







EXPLORING FOOD SYSTEM CAREERS

Version Date January, 2019 prepared by Elizabeth McCarty and the Farm to Plate Network Career Profiles Task Force



The food system is an essential part of Vermont's landscape, culture, and economy.

In Vermont's food system today there are over 65,000 private sector jobs and 12,000 businesses, and many more in government and non-profit organizations which support these businesses. The food and agriculture sector has been growing, even during the Great Recession. From 2002 to 2017, more than 8,500 net new jobs were created, a 15% increase.

Farms and food businesses shape Vermont's communities by maintaining our working landscape, providing jobs as well as food for us to eat. These businesses are responsible for \$776 million in agricultural exports annually, and an overall agricultural economy of \$2.6 billion annually. Because of the way farm and food businesses keep land in production, they also help to support Vermont's recreational economy (\$1.51 billion annually) and our tourist economy (almost \$3 billion annually.)¹

These businesses need employees.

Employers surveyed for a Farm to Plate report made clear that they are in great need of work-ready entry-level as well as a wide range of skilled employees.² Many employers said they could grow their business even more if they had access to more workers.

Understanding Vermont's Food System

A food system is more than just farming. Farms, of course, play a key role in our local food economy, and in 2017 in Vermont there were 9,216 hired farm workers in addition to 12,257 farm operators³. But many other businesses are involved as well. The food system encompasses all of the **resources** (e.g., land, soil, crops, machinery), **activities** (e.g., growing, harvesting, researching, processing, packaging, transporting, marketing, consuming, and disposing of food), and people (e.g., farmers, bakers, policy makers) involved in providing nourishment to people⁴. To learn more, visit www.vtfarmtoplate.com.



Putting Your Skills and Interests to Work

Just like there are many types of farms and food related businesses, there are many types of jobs and careers to be had in the food system.

Farming can be a great career option for those who like working with their hands, being outside, growing plants or taking care of animals. Other interests and skills can also be put to use to strengthen our food system, even in jobs that are not always associated with food and farming. For example,

- Mechanical sciences are critical for specialty foods manufacturing, one of the fastest growing sectors of the food system economy – from repairing existing manufacturing equipment and HVAC to designing new small-scale equipment.
- A wide variety of businesses, from **food distributors** to **compost companies**, are in need of reliable **truck drivers**.
- Many small **farms and food producers** need help from experts such as **marketers and graphic designers**, **accountants**, and **lawyers**.

This booklet explores these careers and many more within Vermont's food system.

Data within this document was compiled using the Vermont Department of Labor and the National Bureau of Labor Statistics.

Wage and employment data represent averages from the state of Vermont whenever possible, with hyperlinks to Vermont's Economic & Labor Market Information Reports. **Wage and employment data compiled from national statistics are indicated with an asterisk** and are hyperlinked to the Bureau of Labor Statistics' Occupational Employment Statistics for that occupation. Further work context such as schedule, education levels, skills, and knowledge were compiled using the Bureau of Labor Statistics' Occupational Outlook Handbook.

Endnotes

- 1 See <u>A 2018 Exploration of the Future of Vermont Agriculture</u>
- 2 Charting a Path: Food Systems Workforce Needs Assessment
- 3 Data from BLS, Census Bureau, and USDA. See more on the Farm to Plate website.
- 4 See the <u>Farm to Plate Strategic Plan, Chapter 3: Analysis of Vermont's Food System</u>.

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PRODUCERS

FARMERS AND OTHER AGRICULTURAL ENTERPRISE OWNERS

Owners of farms, timber tracts, or other agricultural establishments; may carry out daily operations themselves or hire staff.

FARMWORKERS

Plant, cultivate, and harvest vegetables, fruits, nuts, horticultural specialties, and field crops, or work with livestock.

FARM MANAGERS AND OTHER AGRICULTURAL MANAGERS

Non-owners who plan, direct, or coordinate the management or operation of farms, greenhouses, nurseries, timber tracts, or other agricultural establishment.

WORK CONTEXT

Jobs in this field can include both full-time and part-time work. Workers can expect to work any day of the week. Some farm operations, for example diversified vegetable production, are seasonal; these farmers generally hire workers from April to November and workers can work longer hours during high seasons. Other farm work, such as dairying or other animal agriculture, is year-round. Benefits for farm workers might include free or reduced price access to the food being produced. Farm workers can grow within their jobs and advance to crew leaders or supervisors, become farm managers, and own their own farms.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *listening skills, mechanical skills, dexterity, physical stamina, and physical strength*. Agricultural workers are expected to work within a team, have sufficient hand-eye coordination to harvest crops and/or work

with animals, operate farm machinery, and lift heavy objects. Workers who operate equipment are required to have a valid driver's license. Some types of farm operation, such as dairying, have specific associated equipment such as robotic milking machines that the worker will learn to use.

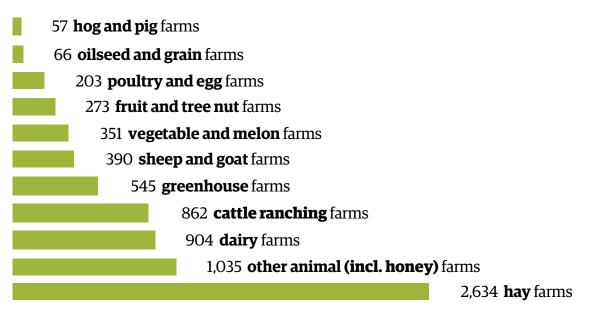
- 45% of farmers, ranchers, and other agricultural managers have a Bachelor's degree, 24% have an Associate's degree, and 19% have gone to college but do not have a college degree
- Farm workers typically learn their skills on the job and may need more extensive training to operate machinery

"There are many skills needed for dairy farming, but some of the most important would be a love of taking care of animals and basic veterinary skills, rotational grazing experience, crop management, and mechanical know-how. Also, financial management and business planning skills are critical. You have to be able to keep an eye on the big picture along with getting the day to day chores done. You can learn these skills at college but you also need hands-on experience."

- Annie Claghorn and Catlin Fox, Organic Dairy Farmers, *Leicester, Vermont*

VERMONT'S FARM LANDSCAPE

Different types of farming can require different skillsets and lifestyles. Understanding the existing farm landscape, both statewide and locally, helps identify opportunities for learning at an existing business or a starting new business. As of 2012, Vermont had:



Source: 2012 <u>USDA Census of Agriculture</u>. Learn more at <u>http://www.vtfarmtoplate.com/getting-to-2020/7-food-production</u>.

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
<u>Farmworkers and Laborers, Crop,</u>	\$30,720 yearly,	145 annual job openings
<u>Nursery, and Greenhouse</u>	\$14.77 hourly	+1.7% average annual growth
<u>Farmworkers, Farm, Ranch, and</u>	\$31,100 yearly,	210 annual job openings
<u>Aquacultural Animals</u>	\$14.95 hourly	+1.7% average annual growth
<u>First-Line Supervisors of Animal</u> <u>Husbandry and Animal Care</u> <u>Workers</u>	\$49,520 yearly, \$23.81 hourly	43 annual job openings +0.7% average annual growth
<u>Farmers, Ranchers, and other</u>	\$80,320 yearly,	468 annual job openings
<u>Agricultural Managers</u>	\$38.62 hourly <u>*</u>	+0.5% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University Degree Program Castleton University Biology (BS), Environmental Studies (BA), Castleton, Vermont Environmental Science (BS) Champlain College Environmental Studies & Policy (BS) Burlington, Vermont Community College of Vermont Environmental Science (AS), STEM Studies (AS) Various Locations Marlboro College Biology (BS), Environmental Studies (BA) Marlboro, Vermont Middlebury College Biology (BS), Environmental Studies (BA) Middlebury, Vermont Norwich University Biology (BS), Environmental Science (BS) Northfield, Vermont Saint Michael's College Biology (BS), Environmental Science (BS), Colchester, Vermont Environmental Studies (BA) Southern Vermont College **Biological Sciences (BS)** Bennington, Vermont Ecology (BA), Environmental Humanities (BA), Sterling College Sustainable Agriculture (BA), Sustainable Food Craftsbury Common, Vermont Systems (BA) Biology (BA), Ecological Agriculture (BS), University of Vermont Environmental Sciences (BS), Environmental Studies Burlington, Vermont (BA), Food Systems (BS), Sustainable Landscape Horticulture (BS)

Associate's and Bachelor's Degrees

College/University	Degree Program
	Dairy Farm Management (AAS), Diversified
Vermont Technical College	Agriculture (BS)
Randolph, Vermont	Many VTC dairy students also study at the Miner
	Institute in New York State.

Continuing Education and Other Training Opportunities

<u>Organization</u>	Program or Courses
Dairy Grazing Apprenticeship <i>Various Locations</i>	Find Vermont mentors at https://www.dga-national.org/
University of Vermont Continuing and Distance Education <i>Various Locations</i>	<u>Farmer Training Program; Winter Greens Short</u> <u>Course</u>
Vermont Technical College Institute for Applied Agriculture and Food Systems <i>Randolph, Vermont</i>	Trainings and courses vary; see current listings at https://www.vtc.edu/meet-vtc/centers-institutes/ ag-institute/short-courses. Past offerings include Welding AWS Certification, Advanced Nutrient Management, Greenhouse Integrated Pest Management Certificate & Commercial Applicator License, Artificial Insemination, Herbaceaous and Woody Grafting, and CBD Certificate.
School of the New American Farmstead at Sterling College <i>Craftsbury, Vermont</i>	Trainings and courses vary; see current listings at <u>https://sterlingcollege.edu/school-of-the-new-</u> <u>american-farmstead/</u> . Past offerings include <i>Farming</i> <i>the Woods: Profitable Agroforestry for Homesteads</i> <i>and Farms, The Permaculture Market Garden, The</i> <i>Market Gardener 2.0, Heritage Poultry,</i> and <i>Ecological</i> <i>Orcharding.</i>
University of Vermont <i>Various Locations</i>	Vermont Beginning Fruit Grower Program
Vermont Youth Conservation Corps <i>Richmond, Vermont</i>	VYCC Food and Farm Program

Related Licenses and Certifications

Certification/License	Where to Get It
Milk Handler License	Vermont Agency of Agriculture, Food & Markets
Milking and Processing Equipment License <u>Application</u>	Vermont Agency of Agriculture, Food & Markets
Nursery-Greenhouse License	Vermont Agency of Agriculture, Food & Markets
Pesticide Applicator License	Vermont Agency of Agriculture, Food & Markets
<u>Tier II Raw Milk</u>	Vermont Agency of Agriculture Food & Markets

ANIMAL BREEDERS

Select and breed animals according to their genealogy, characteristics, and offspring; could include farmers who specialize in breeding stock.

WORK CONTEXT

Jobs in this field can include both full-time and part-time work and workers can expect to work any day of the week. Animal breeders work year round to care for living animals. Animal breeders can grow within their jobs and advance to crew leaders or supervisors, become managers, and own their own breeding operations.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *listening skills, scientific knowledge of biology, dexterity, physical stamina, and physical strength.* Animal breeders are expected to be comfortable and effective working with animals, work within a team, have sufficient hand-eye coordination, operate farm machinery, and lift heavy objects. Workers who operate equipment are required to have a valid driver's license.

• 36% of animal breeders have a high school diploma or equivalent, 24% have attended college, and 15% have postdoctoral training

"If you are interested in breeding cattle there is a certification program to be a dairy artificial insemination breeder. Understanding livestock behavior is important when working with cattle, for detecting animals ready for breeding, and especially for detecting sick animals."

- Anna Jo Smith, Herdswoman, New Haven, Vermont

• Animal breeders may require more extensive training to advance within the field

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
Animal Breeders	\$43,450 yearly, \$20.89 hourly*	1,400 annual U.S. job openings
	\$20.05 floany_	+2% in the U.S. by 2026

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Bennington College Bennington, Vermont	Biology (BS)
Castleton University Castleton, Vermont	Biology (BS)
Community College of Vermont <i>Various Locations</i>	STEM Studies (AS)

College/University	Degree Program
Marlboro College <i>Marlboro, Vermont</i>	Biology (BS)
Middlebury College <i>Middlebury, Vermont</i>	Biology (BS)
Norwich University Northfield, Vermont	Biology (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Biology (BS)
Southern Vermont College <i>Bennington, Vermont</i>	Biological Sciences (BS)
University of Vermont <i>Burlington, Vermont</i>	Animal Science (BS), Animal & Biological Sciences (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Dairy Farm Management (AAS), Equine Studies (AAS) <i>Many VTC dairy students also study at the Miner</i> <i>Institute in New York State.</i>

Continuing Education and Other Training Opportunities

Organization	Program or Courses
Vermont Technical College	Trainings and courses vary; see current listings at
Institute for Applied Agriculture and	https://www.vtc.edu/meet-vtc/centers-institutes/
Food Systems	ag-institute/short-courses. Past offerings include
Randolph, Vermont	Artificial Insemination.

Related Licenses and Certifications Below is related licensure for this occupation; specific requirements may vary based on employer.

Certification/License	Where to Get It
Livestock Dealer License	Vermont Agency of Agriculture Food & Markets
Livestock Packer License	Vermont Agency of Agriculture Food & Markets
Livestock Transporter License	Vermont Agency of Agriculture Food & Markets



INPUTS AND SERVICES

FEED, SEED, AND EQUIPMENT DEALERS

Sell directly to producers the equipment and inputs (including feed, seed, soil amendments, and miscellaneous supplies) needed for agricultural production.

WORK CONTEXT

Jobs in this field are typically full-time positions that have office hours during the week, not on weekends. However, they often visit their farm customers to assess their needs. Most dealers work in offices and retail stores. They spend a lot of their career on the phone selling goods, taking orders, and problem solving.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *customer service*, *interpersonal skills, physical stamina, and self confidence*. Workers in this field must have extensive knowledge of their products, be able to build relationships with customers, and be confident when making sales pitches.

- 39% of dealers have a Bachelor's degree, 30% attended some college but did not earn a degree, and 14% earned a high school diploma or equivalent
- Sales representatives often have formal training when first hired at a company

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
<u>Sales Representatives, Wholesale</u> <u>and Manufacturing, Technical</u> <u>and Scientific Products</u>	\$101,440 yearly, \$48.77 hourly	67 annual job openings +0.4% average annual growth
<u>Order Fillers, Wholesale and</u> <u>Retail Sales</u>	\$30,260 yearly, \$14.55 hourly	353 annual job openings +0.3% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)
Norwich University Northfield, Vermont	Business Management (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)
Southern Vermont College <i>Bennington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

Related Licenses and Certifications

Certification/License	Where to Get It
Feed Products Registration	Vermont Agency of Agriculture Food & Markets
Seed Registration	Vermont Agency of Agriculture Food & Markets

LARGE ANIMAL VETERINARIANS

Diagnose, treat, or research diseases and injuries of livestock animals.

WORK CONTEXT

Jobs in this field are typically full-time positions that have office hours. Some large animal veterinarians work nights or weekends and have to respond to emergencies outside of scheduled work hours. Veterinarians in the agricultural sector travel between their offices, farms, and ranches.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *compassion, manual dexterity, communication, decision making, and problem-solving skills*. Veterinarians and technicians must be compassionate when working with animals, be able to control precise hand movements when performing surgery, be able to communicate with animal owners, and problem solve and make correct decisions regarding animal diagnosis and treatment.

- 75% of veterinarians have a doctoral degree, 23% have professional degrees
- 68% of veterinary technicians have an Associate's degree, 12% have a high school diploma or equivalent

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
<u>Veterinarians</u>	\$104,160 yearly, \$50.08 hourly	14 annual job openings +0.9% average annual growth
<u>Veterinary Technologists and</u> <u>Technicians</u>	\$34,420 yearly, \$16.55 hourly	39 annual job openings +1.3% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Biology (BS)
Marlboro College <i>Marlboro, Vermont</i>	Biology (BS)
Middlebury College <i>Middlebury, Vermont</i>	Biology (BS)
Norwich University Northfield, Vermont	Biology (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Biology (BS)

College/University	Degree Program
Southern Vermont College <i>Bennington, Vermont</i>	Biological Sciences (BS)
University of Vermont <i>Burlington, Vermont</i>	Animal Science (BS), Biology (BS), Preveterinary Program
Vermont Technical College <i>Randolph, Vermont</i>	Veterinary Technology (AAS)

Related Licenses and Certifications

Below is related licensure for this occupation; specific requirements may vary based on employer.

Certification/License	Where to Get It
Veterinary Medicine	Vermont Secretary of State

HVAC AND COOLING EQUIPMENT MAINTENANCE AND OPERATORS

Operate and repair agricultural-specific HVAC equipment or equipment used to refrigerate or freeze food and agricultural products.

WORK CONTEXT

Jobs in this field are typically full-time positions that may require some evening or weekend shifts. A valid driver's license is required for HVACR workers to travel between worksites.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *customer service, math, mechanical, time-management, and troubleshooting skills as well as physical stamina and strength.* HVACR technicians work mainly in customer's offices and require the customer service skills to interact with the general public. Additionally, technicians must be able to identify and solve problems, calculate load requirements, and physically install complicated systems.

- Many HVACR technicians receive post secondary instruction from technical and trade schools to earn certificates within the field
- Apprenticeships are extremely common in this field, especially with those interested in the field directly after high school

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
<u>Heating, Air Conditioning, and</u> <u>Refrigeration Mechanics and</u> <u>Installers</u>	\$23.88 hourly	106 annual job openings +0.2% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

<u>Organization</u>	Program or Courses
Vermont Technical College <i>Randolph, Vermont</i>	HVACR Certified Technician
Vermont Registered Apprenticeship <i>Various Locations</i>	HVAC Tech Apprenticeship; Refrigeration Mechanic Apprenticeship. View "Apprenticeship Sponsors" at <u>http://labor.vermont.gov/workforce-development/</u> <u>apprenticeship/</u>
Adult CTE <i>Various CTE locations</i>	HVACR Technician Training. See locations at <u>http://</u> <u>vtadultcte.org/class-category/skilled-trades/</u>

Apprenticeships and Other Training Opportunities

Required Licenses and Certifications

Certification/License	Where to Get It
Section 608 Technician Certification	United States Environmental Protection Agency

FARM EQUIPMENT MECHANICS AND SERVICE TECHNICIANS

Diagnose, adjust, repair, or overhaul farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.



FARM MACHINERY IN USE AT YODER FARM

WORK CONTEXT

Farm equipment mechanics and service technicians' work schedule varies by time of the year. During planting and harvesting season from April to November, mechanics work full time and often long hours every day. Evening and weekend work is not uncommon. In the winter months, mechanics and technicians may work less than full time. Some service technicians travel to worksites to make repairs.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include

dexterity, physical strength, and mechanical, organizational, and troubleshooting skills. Farm equipment mechanics and service technicians need a steady hand and good hand-eye coordination when performing tasks and must be able to lift heavy equipment, tools, and parts. Additionally, technicians must be familiar with mechanical components, be able to

perform diagnostics on machinery, and maintain accurate service records and inventories.

- 42% of farm equipment mechanics and technicians have a high school diploma or equivalent, 34% have a post-secondary certificate
- Vocational training programs in diesel technology or heavy equipment mechanics is common among employed technicians
- Long term on the job training is common

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
Farm Equipment Mechanics and <u>Service Technicians</u>	\$46,390 yearly, \$22.30 hourly	14 annual job openings +0.7% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Vermont Technical College <i>Randolph, Vermont</i>	Diesel Power Technology (AAS)

Continuing Education and Other Training Opportunities

Organization	Program or Courses
Northwest Technical Center Adult CTE <i>St. Albans, Vermont</i>	Industrial Maintenance and Repair
Vermont Technical College <i>Randolph, Vermont</i>	Farm Equipment Maintenance and Repair Master Training, Certificate of Diesel Technology

Related Licenses and Certifications

Certification/License	Where to Get It
ASE Certified Technician	National Institute for Automotive Service Excellence

AGRICULTURAL AND PROCESSING INSPECTORS

Inspect agricultural operations and food processing facilities to ensure compliance with regulations and laws governing health, quality, and safety, or with voluntary certifications.

WORK CONTEXT

Agricultural and processing inspectors work full time, some with evening or weekend shifts. Inspectors travel to worksites to perform their job duties. Specific work environments vary by the size of the establishment to be inspected.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *dexterity, physical strength and stamina, math skills, and mechanical and technical skills*. Agricultural and Processing inspectors use specialized tools and machinery when testing and must understand technical documents and manuals to ensure that businesses meet quality standards.

- 56% of agricultural and processing inspectors have a high school diploma or equivalent
- 12% have an Associate's degree, 12% attended college but did not earn a degree
- New inspectors may receive training on how to use specialized instruments

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
Agricultural Inspectors	\$64,070 yearly, \$30.81 hourly	5 annual job openings 0.3% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Biology (BS), Environmental Studies (BA), Environmental Science (BS)
Champlain College <i>Burlington, Vermont</i>	Environmental Studies & Policy (BS)
Community College of Vermont <i>Various Locations</i>	Environmental Science (AS), STEM Studies (AS)
Marlboro College <i>Marlboro, Vermont</i>	Biology (BS), Environmental Studies (BA)
Middlebury College <i>Middlebury, Vermont</i>	Biology (BS), Environmental Studies (BA)
Norwich University Northfield, Vermont	Biology (BS), Environmental Science (BS)

College/University	Degree Program
Saint Michael's College <i>Colchester, Vermont</i>	Biology (BS), Environmental Science (BS), Environmental Studies (BA)
Southern Vermont College <i>Bennington, Vermont</i>	Biological Sciences (BS)
Sterling College <i>Craftsbury Common, Vermont</i>	Ecology (BA), Environmental Humanities (BA), Sustainable Agriculture (BA), Sustainable Food Systems (BA)
University of Vermont <i>Burlington, Vermont</i>	Animal Science (BS), Animal & Biological Sciences (BS), Biology (BS), Ecological Agriculture (BS), Environmental Sciences (BS), Environmental Studies (BA), Food Systems (BS), Sustainable Landscape Horticulture (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Diversified Agriculture (BS)

Continuing Education and Other Training Opportunities

<u>Organization</u>	Program or Courses
Vermont Technical College Institute for Applied Agriculture and Food Systems <i>Randolph, Vermont</i>	Trainings and courses vary; see current listings at https://www.vtc.edu/meet-vtc/centers-institutes/ ag-institute/short-courses. Past offerings include <i>Greenhouse Integrated Pest Management Certificate</i> & Commercial Applicator License and Wetland Delineation
University of Vermont Extension Various Locations	Several "Food Safety Training for Processors" courses at <u>https://www.uvm.edu/extension/food safety</u> <u>training processors</u>
Hannaford Career Center Adult Education <i>Middlebury, Vermont</i>	Hazard Analysis for Critical Control Points (HACCP) Certification



SPECIALTY FOODS AND BEVERAGES

SPECIALTY FOOD AND BEVERAGE ENTREPRENEURS

Own a business that produces and sells unique, high-quality value-added foods or beverages, usually in small batches, for example bread, cheese, beer, or fermented foods such as kimchi.

SPECIALTY FOOD AND BEVERAGE PRODUCTION WORKERS

Engage in the day-to-day production of specialty foods or beverages, manually or by operating equipment.

SPECIALTY ENTERPRISE: MANAGERS OR SUPERVISORS

Plan, direct, or coordinate the operation of a specialty food or beverage enterprise, including management of the production facilities/equipment.

WORK CONTEXT

Jobs in this field are typically fulltime positions, but details can vary. For example, bakers often work early mornings and late evenings, including on weekends and holidays. "As an entrepreneur, I like to find things that people aren't doing and then figure out how to do them. I find new ways at looking at niche markets."

- Scott Kerner, Specialty Food Entrepreneur, *Montpelier, Vermont*

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *customer service*, *interpersonal skills*, *physical stamina*, *attention to detail*, *and self confidence*. Workers in this field must have extensive knowledge of their products and the production process, often including scientific aspects, such as the role of microbiology in cheesemaking. They must be able to build relationships with customers, and be confident when making sales pitches.

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
Food Batchmakers	\$35,700 yearly, \$17.16 hourly	63 annual job openings
Bakers	\$30,180 yearly, \$14.51 hourly	26 annual job openings +1.3% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)
New England Culinary Institute <i>Montpelier, Vermont</i>	Culinary Arts (BA)
Norwich University Northfield, Vermont	Business Management (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)
Southern Vermont College Bennington, Vermont	Business Administration (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

Organization	Program or Courses
Vermont Technical College Institute for Applied Agriculture and Food Systems <i>Randolph, Vermont</i>	Trainings and courses vary; see current listings at https://www.vtc.edu/meet-vtc/centers-institutes/ ag-institute/short-courses. Past offerings include Essential Principles and Practices of Cheese Making, Sensory Evaluation of Cheese, and Craft Distilling; the Vermont Experience.
University of Vermont Continuing and Distance Education <i>Various Locations</i>	<u>Art and Science of Small-Batch Cheesemaking</u> <u>Professional Certificate</u> ; <u>Business of Craft Beer</u> <u>Certificate</u>
School of the New American Farmstead at Sterling College <i>Craftsbury, Vermont</i>	Certificate in Sustainable Food Craft; Additional trainings and courses vary; see current listings at <u>https://sterlingcollege.edu/school-of-the-</u> <u>new-american-farmstead/</u> . Past offerings include <i>Charcuterie: Artisanal Preparation & Preservation of</i> <i>Meat, Fundamentals of Artisan Cheese, Bread Making</i> <i>and Heritage Grains</i> , and <i>Living Foods: Fearless</i> <i>Fermentation from the Farm, Field, and Forest.</i>
New England Culinary Institute Continuing Education <i>Montpelier, Vermont</i>	Courses vary; see current listings at <u>https://www.neci.</u> <u>edu/for-continuing-education-students.php</u> .
King Arthur Flour <i>Norwich, Vermont</i>	Trainings vary; see current listings at <u>https://www.kingarthurflour.com/baking-school/</u> .
University of Vermont Extension <i>Various Locations</i>	Several "Food Safety Training for Processors" courses at <u>https://www.uvm.edu/extension/food safety</u> <u>training processors</u>
Hannaford Career Center Adult Education <i>Middlebury, Vermont</i>	Hazard Analysis for Critical Control Points (HACCP) Certification

Continuing Education and Other Training Opportunities

Related Licenses and Certifications

Certification/License	Where to Get It
Apiary Registration	Vermont Agency of Agriculture Food & Markets
Maple Dealer-Processor License	Vermont Agency of Agriculture Food & Markets
Bakery License	Vermont Department of Health
ServSafe Certification	National Restaurant Association
Food Processing Establishment	Vermont Department of Health

SPECIALTY ENTERPRISE: TECHNICAL ASSISTANCE

A consultant or service provider that provides expert advice or assistance to a specialty food or beverage enterprise but is not a direct employee of that business.

WORK CONTEXT

Most technical assistance workers work full-time and may need to travel often to consult with different businesses. When not meeting with clients, technical assistance workers typically work in offices.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *analytical skills, critical thinking, problem solving skills, interpersonal skills, and speaking skills.* Technical assistance workers must analyze client portfolios and are constantly working with numbers. Professionals in this career interact



HARD CIDER MANUFACTURING, CREDIT CITIZEN CIDER

with clients often and must be able to make clients feel comfortable and be able to respond to questions and concerns.

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
Business Continuity Planners	\$66,150 yearly, \$31.80 hourly	94 annual job openings +0.6% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)

College/University	Degree Program
Norwich University Northfield, Vermont	Business Management (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)
Southern Vermont College <i>Bennington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

Continuing Education and Other Training Opportunities

<u>Organization</u>	Program or Courses
University of Vermont Extension Various Locations	Several "Food Safety Training for Processors" courses at <u>https://www.uvm.edu/extension/food safety</u> <u>training processors</u>
Hannaford Career Center Adult Education <i>Middlebury, Vermont</i>	Hazard Analysis for Critical Control Points (HACCP) Certification



PHOTO: INTERVALE FOOD HUB

PROCESSING, STORAGE, AND DISTRIBUTION

BUTCHERS, MEAT CUTTERS, SLAUGHTERERS, AND MEAT PACKERS: SMALL-SCALE OR CUSTOM

Work in slaughtering or meat packing for small wholesale establishments, or perform custom slaughtering for farm clients; cut, trim, or prepare consumer-sized portions of meat for use or sale in small retail establishments.

BUTCHERS, MEAT CUTTERS, SLAUGHTERERS, AND MEAT PACKERS: MID-SCALE

Work in slaughtering or meat packing for midsized wholesale establishments; cut, trim, or prepare consumer-sized portions of meat for use or sale in midsized retail establishments.

WORK CONTEXT

Jobs in this field can include both full-time and part-time work and workers can expect to work any day of the week, depending on the specific employer. Wholesale establishments generally operate Monday through Friday while retail establishments and delis may operate on weekends. There is room for growth within the field as a worker can start at entry-level and eventually work their way up to management positions. Work is year-round.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *customer-service skills, dexterity, physical stamina, and physical strength.* A worker must be able to precisely cut meat to the right size, lift and carry boxes of meat, and interact with customers.

- 70% of butchers and meat cutters have a high school diploma or equivalent
- Butchers typically learn their skills on the job

WAGE AND EMPLOYMENT DATA



STUDENTS AT HANNAFORD CAREER CENTER

Position Type	<u>Average Wages</u>	Employment Trends
<u>Butchers and Meat Cutters,</u>	\$36,420 yearly,	26 annual job openings
<u>General</u>	\$17.51 hourly	+0.4% average annual growth
<u>Meat, Poultry, and Fish Cutters</u>	\$33,870 yearly,	30 annual job openings
and Trimmers	\$16.28 hourly	+0.4% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Continuing Education and Other Training Opportunities

<u>Organization</u>	Program or Courses
Vermont Technical College <i>Randolph, Vermont</i>	Meat Cutter Master Training
Vermont Technical College	Trainings and courses vary; see current listings at
Institute for Applied Agriculture and	https://www.vtc.edu/meet-vtc/centers-institutes/ag-
Food Systems	institute/short-courses. Past offerings include <i>Meat</i>
Randolph, Vermont	Cutting: Butchering Basics.

Related Licenses and Certifications

Certification/License	Where to Get It
Meat Handlers Operation License	Vermont Agency of Agriculture Food & Markets
On-Farm Slaughter Registration	Vermont Agency of Agriculture Food & Markets

FOOD HUB DIRECTORS

Develop and oversee all aspects of a Food Hub, including supplier and customer relationships, funding streams, and community programming.

FOOD HUB DISTRIBUTION WAREHOUSE MANAGERS

Receive, organize, track, manage storage of, and coordinate distribution of food products, at a Food Hub.

OTHER DISTRIBUTION WAREHOUSE MANAGERS

Receive, organize, track, manage storage of, and coordinate distribution of food products, at a large warehouse.

WORK CONTEXT

Jobs in this field can include both full-time and part-time work and workers can expect to work any day of the week, depending on the specific employer. There is room for growth within the field as a worker can start at entry-level as a grader or sorter and eventually work their way up to management positions. Work is year-round.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *customer-service skills*, *dexterity*, *physical stamina*, *and physical strength*. A worker must have proper hand eye coordination to grasp and assemble objects and be able to lift and carry heavy boxes.

- 64% of graders and sorters do not have a high school diploma, 27% have a high school diploma or equivalent, and 5% have a post secondary certificate
- 50% of storage and distribution managers have a Bachelor's degree and 21% have a high school diploma or equivalent

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
<u>Transportation, Storage, and</u> <u>Distribution Managers</u>	\$92,230 yearly, \$44.34 hourly	11 annual job openings +0.8% average annual growth
Stock Clerks and Order Fillers	\$30,260 yearly, \$14.55 hourly	353 annual job openings +0.3% average annual growth
<u>Graders and Sorters, Agricultural</u> <u>Products</u>	\$28,020 yearly, \$13.47 hourly	49 annual job openings

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)
Norwich University Northfield, Vermont	Business Management (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)
Southern Vermont College Bennington, Vermont	Business Administration (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

Associate's and Bachelor's Degrees

Continuing Education and Other Training Opportunities

Organization	Program or Courses
University of Vermont Continuing and Distance Education <i>Various Locations</i>	Food Hub Management Certificate

TRUCK DRIVERS AND SALES WORKERS

Drive trucks or other vehicles over established routes or within an established territory to deliver food products. May also make sales, collect payment, or stock merchandise at point of delivery.

WORK CONTEXT

Jobs in this field are mostly comprised of full-time work and drivers with regular routes may need to work early in the morning or late at night and oftentimes drivers work on weekends. Some drivers stop at the distribution center only once before daily deliveries while others make multiple trips between the distribution center and delivery locations each day. A valid driver's license is required, some may require a commercial driver's license (CDL).

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *physical strength*, *customer service skills*, *hand-eye coordination*, *patience*, *math and sales skills*, *and visual ability*. Since this job requires extended time driving, hand-eye coordination, visual ability, and patience are useful skills when driving, particularly in traffic and for longer periods of time. Drivers often function as sales workers and interact with customers, take payments, and offer information about different products.

- 56% of heavy and tractor-trailer truck drivers have a high school diploma or equivalent, 19% have less than a high school diploma, and 15% have a post-secondary certificate
- 75% of light truck or delivery services drivers have a high school diploma or equivalent, 23% have less than a high school diploma

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
Drivers/Sales Workers	\$35,860 yearly, \$17.24 hourly	87 annual job openings
<u>Heavy and Tractor-Trailer Truck</u>	\$44,190 yearly,	449 annual job openings
<u>Drivers</u>	\$21.25 hourly	-0.1% average annual change
<u>Light Truck or Delivery Services</u>	\$36,800 yearly,	283 annual job openings
<u>Drivers</u>	\$17.69 hourly	+0.1% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Related Licenses and Certifications

Certification/License	Where to Get It
Commercial Driver's License	Vermont Department of Motor Vehicles



SALES

GROCERY STORE PROPRIETORS

Owner of any size grocery store, general store, or other retail store that sells primarily food products.

GROCERY STORE CATEGORY BUYERS

Make strategic product decisions and coordinate purchases for a grocery store.

WORK CONTEXT

Jobs in this field are typically full-time positions that have office hours during the week, not on weekends. Most buyers and purchasing agents work in offices, but travel is sometimes necessary to visit suppliers. Advancement in this career can include becoming purchasing manager, supply manager, director of sales, and Chief Procurement Officer.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *customer service*, *analytical*, *decision making*, *math*, *and negotiating skills*. Workers in this field must have extensive knowledge of their products, make informed and timely decisions, and be able to compare prices with competitors.

- 77% of buyers and purchasing agents have a Bachelor's degree, 8% have an Associate's degree, and 8% have a high school diploma or equivalent
- Buyers and purchasing agents typically get on the job training

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
Wholesale and Retail Buyers	\$62,120 yearly, \$29.87 hourly <u>*</u>	55 annual job openings -0.7% average annual growth
Buyers and Purchasing Agents	\$63,910 yearly, \$30.73 hourly <u>*</u>	12 annual job openings -0.6% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)
Norwich University Northfield, Vermont	Business Management (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)
Southern Vermont College Bennington, Vermont	Business Administration (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

Related Licenses and Certifications

Certification/License	Where to Get It
Retail Licensure	Vermont Agency of Agriculture Food & Markets

CUSTOMER SERVICE

Interact directly with customers to sell or offers samples of food and beverage products.

"It's a good balance of both physical and mental abilities. I enjoy arranging the produce for sales, writing up recipes for customers to try, and supporting the growers. I like having an impact on the community and getting as much local produce as I possibly can onto the co-op shelves."

- Kira Winslow, Produce Manager, Middlebury, Vermont

WORK CONTEXT

Jobs in this field can include both full-time and part-time position. When working in retail stores, customer service workers may spend hours on their feet assisting customers in person. With experience, customer service workers may advance to a role as a supervisor.

WORK VALUES AND SKILLS

Qualities that employees look for when hiring in this field include customer service, communication, interpersonal, and problem solving skills. Workers in this field must have extensive knowledge of their products, be able

to provide clear information about their products to customers, and be able to listen and determine solutions to a customer's problem.

- 67% of customer service representatives have a high school diploma or equivalent, 16% have a Bachelor's degree, and 6% went to college but did not earn a degree
- Customer service representatives typically get on the job training for a few weeks

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
<u>Retail Salespersons</u>	\$30,240 yearly, \$14.54 hourly	1,366 annual job openings -0.2% average annual growth
<u>First-Line Supervisors of Retail</u> <u>Sales Workers</u>	\$51,480 yearly, \$24.75 hourly	474 annual job openings -0.3% average annual growth

FOOD AND BEVERAGE MARKETING

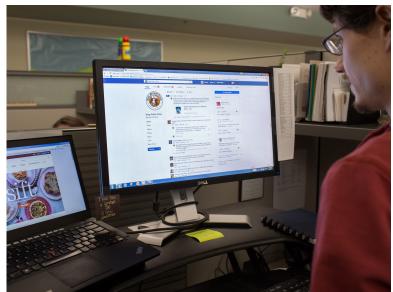
Plan, direct, or coordinate marketing policies and programs; manage product branding and create branding/marketing materials.

WORK CONTEXT

Jobs in this field mostly include fulltime work. Some marketing managers travel often to meet clients or media representatives.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *creativity* and *analytical, communication, decision making, interpersonal, and organizational skills*. Workers in this field must be able to create imaginative marketing campaigns, be able to analyze industry trends, and be able to communicate with a range of people in different roles. Some positions may



SOCIAL MEDIA MARKETING AT KING ARTHUR FLOUR

- require computer skills and skills in specific design software.
- 71% of market research analysts and marketing specialists earned a Bachelor's degree and 21% earned a Master's degree
- 56% of marketing managers earned a Bachelor's degree, 24% earned a Master's degree, and 11% earned a professional degree

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
<u>Market Research Analysts and</u> <u>Marketing Specialists</u>	\$61,240 yearly, \$29.44 hourly	208 annual job openings +1.8% average annual growth
Marketing Managers	\$112,650 yearly, \$54.16 hourly	40 annual job openings +0.9% average annual growth
Graphic Designers	\$46,480 yearly, \$22.35 hourly	80 annual job openings

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Bennington College <i>Bennington, Vermont</i>	Media Studies (BA)
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS), Media and Communication (BS)
Champlain College <i>Burlington, Vermont</i>	Communication (BS), Creative Media (BFA), Marketing (BS)
Community College of Vermont <i>Various Locations</i>	Business (AS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)
New England Culinary Institute <i>Montpelier, Vermont</i>	Food and Beverage Business Management (BA)
Norwich University Northfield, Vermont	Business Management (BS), Communications (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS), Media Studies, Journalism, and Digital Arts (BA)
Southern Vermont College <i>Bennington, Vermont</i>	Business Administration (BS), Communication (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Business Analytics (BS), Entrepreneurship (BS), Marketing (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

Associate's and Bachelor's Degrees

Continuing Education and Other Training Opportunities

Organization	Program or Courses
Vermont Technical College Institute for Applied Agriculture and Food Systems <i>Randolph, Vermont</i>	Trainings and courses vary; see current listings at <u>https://www.vtc.edu/meet-vtc/centers-institutes/</u> <u>ag-institute/short-courses</u> . Past offerings include <i>Sensory Evaluation of Cheese</i> .
University of Vermont Continuing and Distance Education <i>Various Locations</i>	Digital Marketing Fundamentals Professional Certificate; Marketing and Branding Your Brewery; Digital Marketing and Social Media Promotion in Craft Beer



FOOD PREPARATION AND FOOD ACCESS

CHEFS, COOKS, AND FOOD SERVICE

Direct and/or participate in the preparation, seasoning, and cooking of salads, soups, fish, meats, vegetables, desserts, or other foods. May plan and price menu items, order supplies, and keep records and accounts.

WORK CONTEXT

Most cooks work full time with shifts that can include early mornings, late evenings, weekends, and holidays. Food preparation workers can work full- or part-time. Institutional cooks working in schools may work longer hours during the school year and shorter hours in the summertime. Advancement in this field is common but depends on training and work experience.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *dexterity, physical stamina, and sense of taste and smell*. Cooks need to understand orders and follow recipes, should have proper hand-eye coordination for using kitchen utensils such as knives, and must have a good sense of taste and smell when preparing dishes.

- 44% of chefs and head cooks earned an Associate's degree, 22% earned a post-secondary certificate, and 11% have a high school diploma or equivalent
- 47% of institution and cafeteria cooks do not have a high school diploma and 46% have a high school diploma or equivalent

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
Chefs and Head Cooks	\$48,320 yearly, \$23.23 hourly	60 annual job openings +0.4% average annual growth
Cooks, Institution and Cafeteria	\$30,460 yearly, \$14.65 hourly	165 annual job openings +0.4% average annual growth
<u>Cooks, Restaurant</u>	\$30,280 yearly, \$14.56 hourly	385 annual job openings +0.7% average annual growth
Food Preparation Workers	\$26,220 yearly, \$12.61 hourly	308 annual job openings +0.4% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
New England Culinary Institute Montpelier, Vermont	Culinary Arts (BA)

Continuing Education and Other Training Opportunities

Organization	Program or Courses
Adult CTE <i>Various Locations</i>	Culinary Arts. See locations at <u>http://vtadultcte.org/</u> <u>class-category/agriculture-food-natural-resources/</u>
Vermont Foodbank with Chittenden Emergency Food Shelf and Capstone Community Action <i>Burlington and Barre, Vermont</i>	Community Kitchen Academy
Salvation Farms <i>Winooski, Vermont</i>	Vermont Commodity Program
New England Culinary Institute Continuing Education <i>Montpelier, Vermont</i>	Courses vary; see current listings at <u>https://www.neci.</u> <u>edu/for-continuing-education-students.php</u> .

Related Licenses and Certifications

Below is related licensure for this occupation; specific requirements may vary based on employer.

Certification/License	Where to Get It
Bakery License	Vermont Department of Health
ServSafe Certification	National Restaurant Association
Food Processing Establishment	Vermont Department of Health

FOOD SERVICE MANAGERS

Plan, direct, or coordinate activities of an organization or department that serves food and beverages. Positions could include Catering Manager, Bar Manager, Restaurant Manager, Kitchen Manager, Food Buying Manager, Staff Manager, or Staff Supervisor.

INSTITUTIONAL FOOD SERVICE TEAMS

Food service managers or other food service workers in a school or healthcare setting.



MONKTON CAFETERIA LINE

WORK CONTEXT

Most food service managers work full-time and can often be expected to work long shifts. Managers for institutional food services tend to work traditional business hours.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include business and communication skills, customer-service skills, organizational skills, detail oriented, and problemsolving skills. Food service managers must understand all aspects of the business, be able to give clear orders to staff, keep detailed records and

keep track of employee schedules, and be able to interact with customers.

• 55% of food service managers earned a high school diploma or equivalent, 18% attended some college but did not earn a degree, and 15% did not earn a high school diploma

WAGE AND EWIPLOTWIENT DATA		
Position Type	<u>Average Wages</u>	Employment Trends
Food Service Managers	\$51,870 yearly, \$24.94 hourly	95 annual job openings +0.1% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

WACE AND EMDI OVMENT DATA

College/University	Degree Program
New England Culinary Institute <i>Montpelier, Vermont</i>	Culinary Arts (BA)

<u>Organization</u>	Program or Courses
Adult CTE <i>Various Locations</i>	ServSafe for Managers. See locations at <u>http://vtadultcte.org/class-category/agriculture-food-natural-resources/</u>
New England Culinary Institute Continuing Education <i>Montpelier, Vermont</i>	Courses vary; see current listings at <u>https://www.neci.</u> <u>edu/for-continuing-education-students.php</u> .

Continuing Education and Other Training Opportunities

Related Licenses and Certifications

Below is related licensure for this occupation; specific requirements may vary based on employer.

Certification/License	Where to Get It
ServSafe Certification	National Restaurant Association
Food Service Establishment License	Vermont Department of Health

NUTRITION DIRECTORS

Oversee all aspects of the nutrition program for either school or healthcare facilities.

DIETITIANS AND NUTRITIONISTS

Plan and conduct food service or nutritional programs to assist in the promotion of health and control of disease. May supervise activities of a department providing food services, counsel individuals, or conduct nutritional research.

WORK CONTEXT

Most dietitians and nutritionists work full-time, with about 25% of dietitians and nutritionists working part-time. Work may include hours in the evenings and weekends to meet with clients who are unavailable during normal business hours.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *compassion, listening and speaking skills, organizational skills, analytical skills, and problem-solving skills.* Dietitians and nutritionists must be compassionate when helping address health problems, be able to listen to clients' concerns and explain complicated topics, and be able to evaluate the health status of clients in order to create a care plan.

- 33% of dietitians and nutritionists earned a post-baccalaureate certificate, 29% earned a Bachelor's degree, and 24% earned a Master's degree
- Supervised training is generally required, usually in the form of an internship

WAGE AND EMPLOYMENT DATA

Position TypeAverage WagesEmployment TrendsDietitians and Nutritionists\$60,150 yearly,
\$28.92 hourly*17 annual job openings
+0.8% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Bennington College <i>Bennington, Vermont</i>	Biology (BS)
Castleton University Castleton, Vermont	Biology (BS), Health Promotion (BS), Health Science (BS)
Marlboro College <i>Marlboro, Vermont</i>	Biology (BS)
Middlebury College <i>Middlebury, Vermont</i>	Biology (BS)
Norwich University Northfield, Vermont	Biology (BS), Health Science (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Biology (BS)
Southern Vermont College <i>Bennington, Vermont</i>	Biological Sciences (BS)
University of Vermont <i>Burlington, Vermont</i>	Biology (BA), Dietetics, Nutrition, and Food Sciences (BS), Nutrition and Food Sciences (BS)

Related Licenses and Certifications

Below is related licensure for this occupation; specific requirements may vary based on employer.

Certification/License	Where to Get It
Certified Nutritional Consultant	The American Association of Nutritional Consultants
Certification of Dietitian	Vermont Secretary of State

CHARITABLE FOOD ORGANIZATION OPERATORS OR STAFF

Director or staff of any organization with a charitable mission to provide food to those in need of assistance, including food pantries, community meal sites, and food banks.

WORK CONTEXT

Most food organization staff generally work full time, sometimes during nights and weekends. Some social and human service assistants work in offices or clinics.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *compassion, communication skills, interpersonal skills, organizational skills, and problem-solving skills.* Food organization staff advise clients regarding food stamps and money management when shopping for food, oversee individual volunteers,



PACKING HEALTH CARE SHARES, CREDIT VFFC.

keep records concerning visits with clients, and organize donated goods from various organizations.

- 27% of social and human service assistants earned a Bachelor's degree, 22% earned a high school diploma or equivalent, and 18% earned a Master's degree
- 50% of social and community service managers earned a Bachelor's degree, 24% earned a Master's degree, and 8% earned an Associate's degree

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
<u>Social and Human Service</u>	\$35,460 yearly,	339 annual job openings
<u>Assistants</u>	\$17.05 hourly	+1.0% average annual growth
<u>Social and Community Service</u>	\$65,810 yearly,	74 annual job openings
<u>Managers</u>	\$31.64 hourly	+1.2% average annual growth



NUTRIENT MANAGEMENT

COMPOSTING FACILITY OWNERS OR OPERATORS

Owner, director, or manager of any facility that receives organic waste from the surrounding community and composts it; may sell the finished compost.

SOLID WASTE MANAGEMENT: FOOD-SYSTEM-SPECIFIC POSITIONS

Employee of a Solid Waste Management District or other facility who manages a project or conducts community outreach related specifically to food system waste.

WORK CONTEXT

Most compost facility owners work full-time. Depending on the size of the facility, workers may work in shifts so that the plant is staffed 24 hours a day, or workers are on call at night and on the weekends.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *analytical skills, math skills, mechanical skills, and detail orientation*. Composting facility operators must understand the science of composting, conduct tests to ensure performance, and know how to operate, repair, and maintain their equipment.

- 54% of sustainability specialists earned a Bachelor's degree, 29% earned a Master's degree, and 7% earned a post-baccalaureate certificate
- Long-term on the job training is common

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
<u>Refuse and Recyclable Material</u> <u>Collectors</u>	\$32,860 yearly, \$15.80 hourly	100 annual job openings +1.2% average annual growth
Recycling Coordinators	\$53,700 annually, \$25.82 hourly <u>*</u>	47 annual job openings +0.4% average annual growth
Sustainability Specialists	\$66,150 yearly \$31.80 hourly	94 annual job openings +0.6% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Environmental Studies (BA), Environmental Science (BS)
Champlain College <i>Burlington, Vermont</i>	Environmental Studies & Policy (BS)
Community College of Vermont <i>Various Locations</i>	Environmental Science (AS), STEM Studies (AS)
Marlboro College <i>Marlboro, Vermont</i>	Environmental Studies (BA)
Middlebury College <i>Middlebury, Vermont</i>	Environmental Studies (BA)
Norwich University Northfield, Vermont	Environmental Science (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Environmental Science (BS), Environmental Studies (BA)
Sterling College <i>Craftsbury Common, Vermont</i>	Ecology (BA), Environmental Humanities (BA), Sustainable Food Systems (BA)
University of Vermont <i>Burlington, Vermont</i>	Environmental Sciences (BS), Environmental Studies (BA), Food Systems (BS)

Associate's and Bachelor's Degrees

Continuing Education and Other Training Opportunities

<u>Organization</u>	Program or Courses
University of Vermont Extension	Master Composter Certification
Various Locations	



SCIENCE AND ENGINEERING

SCIENCE AND ENGINEERING RESEARCH AND EDUCATION

Researchers or teachers in fields relating to food and agriculture, including soil and plant science, agricultural science, environmental science, animal science, food science, agricultural engineering, and agricultural economics.

APPLIED FOOD SCIENCE

Assist or advise food processors and distributors by applying knowledge of chemistry, microbiology, engineering, and other science disciplines. May manage microbiological processes; analyze food content to determine levels of vitamins, fat, sugar, and protein; and determine best ways to process, package, preserve, store, and distribute food.

APPLIED AGRICULTURAL OR CONSERVATION SCIENCE

Assist or advise agricultural producers by applying knowledge of agricultural or conservation science including agronomy, dairy sciences, horticultural sciences, poultry sciences, range management, and agricultural soil conservation.

MICROBIOLOGISTS

Investigate the growth, structure, development, and other characteristics of microscopic organisms, such as bacteria, algae, or fungi.

WORK CONTEXT

Most agricultural and food scientists work full-time and may be required to travel often.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *math and data analysis skills, critical-thinking skills, communication skills, and observation skills*. Applied scientists conduct research in which they much apply math and data analysis skills. Scientists must have keen observational skills when conducting experiments and be able to explain their studies to the community and other professionals.

- 69% of applied food scientists earned a Bachelor's degree, 19% earned a Master's degree, and 8% earned a Doctoral degree
- 32% of agricultural technicians earned a Master's degree, 29% earned a Bachelor's degree, and 18% earned an Associate's degree
- 32% of food science technicians earned a high school diploma or equivalent, 17% earned a Bachelor's degree, and 14% earned a Master's degree
- 67% of conservation scientists earned a Bachelor's degree, 14% earned an Associate's degree, and 10% earned a Master's degree
- 48% of microbiologists earned a Bachelor's degree, 17% earned a Post-baccalaureate certificate, and 13% earned a Master's degree

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
<u>Agricultural and Food Science</u> <u>Technicians</u>	\$82,230 yearly, \$40.02 hourly	7 annual job openings -0.2% average annual growth
Conservation Scientists	\$63,090 yearly, \$30.33 hourly	10 annual job openings +0.7% average annual growth
<u>Microbiologists</u>	\$61,340 yearly, \$29.49 hourly	4 annual job openings +0.5% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

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College/University	Degree Program
Castleton University Castleton, Vermont	Biology (BS), Environmental Studies (BA), Environmental Science (BS)
Champlain College <i>Burlington, Vermont</i>	Environmental Studies & Policy (BS)
Community College of Vermont <i>Various Locations</i>	Environmental Science (AS), STEM Studies (AS)
Marlboro College <i>Marlboro, Vermont</i>	Biology (BS), Environmental Studies (BA)

College/University	Degree Program
Middlebury College <i>Middlebury, Vermont</i>	Biology (BS), Environmental Studies (BA)
Norwich University Northfield, Vermont	Biology (BS), Environmental Science (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Biology (BS), Environmental Science (BS), Environmental Studies (BA)
Southern Vermont College Bennington, Vermont	Biological Sciences (BS)
Sterling College <i>Craftsbury Common, Vermont</i>	Ecology (BA), Environmental Humanities (BA), Sustainable Agriculture (BA), Sustainable Food Systems (BA)
University of Vermont <i>Burlington, Vermont</i>	Biology (BS), Ecological Agriculture (BS), Environmental Sciences (BS), Environmental Studies (BA), Food Systems (BS), Sustainable Landscape Horticulture (BS), Wildlife and Fisheries Biology (BS)

Continuing Education and Other Training Opportunities

Organization	Program or Courses
Vermont Technical College Institute for Applied Agriculture and Food Systems <i>Randolph, Vermont</i>	Trainings and courses vary; see current listings at <u>https://www.vtc.edu/meet-vtc/centers-institutes/</u> <u>ag-institute/short-courses</u> . Past offerings include <i>Introduction to ArcGIS, ArcGIS Natural Resource Mapping Certificate</i> , and <i>Wetland Delineation</i> .
School of the New American Farmstead at Sterling College <i>Craftsbury, Vermont</i>	Trainings and courses vary; see current listings at <u>https://sterlingcollege.edu/school-of-the-new-</u> <u>american-farmstead/</u> . Past offerings include <i>Pollinator</i> <i>Conservation</i> .
Vermont Law School Summer Program <i>South Royalton, Vermont</i>	Courses vary; see current listings at <u>https://www.</u> <u>vermontlaw.edu/summer</u> . Past offerings include <i>Land Conservation Law</i> and <i>Environmental Health</i> <i>Law</i>

AGRICULTURAL ENGINEERS

Apply knowledge of engineering technology and biological science to agricultural problems concerned with power and machinery, electrification, structures, soil and water conservation, and processing of agricultural products.



INSTALLING WATER QUALITY TECHNOLOGY, CREDIT NRCS.

WORK CONTEXT

Most agricultural engineers work fulltime and may need to be available outside of typical business hours to address unexpected problems. Agricultural engineers typically work in offices but may spend time at either indoor or outdoor worksites. Agricultural engineers can advance in their field to become a supervisor for a team of engineers or technicians.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *analytical skills, math skills, problemsolving skills, and communication*

skills. Agricultural engineers must analyze complex systems using math skills, solve problems found in agricultural production, and be able to effectively communicate the needs of both clients and workers.

• 69% of agricultural engineers earned a Bachelor's degree, 12% earned a postbaccalaureate certificate, and 12% earned a Master's degree

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
Agricultural Engineers	\$77,970 yearly, \$37.49 hourly <u>*</u>	200 annual U.S. job openings +8% in the US by 2026

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Norwich University Northfield, Vermont	Civil and Environmental Engineering (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Engineering (BA)

College/University	Degree Program
University of Vermont <i>Burlington, Vermont</i>	Engineering Management (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Civil & Environmental Technology (AE), Manufacturing Engineering Technology (BS), Mechanical Engineering Technology (AE), Renewable Energy (BS)

Continuing Education and Other Training Opportunities

<u>Organization</u>	Program or Courses
Vermont Technical College Institute for Applied Agriculture and Food Systems <i>Randolph, Vermont</i>	Trainings and courses vary; see current listings at <u>https://www.vtc.edu/meet-vtc/centers-institutes/</u> <u>ag-institute/short-courses</u> . Past offerings include <i>Introduction to ArcGIS, ArcGIS Natural Resource Mapping Certificate</i> , and <i>Wetland Delineation</i> .



TECHNICAL ASSISTANCE AND FINANCIAL SERVICES

FARM AND FOOD BUSINESS MANAGEMENT ADVISORS

Advise, instruct, and assist individuals and families engaged in agriculture or food businesses. May demonstrate procedures and apply research findings to solve problems, and instruct and train in product development, sales, and the use of machinery and equipment. Includes county agricultural agents and extension service advisors.

WORK CONTEXT

Most farm and food business management advisors work full-time and may need to travel often to consult with farmers and food entrepreneurs at their worksites. When not meeting with clients, farm and food business management advisors typically work in offices.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *analytical skills, math skills, sales skills, interpersonal skills, and speaking skills.* Farm and food "There are a lot of skills around financial and business planning and knowing how to create financial projections and data about different farm production methods. We have lots of information that we need to know, but most basically you have to have a pretty good sense of farming."

- Maggie Donin, Farm Business Specialist, *Burlington, Vermont* business management advisors must analyze client portfolios and are constantly working with numbers. Advisors interact with clients often and must be able to make clients feel comfortable and be able to respond to questions and concerns.

• 59% of farm and home management advisors earned a Master's degree, 24% have earned a Bachelor's degree, and 7% earned a Post-master's certificate

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
<u>Farm and Home Management</u> <u>Advisors</u>	\$52,220 yearly, \$25.11 hourly <u>*</u>	1,000 annual U.S. job openings +8% in the U.S. by 2026

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)
Norwich University Northfield, Vermont	Business Management (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)
Southern Vermont College <i>Bennington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

FINANCE MANAGERS

Internal employee of a food or agriculture business who plans, directs, or coordinates accounting, banking, or other financial activities.

WORK CONTEXT

Most financial managers work full-time in offices. Experienced financial managers can advance to become chief financial officers.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *analytical skills, math skills, communication skills, organizational skills, and detail orientation.* Financial managers must have advanced algebra skills, be able to explain management techniques, be able to keep documents well organized, and pay attention to detail when analyzing reports.

- 50% of financial managers earned a Bachelor's degree, 17% earned a high school diploma or equivalent, and 14% earned a Master's degree
- 61% of financial analysts earned a Bachelor's degree, 35% earned a Master's degree, and 2% earned an Associate's degree

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
<u>Financial Managers, Branch or</u> <u>Department</u>	\$112,610 yearly, \$58.95 hourly	73 annual job openings +1.3% average annual growth
<u>Financial Analysts</u>	\$84,050 yearly, \$40.41 hourly	17 annual job openings +0.7% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)
Norwich University <i>Northfield, Vermont</i>	Business Management (BS)

College/University	Degree Program
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)
Southern Vermont College <i>Bennington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

ACCOUNTING SERVICES

External (non-employee) provider of accounting services including examining and interpreting accounting records to prepare financial statements; auditing and evaluating statements prepared by others; or giving financial advice.

WORK CONTEXT

Most accountants work full-time and may need to travel often to consult with farmers and food businesses at their worksites. When not meeting with clients at their homes, accountants typically work in offices. Accountants often advance to become financial managers.

WORK VALUES AND SKILLS

Qualities that employees look for when hiring in this field include a*nalytical skills, math skills, organizational skills, communication skills, and detail orientation.* Accountants must analyze client portfolios and are constantly working with numbers. Advisors interact with clients often and must be able to make clients feel comfortable and be able to respond to questions and concerns.

- 79% of accountants earned a Bachelor's degree, 5% earned an Associate's degree, and 5% earned a Master's degree
- 41% of bookkeeping, accounting, and auditing clerks earned a high school diploma or equivalent, 21% earned a post-secondary certificate, and 12% earned a Bachelor's degree

Position Type	Average Wages	Employment Trends
Accountants	\$75,470 yearly, \$36.28 hourly	354 annual job openings +0.6% average annual growth
<u>Bookkeeping, Accounting, and</u> <u>Auditing Clerks</u>	\$41,140 yearly, \$19.78 hourly	634 annual job openings -0.4% average annual growth

WAGE AND EMPLOYMENT DATA

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program	
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)	
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)	
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)	
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)	
Norwich University Northfield, Vermont	Business Management (BS)	
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)	
Southern Vermont College Bennington, Vermont	Business Administration (BS), Entrepreneurship (BS)	
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)	
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)	

AGRICULTURAL LOAN OFFICERS

Evaluate and authorize ownership loans and operating loans for agricultural businesses. May advise borrowers on financial status and payment methods.

WORK CONTEXT

Most loan officers work full-time and may need to travel often to consult with farmers at their farms. When not meeting with clients, loan officers typically work in offices.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *decision making skills, interpersonal skills, and detail orientation.* Loan officers must analyze client portfolios and are constantly working with numbers. Loan officers interact with clients often and must be able to make



COMMUNITY CAPITAL OF VERMONT

clients feel comfortable and be able to respond to questions and concerns.

- 32% of loan officers earned a Bachelor's degree, 20% earned a high school diploma or equivalent, and 17% attended some college but did not earn a degree
- 43% of loan interviewers and clerks earned a high school diploma or equivalent, 38% earned a Bachelor's degree, and 12% earned a post-secondary certificate

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
Loan Officers	\$67,100 yearly, \$32.26 hourly	54 annual job openings +06% average annual growth
Loan Counselors	\$39,010 yearly, \$18.76 hourly	3 annual job openings +0.5% average annual growth
Loan Interviewers and Clerks	\$39,640 yearly, \$19.06 hourly	25 annual job openings +0.7% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS)
College of St. Joseph <i>Rutland, Vermont</i>	Business Administration (BS)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Landmark College <i>Putney, Vermont</i>	Business Studies (AA)
Norwich University Northfield, Vermont	Business Management (BS)
Saint Michael's College <i>Colchester, Vermont</i>	Business Administration (BS)
Southern Vermont College Bennington, Vermont	Business Administration (BS), Entrepreneurship (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS)
Vermont Technical College <i>Randolph, Vermont</i>	Agribusiness Management Technology (AAS), Applied Business Management (BS), Entrepreneurship (AAS, BS)

Associate's and Bachelor's Degrees

Related Licenses and Certifications

Below is related licensure for this occupation; specific requirements may vary based on employer.

Certification/License	Where to Get It	
Mortgage Loan Originator	Vermont Department of Financial Regulation	
Loan Services	Vermont Department of Financial Regulation	
Lenders	Vermont Department of Financial Regulation	



ADVOCACY AND EDUCATION

POLICYMAKERS AND GOVERNMENT STAFF

Employee of a government department responsible for developing or implementing policies and programs related to food and agriculture.

WORK CONTEXT

Most policymakers work full-time in an office.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *analytical skills*, *communication skills*, *and critical-thinking skills*. Policymakers often analyze government policies, examine current problems within policies, and be able to effectively communicate with others. Some policymakers run for elected office.

WAGE AND EMPLOYMENT DATA

Position Type	Average Wages	Employment Trends
<u>Eligibility Interviewers,</u> <u>Government Programs</u>	\$47,820 yearly, \$22.99 hourly	6 annual job openings +0.6% average annual growth
<u>Executive Secretaries and</u> <u>Executive Administrative</u> <u>Assistants</u>	\$53,330 yearly, \$25.64 hourly	166 annual job openings -2.2% average annual growth

Position Type

Average Wages

Employment Trends

Urban and Regional Planners

\$52,730 yearly, \$25.35 hourly

16 annual job openings +0.7% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

Associate's and Bachelor's Degrees

College/University	Degree Program
Bennington College Bennington, Vermont	History (BA), Politics (BA)
Castleton University <i>Castleton, Vermont</i>	Business Administration (BS), History (BA), Political Science (BS), Social Studies (BA)
Champlain College <i>Burlington, Vermont</i>	Law (BA)
Community College of Vermont <i>Various Locations</i>	Administrative Management (AS), Business (BS)
Marlboro College <i>Marlboro, Vermont</i>	American Studies (BA), History (BA), Politics (BA), World Studies (BA)
Middlebury College <i>Middlebury, Vermont</i>	History (BA), International Politics and Economics (BA), International and Global Studies (BA), Political Science (BS)
Norwich University Northfield, Vermont	History (BA), International Business (BS), Political Science (BS)
Saint Michael's College <i>Colchester, Vermont</i>	History (BA), International Relations (BA), Political Science (BS)
Southern Vermont College <i>Bennington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), History and Politics (BS)
University of Vermont <i>Burlington, Vermont</i>	Business Administration (BS), Entrepreneurship (BS), Sustainable Business (BS), History (BA), Political Science (BA)

Continuing Education and Other Training Opportunities

Organization	Program or Courses	
	Courses vary; see current listings at <u>https://www.</u>	
Vermont Law School	vermontlaw.edu/summer . Past offerings include The	
Summer Program	Law of Animals in Agriculture, Land Conservation Law,	
South Royalton, Vermont	Global Food Security, Animal Welfare Law, The Farm	
	Bill, and Food Justice and Sustainability.	

LAWYERS AND LEGAL ASSISTANTS

Lawyers who engage in food systems work, whether by serving farm & food business clients, working for nonprofits or advocacy organizations, or engaging in policy making.

WORK CONTEXT

Most lawyers work full-time and often work more than 40 hours a week. Lawyers work mostly in offices, but travel to attend meetings with clients and sometimes appear in court.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *analytical skills, problemsolving skills, research skills, speaking skills, writing skills, and interpersonal skills.* Lawyers must help their clients resolve problems by researching laws and regulations and preparing documents, and some also engage in litigation in court.

- 68% of lawyers earned a Professional degree and 31% earned a Doctoral degree
- 44% of paralegals and legal assistants earned a Bachelor's degree, 30% earned an Associate's degree, and 12% attended some college but did not earn a degree

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
Lawyers	\$105,900 yearly, \$50.92 hourly	83 annual job openings +0.1% average annual growth
Paralegals and Legal Assistants	\$51,610 yearly, \$24.81 hourly	79 annual job openings +0.8% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Bennington College <i>Bennington, Vermont</i>	History (BA), Politics (BA)
Castleton University <i>Castleton, Vermont</i>	History (BA), Political Science (BS), Social Studies (BA)
Champlain College <i>Burlington, Vermont</i>	Law (BA)
Marlboro College <i>Marlboro, Vermont</i>	American Studies (BA), History (BA), Politics (BA), World Studies (BA)
Middlebury College <i>Middlebury, Vermont</i>	History (BA), International Politics and Economics (BA), International and Global Studies (BA), Political Science (BS)

College/University	Degree Program
Norwich University Northfield, Vermont	History (BA), International Business (BS), Political Science (BS)
Saint Michael's College <i>Colchester, Vermont</i>	History (BA), International Relations (BA), Political Science (BS)
Southern Vermont College Bennington, Vermont	History and Politics (BS)
University of Vermont <i>Burlington, Vermont</i>	History (BA), Political Science (BA)

Continuing Education and Other Training Opportunities

Organization	Program or Courses
	Courses vary; see current listings at <u>https://www.</u>
Vermont Law School	vermontlaw.edu/summer . Past offerings include The
Summer Program	Law of Animals in Agriculture, Land Conservation Law,
South Royalton, Vermont	Global Food Security, Animal Welfare Law, The Farm
	Bill, and Food Justice and Sustainability.

ADVOCACY AND OUTREACH STAFF

Employees or consultants who engage in advocacy or support community activism related to food and agriculture issues, for example employees of an anti-hunger nonprofit.



TESTIFYING TO THE VT STATE LEGISLATURE AG COMMITTEES

WORK CONTEXT

Most food organization staff generally work full time, sometimes during nights and weekends. Some social and human service assistants work in offices or clinics.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *compassion, communication skills, interpersonal skills, organizational skills, and problem-solving skills.* Food organization staff advise clients regarding food stamps and money management when shopping for food, oversee individual volunteers, keep records concerning visits with clients, and organize donated goods from various organizations.

- 27% of social and human service assistants earned a Bachelor's degree, 22% earned a high school diploma or equivalent, and 18% earned a Master's degree
- 50% of social and community service managers earned a Bachelor's degree, 24% earned a Master's degree, and 8% earned an Associate's degree

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
<u>Social and Human Service</u>	\$35,460 yearly,	339 annual job openings
<u>Assistants</u>	\$17.05 hourly	+1.0% average annual growth
<u>Social and Community Service</u>	\$65,810 yearly,	74 annual job openings
<u>Managers</u>	\$31.64 hourly	+1.2% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Bennington College <i>Bennington, Vermont</i>	History (BA), Politics (BA)
Castleton University <i>Castleton, Vermont</i>	History (BA), Political Science (BS), Social Studies (BA)
Champlain College <i>Burlington, Vermont</i>	Law (BA)
Marlboro College <i>Marlboro, Vermont</i>	American Studies (BA), History (BA), Politics (BA), World Studies (BA)
Middlebury College <i>Middlebury, Vermont</i>	History (BA), International Politics and Economics (BA), International and Global Studies (BA), Political Science (BS)
Norwich University Northfield, Vermont	History (BA), International Business (BS), Political Science (BS)
Saint Michael's College <i>Colchester, Vermont</i>	History (BA), International Relations (BA), Political Science (BS)
Southern Vermont College <i>Bennington, Vermont</i>	History and Politics (BS)
University of Vermont <i>Burlington, Vermont</i>	History (BA), Political Science (BA)

<u>Organization</u>	Program or Courses
University of Vermont Continuing and Distance Education <i>Various Locations</i>	Breakthrough Leaders for Sustainable Food Systems
Vermont Law School Summer Program <i>South Royalton, Vermont</i>	Courses vary; see current listings at <u>https://www.</u> <u>vermontlaw.edu/summer</u> . Past offerings include <i>The</i> <i>Law of Animals in Agriculture, Land Conservation Law,</i> <i>Global Food Security, Animal Welfare Law, The Farm</i> <i>Bill,</i> and <i>Food Justice and Sustainability.</i>

Continuing Education and Other Training Opportunities

AGRICULTURAL WRITERS

Journalists, authors, and other writing professionals who address food and agriculture issues.

WORK CONTEXT

Writers and authors can work full-time or part-time, while reporters mostly work full-time Although writers can work anywhere they have access to a computer, some keep regular office hours. Reporters mostly work in offices and often work nights and weekends.

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include *communication skills*, *interpersonal skills*, *critical-thinking skills*, *creativity*, *and writing skills*. Reporters must understand their subjects and build relationships with sources. Writers must fully understand the topics they write about, be able to think creatively about their subjects, and write effectively.

- 46% of writers and authors earned a Bachelor's degree, 15% earned a high school diploma or equivalent, and 19% did not earn a high school diploma
- 82% of reporters and correspondents earned a Bachelor's degree and 5% earned an Associate's degree

WAGE AND EMPLOYMENT DATA

Position Type	<u>Average Wages</u>	Employment Trends
Writers and Authors	\$54,700 yearly, \$26.30 hourly	74 annual job openings -0.2% average annual growth
Reporters and Correspondents	\$37,610 yearly, \$18.08 hourly	16 annual job openings -0.8% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Bennington College <i>Bennington, Vermont</i>	Literature (BA)
Castleton University <i>Castleton, Vermont</i>	English/Literature (BA)
Champlain College <i>Burlington, Vermont</i>	Professional Writing (BS)
Marlboro College <i>Marlboro, Vermont</i>	Literature (BA), Writing (BA)
Middlebury College <i>Middlebury, Vermont</i>	Comparative Literature (BA), Creative Writing (BA), English & American Literatures (BA), Writing (BA)
Norwich University Northfield, Vermont	English (BA)
Saint Michael's College <i>Colchester, Vermont</i>	English (BA)
Southern Vermont College <i>Bennington, Vermont</i>	Creative Writing (BA)
University of Vermont <i>Burlington, Vermont</i>	English (BA)

Associate's and Bachelor's Degrees

Continuing Education and Other Training Opportunities

<u>Organization</u>	Program or Courses
University of Vermont Continuing and Distance Education <i>Various Locations</i>	Breakthrough Leaders for Sustainable Food Systems
School of the New American Farmstead at Sterling College <i>Craftsbury, Vermont</i>	Trainings and courses vary; see current listings at <u>https://sterlingcollege.edu/school-of-the-new-</u> <u>american-farmstead/</u> . Past offerings include <i>Food</i> <i>Writing</i> .

SCHOOL AND COMMUNITY GARDEN COORDINATORS

May be responsible for program development, outreach, coordination of gardeners, and/or maintenance of the garden itself. May work with an individual school or community garden, or with a network or statewide organization.

EDUCATORS

Including farm-to-school educators, farm-to-school coordinators, 4-H educators, ag teachers, and others.

WORK CONTEXT

Educators work in many different contexts, throughout all grade levels and even outside the formal school setting. Grade school teachers work full-time and often spend time outside of school hours grading papers and preparing lessons. Grade school teachers work the 10-month school year and have a 2-month break during summer, during which they may teach summer programs. Postsecondary teachers work both full-time and part-time. Part-time postsecondary teachers often have a full-time job in their field of expertise in addition to their teaching position. Postsecondary teachers can have



NORTHFIELD HS STUDENTS GARDENING, CREDIT VT FEED

flexible schedules, but are generally on campus during normal working hours to teach classes and hold office hours. Some postsecondary teachers teach summer courses or conduct research during the summer.

"I've learned a lot of interpersonal skills and how to make connections with people on a professional basis. There's so many great people doing important work, but if you're not meeting them and not collaborating with them, then it is kind of pointless."

- Jeyna Diallo, Green Mountain Farmto-School Coordinator, Newport, Vermont

WORK VALUES AND SKILLS

Qualities that employers look for when hiring in this field include communication skills, critical-thinking skills, interpersonal skills, speaking and writing skills, resourcefulness, and patience. Teachers at all levels must be able to effectively communicate with students and colleagues, be able to think critically about their subjects, and be able to effectively present information in a way that students will understand.

• 60% of postsecondary teachers earned a Doctoral Degree, 25% had postdoctoral

trainings, and 6% earned a Bachelor's degree

• 35% of secondary teachers earned a Bachelor's degree, 23% earned a postbaccalaureate certificate, and 17% earned a post-secondary certificate

WAGE AND EMPLOYMENT DATA	A	
Position Type	<u>Average Wages</u>	Employment Trends
<u>Elementary School Teachers,</u> <u>Except Special Education</u>	\$61,090 yearly	225 annual job openings -0.4% average annual growth
<u>Middle School Teachers, Except</u> <u>Special and Career/Technical</u> <u>Education</u>	\$58,920 yearly	64 annual job openings -0.4% average annual growth
<u>Secondary School Teachers,</u> <u>Except Special and Career/</u> <u>Technical Education</u>	\$61,710 yearly	156 annual job openings -0.3% average annual growth
Career/Technical Education Teachers, Secondary School	\$64,880 yearly	15 annual job openings -0.4% average annual growth
<u>Agricultural Sciences Teachers,</u> <u>Postsecondary</u>	\$91,690 yearly <u>*</u>	1,100 annual U.S. job openings +8% in the U.S. by 2026
Educational, Guidance, School, and Vocational Counselors	\$53,770 yearly, \$25.85 hourly	88 annual job openings +0.4% average annual growth
Instructional Coordinators	\$58,960 yearly \$28.35 hourly	58 annual job openings +0.3% average annual growth
<u>Self-Enrichment Education</u> <u>Teachers</u>	\$51,850 yearly \$24.93 hourly	128 annual job openings +0.7% average annual growth

POTENTIAL NEXT STEPS TOWARD THIS CAREER

College/University	Degree Program
Castleton University Castleton, Vermont	Education (BA)
Champlain College <i>Burlington, Vermont</i>	Early Childhood/Elementary Education (BS), Middle School Teacher Education (BA), Secondary Teacher Education (BS)
Community College of Vermont <i>Various Locations</i>	Early Childhood Education (AA)

College/University	Degree Program
Middlebury College <i>Middlebury, Vermont</i>	Education Studies (BA)
Norwich University Northfield, Vermont	Education (BA)
Saint Michael's College <i>Colchester, Vermont</i>	Education (BA), Education Studies (BA)
Sterling College <i>Craftsbury Common, Vermont</i>	Outdoor Education (BA)
University of Vermont <i>Burlington, Vermont</i>	Early Childhood Education (BS), Middle Level Education (BS), Secondary Education (BS)

Continuing Education and Other Training Opportunities

Organization	Program or Courses
University of Vermont Continuing and Distance Education <i>Various Locations</i>	Breakthrough Leaders for Sustainable Food Systems; John Dewey Kitchen Institute
Vermont Technical College <i>Randolph, Vermont</i>	Career & Technical Teacher Education Program
University of Vermont Extension Various Locations	Master Gardener Certification

For additional information about careers in the food system, please see the Farm to Plate Network's **Career Profiles and Pathways** publication, a growing collection of interviews with farmers and food entrepreneurs conducted by high school students around Vermont and related resources.



Farm to Plate is Vermont's food system plan being implemented statewide to increase economic development and jobs in the farm and food sector and improve access to healthy local food for all Vermonters.

This resource was created by the **Career Pathways Task Force** within the Farm to Plate Network's <u>Education and Workforce Development Working Group</u> to accompany the <u>Career Profiles and Pathways</u> publication.