NEW ENGLAND
FOOD SYSTEM
PLANNERS PARTNERSHIP

A Regional Approach to Food System Resilience

VT House & Senate Agriculture Committees

Report Overview & Vermont State Brief

January 16, 2024

Funding made possible by the Henry P. Kendall Foundation, the John Merck Fund, and U.S. Department of Agriculture's Agricultural Marketing Service through grant #AM200100XXXXG100.

NEW ENGLAND FOOD SYSTEM PLANNERS PARTNERSHIP

Meg Hourigan & Martha Page

Nessa Richman

Nicole Cardwell

Ellen Kahler & Jake Claro

J Harrison

Tanya Swain

Karen Nordstrom

State Agency Supporting Partners

Cyrena Thibodeau

Julianne Stelmaszyk

Joshua Marshall

Abbey Willard

Bonita Oehlke

Michelle Webb

Project Goal

By 2030, 30% of the food consumed in New England is produced/harvested/caught within New England.

Our collective effort will focus on expanding and fortifying the region's food supply and distribution systems in an equitable and inclusive way that ensures the availability of adequate, affordable, socially and culturally appropriate products under a variety of rapidly changing climate, environmental, and public health conditions.

NEFNE Project Timeline

2021 through 2022

PHASE 1
Research

2023 through 2024

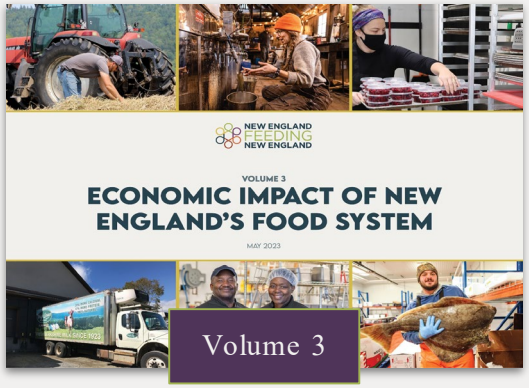
PHASE 2
Convening &
Coordination

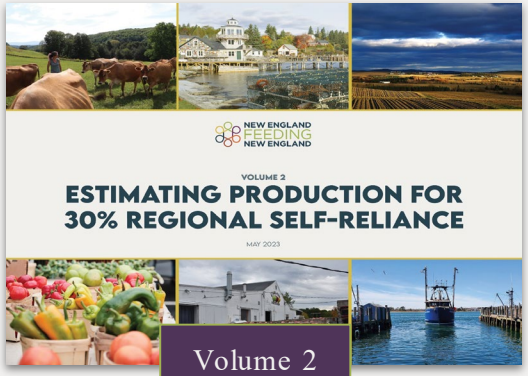
2023 into 2030 and Beyond

PHASE 3
Implementation

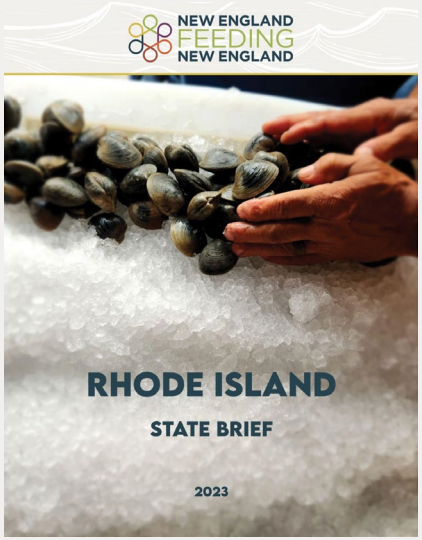
By 2030, 30% of the food consumed in New England is produced/harvested/caught within New England.

NEW ENGLAND FOOD SYSTEM PLANNERS PARTNERSHIP





Plus Six State Specific Reports



Research Team (16 Members)

- **Brian Donahue, PhD** – formerly at Brandeis University; **Dietary Patterns Team Lead**
- **Christian Peters, PhD** – USDA Agricultural Research Service's Food Systems Research Unit; **Production Team Lead**
- **Nicolas Rockler** – Kavet, Rockler and Associates; **Economic Impact Lead**
- **Holly Fowler, MBA** – Northbound Ventures Consulting, LLC; **Market Channel Team Lead**
- Dr. Sarah Amin, PhD – University of Rhode Island
- Laura Barley – formerly at American Farmland Trust
- Ramón Borges-Méndez, PhD – Clark University
- Michelle Klieger, MBA – Helianth Partners, LLC
- Hannah Leighton – Farm to Institution New England
- Ashley McCarthy – University of Vermont
- April McIlwaine – University of Vermont
- Scott Richardson, PhD, MBA – Northbound Ventures Consulting, LLC
- **Scott Sawyer, PhD – Project Editor, Researcher and Designer**
- Sarah Schumann – Shining Sea Fisheries Consulting
- Dr. Joshua Stoll, PhD – University of Maine
- Dr. Eric von Wettberg, PhD – University of Vermont

Advisory Committee (15 Members)

- Molly Anderson – Middlebury College, Vermont
- Patrick Baur – University of Rhode Island
- Kristen Cooksey Stowers – University of Connecticut
- Vanessa Garcia Polanco – National Young Farmers Coalition
- Laura Ginsburg – Vermont Agency of Agriculture, Food and Markets
- Gray Harris – formerly at Coastal Enterprises of Maine
- Erin Lane – USDA Northeast Climate Hub
- Dr. Isaac “Ike” Leslie – University of Vermont
- Kate Masury – Eating with the Ecosystem
- Ken Meter – Crossroads Resource Center
- Jacob Park – University of Johannesburg (South Africa) and Castleton University, Vermont
- Eric Rimm – Harvard T.H. Chan School of Public Health
- Rachel Schattman – University of Maine
- Tom Sproul – Formerly at University of Rhode Island
- Lindsey Williams – University of New Hampshire

NEW ENGLAND FEEDING NEW ENGLAND

EXECUTIVE SUMMARY

A REGIONAL APPROACH TO FOOD SYSTEM RESILIENCE

MAY 2023

Key Findings

Key Findings

Volume 1

If we ate in a healthier, more resilient way, could more of our food be supplied by regional production?

TODAY NEW ENGLANDERS EAT ABOUT **2,940** CALORIES PER DAY (INCLUDES ALCOHOL)

THIS IS WELL ABOVE DIETARY GUIDELINES FOR MOST PEOPLE

A SWITCH TO "RESILIENT EATING" WOULD MEAN REDUCING CONSUMPTION BY 600 CALORIES

2,320 CALORIES PER DAY

REQUIRES SIGNIFICANTLY MORE

REQUIRES SIGNIFICANTLY LESS

Volume 2

Could the six New England states meet a goal of supplying 30% of the region's food by 2030?

NEW ENGLAND'S FARMERS + FISHERMEN COULD MEET **30%** OF SERVINGS FOR A POPULATION GROWING FROM **15.3** MILLION TO **15.6** MILLION THIS WOULD REQUIRE MAXIMIZING USE OF **401,000** EXISTING UNDERUTILIZED ACRES + **588,000** ADDITIONAL ACRES OF CLEARED LAND

Volume 3

Do we have the right mix of industries to ramp up food production?

NEW ENGLAND'S FOOD SYSTEM EMPLOYS **1,000,000** PEOPLE = **10%** OF ALL JOBS AND GENERATES **$190** BILLION IN SALES = **11%** OF ALL SALES *BUT* EMPLOYMENT AND SALES IN AGRICULTURE AND FISHERIES ARE *FLAT OR DECLINING*

Volume 4

What market channels offer the best opportunities for sourcing local and regional food products?

4 MARKET OUTLETS → GROCERY STORES, FAST FOOD, RESTAURANTS, WAREHOUSE CLUBS ACCOUNT FOR **$71.5** BILLION **84%** OF NEW ENGLAND FOOD SALES

ACCESSING THESE MARKETS HAS BEEN CHALLENGING FOR SMALL PRODUCERS

NEW ENGLAND FEEDING NEW ENGLAND

BACKGROUNDER

COMMON FOOD SYSTEM CHALLENGES

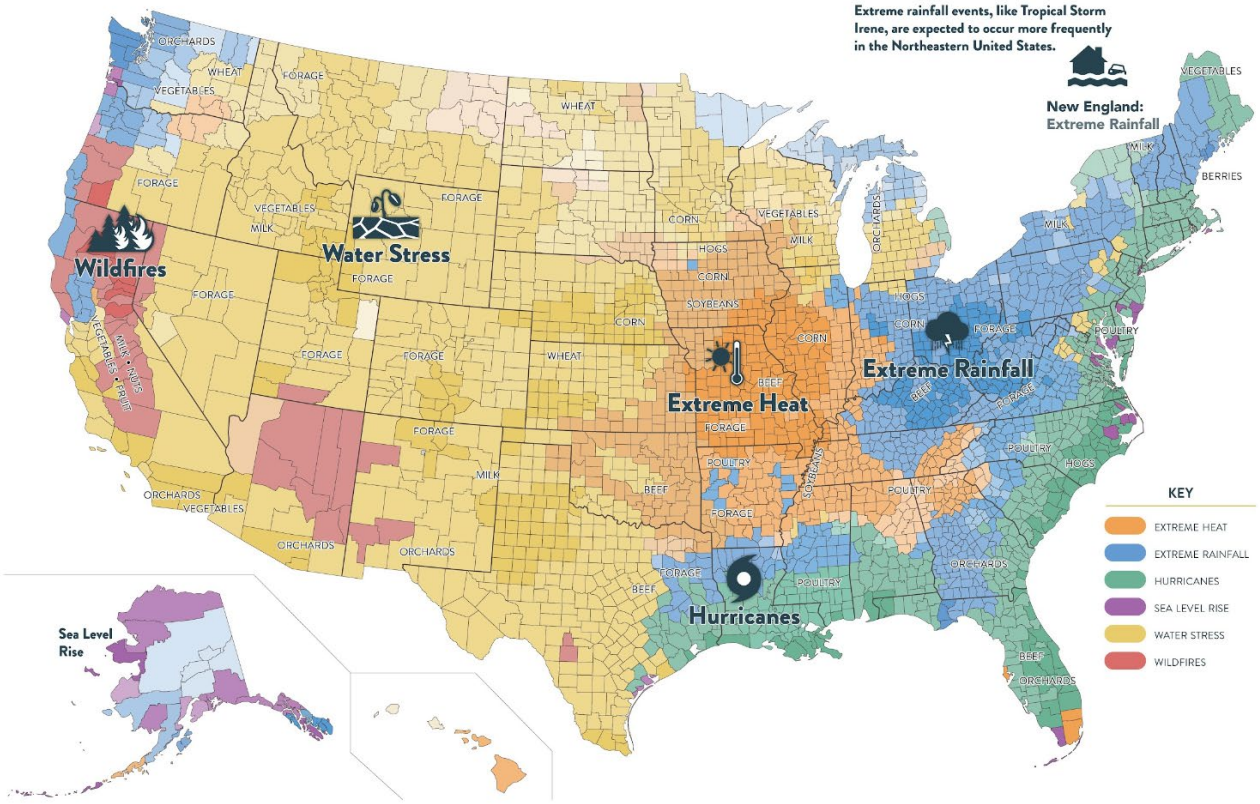
JULY 2023

Seven Common Challenges Across the Food System

1. Lack of Planning for Long-Term Food Supplies
2. Risks to Long-Term Food Production
3. Challenges to Farm, Fishery, and Food Business Viability
4. Ongoing Exploitation of Food System Workers
5. Limited Progress Reducing Diet-Related Health Problems
6. Limited Progress Reducing Food and Nutrition Insecurity
7. Limited Progress Reducing Wasted Food

Major Climate Risk by US County

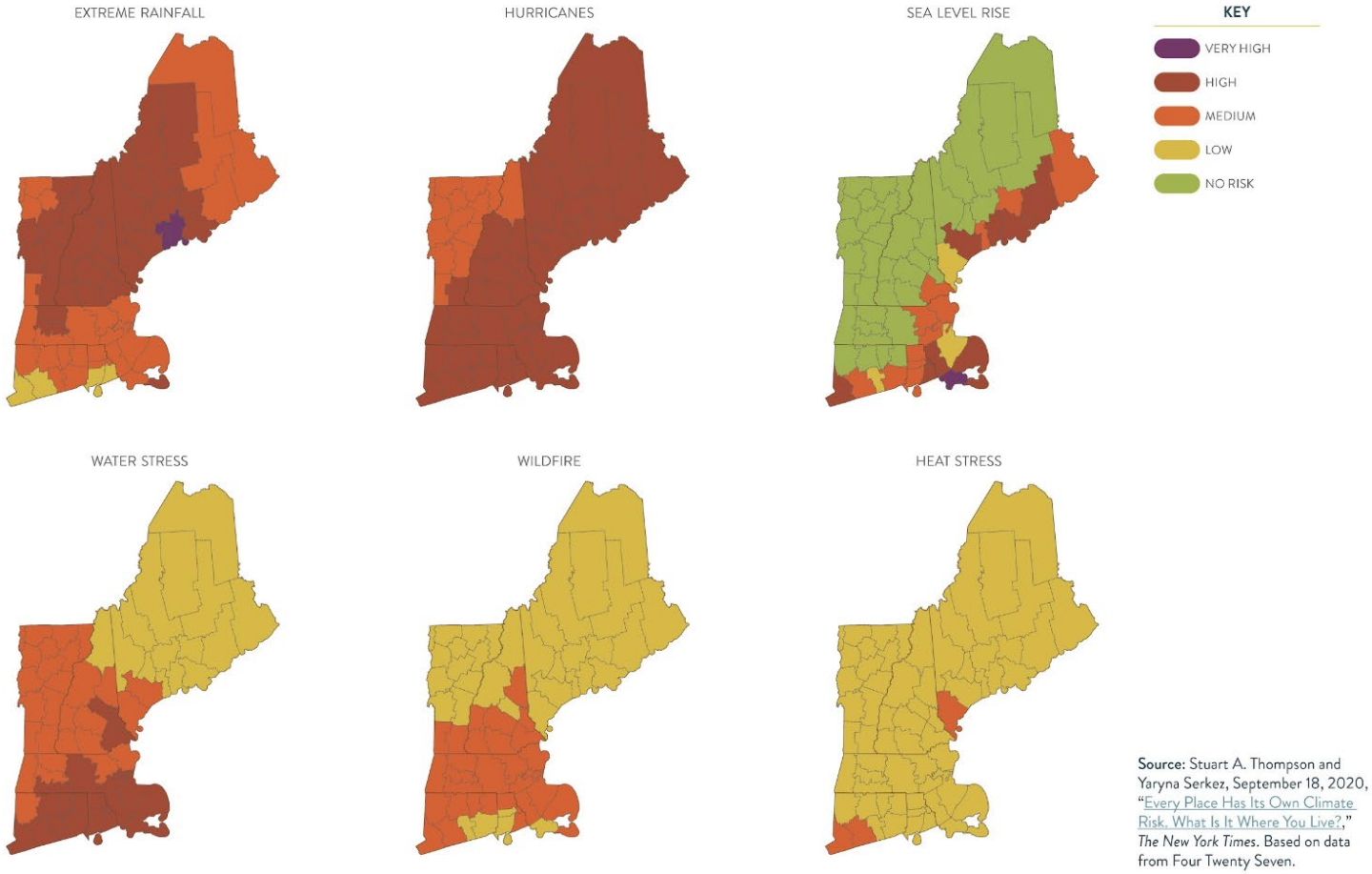
FIGURE 3: Major Climate Risk by U.S. County



Sources: Stuart A. Thompson and Yaryna Serkez, "Every Place Has Its Own Climate Risk. What Is It Where You Live?," *The New York Times*, https://www.nytimes.com/interactive/2020/09/18/opinion/wildfire-hurricane-climate.html. Based on data from Four Twenty Seven. Major agricultural products data based on USDA Ag Atlas Maps.

Preparing our Food Supply for Climate Change

FIGURE 2: Projected Climate Change Risks by County



Source: Stuart A. Thompson and Yaryna Serkez, September 18, 2020, "Every Place Has Its Own Climate Risk. What Is It Where You Live?," *The New York Times*. Based on data from Four Twenty Seven.

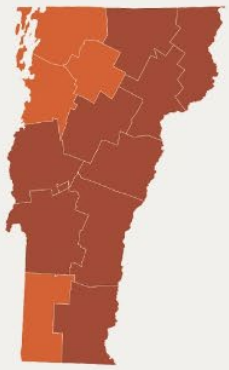
Climate Change in Vermont

Projected Climate Risks

HIGH MEDIUM LOW NO RISK

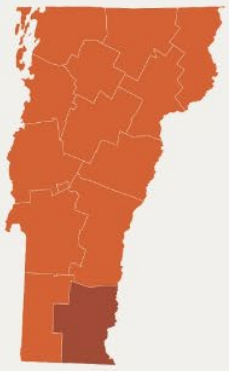
EXTREME RAIN

Annual precipitation and extreme precipitation events in Vermont have been above average in recent years.



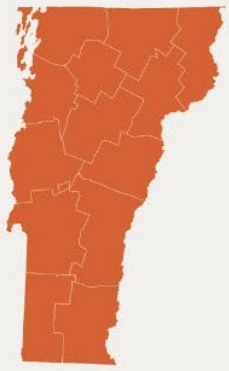
HURRICANES

Hurricanes Irene (2011), Floyd (1999), and Gloria (1985), were all billion-dollar disasters that impacted Vermont.



WATER STRESS

Vermont has experienced more abnormally dry days during the past 10 years then it did in the early 2000s.



Source: Stuart A. Thompson and Yaryna Serkez, September 18, 2020, "Every Place Has Its Own Climate Risk. What Is It Where You Live?," *The New York Times*. Based on data from Four Twenty Seven.

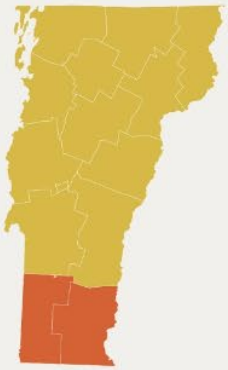
Climate Change in Vermont

Projected Climate Risks

HIGH MEDIUM LOW NO RISK

WILDFIRE

Large wildfires are not very common in Vermont, but 200-400 small fires (1.5-2 acres) occur per year.



HEAT STRESS

Temperatures have risen about 3.0°F since the beginning of the 20th century, resulting in warmer nights, shorter freeze-free seasons, and longer growing seasons.

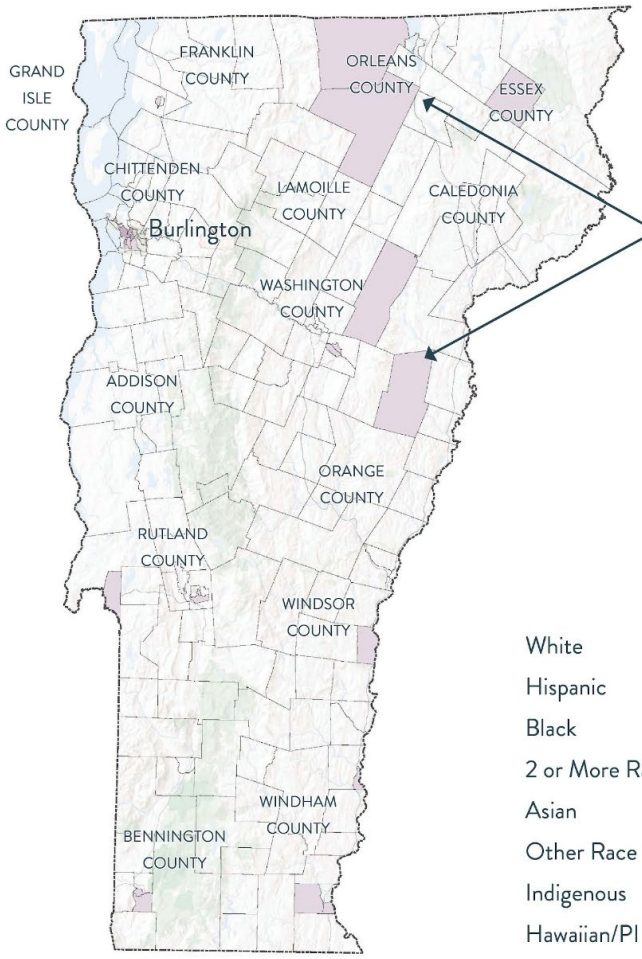
SEA LEVEL RISE

With no ocean coastline, Vermont is spared the direct impacts of sea level rise.

Source: Stuart A. Thompson and Yaryna Serkez, September 18, 2020, "Every Place Has Its Own Climate Risk. What Is It Where You Live?," *The New York Times*. Based on data from Four Twenty Seven.

Food Access in Vermont

Vermont's biracial, Hispanic, Asian, Black, and other non-White populations disproportionately live in low income/low access (LILA)* census tracts.



A higher percentage (i.e., a more purple census tract) means that residents are more likely to be non-White, Hispanic, and/or low income with limited access to grocery stores, particularly in cities.

Vermont is also home to predominantly rural, White populations with low income and low access.

% NON-WHITE OR HISPANIC BY LILA CENSUS TRACT

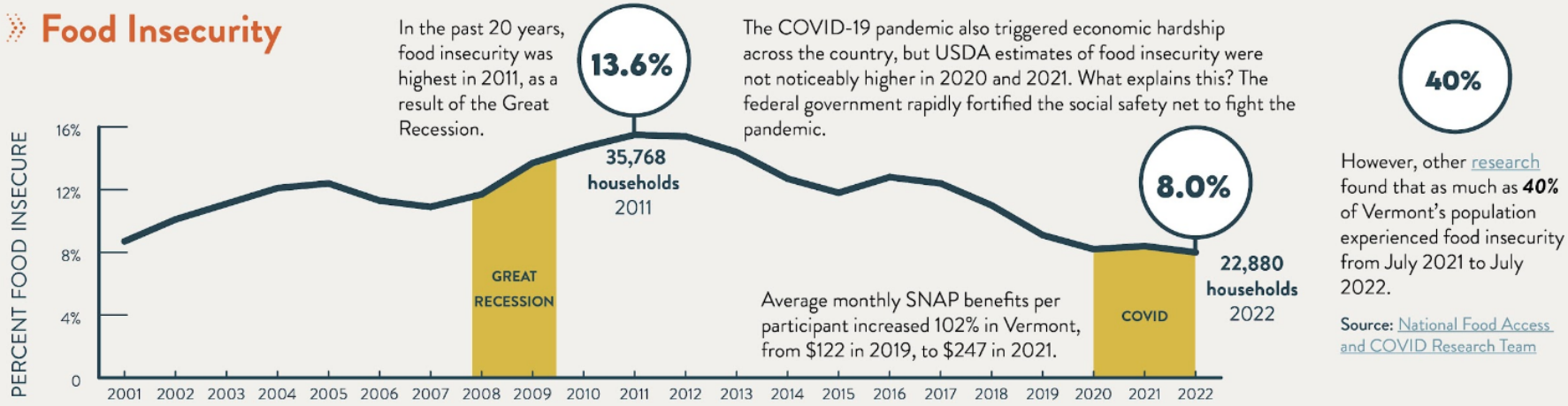
- 78-99%
- 59-78%
- 41-59%
- 21-41%
- 2-21%

* Low Income/Low Access (LILA) = Where a large proportion of the residents have low-incomes and are more than 1/2 mile from a food source for urban populations, and over 10 miles for rural populations.

Sources: USDA Food Research Atlas, American Community Survey

	% OF POPULATION		% LIVING IN LILA TRACTS
White	**89.1%** (573,201)	→	**15.1%** (86,542)
Hispanic	**2.4%** (15,504)	→	**14.8%** (2,298)
Black	**1.3%** (8,649)	→	**23.0%** (1,992)
2 or More Races	**4.6%** (29,549)	→	**10.0%** (2,964)
Asian	**1.8%** (11,457)	→	**24.7%** (2,828)
Other Race	**0.4%** (2,561)	→	**4.4%** (113)
Indigenous	**0.3%** (1,986)	→	**8.1%** (160)
Hawaiian/PI	**0.03%** (170)	→	**21.8%** (37)

Food Insecurity in Vermont



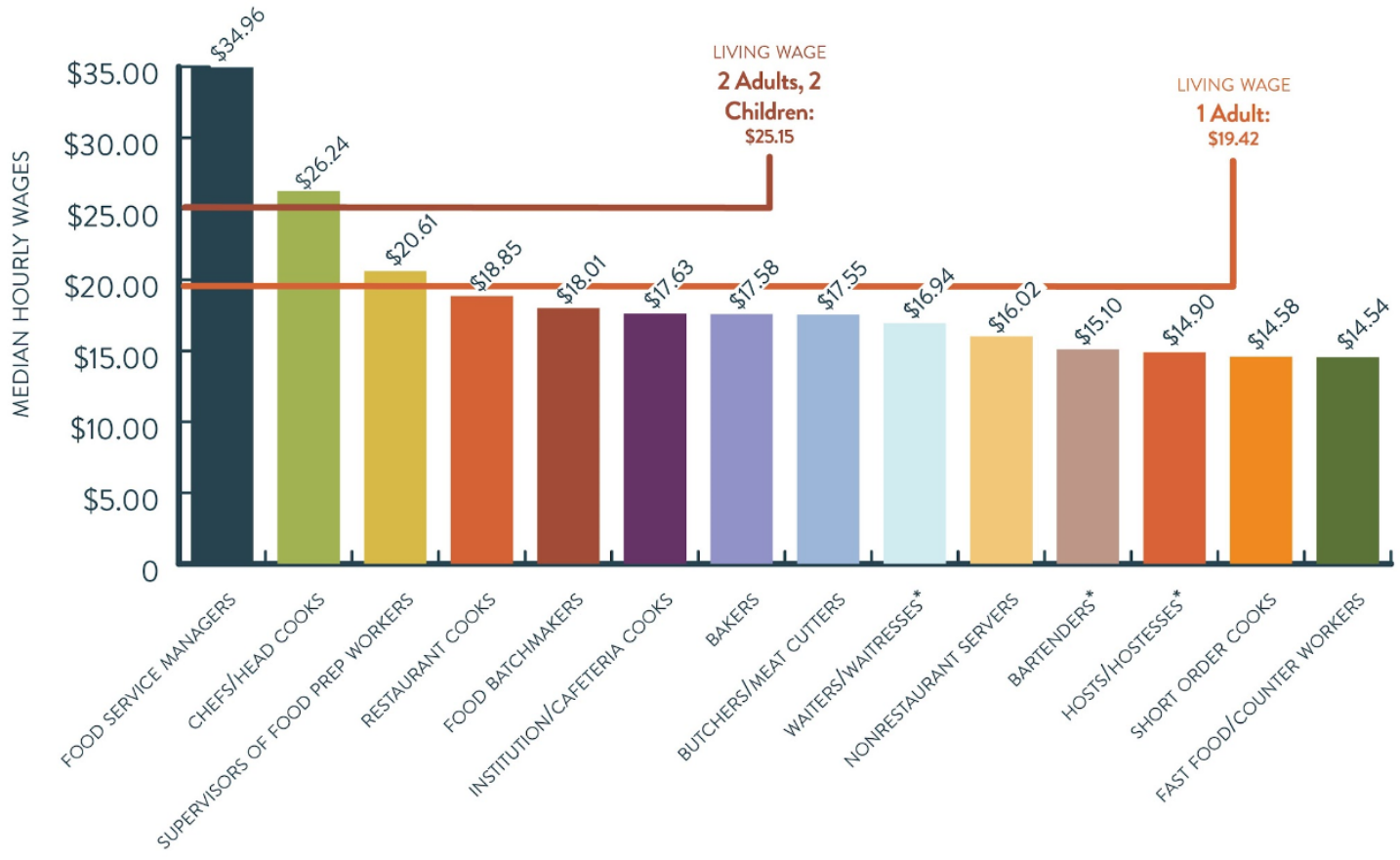
40%

However, other research found that as much as **40%** of Vermont's population experienced food insecurity from July 2021 to July 2022.

Source: National Food Access and COVID Research Team

Median Hourly Wages by Major Occupational Category

Median Hourly Wages by Selected Food System Occupations, 2022



Source: U.S. Bureau of Labor Statistics, Occupational Employment and Wage Statistics, Vermont Legislative Joint Fiscal Office, 2022 Vermont Basic Needs Budget and Livable Wage Report. Note: the average between rural and urban was used. * wage data includes tips.

Food Waste in Vermont

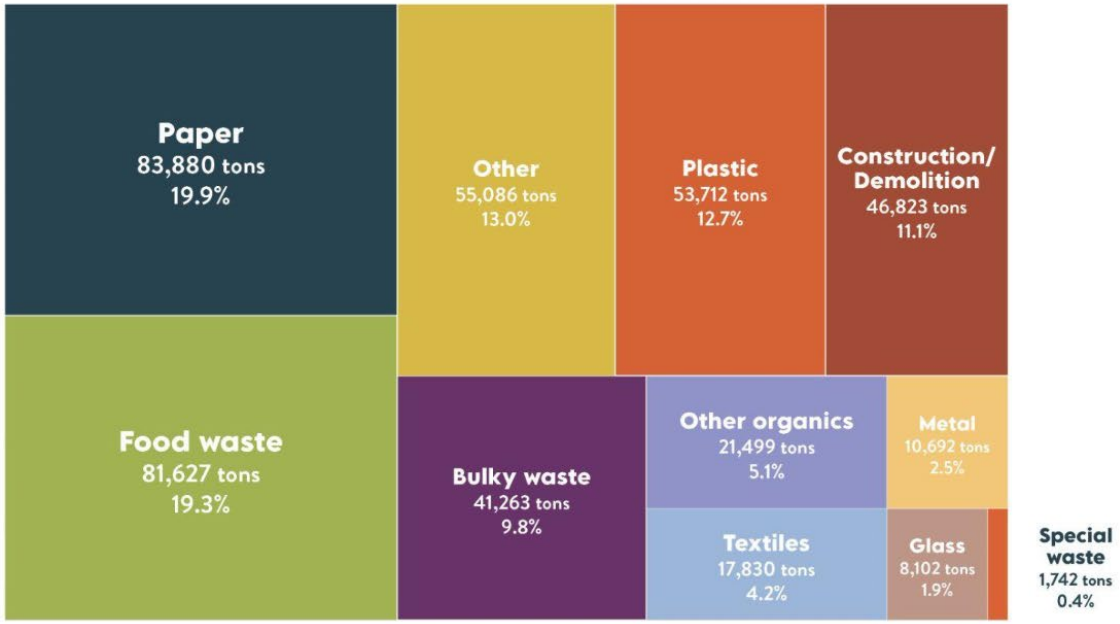
How much food waste is landfilled in Vermont?

A 2018 "Waste Characterization" study found that food waste (vegetative and protein) is the second most common material in Vermont's municipal waste stream at 82,000 tons, or 1.6 million pounds.

Landfilled Food Waste

422,258 TONS TOTAL MSW

81,627 TONS FOOD WASTE



Source: DSM Environmental Services, 2018, 2018 Vermont Waste Characterization

NEW ENGLAND FEEDING NEW ENGLAND

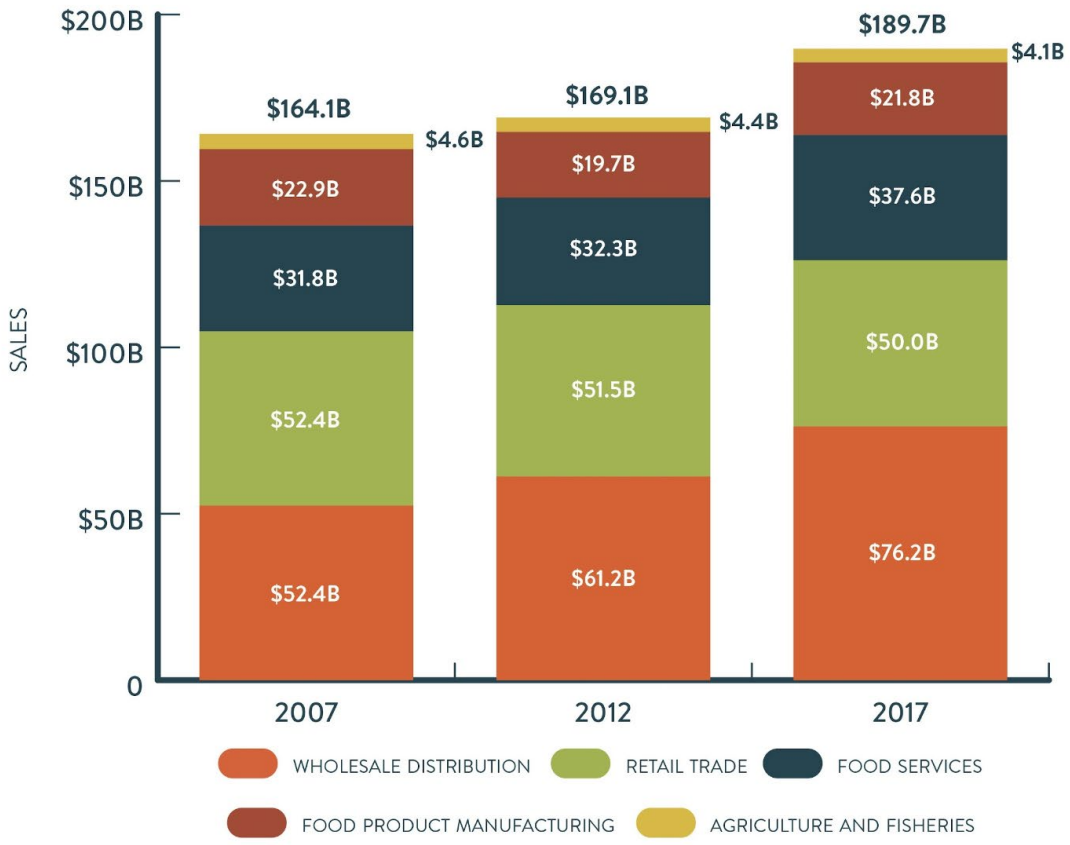
VOLUME 3

ECONOMIC IMPACT OF NEW ENGLAND'S FOOD SYSTEM

MAY 2023

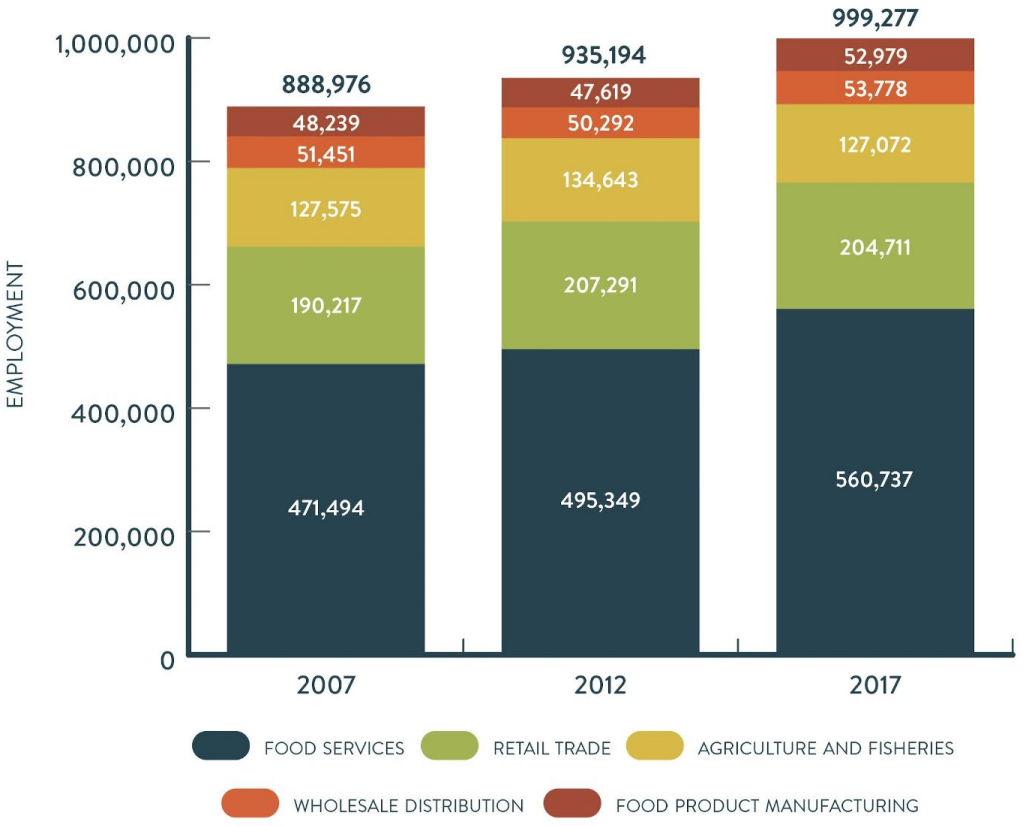
New England Sales by Sector

FIGURE 2: New England Sales by Sector, 2007, 2012, 2017



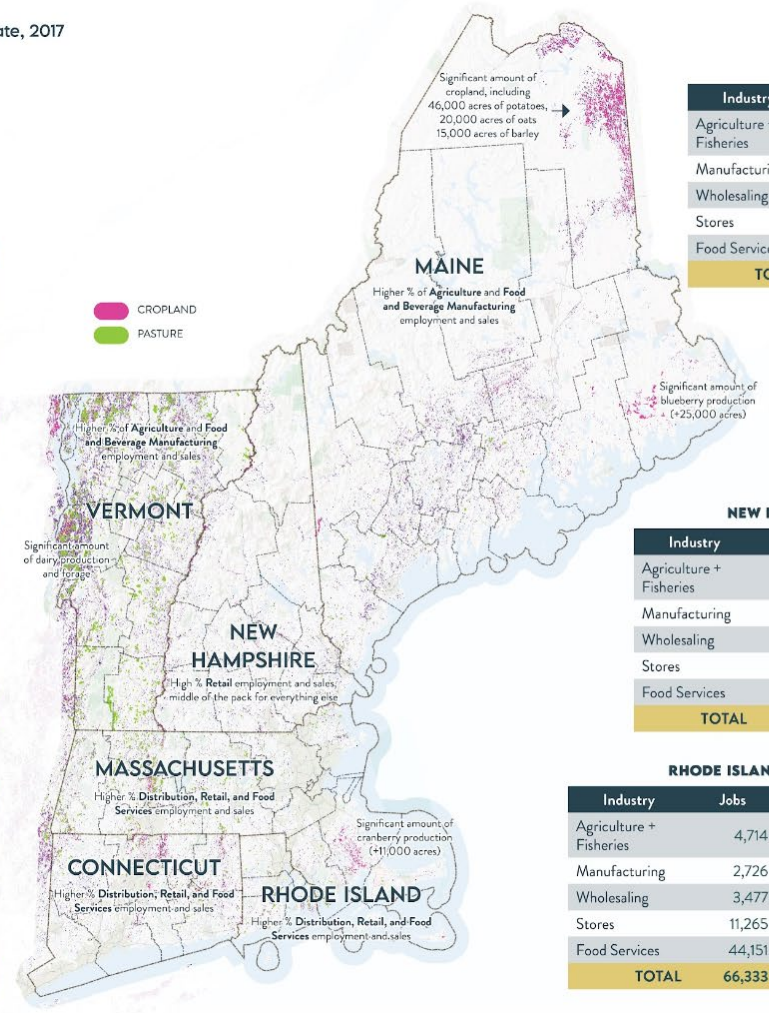
New England Employment by Sector

FIGURE 1: New England Employment by Sector, 2007, 2012, 2017



Employment & Sales by Type in New England

FIGURE 6: Employment and Sales by State, 2017



VERMONT

Industry	Jobs	Sales
Agriculture + Fisheries	21,700	$696 million
Manufacturing	5,682	$3.0 billion
Wholesaling	3,530	$7.1 billion
Stores	9,871	$2.2 billion
Food Services	20,555	$1.2 billion
TOTAL	**61,338**	**$14.2 billion**

MASSACHUSETTS

Industry	Jobs	Sales
Agriculture + Fisheries	30,421	$1.1 billion
Manufacturing	26,068	$10.4 billion
Wholesaling	23,967	$30.7 billion
Stores	98,789	$23.5 billion
Food Services	278,738	$19.5 billion
TOTAL	**457,983**	**$85.2 billion**

CONNECTICUT

Industry	Jobs	Sales
Agriculture + Fisheries	22,478	$530 million
Manufacturing	7,773	$3.3 billion
Wholesaling	14,071	$25.6 billion
Stores	44,728	$11.3 billion
Food Services	122,550	$8.2 billion
TOTAL	**211,600**	**$48.8 billion**

MAINE

Industry	Jobs	Sales
Agriculture + Fisheries	34,905	$1.3 billion
Manufacturing	6,862	$2.6 billion
Wholesaling	4,858	$4.2 billion
Stores	18,269	$4.4 billion
Food Services	44,641	$2.8 billion
TOTAL	**109,535**	**$15.3 billion**

NEW HAMPSHIRE

Industry	Jobs	Sales
Agriculture + Fisheries	12,854	$233 million
Manufacturing	3,868	$1.7 billion
Wholesaling	3,875	$3.5 billion
Stores	21,789	$5.5 billion
Food Services	50,102	$3.0 billion
TOTAL	**92,488**	**$14.1 billion**

RHODE ISLAND

Industry	Jobs	Sales
Agriculture + Fisheries	4,714	$190 million
Manufacturing	2,726	$729 million
Wholesaling	3,477	$5.1 billion
Stores	11,265	$3.1 billion
Food Services	44,151	$2.8 billion
TOTAL	**66,333**	**$11.9 billion**

Employment & Sales by Type in Vermont

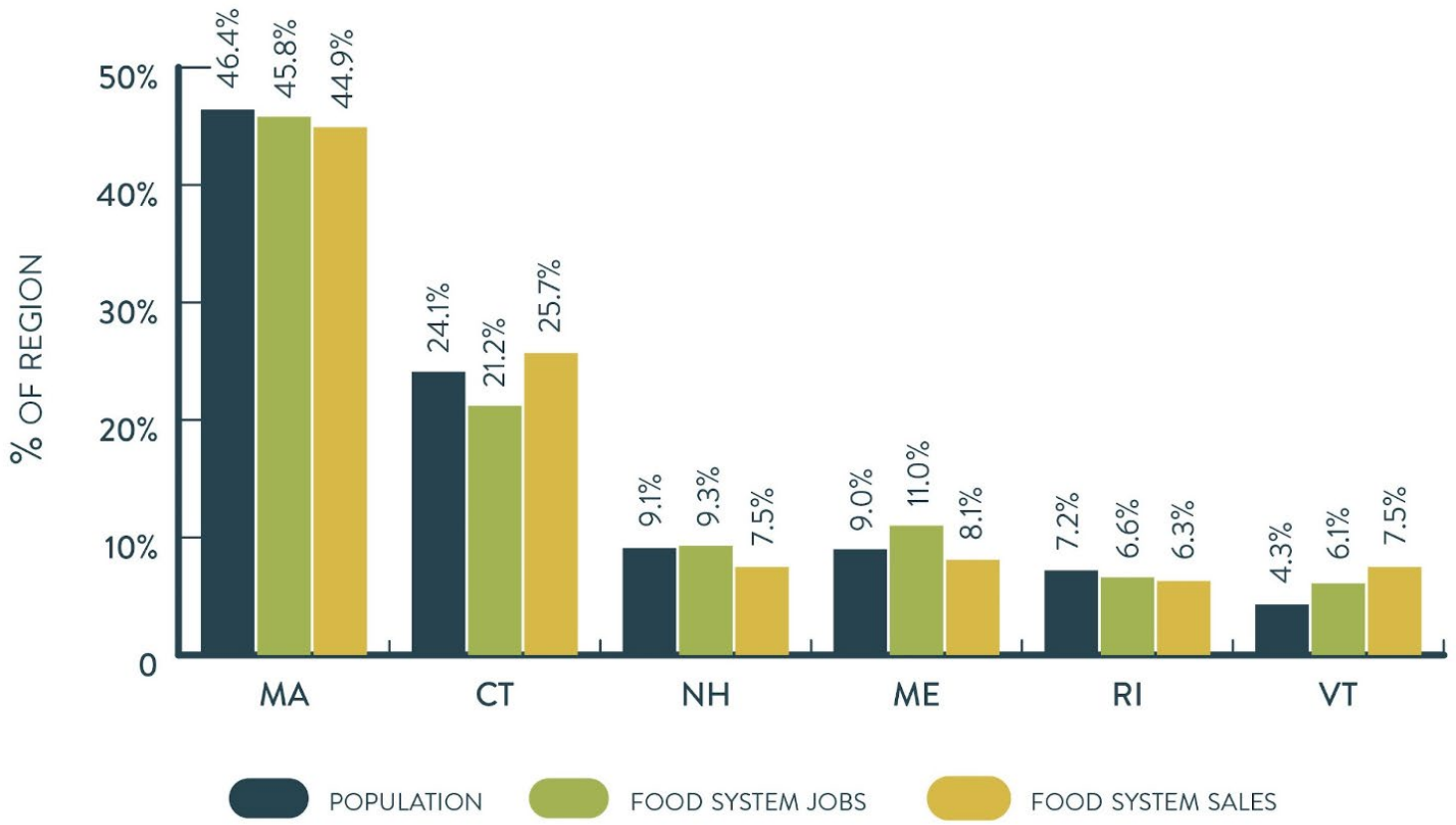
Economic Impact of Vermont's Food System, 2017

	2017 Employment	% of Total	Growth from 2007-2017	2017 Sales	% of Total	Growth from 2007-2017
Agriculture	21,700	35.4%	0.6%	$704,405,500	4.9%	1.5%
Fisheries	0	0.0%	0.0%	$0.00	0.0%	0.0%
Food Manufacturing	4,806	7.8%	2.3%	$2,788,294,100	19.6%	0.2%
Beverage Manufacturing	867	1.4%	11.8%	$240,740,000	1.7%	0.7%
Wholesaling + Distributing	3,530	5.7%	1.2%	$7,132,355,700	50.1%	11.7%
Stores	9,871	16.1%	0.4%	$2,178,873,100	15.3%	-0.7%
Food Services + Drinking Places	20,555	33.5%	0.4%	$1,206,743,600	8.5%	1.4%
TOTAL	**61,338**	**100.0%**	**0.7%**	**$14,251,411,900**	**100.0%**	**4.3%**

Source: Volume 3: Economic Impact of New England's Food System. **Note:** Agriculture sales in this table includes support activities. Sales values are adjusted for inflation to 2020 dollars. Agricultural sales are adjusted using producer price indices for crops and livestock.

Food System Sales and Jobs in New England

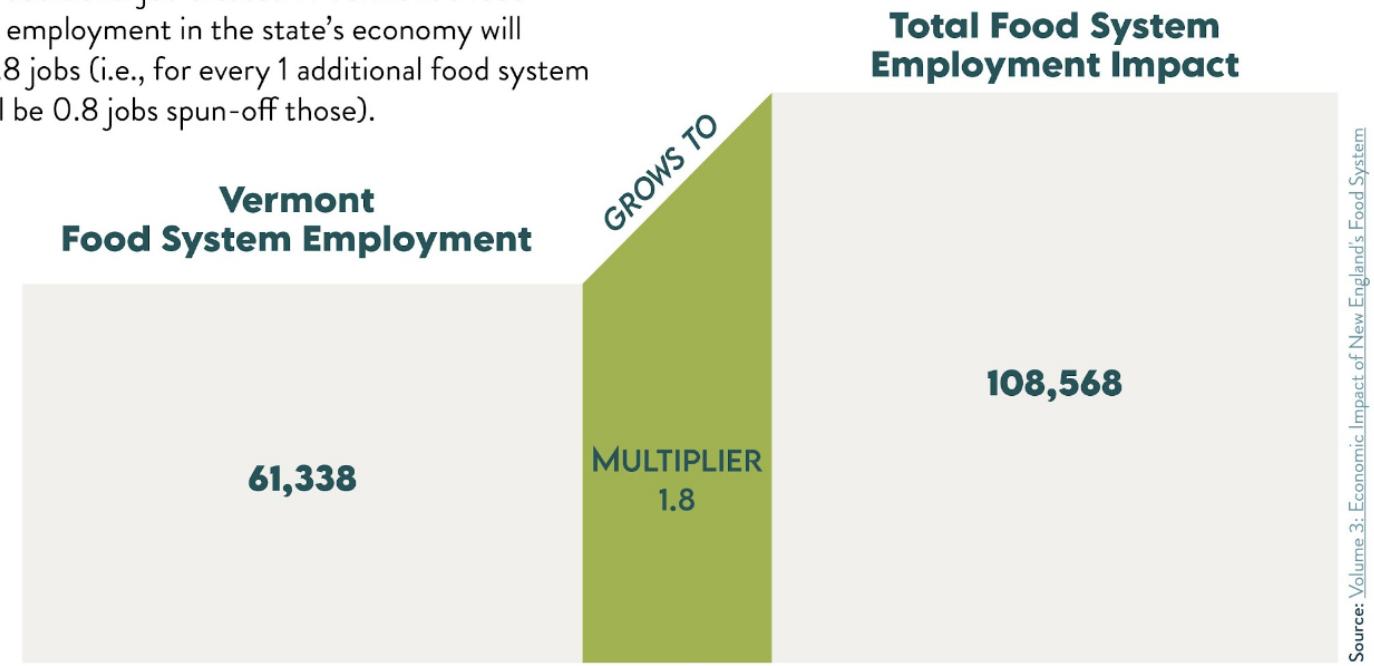
FIGURE 4: Share of New England Population, Food System Jobs, and Sales by State, 2017



Food System Employment Multiplier

Food System Employment Multiplier

The employment multiplier calculated in Volume 3 shows that for each additional job created in Vermont's food system, total employment in the state's economy will increase by 1.8 jobs (i.e., for every 1 additional food system job, there will be 0.8 jobs spun-off those).



The additional 0.8 job (in aggregate) is actually a set of fractional jobs spread over the entire economy, the result of linked activity in other food system and nonfood system sectors. These include jobs in transportation, utilities, finance, trade, and government.

NEW ENGLAND FEEDING NEW ENGLAND

VOLUME 1

ESTIMATING RESILIENT EATING PATTERNS

MAY 2023

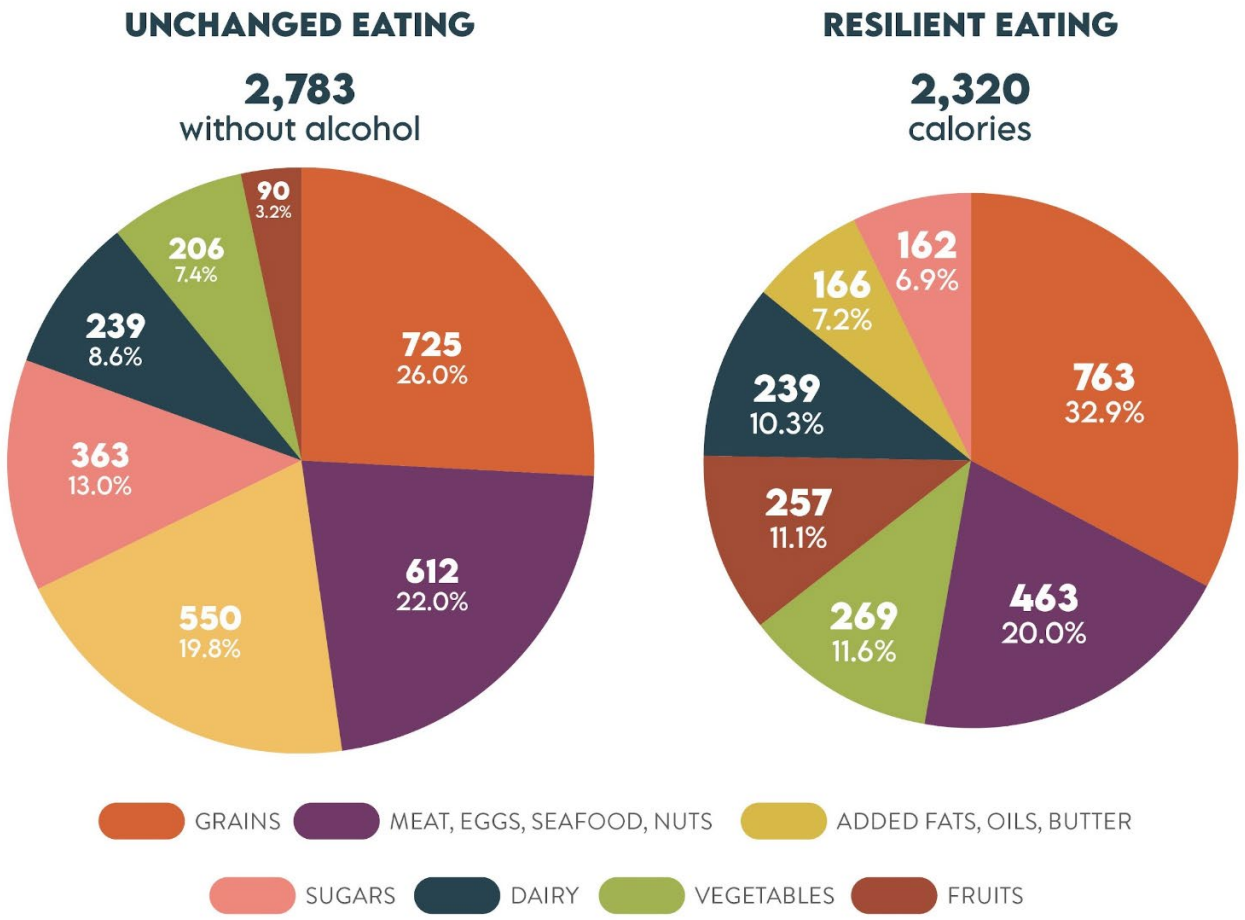
What is Resilient Eating?

Resilience refers to our collective ability to respond and recover from adverse conditions. External risks—hurricanes, droughts, earthquakes—have always posed a threat to societies, but the modern world is now threatened by manufactured risks—climate change, health epidemics, ecological degradation, nuclear catastrophe, the COVID-19 pandemic—that are the result of human actions.

Resilient eating is an important element in overall regional food system resilience. Resilience goes beyond increased regional self-reliance in production of healthy food by sustainable methods: **it must ensure food security for everyone**. Resilient eating is healthier eating plus improved access, greater food and nutrition security, support for local and regional food system businesses, and support for what local farms and fisheries can produce. Resilient eating reduces vulnerability for individuals and, in doing so, increases community food security and empowerment.

— Volume 1: pg. 8

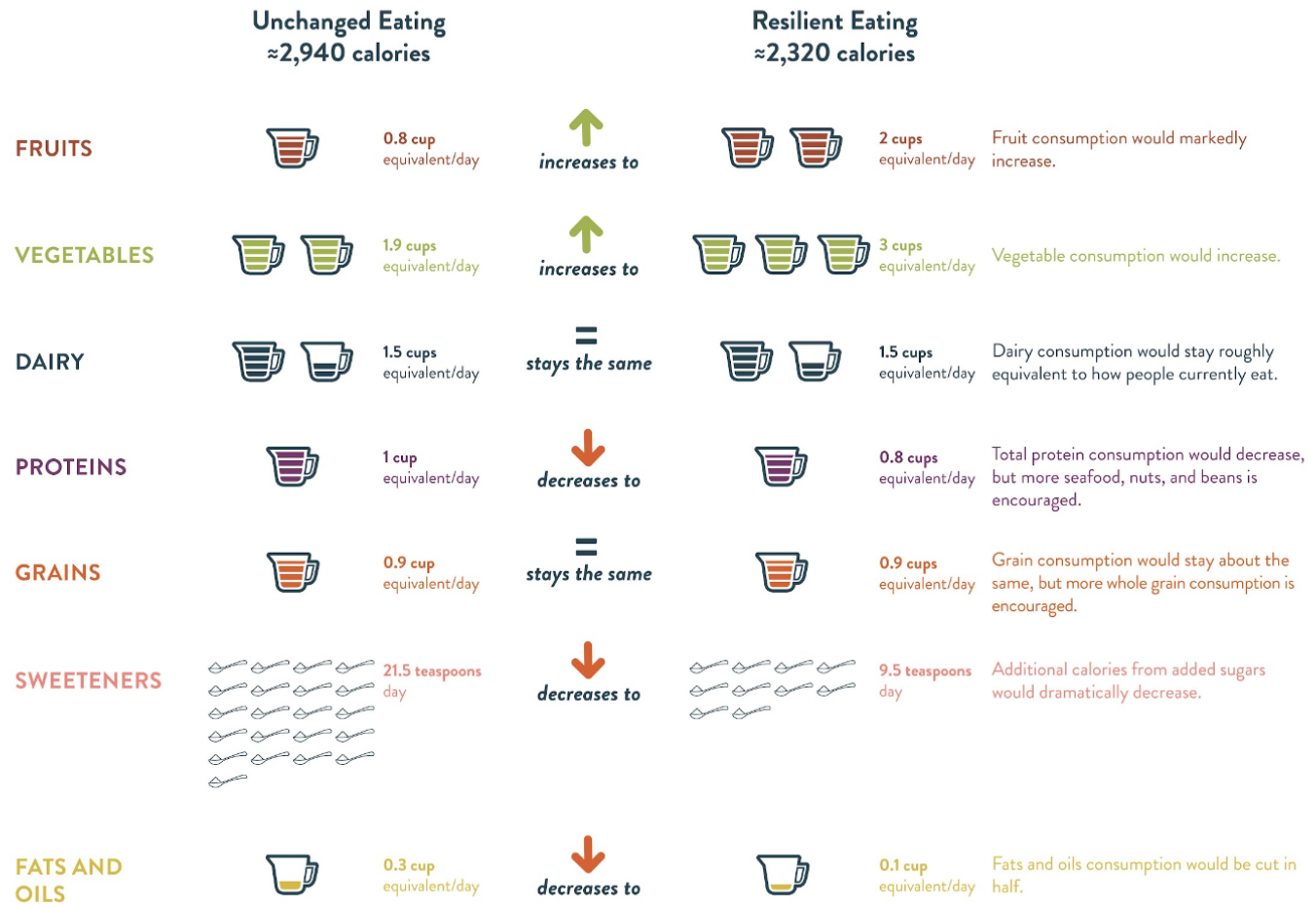
2 Scenarios: Unchanged Eating & Resilient Eating Dietary Patterns



Unchanged Eating Source: USDA Loss-Adjusted Food Availability Data System.

Estimates of Shifts in Servings Required to Move From Unchanged to Resilient Eating by 2030

FIGURE 3: Estimates of Shifts in Servings Required to Move From Unchanged Eating to Resilient Eating in 2030



NEW ENGLAND FEEDING NEW ENGLAND

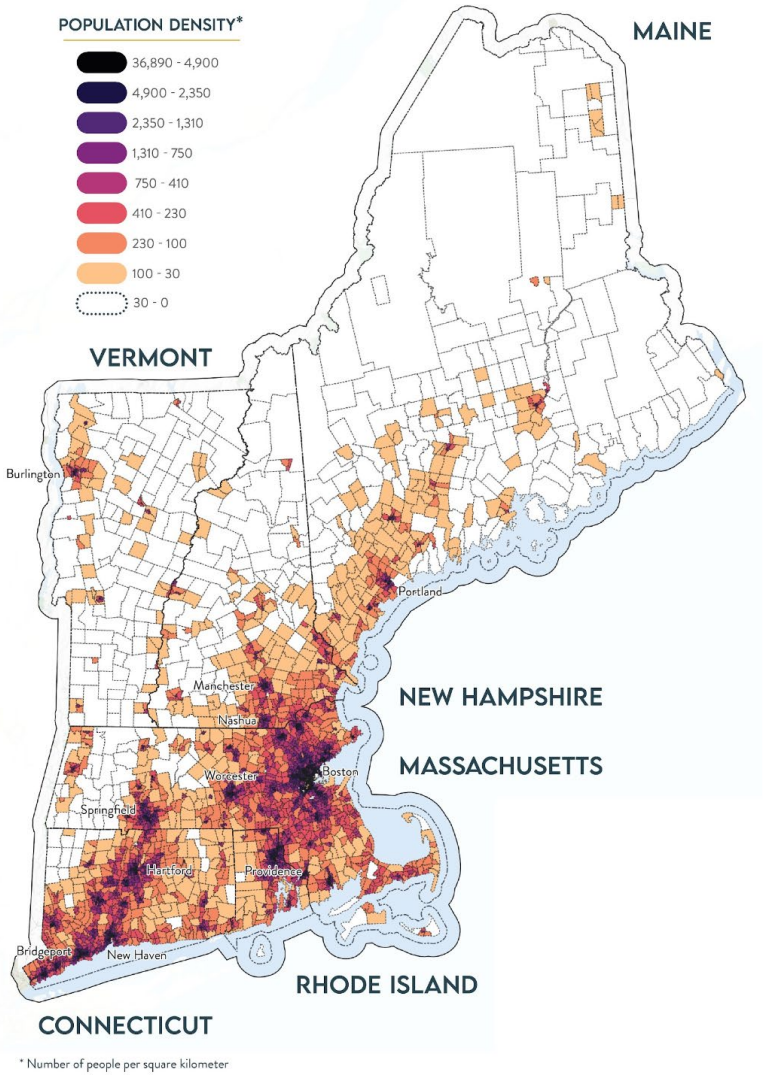
VOLUME 2

ESTIMATING PRODUCTION FOR 30% REGIONAL SELF-RELIANCE

MAY 2023

Population Density in New England

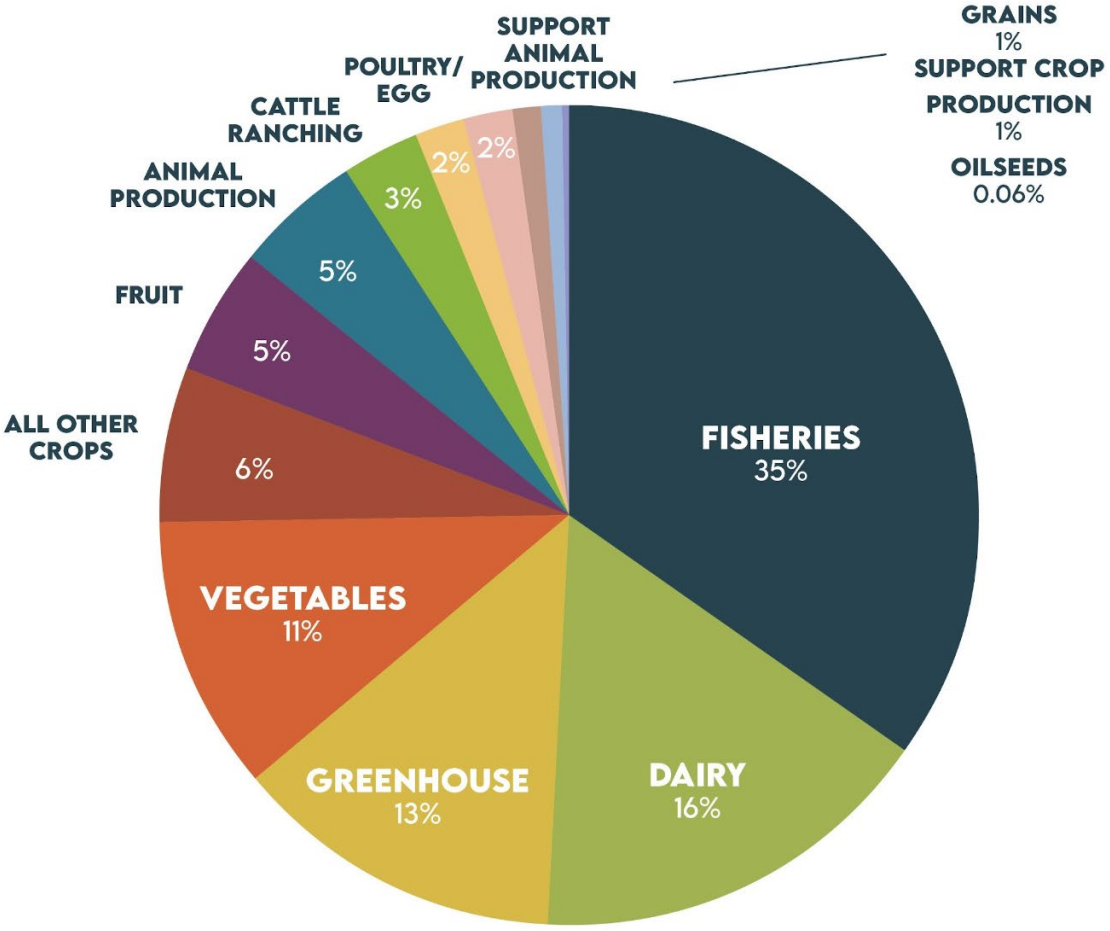
FIGURE 3: New England Population Density by Town/City



* Number of people per square kilometer

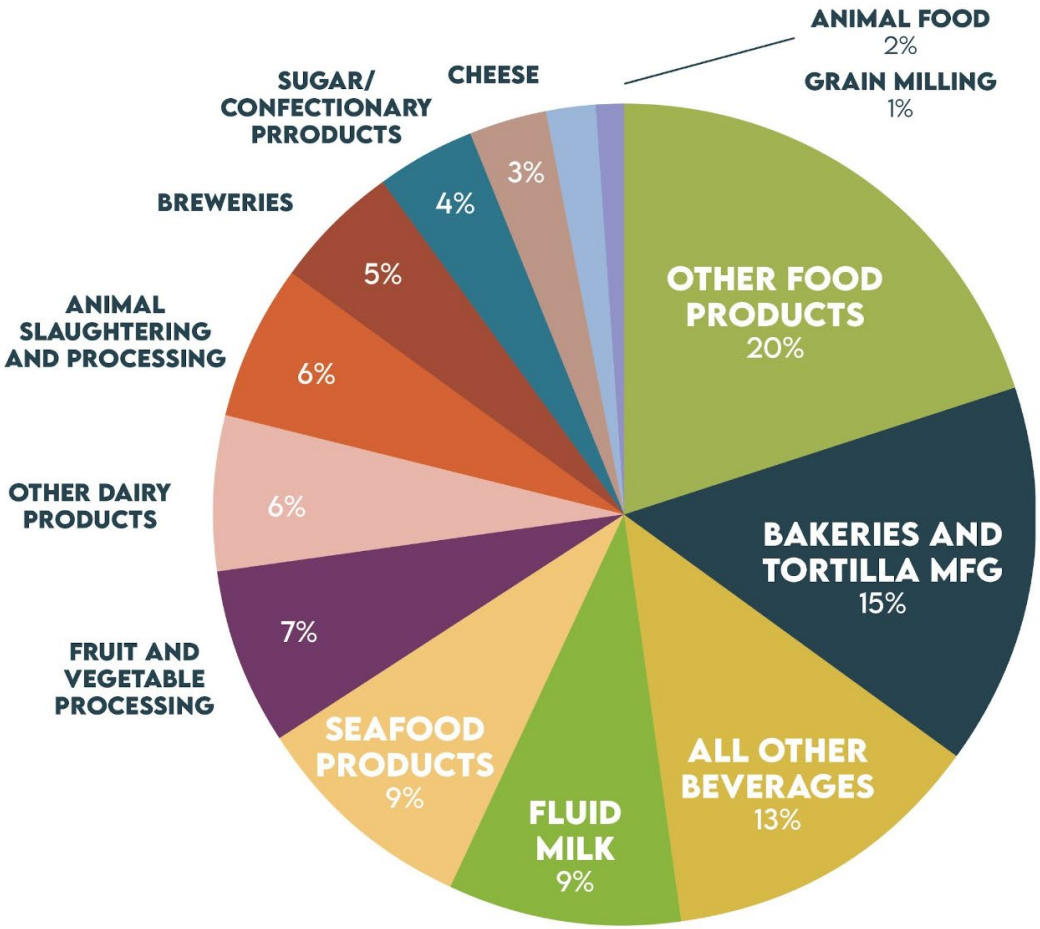
What is Produced in New England?

FIGURE 8: Composition of Agricultural and Fishery Sales, 2017



What is Produced in New England?

FIGURE 13: Composition of Food and Beverage Product Manufacturing Sales, 2017



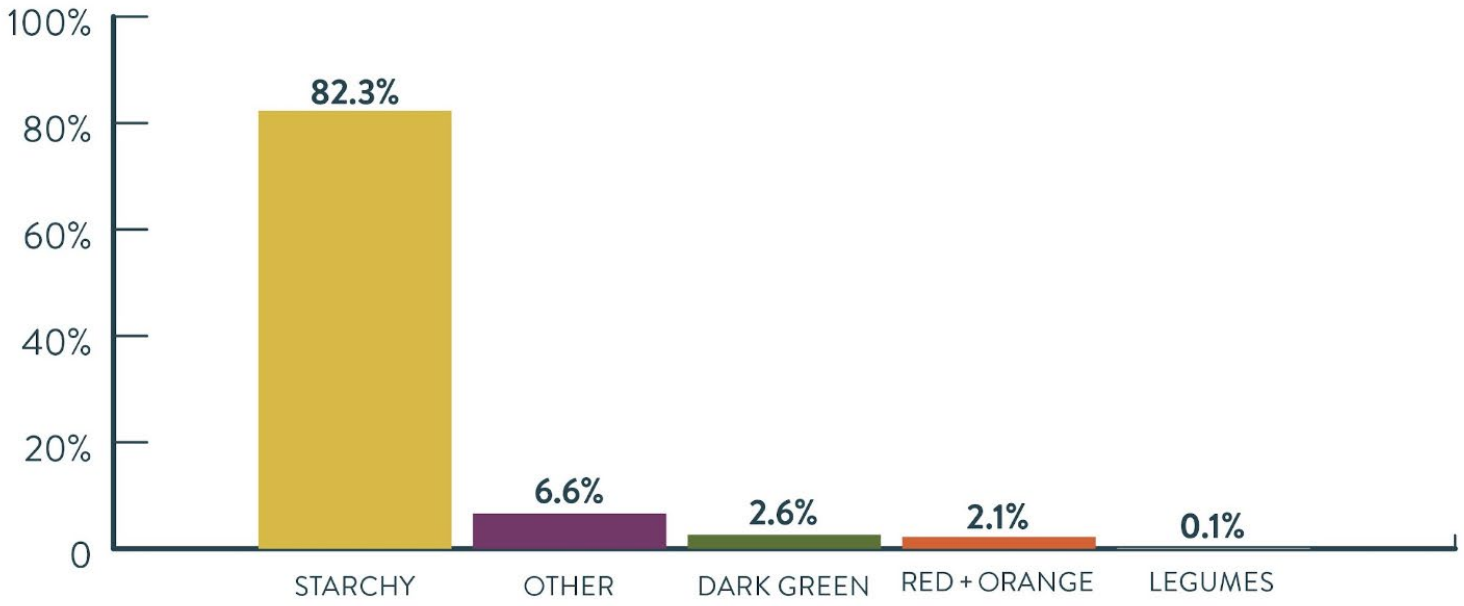
Regional Self Reliance by Food Group in New England

TABLE 2: New England Production, Consumption, and Regional Self-Reliance (RSR) by Food Group (Pounds), 2010-2019

Food Group	Mean Production	Mean Consumption	Mean RSR
Dairy	4,149,600,000	9,302,000,000	44.6%
Vegetables	1,821,300,000	5,746,800,000	31.7%
Fruits	237,800,000	3,705,200,000	6.4%
Proteins	257,800,000	6,336,600,000	4.1%
Grains	64,700,000	3,585,400,000	1.8%
Fats and Oils	15,000,000	1,184,000,000	1.3%
Sweeteners	20,700,000	1,900,700,000	1.1%
TOTAL	**6,566,800,000**	**31,760,800,000**	**20.7%**

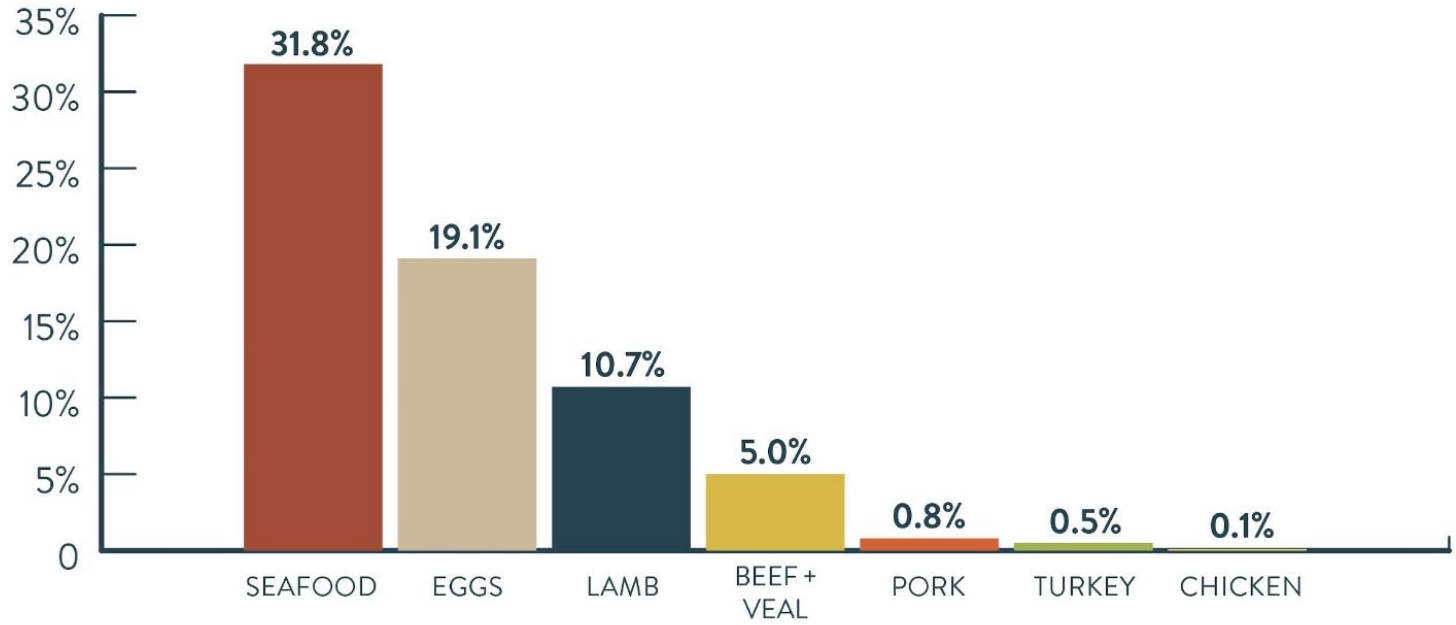
New England RSR by Percentage of Vegetable Sub-groups

FIGURE 1: New England Regional Self-Reliance Percentage for Vegetable Subgroups



New England RSR by Percentage of Protein Sub-groups

FIGURE 2: New England Regional Self-Reliance Percentage for Protein Subgroups



NOTE: NUTS AND SEEDS = 0.0%

RSR by Scenario, Servings, and Calories - 2020 (reference diet)

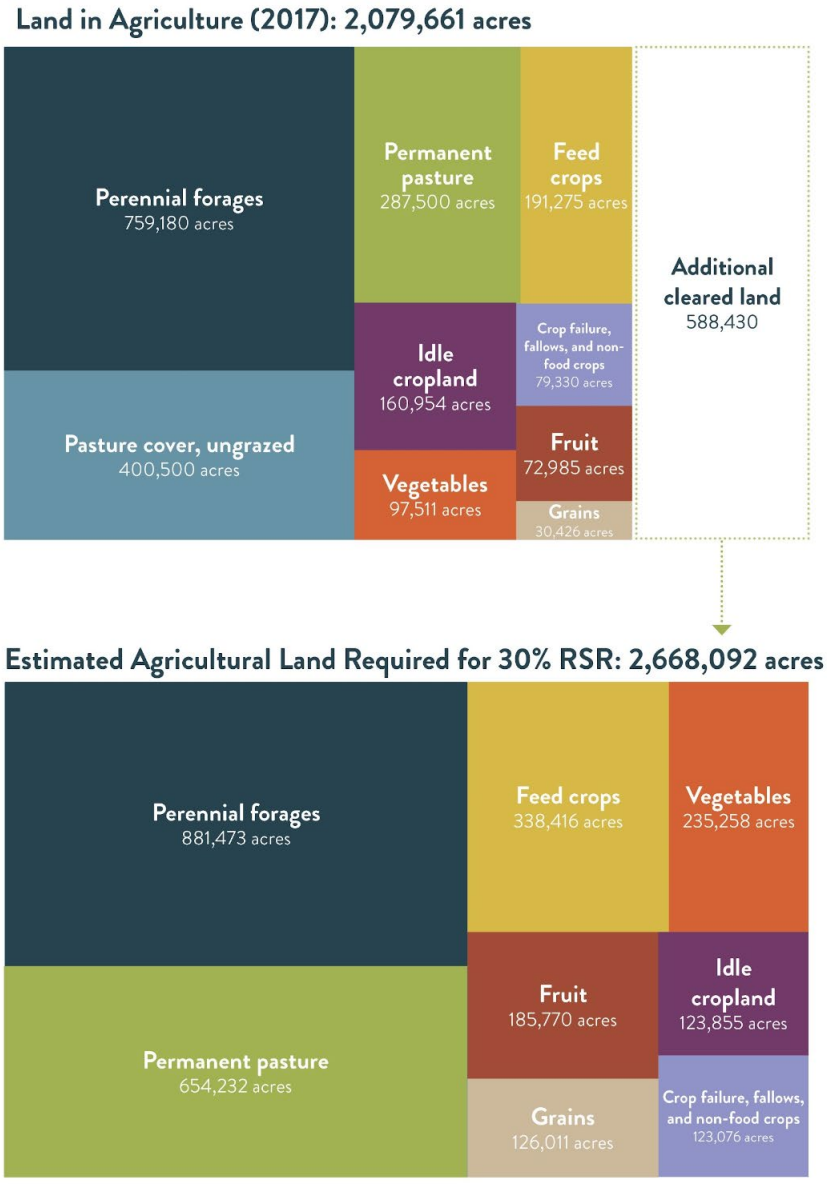
New England Regional Self-Reliance for Major Food Groups

	GRAINS	VEGETABLES	FRUITS	DAIRY	PROTEINS
Servings	1.6%	28.3%	8.7%	50.0%	3.2%
Calories	1.7%	41.0%	6.9%	47.4%	2.6%

Source: Volume 2: Estimating Production for 30% Regional Self-Reliance. *Note: vegetables consists of a significant amount of calorie-dense potatoes grown in Maine; dairy includes a significant amount of production in Vermont.*

Additional Land Needed in Agricultural Production to Achieve 30% RSR

To achieve 30% regional production available for consumption (in servings), **400,000** in existing underutilized cropland and **590,000** in new cropland would need to be brought into production.



What Does 2030 Resilient Eating Mean for New England Farms Production?

TABLE 3: Projected 2030 Farm Production and Employment Change

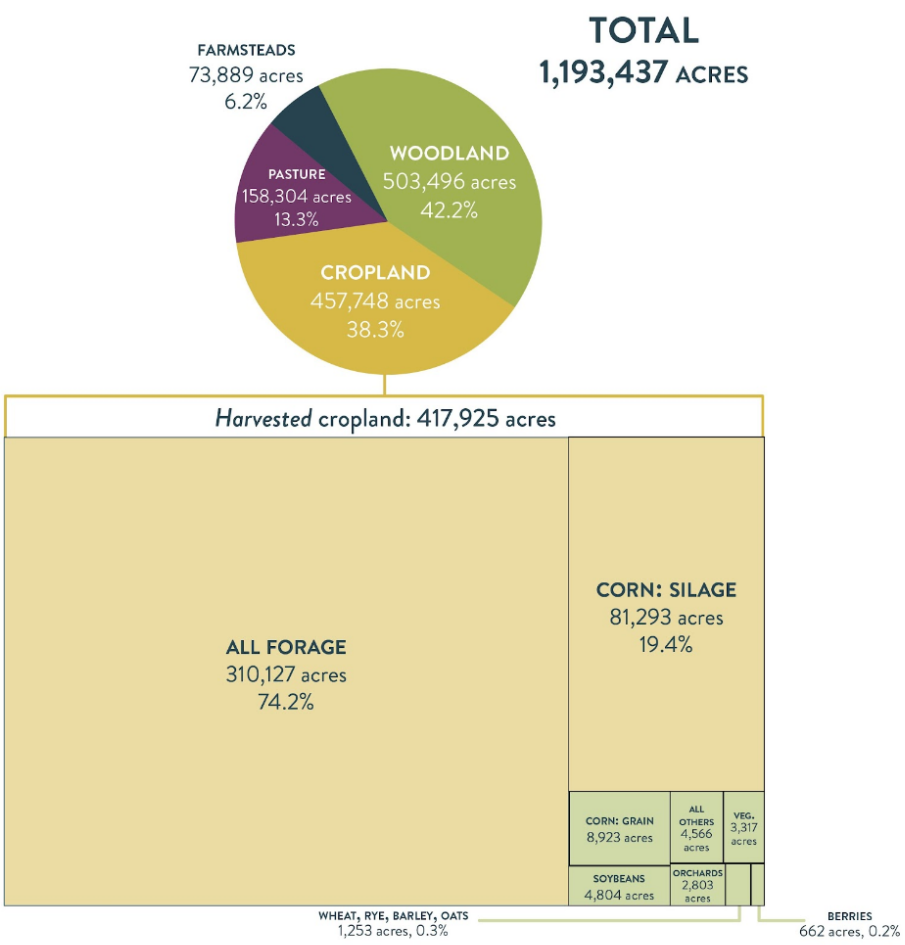
Sector	2017 Farm Production Sales*	2030 Projected Farm Production Sales		2030 Projected Change in Farm Sales		2030 Projected Change in Employment (Jobs)**	
		Unchanged Eating	Resilient Eating	Unchanged Eating	Resilient Eating	Unchanged Eating	Resilient Eating
Grain and Oilseed Farming	$56,195,000	$255,046,000	$265,036,000	454%	472%	607	631
Vegetable and Melon Farming	$468,142,000	$820,789,000	$1,131,506,000	175%	242%	348	480
Fruit Farming	$213,049,000	$316,914,000	$542,276,000	149%	255%	415	710
All Other Crop Farming	$232,768,000	$277,709,000	$290,948,000	119%	125%	964	1,010
Cattle Ranching	$110,329,000	$593,300,000	$649,170,000	538%	588%	1,007	1,102
Dairy Cattle and Milk Production	$652,362,000	$676,882,000	$682,224,000	104%	105%	83	84
All Other Animal Production	$199,019,000	$607,977,000	$864,806,000	305%	435%	677	962
Poultry and Egg Production	$71,975,000	$358,467,000	$519,524,000	498%	722%	278	403
Support for Crop Production	$50,693,000	$87,286,000	$200,615,000	172%	396%	685	1,574
Support for Animal Production	$68,345,000	$147,881,000	$388,516,000	216%	568%	861	2,262
TOTAL	**$2,122,876,000**	**$4,142,252,000**	**$5,534,621,000**	**195%**	**261%**	**5,924**	**9,217**

* Table A1, page 57.

** Table 7, page 22.

Vermont State Brief: Land in Agriculture

Land in Agriculture



#1 Vermont had the highest agricultural sales of any New England state, largely due to milk production.

47% In 2021, Vermont produced almost half of the country's maple syrup (1.75 million gallons)

-64% Cropland decreased from 1.3 million acres in 1945 to 458,000 acres in 2017

-85% Pastureland decreased from 1.0 million acres in 1945 to 158,000 acres in 2017

END USES

- ANIMAL FEED
- EDIBLE

Acreage for animal feed equaled **93.6% (391,420 acres)** of harvested cropland and 32.8% of total land in agriculture. Boosting vegetable, fruit, and grain production—whether in the open or indoors—is one way Vermont could help the region.

Projected Changes in Land in Agriculture by 2040: Business as Usual Scenario

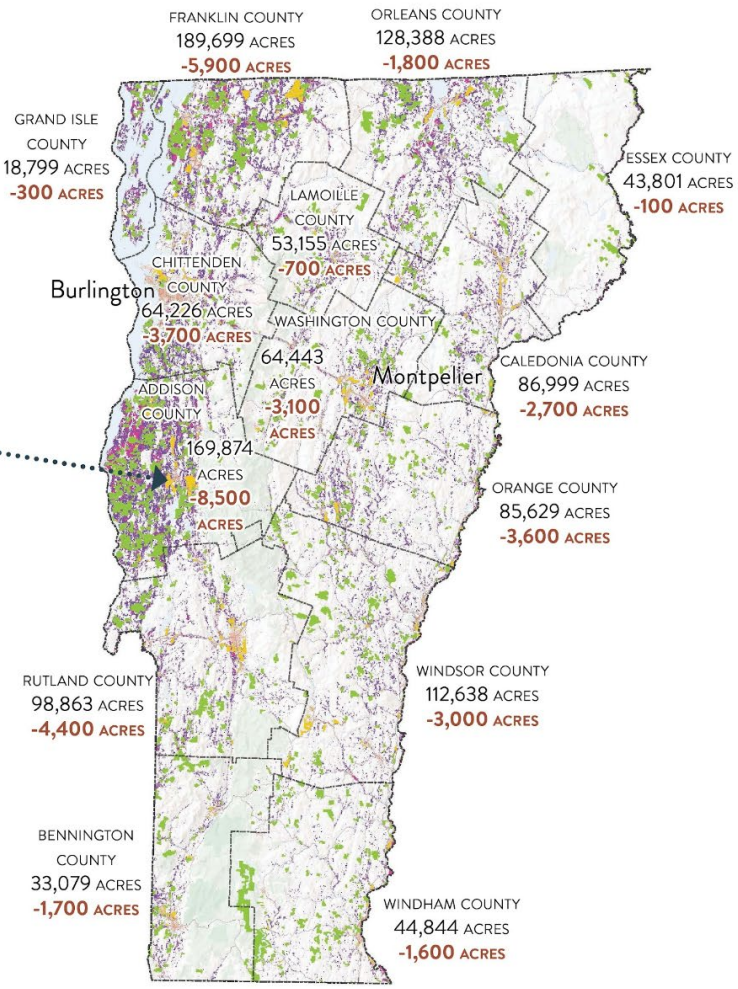
Projected Changes in Land in Agriculture, Business as Usual Scenario

TOTAL

1,193,437 ACRES EXISTING ACREAGE
-41,200 ACRES BUSINESS AS USUAL SCENARIO

LAND USES

- CULTIVATED CROPS
- PASTURE/HAY
- EASEMENT
- DEVELOPED LAND
- PROJECTED URBAN AND HIGHLY DEVELOPED AND LOW-DENSITY RESIDENTIAL



An analysis from the American Farmland Trust (AFT) estimates that Vermont could lose an additional **41,200 acres** by 2040 under a "Business as Usual" development scenario and **61,800 acres** under a "Runaway Sprawl" scenario.

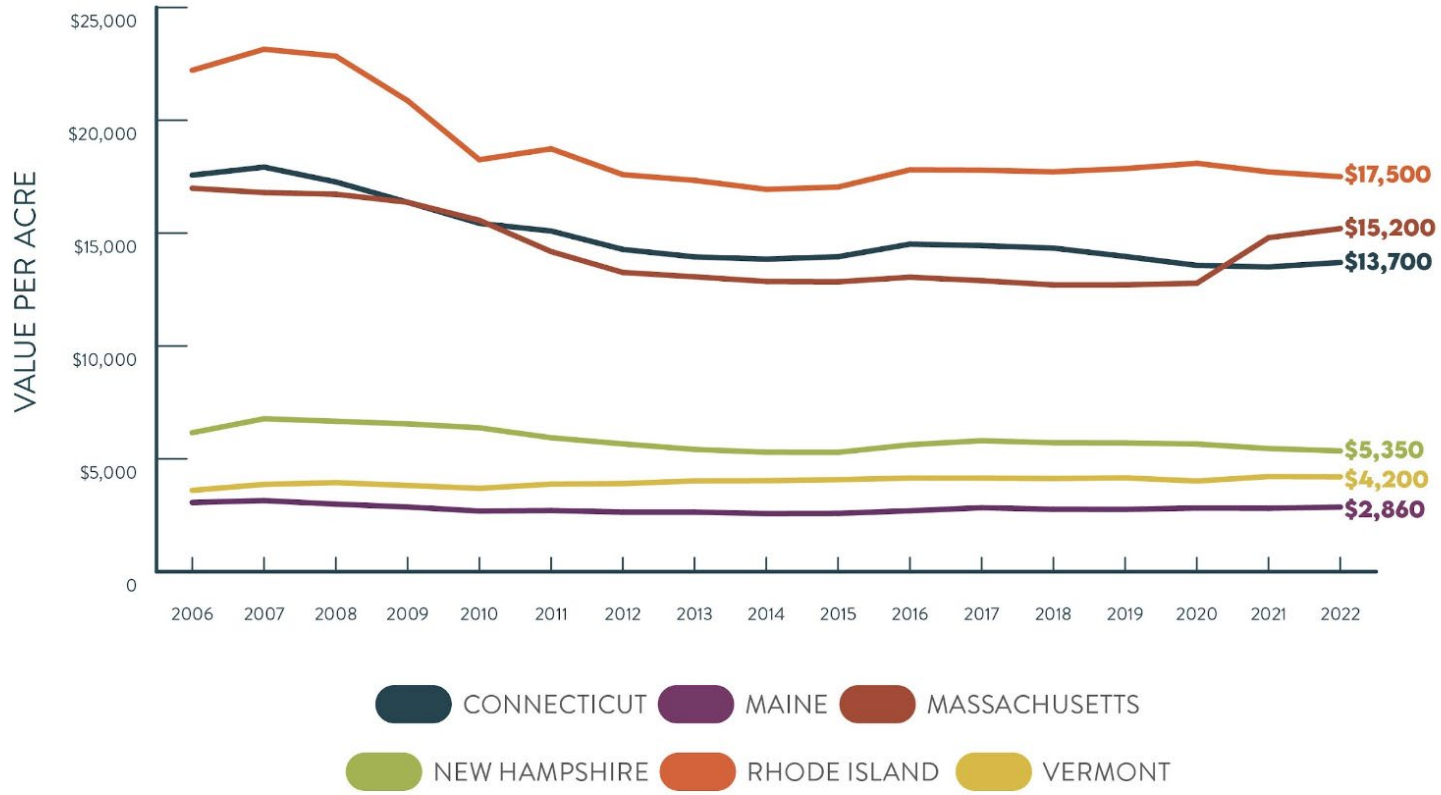
AFT projects that **Addison, Franklin,** and **Rutland** counties will experience the biggest decreases in land in agriculture.

Source: American Farmland Trust, Farms Under Threat 2040: Choosing an Abundant Future

20.5% Vermont has the highest percentage of agricultural land as a percentage of total land area, 20.5%, of any state in New England, but only a small percentage of agricultural land is used for crops to directly feed people.

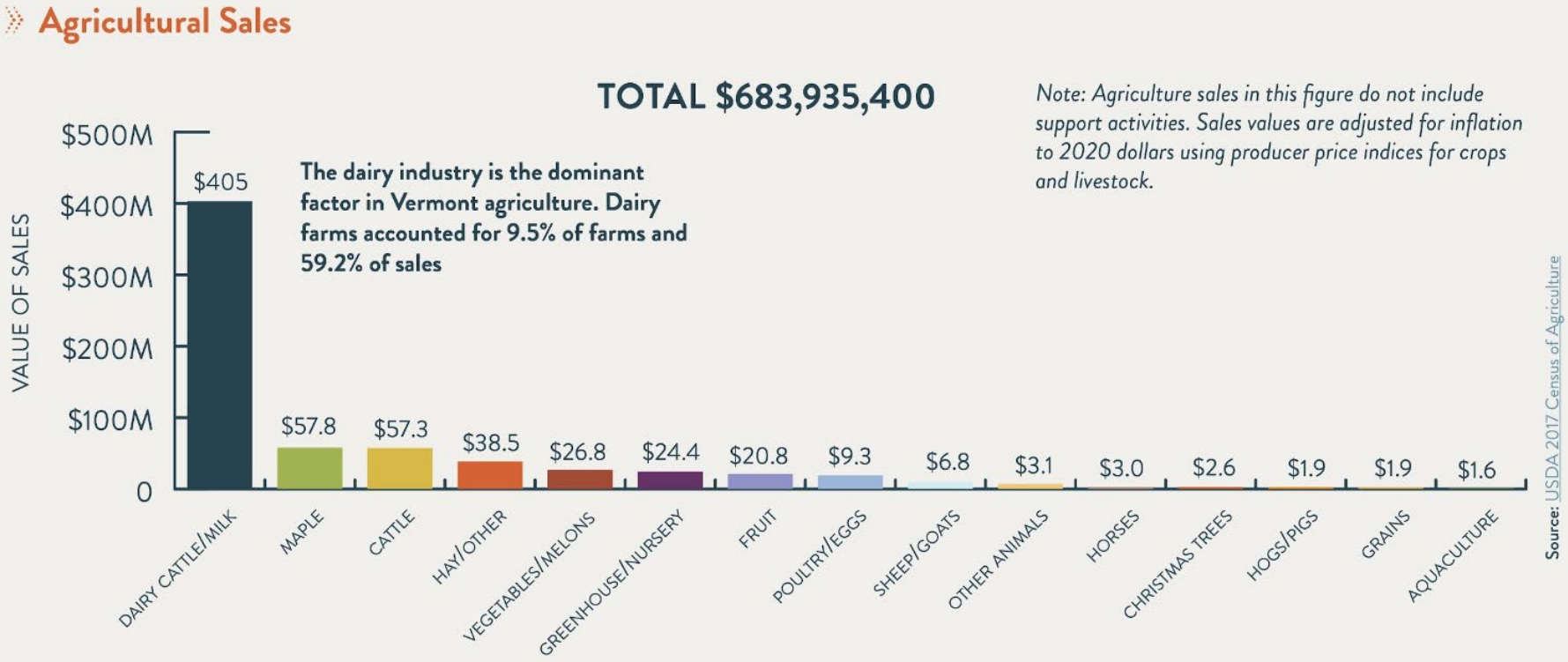
New England Farm Land Values

FIGURE 9: New England Farm Land Values

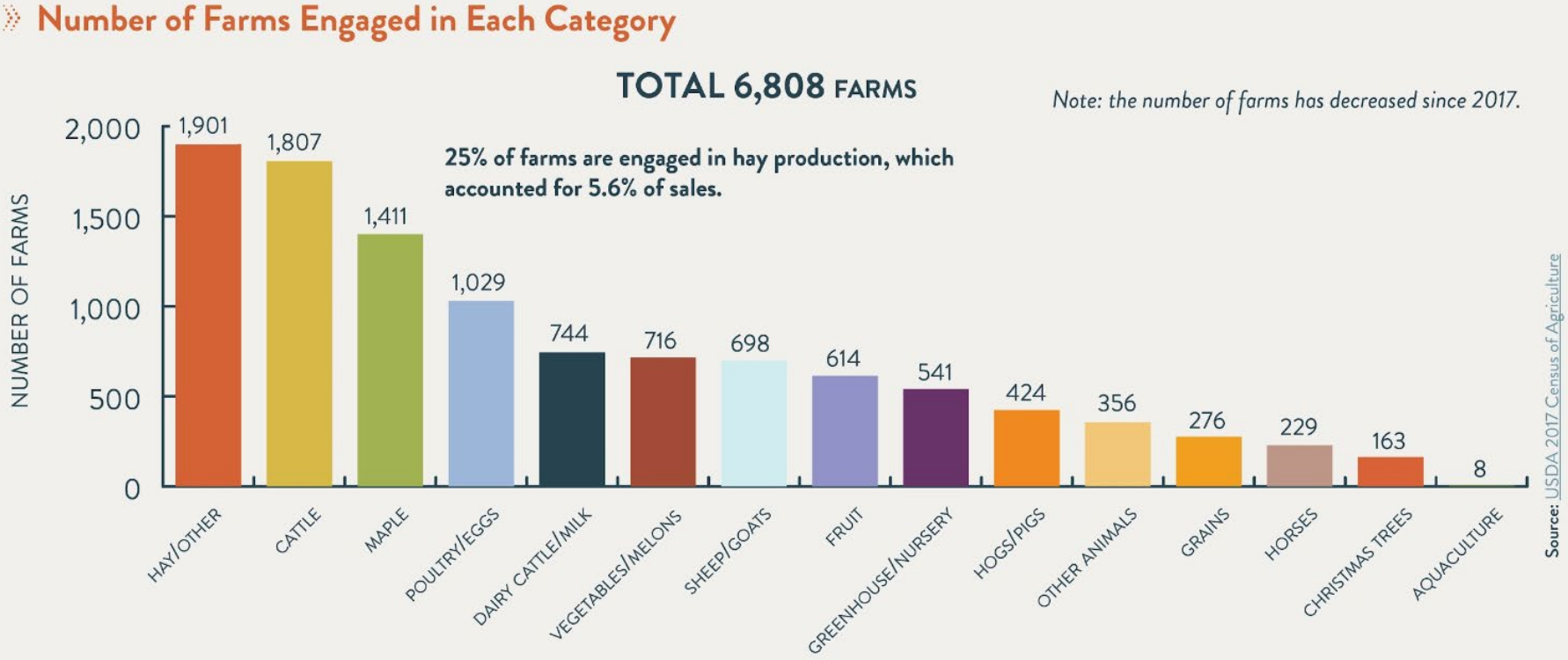


Source: USDA National Agricultural Statistics Service, August 2022, Land Values 2022 Summary, https://www.nass.usda.gov/Publications/Todays_Reports/reports/land0822.pdf. Reported in 2022 dollars.

Agricultural Sales in Vermont (2017)

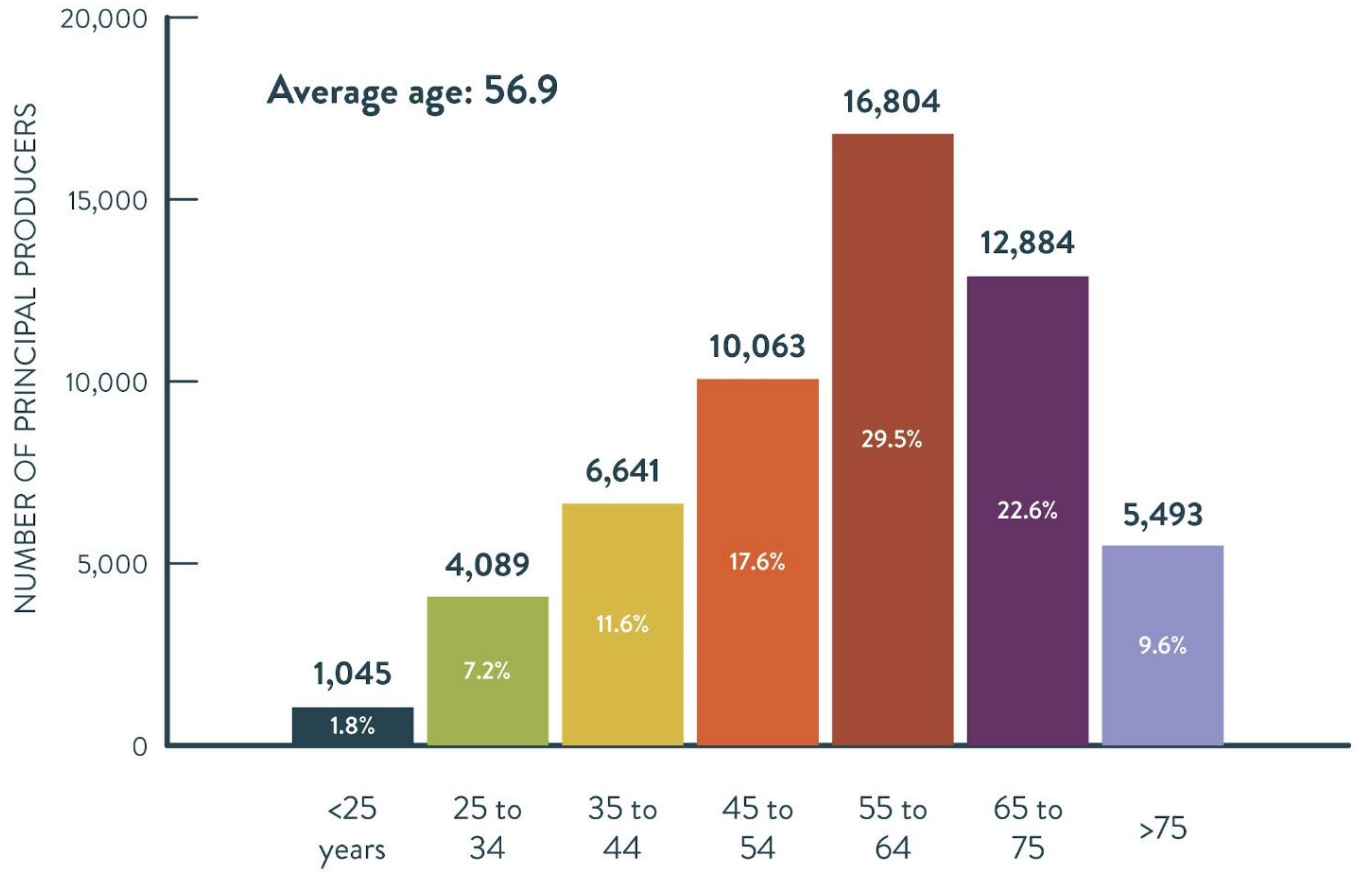


Numbers of Farms by Category (2017)



New England Farmer Age Demographics

FIGURE 10: New England Farmer Age Demographics, 2017



NEW ENGLAND FEEDING NEW ENGLAND

VOLUME 4

UNDERSTANDING MARKET CHANNELS AND FOOD EXPENDITURES

MAY 2023

Percent Distribution of Total Annual Expenditures by Major Category of Consumer Spending

TABLE 7: Percent Distribution of Total Annual Expenditures by Major Category for All Consumer Units, 2018-2021

Category	2018	2019	2020	2021
Average annual expenditures	100%	100%	100%	100%
Housing	32.8%	32.8%	34.9%	33.8%
Transportation	15.9%	17.0%	16.0%	16.4%
Food	**12.9%**	**13.0%**	**11.9%**	**12.4%**
Personal Insurance and Pensions	11.9%	11.4%	11.8%	11.8%
Healthcare	8.1%	8.2%	8.4%	8.1%
Entertainment	5.3%	4.9%	4.7%	5.3%
Cash Contributions	3.1%	3.2%	3.7%	3.6%
Apparel and Services	3.0%	3.0%	2.3%	2.6%
Education	2.3%	2.3%	2.1%	1.8%
Miscellaneous	1.6%	1.4%	1.5%	1.5%
Personal Care Products and Services	1.3%	1.2%	1.1%	1.2%
Alcoholic Beverages	**1.0%**	**0.9%**	**0.8%**	**0.8%**
Tobacco Products and Supplies	0.6%	0.5%	0.5%	0.5%
Reading	0.2%	0.1%	0.2%	0.2%

Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Surveys, multiple years, https://www.bls.gov/cex/tables.htm.

Consumer Expenditures by Race & Hispanic Ethnicity

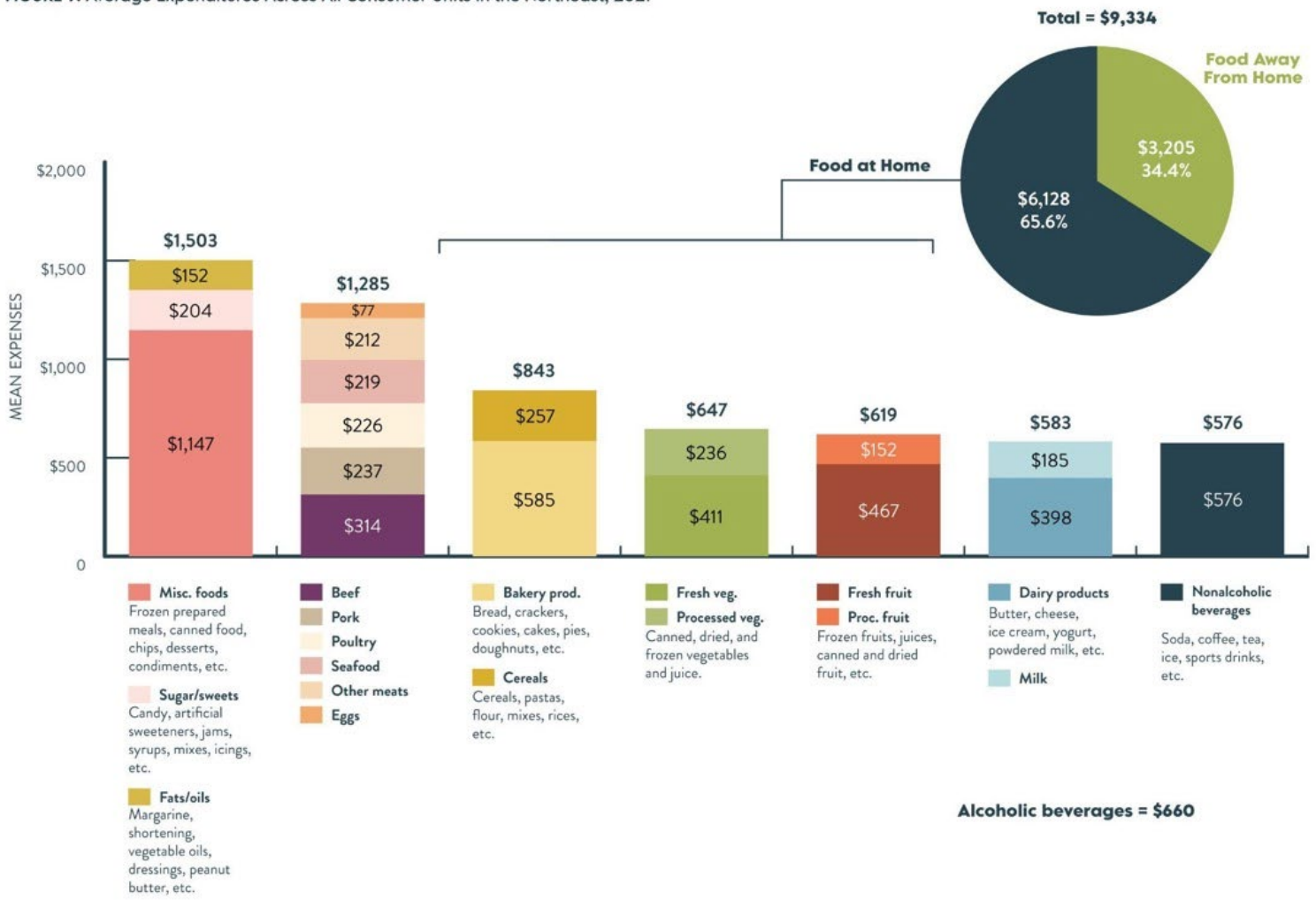
TABLE 8: Food Expenditures by Race and Hispanic Ethnicity, 2021

Category	White	Asian	Hispanic	Black
Average annual expenditures	$71,641	$78,726	$57,955	$51,013
Housing	$23,617	$28,378	$20,832	$19,142
Transportation	$11,191	$10,494	$11,505	$9,072
Food	**$8,716**	**$10,527**	**$8,158**	**$6,124**
Food at Home	$5,485	$,6,918	$5,272	$4,026
Cereals/Bakery	$702	$871	$654	$531
Meat/Fish/Eggs	$1,097	$1,588	$1,285	$1,030
Dairy Products	$533	$544	$461	$304
Fruits and Vegetables	$1,061	$1,650	$1,104	$805
Sugar/Sweets	$200	$171	$154	$116
Fats/Oils	$137	$174	$130	$110
Misc. Foods	$1,140	$1,328	$914	$699
Nonalcoholic Beverages	$538	$518	$511	$396
Food Away From Home	$3,232	$3,609	$2,886	$2,098
Alcoholic Beverages	$643	$373	$421	$215

Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Surveys, multiple years, https://www.bls.gov/cex/tables.htm.

Average Expenditures Across All Consumers in Northeast

FIGURE 9: Average Expenditures Across All Consumer Units in the Northeast, 2021



Source: Consumer Expenditure Survey, Annual Expenditure Means by Region of Residence.

Estimating 30% Regional Food Expenditures

*On a **per capita basis**, the average New Englander would currently have to spend between $1,152 and $1,760 on regional food and beverage products per year to reach 30%. By 2030, that amount would increase to $1,890.*

	LOW ESTIMATE		HIGH ESTIMATE		2030 ESTIMATE
30% PER CAPITA	$1,152	——	$1,760	→	$1,890

*Given the relative size of its population, **Massachusetts** would have to do the heavy lifting for the region, spending between $7.6 billion and $12.1 billion to reach 30% currently, and $13.2 billion by 2030.*

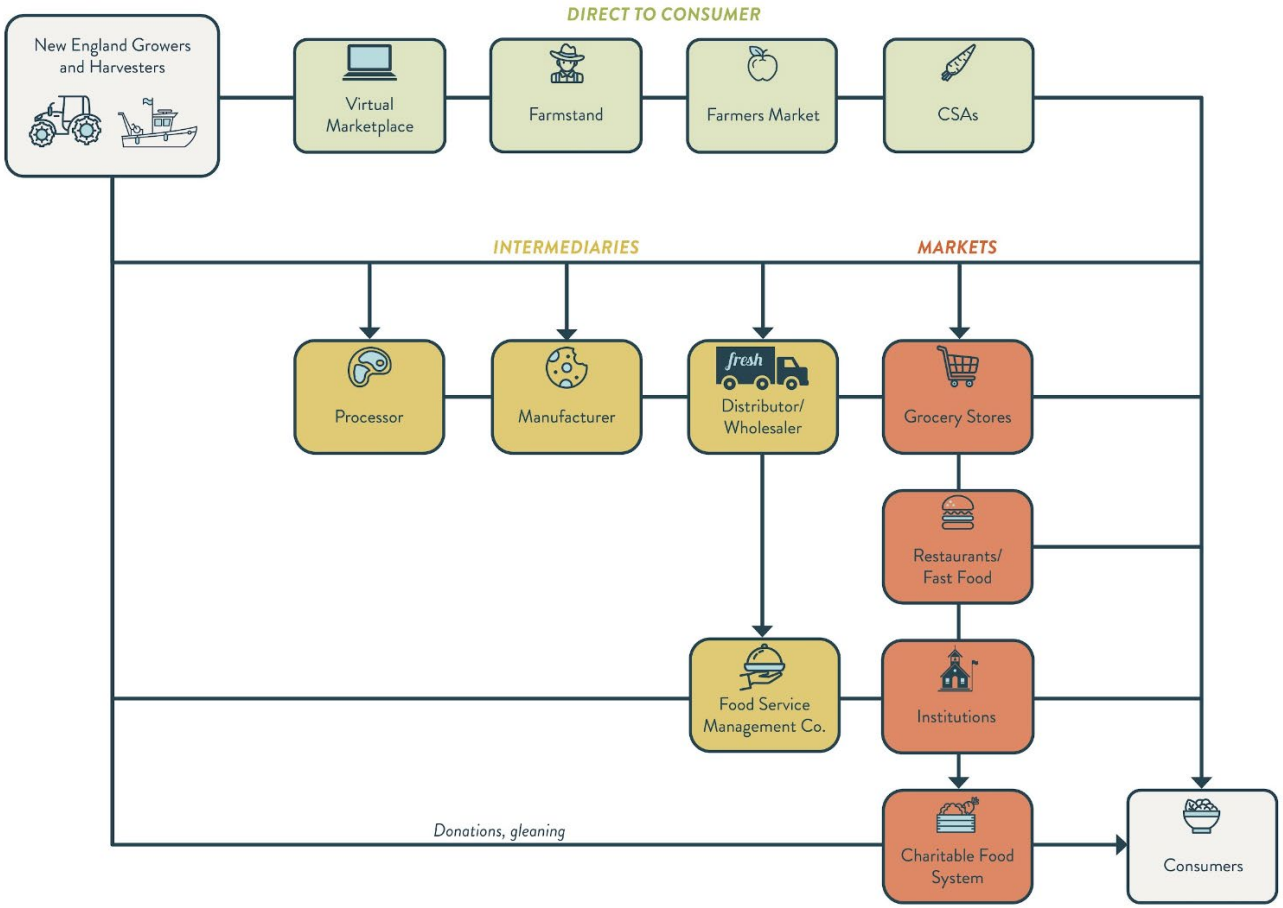
	LOW ESTIMATE		HIGH ESTIMATE		2030 ESTIMATE
30% OF TOTAL	$7.6 billion	——	$12.1 billion	→	$13.2 billion

Per Capita Low and High Estimates of Total Food Expenditures by State

FIGURE 16: Per Capita Low and High Estimates of Food Expenditures by State

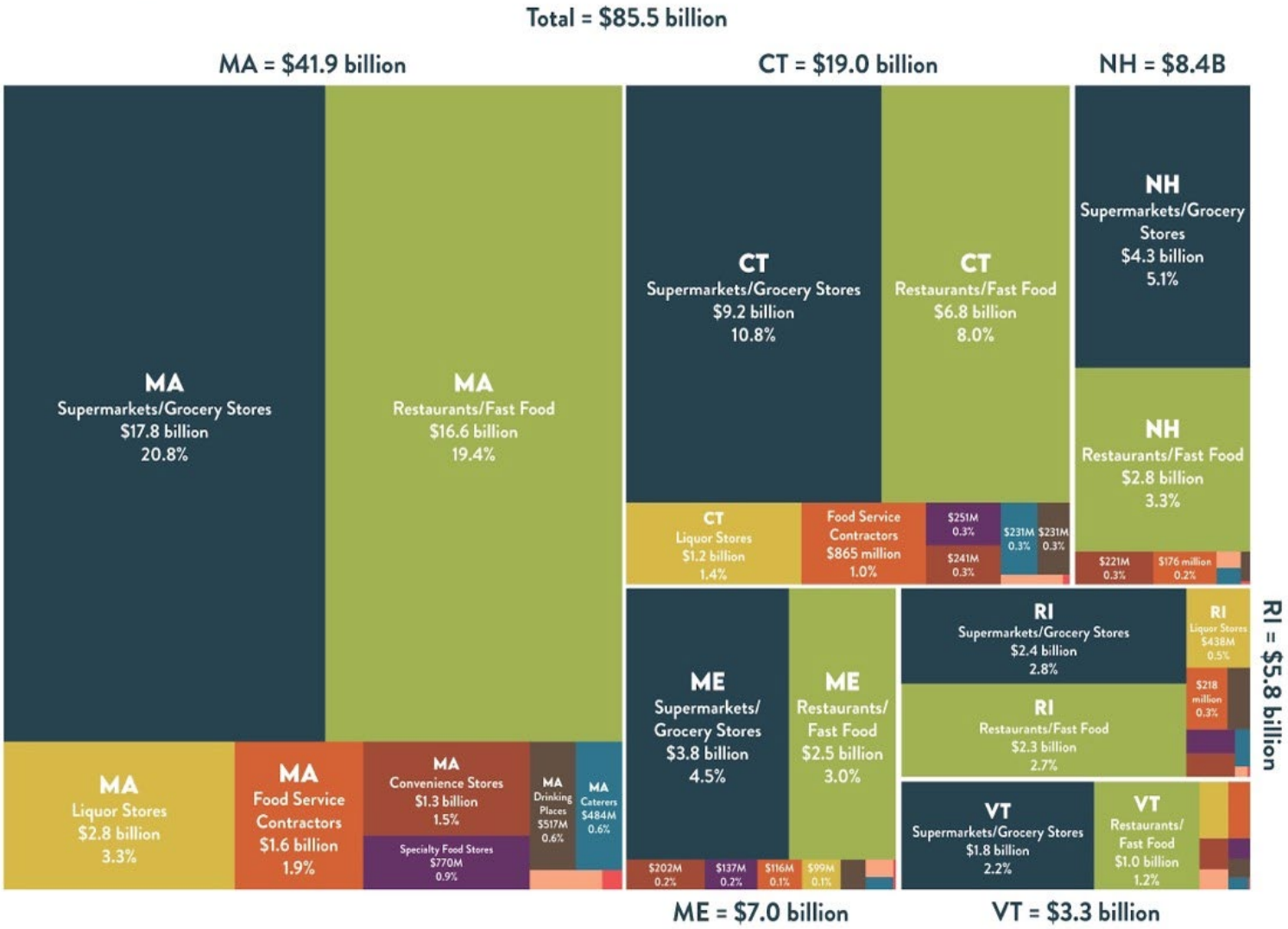
Distribution Pathways from Producers to Consumers

FIGURE 1: Possible Distribution Pathways From Producers to Consumers



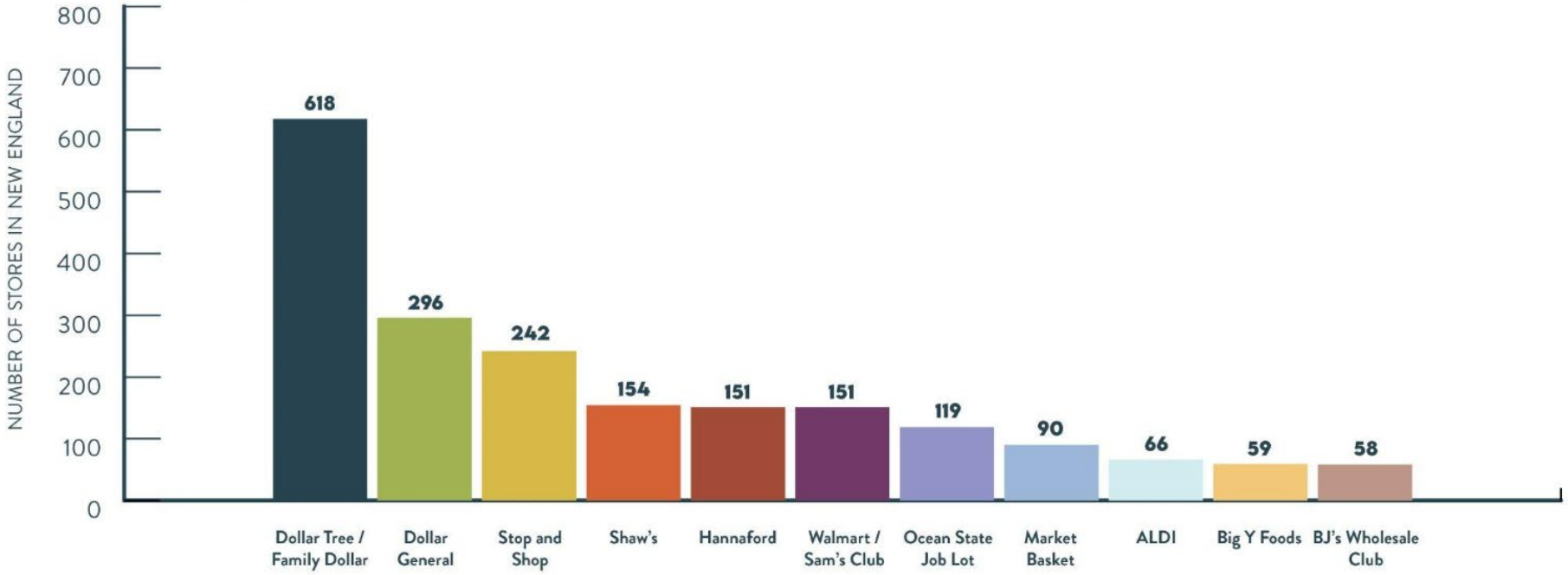
Retail Food Sales by State in New England

FIGURE 2: New England Retail Food Sales by State, 2017



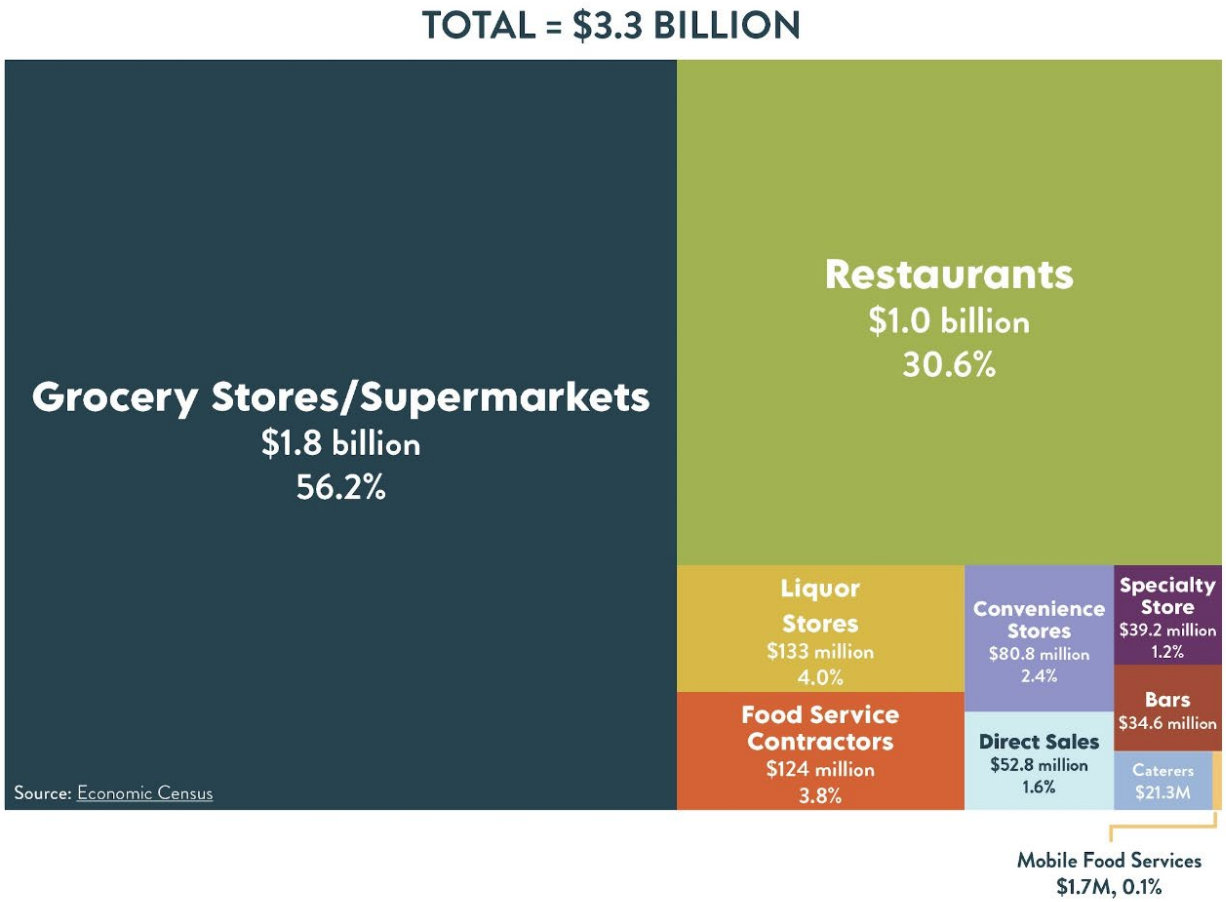
Top 10 Grocery Stores in New England by Number of Stores

FIGURE 16: Top 10 Grocery Stores in New England by Number of Stores



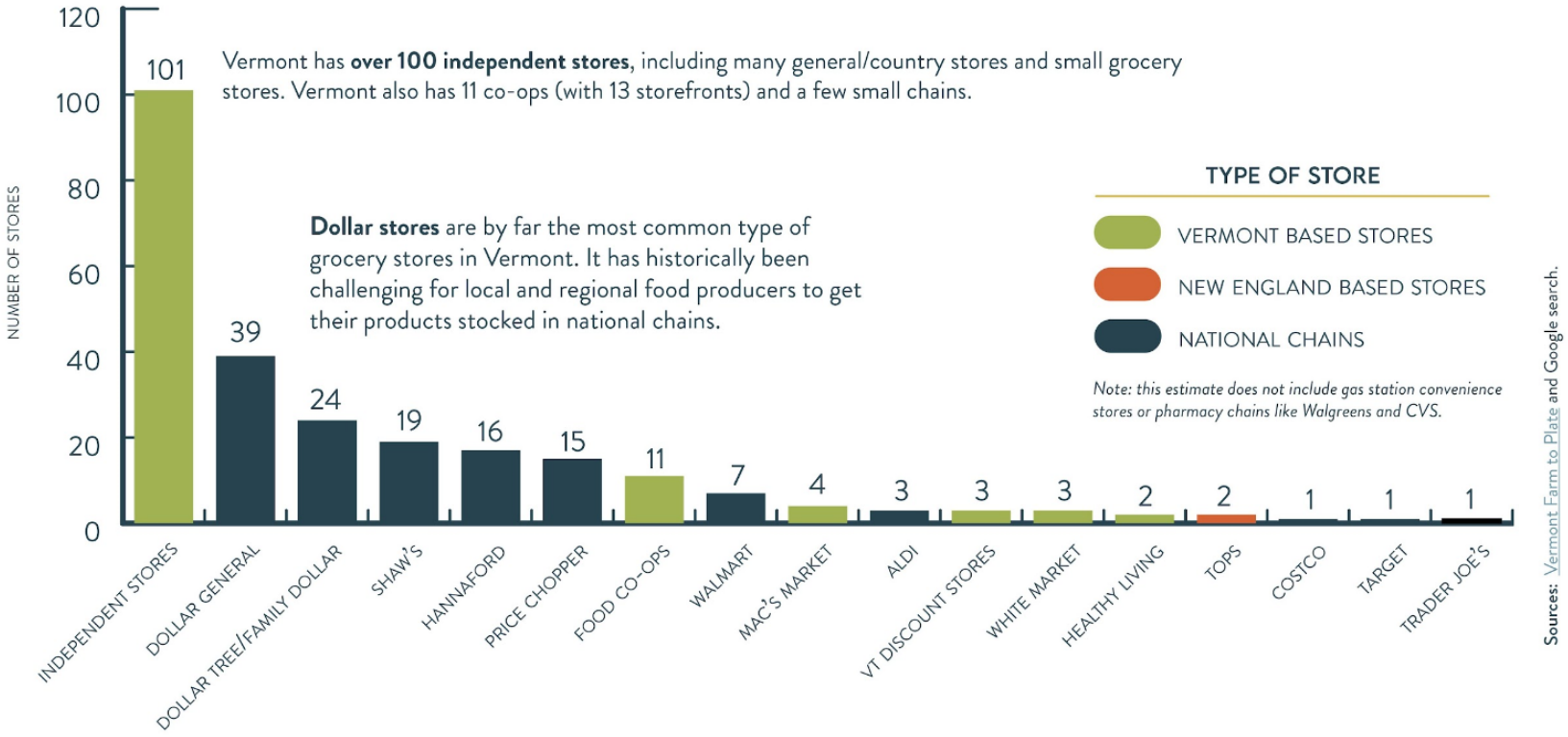
Sales by Market Channel in Vermont

Food Stores and Services Sales, 2017



Number & Type of Food Stores in Vermont

Count of Food Stores in Vermont



Vermont Fresh Network

The Vermont Fresh Network is a member-based 501(c)3 nonprofit organization founded in 1996 to advance relationships among farmers, chefs, and consumers to grow markets and eat more locally grown food.

- Four (4) VFN Farmers or Food Producers that you purchase from regularly.
- Minimum of 15% of annual food purchases are VT grown or raised food (or within 30 miles of Vermont). Hospitals, institutions, and schools are required to meet a 10% threshold.
- Menu contains VT products that represent (3) of the (6) USDA Food Groups year-round.
- Participation in local food and farm events at least once during the year.

Gold Barn Members (25% of members) must spend at least 35% of their annual food purchasing budget on local food and products and have at least 10 local producer partners.

As of April 2023, 56 Gold Barn Members collectively spent close to $9 million on Vermont-grown and crafted food and beverage products in the past year.

Number of Institutions in New England

Institutions represent <4% of food and beverage sales, but 25% of the population spends time in a New England institution daily.

TABLE 9: Number of Institutions in New England

State	K-12 Public	K-12 Private	Early Childhood Sites	Colleges/ Universities	Hospitals	Jails	Prisons	Total
Connecticut	1,022	315	3,219	28	41	Unified system	14	4,639
Maine	599	152	1,566	24	40	13	7	2,401
Massachusetts	1,852	657	7,577	84	120	17	17	10,324
New Hampshire	494	209	TBD	20	32	10	4	769
Rhode Island	320	112	549	11	14	Unified system	7	1,013
Vermont	312	112	1111	15	23	Unified system	6	1,579
New England	**4,599**	**1,557**	**14,022**	**182**	**270**	**40**	**55**	**20,725**

Reported Frequency of Serving Local Foods in Schools

Milk is the most frequently served "local" food in K - 12 schools, followed by fruits and vegetables. This is influenced by federal nutritional requirements.

TABLE 16: Reported Frequency of Serving Local Foods

	Fruits	Vegetables	Fluid Milk	Other Dairy	Proteins	Grains	Other
Daily	20%	13%	34%	4%	2%	6%	1%
Few times per week	12%	13%	1%	5%	2%	3%	0.1%
Weekly	14%	11%	2%	2%	2%	2%	0.4%
Few times per month	6%	10%	1%	2%	2%	0.4%	0.6%
Monthly	3%	4%	1%	1%	2%	1%	0.3%
Occasionally	11%	13%	1%	3%	4%	2%	0.4%
Never	1%	1%	1%	2%	1%	1%	–
No response	33%	34%	59%	81%	85%	85%	97%

Source: USDA Farm to School Census

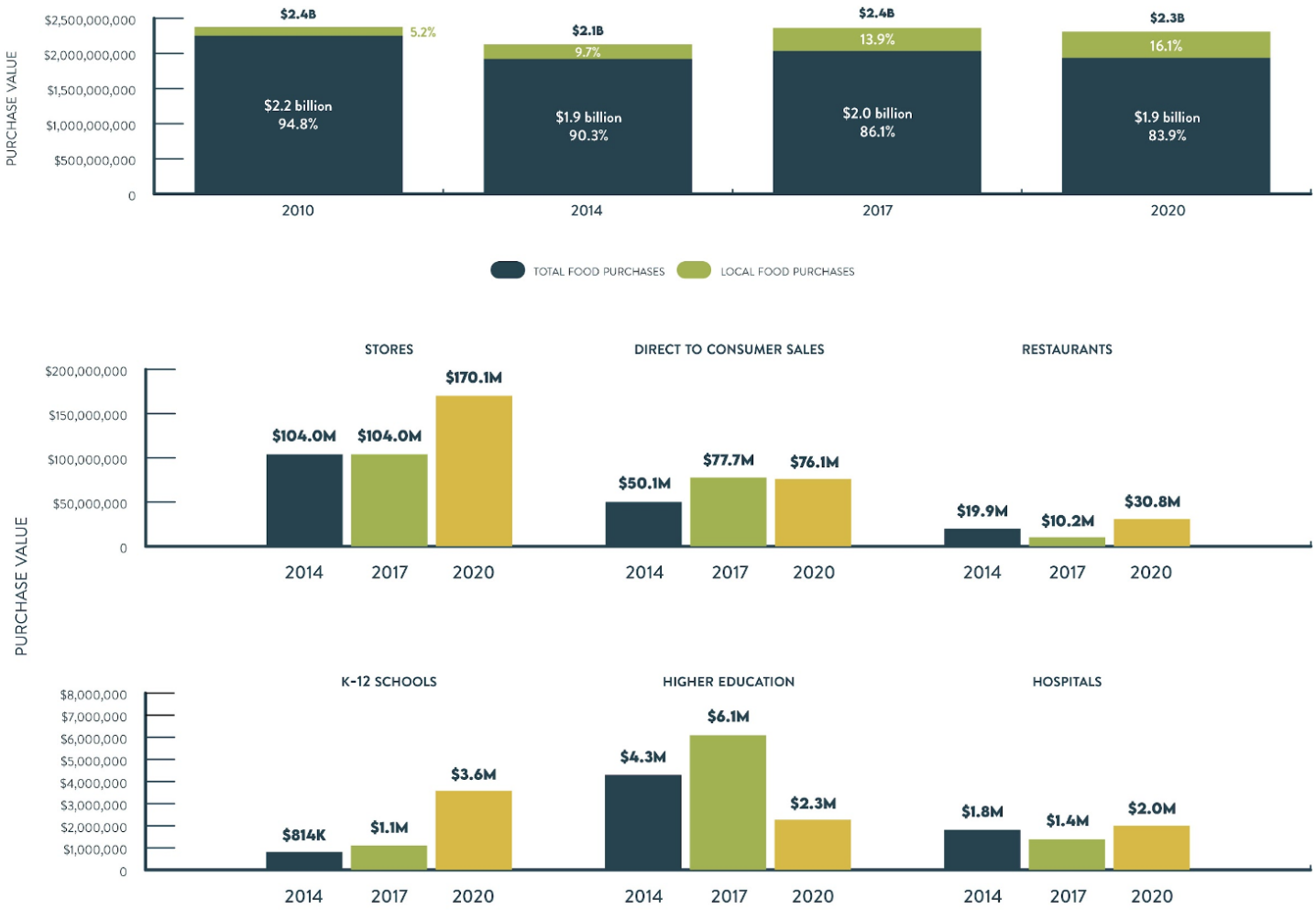
Example: Estimated Impact of Change in Frequency of Serving Local Fruit

TABLE 20: Estimated Impact of Change in Frequency of Serving Local Fruit Among Census Respondents

Frequency	% Reporting	Potential Servings	Adjusted Reporting	Potential Servings
Daily	30%	30,147,660	48%	52,830,900
Few times per week	18%	8,821,260	21%	10,510,360
Weekly	21%	5,255,180	10%	2,247,595
Few times per month	10%	1,284,340	4%	650,920
Monthly	4%	325,460	16%	1,058,030
Occasionally	16%	423,212	1%	15,708
Never	1%	0	0%	0
Total	**100%**	**46,257,112**	**100%**	**67,313,513**

Vermont Local Food Count 2010 - 2020

FIGURE 11: Vermont Local Food Count, 2010, 2014, 2017, 2020



Vermont State Brief

Vermont State Brief – Priorities

1. Improve production, processing and distribution infrastructure and supply chain investment.
2. Cultivate viable wholesale grocer market opportunities within the state of Vermont.
3. Support and accelerate land access and land affordability with a particular focus on equitable access for beginning, socially disadvantaged, and BIPOC farmers.
4. Create synergies between climate policy and resilience and food system development.
5. Leverage cross-sector coalitions to stimulating systemic solutions to food access and security.

What are you Questions?

NEW ENGLAND
FOOD SYSTEM
PLANNERS PARTNERSHIP

Want to learn more about the New England Feeding New England project?

Contact our Project Director, Leah Rovner at leah@nefoodsystemplanners.org or visit us at **www.nefoodsystemplanners.org**