



# Overview of Farm to Plate Investment Program and Vermont's Food System

Presented to the Senate Committee on Agriculture  
1.31.25





# The Farm to Plate Investment Program is in Vermont Statute

## The Vermont Statutes Online

**Title 10 : Conservation And Development**

**Chapter 015A : The Sustainable Jobs Fund Program**

(Cite as: 10 V.S.A. § 330)

§ 330. The Farm-to-Plate Investment Program; creation; goals; tasks; methods

# Farm to Plate Investment Program: Enabling Legislation Passed in 2009

Statute passed in 2009 tasked the Vermont Sustainable Jobs Fund (VSJF) with creating a strategic plan for agriculture and food system development, and establishing the F2P program to fulfill the following outcomes:

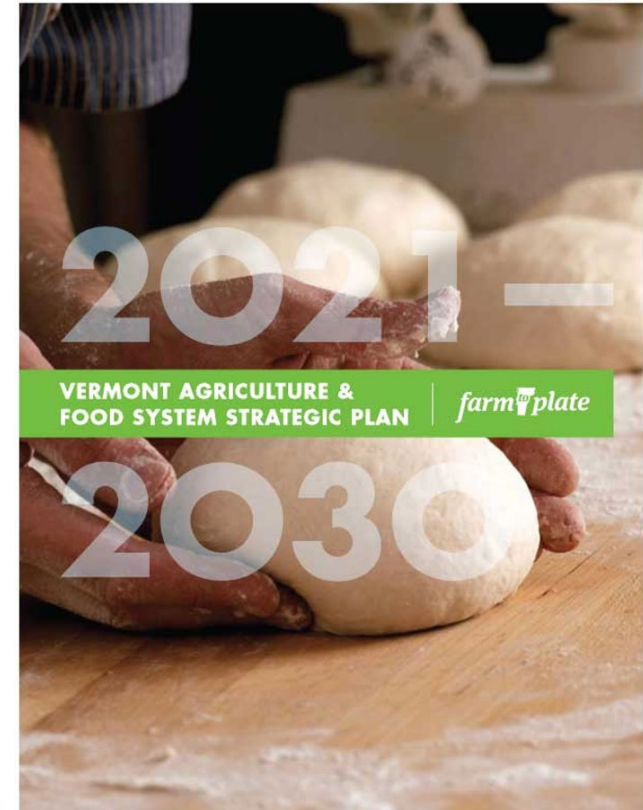
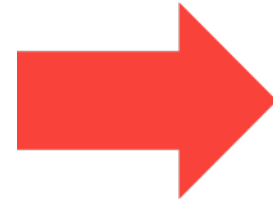
- 1 Increase economic development in Vermont's food and farm sector.**
- 2 Create jobs in the food and farm economy.**
- 3 Improve access to healthy local foods.**



# Farm to Plate Investment Program: Reauthorized for Another 10 Years in 2019

Legislature reauthorized F2P in 2019, effectively tasking VSJF again to create a 10-year strategic plan and support the program to fulfill the legislative outcomes. The outcomes were amended slightly to:

- 1** Increase sustainable economic development and create jobs in Vermont's food and farm sector
- 2** **Improve soils, water, and resiliency of the working landscape in the face of climate change**
- 3** Improve access to healthy local foods for all Vermonters

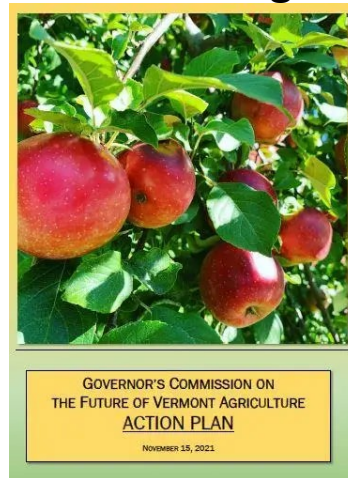






**New England Feeding  
New England Report**

## Gov's Commission on Future of Ag

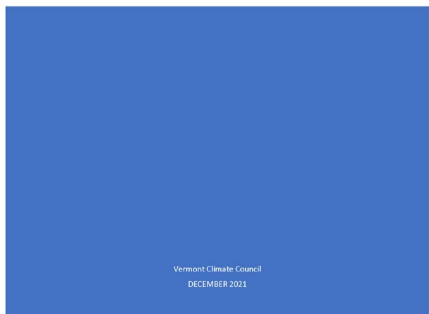


**Food Security  
Roadmap**

## Climate Action Plan



INITIAL VERMONT CLIMATE  
ACTION PLAN



## Other Places You'll Find The Fingerprints of 2021-2030 Ag & Food System Plan

The Plan has served as a keystone or source of strategies and recommendations in other state plans, roadmaps, and reports



# The Farm to Plate Network: From Plan to Action





# The Farm to Plate Network: From Plan to Action



## 2024 Highlights:

- 75 farm and food businesses received distribution and retail sales technical assistance
- 15 farm and food businesses received infrastructure planning and funding technical assistance
- 7 farms participating in Beef on Dairy breeding program, and involved in new start-up Vermont Cattleman LLC
- Supporting 6 food hubs across the state to improve distribution efficiencies and infrastructure development
- Formation of Food Security Coalition
- Financial and legal feasibility analysis of shared equity farmland access models
- Funding secured for CSA & Healthcare programs to aid further program development and scaling

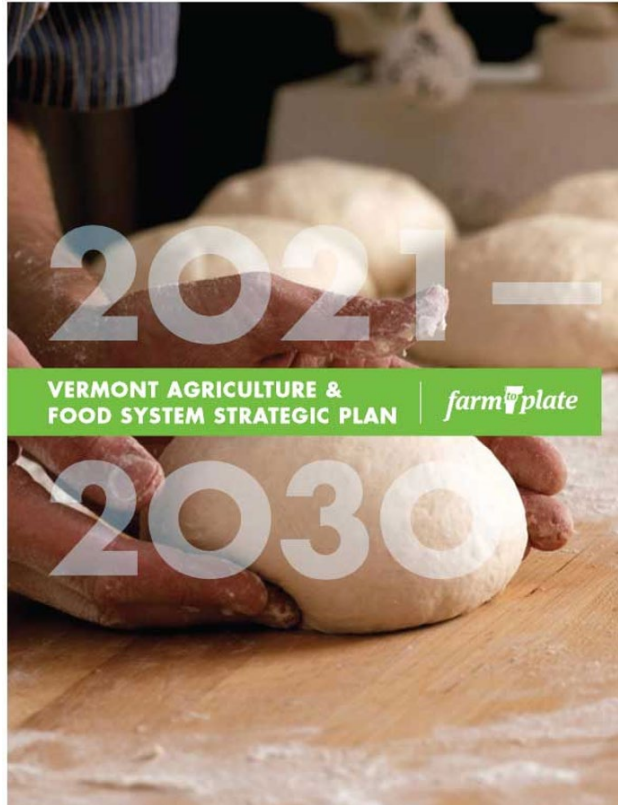
**“I attended the Producer, Distributor, Buyer Forum organized by the Network’s Independent Grocers Program. The candid conversation and insider knowledge about distribution was invaluable. In addition, the contacts both with distributors and information sharing with other producers was ideal one-stop networking. I’m glad that I invested the time in participating, and I know that other participants felt the same way”** *Becky Castle – Fisher Brothers Farm and Sisters of Anarchy Ice Cream*





# How to Understand & Use the Strategic Plan

Three Legislative Outcomes



Vision

Goals

Objectives

Priority Strategies

Product, Market, and  
Issue Brief

Recommendations



# Product, Market, and Issue Briefs (pgs 38-190, pdf pgs 40-192)

## VERMONT FOOD SYSTEM PLAN PRODUCT BRIEF



**PRODUCT:**  
Agroforestry

### What's At Stake?

Vermont's 4.465 million acres of forest cover around 73% of its territory.<sup>1</sup> If we are to address the critical moment facing Vermont agriculture, sustainable agroforestry should be among the solutions considered and implemented. Done well, it can enhance Vermont's working landscape, supporting farmers' livelihoods, local economies, and our natural ecosystems. This short, medium, and long-term strategy can provide additional food, fiber, timber, carbon sequestration, water quality, habitat restoration, and increased livestock comfort and yields, but will need institutional support to provide farmers with sufficient capacity, expertise, and financing. Further, agroforestry can be part of an effective payment for ecosystem services system for Vermont's agricultural working lands and economy.

### Current Conditions

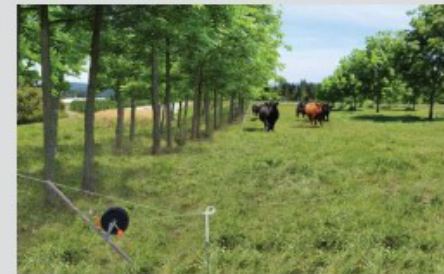
Agroforestry (agriculture and forestry) is the deliberate, integrated management of trees, crops, and sometimes livestock within the same area. It can enhance agricultural lands and complement natural forests, and produce food, feed, fiber, fuel, and timber products. Five agroforestry practices are recognized by the USDA including riparian forest buffers, alley cropping, windbreaks, forest farming, and silvopasture.<sup>2</sup> Agroforestry provides multiple environmental benefits and is an effective climate change mitigation strategy.<sup>3</sup> Agroforestry can sequester thousands of tons of carbon annually, at a conservative rate of one ton per acre per year.

Existing cropland and pastureland production can be ecologically and economically enhanced with appropriate agroforestry implementation. Agroforestry can increase farm business revenue when farmers complement feed, food, or fiber production by adding timber and/or other forest products as another crop from the farm. Agroforestry

helps farmers adapt to climate change by integrating more trees and more diverse tree crops that can tolerate new climate conditions, for example grazing animals in well-managed marginal forest lands converted to silvopasture. Agroforestry products can include mushrooms and maple syrup, nuts, fruits, and wood products. Using management-intensive grazing, silvopasture may increase viable grazing capabilities. Silvopasture<sup>4</sup> is one of the agroforestry practices done in Vermont, with 4.6% of Vermont's woodland acres grazed.<sup>5</sup>

Vermont officially encourages two practices, riparian buffers and windbreaks, through Natural Resources Conservation Service (NRCS) payments. Windbreaks can increase crop yields 5% to 45%,<sup>6</sup> and reduce climate stress in livestock, increasing their performance. Energy savings in buildings sheltered by windbreaks range from 10% to 40% annually.<sup>7</sup> Adding additional practices to NRCS programs would benefit the sector.

Open fields (left) versus silvopasture (right). For additional visuals and image credits, see [end notes](#).





# Priority Strategies (pgs 29-33, pdf pgs 31-35)



## Priority Strategies

Priority strategies are the recommended programs, investments, and policies which will lead us to meet our objectives and reach our goals. In most cases, the priority strategies are a distillation of interrelated recommendations from the food system briefs and thus, if implemented, may solve challenges in multiple areas of the food system. The [Supplemental Materials](#) contain a table of the priority strategies and the recommendations from the product, market, and issue briefs from which they derive. Each priority strategy is followed by a color-coded numerical icon(s) which indicate the outcome area(s) and goal(s) it addresses. The priority strategies are not listed in order of importance.

In some cases, a strategy may be within the purview and capacity of a specific organization, state agency, or the Legislature. In other cases, implementation of a priority strategy or its constituent parts can only be accomplished through multi-stakeholder collaboration. These strategies will be addressed by the Farm to Plate Network, and will inform the restructuring of the Network in the first half of 2021.

### GOAL CATEGORIES

- Sustainable Economic Development
- Environmental Sustainability
- Healthy Local Food for All Vermonters
- Racial Equity

## Priority Strategies

1. Provide at least \$1.5 million in annual funding to the Working Lands Enterprise Fund. These grant funds are a unique and critical source of capital that accelerate innovation and sustainability in Vermont food system businesses. 1 3 6 8
2. Establish funding mechanisms (e.g., agricultural loan loss reserve, farm-transfer financing) to address specific food system investment gaps (e.g., for women and BIPOC-owned businesses). 1 3 15
3. Improve funding opportunities and create equitable access for BIPOC organizations and BIPOC-owned businesses by developing multi-year, unrestricted BIPOC-centered grants and loan programs, while removing barriers such as unnecessarily long grant application processes, and combating explicit and implicit bias against BIPOC communities. 1 3 6 8 15
4. Rebuild Vermont's restaurant industry with equitable grant programs and business assistance, and provide local purchasing incentives to support the expansion of farm-to-table relationships. 1 2 15
5. Support stabilization and revitalization of the dairy industry through: (1) a comprehensive dairy products marketing program focused on quality that would assist producers with limited marketing budgets; (2) by expanding opportunities to differentiate the milk supply by supporting farms and processors to increase production capacity for higher-attribute milk; (3) increased capital investment and funding for dairy processing, storage, and co-packing (particularly for cheese, yogurt, butter, etc). 1 2 3
6. To increase the availability of local meat, improve productivity and processing capacity at Vermont meat slaughter and processing facilities through investment in plant upgrades, new facilities, technical assistance, and workforce development. 1 3 10
7. Make significant investment in storage, processing, and distribution infrastructure in order to enhance product innovation and quality across all Vermont food products, expand regional market access for businesses, and increase the resilience of local supply chains. This includes investments in new facilities, upgrades and maintenance to existing facilities, and energy efficiency and renewable energy incentives for food system infrastructure. 1 3 6 8 12 14
8. Support product-specific value chain development. Strategies include bringing producers, distributors, and buyers together at matchmaking events, assisting producer-driven aggregation, distribution, and marketing enterprises, and funding the development of market opportunities in the Northeast. 1 2 3 10 12





## Table of Priority Strategies with Source Reference (pgs 193-200, pdf pgs 195-202)

<p>7. Make significant investment in storage, processing, and distribution infrastructure in order to enhance product innovation and quality across all Vermont food products, expand regional market access for businesses, and increase the resilience of local supply chains. This includes investments in new facilities, upgrades and maintenance to existing facilities, and energy efficiency and renewable energy incentives for food system infrastructure.</p>	<ul style="list-style-type: none"><li>• <i>Agricultural Literacy: K-12</i> Brief: Recommendation #3</li><li>• <i>Agroforestry</i> Brief: Recommendation #6</li><li>• <i>Beer</i> Brief: Recommendation #2</li><li>• <i>Beer</i> Brief: Recommendation #5</li><li>• <i>Bread</i> Brief: Recommendation #3</li><li>• <i>Compost</i> Brief: Recommendation #2</li><li>• <i>Direct Markets</i> Brief: Recommendation #3</li><li>• <i>Direct Markets</i> Brief: Recommendation #5</li><li>• <i>Distribution</i> Brief: Recommendation #1</li><li>• <i>Distribution</i> Brief: Recommendation #3</li><li>• <i>Eggs</i> Brief: Recommendation #1</li><li>• <i>Eggs</i> Brief: Recommendation #4</li><li>• <i>Food Access and Farm Viability</i> Brief: Recommendation #1</li><li>• <i>Food-Grade Grains</i> Brief: Recommendation #1</li><li>• <i>Food-Grade Grains</i> Brief: Recommendation #2</li><li>• <i>Goats</i> Brief: Recommendation #2</li><li>• <i>Lightly Processed Vegetables</i> Brief: Recommendation #3</li><li>• <i>Lightly Processed Vegetables</i> Brief: Recommendation #4</li><li>• <i>Produce</i> Brief: Recommendation #1</li><li>• <i>Restaurants</i> Brief: Recommendation #3</li><li>• <i>School Food Procurement</i> Brief: Recommendation #2</li><li>• <i>Sheep</i> Brief: Recommendation #5</li><li>• <i>Specialty Foods</i> Brief: Recommendation #5</li><li>• <i>Spirits</i> Brief: Recommendation #1</li><li>• <i>Water Quality</i> Brief: Recommendation #4</li><li>• <i>Water Quality</i> Brief: Recommendation #5</li></ul>
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# Strategic Goals (pgs 13-15, pdf pgs 15-17)



## Vermont Agriculture and Food System Strategic Goals

Fifteen strategic goals articulate the results we will achieve by 2030, in service to the Vermont Legislature's intended outcomes for the Vermont Farm to Plate Investment Program:

1. Increase sustainable economic development and create jobs in Vermont's food and farm sector
2. Improve soils, water, and resiliency of the working landscape in the face of climate change
3. Improve access to healthy local foods for all Vermonters

The 15 statewide food system strategic goals are first presented together, and then each goal is presented with its objectives, the measurable improvements that represent progress and will be tracked over time to indicate the degree to which the goal has been accomplished. Some objectives already contain known targets, while other objectives require additional work to establish baselines and set specific improvement targets. The objectives will inform the actions to be taken by the Farm to Plate Network, policy makers, state agencies, and others, and will hold us all accountable to achieving our intended goals. However, they do not tell the whole story about progress toward our goals, and the absence of data should not be used to dismiss individual experiences or delay taking action on an issue. We include one data visualization per goal, with sources listed on page 27. Additional data visualizations will be available on the Farm to Plate website as they are developed. Please note that the goals are not in priority order.

### GOAL CATEGORIES

Goals are divided into four categories. The first three correspond with the three legislative outcomes. The fourth is our commitment to racial equity.

- Sustainable Economic Development
- Environmental Sustainability
- Healthy Local Food for All Vermonters
- Racial Equity

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# Goals Cont. – Econ and Enviro (pg 14, pdf pg 16)

## SUSTAINABLE ECONOMIC DEVELOPMENT GOALS

1. Food system economic output, employment, and establishments in Vermont will increase.
2. Demand for Vermont food will increase.
3. Vermont's production portfolio is more diverse, farm and food businesses of all types will increase their economic viability, and businesses have equitable access to capital and to production, processing, aggregation, and distribution infrastructure appropriate to their needs.
4. Vermont food system jobs provide livable wages, safe, healthy, and supportive workplace conditions, and access to health care and other benefits.
5. Vermont farms and food system businesses have sufficient, diverse, and reliable employees, and there are accessible and equitable opportunities in Vermont to gain the knowledge and skills for food system careers.

## ENVIRONMENTAL SUSTAINABILITY GOALS

6. Vermont farm and food businesses will increase carbon sequestration and reduce food system-related greenhouse gas emissions, and are able to adapt to climatic changes due to global warming, including floods, droughts, extreme storms, and pest and disease pressures.
7. Vermont farm stewardship is increasing ecological diversity and improving soil and water quality, and farm stewards are supported, compensated, and recognized for their positive contributions to the environment and public good.
8. Vermont's agricultural land remains in productive agricultural use, access to that land is more affordable and equitable, and land-use planning decisions maintain and promote a strong and viable food system.
9. Edible food, food scraps, and other food residuals are used for their highest purpose, and not considered waste.



## Goals Cont. – Access for All and Racial Equity (pg 15, pdf pg 17)

### HEALTHY LOCAL FOOD FOR ALL VERMONTERS GOALS

10. The amount of Vermont-grown food that fulfills the dietary and cultural needs of people in Vermont will increase.
11. All people in Vermont increasingly have the financial resources to access local food, including through programs that provide support for purchasing local food.
12. All people in Vermont are able to access locations in which local food is sold, served, or provided.
13. All people in Vermont can access the knowledge, skills, and resources to select, grow, hunt, fish, forage, process, store, and prepare local food.
14. Vermont's food system is resilient and able to provide adequate and accessible healthy local food in the face of emergencies—including climate-related natural disasters.

Vermont Agricultural and Food System Strategic Goals

### RACIAL EQUITY GOAL

15. Food system organizations and stakeholders prioritize racial equity and actions to eradicate structural racism in their work, are accountable to Black, Indigenous, People of Color (BIPOC) leadership, and support BIPOC participation and representation.



# How Are We Doing in Reaching the 15 Strategic Goals?

## SUSTAINABLE ECONOMIC DEVELOPMENT GOALS

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# Buckle Up!





## SUSTAINABLE ECONOMIC DEVELOPMENT GOALS

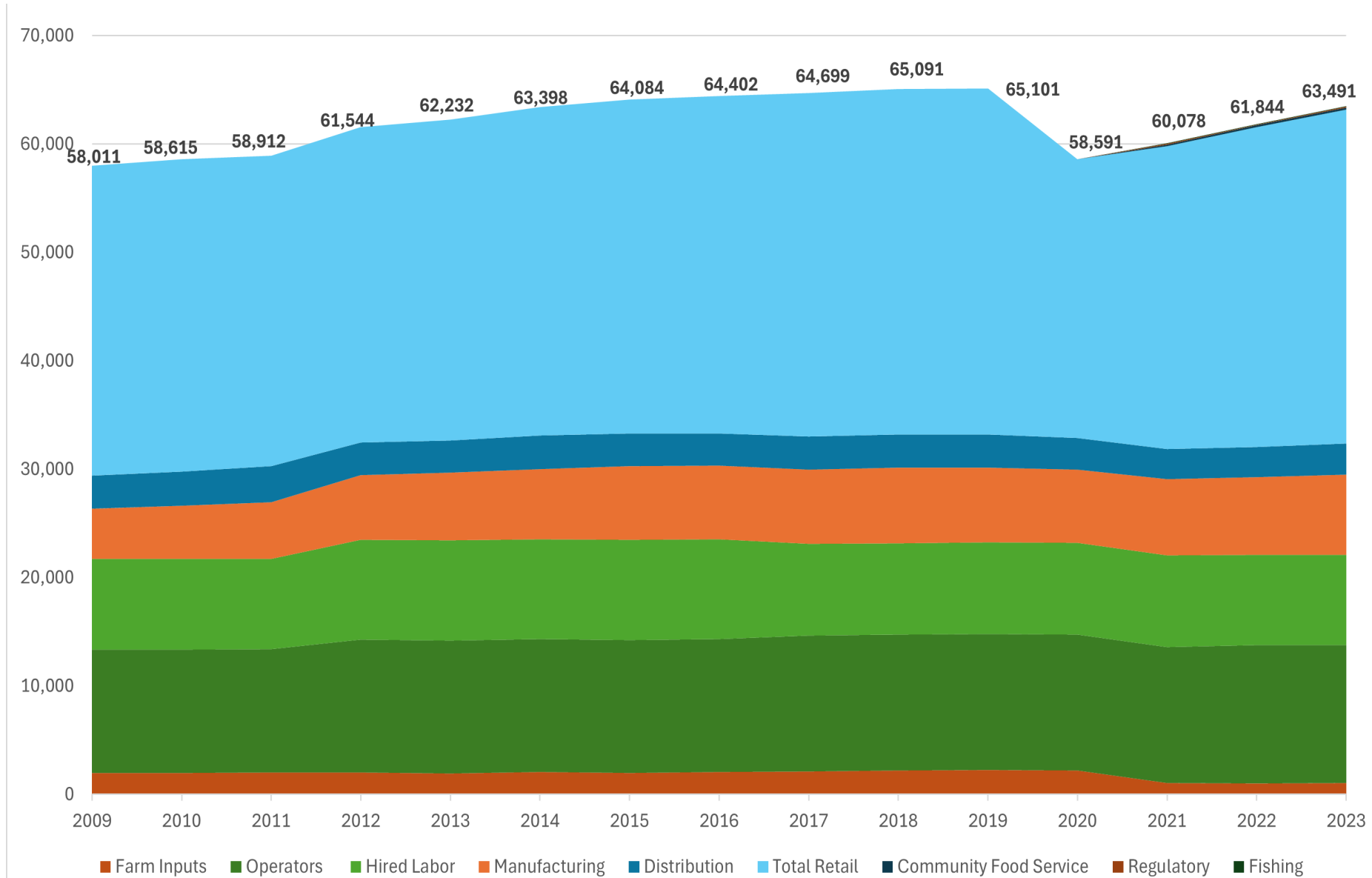
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## ECONOMICS: TOTAL ECONOMIC OUTPUT, 2022

Industry	2022 Sales	Industry Aggregate
<b>Production &amp; Processing</b>		\$4,321,520,000
Agriculture	\$1,033,194,000	
Food Manufacturing	\$3,073,866,000	
Beverage Manufacturing	\$214,460,000	
<b>Distribution</b>		\$3,606,468,000
Wholesaling + Distribution	\$3,606,468,000	
<b>Retail &amp; Food Service</b>		\$3,598,468,000
Stores	\$2,214,468,000	
Food Services + Drinking Places	\$1,384,000,000	
<b>Total</b>	<b>\$11,526,456,000</b>	

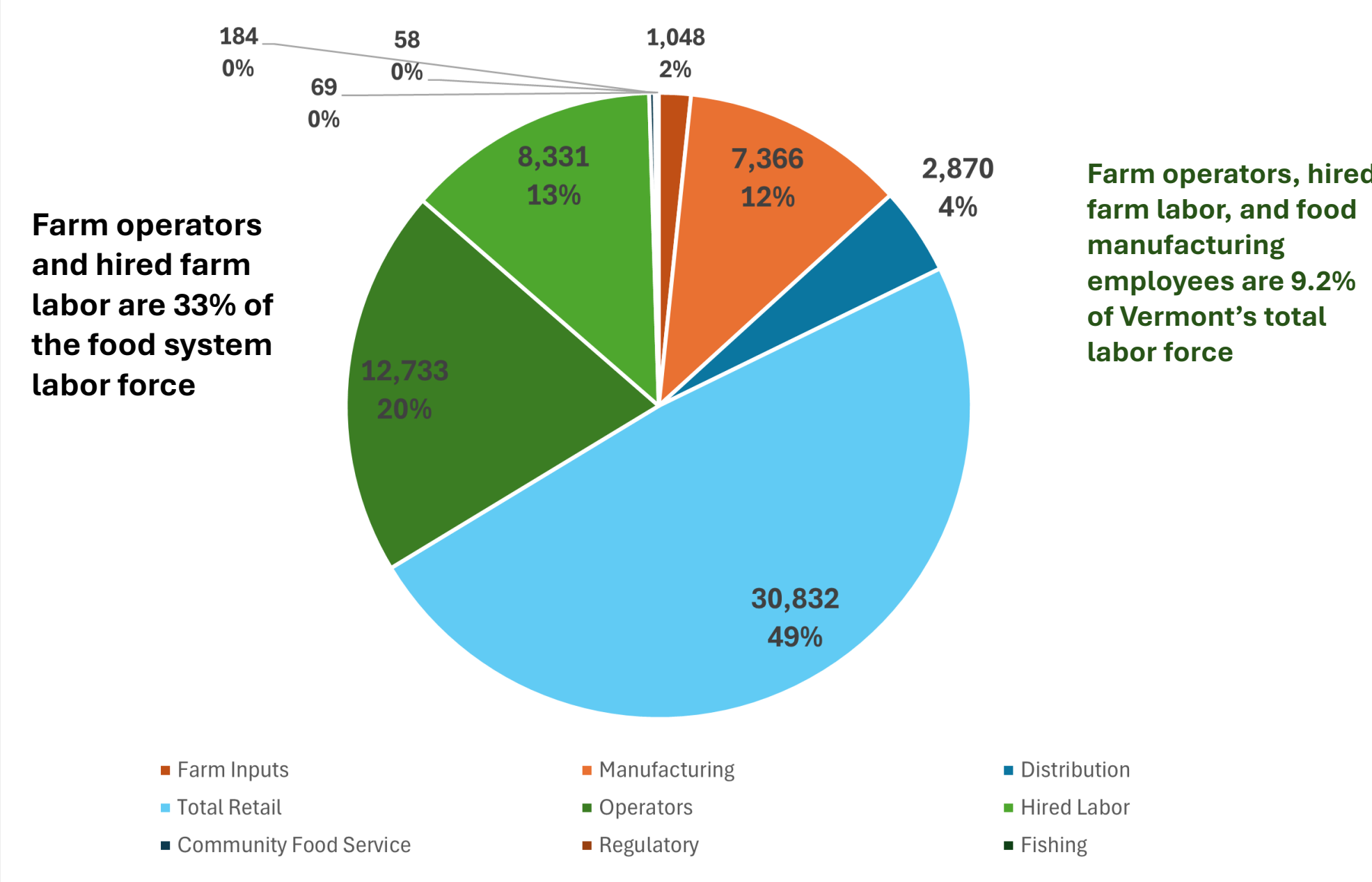


# ECONOMICS: TOTAL FOOD SYSTEM EMPLOYMENT, 2009-2023



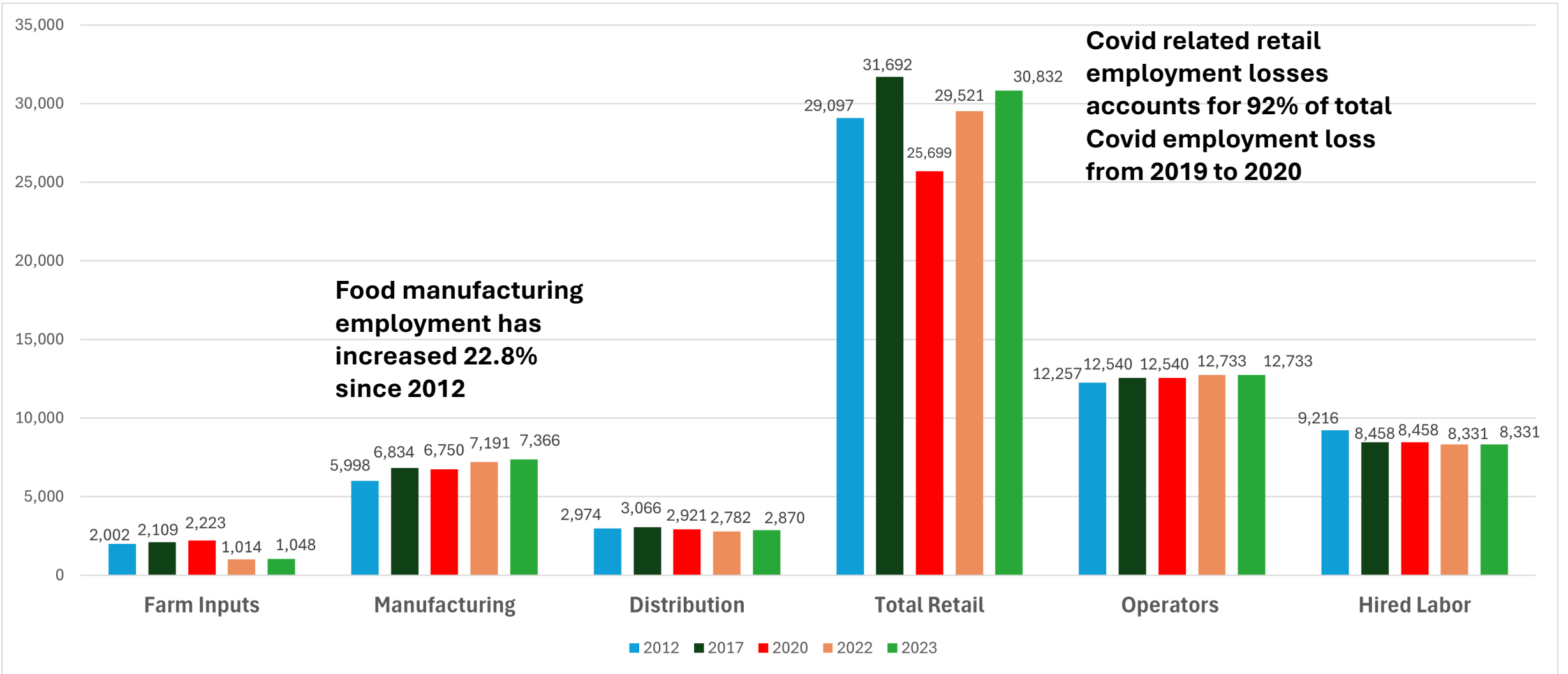
- **9.4% increase** in employment since 2009
- **10% decrease** from 2019 to 2020 due to Covid-19
- 4,900 net new jobs added since since peak decline from Covid-19, **an 8.4% increase.**
- **20.6%** of total employment in Vermont

# ECONOMICS: FOOD SYSTEM EMPLOYMENT 2023

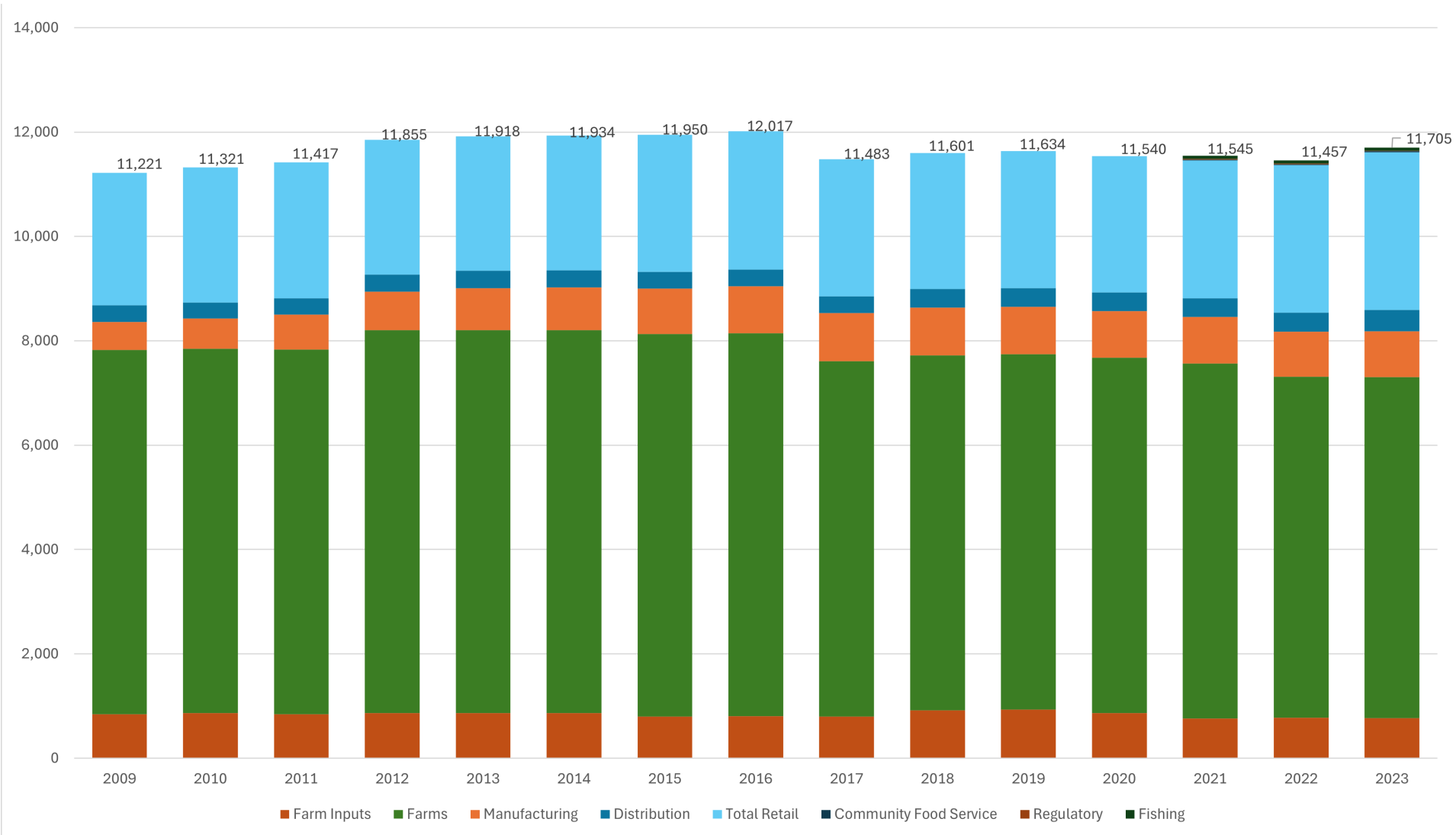




# ECONOMICS: FOOD SYSTEM EMPLOYMENT BY CATEGORY 2012-2023

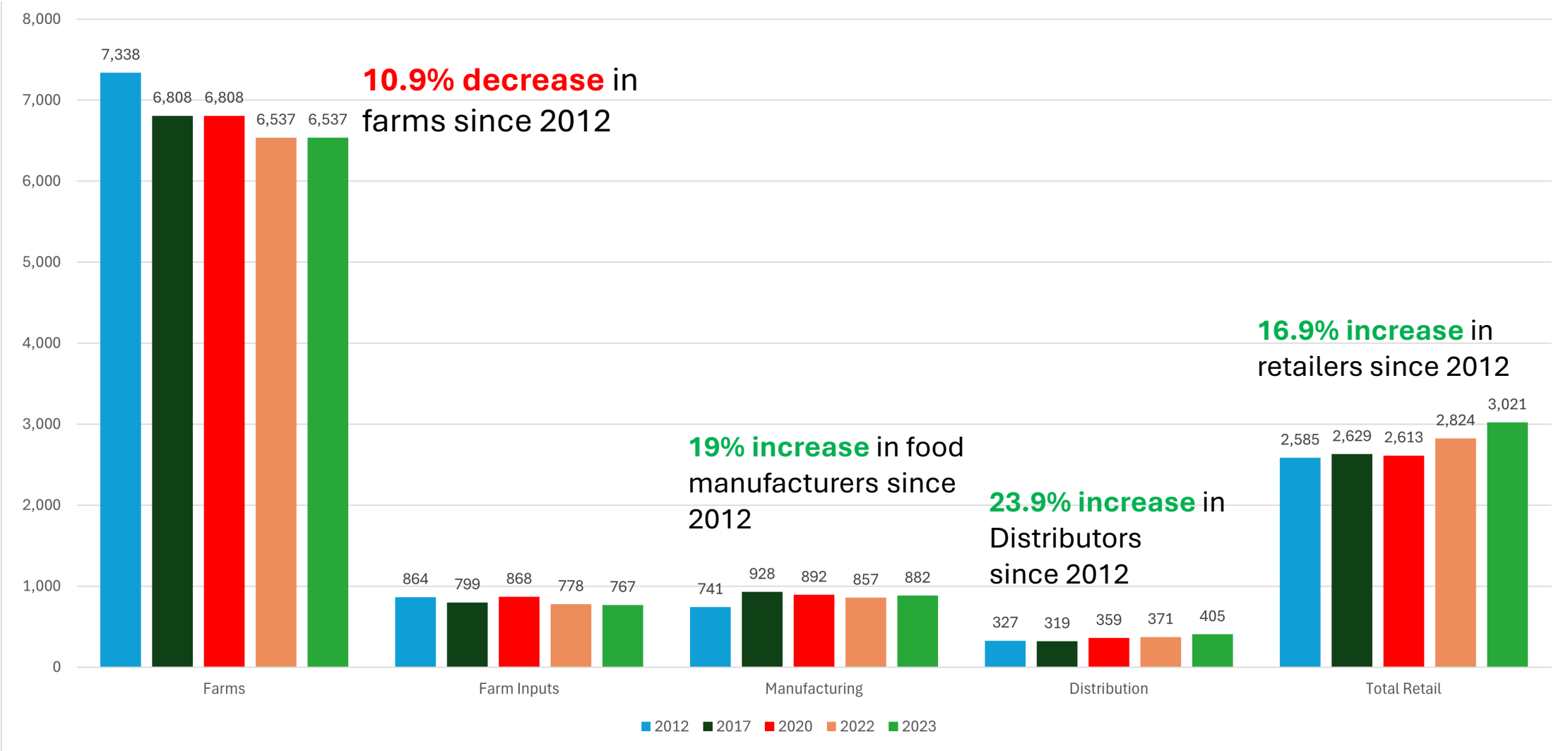


# ECONOMICS: FOOD SYSTEM ESTABLISHMENTS 2009-2023



4.3% increase in establishments since 2009







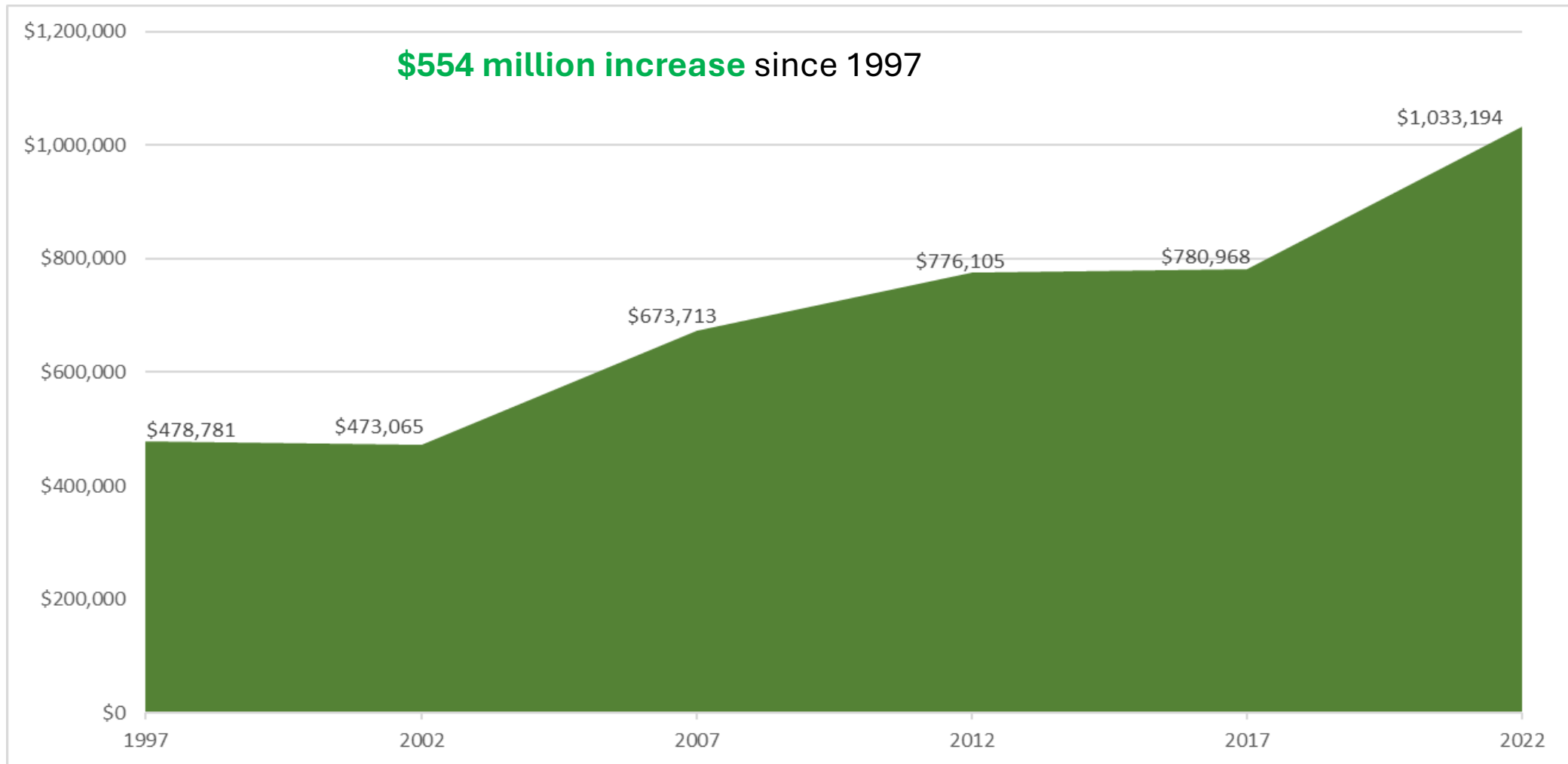
# Farm Production, Sales, and Viability



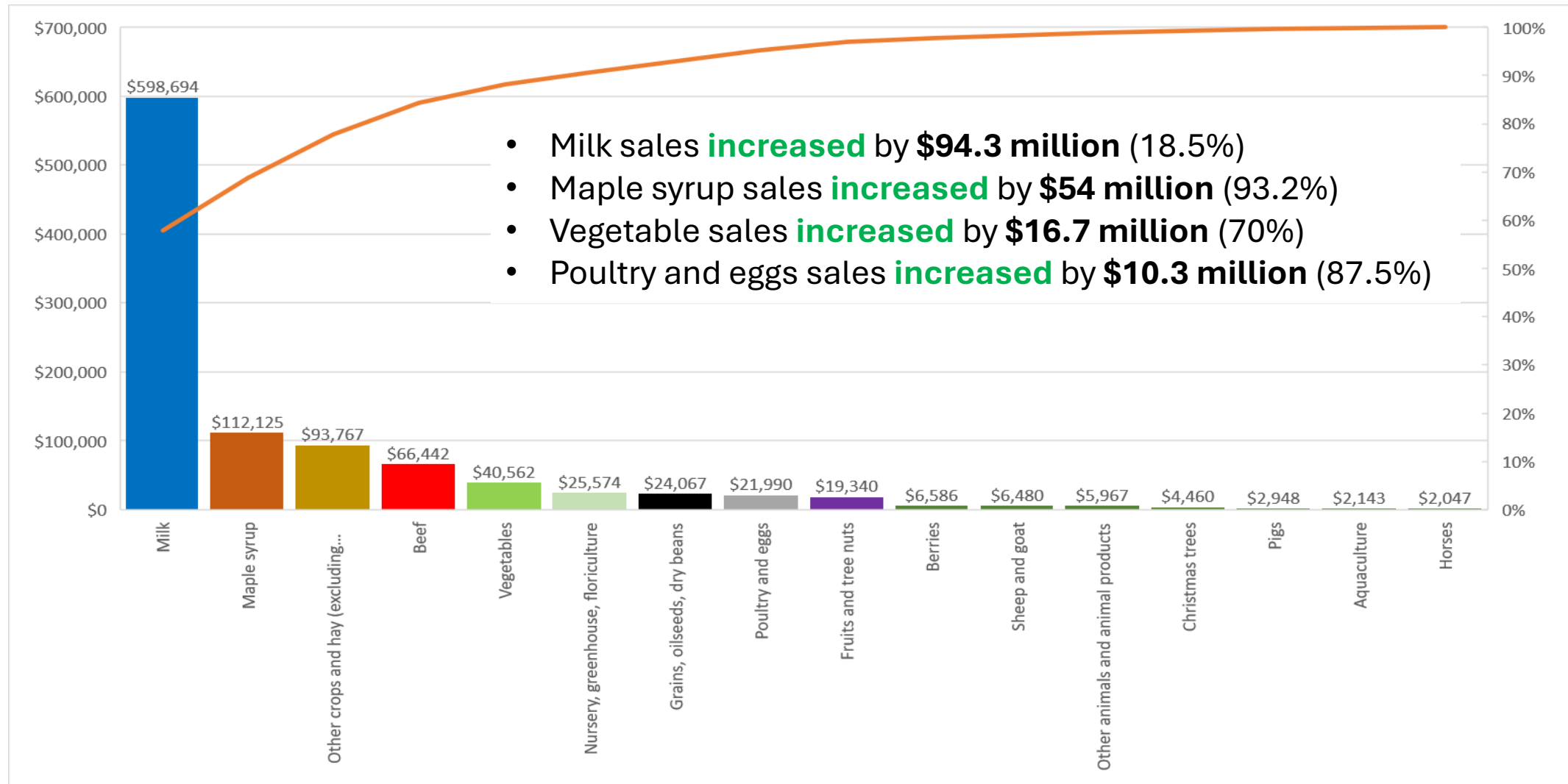


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## FARM GATE SALES: VALUE OF PRODUCTS SOLD, 1997-2022 (IN \$1,000)

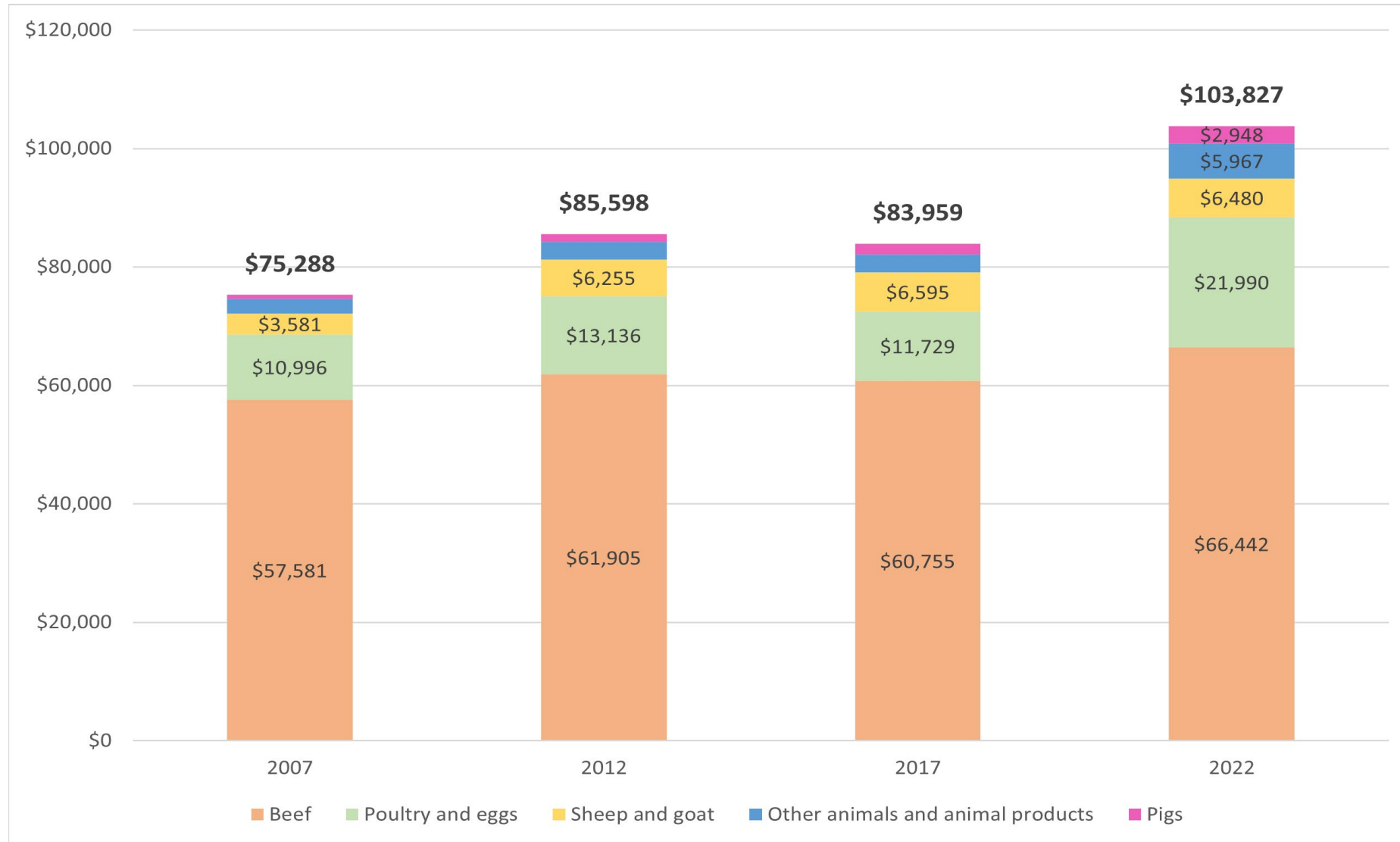


## FARM GATE SALES: VALUE OF SALES BY COMMODITY/COMMODITY GROUP, 2022 (IN \$1,000)



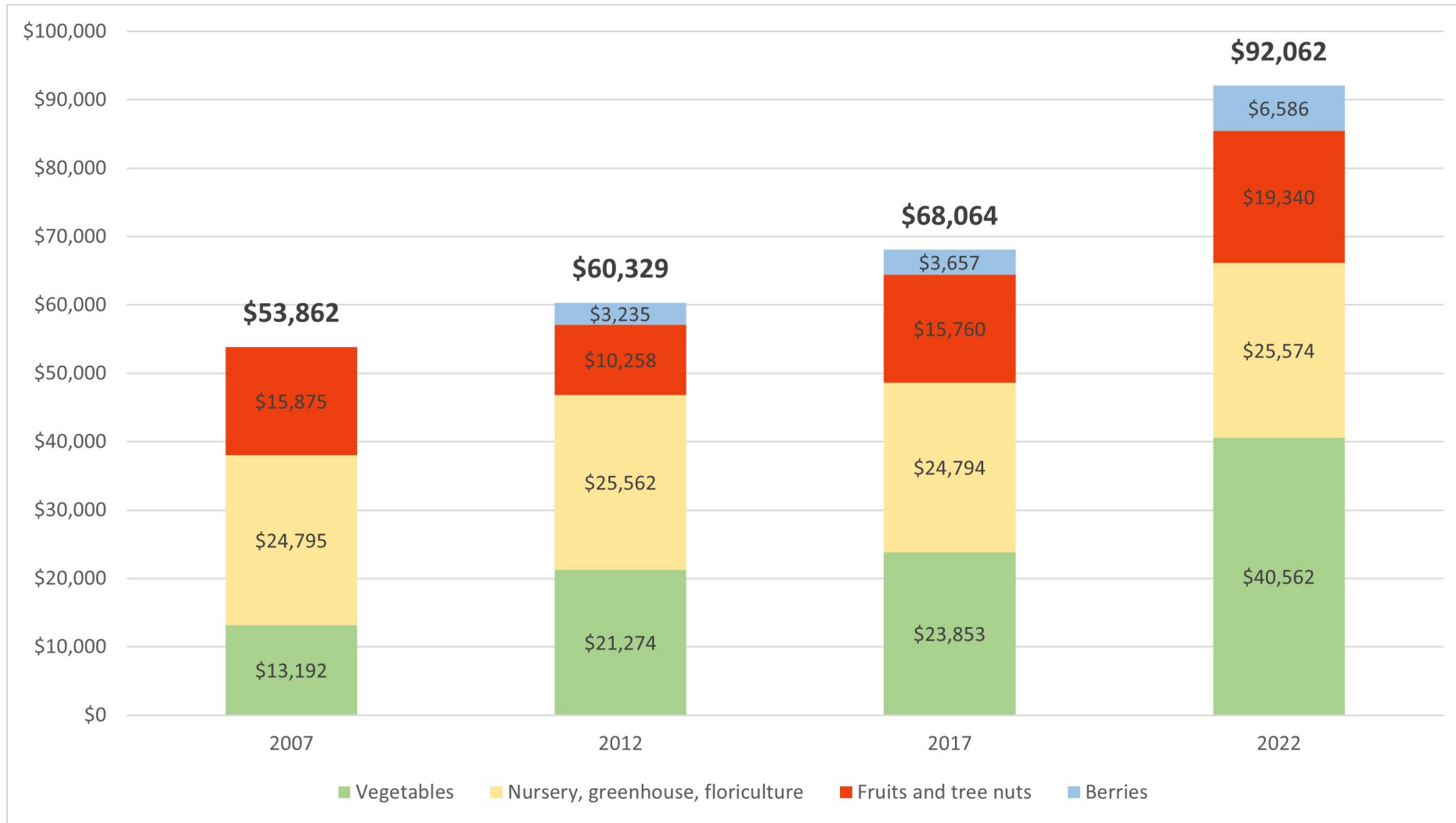


## FARM GATE SALES FOCUS: NON-DAIRY LIVESTOCK, 2007-2022



Poultry and egg sales have **nearly doubled** since 2007 (and 2017)!

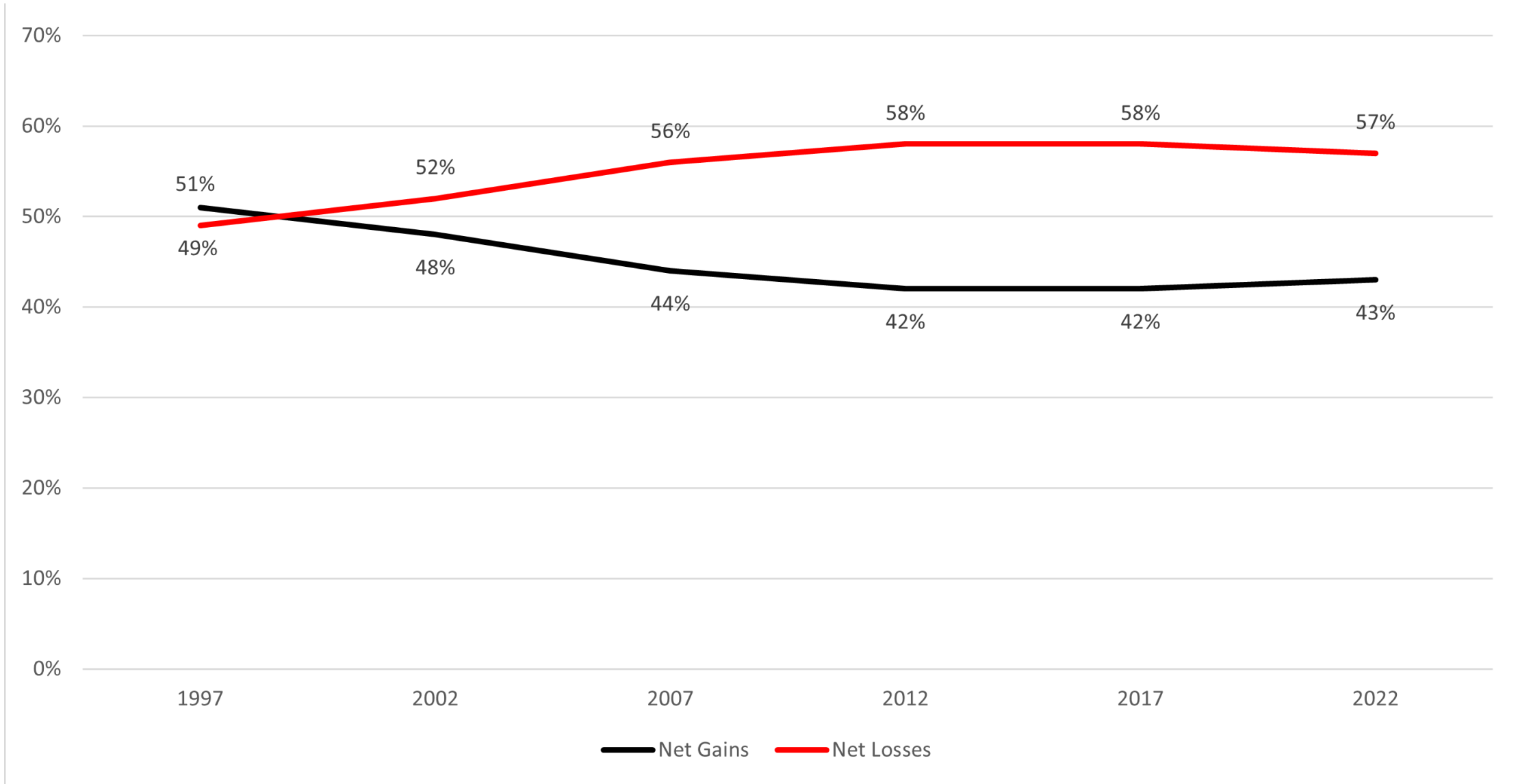
## FARM GATE SALES FOCUS: PRODUCE & NURSERY/FLORICULTURE, 2007-2022



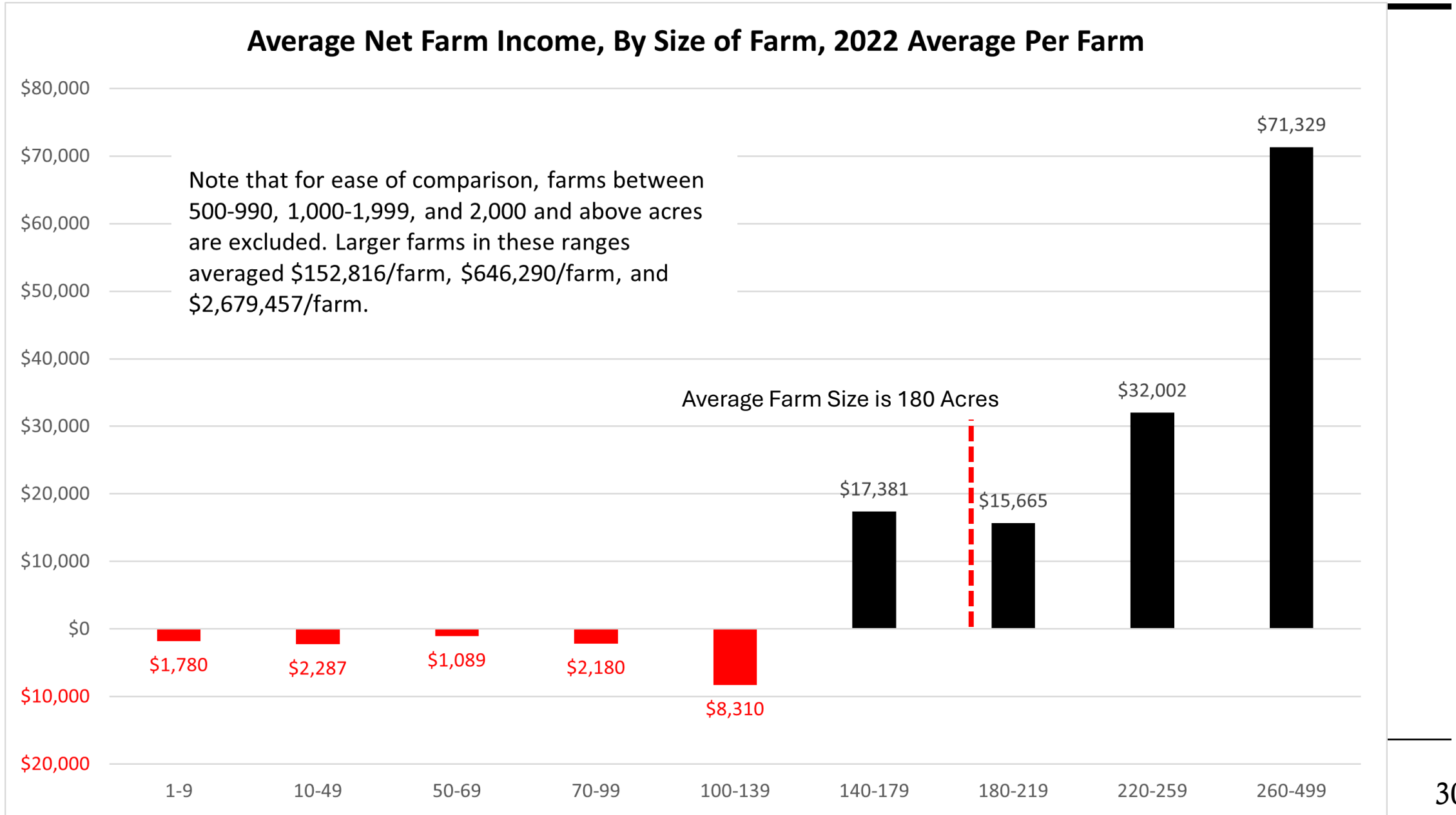
Vegetable sales have **more than tripled** since 2007, **increasing** by \$27 million!



# FARM VIABILITY: PERCENTAGE OF FARMS REPORTING NET GAINS AND NET LOSSES

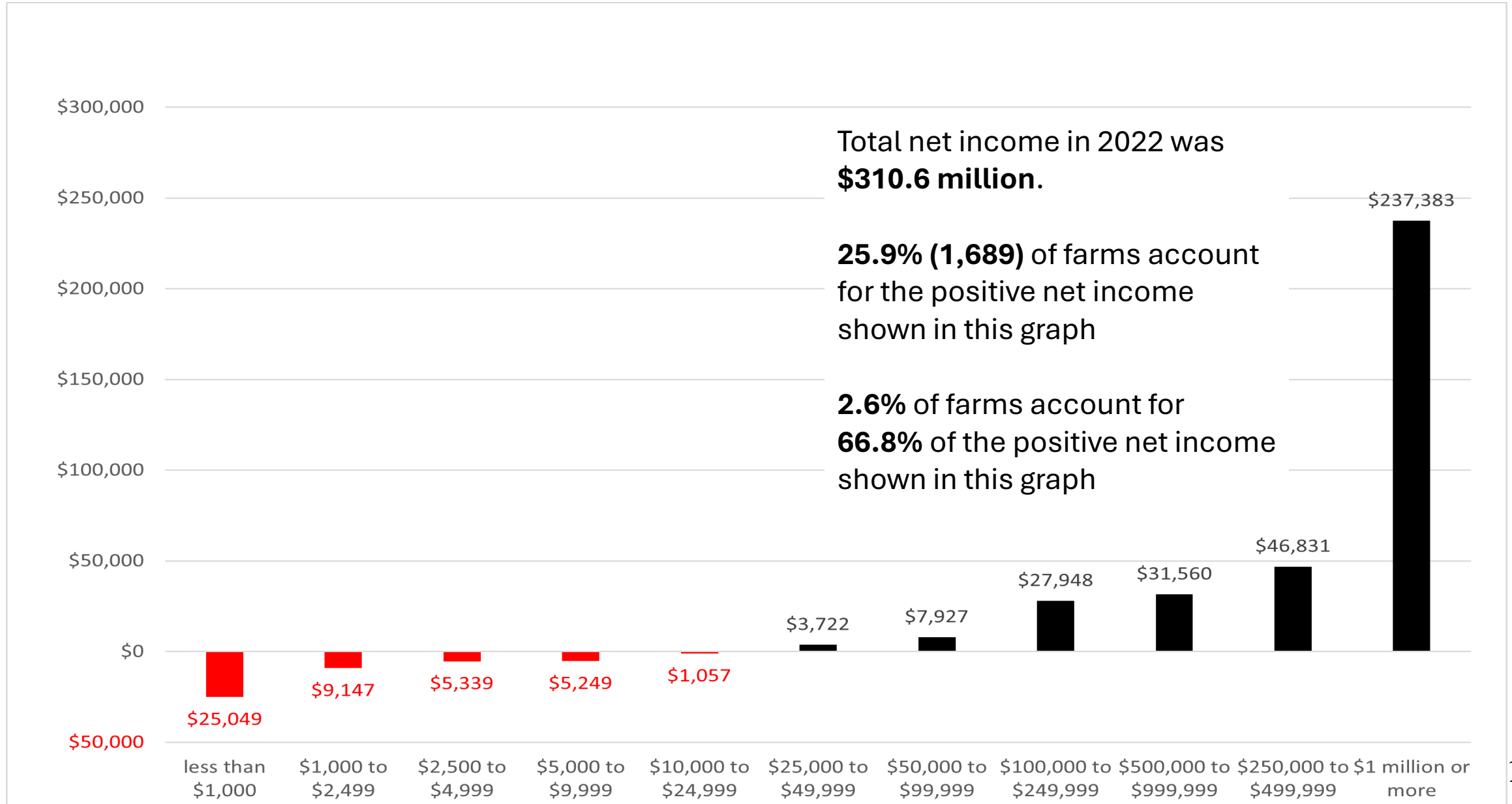


# FARM VIABILITY: NET INCOME BY FARM SIZE

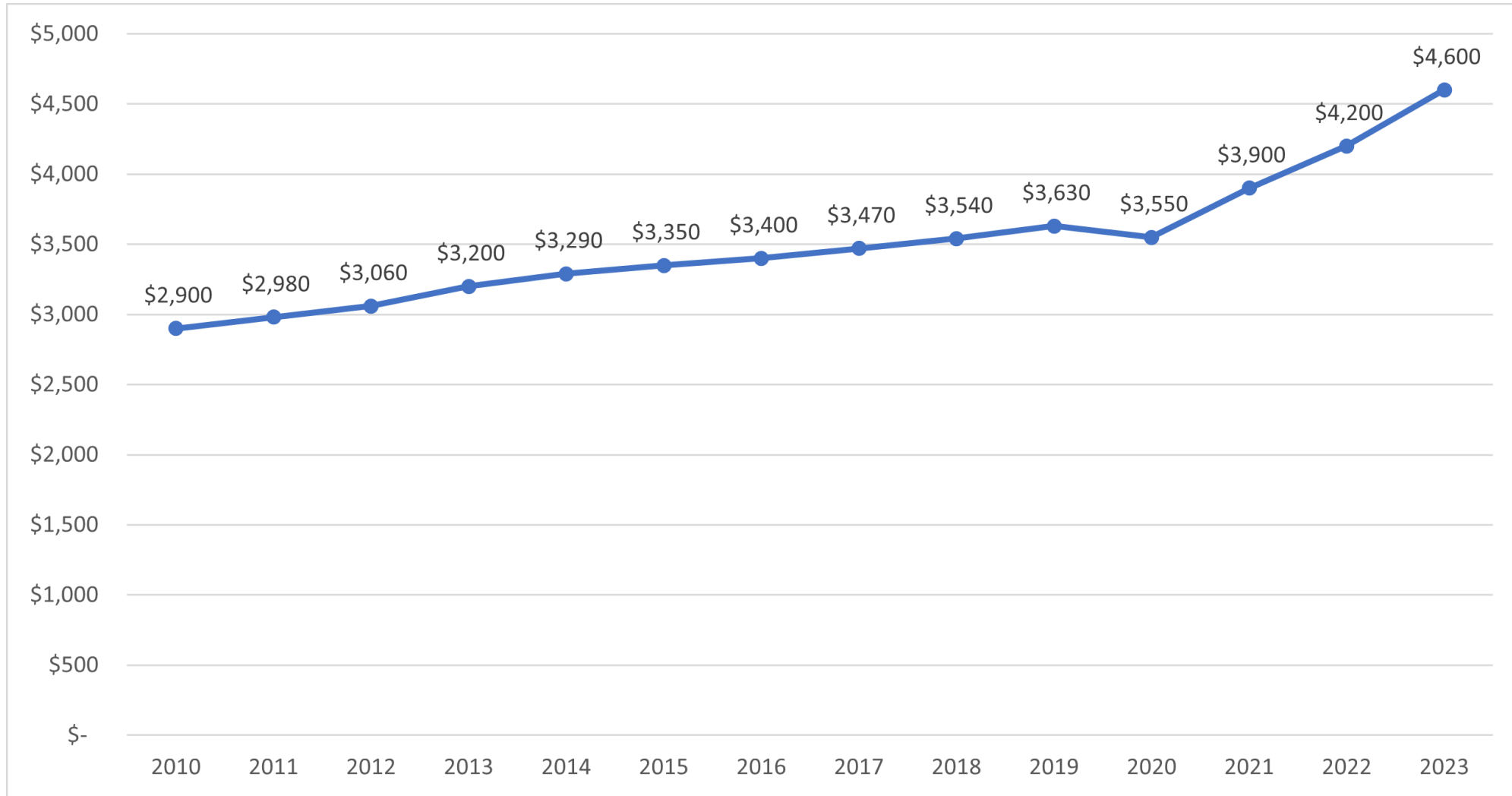




# FARM VIABILITY: NET INCOME BY VALUE OF SALES (ECONOMIC CLASS), 2022 (IN \$1,000)



## FARM VIABILITY: VALUE OF FARMLAND PER ACRE, 2010-2023



**58.6%**  
**increase**  
since  
2010



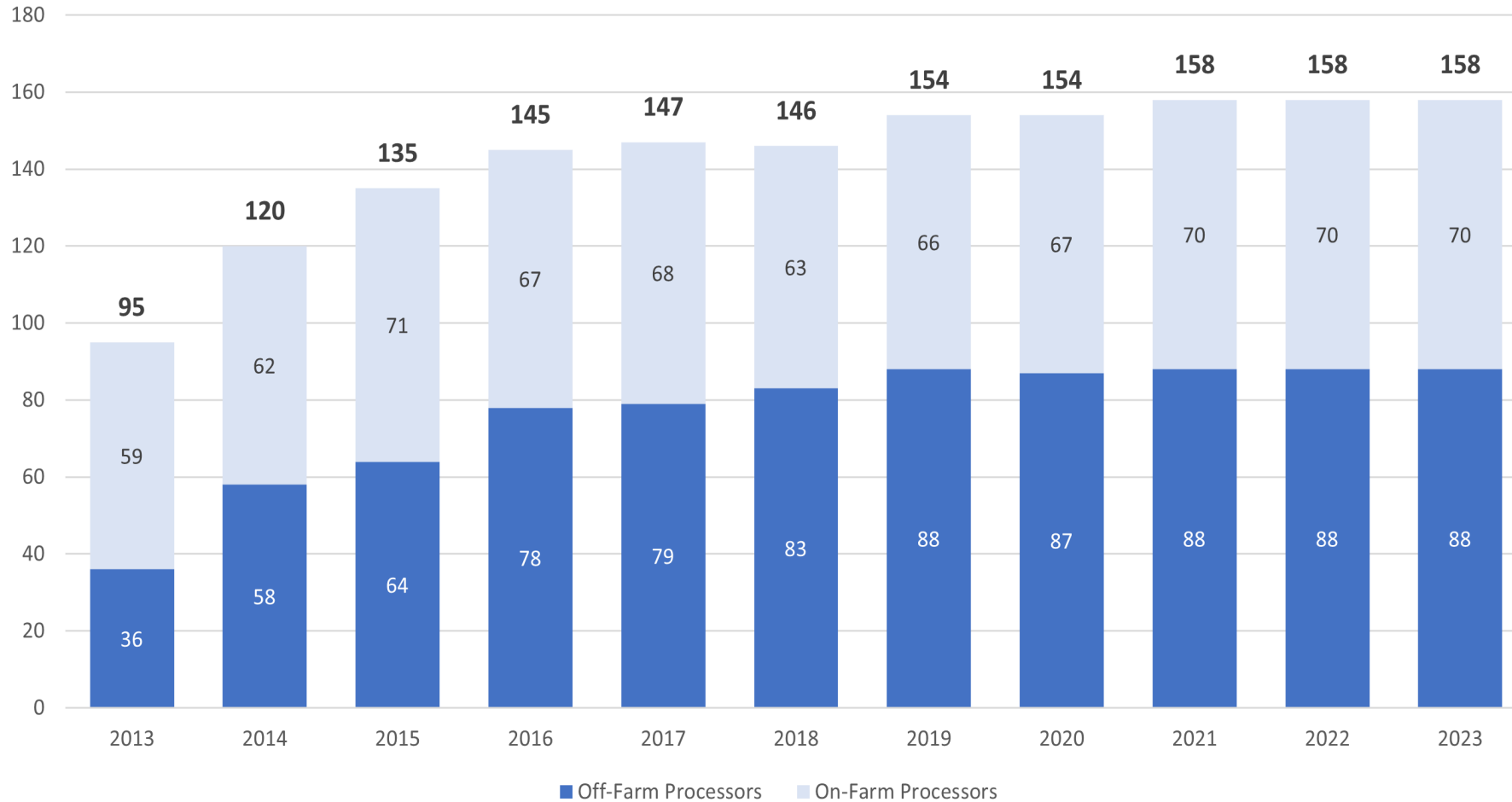
# Food Processing





## PROCESSING FOCUS: DAIRY

Dairy Processors, On- and Off-Farm 2013-2023



Dairy Product Manufacturing a

**\$1.78**

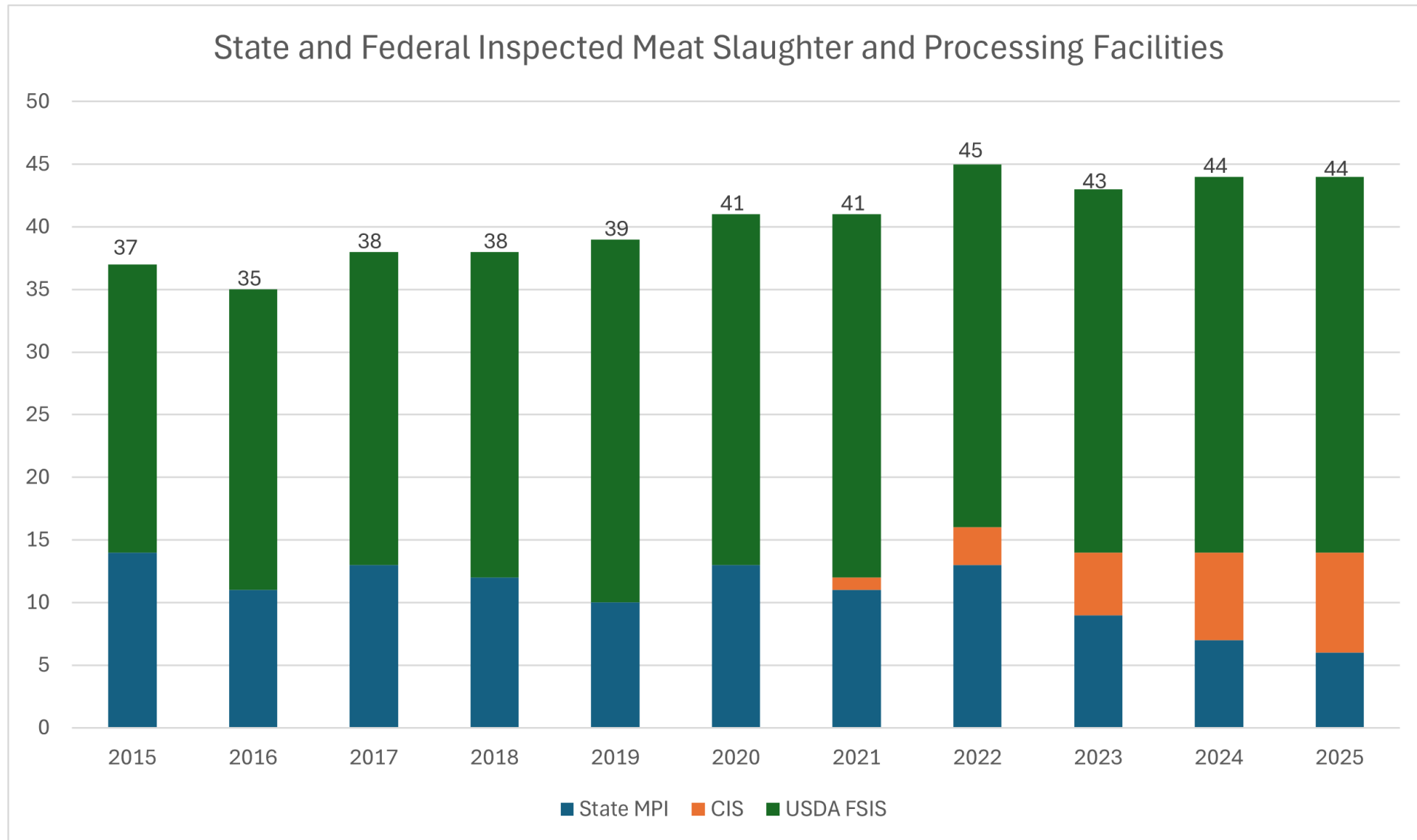
**Billion** Industry

Cheese Manufacturing

alone is a **\$1.19**

**Billion** Industry

## PROCESSING FOCUS: MEAT



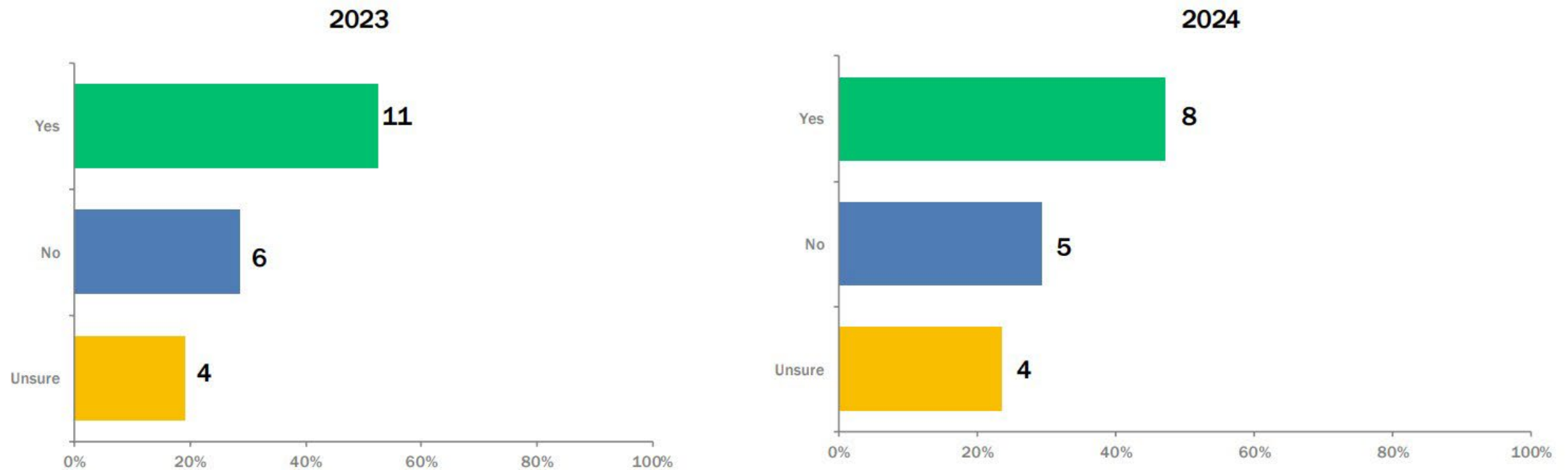


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**PROCESSING FOCUS: MEAT**

# Are you interested in expanding your facility's capacity?

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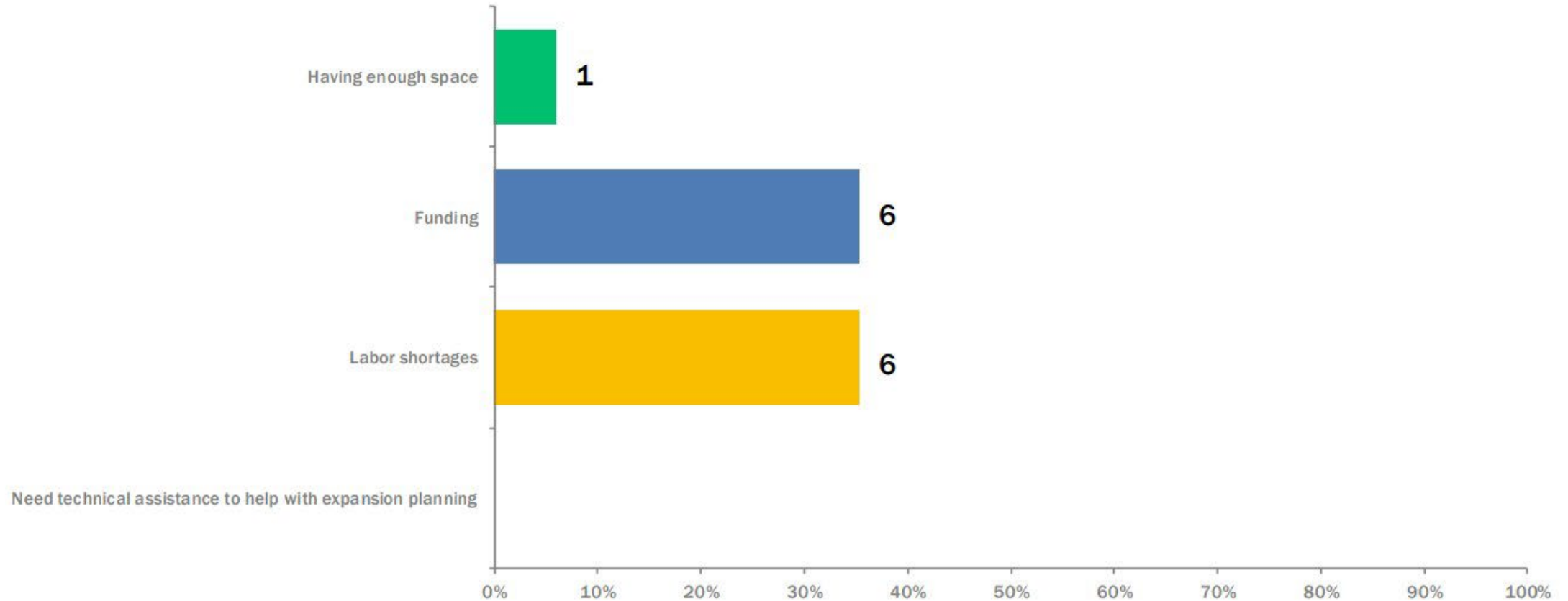


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**PROCESSING FOCUS: MEAT**

# What is your largest barrier to facility expansion?

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**Estimate of 3-year infrastructure investment needs across 5 industries:**

**Livestock Infrastructure Estimate:**  
\$58,800,000

**Dairy Infrastructure Estimate:**  
\$53,150,000

**Produce Infrastructure Estimate:**  
\$46,850,000

**Grains Infrastructure Estimate:**  
\$15,050,000

**Permanent Crops Infrastructure Estimate:**  
\$5,000,000

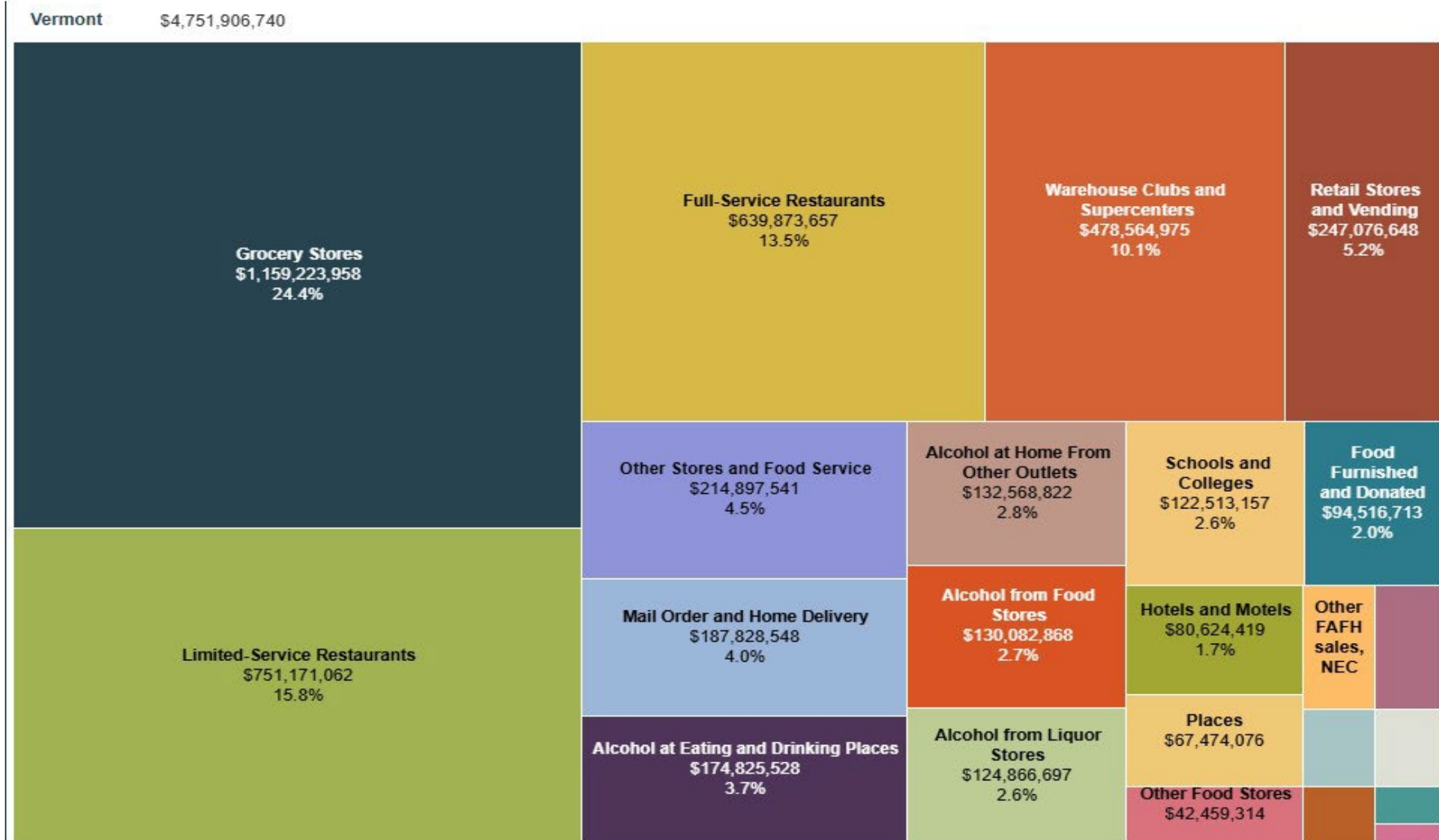


# Markets and Local Food Sales

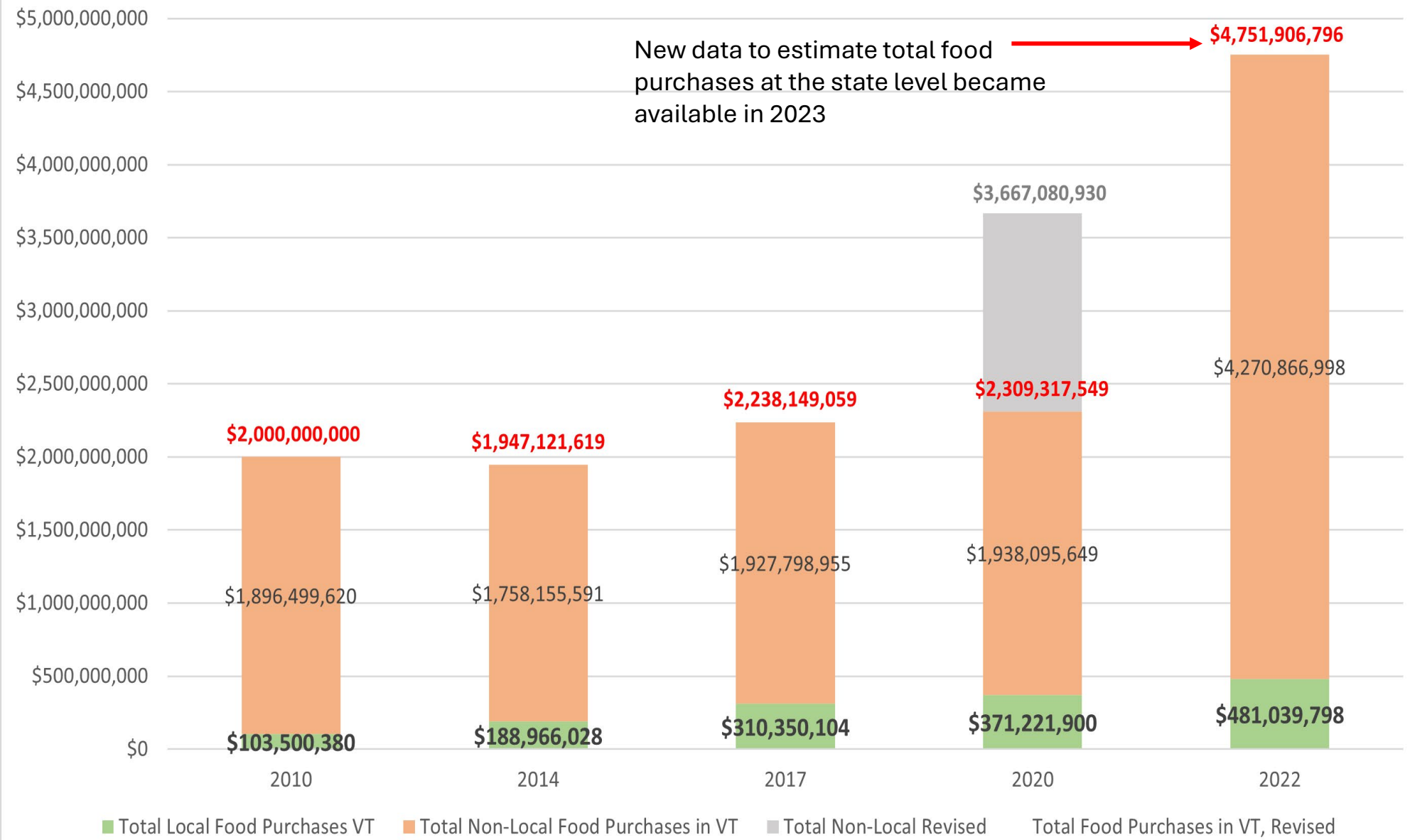




# WHERE DO VERMONTERS SPEND THEIR FOOD DOLLARS?



## Local Food Purchases, 2010-2022



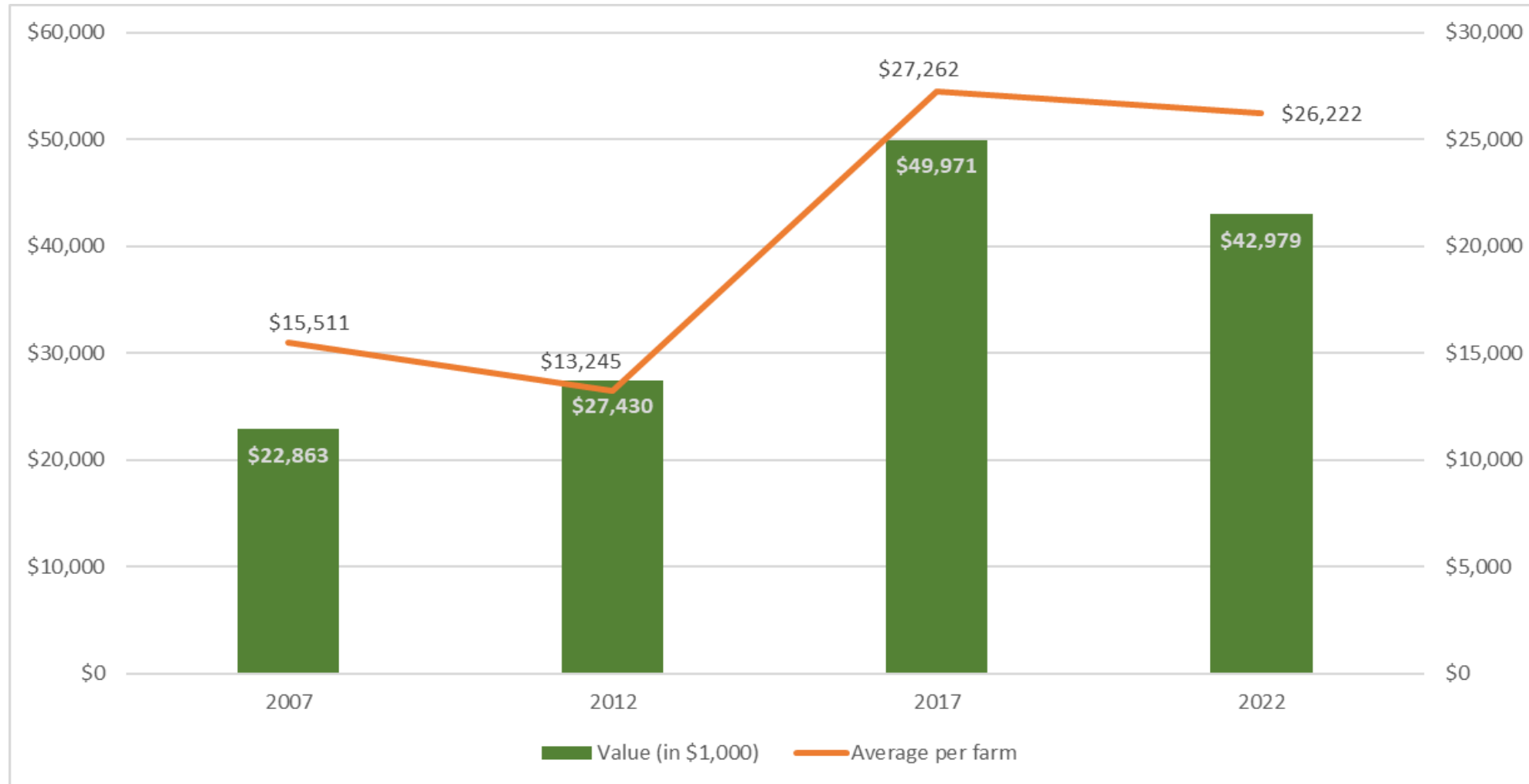
Local food purchases are **10.1%** of total food purchases in Vermont



# LOCAL FOOD SALES BY MARKET CHANNEL

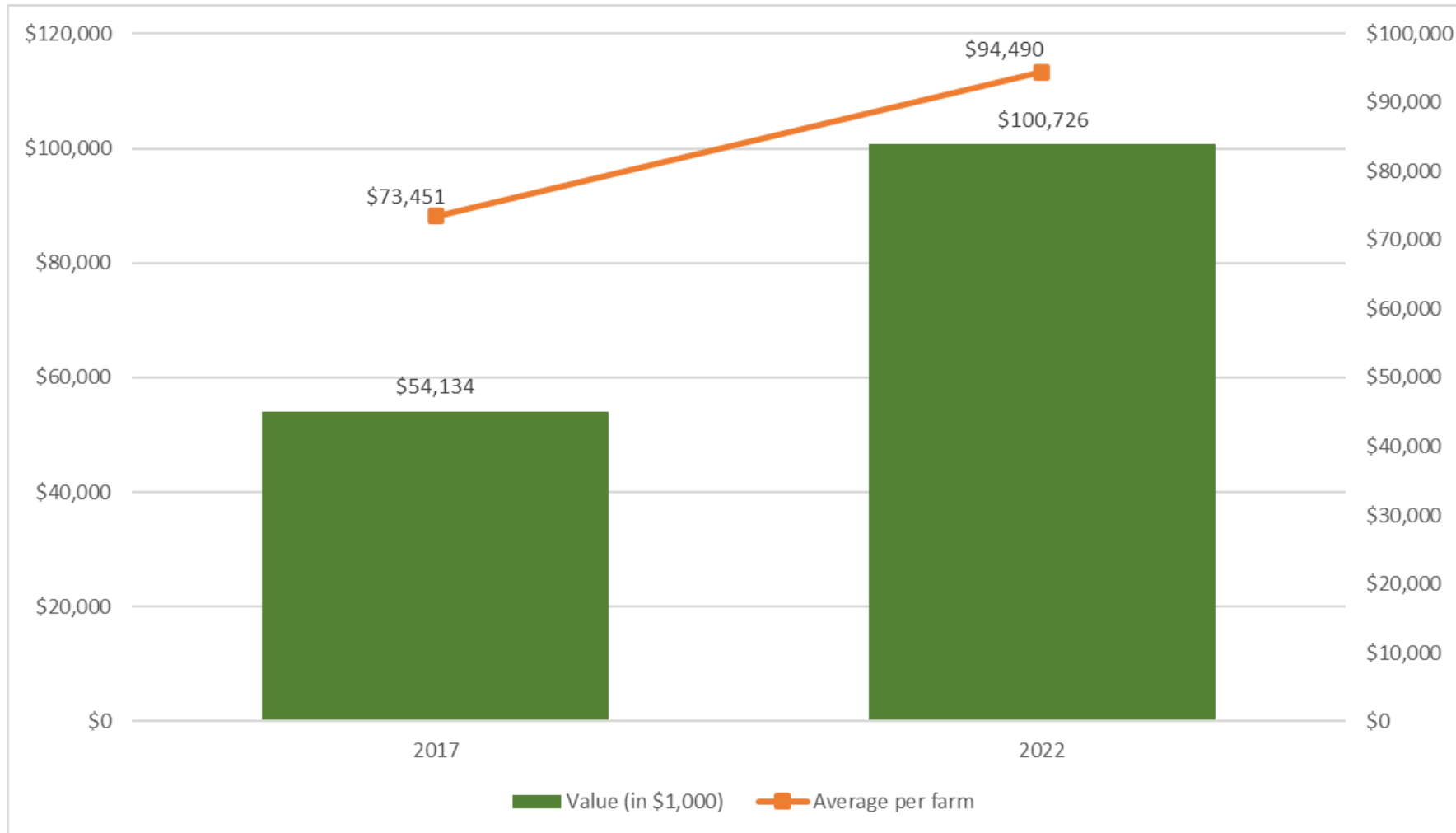


## MARKET CHANNEL FOCUS: DIRECT SALES



## MARKET CHANNEL FOCUS: DIRECT SALES

VALUE OF FOOD SOLD DIRECTLY TO RETAIL MARKETS, INSTITUTIONS, AND FOOD HUBS, 2017-2022 (IN \$1,000)



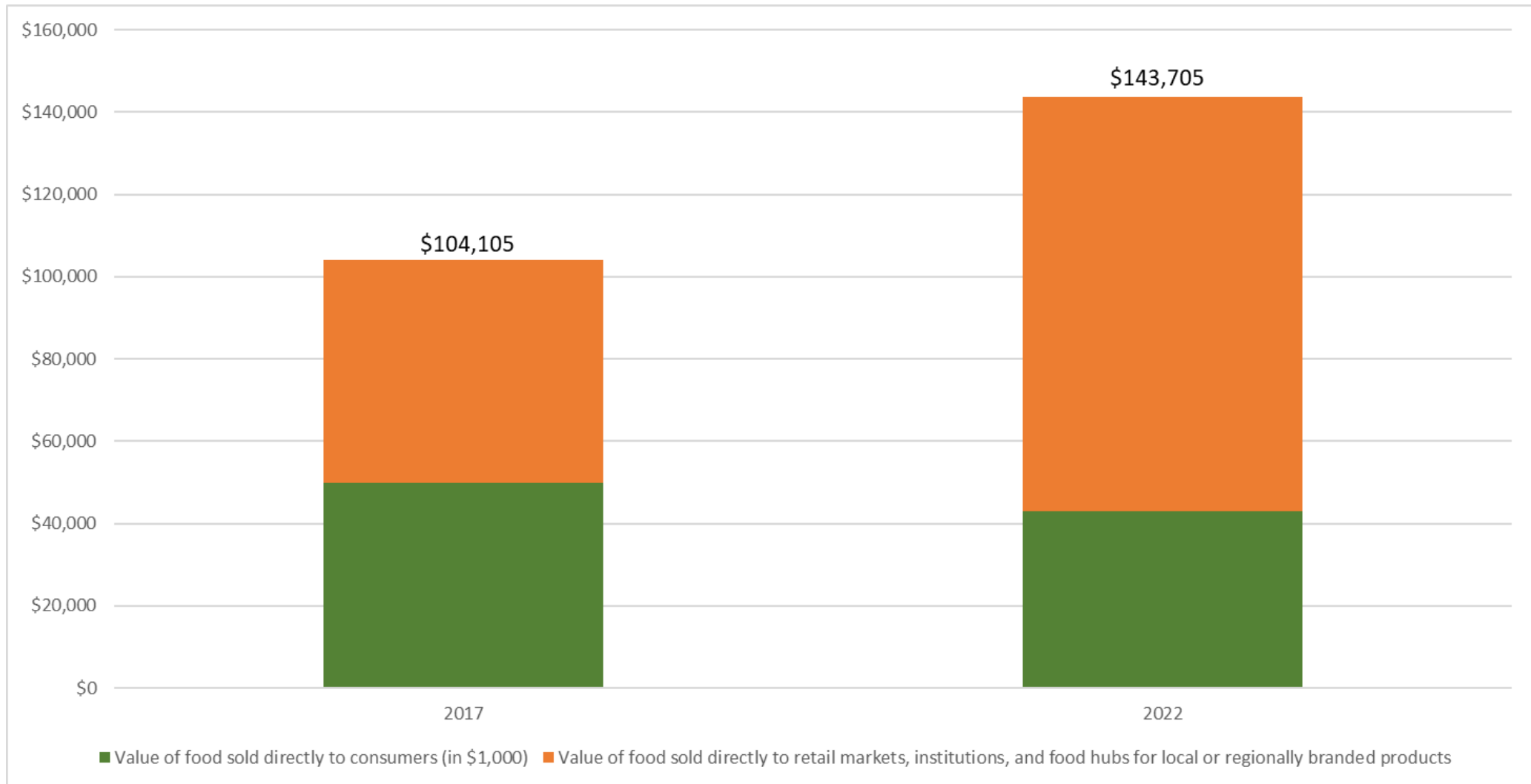
An  
**increase**  
of **86%**=  
**\$46.6**  
**million**



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## MARKET CHANNEL FOCUS: DIRECT SALES

VALUE OF DIRECT SALES COMBINED, 2017-2022 (IN \$1,000)



# **Farmland and Environment**





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## ENVIRONMENTAL SUSTAINABILITY GOALS

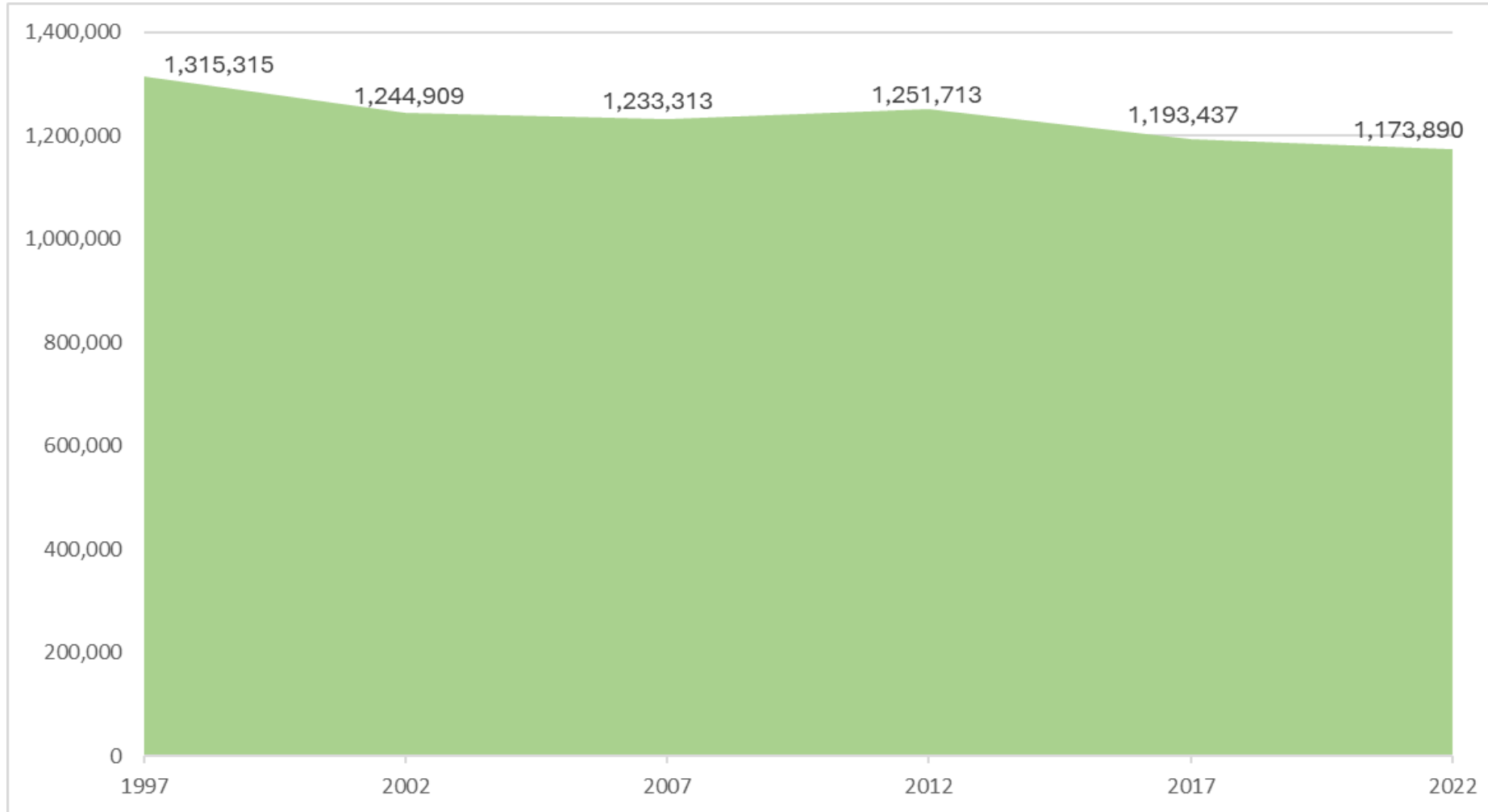
6. Vermont farm and food businesses will increase carbon sequestration and reduce food system-related greenhouse gas emissions, and are able to adapt to climatic changes due to global warming, including floods, droughts, extreme storms, and pest and disease pressures.
7. Vermont farm stewardship is increasing ecological diversity and improving soil and water quality, and farm stewards are supported, compensated, and recognized for their positive contributions to the environment and public good.
8. Vermont's agricultural land remains in productive agricultural use, access to that land is more affordable and equitable, and land-use planning decisions maintain and promote a strong and viable food system.
9. Edible food, food scraps, and other food residuals are used for their highest purpose, and not considered waste.



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## ENVIRONMENT: FARMLAND

### TOTAL ACRES OF FARMLAND, 1997-2022



- **10.8% decrease** since 1997
- **6.2% decrease** since 2012
- **1.6% decrease** since 2017

» **Projected Changes in Land in Agriculture, Business as Usual Scenario**

**TOTAL**

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

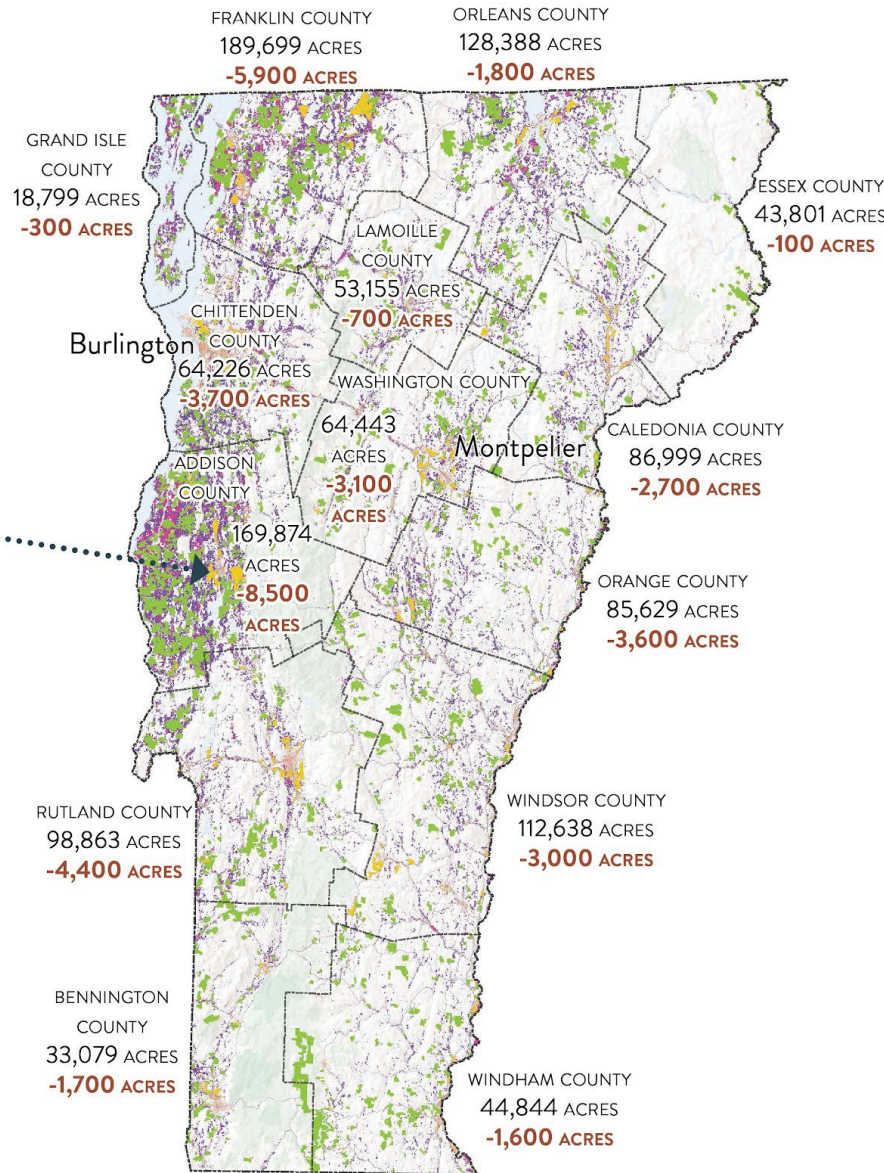
**LAND USES**

- 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](#)



**BUSINESS AS USUAL  
 PROJECTED CHANGES IN LAND  
 IN AGRICULTURE**

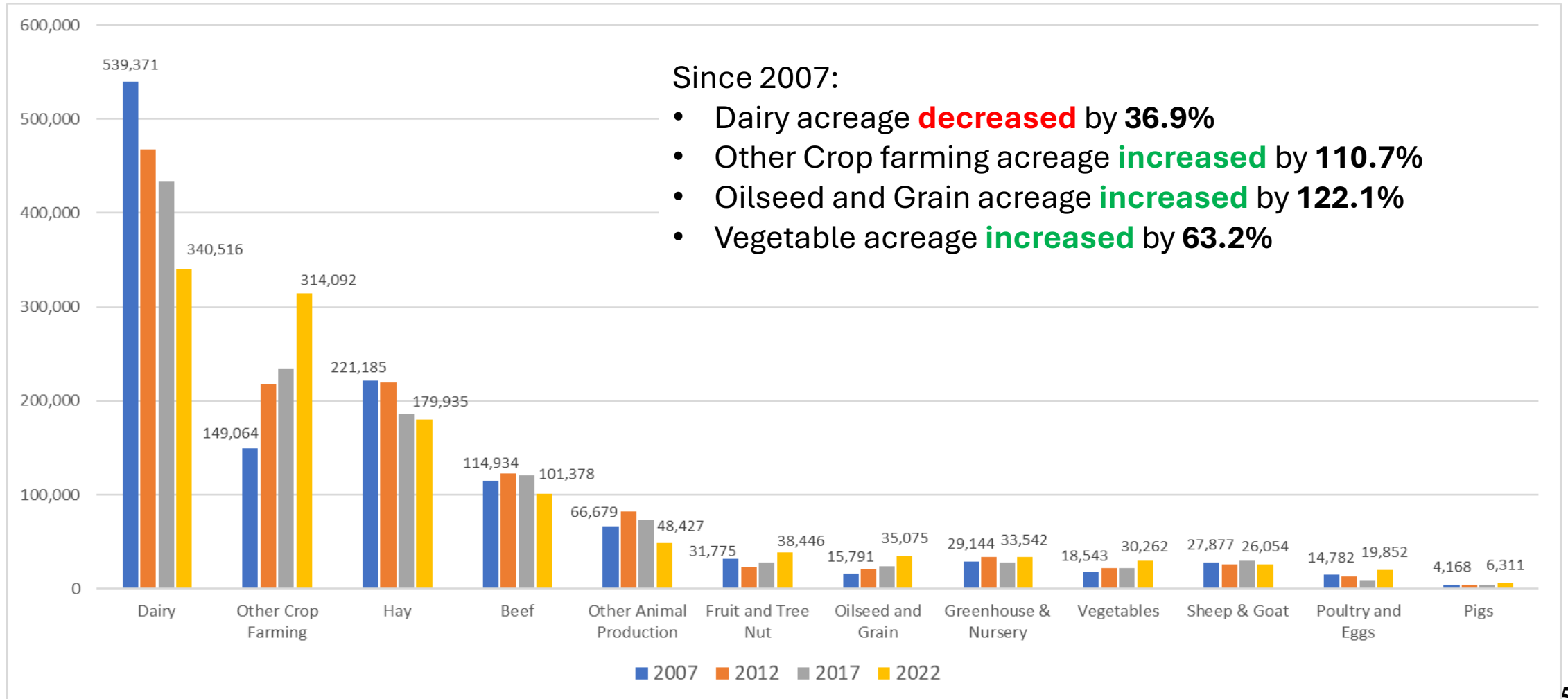
**BY 2040 VERMONT  
 COULD LOSE BETWEEN  
 41,200 - 61,800 ACRES  
 OF FARMLAND, MAINLY  
 IN ADDISON, FRANKLIN  
 AND RUTLAND  
 COUNTIES.**

**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.

# ENVIRONMENT: FARMLAND

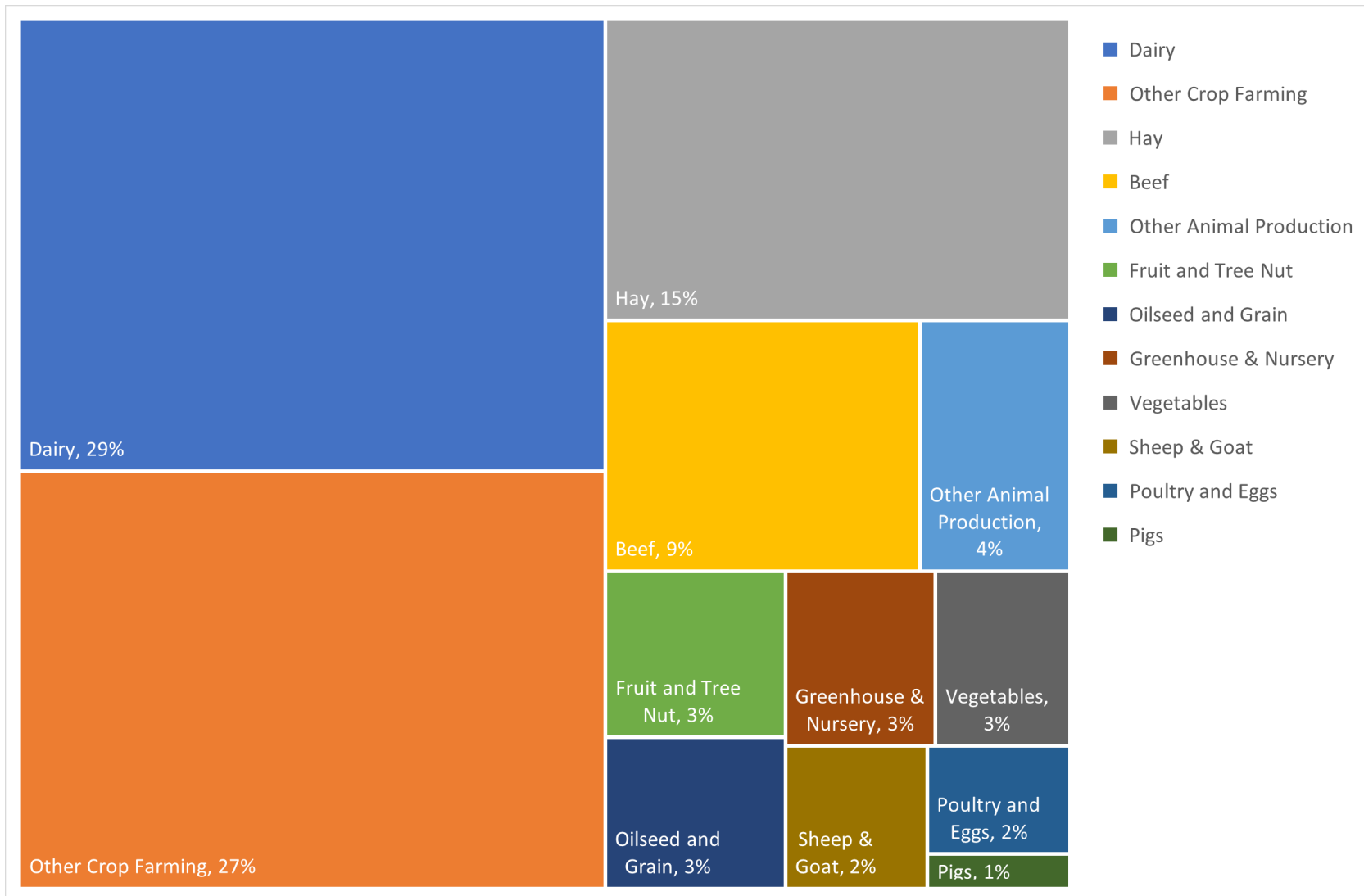
## TOTAL ACRES OF FARMLAND, BY COMMODITY OR COMMODITY GROUP 2007-2022





# ENVIRONMENT: FARMLAND

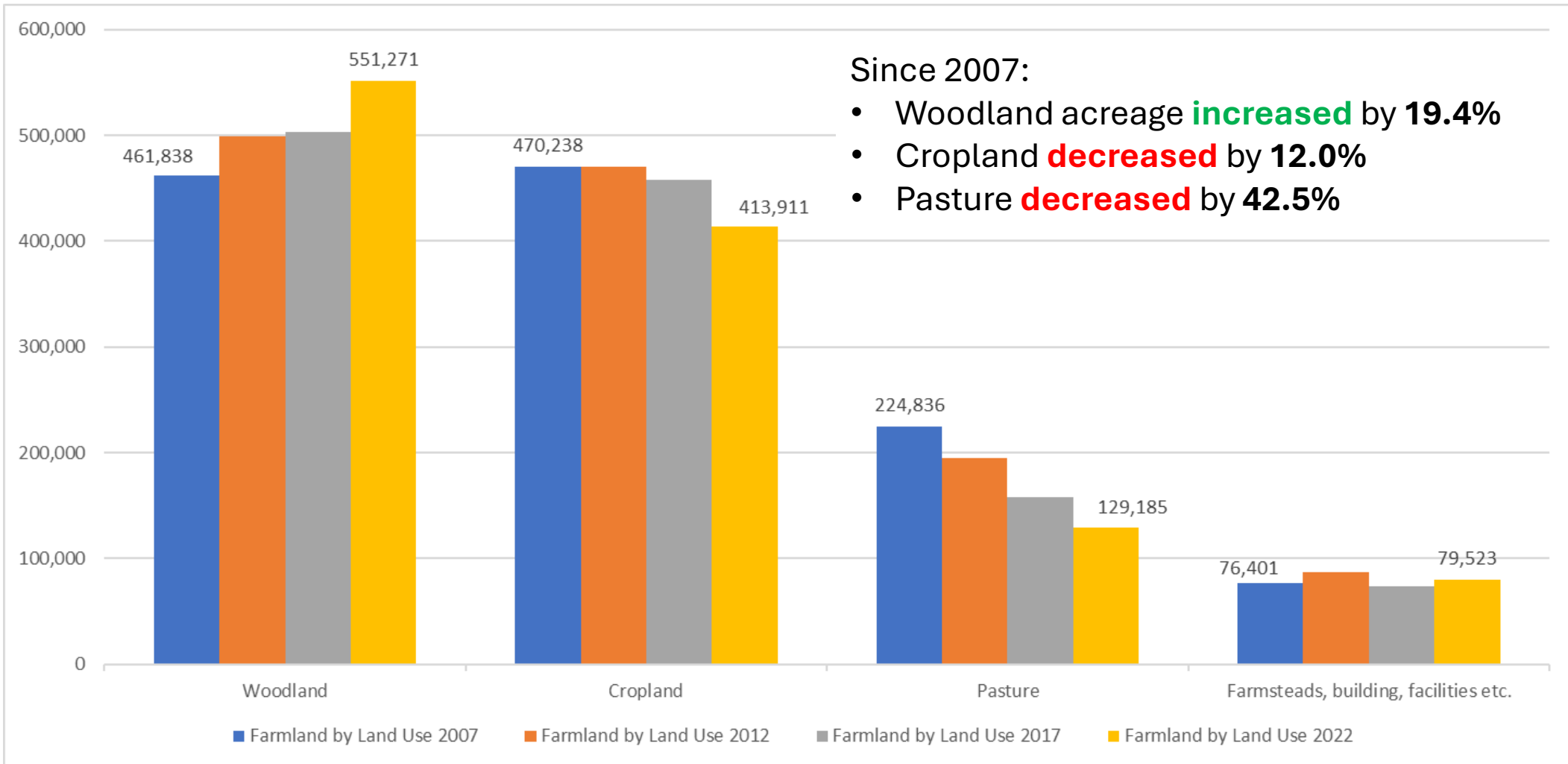
## FARMLAND BY COMMODITY TYPE, PERCENTAGE BREAKDOWN 2022



**89%** of farmland in Vermont is associated with raising and feeding livestock

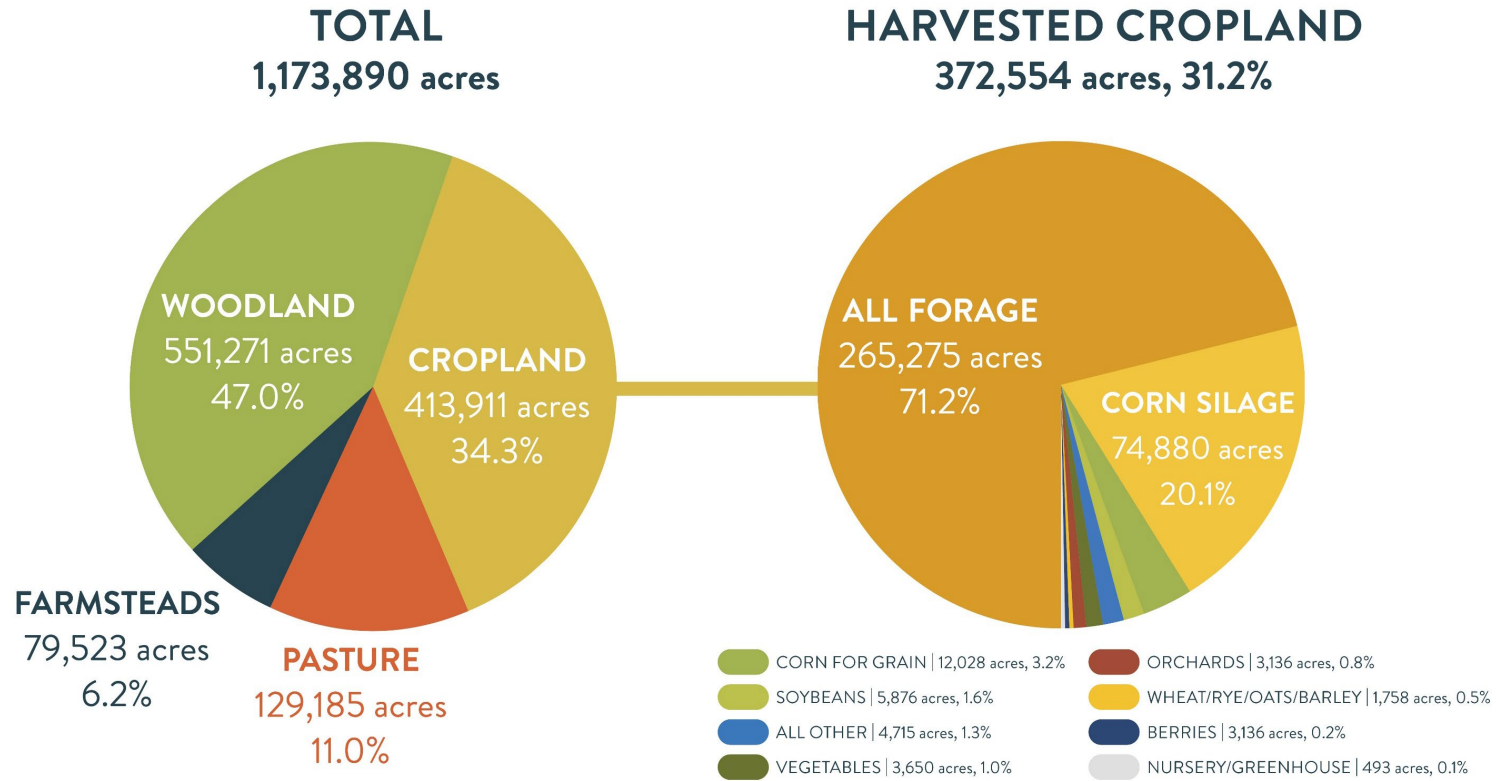
## ENVIRONMENT: FARMLAND

### TOTAL ACRES OF FARMLAND, BY LAND USE TYPE 2007-2022



# ENVIRONMENT: FARMLAND

## TOTAL ACRES OF FARMLAND, BY LAND USE TYPE 2022



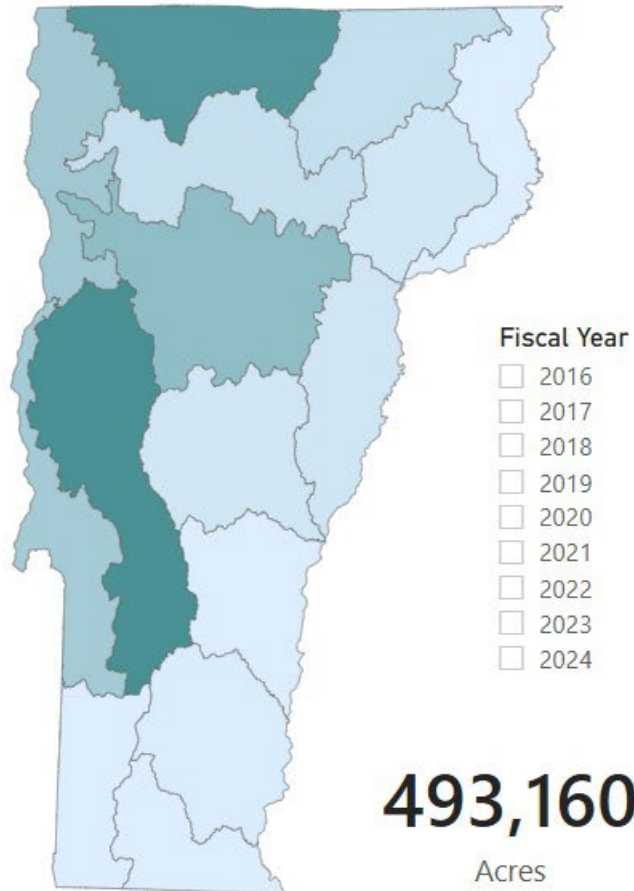
Acres for animal feed equaled **91.3% (340,155 acres)** of harvested cropland and 29.0% of total land in agriculture. Boosting vegetable, fruit, and grain production—whether in the open or indoors—is one way Vermont could help the region.



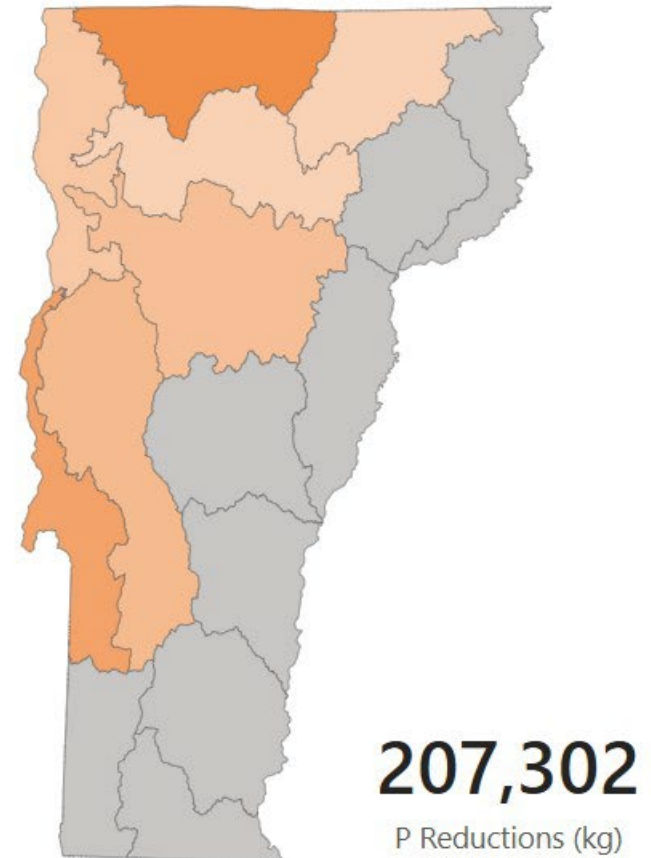
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# WATER QUALITY STEWARDSHIP: ACRES OF CONSERVATION PRACTICES & PHOSPHORUS REDUCTIONS

Acres of Agricultural Conservation Practices



Phosphorus Reductions from Agricultural Conservation Practices



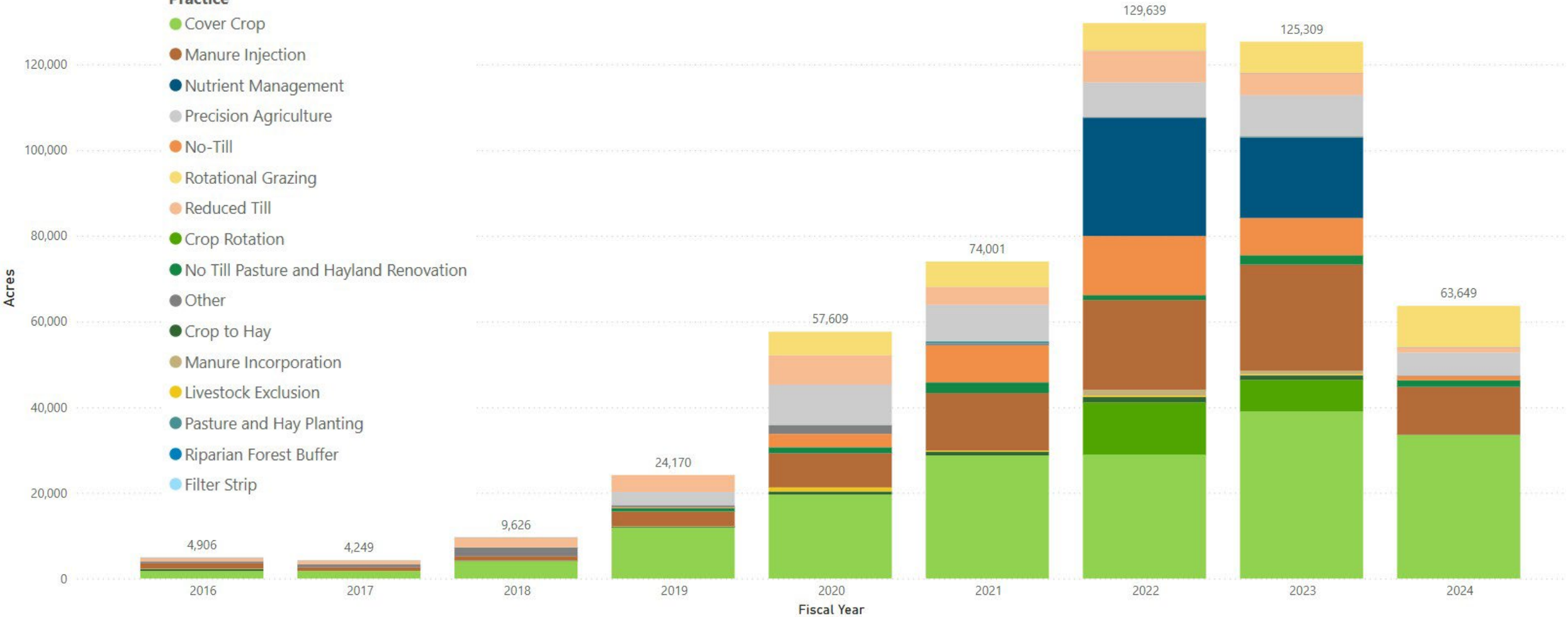
# WATER QUALITY STEWARDSHIP: ACRES OF CONSERVATION PRACTICES IMPLEMENTED

< Back to report

ACRES BY FISCAL YEAR AND PRACTICE

**Practice**

- Cover Crop
- Manure Injection
- Nutrient Management
- Precision Agriculture
- No-Till
- Rotational Grazing
- Reduced Till
- Crop Rotation
- No Till Pasture and Hayland Renovation
- Other
- Crop to Hay
- Manure Incorporation
- Livestock Exclusion
- Pasture and Hay Planting
- Riparian Forest Buffer
- Filter Strip



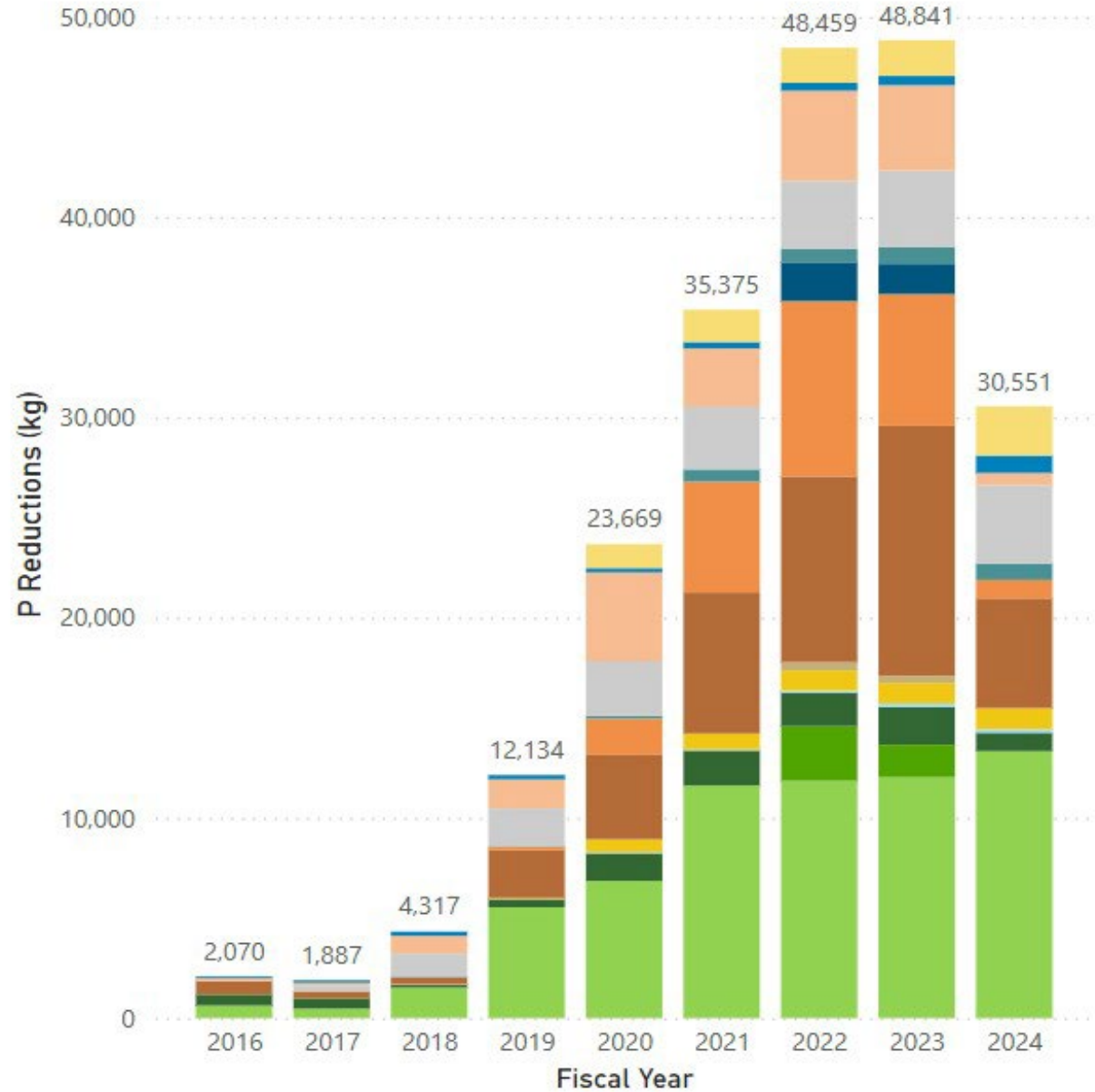
# ENVIRONMENT: WATER QUALITY

## PHOSPHORUS REDUCTIONS AND COST EFFECTIVENESS

### Practice

- Cover Crop
- Manure Injection
- Nutrient Management
- Precision Agriculture
- No-Till
- Rotational Grazing
- Reduced Till
- Crop Rotation
- No Till Pasture and Hayland Renovation
- Other
- Crop to Hay
- Manure Incorporation
- Livestock Exclusion
- Pasture and Hay Planting
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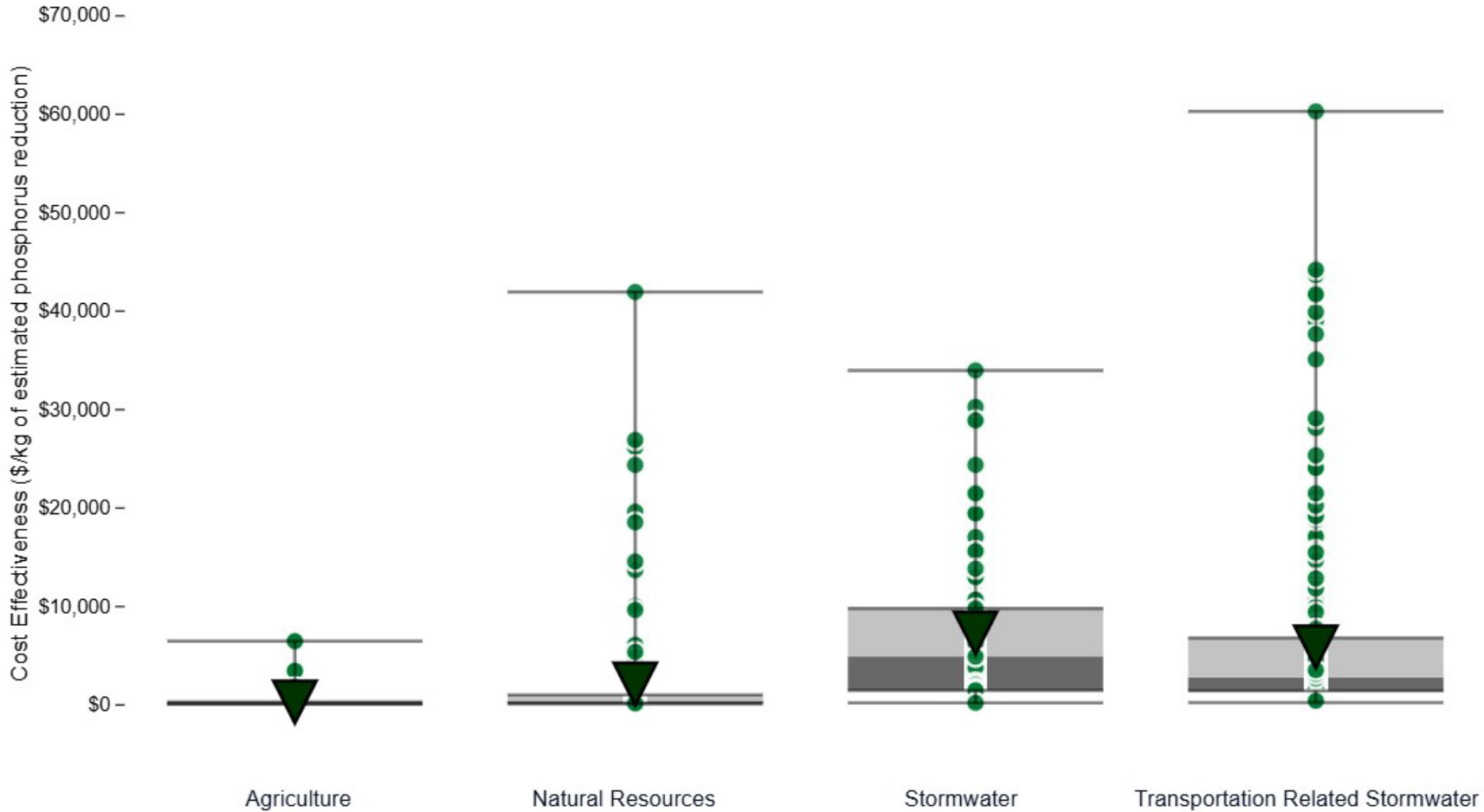
### P Reductions by Fiscal Year and Practice



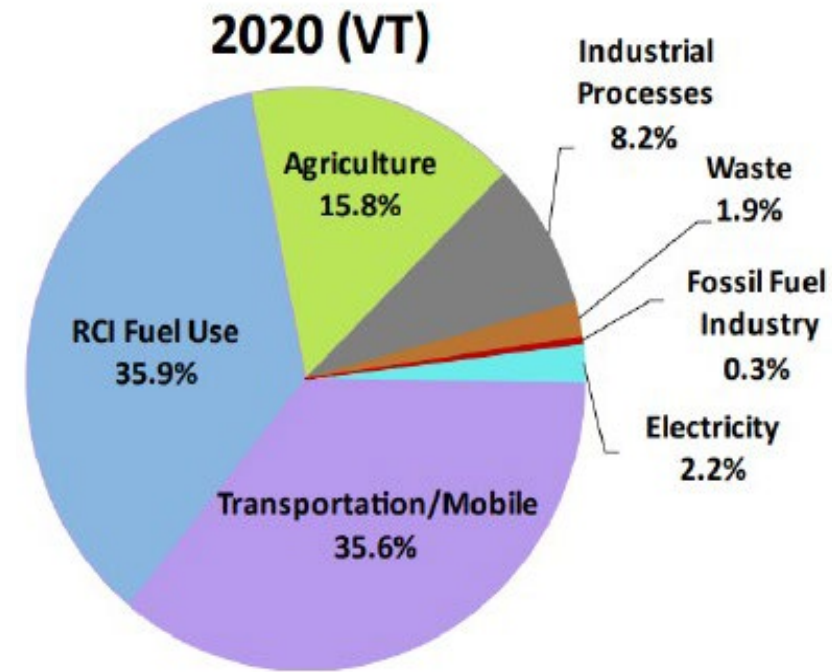
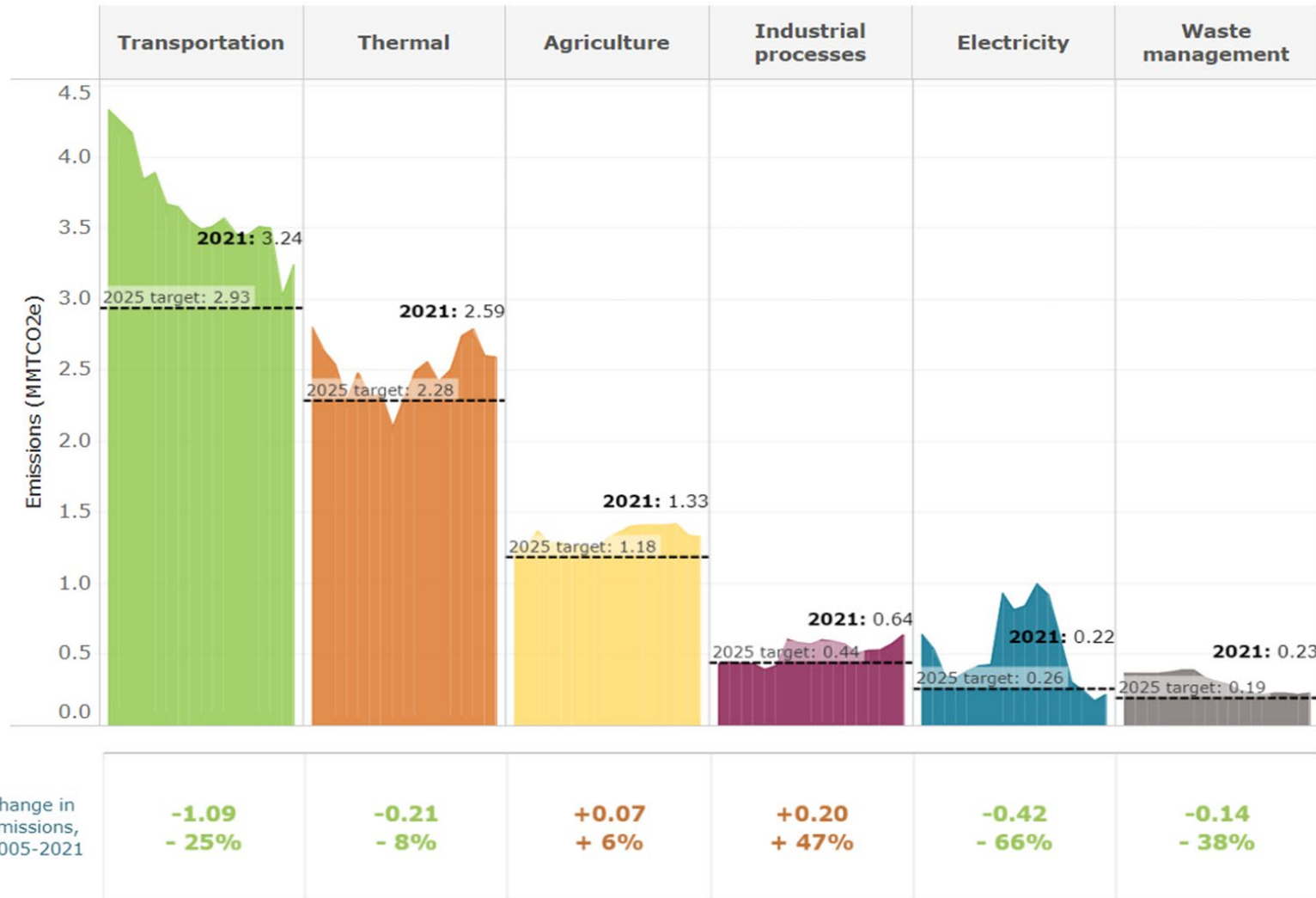
*Due to ongoing projects, data reported in the most recent fiscal year is not complete until the following fiscal year, i.e. fiscal year 2024 data is not complete.*



# WATER QUALITY: PHOSPHORUS REDUCTION COST EFFECTIVENESS



# CLIMATE: GHG EMISSIONS



## CLIMATE: SOURCES OF GHG EMISSIONS FROM AGRICULTURE

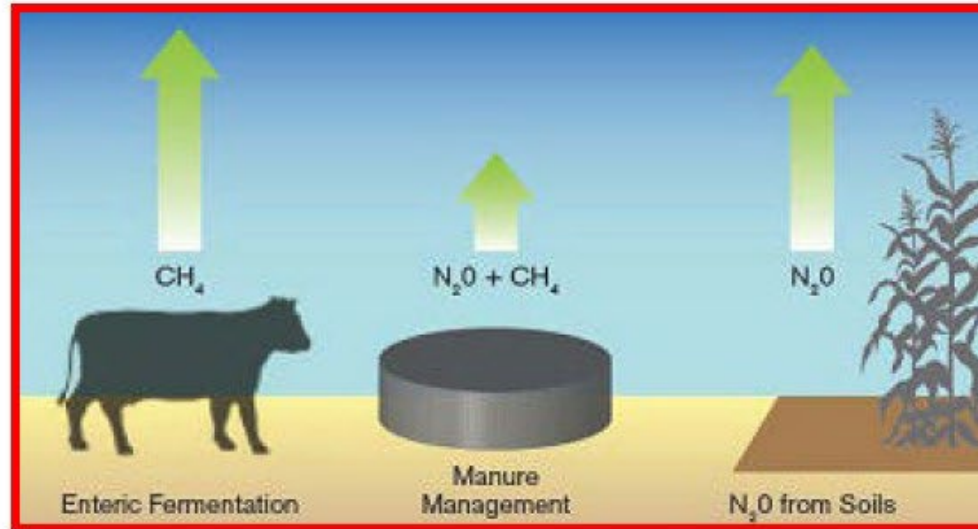
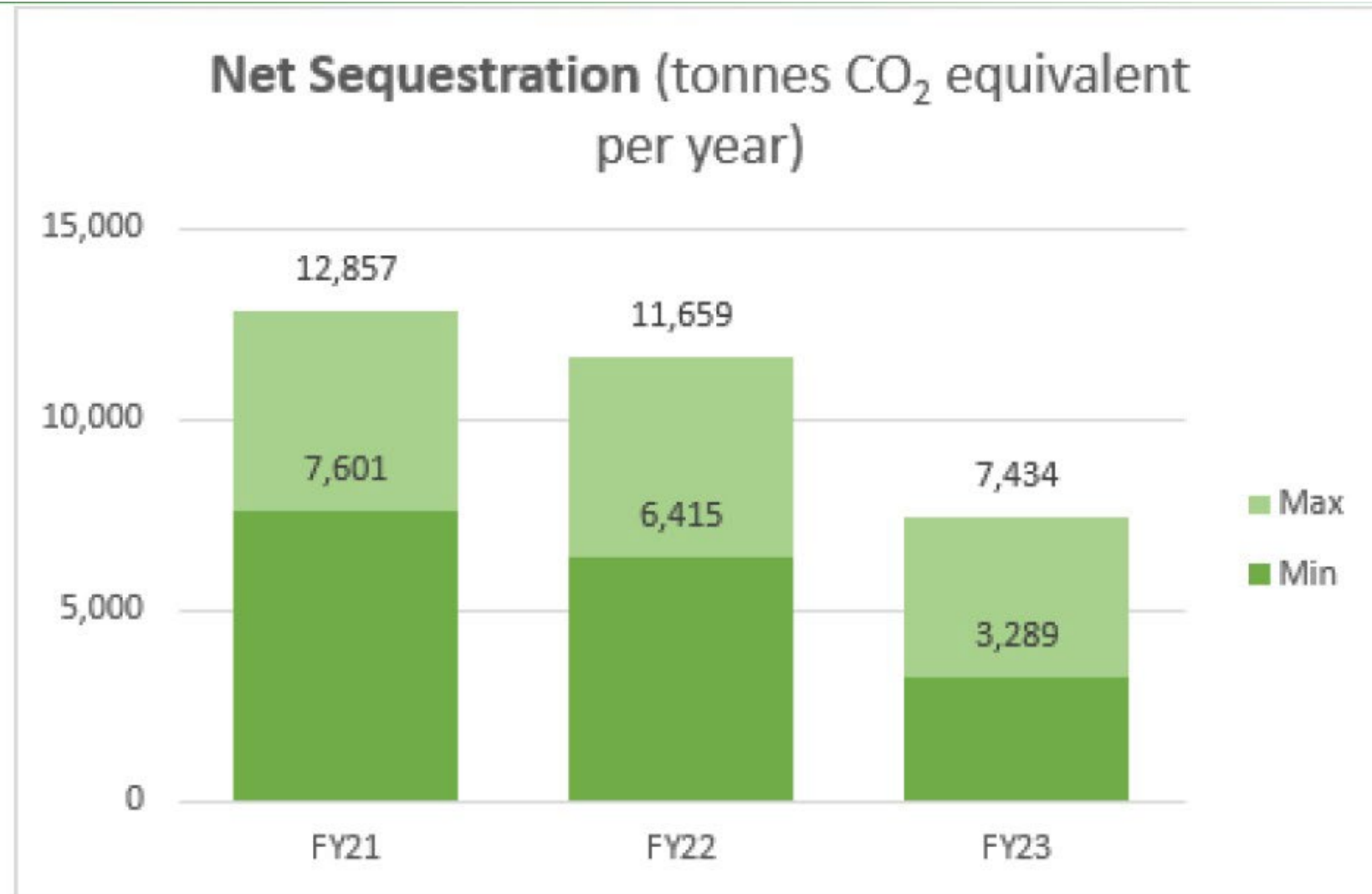


Table 6: GHG emissions contributions of subsectors within the agriculture sector.

Sector	Emissions in MMTCO <sub>2</sub> e						
	1990	2005	2017	2018	2019	2020	
<b>Agriculture</b>	<b>1.24</b>	<b>1.27</b>	<b>1.40</b>	<b>1.40</b>	<b>1.38</b>	<b>1.26</b>	
<i>Enteric Fermentation (CH<sub>4</sub>, N<sub>2</sub>O)</i>	<i>0.70</i>	<i>0.63</i>	<i>0.64</i>	<i>0.64</i>	<i>0.63</i>	<i>0.61</i>	49%
<i>Manure Management (CH<sub>4</sub>, N<sub>2</sub>O)</i>	<i>0.18</i>	<i>0.33</i>	<i>0.35</i>	<i>0.36</i>	<i>0.35</i>	<i>0.33</i>	26%
<i>Agricultural Soils (CH<sub>4</sub>, N<sub>2</sub>O)</i>	<i>0.36</i>	<i>0.30</i>	<i>0.35</i>	<i>0.36</i>	<i>0.37</i>	<i>0.29</i>	23%
<i>Liming and Urea Fertilization (CO<sub>2</sub>)</i>	<i>0.00</i>	<i>0.00</i>	<i>0.05</i>	<i>0.04</i>	<i>0.04</i>	<i>0.03</i>	2%

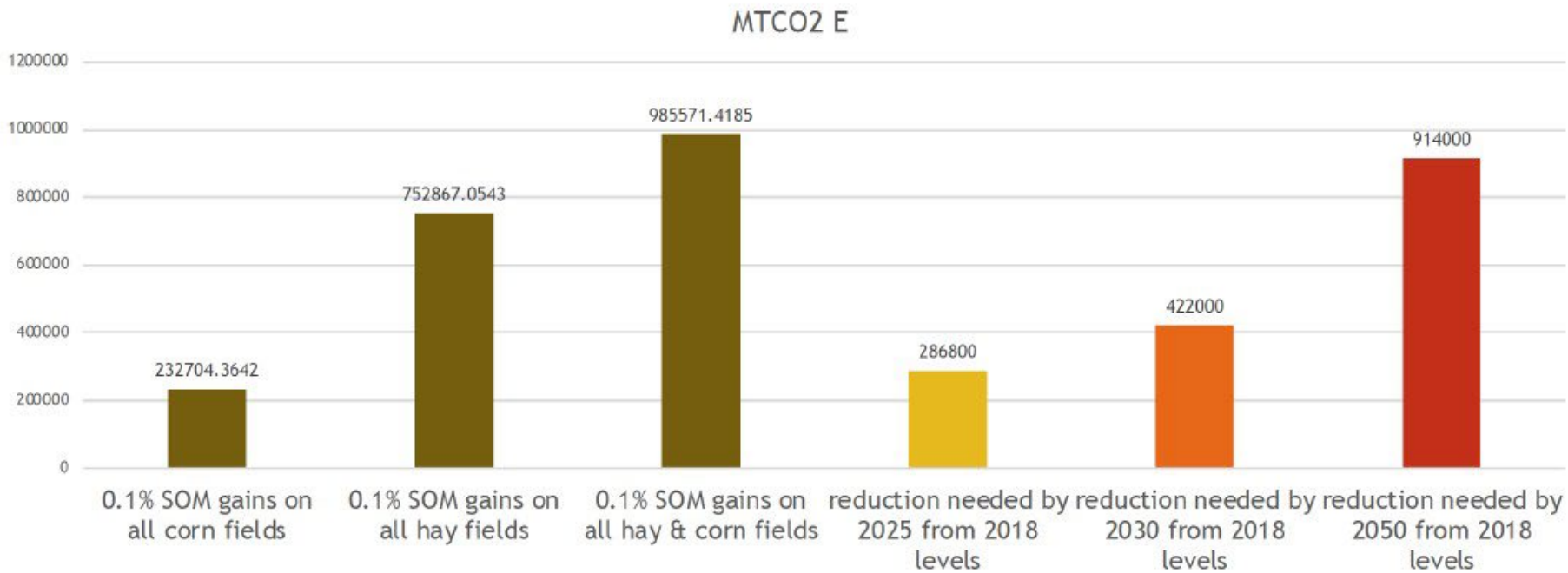


## CLIMATE: NET SEQUESTRATION FROM WATER QUALITY CONSERVATION PRACTICES



At maximum, sequestration from implemented water quality practices is the carbon equivalent to taking **6,946** cars off the road

## CLIMATE: CARBON SEQUESTRATION POTENTIAL FROM ADDING SOIL ORGANIC MATTER



A 0.1% increase in soil organic matter *per year* on corn & hay fields can help Vermont meet its climate change goals in the agriculture sector







# Food Access and Security

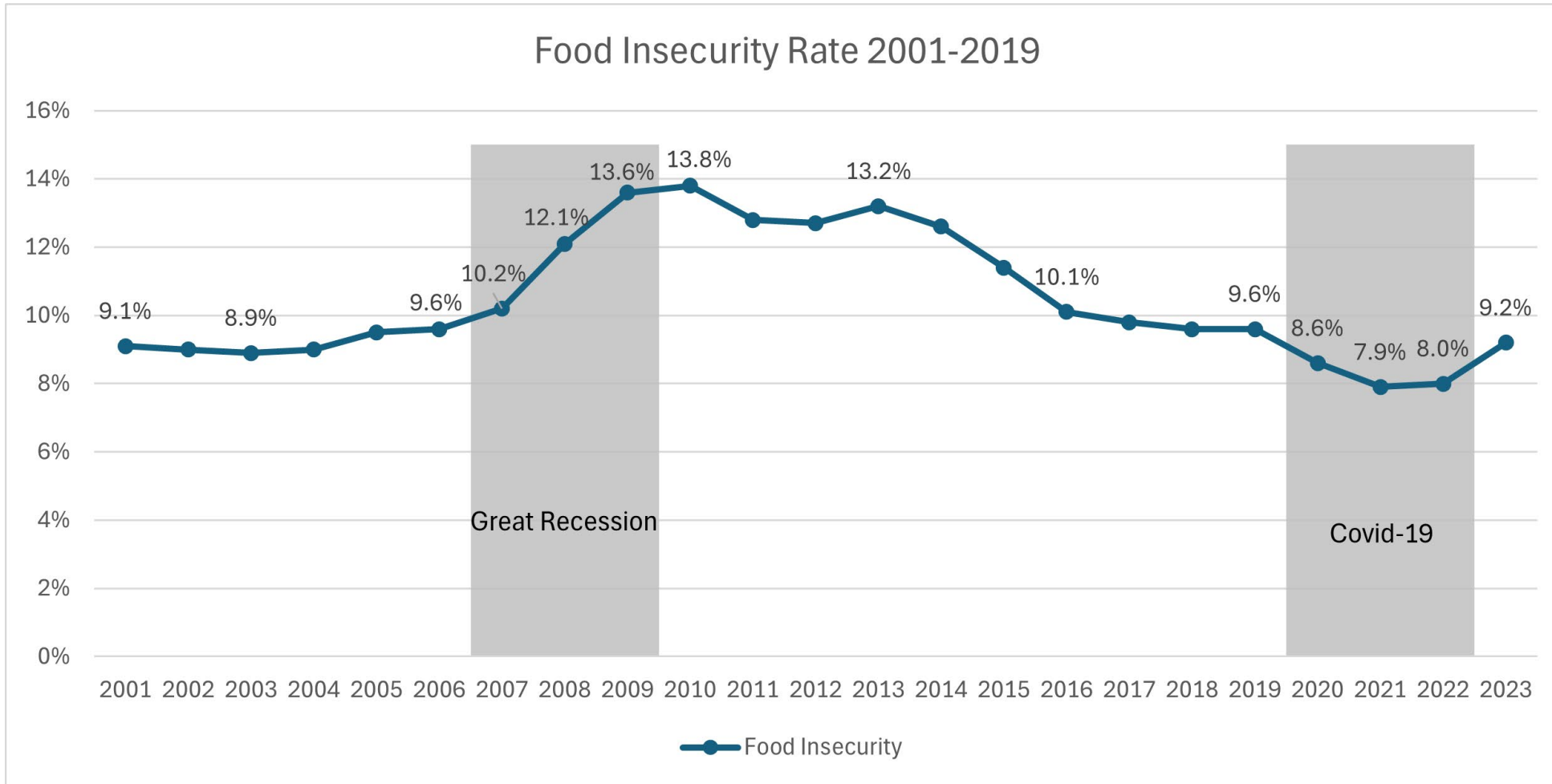




## HEALTHY LOCAL FOOD FOR ALL VERMONTERS GOALS

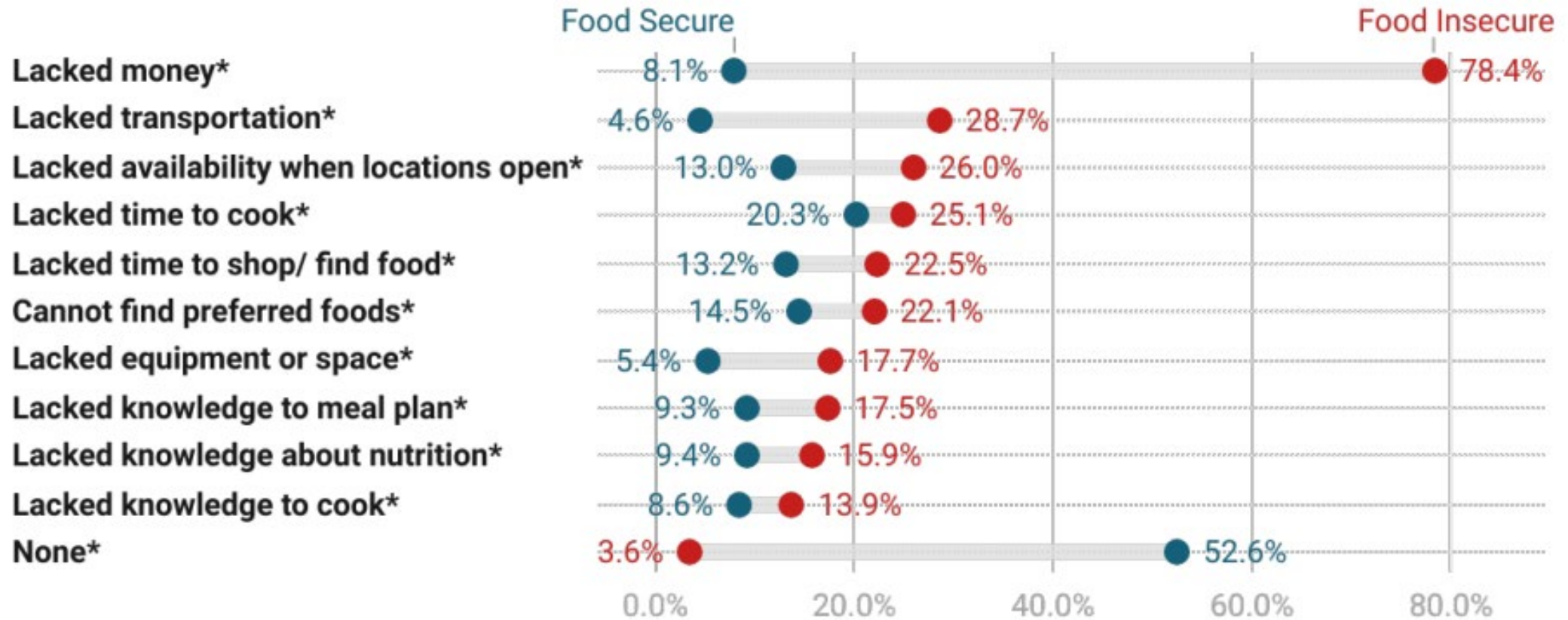
10. The amount of Vermont-grown food that fulfills the dietary and cultural needs of people in Vermont will increase.
11. All people in Vermont increasingly have the financial resources to access local food, including through programs that provide support for purchasing local food.
12. All people in Vermont are able to access locations in which local food is sold, served, or provided.
13. All people in Vermont can access the knowledge, skills, and resources to select, grow, hunt, fish, forage, process, store, and prepare local food.
14. Vermont's food system is resilient and able to provide adequate and accessible healthy local food in the face of emergencies—including climate-related natural disasters.

# FOOD ACCESS AND SECURITY: USDA FOOD INSECURITY RATE



In response to Covid-19, average monthly SNAP benefits per participant increased **102%** in Vermont, from \$122 in 2019, to \$247 in 2021.

## FOOD ACCESS AND SECURITY: FOOD ACCESS CHALLENGES

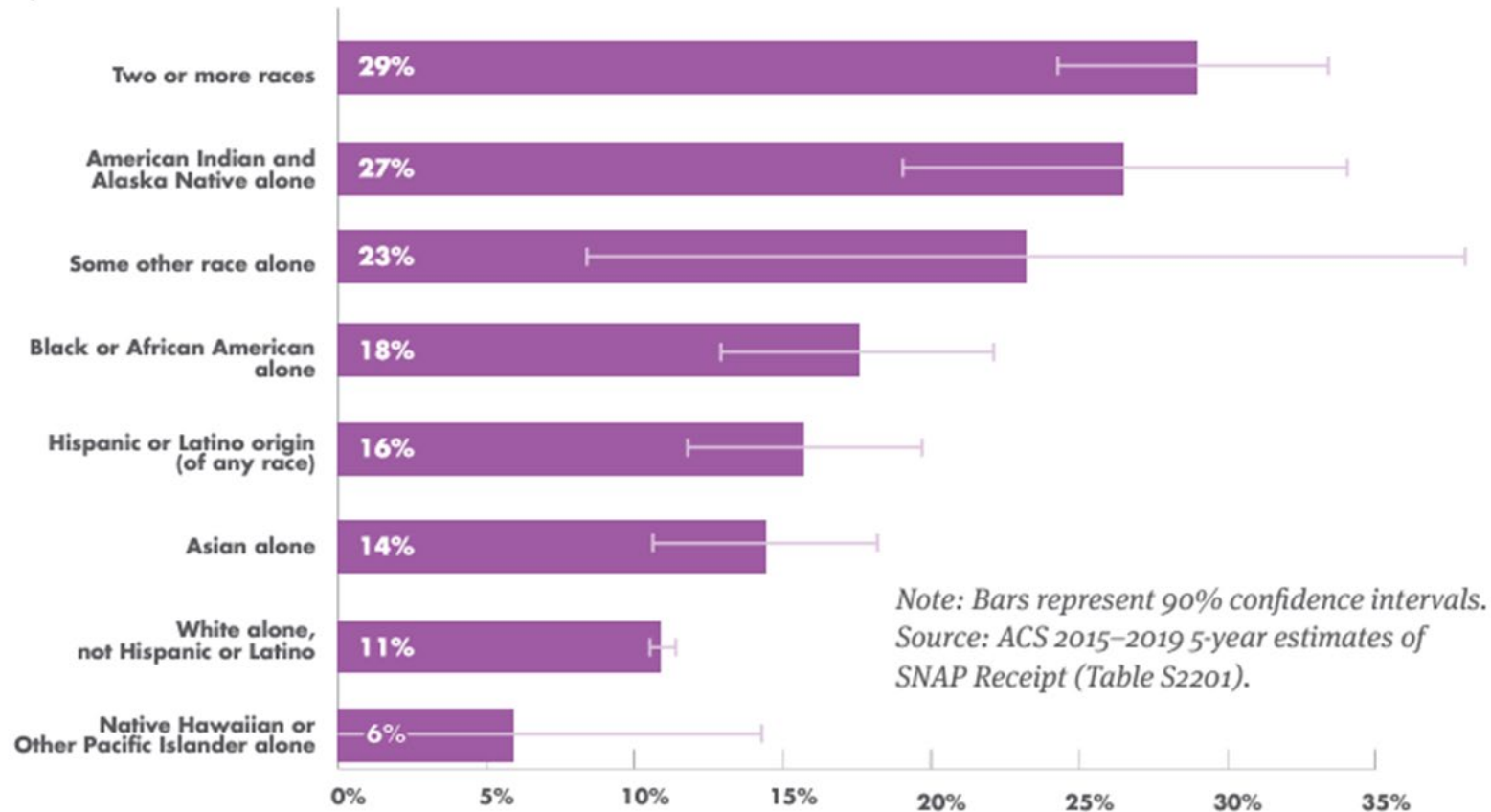




# FOOD ACCESS AND SECURITY: VARIANCES ACROSS DIFFERENT DEMOGRAPHIC GROUPS

## Percentage of Vermont Households Receiving SNAP by Race/Ethnicity of Householder

Vermonters who identify as a race or ethnicity other than white receive SNAP at higher rates than those who identify only as white.

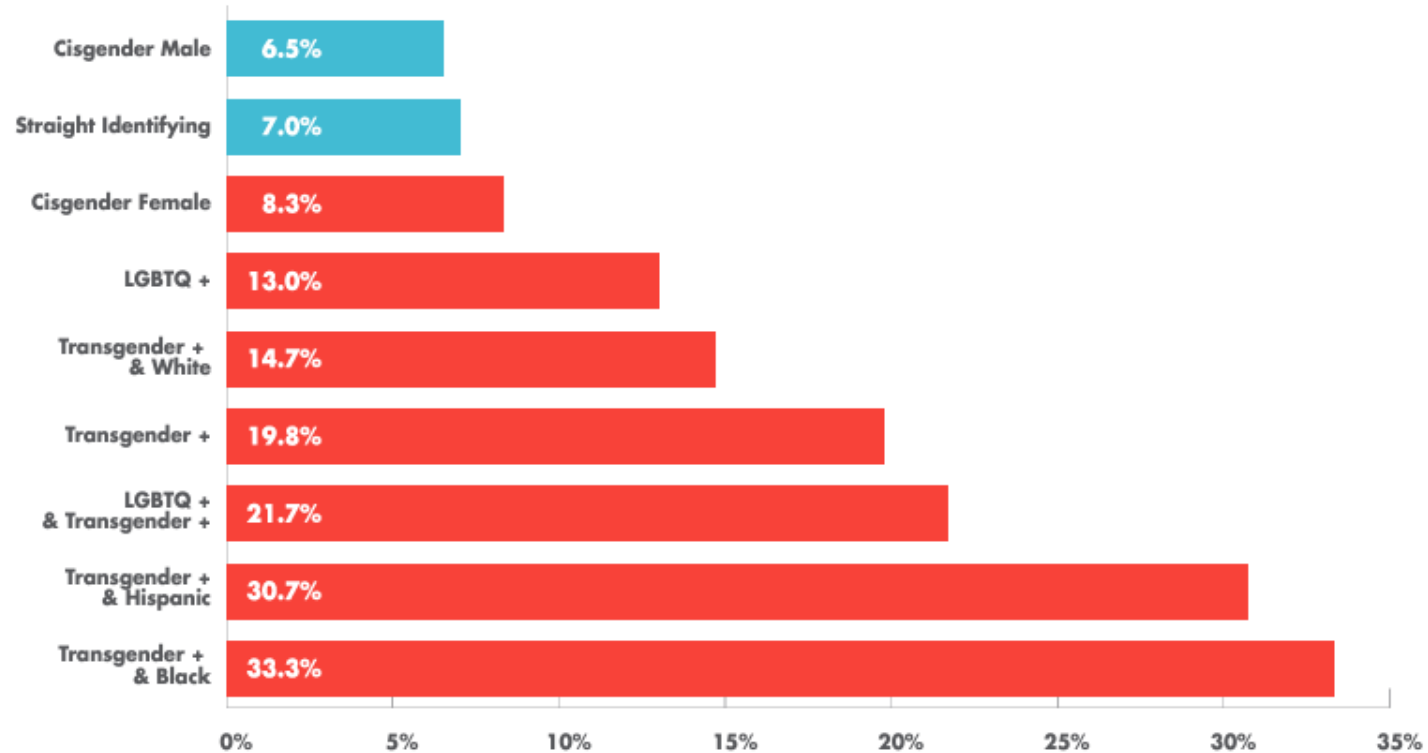


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# FOOD ACCESS AND SECURITY: VARIANCES ACROSS DIFFERENT DEMOGRAPHIC GROUPS

## LGBTQ+ Food Insecurity in New England

The chart below illustrates research on food security among New England residents who are LGBTQ+. It shows that LGB+ (lesbian, gay, bisexual, and other non-heterosexual) New Englanders experience food insufficiency at nearly twice the rate of heterosexuals. Transgender+ (transgender, genderqueer, gender nonbinary, and other non-cisgender) New Englanders experience food insufficiency at two to three times the rate of cisgender individuals. Additionally, the research found that LGBTQ+ New Englanders of color experience disproportionately higher rates of food insufficiency, with one in three Black transgender+ New Englanders experiencing food insufficiency. Bars in red indicate food insecurity rates above the state average of 8%.



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# FOOD ACCESS AND SECURITY: VARIANCES ACROSS DIFFERENT DEMOGRAPHIC GROUPS

## Percentage of Vermont Households Receiving SNAP by Disability Status

Households including an individual with a disability received SNAP at more than three times the rate of households with no individuals with a disability (see chart below). Fifty-five percent (55%) of households that received SNAP included one or more individuals with a disability (data not shown).



*Note: Bars represent 90% confidence intervals.*

*Source: ACS 2015–2019 5-year estimates of SNAP Receipt (Table S2201).*





**THANK YOU!**