



Central Vermont Food System Assessment

Farmprogress.com

Central Vermont Regional Planning Commission

This Assessment was produced under a grant provided by the State of Vermont, Department of Health, Division of Health Promotion & Disease Prevention.

Central Vermont Regional
Planning Commission

29 Main Street
Suite 4
Montpelier, VT 05602

P: 802-229-0389

F: 802-223-1977

Fall 2012

Table of Contents

Abstract	4
Central Vermont Food Systems Planning and Development.....	5
Central Vermont Region	6
Profile of Demographic &Socioeconomic Characteristics	6
Demographic Characteristics	6
Socioeconomic Characteristics	7
Community Specific Demographic Summary.....	8
Land Use Regulations.....	10
Health Characteristics	11
Adults	11
Children.....	13
Health Disparities	16
Regional Food System Profile	20
Producers	20
Processors	21
Distribution	22
Storage and Aggregation	23
Food Security and Vulnerable Populations.....	24
Local Food System Economics	30
Economic Drivers: Food Purchasing, Nutritional Requirements and Consumption	32
Community Based Organizations.....	34
Non-profit Organizations	34
Waste Management	35
Waste and Nutrient Management.....	35
Identified Gaps & Next Steps	36
Gaps and Challenges	36
Next Steps	37
Appendix A: Glossary	39
Appendix B: Draft Work Plan	42
Potential Work Plan Outline for the Creation of a Regional Food Systems Plan.....	42
Appendix C: Survey	45

Survey Target Respondents	45
Survey Questions	46
Survey Results	51
Appendix D: Food Asset Inventory Data	61
Community Supported Agriculture (CSA)	61
Market Opportunities	62
Farmers Markets and Co-Ops	63
Community Gardens	64
School Gardens	65
Composting	66
Appendix E: Maps	67
Central Vermont Food Producers	67
Central Vermont Food Processors & Distributors Including Direct Sales	68
Central Vermont Food Storage	69
Central Vermont Food Consumption.....	70
Central Vermont Food Access Sites	71

Abstract

In the fall of 2011, the Central Vermont Regional Planning Commission (CVRPC) was awarded a Building Healthy Communities grant through the Vermont Department of Health, Division of Health Promotion & Disease Prevention. The purpose of this grant was to identify community based policy and environmental strategies that support the Fit and Healthy Vermonters 2020 program goals of reducing the proportion of adults, children, and adolescents that are obese. CVRPC completed research, information gathering and gathering public input to guide the creation of a central repository of information. The intent was to ensure greater distribution, more frequent updating of information and facilitation and networking among local and state food systems groups to increase access to healthy local food. This effort will help establish baseline data in order to begin work on a regional food system plan-essentially a blueprint for promoting local food, sustaining agricultural economic development, and increasing the availability of fresh, nutritional food.

Central Vermont Food Systems Planning and Development

Like air, water, and shelter, food is essential for life and plays a central role in our health, economy, and culture. The food system (the production, transformation, distribution, access, and consumption of food and the associated waste) greatly impacts the overall public, environmental, and economic health of a community. The presence or absence of a local and regional functioning food system greatly influences the availability of nutritious, affordable food in a community. Planners have the potential to play a significant role in community food systems planning which is a collaborative planning process of developing and implementing local and regional land use, economic development, public health, and environmental goals, programs and policies that contribute to the sustainability and effectiveness of local food systems. The American Planning Association recognizes the role many planners have already taken in shaping the local food system:

“Current planning activities already affect the food system and its links with communities and regions. For example, land use planners may use growth management strategies to preserve farm and ranch land, or recommend commercial districts where restaurants and grocery stores are located, or suggest policies to encourage community gardens and other ways of growing food in communities. Economic development planners may support the revitalization of main streets with traditional mom-and-pop grocery stores, or devise strategies to attract food processing plants to industrial zones. Transportation planners may create transit routes connecting low-income neighborhoods with supermarkets, and environmental planners may provide guidance to farmers to avoid adverse impacts on lakes and rivers.”¹

Food systems planning and agricultural development has traditionally been in the domain of private business, or at the national level, through food and agriculture policy. A regional food system can be defined as a system that comprises the interdependent and linked activities that result in the production and exchange of food.² Food systems planning is an emerging area of interest about which local community groups and organizations are realizing the benefits.

Few Vermont municipal plans and fewer regional plans address this issue, but its need has been recognized at the State level through the Farm to Plate Initiative. One of the few states in the nation with a statewide strategic plan for food systems and agricultural development, the Farm to Plate Strategic Plan was created in 2011 in order to lay the foundation to implement the steps necessary to lead the state towards increased production and consumption of local food with increased food security and resiliency. On the community level, local groups such as food systems councils have been organizing around these issues throughout the past decade.

Food system planning is not a required element by State Statute for inclusion in municipal and regional plans; however, it is as integral to human, economic and environmental health, and as important as other systems for which we plan. In the fall of 2011 CVRPC was awarded a Building Healthy

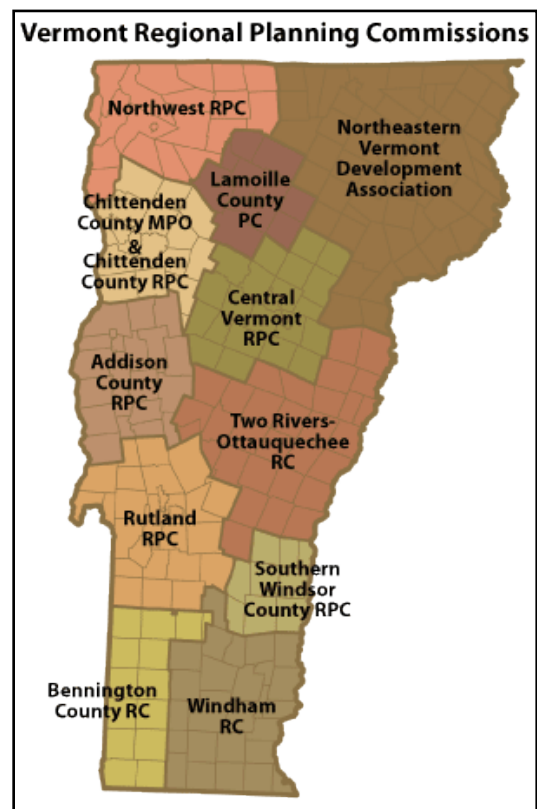
¹ American Planning Association, *Policy Guide on Community and Regional Food Planning*, <http://www.planning.org/policy/guides/adopted/food.htm>

²Branden Born & Mark Purcell, “Avoiding the Local Trap: Scale and Food Systems Planning Research,” *Journal of Planning Education and Research* 26:2 (December 2006): 195-207

Communities grant through the Vermont Department of Health. The purpose of this grant was to identify community based policy and environmental strategies that support the Fit and Healthy Vermonters 2020 program goals of reducing the proportion of adults, children, and adolescents that are obese. CVRPC conducted research, information gathering and gathering public input to guide the creation of a central repository of information. The intent is to ensure greater distribution, more frequent updating of information and facilitation and networking among local and state food systems groups to increase access to healthy local food. This effort will help establish baseline data in order to begin work on a regional food systems plan.

Central Vermont Region

All references to Central Vermont in this report refer to the region as defined by the 23 communities that are members of the Central Vermont Regional Planning Commission (CVRPC), unless otherwise stated. It is important to note that this geographical definition is not only based on the RPC's jurisdiction, but it also based on the natural boundaries that relate to natural resources and food systems-while it does not specifically encompass a singular watershed or food shed, it is closer to these types of bioregions that other selections of Central Vermont towns. It shares the majority of the upper Winooski River Watershed and is surrounded on the west and east by mountain ranges that separate this community significantly from other regions. By this definition, the Central Vermont region includes: Barre City; Barre Town; Berlin; Cabot; Calais; Duxbury; East Montpelier; Fayston; Marshfield; Middlesex; City of Montpelier; Moretown; Northfield; Orange; Plainfield; Roxbury; Waitsfield; Warren; Washington; Waterbury; Williamstown; Woodbury; and Worcester.



Profile of Demographic & Socioeconomic Characteristics

Demographic Characteristics

As of 2010, the Central Vermont population was approximately 65,034, or approximately 10 percent of the entire Vermont population.³ Reflecting state-wide trends, the Region is characterized by a graying population, with the largest age group found between 50-54 years and the greatest household

³ 2010 United State Census, <http://2010.census.gov/2010census/>

population growth in the past decade found in the 55-59 age groups.⁴ In 2010, the median age in Washington County was 42.3, which is five years older than the national average of 37.2.⁵ When considering the demographic data in relation to the food system and food security, it is important to acknowledge that different age groups will have different nutritional requirements, which will inform how much food will need to be produced to support the residents of Central Vermont. Considering that as a whole, the state of Vermont is a graying state, Central Vermont reflects such demographic trends. Demographics also affect production capabilities. As of 2007, the average age of the principal farm operator in Washington County was 58.6.⁶ An aging farm production population also signals the need to attract more young farmers through a diversity of mechanisms such as educational training and financial incentives.

Historical Population of Washington County, Vermont		
Census Year	Population	% +/-
1850	24,654	4.9%
1860	27,612	12.0%
1870	26,520	-4.0%
1880	25,404	-4.2%
1890	29,606	16.5%
1900	36,607	23.6%
1910	41,702	13.9%
1920	38,921	-6.7%
1930	41,733	7.2%
1940	41,546	-0.4%
1950	42,870	3.2%
1960	42,860	0%
1970	47,659	11.2%
1980	52,393	9.9%
1990	54,928	4.8%
2000	58,039	5.7%
2010	59,534	2.6%

The average household size in 2010 was 2.28 people, down from 2.47 people in 2000 and 2.64 people in 1990. The average household size is projected to continue to decrease, with the Region predicted to experience substantial changes in the growth and decline of certain age groups over the next decade. Most notably, householders between the ages of 25-44 are expected to decline while most of the growth will occur in householders between the ages 45-69. There will also be a fairly significant increase in the number of householders over 80 years old.

As of the 2010 Census, the Region is comprised of approximately 96 percent white residents, 0.7 percent African American, 0.3 Native American, 0.8 Asian, and the remaining identified as other. Households with children under the age of 18 makes up a small percentage of the population at 26 percent, with 6 percent of those households comprised of single female-head of household.

Socioeconomic Characteristics

The Region is rural in nature with approximately 80 percent of Central Vermont's inhabitants living outside of the core urban areas, and roughly nine percent of the population living below the federal poverty line.⁷ As of 2010, the

⁴ Vermont Department of Housing and Community Affairs, http://accd.vermont.gov/strong_communities/

⁵ 2010 United States Census, <http://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>

⁶ 2007 Census of Agriculture, *Washington County Profile*, http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Vermont/cp50023.pdf

⁷ Green Mountain United Way, *Community Review: Caledonia, Essex, Orange, Orleans, & Washington Counties 2007-2008*, www.gmunitedway.org/content/pdf/CommunityAssessment.pdf

median family adjusted gross income was \$60,726.⁸ With an unemployment rate at approximately 6 percent, approximately 2,100 residents are unemployed.⁹

A percentage of Central Vermont residents may experience difficulty accessing food. Although the Green Mountain Transit Association (GMTA) operates multiple bus routes within the region, the routes fail to reach (or run less frequently around) areas located away from major routes (RT 2, RT100, I89) and the urban cores of Montpelier and Barre City. Within Washington and Orange Counties, the percentage of low income residents living greater than one mile from a grocery store is 17 to 23 percent.¹⁰ The Region suffers from the highest price ratios of healthy foods to “junk” foods in the state.¹¹

In Washington County, 43.8 percent of renters and 32.2 percent of owners pay more than 30 percent of their income towards housing, which does not include the high cost of utilities during the cold winter season.¹² As Vermont has the tenth highest cost of living in the United States, the high costs of living in rural Central Vermont coupled with low wages leaves little extra income to purchase locally grown fresh foods.

Households, By Age of Householder, 2000-2010 (Washington County)					
Age Group	2000	2005	2010	%Change (2000-2010)	Change in # Households (2000-2010)
15-24	1,040	1,116	1,158	11%	118
25-34	3,514	3,402	3,367	-4%	(147)
35-44	5,402	5,315	5,225	-3%	(177)
45-54	5,593	6,083	6,414	15%	821
55-59	1,855	2,230	2,509	35%	654
60-64	1,432	1,634	1,892	32%	460
65-69	1,286	1,348	1,501	17%	215
70-74	1,145	1,197	1,235	8%	90
75-79	1,002	943	955	-5%	(47)
80-84	751	820	870	16%	119
85+	639	683	767	20%	128
Total	23,659	24,771	25,893	9%	2,234

Community Specific Demographic Summary Profiles

The following Community Profiles is based on the Green Mountain United Way *Building Healthy Communities Report*¹³. The concept of dividing the Central Vermont Region based on the current supervisory districts is potentially beneficial as these districts share common resources, which could potentially be explored in terms of micro-food systems. Overall, these descriptions provide a rich cultural and socio-economic data source.

Within the Central Vermont Region, community can also be defined by the towns in the six supervisory districts in Washington County which include: **Washington West** – Duxbury, Fayston, Moretown,

⁸ Vermont Housing Data, <http://www.housingdata.org/profile/>

⁹ Vermont Department of Labor (DET), *Economic and Labor Market Information*, <http://www.vtlni.info/>

¹⁰ USDA Food Desert Atlas, www.ers.usda.gov/foodatlas

¹¹ Vermont Housing Finance Agency, *Between a Rock and a Hard Place*, www.vhfa.org/documents/housing-wages-2011.pdf

¹² www.vhfa.org/documents/housing-wages-2011.pdf

¹³ Green Mountain United Way, *Building Healthy Communities*, <http://www.gmunitedway.org/BuildingHealthyCommunities.shtml>

Waitsfield, Warren, Waterbury; **Washington Central** – Berlin, Calais, Worcester, Middlesex, East Montpelier; **Barre**- Barre City, Barre Town; **Montpelier** – Montpelier; **Washington South** – Northfield, Roxbury; and **Washington Northeast** – Cabot, Marshfield, Plainfield.

Community Profiles

Washington West – Towns in this district group into two distinct communities. The Mad River Valley is a residential resort community with two ski areas. Waterbury/Duxbury is a bedroom community with state offices, recreation areas and industrial parks. This district as a whole has the highest median income in the county. Well-developed support is in place for physical activity opportunities and healthy eating.

Washington Central – This district is made up of four rural residential towns, Calais, Worcester, Middlesex, and East Montpelier with large tracks of undeveloped land and Berlin with its higher population density, home to the hospital, grocery stores, and industry. It has the second highest median income in the county. All the elementary schools in this district have school gardens and use local products in their food programs. The towns all work independently from each other with the local schools and U32 serving as a community hub. The Friends of Education/Community Connections newsletter serves as a vehicle for communication between the towns in this district released on a bi-monthly basis.

Barre - Barre and Barre City are two distinct communities that share this district. Barre City has the larger population, lower median income and twice the percentage of families with children in poverty. In recent years, there has been significant community support to connect local farms with schools and community and site based gardening. Local churches are active in serving in the community.

Montpelier - Montpelier is the only one town district and has the third largest town population in the county. There are three colleges located in this district, the New England Culinary, Community College of Vermont, and the Vermont College of Fine Arts. The churches in the community are active in serving those in need through soup kitchens and food shelves. There are downtown markets and a year round Farmer's Market. There is a strong neighborhood group initiative through Transition Town Montpelier and citizen efforts such as the Onion River Exchange where participants earn community credits in exchange for their time and services.

Washington South - Northfield and Roxbury each have close to the same square mileage, with Roxbury making up only 10% of the population. Roxbury, with 555 residents, is a tightly knit community that holds two monthly potlucks, and a small elementary school, library, post office, and country store serving as its hub. This district has the lowest combined per median income in the county and the highest combined unemployment rate. The library, churches and senior center serve as the main social meeting venues in Northfield.

Washington Northeast - The three rural towns that make up this district have a population well under 5,000 making this the smallest Supervisory Union in the county. The per capita income is lower than the county average. Two school districts Twinfield and Cabot each with K-12 schools, serve as active

community resources. Plainfield Village hosts a coop, small stores and eateries and is the downtown of Goddard College. Cabot is a rural community with working farms, Cabot Creamery and a small country store that serves as the community hub along with the school. Marshfield's social center is the Old School House Common, which hosts the Library, Head Start, senior activities, the food shelf and a weekly community dinner. The Farmers Market in Plainfield, church groups and local restaurants are places of social interaction.

Land Use Regulations

Central Vermont is comprised of 23 individual Towns and Villages throughout Washington and Orange Counties. The zoning for each town is included in each town's zoning bylaws, as applicable. Zoning districts vary by town, but generally, each town includes a form of the following districts: Village Commercial and Residential; Agricultural; Residential; Recreation; and Industrial.

The first purpose and subsequent goals of the Vermont State Municipal and Regional Planning and Development Statute (24 V.S.A. § 4302) is identified as:

(1) To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.

(A) Intensive residential development should be encouraged primarily in areas related to community centers, and strip development along highways should be discouraged.

(B) Economic growth should be encouraged in locally designated growth areas, or employed to revitalize existing village and urban centers, or both.

(C) Public investments, including the construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of the area.

In addition to state regulatory language intended to guide local municipal zoning bylaws and Municipal Plans, the state also encourages the preservation of working lands through such programs as Vermont's Agricultural and Managed Forest Land Use Value Program (Current Use Program). The Current Use Program offers landowners use value property taxation based on the productive value of land rather than based on the traditional "highest and best" use of the land. In 2000, the current use value of the land in the program averaged about 20 percent of the full fair market value.¹⁴

Although the state encourages the preservation of agricultural lands through both regulatory and non-regulatory mechanisms and incentives, many towns throughout the Central Vermont Region struggle to maintain productive agricultural lands due to numerous factors such as the financial ease of developing in greenfields as opposed to infill; agricultural competition and incentives for large scale production within an international market; and local regulatory policies that may discourage agricultural production at varying scales.

¹⁴ Vermont Agency of Agriculture, Food & Markets, *Current Use Program*, <http://www.vermontagriculture.com/agdev/currentuse.htm>

Additional analysis of regulatory policies throughout the Central Vermont Region will be necessary to identify potential impediments to working lands. This process will encompass a detail review of all current local zoning regulations; identification of all zoning bylaws related to agriculture; as well as specific permitting processes. In addition, a spatial comparison of active agricultural lands as well as potential productive lands (prime agricultural soils) in relation to current zoning regulations will further contribute to such analyses.

Health Characteristics

Vermont is consistently ranked within the top three states in the nation in overall health. While the state continues to be a leader in health, obesity rates in Vermont, as well as nationwide have been progressively increasing over the past decade.¹⁵ More than half of adult Vermonters are overweight and obese, and obesity related chronic diseases such as diabetes, heart disease, stroke, and some cancers continue to be leading causes of death in Vermont. Annual medical expenses attributable to adult obesity in Vermont total approximately \$141 million.¹⁶ Research

continues to illustrate that consuming adequate amounts of fruits and vegetables and exercising the recommended amount of 30 minutes a day can prevent obesity and improve overall health.

Vermonters tend to eat healthier than most Americans—38% of adult Vermonters eat fruit two or more times a day, tied for third in the nation, while 30% of adult Vermonters eat vegetables three or more times a day, tied for sixth in the nation
-*Vermont Farm to Plate Strategic Plan, 2011*

Recent food access research suggests that urban design, land use and zoning regulations influence the proximity of food stores to residential areas; the prevalence and type of food stores in a given area; and therefore the availability of healthy and unhealthy foods in a community. As land use regulations directly control a community's built environment, changes in land use policy coupled with behavioral shifts can result in healthier environments and people. Collectively, these factors drive the availability of healthy and unhealthy foods in a community. The following explores current levels of health in the Central Vermont Region.

Adults

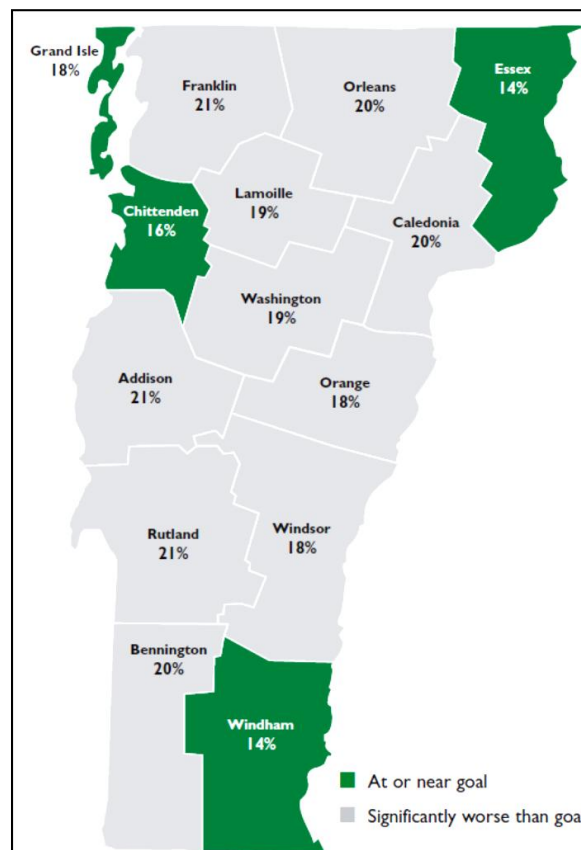
Adult Obesity by County

- In Vermont, approximately 88,000 people or nearly one in five adults are obese.
- Chittenden County (16%) and Windham County (14%) have rates of obesity that are statistically better than the state as a whole (18%).
- All other counties have a rate of obesity that is statistically similar to the state as a whole.

¹⁵ <http://www.gmunitedway.org/BuildingHealthyCommunities.shtml>

¹⁶ Vermont Department of Health, *Obesity and Health Status Report 2006*, <http://healthvermont.gov/research/chronic/documents/ObesityHealth2006.pdf>

Adult Obesity Rates 2001-2003



Adult Overweight and Obesity Trends

- Over half (54%) of Vermont adults are overweight or obese; that translates to about 250,000 adults above a healthy weight.
- The prevalence of obesity among Vermont adults increased by 58 percent from 1993 to 2003 (from 12% to 19%).
- Although genes can and do play a role, the increase in obesity is also attributable to other factors, including behavioral, environmental, cultural and socioeconomic influences.

Morbid Obesity Trend

- In Vermont, Class III or morbid obesity rose a dramatic 367 percent from 1993 to 2003.
- Morbid obesity refers to adults who are more than 100 pounds above their ideal body weight.
- Although people who are extremely obese make up a relatively small percentage of the adult population, the rapid rise in prevalence is of great concern because of the many health risks associated with extreme obesity.

Obesity and Chronic Disease

- Being overweight substantially increases risks for many chronic diseases, including diabetes, high blood pressure, osteoarthritis, heart disease and stroke, gallbladder disease, arthritis, sleep disturbances, breathing problems, and certain cancers including breast, prostate and colorectal.
- In Vermont, the prevalence of diabetes, arthritis and asthma is higher in obese adults than in healthy weight adults.
- In Vermont, 35 percent of obese adults report high blood pressure and 56 percent of morbidly obese adults report high blood pressure.

Statewide, 58.2% of Vermont adults were considered overweight or obese in 2009, and the percentage of overweight and obese Vermonters increased 5.5% and 60.3%, respectively, from 1995 to 2009.

-Vermont Farm to Plate Strategic Plan, 2011

- In 2003, estimated health care costs attributable to obesity in Vermont were \$141 million. Of that, \$40 million was spent on the Medicaid population.

Diagnosed Diabetes by BMI

- In Vermont, the prevalence of diabetes is greater among obese adults than among healthy weight adults.
- From 2000 to 2004, 49 percent of Vermonters with diabetes were obese, compared to 17 percent of

Vermonters without diabetes.

- Early screening and detection can prevent or delay the onset of diabetes and related health complications.

Children

Currently, there are more than three times as many overweight children and adolescents in the U.S. than there were in 1980.¹⁷ The consequences associated with such rates are significant. Obesity in childhood and adolescence is associated with negative psychological and social consequences and adverse health outcomes, including type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome.¹⁸ Overweight and obesity acquired during childhood or adolescence may persist into adulthood.¹⁹ Approximately 400,000 deaths a year in the United States are currently associated with overweight and obesity.²⁰

Nutritious eating and physical activity are two cornerstones of healthy adolescent development. Since 1993, the Department of Health Division of Alcohol and Drug Abuse Programs and the Department of Education Student Health and Learning team sponsor the Vermont Youth Risk Behavior Survey (YRBS) every other year. The YRBS measures the prevalence of behaviors that contribute to the leading causes of death, disease, and injury among youth. The 2011 YRBS implemented high school and middle school surveys which targeted breakfast consumption, physical activity, physical education classes, and television, computer, and video game use. The high school survey also asked about consumption of fruits, vegetables, soda, and sugar-sweetened beverages. Summaries of those results for Washington County are as follows.

2011 Washington County High School Youth Risk Behavior Survey

Body Image

Percent of students who are:

	All	Grade				Sex	
	2011	9th	10th	11th	12th	Female	Male
Overweight (85th BMI Percentile)	15%	15%	14%	17%	14%	13%	17%
Obese (95th BMI Percentile)	11%	11%	10%	10%	12%	8%	14%

Note: BMI= body mass index; weight in kilograms divided by height in meters, squared

¹⁷ Ogden, C.L., Carroll, M.D., "Prevalence of obesity among children and adolescents: United States, trends 1963-1965 through 2007-2008," *National Center for Health Statistics Health E-Stats*, June 2010.

¹⁸ Daniels, S.R., Arnett, D.K., Eckel, R.H., et al., "Overweight in children and adolescents: pathophysiology, consequences, prevention, and treatment," *Circulation* 111(15):1999-2012, 2005.

¹⁹ Wright, C.M., Parker, L., Lamont, D., Craft, A.W., "Implications of childhood obesity for adult health: findings from thousand families cohort study," *British Medical Journal*, 323 (2001)1280-1284.

²⁰ Mokdad, A.H., Marks, J.S., Stroup, D.F., Gerberding, J.L., "Actual causes of death in the United States, 2000," *JAMA* 291:10 (2004) 1238-1245.

Percent of students who think they are:

	All	Grade				Sex	
	2011	9th	10th	11th	12th	Female	Male
Underweight	13%	15%	10%	12%	14%	8%	18%
About the right weight	56%	54%	60%	57%	54%	57%	56%
Overweight	31%	30%	30%	31%	31%	35%	26%

Percent of students who are trying to:

	All	Grade				Sex	
	2011	9th	10th	11th	12th	Female	Male
Lose weight	44%	43%	41%	47%	44%	58%	28%
Gain weight	12%	11%	14%	10%	13%	2%	22%
Stay the same weight	22%	22%	23%	21%	23%	21%	23%
Not trying to do anything about weight	22%	24%	23%	22%	20%	19%	26%

Nutrition

Percent of students who, during the past seven days:

	All	Grade				Sex	
	2011	9th	10th	11th	12th	Female	Male
Ate fruits and vegetables five or more times per day	26%	26%	28%	26%	22%	25%	26%
Ate two or more servings of fruit or fruit juice per day	38%	41%	41%	38%	31%	38%	38%
Ate three or more servings of vegetables per day	18%	19%	20%	18%	15%	17%	20%
Ate breakfast seven of the past seven days	47%	49%	48%	47%	46%	46%	49%
Ate breakfast at least three of the past seven days	79%	79%	82%	79%	77%	79%	79%
Ate breakfast zero of the past seven days	7%	9%	5%	7%	8%	7%	8%
Drank a can, bottle, or glass of soda or pop at least once per day	13%	12%	13%	16%	11%	7%	19%
Drank a can, bottle, or glass of a sugar-sweetened beverage such as lemonade, sweetened tea or coffee drinks, sports drinks, energy drinks, Snapple, or Sunny Delight at least once per day	16%	15%	19%	16%	16%	13%	20%

2011 Washington County Middle School Youth Risk Behavior Survey

Body Image

Percent of students who think they are:

	All	Grade			Sex	
	2011	6	7	8	Female	Male
Underweight	18%	18%	19%	16%	16%	19%
About the right weight	56%	53%	55%	58%	56%	55%
Overweight	27%	29%	26%	26%	28%	25%

Percent of students who are trying to:

	All	Grade			Sex	
	2011	6	7	8	Female	Male
Lose weight	43%	49%	41%	41%	50%	34%
Gain weight	10%	9%	12%	10%	6%	15%
Stay the same weight	22%	20%	21%	23%	21%	22%
Not trying to do anything about weight	25%	22%	26%	26%	22%	28%

Nutrition

Percent of students who, during the past thirty days:

	All	Grade			Sex	
	2011	6	7	8	Female	Male
Skipped meals to lose weight or keep from gaining weight, past 30 days	16%	12%	15%	17%	21%	10%

Washington County Middle & High School Youth Risk Behavior Survey: Comparative Results

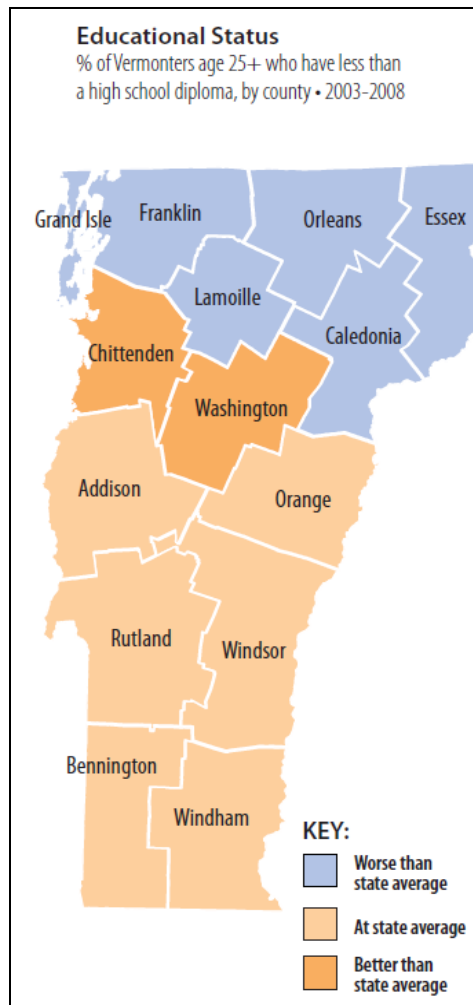
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who describe themselves as:									
Underweight	13	13	14	13	11	13	13	9	16
About the right weight	59	58	58	58	57	59	60	58	58
Overweight	28	29	28	29	32	28	27	32	26
Percent of students who are:									
Trying to lose weight	42	42	42	42	44	41	38	57	26
Trying to gain weight	13	13	12	11	14	14	17	4	23
Trying to stay the same weight	19	18	16	22	17	17	20	18	18
Doing nothing about their weight	26	27	30	25	26	28	25	21	32
Percent of students who, during the past 30 days:									
Vomited or took laxatives	4	3	3	2	4	5	3	5	2
Took diet pills, powders, or liquids	4	3	3	3	4	3	3	5	2

Health Disparities

The following section addresses known health disparities among Vermont residents. The majority of the data came from the Department of Health's 2010 *Health Disparities of Vermonters Report*, which presents information, maps, data and trends that highlight health disparities as they exist in the state, as well as recommended actions that can be taken to reduce these disparities. Combined with income, education and occupation provide a thorough measure of socioeconomic status—a key predictor of health. Research suggests that people who complete higher levels of schooling have greater cognitive and social survival skills, such as problem-solving, teamwork, structure, routine, and dependability. Gainful employment has been shown to have both indirect and direct beneficial effects on health—from benefits access to earnings. Although income, education, and occupation each play a unique role in a person's overall health, all three measures are closely linked.

- While 42% of Vermonters have less than a high school education earn an income below the federal poverty level, only 5% of those who have a college degree earn so little.
- 5% of Vermonters who had less than a high school diploma were unemployed, as compared to 2% of those who had a college degree or more.
- Educational attainment varies across the state, with Chittenden and Washington counties having the higher levels of educational attainment, and the state's northern most counties having the lowest.

Income and Education²¹



- In Vermont, adults with less education have a higher prevalence of obesity than adults with education beyond high school.
- Vermont adults with no college education are twice as likely to be obese compared to adults with some college education or higher.
- In Vermont, adults in the lowest income category had the highest prevalence of obesity.
- A diet consisting of foods high in fat and calories is often more affordable than a diet high in lean meats, fish, fruits and vegetables.
- Individuals living in poverty are often concerned about food quantity before nutrient quality.
- Limited incomes can cause a shift in dietary choices toward foods that are energy dense, and provide the most calories for the lowest cost.
- Over the past 20 years, price increases for foods high in sugar and fats have been much lower than price increases for vegetables and fruit.
- Lack of money, lack of transportation to stores where low-cost healthy foods are available and limited knowledge of how to prepare healthy meals contribute to unhealthy eating habits.

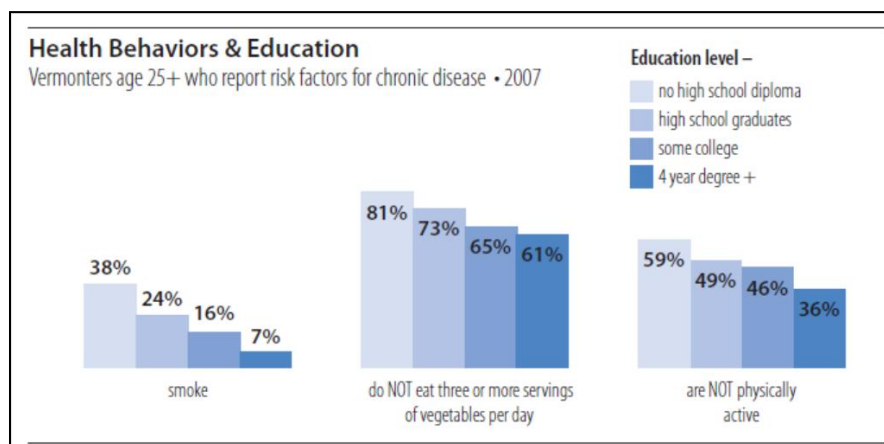
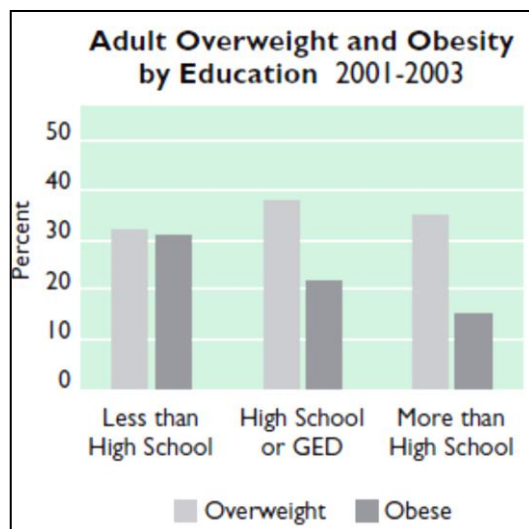
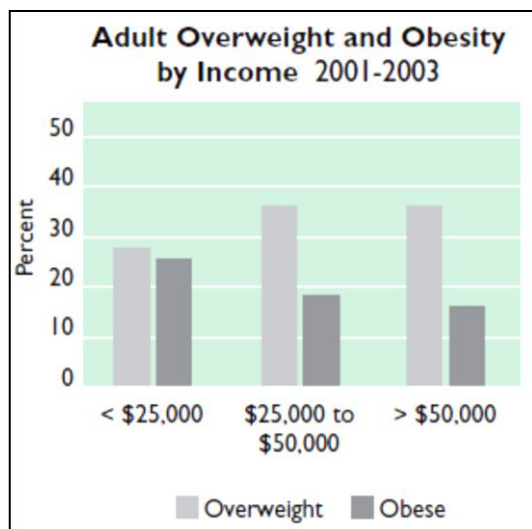
Overall, research shows higher education levels are correlated with better health. Vermonters with less than a high school education are more likely to have diabetes, heart disease, asthma, obesity, and depression, compared to those who have a college degree. Indeed, two-thirds of people with less than a

high school education report having one or more chronic conditions, compared to the one-third of those who have a college degree or more. A person's perception of his or her own health is more positive among those who are more educated.²²

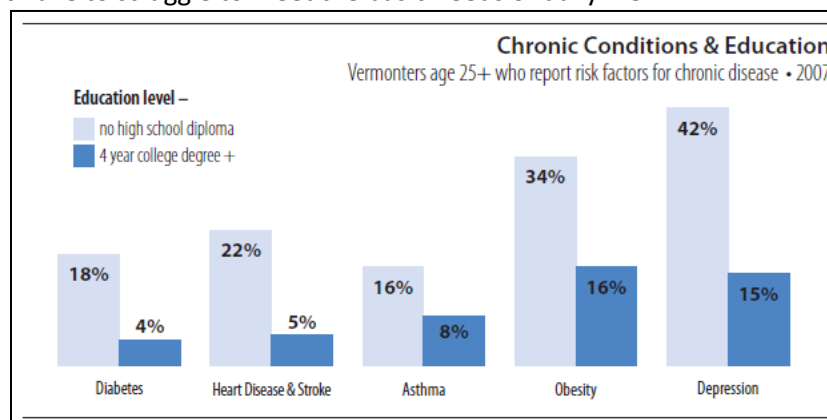
²¹ Vermont Department of Health, *The Health Disparities of Vermonters 2010*,

<http://healthvermont.gov/research/healthdisparities.aspx>

²² <http://healthvermont.gov/research/healthdisparities.aspx>



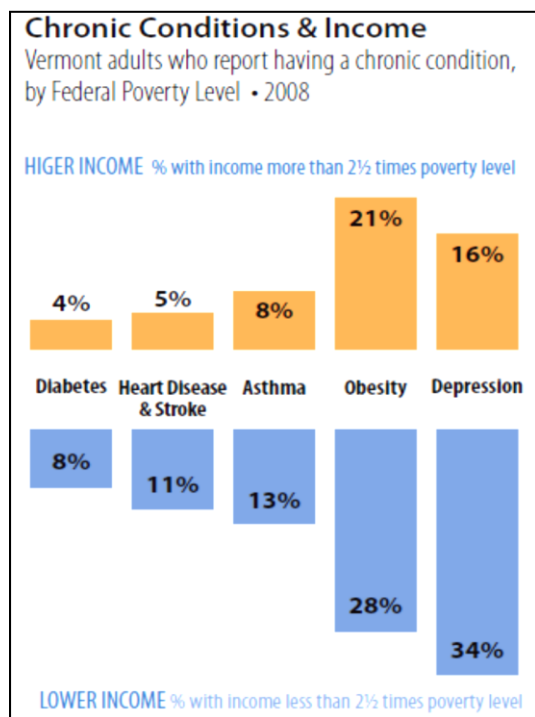
The well documented risk factors for chronic health conditions, such as smoking, poor nutrition, and inactivity, are less common among those with more education. Studies have shown that even when risk factors are present, people with a higher socioeconomic status are less likely to suffer from chronic diseases like diabetes, heart disease and stroke.²³ This is can be partially attributed to the fact that such individuals do not have to struggle to meet the basic needs of daily life.



²³ <http://healthvermont.gov/research/healthdisparities.aspx>

Poverty and Health Costs

Income is correlated with adult health habits and overall health.



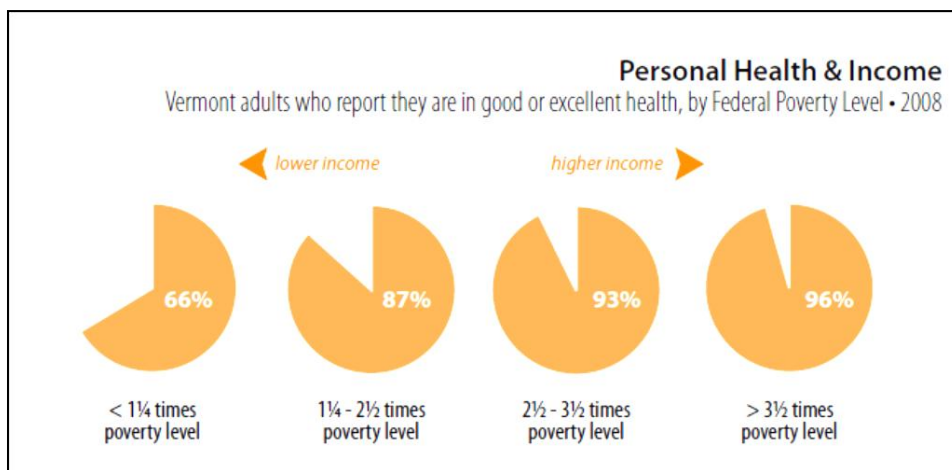
- Lower income Vermonters report higher rates of depression and chronic conditions such as obesity, asthma, heart disease, stroke, and diabetes.
- 15% of low income Vermont adults have two or more chronic conditions, compared to 7% of higher income Vermonters.
- As income rises, a person's perception of his or her general health also improves.

People without food security must too often compromise quality for quantity, eating higher-calorie but lower cost and nutritionally deficient foods. Over time, food insecurity can lead to malnutrition, obesity and chronic illness. According to Vermont Behavioral Risk Factor Surveillance System data:

- 16% of low income Vermonters eat less than they feel they should because there is not enough food, or money to buy food.
- 28% of Vermonters who earn less than 250% of

the poverty level are obese.

More than half of all the babies born in Vermont and their families benefit from the healthy food package they receive through the WIC supplemental nutrition program. Offerings include whole grain and lower-fat foods, and a debit-like card that enables them to buy fresh fruit and vegetables at a number of Vermont markets.



The health status of minority groups

Due to the small numbers of racial and ethnic minorities in Vermont, race reporting errors and statistical analysis limitations sometimes make it difficult to determine if there are differences in health status across racial and ethnic groups. While nationally disparities by race can often be observed in incidence or deaths from cancer, and hospitalizations, injuries or deaths from any cause, it is not possible to observe such disparities in Vermont.

There are, however, measurable disparities by race in prevalence of chronic disease and overall reported health status. Rates for prevalence of diabetes, asthma and obesity all vary by race, as does the percentage of Vermonters who say their health is good or excellent. Smoking, lack of exercise and poor nutrition, all key determinants of poor health, vary by race, too.

Among Vermonters from 2003 to 2008:

- 12% of American Indians have diabetes, compared to 6% of White non-Hispanics.
- 18% of American Indians have asthma, compared to 10% of Blacks, 11% of Hispanics, 9% of White, non-Hispanics, and 5% of Asians.
- 33% of Blacks are obese, compared to 4% of Asians.

Regional Food System Profile

Within Washington and Orange Counties, the percentage of low income residents living greater than

Vermont has at least 765 farm support establishments that collectively employ at least 2,139 people.

-Farm to Plate Strategic Plan, 2011

one mile from a grocery store is 17 to 23 percent.²⁴ The Region suffers from the highest price ratios of healthy foods to “junk” foods in the state.²⁵ Yet, locally grown fresh food is available in the region. Central Vermont has a vibrant and thriving agricultural sector. According to the 2007 USDA Agricultural Census, over \$21 million of agricultural products were sold. There are over 61,000 acres of agricultural land in the region. The Region has also increased the amount of land used for agricultural activities from 2002 to 2007.

The following sections break down the local food system by components: Food processors; Food distribution; Food storage and aggregation; and Food security.

Producers

As of 2007, over one quarter of the land in the Central Vermont region is open and agriculturally managed lands, with 444 farms working the landscape in Washington County. In addition to traditional production and distribution methods, there are a number of farms participating in Farm Stands, Community Supported Agriculture, and Pick Your Own.²⁶ Farms in this region are small in scale with an average farm size of 137 acres.²⁷ The average market value of products sold per farm in 2007 was

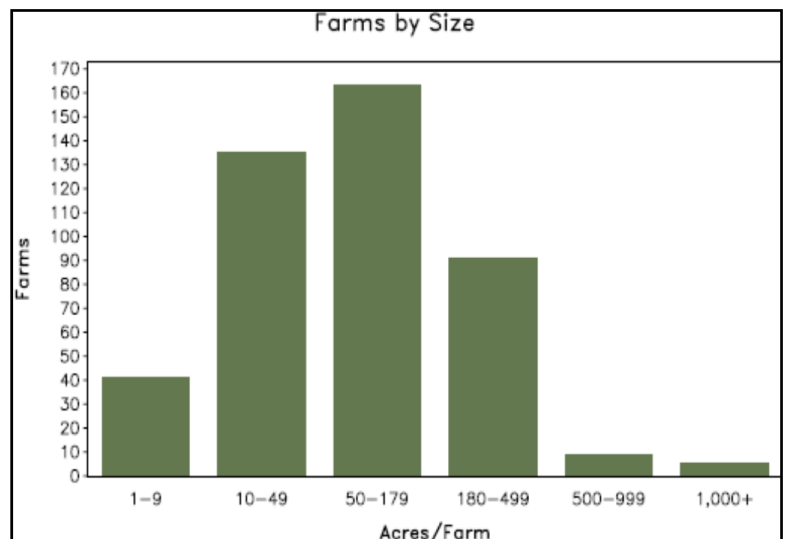
²⁴ www.ers.usda.gov/foodatlas

²⁵ www.vhfa.org/documents/housing-wages-2010.pdf

²⁶ http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1_Chapter_2/County_Level/Vermont/

²⁷ United State Department of Agriculture: Economic Research Service, *Agricultural Baseline Projections to 2021*, <http://www.ers.usda.gov/topics/farm-economy/agricultural-baseline-projections.aspx>

\$48,448. The primary agricultural goods produced by farmers and agricultural businesses in Central Vermont include dairy, meat, and animal products, fruits and vegetables, nursery products, hay, grains, and other cattle feed, and maple sugar. In addition to traditional production and distribution methods, there are a number of farms participating in a direct sale model such as Farmer’s Markets, Farm Stands, Community Supported Agriculture, and Pick Your Own.²⁸ Finally, a number of communities and schools have established additional food access sites such as community based gardens.²⁹ CVRPC is in the process of mapping the processors based on data collected in-house and the Vermont Farm to Plate (F2P) data.



Processors

The 2011 *Vermont Farm to Plate Strategic Plan* identified the significant role of processing in the state economy: “Vermont has at least 457 food processing establishments that employ at least 4,356 people and is the second-largest manufacturing sector employer in the state, behind computer and electronic

Processing - “the transformation of a raw product or products into a value-added product prior to entering the marketplace (e.g., livestock must be slaughtered, processed, and packaged before entering the marketplace for sale as meat).

-Farm to Plate Strategic Plan, 2011

products. The average wage in the food processing and manufacturing industry is \$37,612 per year. Food manufacturing is one of only two manufacturing sectors that saw employment growth from 2007 to 2010.³⁰ The F2P plan encompasses all types and scales of agricultural-related production and processing, from small-scale diversified production to commodity dairy production, from on-farm processing to commercial scale food manufacturing.

There are also a number of small-scale food processors in the region, including bakeries, dairies and creamers, maple sugar processors, and bottling operations (many of which are the actual producers as well but may buy bulk maple sugar from

other farmers), and other specialty operations are based in Central Vermont: Grand View Winery, Fresh Tracks Vineyard and Winery, the Alchemist Cannery, Lawson’s Finest, Cold Hollow Cider Mill, Cabot Creamery, Vermont Butter and Cheese Company, Vermont Smoke and Cure, and the new Mad River

²⁸ Appendix D

²⁹ Appendix D

³⁰ Vermont Sustainable Jobs Fund, *Vermont Farm to Plate Strategic Plan 2011*, <http://www.vsif.org/project-details/5/farm-to-plate-initiative>

Food Hub.³¹ In addition, several large food processing businesses are centrally based or have processing plants in the area: Ben & Jerry's Ice Cream, Booth Brother Dairy (owned by HP Hood LLC), and Green Mountain Coffee Roasters. CVRPC is in the process of mapping the processors based on data collected in-house and the Vermont Farm to Plate (F2P) data.

Distribution

There are a variety of distribution companies that operate and transport products in and through Central Vermont, but there are only a few that specialize in moving small volumes of local, farm-fresh products. CVRPC is in the process of mapping the known distributors based on data collected in-house and the Vermont Farm to Plate (F2P) data.

Fluid Milk Distribution-The majority of fluid milk produced in the Central Vermont Region is distributed by a variety of distribution companies and cooperatives. For conventionally produced (non-organic) milk, typical distributors are St. Albans Coop, Hood, and Agri-Mark (Cabot Cheese). Organic distributors include Organic Valley, Stoneyfield and Organic Cow. Fluid milk trucks pick up and deliver from dairy farms on a regular basis. In 2008, the Vermont Milk Commission, created from Vermont legislation, Act 50 (S.78) of 2007, recommended to the Vermont Legislature to require purchasers of milk to pay hauling charges rather than farmers. Agri-mark opposed this as it stated purchasers would not want to buy Vermont milk if they had to pay a hauling fee.³² It is important to address the cost of distribution and hauling fees if dairy farms are to be viable in the future.

Wholesale Distributors- Black River Produce, located in Springfield, VT, is another distributor focused on farm-fresh foods along with seafood and floral products that began operations in southern Vermont and has expanded to serve all of Vermont and parts of New Hampshire, Massachusetts and New York. It supplies largely out of state organic produce, but since its start in 1978, Black River Produce continues to transport small deliveries, making it a critical distribution resource to many restaurants, institutions, food coops and grocers. Upper Valley Produce has distribution facilities in both Waterbury and White River Junction.

Community Supported Agriculture (CSA), and Farmer Distribution and Cooperatives- Over the last 20 years, CSA has become a popular way for consumers to buy local, seasonal food directly from a farmer. Today, there are 14 CSA models of distribution in the Central Vermont Region.³³ Most CSA farms deliver shares to a designated location, such as farmers markets or employment centers, or customers can pick up their share at the farm. Individuals purchase CSA shares up front to support the farm's production, and in turn, receive a share of the harvest. Farmers benefit by receiving early payment to help with cash flow, gaining financial security, being able to market prior to the farming season, and by members sharing in the risks of farming. The majority of CSAs offer vegetables and fruit, but some are expanding into meats, eggs, cheese, breads, pickles, and grains.

³¹ Central Vermont Chamber of Commerce, *Central Vermont Products* <http://www.central-vt.com/region/product.htm>

³² Vermont Milk Commission, *A Final Decision and Report on the Proceedings of the Vermont Milk Commission 2008*, <http://www.vermontagriculture.com/milkcommission/documents/FinalReportVermontMilkCommission.pdf>

³³ Appendix D

Retail Distribution- This section addresses retail establishments that sell local food, as well as acquiring local food directly from farmers. CVRPC is in the process of mapping retail distribution centers.

- **Grocery Stores:** There are a variety of grocery stores throughout the region. According to the 2007 Agricultural Census, the majority of household food sales in the Central Vermont Region occur within a grocery store.
- **Food Coops:** The Central Vermont region has four food cooperatives: Hunger Mountain Coop in Montpelier; the East Warren Community Market in Warren; the Adamant Coop in Calais; and the Plainfield Coop in Plainfield.
- **Schools and Institutions:** Institutions feed a larger portion of the community everyday. Institutional cafeterias at workplaces, hospitals, schools, universities, jails and prisons are a significant part of the food systems and provide a significant opportunity to institute policies that will affect change on many levels, as many of these are public institutions that are and are directly affected by changes to public policy. Farm to school programs and local purchasing policies are two examples of public policy initiatives that can greatly change how food services affect local businesses and the economy. A statewide nonprofit organization, the Vermont Fresh Network, is an important program serving farmers, schools, institutions and restaurants in Central Vermont. Its primary goal is to encourage restaurants and institutions to purchase local fresh food from in-state farms, by promoting direct relationships between chefs and farmers and providing a membership network to facilitate this process.

In the Central Vermont Region, there are several institutions. The New England Culinary Institute (NECI) is a valued educational institution that has educated and brought to Vermont many local chefs and restaurant owners, and also serves much of the Montpelier area through its operation of cafeterias at Vermont College and the National Life Insurance building, a major regional employment center, as well as town restaurants and a bakery. The Central Vermont Medical Center is one of the largest hospitals in the state and the only one in the region, and serves food to employees, patients, and visitors around the clock. Higher education institutions in the Region include: Norwich University in Northfield, Vermont College of Fine Arts and the Community College of Vermont in Montpelier, and Goddard College in Plainfield. There are a variety of elder care and independent living facilities in the Region that maintain food services. Although the Waterbury State Office complex has historically housed the State Psychiatric Hospital, the facility will more than likely be relocated on a smaller scale throughout the state in various facilities post-the August 2012 flooding.

Storage and Aggregation

There are extremely limited food storage and aggregation facilities in the region. The nation is increasingly moving towards in-time freight movement, which has allowed retailers to rely less on storage, and therefore, storage facilities have declined. Large grocery stores receive regular deliveries from tractor trailer trucks moving goods long distances.

Currently in the Central Vermont Region contains one commercial warehouse with refrigerated and freezer storage that can be leased by food producers, the Mad River Valley Food Hub in Waitsfield contains a 4,000 square foot facility of food processing and storage rooms, including an industrial size

freezer and cooler and dry storage. The Region also contains another food storage facility with refrigerated space in Plainfield at Lucky Day, LLC. Farmers with such needs can also use other facilities in the state such as the Vermont Commercial Warehouse in Williston. Many food producers tend to have small refrigeration or freezer units.

Root cellars and home storage units are also critical pieces of food systems infrastructure. Food Works at Two Rivers Center in Montpelier is undergoing facility renovations that will result in the creation of a root cellar for food storage. Home-based root cellars allow people to grow and store crops, as well as purchase local crops in the fall to store throughout the winter. Communities and neighborhoods throughout the Central Vermont Region could also consider investing in shared community root cellar that could be used by farmers and households. This is a topic that local food advocacy groups such as the Central Vermont Food Systems Council and Transition Montpelier are exploring and educational institutions such as Yestermorrow Design School in Waitsfield are exploring through “how to” workshops. CVRPC is in the process of mapping large scale food storage facilities available in the Region.

Food Security and Vulnerable Populations

The Vermont Foodbank estimates that hunger is a problem for more 86,000 Vermonters who rely on the state's charitable food system each year to feed themselves and their children. More than 30 percent of these Vermonters are children under the age of 18. Here you will find data and research about hunger in Vermont and beyond.³⁴ A 2012 Household Food Security Report from the United States Department of Agriculture (USDA), reported that 12.8 % of Vermont's residents are food insecure. This report shows that the number of households struggling with food insecurity remains well above pre-recession totals. Food Assistance and Emergency Programs continue to play a significant role in filling the food gap for many Vermonters.

Emergency Resources

Alternative sources of food for people who may need additional crisis support are known as locally based emergency food providers. Emergency food providers include food pantries, soup kitchens, food banks, and other community-based food distribution programs.

As part of State's Commodity Supplemental Food Program (CSFP), the Vermont Food Bank warehouses, packs, and delivers 31 pound packages of commodity food to income eligible seniors, mothers and their children, once per month at distribution sites across Vermont.³⁵ A branch of the Vermont Foodbank is located in the Region, serving the state from its facility in Barre. The Vermont Food Bank works with approximately 280 non-profit organizations and community groups across the state, including many Central Vermont food pantries, community kitchens, senior meal programs, homeless shelters, and other feeding sites-feeding approximately 86,000 Vermonters in need of food assistance. Through state funds, grants, donations and equivalent volunteer hours to twelve full time employees each year, the Food Bank coordinates the receipt of food donations, rescuing prepared food and purchasing other food

³⁴ Vermont Foodbank, *About Hunger*, <http://www.vtfoodbank.org/AboutHunger/Research.aspx>

³⁵ Vermont Division of Disability and Aging Services, *Commodity Supplemental Food Program*, <http://www.ddas.vermont.gov/ddas-programs/programs-food-nutrition/programs-food-nutrition-csfp>

and food-related products, and delivers this food to its client organizations and food drop-off sites for a low-cost, shared maintenance fee, approximately \$0.18 per pound. These client organizations then deliver food and related products directly to residents. The Food Bank also administers additional programs aimed at empowering residents transitions from welfare to work.³⁶ The following tables highlight the type and number of Emergency Food Resources Available throughout the Central Vermont Region.

Food Shelves				
Town	Name	Location	Hours	Details
Berlin	CVCAC	Barre-Montpelier Rd	MWF (9am-12pm, 1pm-3pm)	Food provided: Staples, meat, dairy, produce, commodities, 3 days worth
Barre	Salvation Army	25 Keith Ave	T,W,F (10am-1:30pm)	Number of Visits: Once monthly and emergencies. Free meals MWF (12-1pm); Food Provided: Assorted commodities, meat, 3-5 days worth
Barre	Hedding UMC Food Shelf	Hedding Methodist Church	W, TH (3-5pm)	Number of Visits: Once every 30 days; Food Provided: Staples, meat, dairy, produce, 3 days worth
Barre	Barre Baptist Open Door Fellowship	84 Summer St.	T, TH (8am-10:30am)	Number of Visits: 2x per month; Food provided: Staples, 1-3 days worth
Duxbury	Duxbury Elf's Shelf	Duxbury Town Clerk office basement	W, F (8am-10am)	No limit; Staples, Meat, Commodities, as much as needed
Marshfield	Onion River Food Shelf	Old School House Common	W (10am-2pm)	Once/month and emergencies; Staples,
Middlesex	Middlesex UMC Food Shelf	UMC	Sat (9-10:30am)	Once/wk; Staples, Meat, 1 large grocery bag
Montpelier	Montpelier Christ Church Food Pantry	Christ Church, 64 State St.	T, W, TH (9am-2pm)	Once every 2-3 wks, Emergency Use only; Staples, 2 days worth
Montpelier	Montpelier Food Pantry	Trinity United Methodist Church	T (10am-12PM); W (10-11am, 5-6pm); TH (10-11am)	Once/month and emergencies; Staples, Meat, Produce (7 days worth)
Barre	St. Monica's Food Shelf	79 Summer St	W, F (9am-12pm)	Once per month
Northfield	Emergency Relief Volunteers	Northfield, ambulance, garage	M (5:30-6:30pm), W (9-10am), Sat(9-11am);	Twice/month; staples, meat, produce, amount varies
Waitsfield	Mad River Valley Interfaith Council	Evergreen Place	T, TH (9am-12pm)	Once/wk; Staples, Produce, Amount varies
Roxbury	Roxbury Food Shelf	Roxbury Union Congregational Church	W (1-4:30pm)	Visits depend on food supply; Staples, meat, amount varies
Waterbury	Waterbury Area Food Shelf	Wesley House, 57 South Main	M, F (10am-noon), W (3-5pm)	2x/month; Staples, meat, dairy, produce, 2-3 bages

³⁶ Elanor Chapin, *Creating a More Sustainable Central Vermont Food System: Is there a role for Public Planning?*, 2006, https://apha.confex.com/apha/134am/techprogram/paper_133005.htm

Websterville	Websterville Food Shelf	Websterville Baptist Church	call for appt	staples, meat, dairy, produce, one box
Woodbury	Woodbury/Calais Food Shelf	Valley Lake Rd	3rd Sat every month (9-11am); following T (5-7pm)	Once/month; staples, meat, produce, as needed
Worcester	Worcester Food Shelf	Town Hall	W (1-2pm), 3rd Sat (11am-1pm); call if emergency	once/wk; staples, meat, dairy, produce (as available), limit of 20 lbs/person/wk

Organizations in the Region outside of the emergency food system that work to combat hunger and poverty are another significant resource. The Central Vermont Community Action Council is the primary organization working on hunger and poverty issues in the Region, providing various programs throughout three counties in Vermont, from workforce and economic development programs, skills training, and weatherization and heating fuel assistance, to running head start and child care food programs.³⁷ In addition to the organizations listed, there are community based organizations throughout the region that provide emergency meals to those in need on a regular basis. They include:

Community Dinners/Meals				
Town	Name	Location	Time	Description
Adamant	Community Cookout	Adamant County Store	Friday nights; 6-9pm	Weekly cookout
Barre	Barre Congregational Church	35 Church St., Barre	Saturdays (7:30-9am)	Breakfast served
Barre	Open Door Fellowship	Barre Baptist Fellowship, 84 Summer St., Barre	T, TH (7am-1pm), M W F (7-10am)	Lunch and breakfast served
Montpelier	Trinity United Methodist Church	137 Main St., Montpelier	TH and 2nd Sat of the month (11:30am-1pm)	Lunch served
Northfield	Northfield United Methodist Parish	152 S. Main St., Northfield	F (6pm-)	Dinner served
Marshfield	Marshfield Community Supper	Old School House Common, 31 Upper Depot Rd., Marshfield	W (6-7pm)	Dinner served
Montpelier	Bethany United Church of Christ	115 Main St., Montpelier	T (11:30am-1pm)	Lunch served
Montpelier	The Christ Church	64 State St., Montpelier	W (11:30am-1pm)	Lunch served
Montpelier	Unitarian Church of Montpelier	130 Main St., Montpelier	M (11:30am-1pm)	Lunch served
Barre	First Presbyterian Church	78 Sumner St, Barre	3rd Sunday of the month (7:30-9am)	Breakfast served
Worcester	Worcester Community Kitchen	Worcester Town Hall, Rte 12, Worcester	W (noon-1pm)	Lunch served
Barre	Hedding UMC Food Shelf	40 Washington St.	F (5:30-6:30pm)	Community supper

³⁷Central Vermont Community Action Council, <http://www.cvcac.org/>

Montpelier	St. Augustine's Catholic Church	16 Barre St., Montpelier	F (11:30am-1pm)	Lunch served
Barre	Salvation Army	25 Keith Ave, Barre	M W F (11:30am-1pm)	Lunch served

Senior Meal Sites				
Town	Name	Location	Time	Description
Barre	Galley Senior Meals	14 Washington St., Barre	M-F (7:30am; 11am-12pm)	Breakfast \$1.50; Lunch \$5
Waitsfield	Mad River Valley Seniors	5308 Main St., Waitsfield	T, TH	Suggested donations\$4
Montpelier	Montpelier Senior Meals	Pioneer Apts., 155 Main St.	Congregate meals and home delivery M-F	Suggested donation \$2.50
Roxbury	Roxbury Senior Center	1642 Roxbury Rd., Roxbury	M W	\$2.75
Marshfield	Twin Valley Senior Center	Marshfield Schoolhouse Common	not specified	Suggested donation \$3
Northfield	Northfield Senior Center	68 Wall St., Northfield	M-F Lunch (12-1pm)	60 years or older, suggested donation \$2.75

Additional Food Assistance Programs

Each year the U.S. Department of Agriculture spends billions of dollars to provide food assistance programs for low-income people. For these programs to reach those in need, local communities must have an infrastructure that can deliver food assistance benefits effectively. An overview of such programs and currently operating food assistance sites in the Central Vermont Region can be found below.

- Food Stamp Program (3SquaresVT): The Food Stamp Program (3SquaresVT within the state of Vermont) is the cornerstone of the USDA food assistance programs and serves millions of Americans each day. Eligible participants receive benefits to purchase food at authorized food stores and farmers' markets. Restaurants and group feeding sites can be authorize to accept food stamps for meals provided to the homeless, elderly and people with disabilities. Eligibility and benefits are based largely on household size, income, and assets. Refer to the Current Gross Income limits below³⁸.

³⁸ Three Squares VT, *Do I qualify?*, <http://vermontfoodhelp.com/do-i-qualify>

<u>Household Size</u>	<u>Monthly Gross Income Limit</u>
1	\$1,723
2	\$2,333
3	\$2,944
4	\$3,554
5	\$4,165
6	\$4,775
For each additional person	Add \$611 per person

- National School Lunch and Breakfast Programs: The Vermont Department of Education administers the Child Nutrition Programs, supporting nutritious meals and snacks in schools, daycare settings and summer program sites, and ensuring that nutritious, high-quality meals and snacks are served to program participants in all eligible sites in Vermont. The department supports program sponsors through program guidance, technical assistance, training, monitoring and evaluation to assure that every program receives the maximum federal and state funding available.³⁹ Currently, there are two programs available to support meals and snacks in public as well as private non-profit schools:
 - The National School Lunch Program (NSLP) operates as a three-tiered system. For children whose family incomes are below 130 percent of the Federal poverty guidelines, the meals are free. For children whose family income is between 130 and 185 percent of the poverty guidelines, the program restricts lunch cost to no more than 40 cents. The NSLP provides a small per meal subsidy for “full-price” meals for children who do not receive free or reduced-priced meals.
 - The School Breakfast Program (SBP) is similar to NSLP in that it provides for Federal cash and commodity support for meals served by public and private non-profit K-12th grade schools. This program also uses a three-tiered approach ensuring that low-income children receive a free or reduced cost breakfast as they arrive at school in the morning. Unlike NSLP, the great majority of children enrolled in the program receive free or reduced prove meals.
- Child and Adult Care Food Program (CACFP) provide healthy meals and snacks for children and adults enrolled in a variety of day-care settings. The program reimburses participating day-care providers for serving meals that meet Federal guidelines. It operates in family or group day care homes, child-care centers, adult day care centers for the elderly and impaired adults, emergency shelters that provide meals to homeless children, and after-school programs that provide educational or enrichment activities.⁴⁰

³⁹ Vermont Department of Education, *Programs and Services*,

http://education.vermont.gov/new/html/pgm_nutrition.html

⁴⁰ http://education.vermont.gov/new/html/pgm_nutrition/child_adult_care.html

- Child Care Centers. This program provides reimbursement for nutritious meal and snacks to public or private nonprofit child care centers, outside-school-hours care centers, Head Start programs, and other institutions which are licensed or approved to provide day care services may participate in CACFP, independently or as sponsored centers. For profit centers must receive title funds (childcare subsidy funds) for at least 25 percent of enrolled children or licensed capacity (which ever is less) or at least 25 percent of the children in care must be eligible for free and reduced price meals. Reimbursement for two meals and one snack or two snacks and one meal may be claimed per child per day. All meals and snacks must meet the meal pattern requirements for children and infants. Meals served to children are reimbursed at rates based upon income levels of the children in care.
- Daycare Homes/Sponsors. This program provides reimbursement for nutritious meals and snacks served to children (12 years of age and younger) and infants in day care homes. Reimbursement is based on the eligibility of the local geographic area or town, the income level of the childcare provider or the children in care. Up to two meals and one snack, or one meal and two snacks a day can be reimbursed for each child. To participate in the CACFP, day care providers must sign an agreement with a sponsoring organization. There are seven daycare home sponsoring organizations that administer the CACFP in Vermont. Sponsors must recruit, train, monitor and reimburse all day care home providers. All meals and snacks must meet the requirements of the CACFP meal patterns for children and infants.
- Area Eligible Afterschool Snack & Supper Programs. Community-based programs that offer enrichment activities for children and teenagers, after the regular school day ends, can provide free snacks and suppers through the Child and Adult Care Food Program (CACFP). Eligible facilities include public and private schools, nonresidential child care centers, and outside school-hours care centers. To participate, sponsors must have a structured, supervised after-school enrichment program. Cash assistance is available for up to one snack and one supper a day for each student. All meals must meet the requirements of the CACFP Meal Pattern. Programs must be offered in areas where at least 50% of the children are eligible for free and reduced price meals based upon school data.
- Adult Care Programs. This program provides cash assistance for nutritious meals and snacks served to adults in public or private nonresidential day care centers who are at least 60 years of age or functionally impaired adults of any age who reside in the community. Reimbursement is based on the income levels of the enrolled adults. Cash assistance is available for up to two meals and one snack, or one meal and two snacks a day for each adult. All meals and snacks must meet the requirements of the CACFP Meal Pattern for Adults.
- Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides food assistance, nutrition risk screening, and related services to low-income pregnant and postpartum woman and their infants, as well as low-income children up to age 5.

- Participants in the program must be must have a family income at or below 185 percent of the Federal poverty guidelines (i.e. less than \$795 per week for a family of four) and must be judged to be nutritionally at risk. Nutritional risk is defined as detectable abnormal nutritional conditions, documented nutrition-related medical conditions, health impairing dietary deficiencies, or conditions that predispose people to inadequate nutrition or nutrition related medical problems.
- The WIC Farmer’s Market Nutrition Program (FMNP): Farm to Family in Vermont. The FMNP Program was established to provide WIC participants with increased access to fresh produce. WIC participants are given coupons to purchase goods at authorized farmers’ markets. Farm To Family coupons help you buy locally-grown fresh fruits and vegetables at participating farmers markets.⁴¹ About one in four Vermonters qualifies for Farm To Family coupons.⁴² Eligible Vermonters include: 1) Families enrolled in the Vermont Department of Health’s WIC Program; and 2) Other individuals or families who have a household income at or below 185% of the federal poverty limit. Those income limits are updated each spring. For example, the limits for the 2012 farmers' market season are \$1,723 a month for a single person, \$2,333 for a couple, or \$3,554 for a family of four. Some of the coupons are reserved for income-eligible households that include someone aged 60 or older.
 - Summer Food Service Program (SFSP) provides free meals to children during school vacations in areas where at least half of the children are from households with incomes at or below 185 percent of the poverty guidelines. Any child in the operating area may participate without needing to pass an eligibility test. Local sponsors, who are reimbursed by USDA, operate the program. Sponsors may be schools, units of local government, public or nonprofit private residential camps, other nonprofit private organizations, and colleges or universities participating in the National Youth Sports Program.

Local Food System Economics

Food production and processing have become increasingly efficient over the course of human history. Yields have improved dramatically, particularly in the last century, due to technological advances, modern production systems, machinery, and increased use of fertilizers and pesticides. Local foods are currently not a major part of the agricultural economy at the national scale. But when barriers — such as existing regulations and business practices,

In 2007, Vermont’s major agricultural and food production output totaled \$2.7 billion. The Farm to Plate Strategic Plan estimates that jobs throughout the entire food system represent 16% (or 56,419) of all private sector jobs and are connected to about 13% (or 10,984) of all private businesses.

-Vermont Farm to Plate Strategic Plan,
2011

⁴¹ Appendix D

⁴² Vermont Department of Children and Families: Agency of Human Services, *Farm to Family in Vermont*, http://dcf.vermont.gov/esd/farm_to_family

or artificial price structures — are removed and markets are allowed to function, local food systems can become economically self-sustaining.

Increasing the production, distribution, and purchase of local foods will strengthen our regional economy. At the state level, Vermont's food system plays a critical role to our economy, identity, quality of life, and sustainability⁴³. The Vermont Farm to Plate Strategic Plan estimates that retail food purchases generated over \$2 billion in sales in 2008. The majority of food consumed by Vermonters is imported from out of state. Purchasing food that is grown locally captures and retains those dollars for continued use within our region, supporting local businesses and jobs. Based on estimates from the Farm to Plate Strategic Plan, a 5 percent increase in local food production and manufacturing would generate approximately \$135 million in annual output. The Strategic Plan goes on to highlight that when considering the multiplier effect, total output would increase by an average of \$177 million annually from 2011 to 2020. A 5% increase in production would also boost total food system employment by an average of 1,500 jobs over the 10 year period.

Improving food access could also have positive economic impacts. A full-service urban grocery store typically provides jobs for 150 to 200 employees and generates weekly sales of \$200,000 to \$300,000.⁴⁴ While the scale throughout much of the Central Vermont region would differ from that of our urban counterparts, additional neighborhood food markets would generate additional revenues.

Strengthening a local food system can make preservation of existing farmland more economically viable.

According to the 2007 Census of Agriculture, Vermont leads the nation in direct agricultural products sales, with \$36.77 spent per capita at farm stands, farmers' markets, and CSAs.

-Vermont Farm to Plate Strategic Plan, 2011

Over the past several decades, the state has lost around 41,000 acres of farmland and currently has about 1.2 million acres remaining; relative to total agricultural acreage, this loss ranks Vermont 23rd in the nation for agricultural land conversion⁴⁵. Increasing demand for local foods like vegetables, which can more easily be produced on small or scattered sites, provides aspiring farmers with more production options. Farmland preservation, in addition to maintaining an economic

asset, also helps to preserve the rural character of much of our region and keep agriculture as a thriving economic activity.

Local food production can also improve land value and be used as a neighborhood revitalization tool in some communities. Vacant, unused parcels of land (particularly brownfields) are deleterious to the surrounding neighborhood, and putting this land to productive use can have positive impacts on nearby property values — by as much as 30 percent, according to one study of an urban Philadelphia neighborhood.

⁴³ Farm to Plate Strategic Plan, 2011

⁴⁴ Pennsylvania Fresh Food Financing Initiative — The Reinvestment Fund, 2010. <http://tinyurl.com/26bzykc>.

⁴⁵ Farm to Plate Strategic Plan, 2011

The benefits of a local food system are as diverse as they are numerous. As the Central Vermont Regional Commission considered the next steps in undertaking the development of a Regional Food Systems Plan, it may be beneficial to focus on four main areas, including: strengthening the local economy; ensuring that fresh, safe, healthful, locally produced food is easily accessible to people of all income levels; reducing the miles needed to distribute and sell food; and preserving farmland by making agriculture more viable to area farmers. Other benefits of a local food system include:

- Can include greater varieties of flavorful produce to be grown, rather than a few varieties that are bred more for stability for shipping across the country.
- Can save on energy because it is produced, processed and distributed in a given region, rather than shipped across the country.
- Is more comforting to consumers because they know where it comes from and because it offers more connections with others in the community.
- Can be part of a resilient system that provides a reliable supply of food regardless of economic conditions or weather in other parts of the country.

Economic Drivers: Food Purchasing, Nutritional Requirements and Consumption

Supply and demand are the drivers of the food system. The demand for local food drives how much can ultimately be produced for sale. This demand can be based on various factors, but quantifiable factors include current purchasing habits, nutritional requirements to meet basic health needs, and general consumption patterns. The quantifiable amount of local food produced (referring to food produced at home and through hunting and foraging) and consumed in the Central Vermont Region is unknown. There are general estimates on how much food is consumed based on production, and the majority of this food is produced from outside the state and the Central Vermont region.

Purchasing

The Vermont Farm to Plate Strategic Plan estimates that locally produced food accounts for at least 5 percent of the total food purchases in Vermont, or \$50 million of the total \$2 billion estimated to be spent annually on food.⁴⁶ This is estimated through direct agriculture sales data, Vermont Fresh Network data, Vermont farm-to-school and farm-to-institution sales estimates, and Vermont food manufacturing data from sole proprietors, which are likely to sell products locally. While direct farm sales and other proxy data indicate increasing consumption of local food, there are barriers to purchasing local food. The perceived or actual higher price of local food is often stated as a barrier to purchasing local food.

Nutritional Requirements

The nutritional requirements of a community can help guide the type and magnitude of food production within a food system. Daily dietary recommendations provided by the USDA include standards for energy, protein, vitamin, and mineral consumption. National data on the quantity of food that the average American consumes annually in pounds is divided into six primary categories: meat, vegetables,

⁴⁶ <http://www.vsif.org/project-details/5/farm-to-plate-initiative>

fruit, grain, dairy, and eggs. Further analysis of this data can help to establish the estimated land requirements needed to produce food for Central Vermont residents.

In 2010, the USDA updated its recommendations with the publication of *Dietary Guidelines for Americans 2010*. The basic daily dietary recommendations are based on an average 2,000 calorie diet, with a balanced intake of grains, vegetables, fruit, dairy, and meat: 6 ounces of grains, 2.5 cups of vegetables, 2 cups of fruit, 3 cups of dairy, and 5.5 ounces of protein.⁴⁷ With research conducted by the National Academy of Sciences, made available through the Food and Nutrition Information Center, the USDA also recommends Dietary Reference Intakes (DRI's) for specific nutrients, including energy, protein, vitamins and minerals.

The nutritional needs of the 59,534 residents of Washington County were roughly estimated using averages from the US Census Bureau's 2010 data, along with nutritional information from the USDA and the National Academy of Sciences. The Table below shows the nutritional needs for residents of Washington County broken down by age and gender. The total energy need for the residences is 67,385,392 kcals (kilo calories) and the total protein need is 3,155,676 grams (approximately 6,958 pounds). Within this information, further research into agricultural requirements and analysis of the region landscape will need to be completed in order to determine if Central Vermont has the ability to meet these needs.

Dietary Reference Intakes based on age distribution and gender									
	Energy (Kcal)	Protein (g)	Vit A (ugRE)	Iron (mg)	Ca (mg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Vit C (mg)
One Male >18	2700	61	1000	10	1100	1.2	1.3	16	90
All Males >18 Total	62672400	1415932	2321000	232120	25533200	34818	301756	371392	2089080
One Female >18	2100	48	800	13	1100	1.1	1.1	14	75
All Females >18 Total	50488200	1154016	19233600	312546	26446200	26446.2	26446.2	336588	1803150
One Male < 18	1728	28	621	10	730	0.6	0.6	8	42
All Males <18 Total	10782720	174720	3875040	62400	4555200	3744	3744	49920	262080
One Female <18	1571	26	564	11	730	0.6	0.6	8	40
All Females <18 Total	9551680	4110080	3429120	66880	4438400	3648	3648	48640	243200
Population Total	67,385,392	3,155,676	28,858,760	673,946	60,973,000	68,656.2	335,594.2	806,540	4,397,510

⁴⁷ USDA, *Dietary Guidelines for Americans 2010*, <http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf>

Consumption

The USDA reports that, since 1957, the individual average consumption of calories has increased by 800 per day, reaching an average of 2,757 calories per person per day in 2003.⁴⁸ The approximate 25% increase from 1970 averages, can be attributed to an increase in consumption of refined grains, fats and oils, added sugars, fruits and vegetables, meats and nuts, and dairy. On average, Washington County residents consume over 5 million pounds of beef and potatoes annually.⁴⁹ Over 2.5 million pounds of chicken were consumed, 1.4 million pounds of cheese, 1.9 million pounds of tomatoes (fresh and processed), and 1.8 million pounds of apples (fresh, juiced, and processed). About 1.5 million pounds of pork are consumed annually. There is over 850,000 gallons of milk consumed, as well as over 12 million pounds of cheese and other dairy products from the dairy case. With these millions of pounds of food consumed just of these top products, compared with the much smaller amount we produce, there appears to be a large potential market for local products. In general, knowing the types of food being consumed and the quantity in each of the categories can also serve to assist in planning what kind of food can be produced locally to meet the dietary needs of the residents.

Central Vermont consumers eat the majority of food in the household, and purchase the bulk of this food from the supermarket or grocery stores to be eaten at home. The majority of household food sales in Vermont are from large supermarkets. In 2007, 86 percent of all retail food sales in the state occurred in supermarkets, including Costco and Wal-mart.⁵⁰ Outside the home, residents consume food at restaurants, cafeterias, markets, and vending machines.

Small-scale Production

Many Central Vermont residents grow their own food, hunt, and/or forage, but specific data regarding to what extent is unknown. There currently 21 known allotment style community and school gardens found throughout the region at schools, parks, and other public locations (see Appendix D).⁵¹ These community gardens provide a place where community members who may not have access to their own land can grow food and students can learn about food production. CVRCP is in the process of mapping these facilities.

Community Based Organizations

Non-profit Organizations

The Central Vermont Region is home to three active Food Systems Councils that meet on a regular basis: The Waterbury/Duxbury Food Systems Council based in the towns of Waterbury and Duxbury; the Mad River Localvores representing the mad River Valley towns of Warren, Waitsfield, and Fayston; and the

⁴⁸ USDA, *Profiling Food Consumption in America 2010*, <http://www.docstoc.com/docs/43928367/Profiling-Food-Consumption-in-America>

⁴⁹ Leopold Center for Sustainable Agriculture, *Market Estimator 2008*, <http://www.leopold.iastate.edu/pubs-and-papers/2008-11-us-food-market-estimator-users-guide>

⁵⁰ <http://www.vsjf.org/project-details/5/farm-to-plate-initiative>

⁵¹ Friends of Burlington Gardens & the Vermont Community Garden Network, *Vermont Community Garden Network*, <http://www.burlingtongardens.org/>

Central Vermont Food Systems Council, which is primarily based in the city of Montpelier (see Appendix D for more information).

The Two Rivers Center Farm is a project of Food Works, an organization based in Montpelier that has been working on improving food education and equity in Vermont for over 30 years. Food Works at Two Rivers Center offers a variety of programs and services to the region including educational and outreach programs on the working farm. The farm also works in coordination with the Vermont Food Bank, growing food dedicated to the Food Bank to ensure low-income Vermonters have access to fresh produce and to increase awareness regarding hunger or poverty in the Region. Food Works is also a partner with the statewide education program-Vermont Food Education Everyday (VT FEED). This program is administered with two other statewide non-profit institutions that provide resources and services to residents and farmers in the Central Vermont Region: the Northeast Organic Farming Association of Vermont (NOFA-VT) and Shelburne Farms. VT FEED works with schools and communities to raise awareness about healthy food, the role of Vermont farms and farmers, and good nutrition.⁵²

The VT FEED program works with teachers, farmers and school food service staff to create curricula and standards based lesson plans that teach students about Vermont's agrarian culture, farming, and nutrition through hands-on activities such as cooking, farm tours, and local farm-to-school programs. NOFA-VT provides many services and resources to farmers, gardeners, and institutions through a variety of programs. It administers the state certification program for organic farms, and hosts conferences, workshops, and other educational events.⁵³ Such programs provide important resources, particularly for start-up farmers and for the promotion of local farms and farm products.

Waste Management

Waste and Nutrient Management

Recapturing our food and farm waste streams is a critical element of the food system, closing the cycle. About 30 percent or more of Vermont's solid waste is food scraps, resulting in approximately 120,000-130,000 tons per year heading to landfills.⁵⁴ Landfilled food scraps create methane, a green house gas that is 72 times more damaging than carbon dioxide over a 20 year period. The Agency of Natural Resources oversees the regulation of waste in the state. While any farm or home can compost their own organic wastes, facilities must be certified by the state to accept waste from others.

The Central Vermont Solid Waste Management District services 52,000 residents and 18 member towns. Since 2003, the Central Vermont Solid Waste Management District (CVSWMD) has managed a commercial food waste collection program.⁵⁵ This composting program has targeted institutional and commercial facilities such as grocery stores, food markets such as the Hunger Mountain Coop in

⁵² VT FEED, <http://www.vtfeed.org/>

⁵³ NOFA VT, <http://nofavt.org/>

⁵⁴ Highfields Center for Composting, <http://www.compostingvermont.org/conference/2011/gilbert.pdf>

⁵⁵ CVSWMD 2010 Annual Report, <http://www.cvswwmd.org/annual-report-2010.html>

Montpelier, and schools and cafeterias. Since 2004, CVSWMD's Business Organics Program has diverted an estimated 4,012 tons of food scraps from the trash.⁵⁶ As of 2011, CVSWMD reported that 100 percent of the district public schools were composting their food scraps as part of the School Zero Waste Program. The waste is collected by CVSWMD and transported to local composting operations for a service fee that cost less than the cost of trash collection in the region. The food waste is taken to the following commercial composting operations in the area: Vermont Compost Company in Montpelier; Highfields Center for Composting in Wolcott; Grow Compost of Vermont in Moretown; the Dog River Farm in Berlin; and Cookeville Compost in Cookeville. There are two categorical composting facilities in the Central Vermont Region (the Vermont Compost Company in Montpelier and Grow Vermont in Moretown). CVRPC is in the process of mapping composting and waste management facilities.

There are other state-wide programs that support waste management and composting. The Composting Association of Vermont (CAV) is a non-profit organization that supports and promotes organics recycling throughout Vermont. The organization also advocates for the production and use of compost as a vital link between soil health and sustainable agriculture and communities.

Identified Gaps & Next Steps

Gaps and Challenges

The following section addresses the gaps based on the current analysis completed as well as the long-term next steps necessary to ensure the completion of this project. Currently in the Central Vermont Region there is a significant amount of work occurring from both a top down approach (i.e. the Vermont Farm to Plate work at the state-wide level and the *Facilitating Innovative Agricultural Enterprises Report* that sponsored by the Vermont Planning Association and Completed by the Vermont Law School⁵⁷) and from grassroots efforts (i.e. the various non-profits and food security organizations). In addition, some potential key partners, such as the local Health Department and other health professionals are not regularly involved at the community planning level. As a result, there is often a disconnect resulting in an inefficient use of limited resources and a duplication of work.

The need for highly networked communication and coordination among food system enterprises, markets, technical assistance providers, and advocacy organizations regarding products, activities, and services is more acute than ever. To expand our food system efficiently and effectively, we must significantly improve access to accurate and timely information about land access, product availability, market data, rules and regulations, distribution systems, and other issues.

-Vermont Farm to Plate Strategic Plan, 2011

Currently, there is also a lack of sufficient in-depth quantitative and qualitative analysis at the local level. In its current state, the Food System Asset Inventory is just that, a list and description of all known relevant part of the Food System.

⁵⁶ <http://www.cvswwmd.org/annual-report-2010.html>

⁵⁷ Vermont Law School Land Uses Clinic, *Facilitating Innovative Agricultural Enterprises: Considerations and Example Language for Vermont Municipalities*, <http://nnecapa.org/files/2012/05/VT-Ag-Guide.pdf>

Some elements of the system need significant additional analysis, through qualitative methods such as informative interviews and quantitative analysis such as spatial mapping and analysis of infrastructure affecting production such as prime soils in relation to current zoning regulations and development patterns.

Regional Planning Commissions fill the void by facilitating dialog between state and local officials, providing regional and local planning services, and tackling a broad array of development issues. The expressed need from member towns is a driving force contributing to the continued work necessary to develop a food systems plan. The creation of a regional food systems plan will serve to establish a venue for stakeholders from both the community and state level to collaborate on a regular basis as well as providing the additional research and analysis needed to accurately examine the current state of the system, identify relevant goals to improve the system, and ensure the sustainability of such work. A Central Vermont Regional Food Systems Plan will provide local communities with the relevant quantitative data, policy guides, and model regulations to support their continued work on the local level, including implementation. CVRPC will continue to serve as a consulting organization in this capacity, providing communities with the necessary data and research to support their food systems goals.

Next Steps

The cumulative goal of the project is to create a Food Systems Plan unique to the Central Vermont Region. The Plan will help to guide policy creation that will support systems change to cultivate community hunger resilience. This process will serve as a catalyst for local community engagement in food policy empowerment issues. The following section outlines the necessary components for the creation of such a Plan.

CVRPC's vision for the Food Systems Plan includes a planning process that incorporates community-based needs assessment, long-range planning and visioning, and community participation. Over an 18-24 month time period, this project will: facilitate extensive public outreach to form an Advisory Committee and hold public meetings; complete any additional base line data collection and analysis necessary; identify goals and implementation strategies to enhance long term food security; complete an interactive drafting process; implement an extensive distribution and promotion process. In order to accomplish these goals, CVRPC proposes to:

- Form an advisory committee to provide input on the Regional Food Systems Plan. The Committee will meet on a bi-monthly basis for the purpose of providing input on the planning process, to review research and data finding, and to help develop goals, strategies, and action items.
- Complete a SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis based on previous data collection, asset inventories, and outreach. SWOT Analysis is a tool for strategic planning that includes assessments of gaps and opportunities. The SWOT Analysis will serve as a link between the previous data collection and analysis and the creation of a comprehensive regional food systems plan.

- Draft a comprehensive Regional Food Systems Plan encompassing the data collection and analysis, stakeholder input, and identified objectives. CVRPC has determined four main objectives for the food systems plan:
 - 1) To determine the **existing food needs** of the Central Vermont region by evaluating current agricultural production levels in relation to baseline nutritional requirements, accessibility and economic constraints of vulnerable populations, and infrastructure constraints primarily related to processing and distribution.
 - 2) To evaluate the **potential for food production & land requirements**. This would be completed through a regional site condition analysis examining: natural features, current agricultural methods, crop yield, alternative food production methods; and by soliciting input from local residents and current agricultural producers through outreach methods such as interviews and community meetings.
 - 3) To evaluate potential **regulatory constraints on production, processing, and distribution schemes** through an evaluation of current zoning and subdivision regulations, development patterns, and municipal plans. The evaluation will also incorporate solutions from other communities, outline material and social resources needed, and determine appropriate productions opportunities for specific areas.
 - 4) To determine the impact of food production, distribution, and consumption on the **local economy**.
- Through a series of public meetings, present the draft to the Region for public comment. All groups and organizations and their constituents will be invited to participate.

A detailed draft workplan for the next phase of developing a Regional Food Systems Plan can be found in Appendix B.

A local food system is nothing new to the Central Vermont Region. The state of Vermont continues to have significant ties to the agricultural economy. Though a variety of economic and social factors continue to threaten the local sourcing that was common in the past, new economic and social forces make this a good time to look anew at local food. More farmers are growing for local markets; local processors are feeling pressure for growth; petroleum dependent systems are increasingly vulnerable to market disruptions; and public interest clearly is on the rise.

There is great potential to build a regional food system that can make farms more viable; keep land in agriculture; create jobs on the farm, in food processing and distribution; reduce transportation costs and petroleum dependency; and keep consumers' food dollars circulating, and recirculating, in the local economy. A regional food system also can lead to greater access to healthful food in Central Vermont; promote healthful eating and living; strengthen rural and developed communities that grow and process food; and create a resilient network of farms and food-related businesses that are not dependent on and vulnerable to circumstances in other states or countries.

Appendix A: Glossary

Food Assessment glossary

Aggregation – the gathering of food products from a number of farms at a centralized point from which wholesalers and retailers can have access to large enough volumes to meet their distribution and sales needs.

Commercial kitchen incubator – also called “community kitchen” or “shared-use commercial kitchen:” Facilities with commercial-grade kitchens for processing and canning products for commercial sale. Often, they serve as business “incubators” where entrepreneurs rent space and equipment until their business grows enough that they can have their own facilities.

CUP – Vermont’s Current Use Program: Vermont's Agricultural and Managed Forest Land Use Value Program -- better known as the Current Use Program -- was created in the late 1970’s as a companion to legislation that required towns to list property at 100 percent of fair market value. Because of escalating land values, it was clear that property taxes based on fair market value were placing a heavy property tax burden on owners of productive farm and forest lands. The Current Use Program offers landowners use value property taxation based on the productive value of land rather than based on the traditional “highest and best” use of the land. In 2000, the current use value of the land in the program averaged about 20 percent of the full fair market value

CSA – community-supported agriculture (or “subscription farms”): A farm-funding arrangement by which “members” pay a farm a set fee for a “share” of the farm’s operation in a given year. In return for that fee, members receive a share of what the farm produces each week. Members share in the farm’s risk for the season: In a bad year, the weekly shares may be meager; in a good year, members share in a bumper crop of goods.

Flash Freezing – a process of quickly freezing food, such as fresh produce, at very low temperatures in a way that preserves quality and flavor.

Food desert – an area with little or no access to foods needed to maintain a healthy diet but often served by plenty of fast food restaurants. There are urban food deserts, which may be densely populated neighborhoods that lack grocery stores, and there are rural food deserts where residents may have to drive many miles through many villages to get to a full-service grocery.

Food Hub – a site that facilitates the aggregation, distribution and marketing of local food. To get a sufficient supply of a given product to meet the demands of a large wholesale or institutional customer, products can be aggregated at a hub. Such a hub, in turn, could supply a metropolitan distribution hub. Either hub could also provide processing services, such as a **commercial kitchen incubator** or **flash freezing** facility. A food hub could be a private business, a not-for-profit operation or a co-op, and could provide marketing and distribution services.

Food miles – the distance food is transported from the time of its production until it reaches the consumer

Foodshed – like a watershed, except tracing the production and transport of food from farms “downstream” to major points of consumption within a region. Molly Watson in about.com describes foodshed as: everything between where a food is produced and where a food is consumed — the land it grows on, the routes it travels, the markets it goes through, the tables it ends up gracing.

Heirloom – varieties of fruits and vegetables that once were more common, but fell out of common use in modern food production and distribution processes that favored uniform sizes, shapes and flavors, plus ease of transport and longer shelf life. Heirloom varieties bring back a broader range of flavors and types for specialized uses and tastes.

Incubator, food business – a program that assists new food-related businesses, usually processors, in getting started, often by making space and/or equipment available. (See *community kitchen*)

Infrastructure – the segments of a local- or regional-food system that add value to local food before it gets to consumers, or are part of the process of getting food to consumers. It includes: meat, poultry, dairy and vegetable processing facilities; auctions; aggregation/distribution centers; distribution trucks and warehouses; farmer cooperatives and other arrangements that help producers meet the quantity needs of distributors and processors; the companies that package and sell seeds to farmers; the financial institutions that lend to farmers and processors; and the workers who keep those businesses viable.

Institutional buying – a policy of seeking to purchase local foods by large public or private institutions such as state or local governments, school districts, colleges and universities, hospitals, prisons, jails, etc. The importance of institutional buying is to establish a large market for local goods, which might encourage more farms, processors and distributors to become involved in local-food systems.

Interstate shipment – sale across state lines of meat or poultry processed in a plant inspected by a state department of agriculture, as opposed to the U.S. Department of Agriculture. State inspection programs must have standards at least as high as those of USDA. Nonetheless, federal law has prohibited sale of state-inspected meats across state lines. The 2008 federal Farm Bill removed that prohibition, as long as state programs meet certain additional criteria that the USDA is currently reviewing.

Land trust – an organization, usually private and non-profit, that is organized to preserve or protect environmentally sensitive open space or important farmland. Land trusts may actually own the land, but often they own and/or monitor an easement on the land. The easement may be purchased by the land trust or another entity. With farmland, easements often are donated to the land trust, and the farmer in return received federal tax breaks.

Leakage – loss of potential sales of an agricultural product in a given area. The area may have the capacity to supply all of a given product to the people of that area, but if the people opt to buy that product from another area, that product experiences a leakage.

Local food – a broad term to describe food that is produced, processed, distributed within and consumed within a certain defined locality. “Local food” does not have a precise definition, or certification. But that can be an advantage: Consumers in many cases can become acquainted with farmers and then make their own decisions about quality, local-orientation and natural practices. For the purpose of this research, “local food” means food produced, processed and consumed in Vermont.

Locavore – a loose term for a person who seeks to eat only, or primarily, food that was produced locally. The definition of “local” for locavores may vary, but food grown within 100 miles is a common usage by locavores.

Natural food – The Natural label, as regulated by USDA, is applied only to meat and poultry. When used on other products, the definition of “natural” varies. In meat, it means no chemical preservatives or artificial ingredients – but does not necessarily mean the animal is antibiotic-free, hormone-free or has had time outdoors. There also is a “Certified Naturally Grown” label with standard similar to but stricter than USDA organic certification. But the standards are privately created and not governed by USDA. Likewise, “naturally grown” does not necessarily mean local.

Organic food – Organic products must have at least 95 percent organic ingredients, excluding water and salt, and organic farms must be certified by a USDA-approved organization. Products must be free of synthetic fertilizers, pesticides or genetically modified organisms, although some synthetic chemicals can be used if they are not harmful. Animals must be fed organic food, allowed access to the outdoors and be free of antibiotics. The U.S. Department of Agriculture (USDA) also has a “100 Percent Organic” designation.

Prime farmland – federal Natural Resources Conservation Service designation for land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. It refers only to land that has those characteristics and is used for production. It does not include land already in or committed to urban development or water storage.

Processing – Food “processing” refers to any step in changing a farm commodity into a food product for consumers. It can range from washing and bagging leafy greens to preparing and packaging a complete frozen dinner, or turning tomatoes and peppers into a canned sauce. It includes pasteurizing and bottling milk and making butter, cheese or ice cream; killing and butchering hogs, cattle, lambs, goats and poultry; freezing and packaging fresh produce; canning produce; sorting and bagging fresh fruit and vegetables; preparing and canning salsas and sauces; and more.

Traceability – the ability to trace food back to its source in the event of a food-safety issue. Typically done with packaging labels that include producers’ names, harvest and packaging dates and other information.

Appendix B: Draft Work Plan

Potential Work Plan Outline for the Creation of a Regional Food Systems Plan

Goal 1: To ensure effective outreach, public participation and input is gathered throughout the process of grant activities

G1 Objective 1: Form advisory committee to provide input on the Regional Food Systems Plan.

G1:1 Narrative CVRPC understands the effectiveness and value in public participation in the planning process and will facilitate the formation of an advisory committee which will meet on a bi-monthly basis for the purpose of providing input on the planning process, to review research and data findings, and to help develop goals, strategies, and action items. The committee will include representatives from farms, value-added food production, farm to school programs, higher education, local food groups, retail distribution, and economic development.

Activity	Responsible Party	Start/End Dates
Identify committee members	CVRPC	Month 2-3
Meet on a bi-monthly basis to review SWOT analysis, Plan drafts, research, etc.	CVRPC & Advisory Committee	Month 3-12
Develop goals, strategies, and action items.	CVRPC & Advisory Committee	Month 7-12

Goal 2: Identify and complete additional in-depth analysis integral to the completion of a comprehensive food systems plan.

G2 Objective 1: CVRPC will work in consultation with the identified partners within the Farm to Plate Program to develop and complete tangible strategies that could be used to undertake additional analysis.

G2:1 Narrative Additional analysis will include parameters for more in-depth analysis for a GIS-based landscape capacity analysis to understand the amount of land necessary to sustainably grow food for Central Vermont and outline economic models to project the financial and social impacts of strengthening food security in Central Vermont. Additional analysis may also be based upon community input and interviews with key stakeholders.

Activity	Responsible Party	Start/End Dates
Outline parameters of technical analysis	CVRPC & Farm to Plate Program Staff	Month 2-5
Develop strategies and conduct additional analysis	CVRPC & Advisory Committee	Month 3-8

Goal 3: Review and analyze all information collected and develop organizational strategies and actions for CVRPC to complete a comprehensive food systems plan for Central Vermont.

G3 Objective 1: Based on previous data collection, asset inventories, and outreach, develop a SWOT analysis to serve as a catalyst for Regional Food Systems Plan development. SWOT Analysis is a tool for strategic planning that includes assessments of gaps and opportunities. SWOT stands for Strengths, Weaknesses, Opportunities, and Threats.

G3:1 CVRPC will share SWOT Analysis findings and request input from the Advisory Committee.

Activity	Responsible Party	Start/End Dates
Present SWOT Analysis findings to Advisory Committee to solicit discussion and input from participants.	CVRPC & Advisory Committee	Month 5-8

G3 Objective 2: Prepare a comprehensive, strategic Regional Food Systems Plan.

G3:2 With guidance from the Advisory Committee, CVRPC will draft a comprehensive Regional Food Systems Plan.

Activity	Responsible Party	Start/End Dates
Draft Plan to be reviewed by the Advisory Committee	CVRPC	Month 7-15
Solicit comments from the Advisory Committee	Advisory Committee	Month 10-13

Make draft corrections in preparation for public comment period.	CVRPC	Months 13-15
--	-------	--------------

G3 Objective 3: Present draft to community for public comment to serve as a catalyst for outreach and engagement.

G3:3 Working with the Advisory Committee and interested partner organizations, CVRPC will co-host 3 sub regional community meetings to share the Plan draft and request input. All groups and organizations and their constituents will be invited to participate. Efforts to follow up with parties not able to attend will be made.

Activity	Responsible Party	Start/End Dates
Coordinate 3 sub regional community meetings to share information and request input. Meetings will be advertized in local newspapers and individual invitations sent to target groups or people to request participation.	CVRPC, Advisory Committee, & Partner Organizations	Month 13-15
Present information at meetings	CVRPC, Advisory Committee, & Partner Organizations	Month 15-18
Publish final document on CVRPC website, to serve as a model for municipalities, other RPCs, and state-wide models.	CVRPC	Month 18

Appendix C: Survey

During the Summer of 2012, CVRPC conducted an online survey in order to target potential stakeholders not previously represented throughout the Food Systems Assessment Project and in order to identify potential members for the to be established Food Systems Steering Committee. The Survey was conducted online through the program Survey Monkey. Respondents were identified through local grassroots organizations, the health department, and local schools. An invitation to complete the survey was sent to 43 individuals, 22 responded. All respondents that completed the survey identified that they would like to continue to participate in the creation of a regional Food Systems Plan. The results of the survey can be found below.

Survey Target Respondents

Representatives from the three local and active Food System Councils:

- Mad River Localvores, *Mad River Valley Towns*
- Waterbury/Duxbury Food System Council, *Waterbury/Duxbury Towns*
- Central Vermont Food System Council, *Montpelier based*

Representatives from local non-profits focusing on food access:

- Food Works at Two Rivers Center, *Montpelier*
- Washington County Hunger Council
- Community Connections-Healthy Retailers
- Local Food Shelves

Representatives from the education sector:

- Public Schools (Montpelier, Barre Town, Barre City, Spaulding, Washington West, Waitsfield South SU, Roxbury, Washington Central,
- Yestermorrow

Representatives for agricultural and value-added agricultural production:

- Farmers Market Coordinators
- Food Cooperatives
- NECI
- Farms (Callahan Farm, Northfield; Wellspring Farm CSA, Marshfield; Central Vermont Food Hub, Inc., Montpelier; Green Mountain Girls, Northfield; Tangletown Farm, Middlesex; and Gaylord Farm, Waitsfield)

Representatives for governmental based organizations addressing health, food access, and agriculture:

- Farm to Plate
- Health Department Staff
- Mad River Valley Planning Department
- All Central Vermont municipalities (23 total)
- Chamber of Commerce
- Central Vermont Economic Development Corporation
- Vermont Natural Resources Council

Survey Questions

Regional Food Systems Development Survey

We welcome your participation in this Food System Development survey. **If you are short of time, you may simply read SHOULD I COMPLETE THIS SURVEY? (below) and then go straight to the first question at the bottom of this page. To get the background on the survey, read on.**

PURPOSE AND SURVEY OVERVIEW

This survey is cosponsored by the Central Vermont Regional Planning Commission and the Vermont Department of Health through a Healthy Communities Grant. This questionnaire is largely simple checkboxes and should take about **15 minutes to complete**.

You have the option to provide your name and contact information at the end in case you'd like us to stay in touch with you. The survey and results will be completely anonymous. If you choose to share your contact information, they will not be shared in conjunction with this survey.

One of the big questions relating to food system development is what are the challenges and training needs of current and prospective food system development practitioners? We believe that improved knowledge and skills of practitioners are likely to lead to more effective and efficient programs, and ultimately to more viable and sustainable food systems.

Therefore, we are surveying current or prospective food system development practitioners (including professionals and volunteers) to better understand their needs and opportunities. The results will be shared publicly (although all responses are anonymous) and used to inform the work of a broad range of organizations and agencies.

While Cooperative Extension and other entities have been doing food system development for a long time, for many organizations and their staff or volunteers this is new territory. In addition, much of the current focus in this emerging field lacks established foundations for practice. Out of this we are identifying an emerging need for the kind of information, training opportunities, and networking that enable food system development practitioners to be effective in the important work of building and strengthening local and regional food systems.

Thank you for your participation!

SHOULD I COMPLETE THIS SURVEY?

We define a "food system development practitioner" as anyone who, as a significant portion of their work, uses community development strategies in working with farmers, business people, government agency staff, local residents, or other persons or entities to create or strengthen the viability, equity, and sustainability of food systems. Under our definition of food systems we include (a) agriculture and other kinds of food production, processing, distributing, marketing, and retailing, (b) food security, and (c) food waste management. Under our definition of "food system development professional," we include paid staff with a broad range of job titles and effort allocations, as well as consultants, volunteers, and activists.

1. Do you consider yourself a current or prospective food system development practitioner (professional or volunteer) as per the definition above?

- Yes
- No (this survey will terminate)

Section A: Your Background

We would like to get some details about you and your work. We ask for demographic information at the end of the survey.

2. Which ONE of the following best describes your current food system development situation?

- Staff member of a public agency
- Staff member of a nonprofit organization
- Staff member of a for-profit business
- Staff or faculty in an educational/research institution
- Self employed consultant working in food system development
- Farmer or business person who is active in local or regional food systems projects
- Concerned citizen, interested in food system development
- Volunteer with an agency or organization
- Other (*please specify*)

3. Area(s) of professional expertise: Please identify all areas you have professional experience with. (*check all that apply*)

- Land use planning/Zoning
- Economic development
- Health and/or Nutrition
- Public Health
- Education
- Community Development
- Agriculture (*production, processing, distribution, etc.*)
- Community Gardens
- Value-added agriculture

4. About how many hours per week do you currently spend on food system development work?

- 0
- 1-10
- 11-20
- 21-30
- 31-40 or more

5. How long have you been doing food system development work?

- Haven't started yet
- Less than one year
- 1–3 years
- 4–10 years
- More than 10 years

6. Check the boxes of the geographic area(s) you work in.

City

Town/Village

Rural Area(s)

Region (including two or more of the above community types)

State

Nationwide

International

Section B: Key Food System Development Issues You Work On

7. Traditionally for your profession, residential access to healthy foods is:

- A very important issue
- A marginally important issue
- Not an important issue
- Not sure

8. Traditionally for your profession, the relationship between community design and the ability of residents to access healthy food is:

- A very important issue
- A marginally important issue
- Not an important issue
- Not sure

9. Traditionally for your profession, creating plans, projects and regulations that include specific goals to promote access to affordable, nutritionally dense foods: *(check all that apply)*

- Is not a priority
- Is not necessary because these goals are assumed.
- Does not have the necessary political support
- Would distract from other priorities
- Does not have the necessary funding
- Other (please specify)

10. Please select the PRIMARY issues on which you personally work. You may choose more than one.

- Fostering knowledge, vision, and/or leadership around food system challenges and opportunities.
- Stemming the loss of farms, farmers, and farmland.
- Developing value chains, including marketing, processing, and distribution infrastructure.
- Increasing food security and access to healthy food.
- Promoting the interests of food system workers (including farm and food-service workers).
- Promoting conservation and environmental sustainability.
- Teaching and/or training future food system development practitioners.
- Reducing conflict and disenfranchisement among food system stakeholders.
- Other *(please specify)*

Section C: Food System Development Strategy Training Needs

Food system development practitioners may engage in a wide range of economic, social, and environmental activities. We would like to know more specifically about your training needs regarding these activities.

11. Select all of the food system development activities that you feel you need additional training in:

- Agricultural credit and financing
- "Agripreneurship" development
- Beginning farming training
- Community food security
- Farm transfers (e.g., from a retired farmer to a younger farmer)

- Farm recruitment (e.g., attracting new farmers to the community)
- Food-related health and wellness
- Farmland preservation strategies
- Food policy councils
- Food safety
- Good agricultural practices (GAP)
- Marketing and value chain development
- Regional cuisine and culinary tourism
- Sustainable agricultural practices
- Urban agriculture
- Value-adding strategies (e.g., co-packing, farmstead, regional slaughterhouses)
- Working with socially disadvantaged groups
- Other (please specify below)

Section D: Organizational Challenges

Organizations working in challenged communities often experience challenges themselves. To develop training that helps build organizational capacity, we would like to know more about the challenges your organization(s) face.

12. Select all of the CHALLENGES your project, program, organization, or business faces at this time:

- Attaining financial viability
- Balancing multiple interests
- Clarifying our vision and mission
- Improving project evaluation
- Expanding stakeholder involvement
- Finding viable, established models on which to base our project
- Avoiding mission creep
- Reducing organizational “turfism”
- Developing experienced leadership
- Lessening project dependence on staff
- Fostering more holistic approaches (including the three facets of sustainability: economics, community, environment)
- Increasing our focus on underlying causes as opposed to symptoms of problems
- Addressing racial and/or cultural divides
- Avoiding tension between leadership and stakeholders
- Expanding the number of people who are benefiting
- Other (*please specify*)

Section E: Technical Training Needs and Professional Development

In addition to topical issues we covered in the above questions, we would like to know more about the technical training needs you need to become a highly skilled food system development practitioner. In each of the Technical Training areas below, select the topics you would like made available.

13. Select the TECHNICAL SKILLS you believe you need training in.

- Fundraising and grantsmanship
- Survey design and basic statistical analysis
- Economic impact analysis

- Food system mapping (geographic information systems (GIS))
- Conducting feasibility studies
- Project benchmarking, measuring progress, impact metrics
- Preparing business plans
- Community asset mapping
- Stakeholder engagement (especially disenfranchised groups)
- Online presentation technology
- Optimizing the use of social media
- Curriculum development
- Community food assessments
- Other (please specify below)

Section F: Demographics and Contact Information

We would like to know more about who you are.

14. Please tell us your gender.

- Male
- Female

15. Please identify your age group.

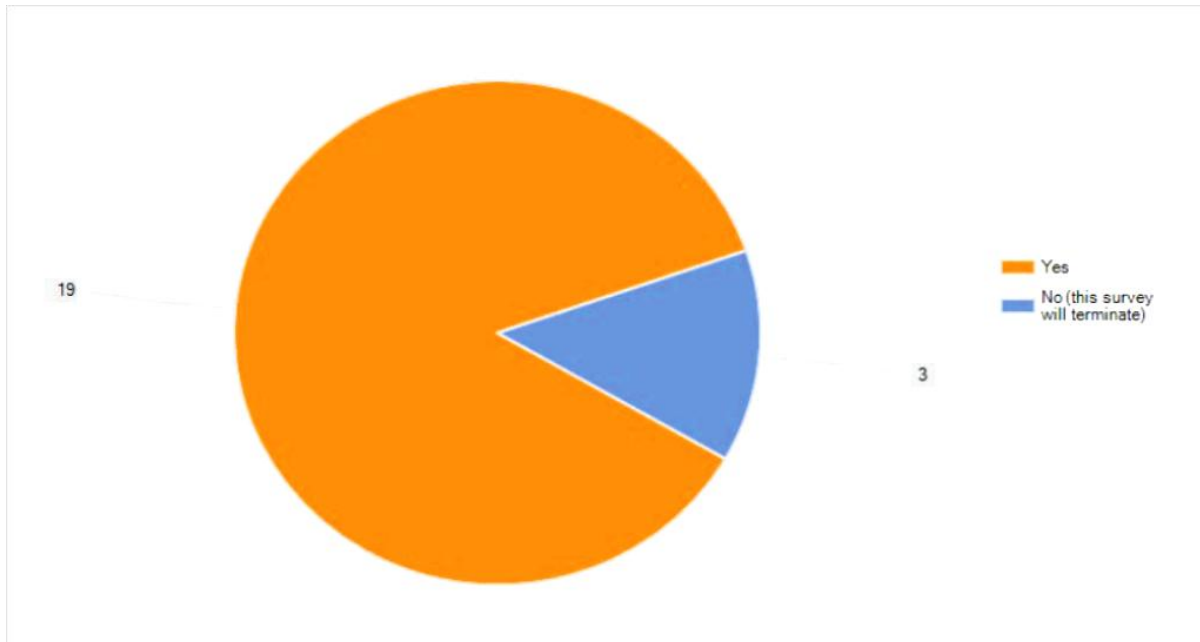
- 29 and under
- 30-39
- 40-49
- 50-59
- 60 and above

16. How do you identify your race or ethnicity?

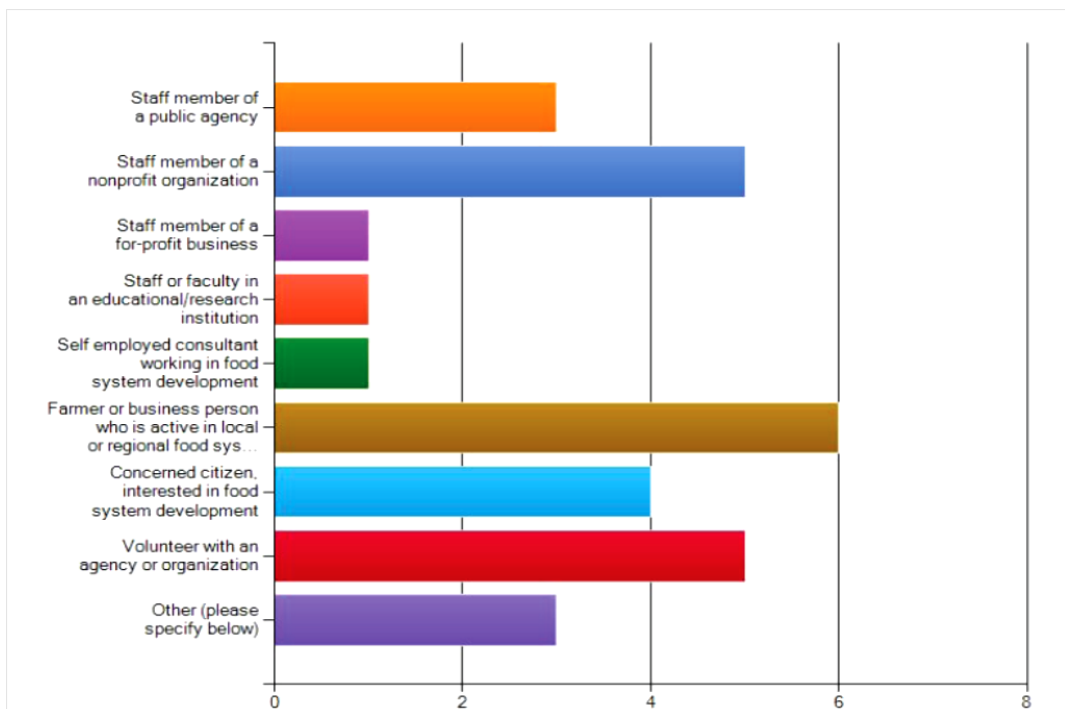
- American Indian or Alaska Native (Not Hispanic or Latino)
- Asian (Not Hispanic or Latino)
- Black or African American (Not Hispanic or Latino)
- Hispanic or Latino
- White (Not Hispanic or Latino)
- Two or more races (Not Hispanic or Latino)
- Would rather not say

Survey Results

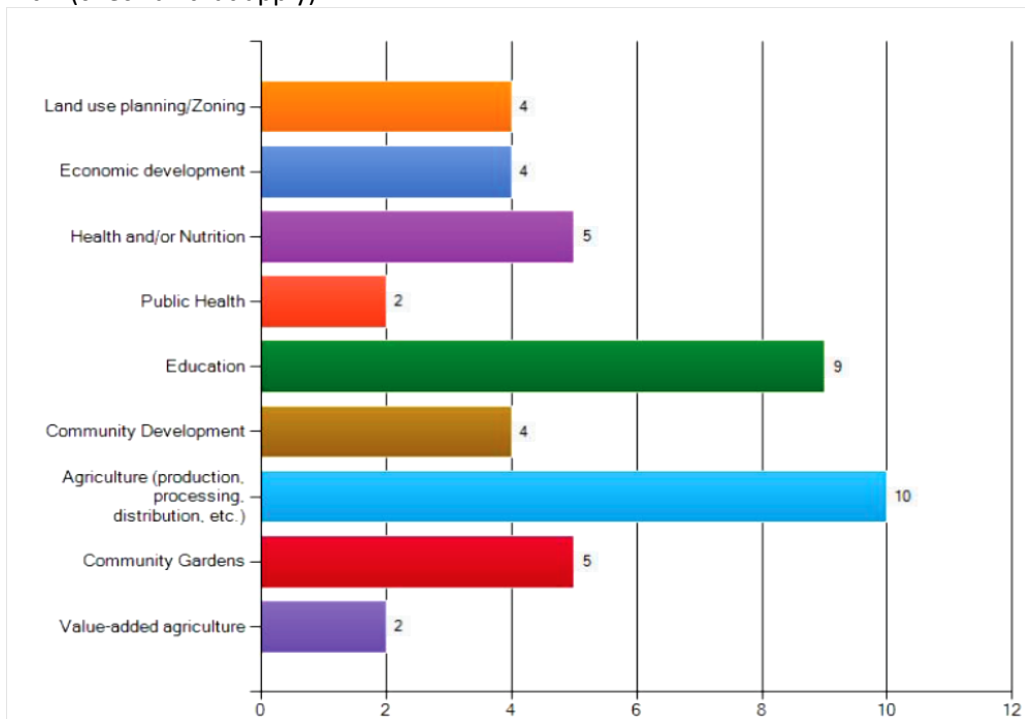
Question 1: Do you consider yourself a current or prospective food system development practitioner (professional or volunteer) as per the definition above?



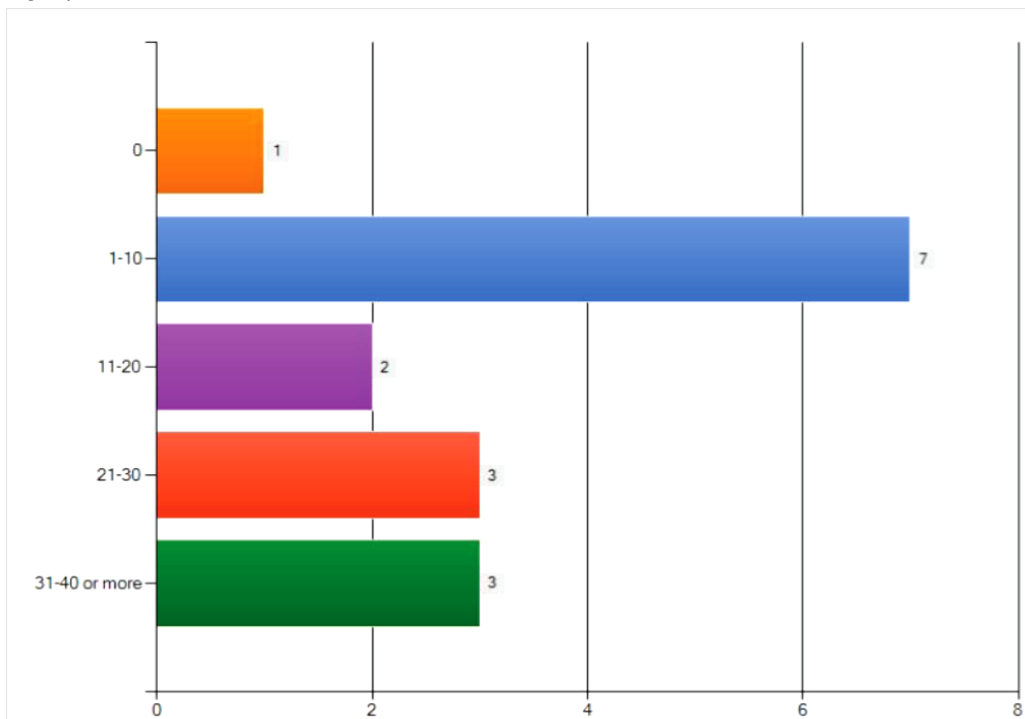
Question 2: Which ONE of the following best describes your current food system development situation? (check all that apply)



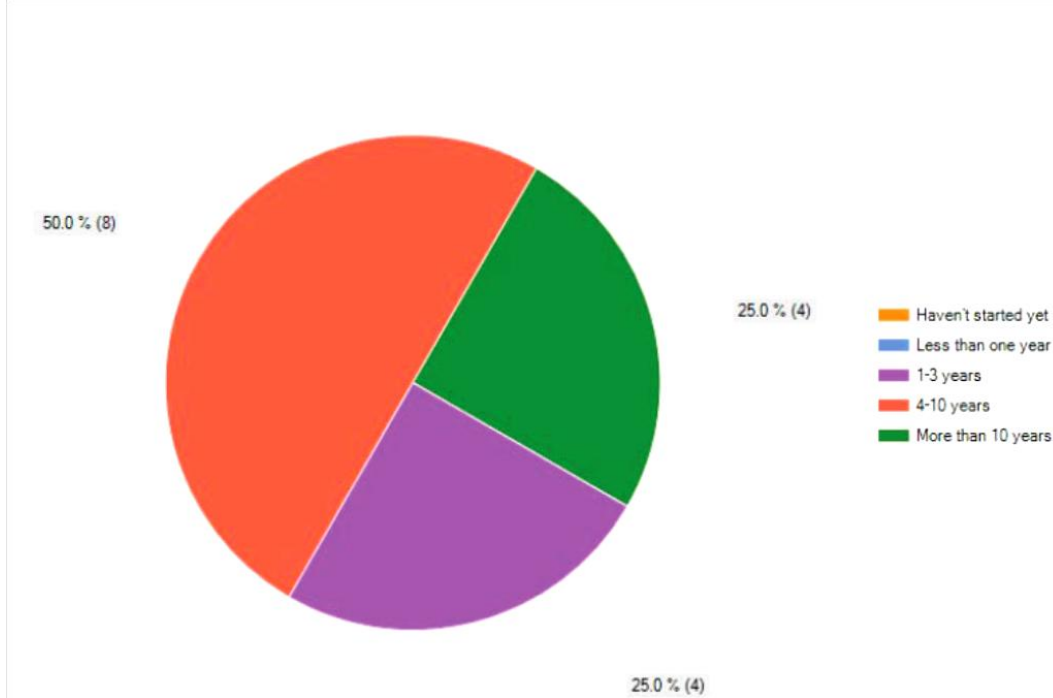
Question 3: Area(s) of professional expertise: Please identify all areas you have professional experience with. (check all that apply).



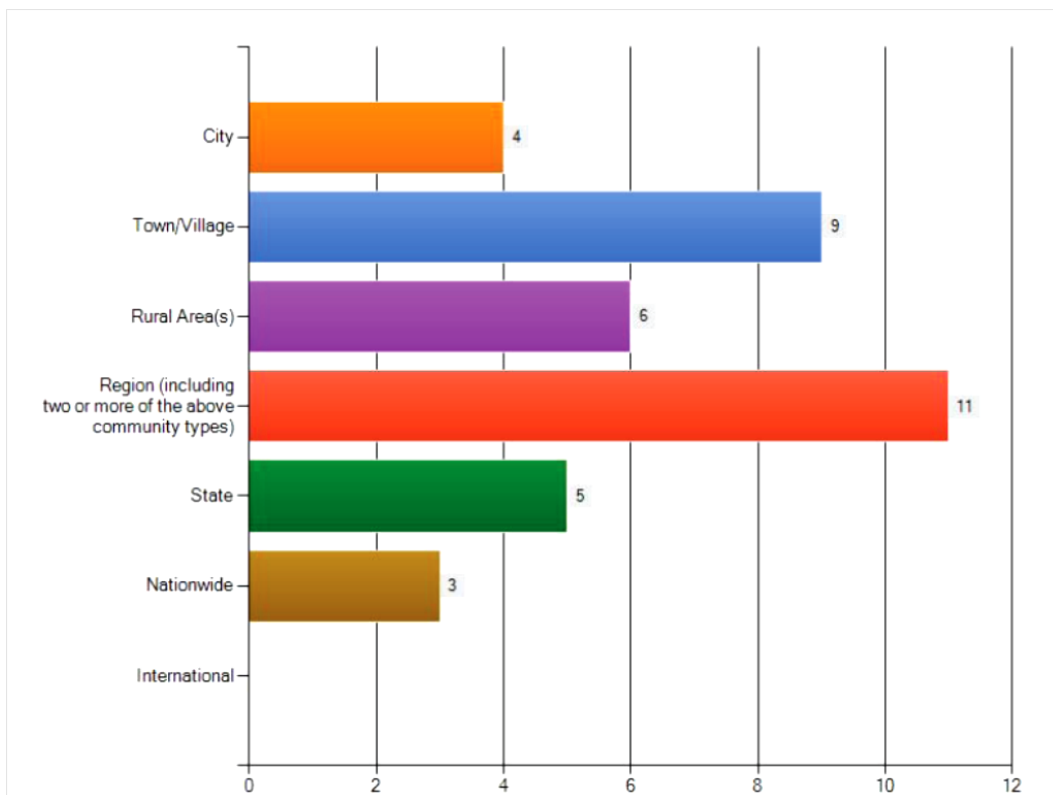
Question 4: About how many hours per week do you currently spend on food system development work?



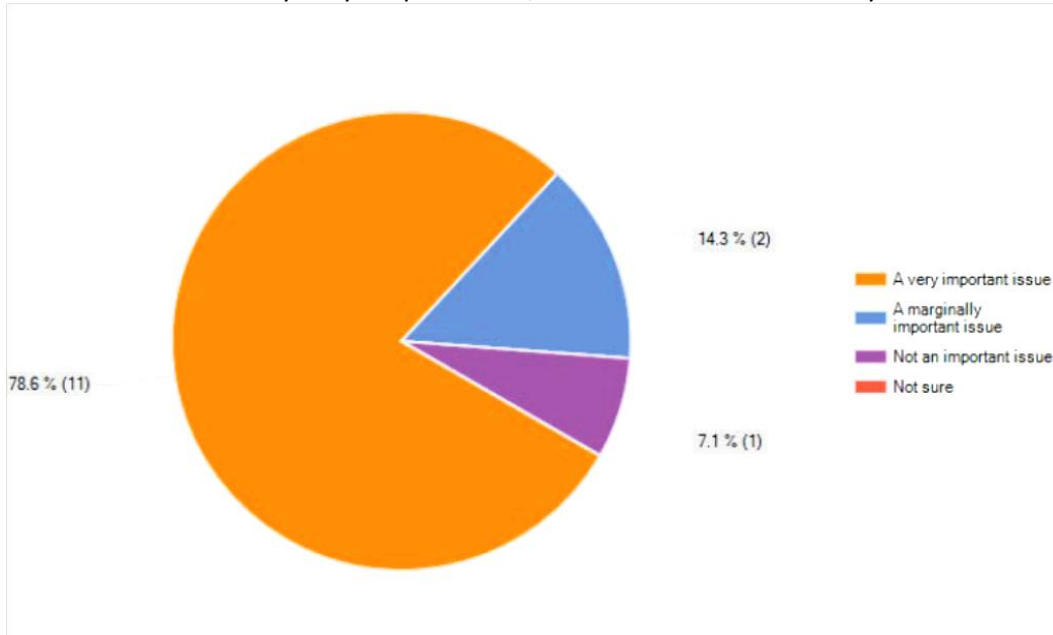
Question 5: How long have you been doing food system development work?



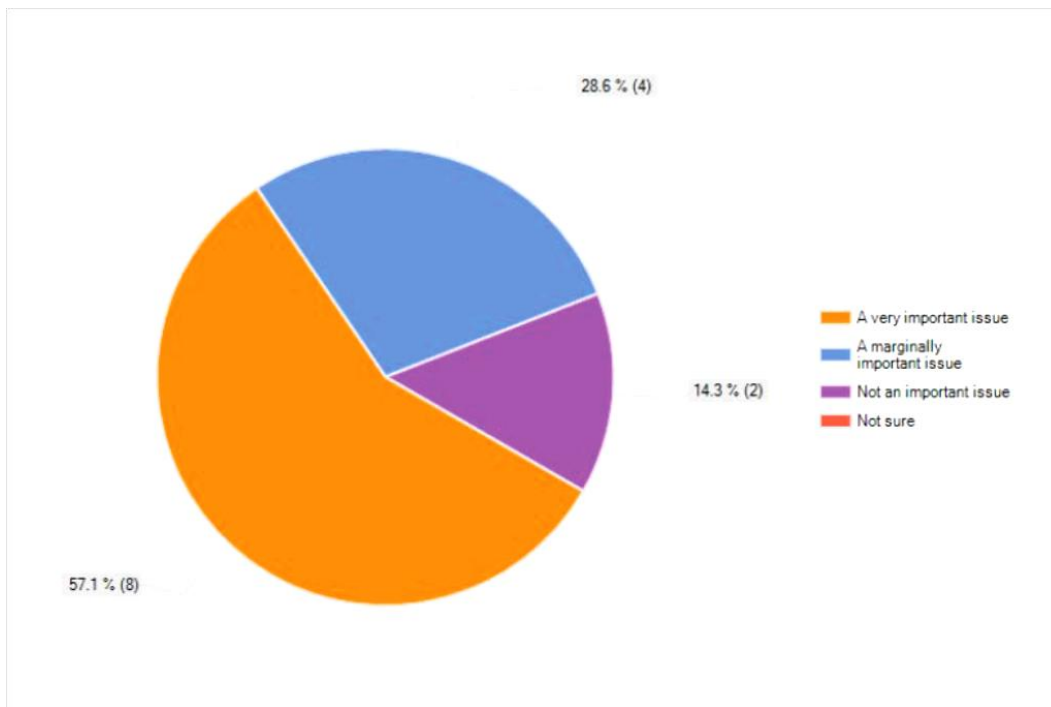
Question 6: Check the boxes of the geographic area(s) you work in.



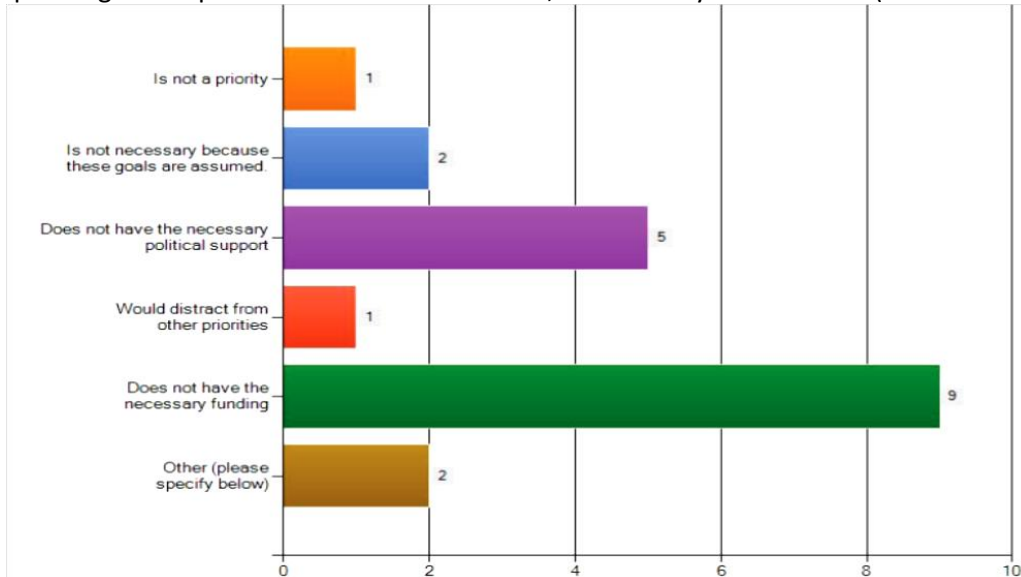
Question 7: Traditionally for your profession, residential access to healthy foods is:



Question 8: Traditionally for your profession, the relationship between community design and the ability of residents to access healthy food is:



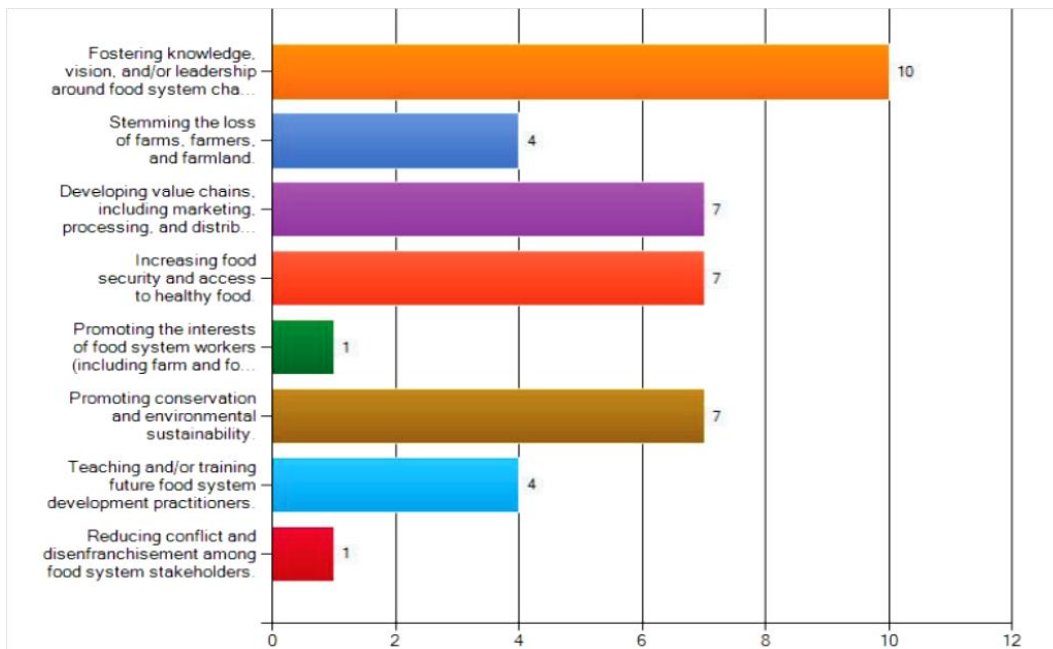
Question 9: Traditionally for your profession, creating plans, projects and regulations that include specific goals to promote access to affordable, nutritionally dense foods: (check all that apply)



Sample of Open Responses:

1. We believe strongly in planning and policy changes, and have recently completed a community food system assessment.
2. Is a goal that many of us are working on.
3. We are building support for increased public investment, with success.

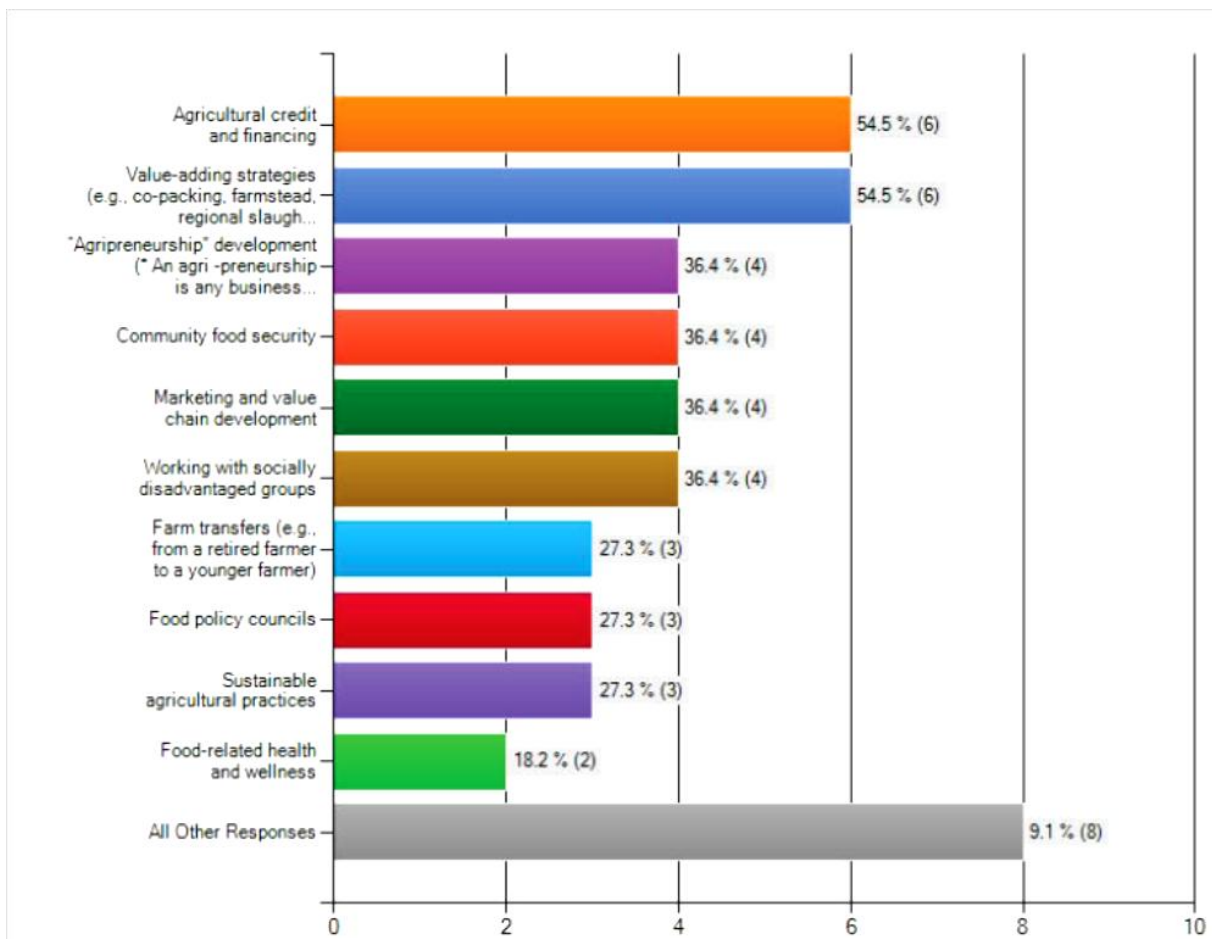
Question 10: Please select the PRIMARY issues on which you personally work.



Sample of Open Responses:

1. Increasing the consumption of local food.
2. Supporting organic practices, building farm-to-school opportunities, growing food for the community.
3. Nutrition Education Improving quality and access to federal nutrition programs Regional food security issues

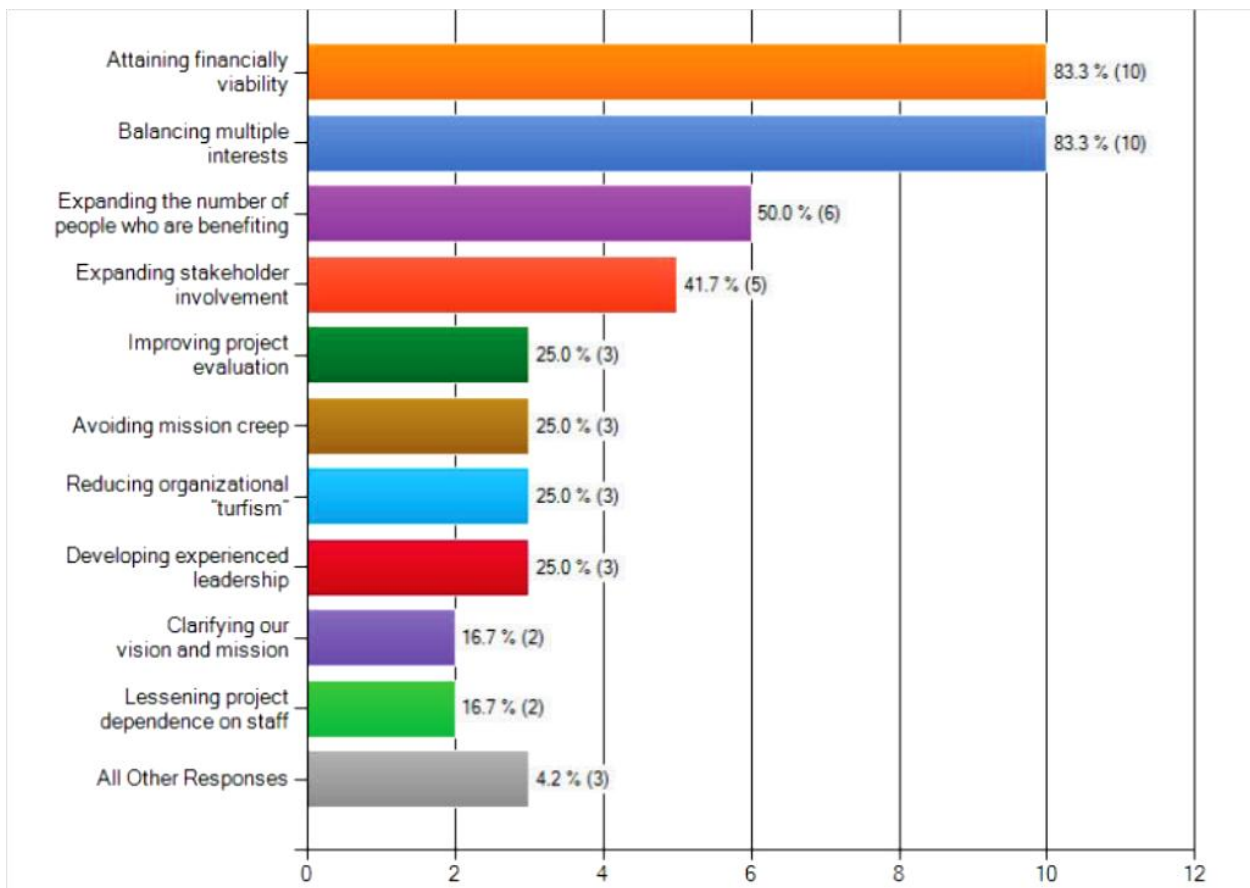
Question 11: Select all of the food system development activities that you feel you need additional training in:



Sample of Open Responses:

1. Knowledge of wholesale distribution networks and skill in efficiency and going to scale with production.

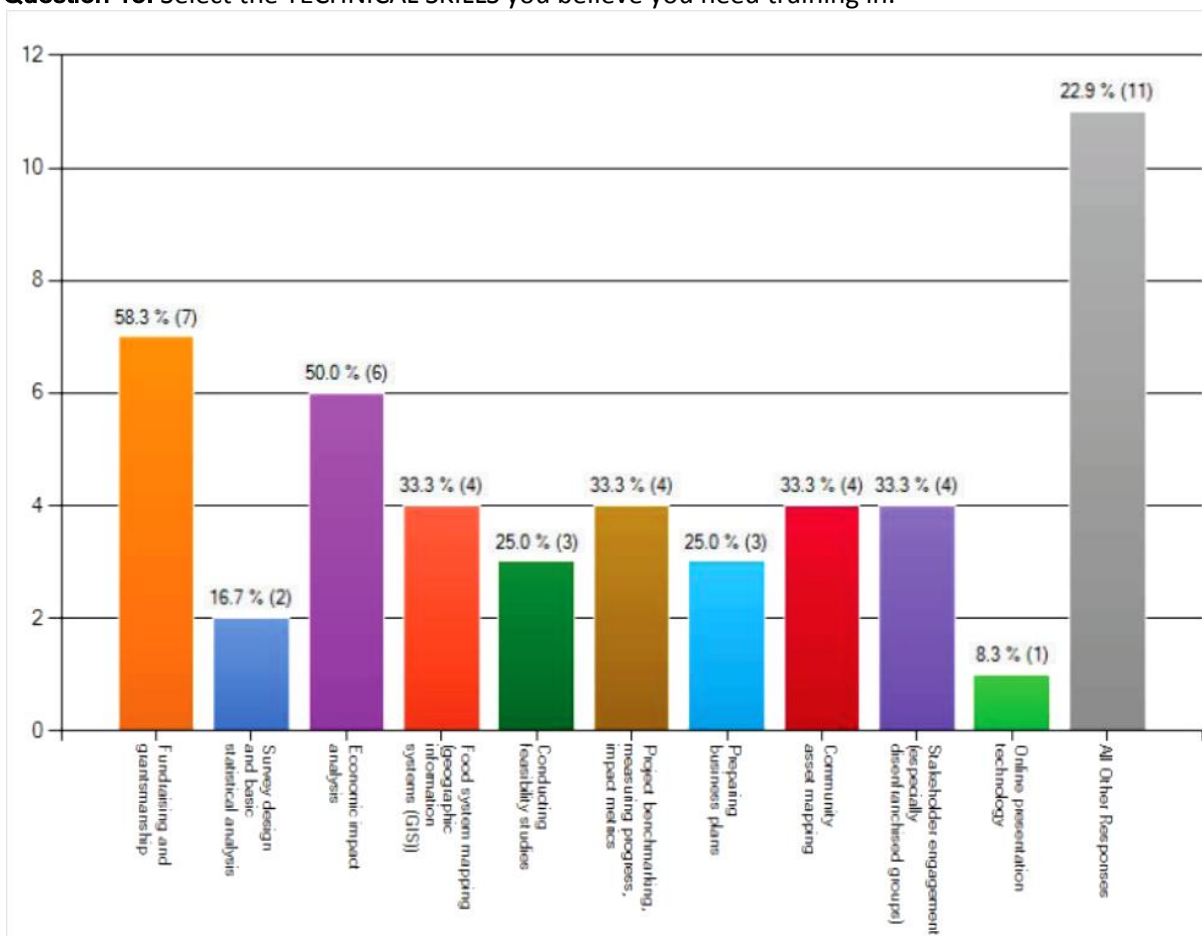
Question 12: Select all of the CHALLENGES your project, program, organization, or business faces at this time.



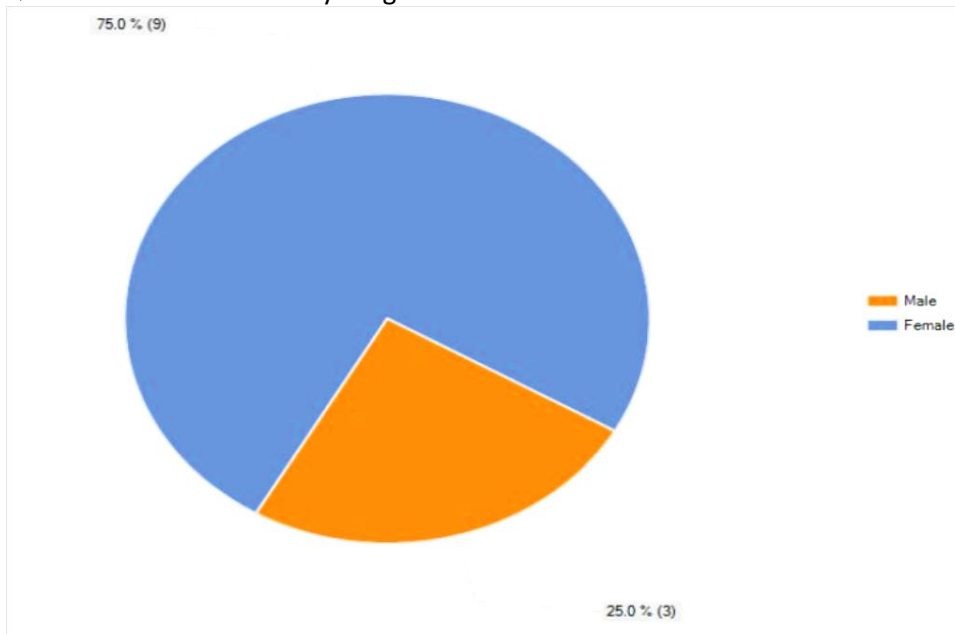
Sample of Open Responses:

1. Knowing how to access the larger food distribution network and package products for larger scale markets

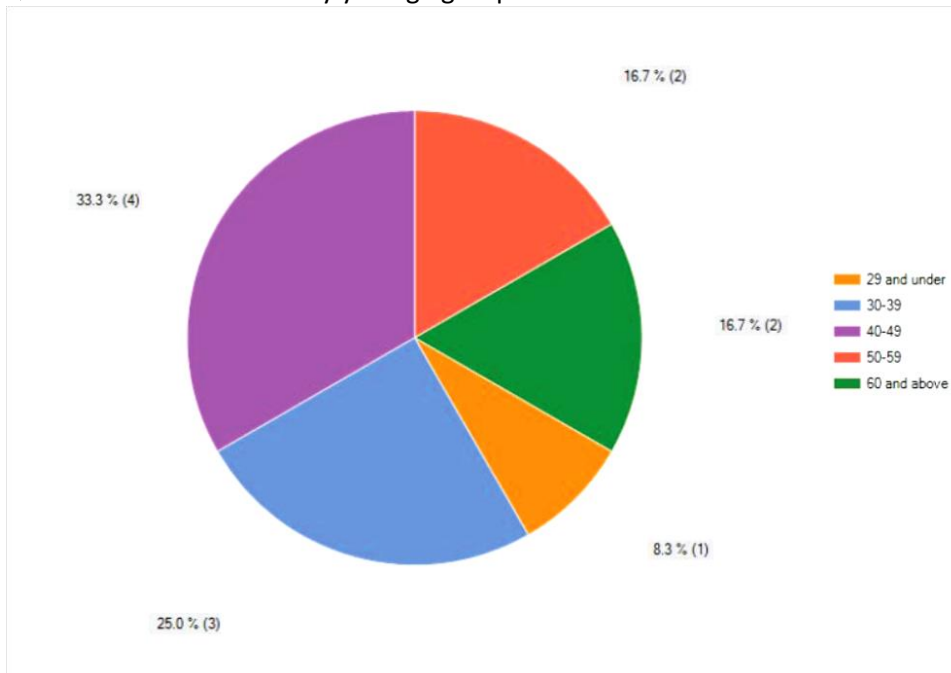
Question 13: Select the TECHNICAL SKILLS you believe you need training in.



Question 14: Please tell us your gender.



Question 15: Please identify your age group.



Appendix D: Food Asset Inventory Data

Community Supported Agriculture (CSA)

Name	Location	Owners	Share Details
Dog River Farm	90 Murray Rd., Berlin	George Cross	Farmstand CSA; TH pickup at Green mTn Coffee in Waterbury and Farmstand ogg of Rte 12 in Berlin
Fieldstone Farm	793 Gib Lane, Northfield	Ian & Chandra Blackmer	Spring/Summer CSA 19 weeks June-Oct; Fall/Winter CSA 10 weeks Oct-Dec; Meat CSA-sourced from local producers and goes for 4 months June-Sept; Pickups at Northfield Farmers Mkt or at Farm
Green Mountain Girls Farm	923 Loop rd, Northfield	Mari Omland and Laura Olsen	Omnivores Farm Share or Farm Stand Share
Hartshorn's Santa Davida Farm	Rte 100 (next to 1824 House Inn), Waitsfield, VT	Dave Hartshorn	Not really a CSA-more of a farm stand direct pickup
Pebble Brook Farm	Moretown	Chip Allen Natvig	Farmers Mkt style Veggie CSA; members pick up at farm or Montpelier delivery and have choice of available tiems
Tangletown Farm	516 Shady Rill Rd, Middlesex	Lila Bennett & David Robb	Meat CSA; Pickup Sat at Montpelier Farmers Market, TH at Waterbury Farmers Market
Gaylord Farm	2587 Main St., Waitsfield	Hadley Gaylord	Meat and Veggie CSAs; Summer CSA June-Oct; Winter CSA meat and egg only Nov-April; Pick up at farm W 4-7pm
High Ledge Farm	198 Chartier Hill, East Calais	Paul Betz & Kate Camilletti	Veggie CSA; 18 weeks (June-Oct)
Maplehill Community Farm	1329 John Fowler Rd	Noah Weintein	Meat CSA-pick up only
Mountain Flower Farm	311 Roxbury Mtn Rd, Warren	Walter Krukowski	
Screamin Ridge Farm	170 Dillon Rd, East Montpelier	Joe Buley	Combined with Dog River Farm through the Central Vermont Food Hub; June 07, 2012 to September 20, 2012 This amounts to 16 deliveries over 16 weeks.
Vermont Grand View Farm	1638 Scales Hill Rd, Washington	Kim Goodling	Yarn Fiber CSA; Meat CSA; Farm pick up
Wellspring Farm	182 Lafiria Pl, Marshfield	Mimi Arnstein & Parker Nichols	Vegetable CSA; Pick up at farm, in Montpelier, or pick your own
Sugar Mountain Farm	252 Riddle Pond Road	Walter Jeffries	All Natural Pastured Pigs, Poultry, Sheep

Source: Vermont Local Growers Guide <http://www.vermontgrowersguide.com/>; NOFA VT Vermont Local Growers Guide <http://www.vermontgrowersguide.com/>

Market Opportunities

Pick Your Own				
Town	Address	Name	Info	Operation
Calais	1502 Route 14	Legare Farm Market	<i>Our own farm planted bedding plants, strawberries, sweet corn, beans, peas, cucumbers, squash, pumpkins, etc.</i>	April 20-Oct. 31, 7am-7pm
Cabot	391 Smith Rd	Smith Road Farm	<i>Pick Your Own Pumpkins. Christmas trees, wreaths, other decorative material and pumpkins. 268 acres 80,000 Christmas trees.</i>	Last week of September, 9am-4pm
Williamstown	3242 S Hill Rd,	Chappelles Vermont Potatoes	<i>We grow 50 acres of potatoes (whites, reds, yukon gold and russets). We also grow certified seed potatoes.</i>	September - May, Call Ahead

Farm Stands	
Town	Name
Cabot	Blackwell Roots Farm
Cabot	Burt's Apple Orchard
Waterbury Center	Cold Hollow Cider Mill
Marshfield	Fruitlands Maple and Fruit
Calais	Legare Farm Market
Montpelier	Morse Farm Maple Sugarworks
Duxbury	Singing Spinnery Roadside Stand
Barre	Single Gate Farm

Source: VT Agency of Agriculture http://www.vermontagriculture.com/buylocal/buy/farmstands_map.html

Farmers Markets and Co-Ops

Town	Location	Name	Seasons Operational	Days/Times	Other Info
Adamant	1313 Haggett Rd.	Adamant Coop	Year-round	Mon-Fri 8-6; Sat 9:30-3; Sun 10-1	Basic groceries, fresh baked cakes and pastries, take out meals, and a wide array of local products and local seasonal produce.
Barre	City Central Park	Barre Granite Center Farmers Market	May 18-October 12, 2011	Wed 3-7pm	Accept EBT cards
Montpelier	Corner of State and Elm St.	Capital City Farmers Market	Year-round	Sat 9am-1pm May-October	Accept EBT cards and debit cards, walkable location
Montpelier	623 Stone Cutters Way Montpelier, VT 05602	Hunger Mountain Coop	Year-round	8 am - 8 pm 7 days a week	Natural foods and products grocery and deli-cafe. Includes news, recipes, featured vendors, workshop calendar, and links.
Northfield	Village Common	Northfield Farmers Market	Spring-Fall	Tues 3-6pm	Accessible by sidewalk or site parking, informal, small
Plainfield	53 Main Street (P.O. Box 266)	Plainfield Co-op	Year-round	Monday - Saturday 9am - 8pm; Sunday 9am - 6pm	Basic groceries; natural products; organic and local foods, baked goods.
Plainfield	Town Green/Mill Street Park, corner of Mill St and Main St	Plainfield Farmers Market	June-October	Fridays 4-7pm	Centrally located, affordable
Waitsfield	Rte 100, Mad River Green	Waitsfield Farmers Market on the Mad River Green	May-Oct	Sat 9am-1pm,	Well established, accessible by sidewalks
Warren	42 Roxbury Mountain Rd	East Warren Community Market and Coop	Year-round	Mon - Sun 8am-7pm	Local, organic, and specialty items; Everyday staples; Artisan specialties; Local meats, cheeses, and seasonal produce from nearby farms; A selection of wine and cold beer; Fresh coffee, baked goods, and lunch items
Waterbury	Rte 2, Rusty Parker Park	Waterbury Farmers Market	May-October	TH 3-7pm	Accept EBT cards; centrally located, accessible by car or foot

Community Gardens

Community Gardens in the Central Vermont Region		
Town	Name	Description
Barre	Highgate Apartments Community Garden	Neighborhood and children's garden maintained by residents of Highgate Apartments; program with cooking & field trips.
Barre	Metro Way Community Garden	Off Main Street in downtown Barre, 20 garden plots available
Duxbury	Duxbury Community Garden	20x20 and 20x10 gardens available to residents and non-residents.
Montpelier	North Branch Community Gardens	Located at North Branch Nature Center. Organic gardening only. Water from river and shallow well. 60 plots.
East Warren	Rootswork Commuity Garden	Four large and six small plots, tilling, water, cleaning stand. The Rootswork Community Gardens are located behind the East Warren Schoolhouse on land that is leased to Rootswork by Anne Burling, a Rootswork founder. Various size plots are available to local gardeners for a small annual fee and tools, water and compost are on site. While the gardeners work their plots individually, they join together as a community to make decisions, share food and ideas, participate in seed exchanges and orders, and make donations to local food shelves. The Rootswork Root Cellar is also available to the gardeners.
Waterbury	Waterbury Community Gardens	Garden land behind library, no water on site, no fee, 12 garden plots, self tilling
Worcester	Worcester Community Garden	Town land by Ladd Field 18 individual and group plots.

School Gardens

School Gardens in the Central Vermont Region			
Town	School	Name	Description (<i>as available</i>)
Barre Town	Barre Town Elementary School	Crop Kids of Barre Town/Barre	Large school garden area with active summer program
Berlin	Berlin Elementary School	School Garden	
Calais	Calais Elementary School	Calais Healthy Eating Garden	Raised bed vegetable gardens in rural setting
E. Montpelier	East Montpelier Elementary School	School Garden	
Duxbury	Harwood Union High School	Gardens for Learning	Vegetable garden beds, greenhouse, and composting
Fayston	Fayston Elementary School	School Garden	
Middlesex	Middlesex Elementary School	School Garden	
Moretown	Moretown Elementary School	School Garden	
Waterbury	Thatcher Brook Primary School	Thatcher Brook School Garden	Raised bed vegetable gardens integrated with after school program and YMCA summer day camp
Montpelier	U32	School Garden	As part of the Farm to School Program: School gardens, composting and waste management programs, in-class education through farmers and chefs in the classrooms, cooking demonstrations, taste tests, as well as tours to the local farms and farmers' markets are included in the program.
Roxbury	Roxbury Elementary School	School Garden	
Warren	Warren Elementary School	Warren School Gardens	
Worcester	Worcester Elementary School	School Garden	
Orange Center	Orange Center School	Orange Center School Garden	Vegetable gardens and summer Gardens for Learning program site

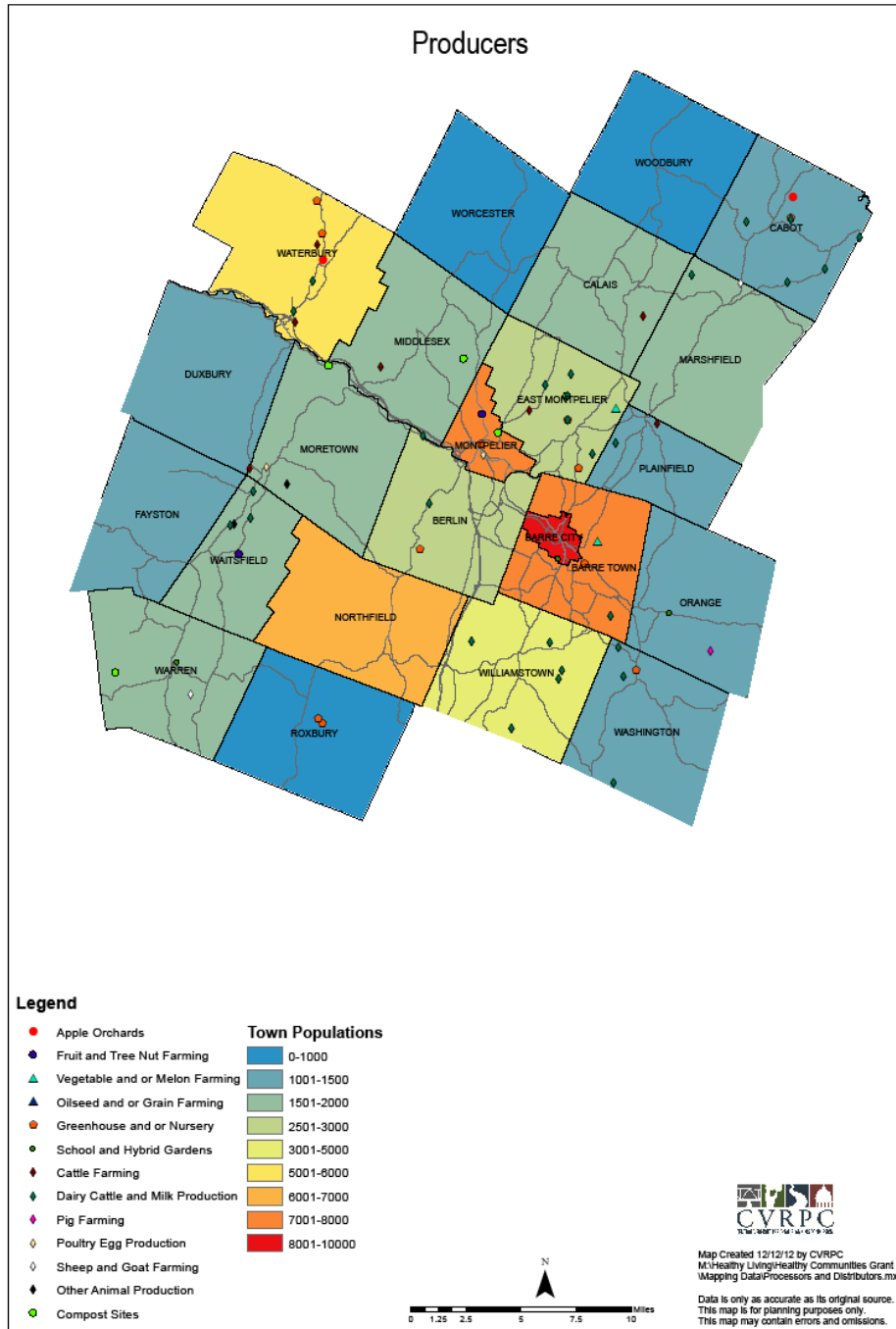
Composting

Categorical Composting Facilities Serving the Central Vermont Region			
Facility Name	Town	Permitted Status	Operating Status
Vermont Compost Compant	Montpelier	Permitted	Operating
Highfields Center for Composting	Wolcott/Hardwick	Permitted	Operating
Grow Compost of Vermont	Moretown	Permitted	Operating
Dog River Farm	Berlin	Permitted	Operating
Cookeville Compost	Cookeville	Permitted	Operating

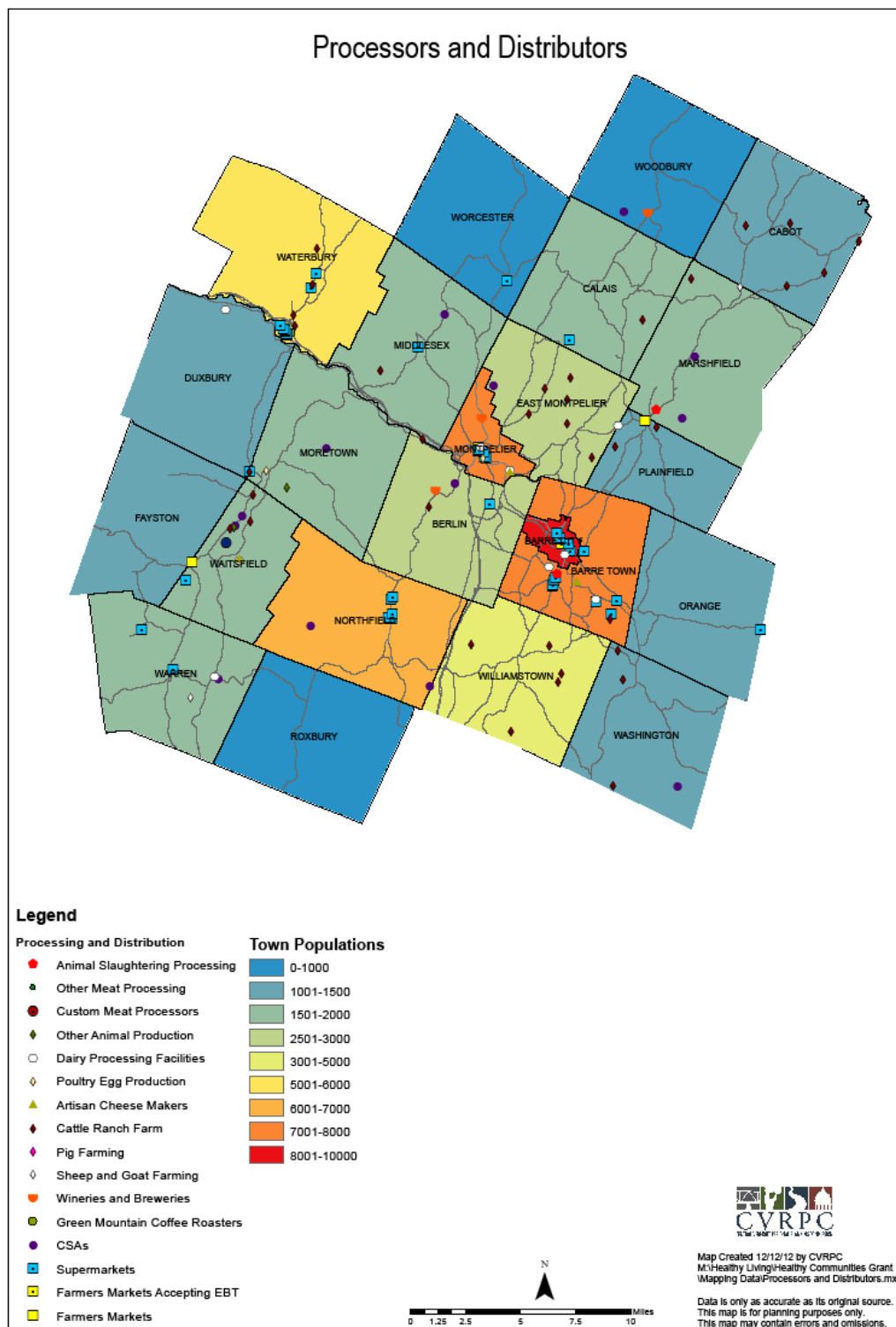
Source: Vermont Agency of Natural Resources

Appendix E: Maps

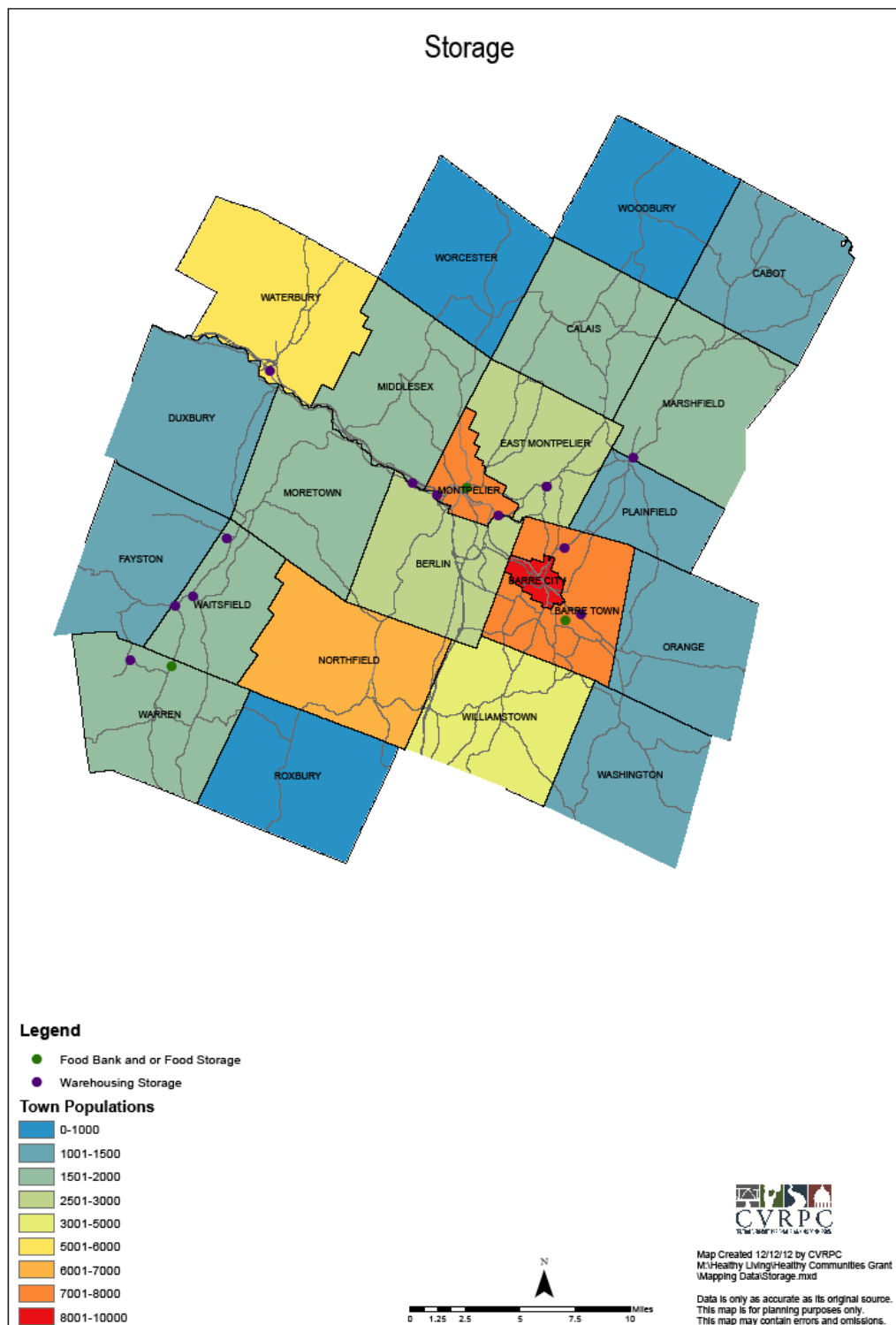
Central Vermont Food Producers



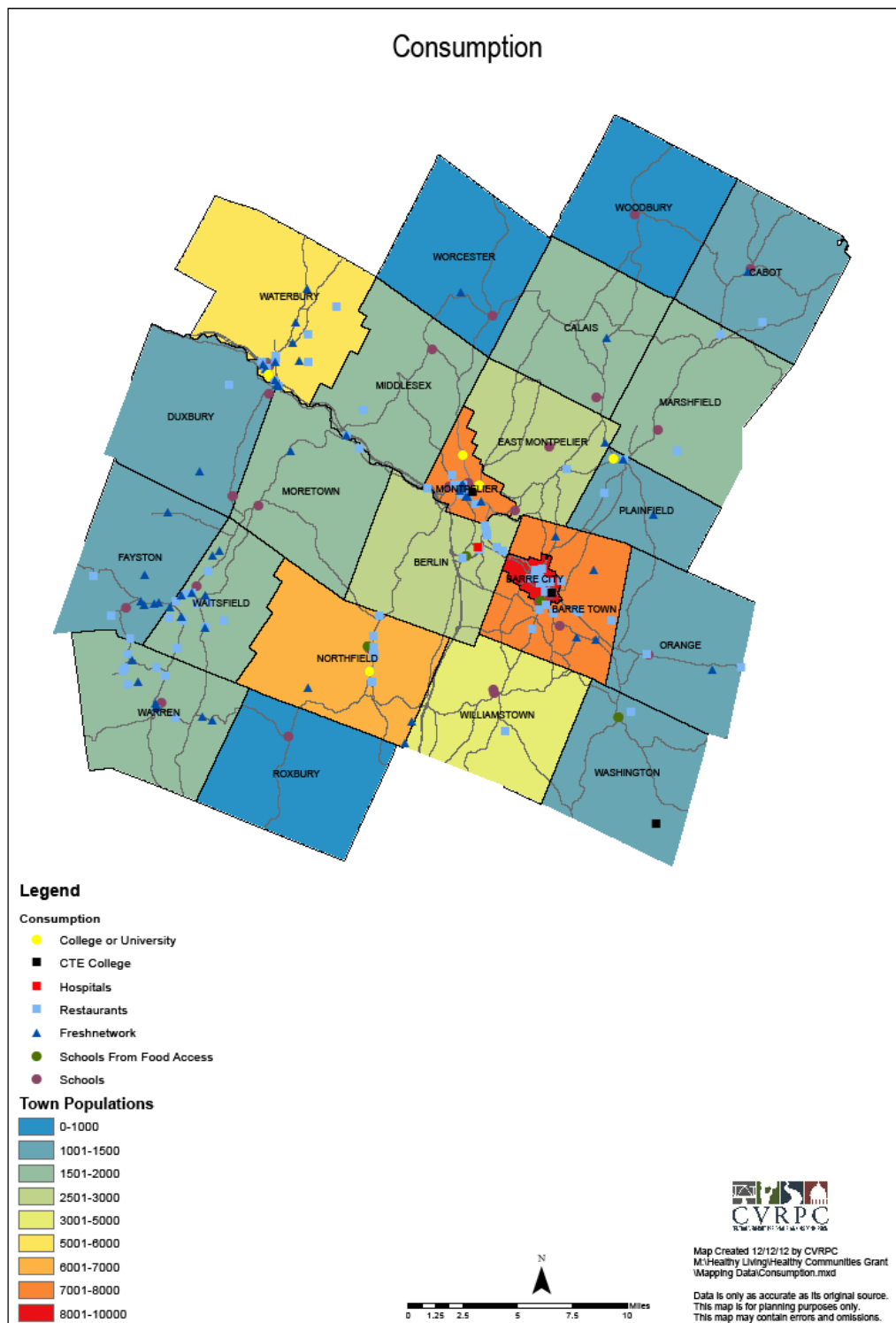
Central Vermont Food Processors & Distributors Including Direct Sales



Central Vermont Food Storage



Central Vermont Food Consumption



Central Vermont Food Access Sites

