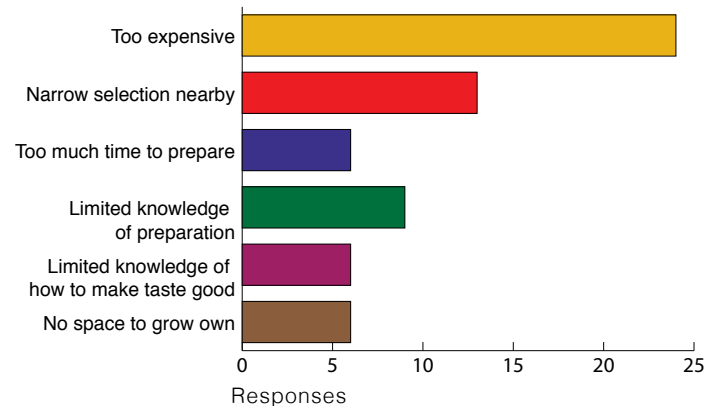
## Consumer Preference & Challenges

In 2011, Bates student Rebecca Dugan conducted a survey of 36 downtown food consumers in Lewiston to learn about shopping patterns and obstacles to obtaining healthy food. The survey revealed the following:

Survey question: **What type of healthy food do you want more of?**



Survey question: **What discourages you from buying healthy food?**



Source: Dugan, Rebecca. Neighborhood Stores as Food Access Points: Lewiston Consumer Preferences and Challenges. Bachelor's Thesis, Bates College, Lewiston: Unpublished, 2011.

## What is Community Supported Agriculture?

According to the Northeast Organic Farming Foundation of Vermont: “Community Supported Agriculture (CSA) is the name of a direct marketing relationship between farmers and subscription consumers. As the name implies, this form of direct sale invites consumers to directly support a farm or group of farms by enrolling in a seasonal share in the farms’ operations. . . . CSA shares are usually purchased for a set price early in the season in exchange for weekly boxes of mixed produce. The partnership allows consumers to share in the seasonal rhythms of diversified farms, enjoying the successful bounties and helping to stabilize crop failures.”

## Farmers’ Markets in Lewiston

Winter Farmer’s Market: Third Thursday of the Month, 5–7:30 p.m.  
Open November–April.  
St. Mary’s Nutrition Center,  
208 Bates Street.

Summer Market at Bates Mill 5: Every Sunday, 10 a.m.–1 p.m.  
June–October.  
Corner of Lincoln and Main streets.

Kennedy Park “Stop & Shop” Market: Every Tuesday, 2–4 p.m.  
July–October.  
Kennedy Park, corner of Pine and Bates streets.

## Farmers’ Markets

Healthy and fresh fruit, vegetables, meats, and other foods can be purchased directly from local farmers at the Lewiston Farmers’ Markets. There are currently two markets during the growing season. In 2010, Lewiston opened a Winter Farmers’ Market, increasing access to fresh foods throughout the winter. With market management support from St. Mary’s Nutrition Center, all markets are able to accept WIC and EBT/SNAP.

## Community Supported Agriculture

Community Supported Agriculture (CSA) offers fresh produce directly from farms. Participants pay an upfront fee and

then receive weekly distributions through the growing season. In most cases, members must drive to farms outside city limits to pick up their weekly box of food, which is an obstacle for residents without access to vehicles. Also, families with limited income are rarely able to pay the upfront cost necessary to belong to a CSA.

CSA Farms in the Lewiston-Auburn area include, as of 2013:

Fresh Start Farms  
Greenwood Orchards  
Jillson’s Farm Sugarhouse  
Little Ridge Farm  
Nezinscot Farm  
South Auburn Organic Farm  
Summit Springs Farm  
Valley View Farm  
Whispering Winds Farm  
Willow Pond Farm



Kristen Wheatley photo



## Distribution and Extent of Food Insecurity

In order to understand the range and extent of food insecurity in Lewiston, a phone survey was coordinated by David Harris, professor of nursing at the University of Southern Maine, in conjunction with St. Mary's Nutrition Center. The results of the survey have been collected in a formal academic paper written by Professor Harris.<sup>16</sup> This summary borrows from that paper.

Using a random selection of Lewiston phone numbers, calls were placed to 2,700 households, and 326 responses to a standard food security questionnaire were obtained. The survey determines the number of children and adults in the household, and, through a series of questions concerning food security, determines a raw food-security score that is used to assign the household one of the four food security categories determined by the USDA: high food security, marginal food security, low food security, and very low food security.

The addresses linked to the phone numbers were used in an analysis of geo-

graphic variables that may be related to food insecurity. These included: population density, concentration of poverty, proximity to supermarkets, and access to municipal bus service. Previous research by Professor Harris had identified which of Lewiston's census blocks could be classified as "obesogenic"—having a food environment that promotes obesity. These data were also used in the geographic analysis.

The survey results indicate that 25.2% of households did not have high food security. Of this number, more than a third lived in an obesogenic census block, just more than 1% lived within 400 meters of a supermarket, and more than 70% lived within 400 meters of a bus line. The 400-meter distance was used as a reasonable walking distance for someone carrying groceries. (However, CFA research into issues impacting the use of the city bus for grocery trips points to the fact that, while many respondents may live within walking distance of the bus lines, issues such as bus schedule limit its usefulness as a transportation option for gro-

cery trips. See Page 18.)

Additionally, 12% of surveyed households had low or very low food security, and an additional 13.2% had marginal food security. The distribution of food insecurity by census tract was not found to be statistically significant, leading to the conclusion that food insecurity is geographically widespread in Lewiston. This conclusion hints at the idea that food insecurity may be present, but harder to see, in Lewiston's suburban neighborhoods.

A critical limitation of this study is that it used only landlines to administer the food security surveys. Currently, it isn't possible to acquire lists of cell phone numbers for geographic areas. Low-income and minority households are more likely to have only cell phones, meaning that these households were underrepresented and may be a reason why low sampling rates occurred for downtown census tracts, places where poverty is known to be high.

<sup>16</sup>Harris, et al. "Predictors of Food Insecurity in Lewiston"

## On Helping Each Other

“My biggest overall observation for this (transitional/homeless) focus group was their friendliness toward each other and their unselfishness. In a situation where food often runs out, even at the best pantries and services, I was shocked that these transitional/homeless individuals were sharing knowledge, tips, tricks, and experiences with each other and not hoarding valuable information. There was no competition in the group. They all wanted to see each other fed.”

—Focus Group Observer

## Resources and Challenges

### Social Capital

Lewiston residents have a tight web of social networks and a commitment to helping each other, including when they are lacking food. One member of the Wellness and Recovery Focus Group said:

People who have lived or still live where they are hand to mouth—they don’t know where their next meal is coming from. But they don’t want to see somebody else go through that same issue . . . I see people, they’ll try to scrape what they can together and do a big meal and invite people to their house so everyone gets to participate. You know, it is the old stone soup thing, that if each person donates a little to the meal they can do one big meal.

Generally speaking, Somali focus groups revealed a more ingrained system than other groups for sharing assets and resources within their community. Somali families tended to turn to each other as their first action, whereas other focus groups tended to search for outside assistance. However, turning to the community for support was a common thread during discussions about certain aspects of the food system; in their focus groups emerging adults and young parents shared without hesitation resources, ideas about emergency food, and tips about transportation.

Although residents felt they can make a difference for neighbors and friends, many said they could not have much impact on larger economic, political and food systems. Because of policies, structural dynamics or systemic issues related to food access, many participants were not sure they could be effective agents of change, as reflected in these comments from Somali focus groups: “We don’t have any choice. We don’t have any money, so we can’t make a change,” and, “We don’t have any power. Only the government can make a change.”

There are groups in the Lewiston area that support residents in developing a sense of agency and power. Community groups



such as The Visible Community, Neighborhood Housing League, Lewiston-Auburn Neighborhood Network, United Somali Women of Maine and the New American Sustainable Agriculture Project all support residents in utilizing their voice to affect positive change in their own lives and in their community. There is potential for these groups to influence issues identified in the CFA.

During the course of the CFA research, a community-led campaign was successful in advocating for the expansion of the city’s bus service, CityLink. The Visible Community and other community groups organized residents to push for extension of hours, routes and for the addition of Saturday service. The CFA transportation research was useful in providing data and supporting resident testimonials. In August 2010, the first expansion was made. The Saturday service proved to be so successful that it was expanded again in October 2012.

Finally, social capital also applies to inter-organizational relationships. Unfortunately, while many organizations are currently working hard to tackle hunger and nutrition issues in Lewiston, these groups are unable, because of limited capacity, to maximize their impact by developing stronger inter-organizational, social networks. Collaboration and building bridges requires resources for planning, coordination and implementation. The reality is that strained resources limit the ability of organizations to develop the broad social/organizational networks needed to make systemic change.

## Knowledge, Literacy, and Language On Cooking Knowledge

Many focus group participants tied good nutrition to eating fruits and vegetables. However, there was little discussion of carbohydrates or the importance of whole grains and lean protein. In the elderly and less mobile focus groups, participants reported being unsure about reading labels and strategies for improving nutrition, indicating that nutrition knowledge can vary by topic and by demographic groups in the downtown. Also, the Somali focus group mentioned clean water as an important nutritional issue, while other groups did not.

In general, focus group participants

seemed to believe there was value in knowing how to cook and relying less on prepared meals. About half of participants self-reported basic knowledge of storing and cooking food. These skills were more common in parents and older people. Some of this knowledge was passed down from families and friends, and also from cooking classes run by the Cooperative Extension, St. Mary's Nutrition Center and others. Individuals talked about strategies such as preparing food from leftovers, making large quantities of food for freezing, and cooking for those with specific nutritional needs.

"One of the things that keeps getting forgotten in diets when you're low income is protein. I think people are very naïve about what actually contains protein. They think if they grab a steak I'll get protein, but they don't realize things like beans and things of that nature have fiber and protein."

–Young Professional Focus Group Participant

"I don't know how to cook from scratch, and the pre-made healthy food is expensive."

–Parents Focus Group Participant



## On Shopping Via the Bus Public and Private Transportation

“You don’t want to be carrying 15 bags from Walmart all the way downtown. That just ain’t happening.”

–Youth Focus Group Participant

National data suggests that those who lack access to private transportation are less likely to have regular access to *good food*.<sup>17</sup> According to Census data, in one downtown census tract in Lewiston, 59% of residents did not have access to a vehicle, and the other downtown census tracts follow close behind.<sup>18</sup> As a result, community members rely on other forms of transportation such as the public bus system, taxis, rideshares, and foot travel to buy groceries.

Lewiston’s public bus system, CityLink, is an important means by which people without cars access food. Buses run from roughly 6 a.m. to 6 p.m. on weekdays. Saturday routes were added in the summer of 2010 and run from approximately 9 a.m. to 3 p.m. A regular fare is \$1.50, with discounts available to students, seniors, and the disabled. Many

buses travel directly to grocery stores in the Lewiston-Auburn area. One CFA survey found that nearly three out of five riders on the bus were traveling to get groceries.<sup>19</sup> Although there is no official bag limit on public buses, passengers are limited to what they can carry in one load. (Despite the “no-limit/one load” policy, most people are only able to carry two bags, which explains why many interviewees were under the misconception that there is a two-bag limit.) While the one-load policy keeps seats open for other passengers and helps avoid delays because passengers are not ferrying many bags onto the bus, it also means that residents may not be able to purchase all their groceries in one trip. (To look at the challenges, see the story of a single-mother on Page 20. To learn about other obstacles see the chart on the following page.)

<sup>17</sup> Block, Scribner and Desalvo, 2004

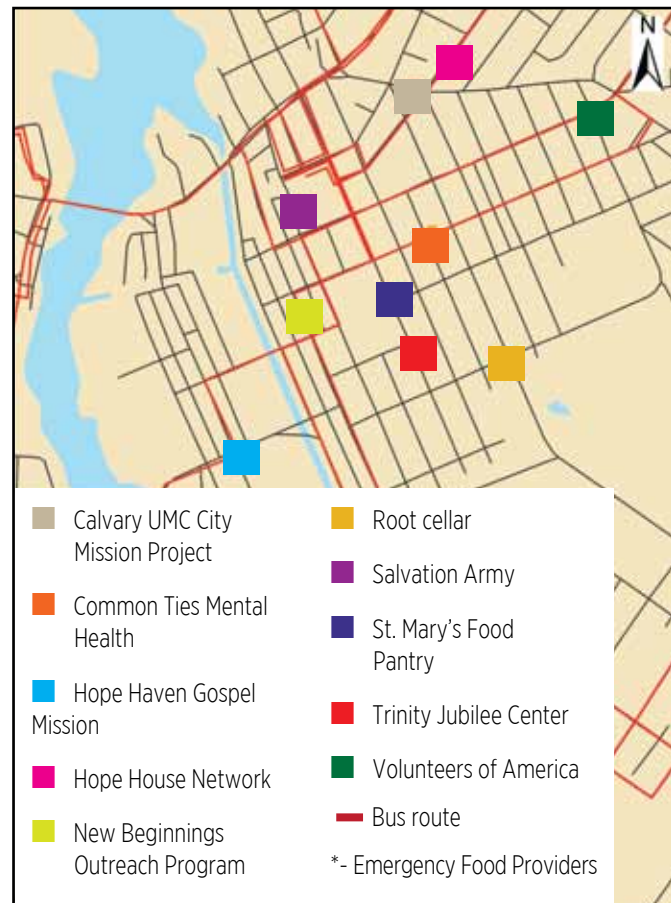
<sup>18</sup> U.S. Census Bureau, 2012

<sup>19</sup> Cullen, Peck and Waldo, 2010

### CityLink Bus Routes



### CityLink Bus Routes & EFPs\*



Source: Bus routes, Androscoggin Valley of Council of Governments. EFPs, Healthy Androscoggin.

Some residents use taxis for grocery shopping, but many note high costs and extra charges for using the trunk to store purchases or for having extra passengers. Many community members coordinate to share rides to the larger grocery stores where they can buy in bulk and avoid scheduling constraints that can arise when using the public bus system.

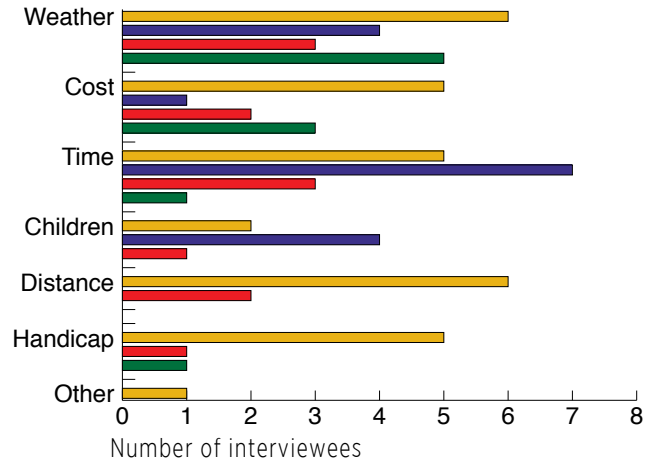
The map on the preceding page shows that the CityLink bus runs within a few blocks of most of the emergency food providers (EFPs), increasing access to those who do not own vehicles. As the chart below illustrates, the bus runs during most of the hours EFPs are open, further increasing food accessibility. However, the bus does not run after 6 p.m. during the week, making it difficult for working residents to access grocery stores, pantries and soup kitchens. Also, there is no bus on Sunday to help access the four EFPs that are open.

When residents are not using vehicles, many rely on walking to purchase what they need. Foot travel is often lim-

## Obstacles to Getting to the Bus Stop

- Moderately problematic
- Problematic
- More problematic
- Extremely problematic

Source: Cullen et al transportation report



iting because of unsafe walking conditions (especially in winter), the weight that people are able to carry, and the distance to various food stores. EFP locations should be accessible under snowy conditions according to city plowing

policy, but plowing practice was not closely assessed. Because of walking issues many community members shop at the smaller, closer convenience stores, which are often more expensive and have fewer healthy choices.

## Bus Route Hours in Relation to EFP Hours

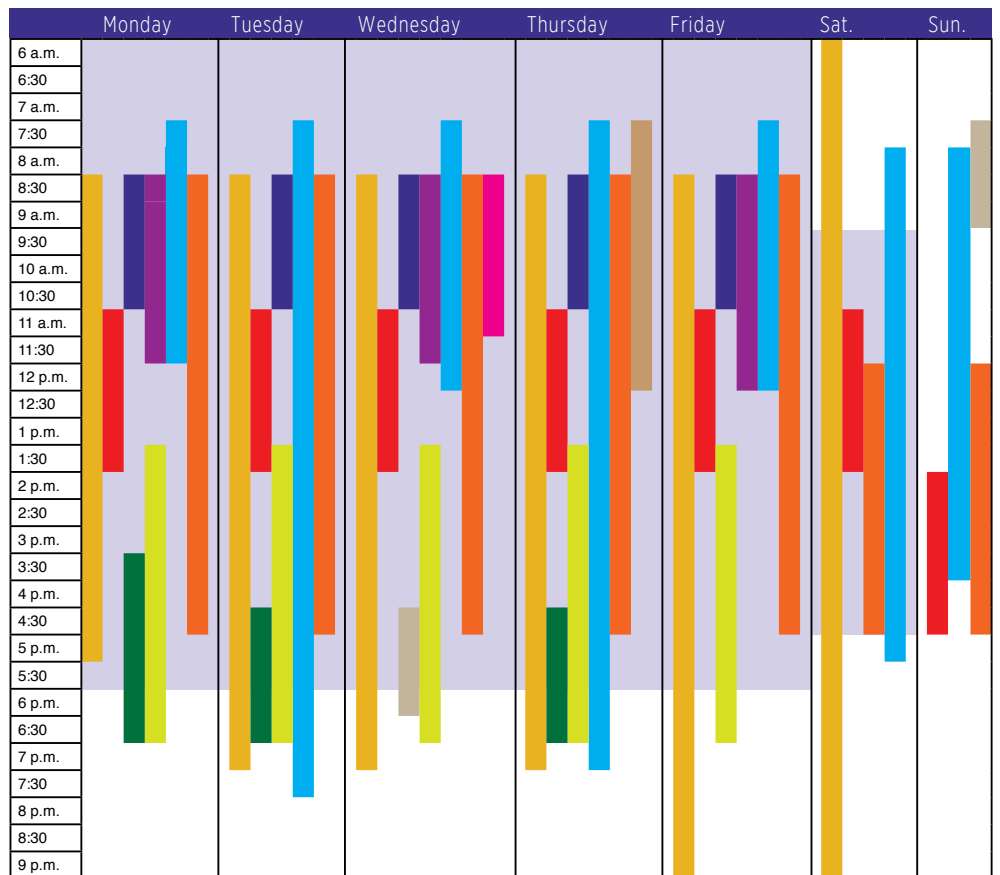
### Bus

  Hours of operation  
(Shaded in background)

### Lewiston EFPs

- Calvary UMC City Mission Project
- Common Ties Mental Health
- Hope Haven Gospel Mission
- Hope House Network
- New Beginnings Outreach Program
- Root Cellar
- Salvation Army-Lewiston
- St. Mary's Food Pantry
- Trinity Jubilee Center
- Trinity Pantry
- Volunteers of America

Source: Cullen et al transportation report



# Shopping Via Bus: A Two-hour Trip



1: Departure



2: Arrival at the grocery store



3: A cart of groceries



4: Gathering bags



5: Preparing to load



6: Heading home

Lewiston resident Lena demonstrates how transportation is helpful and challenging. Lena is a single mother with three children, and she and 4-year-old son Drake are grateful for the CityLink bus system that gets them to the grocery store. However, Lena needs at least 2 hours for the trip, most of which is spent in transit. She often makes two trips to the store per week since she is unable to carry all of her groceries at once; she loads one arm with all of her bags, while using the other to hold Drake's hand. With practice, Lena has made the process more efficient, but it is still a challenge to find the time needed to shop and get enough of the food needed to feed her family.





## Government-Sponsored Food Assistance Programs

Government-based food assistance programs are essential in ensuring access to food for all Lewiston residents. A variety of residents with limited income such as children in schools, individuals, families, and seniors receive assistance.

Means-tested programs serve these populations by increasing their ability to purchase food at stores, school cafeterias, and farmers' markets. After financial need is demonstrated, the government intervenes to either offer money for groceries or, in the case of the National School Lunch Program, to offer free or discounted meals. This assistance provides much-needed food to thousands of people in the community, but it often does not provide enough. When additional help is needed, the services of emergency food providers are called upon to fill the gap. Numer-

ous soup kitchens and food pantries give food to those unable to meet their needs through personal earnings and government assistance.

Food assistance program participation is on the rise in Lewiston<sup>20</sup> (as illustrated on Page 23), and SNAP and WIC are critical to the health of many Lewiston residents. One focus group participant described the assistance as "life support."

However, CFA participants identified several obstacles in accessing these resources. Obstacles include the need to have an address (to prove Lewiston residency), forms of identification, and the stigma associated with using SNAP Electronic Benefits Transfer (EBT) cards. In addition, those in the Somali focus groups reported language barriers to accessing and maintaining assistance programs.

## Limitations of Government Assistance

Healthy foods such as fresh fruits and vegetables can cost more to acquire, but yield high nutritional benefit. For those who struggle with food insecurity, including fresh produce in the government-sponsored programs aimed to help feed them is vitally important.

Many food assistance programs offered by the state and federal government address this need for healthy fresh food. Programs such as WIC fruit and vegetable vouchers and WIC Senior Farm Share show good intention but lack the financial resources to make a significant change in the lives of program participants.

For example, WIC's fresh fruits and vegetables program provides vouchers of only \$6 per child per month, despite a 2005 recommendation from the Institute of Medicine that this amount be increased to \$8 per month to better meet nutritional needs.

<sup>20</sup> Data generated from the Automated Client Eligibility System of the Maine Office of Family Independence, upon request, on 2/27/2013

## On the Challenges

While Government Sponsored Food Assistance Programs are a vital support system, they are not without challenges:

“All the healthy fruits and stuff. When I get my food stamps, I won’t buy fruits and vegetables because they’re all so expensive to get fresh and then they all go to waste anyway.”

–Focus Group Participant

“Sometimes with me, like I get Food Stamps, but sometimes I don’t know how to like shop really that good. So I used to go with like at the end of the month with no food. So I used to go to New Beginnings or some shelters just to eat, because I didn’t know how to shop the correct way to make my food last.”

–Parents Focus Group Participant

“Families receive a letter from DHHS. If they can’t read it, sometimes they lose their benefits because they didn’t understand the letter.”

–Somali Focus Group Participant

Government-sponsored food assistance programs include the following:

### WIC

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) focuses on supplementing the diets of limited-income pregnant, breastfeeding, and non-breastfeeding postpartum women, as well as infants and children up to the age of 5 who are found to be at nutritional risk. The program also provides participants with nutritious food, nutrition education and health care referrals.

Beginning in October of 2009 participants in the WIC program received cash-value vouchers to pay for fresh fruits and vegetables. Women initially received vouchers for \$8 per month, and children received \$6 per month. The \$8 vouchers were quickly raised to \$10 per month, but children still receive just \$6 per month, despite a 2005 recommendation from the Institute of Medicine<sup>21</sup> that this amount be increased to \$8 per month, an amount that would allow WIC children to have one serving a day of fruit or vegetables through the program.

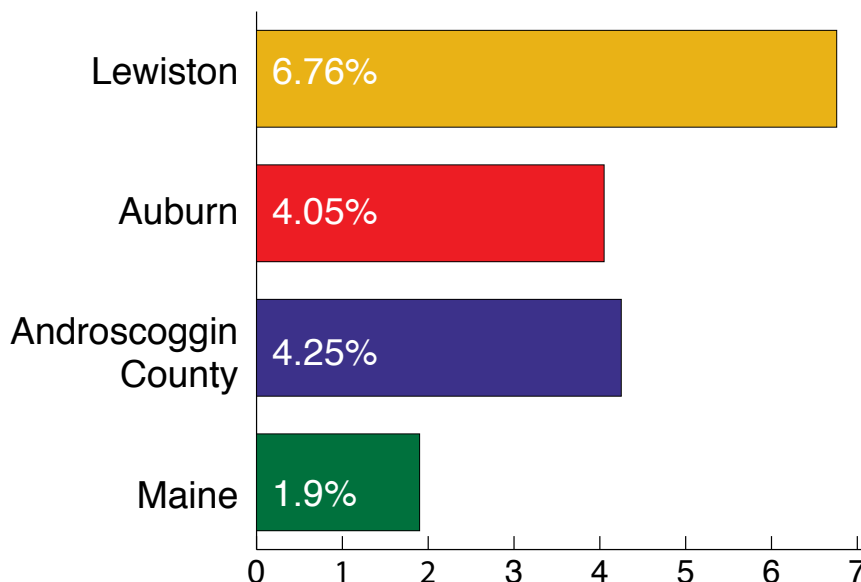
Lewiston WIC participation accounts



Kristen Wheatley photo

for slightly more than half of WIC usage by all of Androscoggin County. Participation rates are higher for Lewiston than for Auburn or the county.<sup>22</sup>

## WIC Usage as a % of Population



Source: 2012 WIC Program: Total Participation, at <http://www.fns.usda.gov/pd/26wifypart.htm>

<sup>21</sup> Committee to Review the WIC Food Packages, 2005

<sup>22</sup> 2011 and 2012 data provided by Ginny Andrews, Nutrition Service Program Manager for Western Maine Community Action, via email, 2/18/13

## SNAP/EBT

The Supplemental Nutrition Assistance Program (SNAP) provides people of limited income with an Electronic Benefits Transfer (EBT) card, which functions like a debit card and is accepted at most grocery stores and accredited farmers' markets. In 2012 the average monthly benefit per person in Maine was \$124.16.<sup>23</sup> (Food stamps have been replaced by this EBT card, but many people still refer to the program as food stamps.)

As is the case in most cities, poverty is concentrated in certain Lewiston neighborhoods, with elevated SNAP usage due to greater food insecurity and dependence on government assistance. Our study area included low-income housing complexes and found that within two of these, River Valley Village and Hillview, children were more likely to be present and that food assistance, including SNAP usage, was much higher than the average for the rest of the city. At the time that River Valley Village was studied (Fall of 2010), 97% of its residents were using food assistance.

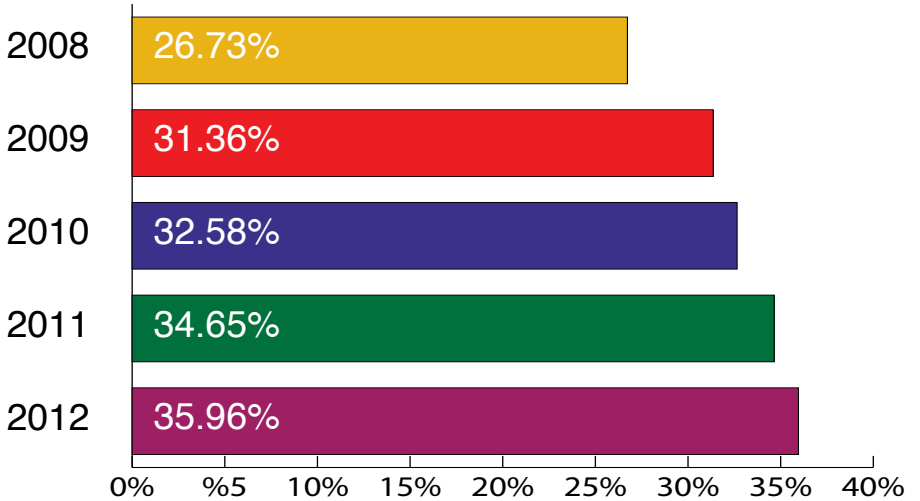
There is also a much greater rate of Lewiston residents using SNAP compared to the rest of the state. From 2008–2012, SNAP usage in Lewiston has consistently been almost twice the state average and has expanded from 26% to almost 36%. That nearly 10% increase represents an additional 4,000 people utilizing the program.<sup>24</sup>

## The National School Lunch Program

The Lunch Program and the School Breakfast Program operate in public and nonprofit private schools and residential child care institutions, providing eligible children with inexpensive or free lunches and breakfasts every school day. The meals must meet federal nutrition requirements. The Summer Food Service Program provides breakfast and lunch at sites throughout the city. Children from families with incomes at or below 130% of the poverty level are eligible for free meals. Those with incomes between 130% and 185% of the poverty level are eligible for reduced price meals.<sup>25</sup>

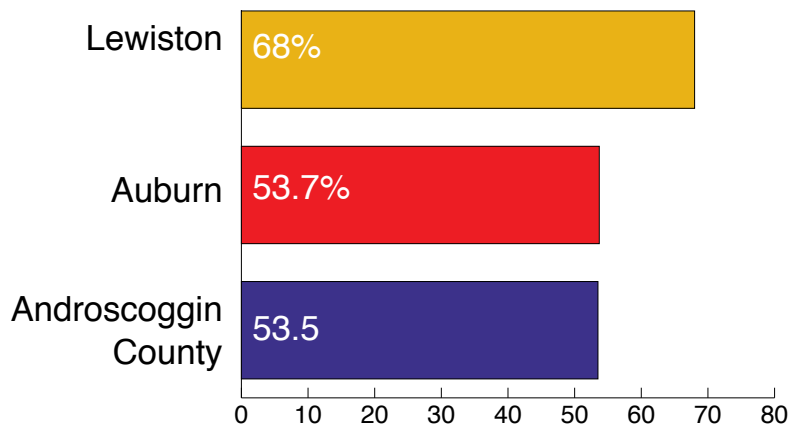
In October of 2012 the percentage of students eligible for free or reduced lunch within the Lewiston school district (68%) was significantly higher than figures for

## SNAP Usage as a % of Lewiston's Population



Source: 2008-2009 population taken from 2007-2009 American Community Survey 3-Year Estimates. 2010-2012 population taken from 2010 census

## Students Eligible for Free or Reduced Lunch



Source: 2012 Maine Dept. of Education, "Participation Report - Lunch" accessed 2/17/13 at [https://portal.maine.gov/sfsr/sfsrdev.ParticipationReport.ParticipationReport\\_params](https://portal.maine.gov/sfsr/sfsrdev.ParticipationReport.ParticipationReport_params)

the Auburn school district (53.7%) and Androscoggin County (53.5%). Montello and Longley elementary schools, which serve Lewiston's downtown, an area of concentrated poverty, had eligibility rates of 79% and 98%, respectively.<sup>26</sup>

School lunch programs have long been viewed as a valuable resource for Lewiston residents. However, as was learned in focus groups, while an asset, school lunches are also a concern to Somali parents who worry that the type of food served and how it is prepared may not be culturally appropriate for their children. This concern may be reflected in the fact that just 71.8% of Lewiston students who are eligible for free or reduced lunch participate in the school lunch program.<sup>27</sup> There are other barriers to par-

ticipation as well, including the perceived social stigma that goes along with receiving a free or reduced lunch.

<sup>23</sup> U.S. Department of Agriculture, 2013

<sup>24</sup> Data generated from the Automated Client Eligibility System of the Maine Office of Family Independence, upon request, on 2/27/2013

<sup>25</sup> U.S. Department of Agriculture, Food and Nutrition Service 2013

<sup>26</sup> Maine Dept. of Education, 2013

<sup>27</sup> Maine Dept. of Education, Participation Report – Lunch for FY2012, accessed 2/7/13 at [https://portal.maine.gov/sfsr/sfsrdev.public\\_reports.main\\_page](https://portal.maine.gov/sfsr/sfsrdev.public_reports.main_page)

## Farms Providing Food for Senior FarmShares in Androscoggin County

Chipman Farm, Poland  
 Fresh Start Farmers, Lisbon  
 Levesque's Farm, Leeds  
 R. Belanger & Sons Farm, Lisbon  
 Summit Springs Farm, Poland  
 Verrill's Vegetable Stand, Poland  
 Willow Pond Farm, Sabattus

Source: Maine Department of Agriculture, 2012



### Fresh Fruit and Vegetable Program

This USDA program aims to increase fresh produce consumption in selected schools, outside of school meals. Limited to elementary and middle schools, preference is given to schools with the highest percentage of low-income students. In general, selected schools have a student population in which 50% or more qualify for free or reduced meals. Two Lewiston schools participated in 2011–2012, Montello and Longley. Montello received \$26,793 for food, with a daily average of 800 students participating. Longley received \$12,953, with a daily average of 375 students participating.<sup>28</sup>

### Dept. of Defense Fresh

DoD Fresh is a program created by the United States Department of Agriculture, in cooperation with the Department of Defense. It is designed to help school districts procure more fresh fruits and vegetables, and complements the USDA's Commodity Foods entitlement. Under the program, schools may buy Maine-grown produce with commodity entitlement funds, federal and

state meal reimbursement funds, school funds, general funds, or other food service funds. All school districts participate in DoD Fresh. The Maine allotment of \$190,639 for 2010–2011 is the most recent year for which there are data. Spread over 662 schools, this equaled an allotment of \$287.97 per school or \$1.01 per student for the year.<sup>29</sup> While every additional dollar toward fresh produce helps, this amount of funding clearly cannot make a great deal of difference in terms of the amount of additional healthy food provided.

### Senior Farmshare Program

This program is funded through the United States Department of Agriculture and managed by the Maine Department of Agriculture. Eligible limited-income seniors are entitled to a FarmShare consisting of \$50 worth of produce from a local farm. The share runs for eight weeks during the growing season. The aim of the program is to improve nutrition and health for a vulnerable population, but this may be difficult to achieve with a share that breaks down to \$6.25 worth of fresh produce a week.

<sup>28</sup> Data provided by Nutrition Program, Lewiston Public Schools, via email 7/27/12

<sup>29</sup> Brayley and Clark, 2012



## On Community Gardens

“I don’t think that (people who need help) can do it all alone. But, I think if I take the example of Lots to Gardens: You need to be willing to open yourself up to these resources. You need to pay attention to what’s going on out there. There is an important lesson to having my children plant a seed and see that grow and see that you can take care of that and that it’s an investment of your time and energy—but not a financial investment.”

—Key Influencer

“I had a garden in the summer with Lots to Gardens. I got a lot (of food) that way.”

—Focus Group Participant

## Community-Based Programs

There are several community-based organizations providing Lewiston-Auburn residents with food, skills, knowledge, and tools that increase access to nutrition. Each organization is an important piece of the community food puzzle. The opportunity is to knit these valuable programs together to make a more responsive overall system.

Community-based programs include the following:

### New American Sustainable Agriculture Project

Run by Cultivating Community and partially supported by USDA grant funds, this program works with refugees and immigrants who want to start farming in Maine. Based in Portland with farmland in Lisbon, the project teaches these new farmers sustainable farming practices as well as business and marketing skills. The result is improved access to healthy and affordable

food for immigrants, refugees, and the larger community. The Kennedy Park Farmers’ Market provides an opportunity for participants with less marketing experience to build that experience while also providing a source for fresh vegetables and fruit downtown.

### Androscoggin Land Trust

Through land conservation and stewardship, the Androscoggin Land Trust (ALT) protects natural areas, traditional landscapes, and outdoor experience in the Androscoggin River watershed. Preserving valuable farmland and working farms is part of the organization’s mission. The trust works with landowners throughout Androscoggin County and has conserved approximately 1,000 acres of farmland through lands it owns and conservation easements it holds. Trust-owned farmland is leased to local farmers to ensure that prime and statewide significant agricultural soils continue to be worked. ALT works closely with the statewide conservation group Maine Farmland Trust to conserve additional farmland, including the 650-acre River Rise Farm in Turner.

## St. Mary's Nutrition Center

Increasing food access for at-risk Lewiston-Auburn residents is one of the Nutrition Center's (NC) core strategies. Since 1999 (first as Lots to Gardens), the NC has transformed more than a dozen vacant lots into community gardens, where 115 families build self-reliance and grow food. The NC gardens contribute to vibrant neighborhoods and remove barriers for underserved people in accessing healthy foods. In addition, the NC creates low-barrier access points for healthy food, including produce grown in the gardens. These include "veggie stands" at public housing complexes; snack-making programs to increase exposure to vegetables; an online-buying club; and harvest dinners prepared by children participating in garden education programs. The NC also supports farmers' markets that now run in the summer and winter. (See the Farmers' Market Incentive Programs below.)

The NC offers hands-on cooking classes for all ages, where participants learn how to make healthy food choices. Classes are free or donation-based and open to the public. The NC provides education to hundreds of at-risk youth through garden-based job training and leadership programs.

Additionally, the NC manages school and children's gardens, where youth learn about the sources of their food. In the school year 2011–12, in partnership with FoodCorps (a nationwide team of leaders that connects children to healthy food), the NC created a pilot school garden program at the downtown Longley Elementary School. The NC also plays a critical role in the local emergency food safety net by housing the largest food pantry in Androscoggin County.

## Farmers' Market Incentive Programs

In 2010, with funding from the Wholesome Wave Foundation, St. Mary's Nutrition Center started the Double Value Coupon Program, which matched \$1 for every \$1 a person spent

with an EBT card or WIC coupon at Lewiston Farmers' Markets. As the program expanded (becoming the Market Dollar Program using multiple funding sources) it shifted to a \$1-to-\$2 match in order to sustain the program. There is a \$10 per week limit.

## Fruit and Vegetable Prescription Program

St. Mary's Nutrition Center piloted the Fruit and Veggie Prescription Program (FVRx) in 2011 in an effort to increase the consumption of fresh produce among overweight or obese families. The Lewiston Farmers' Market partnered with the St. Mary's B Street Health Center to enroll eligible families who receive "prescription" coupons (\$1 per family member per day) to be used at local farmers' markets to purchase fresh fruits and vegetables. Wholesome Wave Foundation and Maine Health Access Foundation provided funding for this pilot.

## University of Maine Cooperative Extension

The Extension, which has an office in Lisbon Falls serving Androscoggin and Sagadahoc counties, is a resource for local residents to access research and expertise on nutrition, food, sustainable agriculture and business management. The extension teaches a Master Gardeners program and offers youth development programs, such as 4-H.

## Healthy Androscoggin

Healthy Androscoggin (HA) empowers people to live healthy lifestyles and to improve the public health of the communities it serves through ongoing planning, community action, education, and advocacy. This community health coalition provides nutrition and cooking education to low income individuals and connects community members to local food through the Androscoggin County Farm Guide. HA also provides education to food pantry directors, staff and clients about accessing and preparing

healthy foods. In order to promote exercise and aid in transportation, HA also works to create more walkable and bikeable communities.

## SeniorsPlus

The local Area Agency on Aging, SeniorsPlus, executes the Meals on Wheels program and Congregate Dining, which provide meals to eligible seniors and to adults with disabilities. Congregate Dining is offered to seniors aged 60 and older, and adults with disabilities. For a suggested \$3 donation seniors and adults with disabilities can gather for a nutritious mid-day meal and socialization at three locations in Lewiston and two locations in Auburn.

However, because of low participation rates, resources from Congregate Dining have been shifted toward the Around Town Program, which offers seniors approved meals in participating venues for a suggested donation of \$5. Registered dietitians check menus, and approved meals provide a minimum of a third of daily nutrition needs. Because it offers a choice of meals and venues, it is a popular program. Users obtain vouchers from SeniorsPlus and present them for selected meals at participating venues, which may offer breakfast, lunch, or dinner. In 2011, 1,139 meals vouchers were redeemed at St. Mary's Health System's d'Youville Pavillion, and 203 were redeemed at Central Maine Medical Center Dining Service.

Additionally, 100 people in the Lewiston-Auburn area are served through Meals on Wheels, a program that targets homebound residents unable to prepare their own meals. The program offers nutritionally balanced meals delivered to a participant's home. The service area is large and serves more than 230 people across Androscoggin, Franklin and Oxford counties. With a growing senior population and increasing food costs, need has risen, and there is a waiting list for the program. A \$3 donation is requested for each meal. While stable over the last decade, funding is not growing.

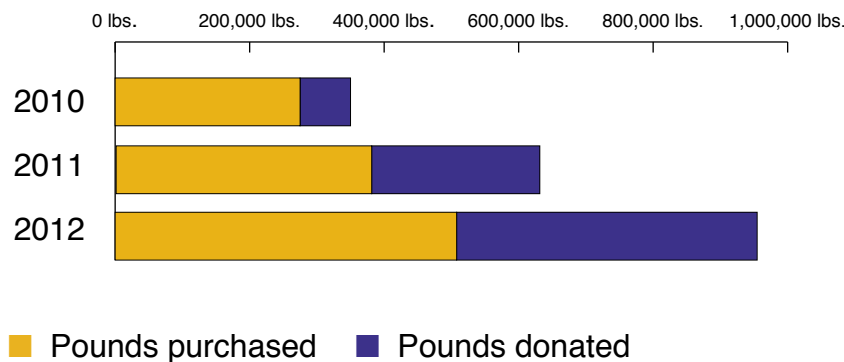
# Emergency Food Providers

For those who can't afford to buy adequate food, there are 10 Emergency Food Providers (EFPs) in Lewiston and an additional three in Auburn, most of which are soup kitchens and food pantries.

Lewiston-Auburn is also home to "Maine's food bank"—Good Shepherd Food Bank (GSFB), which has been operating for 30 years. Good Shepherd's stated mission is to "support member agencies by providing quality, nutritious food." GSFB sources food through donations from companies such as Hannaford, Walmart, and Shaw's as well as the USDA. All of the food that GSFB receives and distributes at a reduced cost to its network of EFPs is safe, but not all of it is healthy. In efforts to supply healthier food options, and to support the local economy, GSFB is increasing its purchase of local agricultural products and seafood through its Mainers Feeding Mainers Program, which employs purchase agreements with Maine farms, dairies, fisheries, and other food producers, and develops food hubs to distribute local, nutritious food to EFPs throughout Maine. Since its inception in 2010, the program has acquired and distributed 2 million pounds of food produced in Maine.<sup>30</sup> (The chart below traces the program's growth.) Good Shepherd is also



## Growth of Mainers Feeding Mainers program



Good Shepherd Food Bank's Mainers Feeding Mainers program acquires (via purchase and donation) local produce.

Source: Good Shepherd Food Bank 2012 Mainers Feeding Mainers Progress Report

## On Helping

"I always say that we just don't want to hand them a bag of food and then send them on their way. We ask them the tough questions in order to help them see, 'Where is my money going? What am I doing? What can I change so this won't happen again?' Some folks are really receptive to that."  
 —Lt. Jason Brake, Salvation Army

<sup>30</sup> Good Shepherd Food Bank, 2013



piloting several projects that will allow it to become more involved in local food processing ventures.

In 2010 and 2011, Lewiston food pantries received nearly 450 tons of food from Good Shepherd. With an average meal weight of 1.2 pounds, this amount translates to 750,000 meals, or roughly 1,027 meals a day for two years.<sup>31</sup>

EFPs in Lewiston serve thousands of people each year, including many homeless or transitional people. Some people access food at several EFP sites, while others tend to rely on only one. Many factors affect the ability of some individuals to receive food from EFPs, including hours; limits on the quantity, quality and types of food provided; requirements such as identification and address; and transportation. The location of EFPs may also be a problem for some, with less than 50 percent of single-parent households living within 1 kilometer of a soup kitchen or a food pantry.

<sup>31</sup> Data provided by request in an email from Good Shepherd Food Bank's Agency Services Manager, 7/11/12

## Local Emergency Food Providers

To find additional services, call 211 toll-free or visit 211maine.org, or call Good Shepherd Food Bank at 782-3554. Emergency Food Provider hours change often. It is recommended to call for current hours.

### LEWISTON

#### Boys and Girls Club of Auburn/

**Lewiston:** Meal site. M–F: 2–9 p.m. W: 11:30 a.m.–9 p.m. Summer hours M–F: 9 a.m.–5 p.m. 43 Second St. (207) 795-6713.

#### Calvary UMC City Mission Project:

Meal site. Su: 7:30–8:30 a.m. W: 4:30–6 p.m. 59 Sabattus St. (207) 782-3221.

**Common Ties Mental Health:** Meal site. Sa/Su: 1–5 p.m. M–F: 9 a.m.–5 p.m. 100 Pine St. (207) 795-6040.

#### Hope Haven Gospel Mission: M–F:

9:30–11:45 a.m. and 12:30–3 p.m. 209 Lincoln St. (207) 783-6086.

#### Hope House Network: W: 9–11 a.m.

91 College St. (207) 345-3027.

#### New Beginnings Outreach Program:

M–F: 1:30–6:30 p.m. Meal site: Tu/Thr nights for youth 14–21. 245 Lisbon St. (207) 795-6831.

#### Root Cellar: M–F. Emergency only. 89

Birch St. (207) 782-3659.

#### Salvation Army, Lewiston: M/W/F: 9

a.m.–12 p.m. Tu/Thr: 12–3 p.m. 67 Park St. (207) 783-0801.

#### St. Mary's Food Pantry: M–F: 9–11

a.m. 208 Bates St. (207) 513-3841.

#### Trinity Jubilee Center: Food pantry.

Thrs: 7:45–11:45 a.m. Meal site: M–Sa: 11 a.m. Su: after 2 p.m. 247 Bates St. (207) 782-5700.

### AUBURN

#### High Street Congregational Church

**Food Pantry:** Th: 10 a.m.–12 p.m. 106 Pleasant St. (207) 784-1306.

#### Seventh Day Adventist Food Pantry:

Tu: 9 a.m.–12 p.m. 316 Minot Ave. (207) 784-0861.

#### Volunteers Of America: Meal Site: M:

3:30–7 p.m. Tu/Th: 4:30–7 p.m. 17 Jefferson St., Third floor. (207) 689-9172.

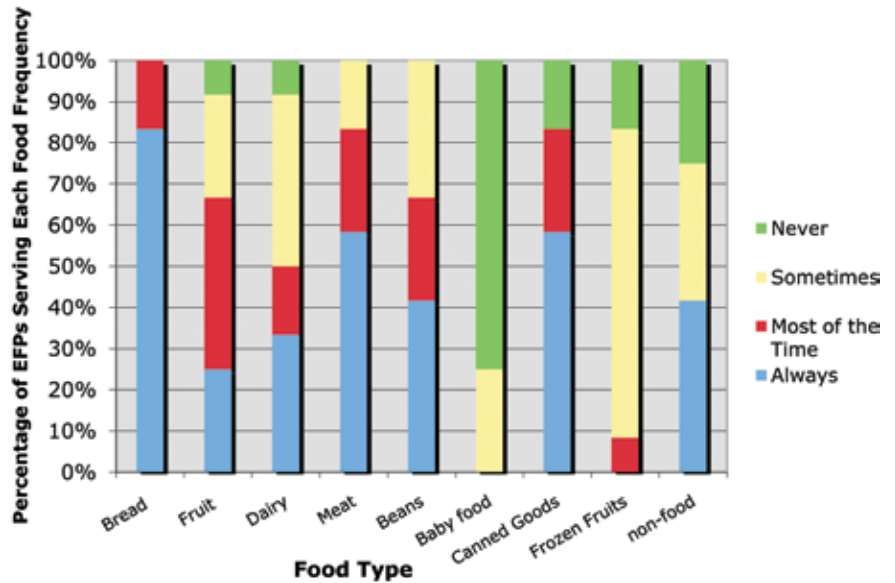


Unfortunately, EFPs are experiencing a reduction in food supply because the food bank has less food to provide and because of rising food costs. Historically, food banks have relied heavily on “salvaged” food from grocery chains which dealt with inventory surpluses by donating products or selling them at steeply discounted rates to food banks. But modern technology has allowed much tighter control of grocery inventories, shrinking the surpluses that supply food banks, and in turn food pantries and meal sites. Additionally, the cost of food has risen significantly over the past five years, putting more pressure on EFP food supplies. (For example, at St. Mary’s Food Pantry the cost of an average box of food increased over 450% in two years—from \$1.84 per box to \$8.44 per box).

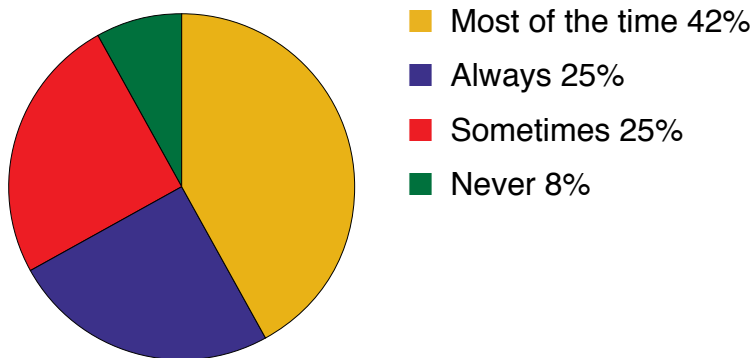
Although EFPs have made great strides in supplying more healthy food, it is still a challenge. According to a survey of Lewiston EFPs, bread, meat and beans are the most common foods offered. The second most common foods are fruit, dairy, and frozen and canned foods. (The chart at above right provides a breakdown of food type frequency at Lewiston EFPs.)

In addition, fresh produce may not always be available from the larger food bank distributors, or individual EFPs may not have the refrigeration or storage space needed for highly perishable items. In fact only 25% of EFPs always provide fruit. (See chart at right to see the breakdown of fruit availability.) Fresh fruits and vegetables are also often more expensive, which is challenging when aiming to

### Food Type Frequency at Lewiston EFPs



### Frequency of Fruit Provided by EFPs



Source: Emergency Food Providers Report. Burgis, Chase, Cohen, and Fahey. 2009. Bates College. Lewiston, Maine Academic Report. Unpublished

### On Food Selection at EFPs

“You are going to places like the various food kitchens and food pantries, and they are giving you bologna sandwiches. . . at one point they were always giving out cakes, like whole cakes, and boxes of doughnuts. . . One of the things that happens with people who get sober is that their dopamine levels are all over the place, so they start eating mad sugar—all kinds of candy bars because of the wiring in their brain. So that’s the time to start introducing a decent meal. That’s recovery. If they keep eating poorly and their blood sugar is

all over the place, the likelihood of relapse increases because of all the stress. We struggle with people who think, ‘Why are they perpetuating the problem?’ We’re not. We’re trying to resolve the problem by feeding people and giving them hope. We might not need as many soup kitchens if we could treat people as people when we see them on the street instead of crossing the street or bowing our heads or shouting something derogatory.”

—Diane Nelder, UMC City Mission Project

## On Few Choices at EFPs

“When we go to the food pantries, because I am diabetic, the biggest thing is not enough produce, or none at all. And I think I try hard.”

–Seniors Focus Group Participant

provide food for as many people as possible. From focus group discussions, it appears that even when healthy food is available at EFPs it is not always reaching residents. This may be due to the lack of knowledge around how to prepare the foods, a lack of kitchen tools, and not fully understanding the benefits of eating well.

In 2009, Bates students undertook a comprehensive survey of EFPs in Lewiston.<sup>32</sup> Selected results from that survey appear in the table below, which illustrates the vital role that EFPs play in the great number of food boxes and meals that they provide to the community. It also shows that most EFPs rely heavily upon Good Shepherd Food Bank. The survey revealed that EFPs seldom have to turn away clients or reduce distribution because of lack of food, despite increasing need. Follow up calls to EFPs in 2012 showed that providers had enough food to meet demand either all or most of the time, even though most providers



reported an increase in demand.

Local EFPs continue to play a critical role in helping to fill the gaps left by government-sponsored assistance programs and insufficient or non-existent earnings.

<sup>32</sup> Burgis, et al., 2009

## Lewiston EFPs: Food Sources, Distribution & Resources

Agency	Calvary UMC City Mission Project	St. Mary's Food Pantry	Trinity Church Food Pantry	Trinity Church Soup Kitchen	SeniorsPlus	Salvation Army Lewiston	New Beginnings Emergency Shelter	New Beginnings Outreach	Grace Project	St. Martin's de Porres Residence, Inc.	Hope Haven Gospel Mission	Common Ties	Totals
Limit on service	No	1 time/month	1 time/month	No	No	Once every 3 months for emergency; no limit for soup kitchen	No	No	No	case-by-case	1 per day, no limit for shelter and meal	case-by-case	
Food boxes distributed in previous month		2,289	900			37			25		198	2	3,451
Clients in previous month		1,029	350			103			2	28	198	2	1,712
Meals served in previous month	150			2,468	1,814	2,335	2,232	521		420	1,376	4	11,320
Diners served in previous month	200			120	190	90	25	50		28	250	23	976
% food from food bank	90	80	85	5	30	90	65	95	100	70	70	90	
% food from business donor	0	0	10	95		10	0	5	0	0	35	1	
% food purchased (not food bank)	0	0			70	0	0	0	0	25	4	9	
% food from food drives	0	10	5			0	0	0	0	5	1	0	
% other sources	10	10					35						
Spent to purchase food	\$100	\$3,330	\$830	\$100	\$6,000	\$500	\$575	\$250	\$35	\$260	\$750	\$50	\$12,780
Enough food for demand	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
% turned away	0	0	5	0	0	0	0	0	0	0	0	0	
% reduced amt	0	2	5	0	0	0	0	0	0	0	0	0	
Use nutrition guidelines	Always	Always	Never	Never	Always	Never	Always	Most of the time	Sometimes	Never	Most of the time	Never	
% increase in demand from 11/08 to 11/09	20	10	100	100	0	30	10	0	0	0	5	0	
Interpreters	No	Yes	Yes	No	Yes	No	Yes	Yes	No	No	No	Yes	

Source: Emergency Food Providers Report. Burgis, Chase, Cohen, and Fahey. 2009. Bates College. Lewiston, Maine Academic Report. Unpublished.

# Androscoggin County Farms

Lewiston-Auburn is surrounded by numerous agricultural communities, many of which include small, diversified farms that supply vegetables, fruits, herbs, maple syrup and honey, meat and other animal products, value-added products, and fiber products. Although more than 5,000 acres of farmland in Androscoggin County were lost between 2002 and 2007 to housing and other developments, there were still 378 farms in 2007.<sup>33</sup> (See the map at right for a sampling of area farms and products.) The Androscoggin Land Trust is working to stem this loss of farmland by accepting gifts of land, working with funding agencies to acquire land, and obtaining conservation easements to maintain the ongoing viability of farming.

Although Lewiston-Auburn is highly developed by Maine standards, the cities could reap the benefits of increased farming activity in the larger Lewiston-Auburn regional food production area. (See the list below for area agricultural products.) Maine’s low population density means that there is good potential for increasing agriculture on uninhabited lands. A century ago, farms were common throughout the county, and they could be again should Lewiston-Auburn choose to move toward a localized food system.

## Local Farm Products

Products produced in Androscoggin County:

**Grains:** alfalfa, barley, oats, wheat

**Vegetables:** arugula, asparagus, beans, dry beans, beets, beet greens, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, sweet corn, cucumber, eggplant, garlic, kale/collards, leeks, lettuce/greens, onions, parsley, parsnip, peas, peapods, peppers, potatoes, pumpkins, radishes, rutabaga, spinach, summer squash, winter squash, Swiss chard, sweet potatoes, tomatoes, turnip

**Fruit:** apples, bush and wild blueberries, cantaloupe, cranberries, grapes, pears, raspberries, rhubarb, strawberries, watermelon

**Protein/Dairy:** calves, cattle, hogs and pigs, poultry, eggs, lamb, turkey, milk and dairy products

**Source:** Dokus, et al., 2009.

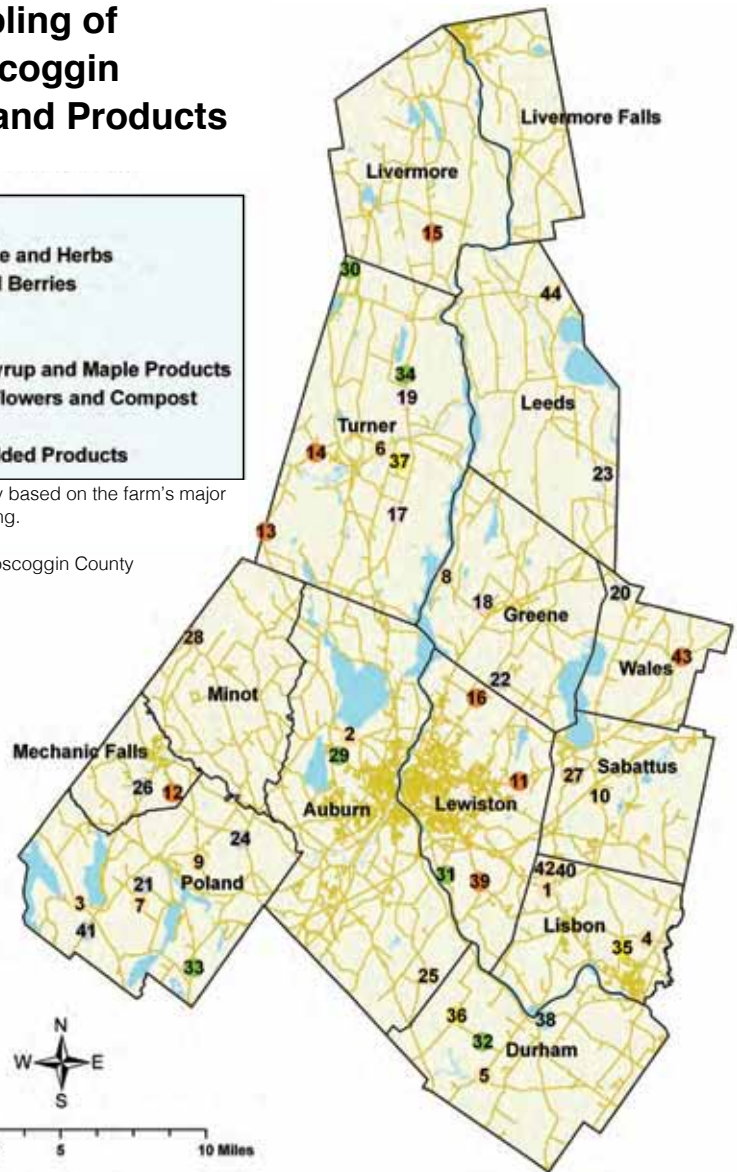
<sup>33</sup> U.S. Department of Agriculture, 2009

## A Sampling of Androscoggin Farms and Products



Food category based on the farm’s major product offering.

Source: Androscoggin County Farm Guide



## Farms and Their Map Numbers Above

- |                             |  |  |
|-----------------------------|--|--|
| 1 Benoit’s Farm Stand       | 18 Bubier Family Farm                    | 31 Provencher Landscape Nursery, Inc.  |
| 2 Farmer Whiting’s          | 19 Caldwell Farms                        | 32 Rice’s Christmas Tree Farm          |
| 3 Goss Farm                 | 20 Farmers’ Gate Market                  | 33 Shaker Hill Nursery                 |
| 4 Little Ridge Farm         | 21 Spruce Bay Farm                       | 34 Sunnyside Gardens                   |
| 5 New Leaf Farm             | 22 The Red Elk Ranch                     | 35 Graceland Alpaca Farm               |
| 6 Nezinscot Farm Store      | 23 Thistle Stop Farm                     | 36 McLew Cashmere Farm                 |
| 7 Summit Springs Farm       | 24 Valhalla Fields                       | 37 White Birch Alpacas                 |
| 8 Val-Greene Farm           | 25 Valley View Farm                      | 38 Right Here!10                       |
| 9 Verrill’s Vegetable Stand | 26 Whispering Winds Farm                 | 39 Stukas Farm                         |
| 10 Willow Pond Farm         | 27 Jillson’s Farm and Sugarhouse         | 40 Fresh Start Farms                   |
| 11 Benoit’s Orchard         | 28 Slattery’s Farm/West Minot Sugarhouse | 41 Harvest Hill Farms                  |
| 12 Goss Berry Farm          | 29 Coyne’s Greenhouse and Nursery        | 42 Packard-Littlefield Farm            |
| 13 Greenwood Orchards       | 30 Hummingbird Farm Greenhouse           | 43 Roaring Brook Farm an Garden Market |
| 14 Ricker Hill Orchards     |  | 44 Levesque’s Organic Farm             |
| 15 Boothby’s Orchard        |  |  |
| 16 Sue’s Blues              |  |  |
| 17 Brigeen Farms Inc.       |  |  |

If the Lewiston-Auburn area was able to localize its food system by producing, processing, and distributing more of the food it needs to feed its citizens, it could tap into enormous economic opportunities. According to the U.S. Bureau of Labor Statistics, the average American household spent \$6,458 on food in 2011.<sup>34</sup> As shown in the table below, this amount multiplied by the 25,241 households in Lewiston-Auburn equals approximately \$163 million. Knowing that the area is above the national average for participation in food assistance programs, we can infer that Lewiston-Auburn’s average household food expenditure is likely lower than the national average. Even if local average food spending in the area is half the national average and the cities spend \$80 million per year on food, capturing

even a quarter of that locally would mean adding \$20 million to the local economy.

As the table below illustrates, using a mid-range estimate of the acreage needed to supply an “average” diet, current Androscoggin County farmland can barely produce enough to meet Lewiston’s needs. When calculating the acreage needed to feed Lewiston and Auburn, or the entire county, it is evident that enormous amounts of additional farmland are needed.

Fortunately, there is a great deal of land suitable for agriculture in Androscoggin County. However, availability of land for farming and the lack of people with the knowledge, skills, and resources to farm are obstacles for growing more food and creating jobs. With the average age of Maine farmers being 56.4 (Androscoggin County’s average is 55.9 and the national average is 57.1),<sup>35</sup> the interest and participation of younger farmers and experienced farmers new to this country is crucial for continuing to raise and grow

healthy animals and produce. Another challenge is the lack of infrastructure to support farming. That infrastructure includes facilities to process and store plant and animal products and transportation networks to collect and distribute those products.

There has been a recent resurgence of young farmers in Maine, thanks in large part to the Farm Apprenticeship and Journeypersons programs offered by the Maine Organic Farmers and Gardeners Association. The Farm Apprenticeship program connects those interested in organic farming with experienced farmers who offer access to their farms, knowledge, and skills. The Journeypersons program offers mentoring, hands-on opportunities, and training for those interested in pursuing a career in farming. There are also other organizations, such as local land trusts, Maine Farmland Trust and Slow Money Maine, which work to locate, preserve, and finance the purchase of land and other start-up needs, such as equipment.

<sup>34</sup> www.bls.gov/news.release/cesan.nr0.htm

<sup>35</sup> U.S. Department of Agriculture, 2009

## What are Value-added Products?

They are items or products that have been changed or enhanced to add something extra before being sold to the customer.

## Food Expenditures

	Number of households	Household food expenditure	Total food expenditure
Lewiston	15,267	\$6,458	\$98,594,286
Auburn	9,974	\$6,458	\$64,412,092
L/A Total	25,241	\$6,458	\$163,006,378

Sources: **Households**, U.S. Census 2010. **Household Food expenditures**, Bureau of Labor Statistics, 2011 Consumer Expenditure Survey

## Agricultural Land & Needs

	Population	Agricultural land need per capita (acres)	Total agricultural land needs	Supply of land in farms in Androscoggin County	Difference/Deficit
Lewiston	36,592	1.23	45,008	50,844	5,836
Auburn	23,055	1.23	28,358	50,844	22,486
L/A	59,647	1.23	73,366	50,844	-22,522
Androscoggin County	107,702	1.23	132,473	50,844	-81,629

Sources: **Populations**, 2010 U.S. Census. **Total agricultural land**, “Greater Philadelphia Food System Study,” Delaware Valley Regional Planning Commission, 2010. Assumes a 2,000 calorie/day diet including 9 ounces of cooked meat and eggs and 91 grams of fat. **Supply of land in farms**, USDA Census of Agriculture, 2007, [http://www.agcensus.usda.gov/Publications/2007/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/Maine/st23\\_2\\_001\\_001.pdf](http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/Maine/st23_2_001_001.pdf)

## How We Choose the Food We Eat

### Overview

Several factors may be compounded to limit the availability, accessibility, and affordability of good food for certain demographic groups. Themes that most frequently appeared throughout the CFA were that food choices are limited by financial constraints and a low rate of vehicle ownership. For many residents, especially immigrants and refugees, language, literacy, and the affordability of

culturally appropriate foods were also challenges. However, CFA participants were knowledgeable about community food resources such as EFPs, incentive programs at farmers' markets, and community gardens. Participants were also creative about stretching food dollars and working cooperatively with neighbors to share rides to grocery stores or to help each other when in need.



### How Demographics Affect Food Choices

Generally, Lewiston residents facing a single challenge, such as limited income, can still find ways to access good food. They can take a bus to a grocery store, grow vegetables in a community garden and walk to a farmers' market to use an EBT card, or cook food from scratch with relatively inexpensive ingredients. However, when the challenges become compounded accessing healthy food can become nearly impossible. The CFA found that the following demographic groups have the greatest difficulty accessing *good food*: parents

with young children, refugees and immigrants, seniors, the disabled, and adolescents/young adults.

(Information about specific, at-risk segments of the population was obtained during a series of 10 focus group discussions convened in the winter of 2010. This section is also informed by: interviews with low-income residents through student research focused on barriers to food access, availability and affordability facing residents of Lewiston housing complexes; key informant interviews; EFP site visits; and observations at farmers' markets.)

### On the Face of Hunger

"Hunger knows no race, age, religion or geographic region. It's something that plagues neighborhoods throughout the community and doesn't discriminate. The fact remains that many hard working people struggle to feed their families every day. Rising energy prices, increasing health care and basic life experiences force families and individuals to make a choice they should never have to make—whether or not to eat or skip a meal because they can't afford it. People who suffer from hunger are confronted with shame, worry and insecurity about how they are going to feed themselves or their families."

—Elk Grove Food Bank, CA



## On Challenges for Parents

“Stress has translated into performance in school . . . It translates into all these things that are about how much you are eating and when you are eating. The kids are worried about things they are not supposed to worry about.”

—Parents Focus Group Participant

“I’m very afraid. I know I don’t have enough (food) to last me, and I’m very much afraid. I will go hungry before I let my grandchildren (go hungry).”

—Interviewee

## Populations Facing the Greatest Food Security Challenges

*Each of the following sections about at-risk populations features an introductory, composite profile of individuals facing challenges on multiple fronts. These composite profiles give a human face to details about the compounding factors that influence access to good food. These profiles evolved during research, based on data and stories shared. They served as a reality check to test underlying assumptions by comparing real experiences to data-driven conclusions.*

### Parents

**Composite profile:** *A single mother living in downtown Lewiston who owns a car will be able to access healthy and affordable groceries from large supermarkets outside of the downtown. But if this same person lacks a vehicle, she might find grocery shopping far more challenging and time consuming.*

It is more difficult for residents in Lewiston to access food when they have children. Getting a child and groceries on a bus is more costly and logistically difficult. Knowledge about nutrition and food preparation is an ongoing issue. The benefits of breastfeeding and the importance of good nutrition in early childhood were brought up by CFA participants, but there are gaps in knowledge. Many parents recognize that they are feeding their

children lower quality food than they ate as children. Families with children often have a difficult time affording healthy food for the whole family. EFPs and government assistance are important resources for limited-income parents. There are also resources available for free diapers and formula, often a significant expense in grocery budgets. Nonetheless, parents sometimes skip meals or sacrifice their own nutrition in order to feed or provide for their children. Grandparents increasingly make sacrifices, sometimes placing the food needs and preferences of their grandchildren before their own. Many limited-income children get free or reduced school lunches during the school year, but the children often cannot access those meals as easily during the summer. Because of the many challenges that parents and guardians face, children are extremely vulnerable to food insecurity.



## New Mainers

**Composite profile:** *A Somali woman who is just beginning to learn English asks her son to read nutrition labels for her at the grocery store. This helps her buy healthier foods for her family. But if this same woman goes grocery shopping by herself, she would have a harder time making healthy food choices.*

The Somali and Somali Bantu population (New Mainers) in Lewiston have many assets that promote a sufficient diet. These residents are often family and community focused, with strong social networks—pooling resources, and sharing knowledge. Also, many of the Somali-Bantu are traditionally farmers, and some in the community have joined community gardens to provide fresh, inexpensive produce.

However, language and cultural barriers affect the ability of these New Mainers to access healthy and culturally appropriate food. Without English language skills it is difficult to get a job and afford good food. Additionally, non-English readers are unable to read food labels to determine nutrition information or Halal compliance. (To learn about Halal, see the sidebar at right.) In fact, even residents who are fluent in English may not know

if a food item contains pork (forbidden in the Muslim religion) because of unclear food labels. Literacy limitations also impact access to government assistance programs because of difficulty filling out forms and reading communications sent from agencies.

Because foods available in the U.S. are different from those found in these immigrants' homeland lack of good nutritional knowledge is a concern. The small Halal grocery stores in the downtown are a necessity for accessing culturally appropriate food and certain foods not available elsewhere. But these stores tend to be more expensive and, in general, have less overall variety than larger stores.

Several focus group participants also noted that New Mainers tend to have larger families, and therefore may have greater challenges when it comes to providing sufficient food for their children.

An added difficulty is that racial tension exists in Lewiston, as evidenced by CFA participants perceiving that new Mainers have access to more resources than the non-immigrant and refugee populations. This perception, whether or not it is true, has generated negative reactions in some groups and created additional unspoken barriers around a sense of safety and hospitality that may influence food access.

## What is Halal?

Halal Foods are those that are acceptable according to Islamic law. They do not include prohibited foods such as pork. Meat must come from animals slaughtered to meet Islamic requirements, and be prepared in ways consistent with Islamic law.

Labeling issues may be a challenge for residents following a Halal diet. For example, Somali children may innocently eat lollipops, which the family later discovers include gelatin that contains pork. In fact, gelatin may be found in ice cream, puddings and other common products.

## On Challenges for New Mainers

"I do not use the food pantries or the emergency food. That is because I do not know where they are available and how they are available . . . There is a Halal requirement. During the wars I didn't get enough food. I had seven kids. We only ate spinach and corn because that's what we could find. I thought that food would be abundant in the U.S., but we are still hungry."

—Somali Focus Group Participant

## Elderly

**Composite profile:** *An elderly man lives alone on a fixed income with a tight food budget. He grows vegetables in his community garden plot to keep his shopping trips to a minimum and to add fresh, vitamin-rich foods to his diet. If he were unable to have a garden, he would probably be eating fewer vegetables, getting less exercise, and perhaps living with a chronic disease.*

Many elderly residents have difficulty walking, and transportation is a frequent issue. Their diets are often determined by health problems, and doctor-recommended food may be more expensive than other choices. On the other hand, some senior focus group participants were also the most knowledgeable about cooking, and some reported enjoying getting exercise and walking to grocery stores.

More isolated individuals tend to be less food secure, and isolation is impacted by lack of social support from friends/family, difficulties with mobility, and lack of motivation to socialize. Widowed senior men are especially prone to isolation, because women often play a larger role in connecting couples socially. Residents of senior-care facilities may benefit from shared meals and activities that are part of community-building efforts. Church and community suppers, congregate dining, and soup kitchens also reduce isolation and increase food security. Participants in the Meals on Wheels program benefit from a brief wellness check provided with their meal deliveries.

Seniors experience a range of physical health issues that influence food security, including difficulty eating because of dentures, diabetic ulcers, and mobility issues. In addition, the sense of taste may be reduced because of aging or as a side effect of medication, leading to less appetite.

Living on a fixed income, as many senior citizens are, makes it difficult to afford enough food. Those reliant upon Social Security receive benefits once a month and face the challenge of budgeting until the next check comes. With money tight, many seniors turn to shop-

ping at discount stores, where processed foods (typically with low nutrition value) are abundant and cheap. When there is not enough money for food some seniors find it difficult or impossible to ask for help. As one Community Action Researcher observed: “Seniors from the era of the Great Depression are humble and proud. They don’t like to ask for services and benefits. It is humiliating for them.”

Some of Lewiston’s elderly residents grew up on farms and had to work from a young age, which sometimes prevented education. For this reason and others, illiteracy is a problem for some, meaning that food choices cannot be informed by reading labels for nutritional information and healthy ingredients. Knowledge of food preparation runs low for some seniors, making it a challenge to prepare healthy meals at home.

Additionally, some seniors suffer from unhealthy eating habits that have been established for decades. Even when people understand the health impacts of poor eating habits, it is often difficult to change those habits, especially when they have been in place for a long time. Many seniors are of French-Canadian descent and eat traditional foods high in fat, sugar, and salt—ingredients that are unhealthy when consumed in large quantities.

## Residents with Disabilities

**Composite profile:** *A man living by himself has been diagnosed with diabetes. He has the financial means and knowledge to manage his disease by buying and preparing healthy foods. However, if his knowledge and income limit him to eating peanut butter and jelly sandwiches, he will have issues managing his diabetes.*

Physical disabilities can create barriers to getting to and from stores and for carrying groceries. Smaller stores may have narrow aisles that are hard to negotiate. Residents who are disabled in other ways, such as mental health and addiction, often have even more difficulty getting the nutrition they need. One in-

terviewee described the mental health clients with whom he works: “We have gone into some units during these crisis times and found the refrigerator totally empty. People who are in crisis don’t shop. They don’t take care of themselves. They don’t take their meds.”

In addition, the disabled immigrant/refugee population faces even greater barriers accessing support resources because of language and cultural barriers.

## Adolescents and Young Adults

**Composite profile:** *A teenage girl has been kicked out of her home, and she is using the bus system to get between the soup kitchens and a homeless shelter. If there were no bus routes between these locations, she would have to walk long distances to get food, perhaps on unplowed sidewalks during the winter.*

Adolescents and young adults are at risk for joblessness, especially in economic hard times—making it difficult for many to afford healthy food. There also seems to be a gap in knowledge among young adults and adolescents about how to prepare healthy food. There are a few assistance programs to support this group of residents; St. Mary’s Nutrition Center offers cooking and nutrition classes and employment opportunities. Goodwill Industries of Northern New England’s Take-2 Program offers a full time community service learning program and New Beginnings, serving runaway and homeless youth and their families, has emergency food for teens without a fixed place to live.





## Choices depend on Affordability, Availability & Accessibility

While analyzing the CFA information, the working group found that Lewiston residents make food choices based on what they can afford, what is available, and what is accessible.

### Affordability

“The week that I pay rent is usually the week that I eat mac and cheese, and the week I don’t pay rent is the week I buy fresh produce. Rent is more important! I mean, you can get a pound of grapes for four dollars or a whole package of Dunkaroos for three.”

—Focus Group Participant

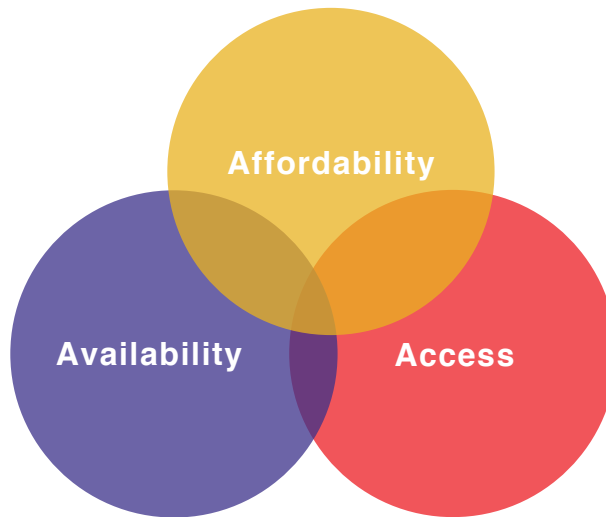
Having too little money to cover the costs of housing and food is a powerful issue in the community. Often, people have to choose between buying healthy food or paying for rent and other necessities such as medications. A limited number of CFA participants reported selling their food stamps in order to pay rent and other bills. As a result they run out of money for food. The recovery (individuals with mental health issues), homeless and transitional (individuals between homes and needing temporary shelter) focus group participants commonly go without meals, skip a meal, or eat once a day.

Many focus group participants shared the perception that healthy food is expensive. Many who are not hungry still buy less nutritious food, and some who are hungry buy less nutritious food or access food from EFPs to supplement their budgets.

CFA participants described a multitude of strategies for stretching their food budgets and reducing costs. These included shopping in bulk at the beginning of the month, effective meal planning, and the strategic use of food assistance programs and EFPs.

## Are Healthy Foods Really More Expensive?

Packaged and processed foods can be desirable choices for people with busy schedules, or who have trouble getting to a grocery store. These choices are not always less expensive than unprepared foods, although there is a perception that they cost less, and unhealthy food may have hidden costs in the way they are produced. For example, food processing and growing methods can negatively impact health and the environment.



### Availability

“(I know a mother) who has to walk home from the bus . . . and consider not only how many bags she can carry but also how much they weigh. She found that junk food, like chips, weighed less to carry home.”

—Parents Focus Group Participant

In neighborhoods with the most limited incomes, healthy food is less available than processed food—often high in corn syrup, sugar, and sodium and low in nutrients. Some focus group participants stated that the ingredients for a healthy meal couldn’t be found downtown, and must be found at larger stores outside of the downtown area. Community members without access to cars often shop in smaller, more convenient stores, with limited selections of affordable, nutritious, and culturally appropriate products. Where healthy food can be found in these places, it is sometimes of lower quality and usually more expensive. Farmers’ markets and community gardens have made healthy food (particularly produce) more available, but are limited by schedule and season, respectively.

### Accessibility

“Honestly, I shop around at the small stores because I don’t have any income, and I don’t have any other help yet because I’m not six months pregnant. So I won’t be able to pay for the bus or a cab. So I have to shop at stores close to me.”

—Parents Focus Group Participant

Healthy food can now be found in Lewiston more easily than a decade ago. However, fast food and junk food is even more accessible and prevalent in the poorest neighborhoods. Even though fast food franchises aren’t close to downtown, it is still easier for downtown residents to access fast food than healthy food. Limited transportation options (including lack of access to cars) results in many Lewiston residents shopping at convenience stores or neighborhood grocery stores that are more expensive and have a limited inventory of healthy food. With the high cost of taxi service, a significant number of groups talked about sharing a cab or riding with friends to reduce the cost and increase the convenience of bulk grocery shopping.

## Themes that Emerged During the CFA

Analysis of discussions revealed recurring themes regarding food insecurity:

- Barriers to physical access to food, including distance to stores and EFPs as well as limited transportation options
- Lack of knowledge about nutrition, cooking, and how to shop within a budget for nutritious food
- Financial barriers that make it difficult to afford enough food, and to include nutritious food in a household food budget, and the physical and emotional hardships that come with food insecurity
- Unique challenges faced by the elderly, young people, parents, and Somali residents
- Lack of assets and a feeling of powerlessness to influence situations

# CFA Self-Assessment



## Lessons Learned from the Process

The greatest lesson learned for those who choose to conduct a CFA is the importance of maximizing the engagement of the community during the process. We learned that large-scale engagement offers a richer understanding of a food system. However, we also learned that such a large engagement created logistical challenges in trying to efficiently manage the process of collecting and integrating useful data from a myriad of sources.

The engagement with our community was ambitious and had many moving parts including a combination of studies by an array of students, faculty, and Community Action Researchers (see Page 10), and events such as the Analysis Fests and the Community Food Charettes. This process enabled a variety of people to follow their interests and use their skills to become more aware of food access issues. However, this meth-

od tested our capacity, drawing attention away from moving forward with planning and implementation of projects. In retrospect, we could have alleviated some challenges and increased our capacity by first establishing a clear set of desired, specific research indicators before matching and assigning students and other researchers to the indicators. In short we would have benefited by creating a clearer research roadmap before starting the data collection process.

Finally, we also learned the importance of continuing our work on improving local and healthy food access while also conducting an assessment. In other words, work should not stall during the assessment; it should be an iterative process. During the entire CFA, pilot projects were underway. St. Mary's Nutrition Center (NC) launched a Winter Farmers' Market, a summer and fall Sunday Farmers' Market, a Market Dollar Incentive Program and a Fruit and Vegetable Prescription Program. The NC also expanded its community garden plots and garnered Food Corps support to build the



groundwork for Farm to School work in area schools. Other community successes during this time included The City of Lewiston extending the hours of the public bus and creating new weekend routes (increasing residents' ability to get to larger grocery stores at more convenient times). The Androscoggin Land Trust pushed forward on the Androscoggin Greenway Project that includes farmland and open space conservation, and Healthy Androscoggin expanded a peer-to-peer nutrition education project (Neighbor to Neighbor) for immigrant and refugee residents. This continual momentum forward emphasizes that the Good Food for Lewiston-Auburn initiative was not just focused on studying food and the patterns of the community through the CFA—the assessment was also informing and complementing efforts in real time. The Good Food Council of Lewiston-Auburn (GFCLA) will continue to advocate and initiate such changes in the future.

## Limitations

The CFA has limitations related to demographic data and sampling. While the phone survey provided important information about food access in a random sample of downtown residents, as noted earlier that survey was limited by the fact that the sample only included responses from people with landlines. Poor and minority households are more likely only to have cell phones, meaning that these households were underrepresented. To mitigate that limitation, qualitative data

were also gathered through focus groups to provide additional information from those who may have been missed in the phone survey.

The focus groups sampled downtown residents gathered by Community Action Researchers. These focus group participants were from sectors identified as having limited access to *good food*. It is not clear to what degree the findings might generalize to all residents of Lewiston who face barriers to access, or to those living in more rural areas of the city. It may be that convenience sampling yielded focus group participants who were particularly interested in food systems or in questions of food access.

The current CFA is limited in its focus on Lewiston's ethnic communities. While the CFA looked at the challenges faced by Lewiston's Somali and Somali-Bantu communities, the realities and needs regarding the food system for other ethnic populations, such as Latinos, were not addressed. As noted below, more research on additional ethnic populations is recommended.

Finally, it is important to note that this assessment does not examine the local food system in its entirety. With limited resources and a desire to focus on hunger and needs, this CFA focuses primarily on the food access portion of the food system. It does not, in a substantial way, explore other food system areas such as production, processing, distribution, policy, and economic development.

## Suggestions for Further Research

As capacity allows, we would like to continue assessing greater Lewiston-Auburn's current food system through the Good Food Council of Lewiston-Auburn and its partners. We believe information about the following would be useful in developing effective ways to increase access to *good food*.

We recommend further research on:

- Local farms, value-added businesses, and other producers;
- Where food dollars are currently spent;
- How much money is spent on food and local food in order to assess the economic development potential for localizing the food system;
- Additional ethnic communities in relation to unique challenges for accessing *good food*;
- Neighborhood stores sales of produce and other *good food*, and the challenges and opportunities for selling this food;
- Land base and local food production capacity needs (building upon work done by Androscoggin Land Trust and others);
- The capacity of large institutions (such as schools, colleges and hospitals) to provide more good and local food to their clientele; and
- Assessing processing and distribution gaps and opportunities.

## Looking at the Whole Picture

“To just deal with food in isolation helps, and I admire that because people really need to eat. But if organizations don’t approach it from a systematic point of view, we’re never going to solve it . . . So, I think it’s a much broader, community-based problem that varying groups need to come together.”

—Mary O’Brien, Grace Project

## Next Steps



While the process was complex, the purpose of this CFA was simple: to provide an information-based tool for use in improving the local food system, and as a direct result, the lives of the people of Lewiston-Auburn.

The Good Food Council of Lewiston-Auburn formed to develop solutions to the challenges identified by this CFA and community engagement process. (To learn more about the evolution of the Good Food Council of Lewiston-Auburn and the community engagement process, see Appendix A.)

The Good Food Council of Lewiston-Auburn is made up of stakeholders from diverse backgrounds and brings many perspectives to bear on the issues facing the local food system. The Council is working to facilitate solutions that will result in long-term change with broad benefit. To set a direction for subcommittees, the Council is using prioritized goals and objectives generated through

Good Food for Lewiston-Auburn’s intensive planning process. The subcommittees have begun to form action plans to effect the sorts of changes that the community wants to see.

The identified focus areas include:

- Education/healthy food education;
- Accessibility;
- Affordability;
- Social capital;
- Food assistance;
- Production; and
- Availability of healthy food.

The Council is now hard at work using the data in this CFA to build thoughtful solutions, and, as the Council continues its efforts, this CFA will serve as a baseline by which to measure progress in building a healthier food system. Going forward, through advocacy and action, the Council will be engaging the Lewiston-Auburn community and building partnerships to forge solutions to meet the challenges identified in this report.

# Conclusion

The Lewiston Community Food Assessment was designed to be a first step in building a healthier local food system. The goal, from the outset, was to gain a better understanding of where our food comes from, how we make decisions, what food-related resources are available and the systemic and individual challenges of securing access to *good food*.

Many individuals and organizations came together to complete this assessment, which we believe has resulted in valuable information we can use to guide next steps. This assessment serves as a tool for finding solutions to hunger and problematic food system issues. In particular, this report and the process behind it:

- has identified challenges (demographic, economic, cultural and geographic) that are limiting access to *good food*;
- has captured actual experiences and stories (via qualitative data) from residents facing daily challenges in accessing healthy food;
- has increased food system awareness thanks to a high level of local engagement through data collection, focus groups and community meetings;
- will function as a benchmark upon which to gauge progress; and
- will provide a strong base for conducting future research.

What emerged is a clear picture of the food resources available to area residents and the challenges faced by many in our community.

Through research we found that much work is currently being done to alleviate hunger in Lewiston-Auburn. We catalogued the many efforts to provide emergency food for those in need. We looked at government and community-based aid and at efforts to increase local food production, such as help for family farms. We shared information about nutrition education outreach and social programs for seniors and others. And, finally, through stories we learned how many people are helping each other, within families, ethnic populations, support groups, neighborhoods and more.



However, our research also indicates many challenges. We identified five demographic groups as being most at risk of food insecurity: the elderly; disabled people; adolescents/young adults; parents/children; and Somali/Somali-Bantu residents, and we found that poverty goes hand in hand with food insecurity, which goes hand in hand with health issues.

Among the most serious challenges identified were:

- Lack of access to *good food* because of geographic isolation, often due to a lack of, or limits to, transportation;
- Lack of affordable food and limited choices for people using downtown stores;
- Cultural obstacles for obtaining appropriate food;
- Limited efficacy of government programs designed to provide healthy food. In some cases, the small size of benefits offer inadequate impact on daily nutri-

tion needs of at-risk recipients;

- Lack of connectivity and collaboration between organizations working toward similar goals; and
- Lack of education about food preparation and selection, impacting healthy eating habits.

Additionally, we found that challenges can be compounded to create complex, debilitating situations.

It is important to understand that these challenges, and others, do not exist in a vacuum. They exist in a complete food system, a complex entity including economic, food tradition, health and environmental factors. Tackling these issues requires a systemic understanding of the many issues and an investment in long-term change.

This CFA is an early step toward understanding. In the end, this assessment is a tool for everyone who wants to make Lewiston-Auburn a better place to live.

# Related Research & Resources

## Related Research

### Local Food Access for Limited-

**Income People:** A thesis project by Bates student Karen Ullmann investigated direct producer-to-consumer marketing, studying the feasibility of increasing local food access for limited income communities in Lewiston and Auburn.<sup>36</sup> Ullman found that direct producer-to-consumer marketing (e.g. farmers' markets and community supported agriculture) is a growing industry that is particularly active in Maine and is bolstering the local food economy, but which is predominately supported by middle- to upper-income consumers who have the time, energy and resources to access it. The research project concludes that, "Barriers to greater adoption of local foods include the fact that local foods are seen as too expensive and observations that fewer people cook, shop seasonally and attend local markets due to inconvenience... Low-income community members are particularly challenged, because affordability drives their access to local foods."

**Urban Farm Projects:** A fall 2009 Environmental Studies capstone research project by Bates students<sup>37</sup> focused on the benefits that urban farms hold for areas like Lewiston-Auburn: enhancing sense of community, producing food, offering opportunities for education, job skill-building, employment, and community self-reliance. A 2010 master's thesis by Southern New

Hampshire University student Annie Doran<sup>38</sup> pointed to the same benefits, and to the capacity and need of the Lewiston-Auburn area to work toward creating an urban farm. Urban farms are areas of agricultural production in or around urban locations. Often established in vacant and run-down lots, urban farms are a source of community revitalization that increase access to healthy produce. Urban farms vary in size and management style, but many offer CSA shares and participate in farmers' markets. Many programs also highlight youth job and leadership development, with the aim of reconnecting community members with the land. Doran's thesis provides recommendations for moving forward with an urban farm, along with a logic model that can serve as a foundation for planning work for this project.

**Children:** It is common for discussions of food insecurity to include children amongst the most vulnerable demographic groups. According to USDA figures, 8.6 million children lived in food insecure households in 2011. The challenges of childhood hunger in Lewiston were captured by a 2010 research report by Bates students.<sup>39</sup> These children suffer from poor overall physical health and are more likely to experience mental and social problems as well. Undernourished children are less prepared to learn and more likely to be disruptive at school. This lost learning potential translates into lost productivity and earnings potential later in life. The far-reaching implications of child hunger should prompt concern, careful deliberation, and meaningful action towards solving this problem.

**Refugees/Immigrants:** Research conducted by Bates students in an

Environmental Studies capstone course yielded five valuable suggestions for dealing with the unique challenges faced by Lewiston's population of Somali immigrants.<sup>40</sup> Those ideas are: 1) conduct an analysis of goals and strategies of programs currently available to immigrants; 2) determine the knowledge gaps of immigrant farmers and determine what they want to learn and how they want to learn it; 3) conduct "learning tours" to provide information about stores, markets, gardens, health care services, etc.; 4) address the literacy barrier that obstructs access to food by increasing radio and television broadcasts concerning food in Somali; 5) establish ties between service providers so that programmatic offerings can be strengthened and made more comprehensive.

**Healthy Corner Stores:** A research project by Bates students in the fall of 2010 Community-Engaged Research in Environmental Studies class explored healthy corner store initiatives and programs that have developed throughout the country in an effort to increase healthy food options in the small neighborhood stores that are prevalent in urban areas.<sup>41</sup> Targeting corner stores is often more viable in urban areas because of the ability to build on existing resources and encourage community engagement. There is rarely enough land in downtown locations to build a new grocery store, so community organizations develop programs and interventions to improve the selection of healthy foods in corner stores. Efforts include improving or installing refrigeration units, sourcing a variety of produce items, and creating effective and educational displays for healthy products.

<sup>36</sup> Ullman, 2012

<sup>37</sup> Friedman, et al, 2009

<sup>38</sup> Doran 2010

<sup>39</sup> Agins, et al, 2010

<sup>40</sup> Goulding, et al, 2010

<sup>41</sup> Dunn, Ross and Russell, 2010

**Elderly:** In 2010 Bates students produced a report on how food security impacts Lewiston’s elderly.<sup>42</sup> Their research identified the five critical components of food insecurity impacting this population that were mentioned earlier in this report: isolation, physical decline, bad habits, economic stress and level of education. Programs that address hunger for the elderly were profiled, and suggestions were given to reduce the pronounced threat that hunger poses for the elderly.

## Resources

**Healthy Corner Stores Network:** A 2007 national collaboration of The Food Trust, Public Health Law & Policy, the Community Food Security Coalition, and Urbane Development resulted in the creation of the Healthy Corner Store Network (HCSN). This network “brings together community members, local government staff, nonprofits, funders, and others across the country to share best practices and lessons learned, and to develop effective approaches to common challenges” regarding healthy corner store development and improvement. The HCSN website offers resources such as toolkits, surveys, and academic publications, while frequent webinars and conference calls allow for more direct and personal communication around project execution. [www.healthycornerstores.org](http://www.healthycornerstores.org)

**The Food Trust:** The Trust, a Philadelphia-based nonprofit, works to improve healthy food access for

all through collaborative work with neighborhoods, schools, grocers, farmers, and policymakers. Example projects include nutrition education, improving healthy food access in neighborhood stores, establishing farmers’ markets, and financing supermarkets in underserved areas. [www.thefoodtrust.org/](http://www.thefoodtrust.org/)

### **Delaware Valley Regional Planning**

**Commission:** Serving Greater Philadelphia, this agency works across nine counties and two states and in 2010 published the *Greater Philadelphia Food Systems Study*, an exemplary regional community food assessment examining the foodshed in a 100-mile radius around Philadelphia. This study informed the multi-stakeholder process that produced *Eating Here: Greater Philadelphia’s Food System Plan*, which includes 52 recommendations for a more sustainable food system. [www.dvrpc.org/food/](http://www.dvrpc.org/food/).

### **The Food Security Learning Center:**

This online information clearinghouse offers an incredible wealth of resources grouped by topic (e.g. U.S. hunger, urban agriculture, food policy councils, food and the farm bill, etc). The group carries forward the work of the recently dissolved Community Food Security Coalition by hosting the publications and downloadable resources of the Coalition. [www.whyhunger.org/fslc](http://www.whyhunger.org/fslc).

### **Food Policy Councils/Food Councils:**

The Good Food Council of Lewiston-Auburn is not alone in its work—it is part of a growing effort across

the state and nation to look at a community’s food system and determine ways to strengthen it. Once a rarity, food councils are increasing in popularity and number. There are now 193 in North America, according to a recent census conducted by the Community Food Security Coalition. The majority of these are independent organizations focused on effecting changes in food policy and supporting coordination of food, nutrition and agricultural initiatives. Food councils bring together representatives from diverse backgrounds to examine how a food system is working and to create strategies to improve it. Additional information about food councils can be found at: <http://www.whyhunger.org/overlay?wf=891&hf=648&id=111&topicId=37&fromValue=1>

### **The Maine Network of Community**

**Food Councils:** This organization exists to foster collaboration and resource sharing between the state’s many emerging food councils. <https://sites.google.com/site/mainecommunityfoodnetwork/>

### **Mark Winne Associates:**

Mark Winne, a recognized leader in food systems work, published a 2012 guidebook to assist with forming and operating a food policy council. The document can be found at: <http://www.markwinne.com/wp-content/uploads/2012/09/FPC-manual.pdf>

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<sup>42</sup> Antell, Bourne and Shahinyan 2010

# Appendix A: The Process of Engagement

## Good Food Council Development Team

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## Good Food Council of Lewiston-Auburn

### 2013–2014 members:

Ginny Andrews, Western Maine Community Action  
 Karen Bolduc, Food Joy/South Auburn Organic Farm  
 Christine Bosse, Bangor Savings Bank  
 Deborah Morrill Burd, St. Mary's Health System  
 Erin Cinelli, Farmers' Gate Market \*  
 Phil Doucette, Austin Associates  
 Belinda Gerry, Auburn City Council  
 Erin Guay, Healthy Androscoggin \*  
 Emily Horton, Healthy Androscoggin  
 Erica Madore, Training for Health, LLC  
 David Moyer, SeniorsPlus  
 Sitey Muktar, Lewiston High School Student  
 Camille Parrish, Bates College  
 Nancy Perry, Good Shepherd Food Bank  
 Leelaine Picker, Retired  
 Mia Poliquin Pross, Attorney  
 Bob Thompson, Androscoggin Valley Council of Governments  
 Daniel Wallace, CEI  
 Kirsten Walter, St. Mary's Nutrition Center

\* – 2013

## Council Vision

Lewiston-Auburn will become a community that is distinguished by a thriving food system that supports healthy people, resilient neighborhoods and a vibrant local economy. We envision a community bustling with people sharing *good food* that is healthy, affordable, and accessible, and that honors the enduring values, rich cultural heritage and diverse needs of our population.

Creation of this assessment has gone hand in hand with participatory outreach with those involved and impacted by food systems in Lewiston-Auburn. Gatherings and charrettes have been a valuable part of a process in which the community has helped to inform this report, which is now being used to improve the local food system.

The following chronicles the evolution of this CFA and GFLA's community engagement activities:

**Good Food for Lewiston (GFL) Workgroup (2006):** The initiative was first called "Local Food for Lewiston." Informal conversations between the St. Mary's Nutrition Center and the Downtown Education Collaborative, Harvard Center at Bates College and faculty from the University of Southern Maine began in late 2006. Together, the partners began to plan the design of the assessment and submitted a proposal for the federal Community Food Projects program in the spring of 2007. A research pilot was conducted in the summer of 2008, and the CFA research officially launched in the 2009–10 academic year.

**Analysis Fests and Community Food Charrette (Spring 2010):** Following completion of the first phase of research, GFL conducted sessions dubbed "Analysis Fests" to distill and organize the output of the CFA research. These events were attended by workgroup members convened by GFL, including Community Action Researchers, faculty and students. These sessions prepared GFL to host a Community Food Charrette—an intensive planning session—at the Lewiston Public Library. A gathering of 120 community members representing a diversity of voices came together to learn about the CFA process and to give feedback on the information gathered. The input from the charrette guided the research agenda for the 2010–11 academic year, during which the second and final, major phase of research was conducted.

**Good Food for Lewiston-Auburn (Summer 2011):** As the majority of the research was completed, the workgroup turned its attention to designing a community planning process that would build upon the CFA key findings and themes. This quickly exposed the need to expand the geographic focus to Lewiston-Auburn for the planning process; any meaningful conversation about the vision and plans for our community's food system would need to include the entire Lewiston-Auburn area.

**Good Food Gatherings (Fall/Winter 2011/2012):** The informal Good Food

Gatherings brought small groups of people together to eat *good food*, create and share a vision for a healthy food system in Lewiston, and identify solutions needed to get there. About 200 people attended, representing many sectors of the food system.

**Analysis Fests (Spring 2012):** A second round of two Analysis Fest were conducted to organize the CFA findings and the priorities voiced during the Good Food Gatherings. Participants grouped the numerous ideas emerging from the CFA and Good Food Gatherings into seven goal areas, broad topics that are supported by more specific goals and objectives.

The Goal Areas include:

- Education/healthy food education,
- Accessibility,
- Affordability,
- Social capital,
- Food assistance,
- Production, and
- Availability of healthy food.

**Food Action Charrette (May 2012):** People from diverse sectors touching on Lewiston-Auburn's food system again filled the Lewiston Public Library for a Food Action Charrette, which involved representatives from municipal government, educational institutions, hospitals, local business, the Somali community, downtown residents, and other groups. At that event, breakout groups used the goal areas to develop objectives and action plans, identifying what would be done, who could lead the efforts, and who potential partners are.

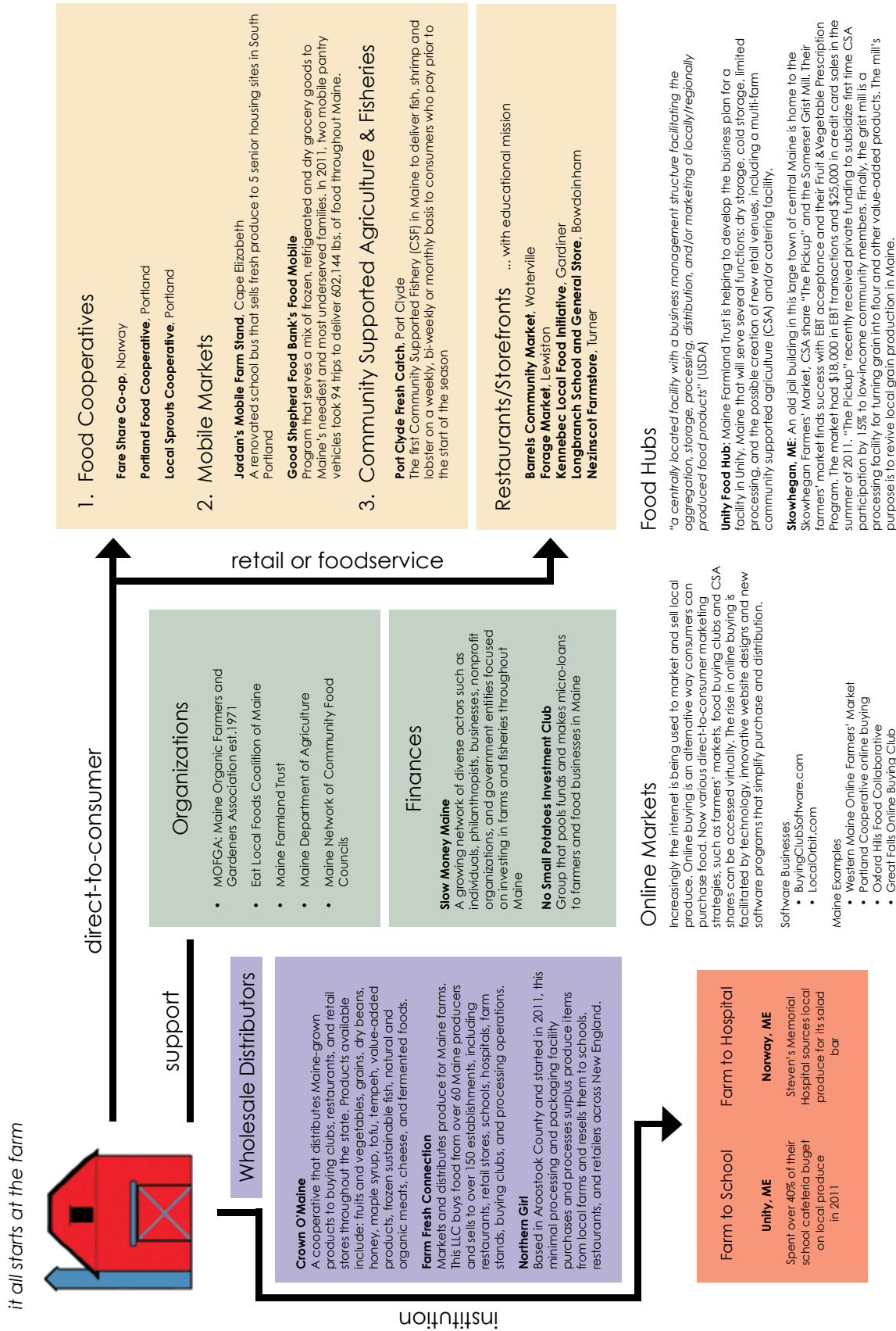
(The work done at the event was understood not to be a mandate for the Good Food Council of Lewiston-Auburn but an expression of the community's priorities and a suggestion for how to begin to address the Council's work. The output of the event has been captured in a summary report available online at <http://goodfood4la.org/resources/helpful-documents/>.)

**Good Food Council of Lewiston-Auburn (June 2012–present):** Convened to create solutions to the challenges identified by the CFA and community engagement process, the Good Food Council is made up of stakeholders from diverse backgrounds. By bringing many perspectives to bear on the issues facing the local food system, the council hopes to facilitate solutions that will result in long-term change with broad benefit. The group used the prioritized goals and objectives from the Food Action Charrette to set a direction for subcommittees, which have begun to form action plans to effect the sorts of changes that the community wants to see.



# Appendix B: Maine Models

## MAINE MODELS ... STATEWIDE FOOD WORK



Created for the 2012 Charette by Karen Ullman, a Bates senior

# Bibliography

- Agin, Adam, Erin Bourgault, Rebecca Dugan, and Robert Little. "Demographic Data and Stories of Food for Families with Children in Hillview and River Valley Village Housing Communities." Report, Lewiston: Unpublished, 2010.
- American Public Health Association. *Advocacy & Policy—Policy Statements*. November 6, 2007. <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1361>. Accessed September 1, 2013.
- Antell, Edmund, Chloe Bourne, and Gohar Shahinyan. "Elderly Food Insecurity in Lewiston, Maine." Report, Lewiston: Unpublished, 2010.
- Beverly SG. "Material hardship in the United States: Evidence from the survey of income and program participation." *Soc Work Res*. 2001; 25(3):143–151.
- Block, J., R. Scribner, and K. Desalvo. "Fast food, race/ethnicity, and income: A geographic analysis." *American Journal of Preventative Medicine*, 2004: 211–217.
- Brayley, Dorothy, and Kimberly Clark. "The 'DoD Fresh' Program: Understanding and Adapting a System to Respond to the Demand for Locally-Grown Foods in New England." Report, Kids First Rhode Island, Farm to Institution in New England, 2012.
- Burgis, Chase, Cohen, and Fahey. "Emergency Food Providers Report." Report, Lewiston: Unpublished, 2009.
- Carlson, A., M. Lino, W-Y. Juan, K. Hanson, and P.P. Basiotis. "Thrifty Food Plan, 2006." Report, Center for Nutrition Policy and Promotion, U.S. Department of Agriculture, Washington, D.C. 2007.
- Committee to Review the WIC Food Packages. "WIC Food Packages: Time for a Change." Report, Institute of Medicine, Food and Nutrition Board, Washington, D.C.: National Academy of Sciences, 2005.
- Cook, J.T., Frank D.A., Berkowitz C., Black M.M., Casey P.H., Cutts D.B., Meyers A.F., Zaldivar N., Skalicky A., Levenson S, Heeren T, Nord M. "Food insecurity is associated with adverse health outcomes among human infants and toddlers." *Journal of Nutrition*, 2004: 1432–1438.
- Cullen, Sarah, Judson Peck, and Rebecca Waldo. "The Role of the Citylink Transportation System Related to Grocery Access and Food Insecurity in Lewiston, Maine." Report, Lewiston: Unpublished, 2010.
- Dharod, J., J. Croom, and C. Sady. "Food Insecurity and its relationship to dietary intake and body weight among Somali refugee women in the U.S." *Journal of Nutrition Education and Behavior*, 2013: 47–53.
- Dokus, Tess, Aly Fiorillo, Kyle Hutton, and Myles Walker. "Food Production & Capacity in Androscoggin County." Report, Lewiston: Unpublished, 2009.
- Doran, Annie. "Returning to Our Roots: Addressing Food Insecurity in Lewiston-Auburn, Maine with an Urban Farm Project. 2010." Southern New Hampshire University. Master's thesis. Unpublished.
- Dugan, Rebecca. "Neighborhood Stores as Food Access Points: Lewiston Consumer Preferences and Challenges." Bachelor's Thesis, Lewiston: Unpublished, 2011.
- Dunn, Brigid, Zach Ross, and Emily Russell. "Addressing Food Insecurity through Corner Stores: Developing a Foundation for Lewiston, Maine." Report, Lewiston: Unpublished, 2010.
- Food and Agriculture Organization of the United Nations. *Rome Declaration on World Food Security and World Food Summit Plan of Action*. Declaration, Rome: Food and Agriculture Organization, 1996.
- Friedman, Charlotte, Robert Friedman, Molly Mylius, and Hannah Roebuck. "The Community Farm: Analysis of Farm Models Throughout the Nation." Report, Lewiston: Unpublished, 2009.
- Good Shepherd Food Bank. *Mainers Feeding Mainers*. September 24, 2013. <http://gsfb.org/how-we-help/programs/mainers-feeding-mainers/>. Accessed September 24, 2013.
- Goulding, Doug, Lily Joslin, Molly Newton, and Gordon Webb. "What Does It Take: Making Nutritious Food Accessible to Immigrants and Refugees Living in Lewiston, Maine." Report, Lewiston: Unpublished, 2010.
- Harris, David, AbouEl-Makarim Aboueissa, Kirsten Walter, and Matthew Bampton. "Predictors of Food Insecurity in Lewiston: A Community Analysis." *Journal of Hunger and Environmental Nutrition*, Forthcoming.
- Harris, D. E., Vazquez Jacobus, M., Ewing, H., Pieck, S., Kane, E., and Whatley Blum, J. (2010) "Challenges and opportunities: Characterization of the built food environment for single-parent households in an older industrial city—Lewiston, Maine." International Geographical Union conference on Local Food Systems in Old Industrial Regions: Challenges and Opportunities. Toledo, Ohio August 3–7, 2010. (Refereed).
- Harris, D.E., Vazquez Jacobus, M., Ewing, H.A., Pieck, S. K., Kane, E., and Blum, J.W.. "Local food, the built environment and single-parent households" in N. Reid, J.D. Gatrell, and P. Ross, eds. *Food Systems in Old Industrial Regions: Spatial Context and Local Practices*, Surrey, England: Ashgate Publishing Inc., 2012.
- Kids County Data Center. <http://datacenter.kidscount.org/data/tables/53-single-parent-families-with-related-children-that-are-below-poverty?loc=1&loc=2#ranking/2/any/true/868/any/342>. Accessed January 6, 2014.
- Maine Department of Agriculture. *Senior FarmShare Participating Farmers*. May 15, 2013. <http://www.getrealmaine.com/index.cfm/fuseaction/home.showpage/pageID/82/index.htm>. Accessed September 1, 2013.
- Maine Department of Education. "ED534 - Maine Department of Education - % Free and Reduced School Lunch Report." School Food Service Reimbursement System." October 31, 2012. [https://portal.maine.gov/sfsr/sfsrdev.ED534.ED534\\_report](https://portal.maine.gov/sfsr/sfsrdev.ED534.ED534_report). Accessed September 22, 2013.
- Mayor's Downtown Renaissance Task Force. *Downtown Urban Center Master Plan*.
- Master Plan, Lewiston: City of Lewiston, 1999.
- Northeast Organic Farming Federation of Vermont. *CSAs: Community Supported Agriculture*. <http://nofavt.org/market-organic-food/community-supported-agriculture>. Accessed September 1, 2013.
- Richardson, John. "Navigating the poverty line." *Portland Press Herald*. Portland: November 11, 2011.
- Seligman, H.K., A.B. Bindman, E. Vittinghoff, A.M. Kanaya, and M.B. Kushel. "Food insecurity is associated with diabetes mellitus: Results from the National Health Examination and Nutrition Examination Survey (NHANES) 1999–2002." *Journal of General Internal Medicine*, 2007: 1018–1023.
- Sharkey, Joseph, and Scott Horel. "Characteristics of Potential Spatial Access to a Variety of Fruits and Vegetables in a Large Rural Area. Understanding the Economic Concepts and Characteristics of Food Access." Unpublished, 2009.
- Treuhaft, S., and A. Karpyn. "The Grocery Gap: Who Has Access to Healthy Food and Why it Matters." Report, Oakland and Philadelphia: PolicyLink and The Food Trust, 2010.
- U.S. Census Bureau. *Community Facts for Lewiston city, Maine*. January 1, 2010. [http://factfinder2.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml). Accessed September 19, 2013.
- . DP02: Selected Social Characteristics in the United States, 2009–2011 American Community Survey 3-Year Estimates. October 25, 2012. [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_11\\_3YR\\_DP02&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_DP02&prodType=table). Accessed September 19, 2013.
- . DP04: Selected Housing Characteristics, 2007–2011 American Community Survey 5-Year Estimates. December 6, 2012. [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_11\\_5YR\\_DP04&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5YR_DP04&prodType=table). Accessed September 19, 2013.
- . DP04: Selected Housing Characteristics, 2009–2011 American Community Survey 3-Year Estimates. October 25, 2012. [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_11\\_3YR\\_DP04&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_DP04&prodType=table). Accessed September 19, 2013.
- . S1701: Poverty Status In The Past 12 Months, 2009–2011 American Community Survey 3-Year Estimates. October 25, 2012. [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_11\\_3YR\\_S1701&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_3YR_S1701&prodType=table). Accessed September 19, 2013.
- U.S. Department of Agriculture. "2007 Census of Agriculture—County Profile, Androscoggin County." USDA Census of Agriculture. February 4, 2009. [http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/County\\_Profiles/Maine/cp23001.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Maine/cp23001.pdf). (accessed September 1, 2013).
- . "Farmers by Age." 2007 Census of Agriculture. February 4, 2009. [http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/Fact\\_Sheets/Demographics/farmer\\_age.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Fact_Sheets/Demographics/farmer_age.pdf). Accessed September 10, 2013.
- . "Historical Highlights: 2007 and Earlier Census Years." 2007 Census of Agriculture. February 4, 2009. [http://www.agcensus.usda.gov/Publications/2007/Full\\_Report/Volume\\_1,\\_Chapter\\_1\\_State\\_Level/Maine/st23\\_1\\_001\\_001.pdf](http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/Maine/st23_1_001_001.pdf). Accessed September 10, 2013.
- . Supplemental Nutrition Assistance Program: Average Monthly Benefit Per Person. September 6, 2013. [http://www.fns.usda.gov/pd/18SNAPavg\\$PP.htm](http://www.fns.usda.gov/pd/18SNAPavg$PP.htm). Accessed September 19, 2013.
- U.S. Department of Agriculture, Food and Nutrition Service. "National School Lunch Program Fact Sheet." National School Lunch Program. August 6, 2013. <http://www.fns.usda.gov/sites/default/files/NSLPFactSheet.pdf>. Accessed September 12, 2013.
- Ullman, Karen. *Direct Producer-to-Consumer Marketing: A Feasibility Study for Increasing Local Food Access to Limited Income Communities in Lewiston-Auburn, Maine*. Bachelor's Thesis, Lewiston: Unpublished, 2012.
- Union of Concerned Scientists. *Market Forces: Creating Jobs through Public Investment of Local and Regional Food Systems*. Report, Cambridge: UCS Publications, 2011.
- What's On Your Plate. Web video. Directed by Andrea Grayson. Performed by University of Vermont. 2012.





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*Building healthy communities through good food*