





RHODE ISLAND FOOD STRATEGY 2030

RI Food Strategy 2030 envisions a collaborative, inclusive, and regenerative food system that nourishes everyone and builds resilience through strong regional connections







Acknowledgements

A Rhode Island food system plan would not exist without the farmers, fishermen, line cooks, chefs, retailers, food manufacturers, and many others who tend the soils, brave the seas, and create nourishing food for Rhode Islanders— thank you!

The development of the RI Food Strategy 2030 was led by the Rhode Island Commerce Corporation (RI Commerce) in collaboration with the Department of Environmental Management (DEM), Department of Health (RIDOH), and many partners across the state's food system. Special thanks to the Rhode Island Food Policy Council (RIFPC) for its support, including project design, fundraising, content contribution, and engagement support for this strategy update.

Central to this strategy are 23 food system briefs, authored by 36 individuals and supported by 122 contributors—including state agency staff, members of the Narragansett Indian Tribe, institutions, local businesses, organizations, and engaged community members—who helped shape a shared vision for a more fair, sustainable, and resilient food future. These briefs are included in their entirety and represent the views and perspectives of the authors and contributors.

Many thanks to RI Food Strategy 2030 funders:

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RHODE ISLAND COMMERCE



Letter from IFNPAC

Rhode Island's food system has long been a pillar of the state's economy, environment, and public health. In recent years, it has faced unprecedented challenges—from the disruptions of a global pandemic to the ongoing impacts of climate change and economic inequities. Yet, through these hardships, Rhode Islanders have shown resilience, innovation, and collaboration, underscoring the essential role food plays in sustaining healthy communities and driving economic growth.

For the past thirteen years, since the formation of the Interagency Food and Nutrition Policy Advisory Council (IFNPAC), Rhode Island has worked to identify and address barriers to building a strong, sustainable food economy and promoting healthy nutrition practices. The launch of the state's first comprehensive Food Strategy in 2017, alongside the appointment of Rhode Island's first Director of Food Strategy, provided IFNPAC with the shared vision and capacity to make meaningful progress. Over the years, partnerships between state agencies, industry leaders, and community organizations have proven to be Rhode Island's greatest strength in advancing this work.

Today, the food system employs over 72,000 individuals and remains a major contributor to the state's economy. However, significant challenges persist. Nearly one in four Rhode Islanders struggle with food insecurity, wages in the food sector remain too low to meet the rising cost of living, and climate change threatens the long-term stability of food production. These realities reinforce the urgent need for continued investment in a food system that is resilient, equitable, and sustainable.

Updating the state's food strategy has always been a collaborative effort, shaped by the individuals, businesses, nonprofits, and institutions dedicated to strengthening Rhode Island's food system. The RI Food Strategy 2030 renews our commitment to ensuring that every Rhode Islander has access to fresh, nutritious, and locally produced food; that farmers, fishers, and food businesses thrive; and that our food system embraces a circular economy that benefits both our communities and the environment.

As members of the Interagency Food and Nutrition Policy Advisory Council, we remain committed to advancing a food system that fosters economic opportunity, environmental stewardship, and equitable access to nutritious food. Moving forward, our work will continue to be guided by collaboration, innovation, and a shared vision for a stronger, more just food future for all.

Sincerely,

Interagency Food and Nutrition Policy Advisory Council

The area known today as the State of Rhode Island occupies the ancestral lands of the Narragansett (Nanhigganêuck), Nipmuc, Pequot, Wampanoag, Pokanoket, and Niantic nations.



Descendants of the First Peoples of the Dawnland (southern New England) trace their ancestral roots back 30,000 years. For thousands of years before, and since colonial occupation, massacre, war, and illegal detribalization, Indigenous people have upheld a kin-like stewardship of the land and waterways that provide, among many valuable resources, food—respected as the essential fuel of life.

Despite centuries of injustice, adversity, and displacement, Indigenous communities and their cultures endure, maintaining and modeling ways of being and knowing that have been passed down through generations. Resilience is a generational legacy that contributes to present-day tribal strength and success.

The Rhode Island Food Strategy 2030 planning period has provided an opportunity to strengthen relationships between state and Tribal governments. This represents a step toward acknowledging Indigenous peoples' traditions and ecological knowledge. The strategy benefits from the wisdom and perspective that Tribal members have shared through their participation on the Steering Committee, Community Advisory Board, and in public meetings.



RHODE ISLAND FOOD STRATEGY 2030

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Executive Summary

The Rhode Island Food Strategy 2030 envisions a collaborative, inclusive, and regenerative food system that nourishes everyone and builds resilience through strong regional connections.

This strategy is not just a vision—it is a call to action. The RI Food Strategy 2030 summarizes and organizes the feedback of Rhode Island's food system representatives with a framework organized around four core priorities. For each priority, several targeted actions are recommended that span capacity building, coordination, funding and investment, research and knowledge sharing, and policy and regulatory interventions. These actions come directly from over a year of deep engagement with community members, industry experts, state agencies, and nonprofits through 23 co-authored Briefs, interviews, focus groups, and listening sessions. Four guiding principles of collective impact, fairness, sustainability, and regionality have served as foundational values throughout its development.

RI FOOD SYSTEM SNAPSHOT

Rhode Island's food system is both a powerful economic engine and a reflection of the state's environmental, health, and access challenges.

Food System Sales, 2022

Category	Sales Value	% of Total
Fisheries	$106,955,436	0.6%
Agriculture	$79,815,042	0.4%
Support Activities for Agriculture	$9,478,946	0.1%
Aquaculture	$8,197,825	0.05%
Food Manufacturing	$1,201,063,569	6.6%
Beverage Manufacturing	$137,045,313	0.8%
Wholesaling + Distribution	$6,107,570,471	33.8%
Food + Beverage Retailers	$6,384,161,423	35.3%
Food Services + Drinking Places	$3,895,800,334	21.5%
Solid Waste Collection	$160,952,462	0.9%
TOTAL	**$18,091,040,820**	**100.0%**

SOURCE: 2022 ECONOMIC CENSUS; 2022 NONEMPLOYER STATISTICS; 2022 CENSUS OF AGRICULTURE; RIDEM 2022 RHODE ISLAND ANNUAL FISHERIES REPORT; CRMC AQUACULTURE IN RHODE ISLAND 2022. ADJUSTED FOR INFLATION TO 2024 DOLLARS.

FOOD SYSTEM JOBS
>77,351
2023
BRIEF 5: ECONOMIC DEVELOPMENT

ACRES OF FARMLAND
59,076
2022
BRIEF 6: STEWARDSHIP OF FOOD PRODUCING LANDS

FOOD INSECURITY
9.7%
2022
BRIEF 16: FOOD & NUTRITION SECURITY

AVERAGE MONTHLY SNAP PARTICIPATION
142,947
2023
BRIEF 16: FOOD & NUTRITION SECURITY

NUMBER OF FISHERMEN
842
2023
BRIEF 9: FISHERIES, AGRICULTURE, & AQUACULTURE BUSINESS VIABILITY

TOTAL LASA AWARDS
$3.2M
2014-2024
BRIEF 9: FISHERIES, AGRICULTURE, & AQUACULTURE BUSINESS VIABILITY

Table 1. Summary of Priorities and Actions

1. Secure the state's long-term food production and harvesting capacity	
ACTION 1.1	Maintain Rhode Island's limited farmland in sustainable production
ACTION 1.2	Increase land access and fair succession opportunities for new and underserved farmers
ACTION 1.3	Expand urban and peri-urban food production
ACTION 1.4	Accelerate adoption of restorative ecosystem practices to mitigate climate change and ensure adequate healthy water and soils
ACTION 1.5	Incentivize new entrants to the agricultural and commercial fisheries professions
ACTION 1.6	Encourage and facilitate coordination and communication between state regulatory bodies and fishing and aquaculture industry operators
ACTION 1.7	Invest in climate-smart indoor fresh food production
ACTION 1.8	Support the long-term viability of agricultural and fishing industries
2. Invest in local and regional food value chain development	
ACTION 2.1	Increase wastewater processing infrastructure to relocalize seafood processing
ACTION 2.2	Strengthen and broaden participation in the Local Agriculture and Seafood Act (LASA)
ACTION 2.3	Develop second-stage food business capacity
ACTION 2.4	Support local & regional food hubs as essential value-chain partners in small food business viability
ACTION 2.5	Support state and regional marketing efforts for RI Grown and RI Seafood products
3. Create community food environments that promote equitable food access and contribute to regional resiliency	
ACTION 3.1	Support community-led initiatives to improve access to fresh, local, and culturally relevant food
ACTION 3.2	Ensure comprehensive access to federal nutrition programs
ACTION 3.3	Engage grocery retailers and food service establishments to source more Rhode Island and regional food
ACTION 3.4	Increase public institutional procurement of local products, including locally-landed & processed seafood
ACTION 3.5	Strengthen pathways to advancing nutrition support in schools
ACTION 3.6	Restore Indigenous sovereign rights to waterways, hunting grounds, and open space for food gathering
ACTION 3.7	Enhance economic mobility and income for food system workers
4. Scale up wasted food prevention, recovery, and recycling efforts	
ACTION 4.1	Ensure compliance and capacity for Rhode Island's Food Waste Ban
ACTION 4.2	Maximize surplus food value and reduce wasted food by creating alternative pathways and partnerships
ACTION 4.3	Incentivize and remove barriers to increasing residential and commercial composting infrastructure and implementation

The release of the Rhode Island 2030 Food Strategy marks an important milestone in the state's continued commitment to advancing a fair, sustainable, and resilient food system. This strategy builds on the momentum and shared successes of Relish Rhody and was made possible by the advocacy and investment of Rhode Islanders who championed state-led food system planning, policy implementation, and the creation of the Director of Food Strategy role in 2017.

Rhode Island must act boldly and collaboratively to address the root causes of systemic food issues and lead regionally in building a better food future. Delayed action will incur irreversible impacts on our natural resources, deepen existing health disparities, and miss an opportunity to build on economic momentum. While this document amplifies existing efforts and highlights new ideas, its long-term success depends on addressing the complex drivers causing issues in the food system and adapting as new challenges, insights, and partnerships arise.







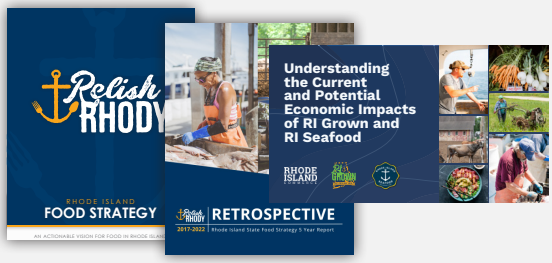
Integrated Planning

Many other municipal, state, regional, and nonprofit plans are food system-centric or related to food system issues. Alignment with other statewide plans and regional food systems resiliency goals is necessary for collective impact. RI Food Strategy 2030 recognizes that there are over 20 existing and emerging plans with more than 200 mentions of food production and nutrition, including dozens of evolving policy priorities.

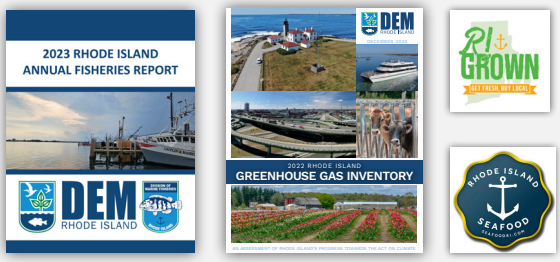
OFFICE OF THE GOVERNOR



RHODE ISLAND COMMERCE CORPORATION



RI DEPT OF ENVIRONMENTAL MANAGEMENT



RI DEPARTMENT OF HEALTH



RI DEPARTMENT OF EDUCATION



RI DIVISION OF STATEWIDE PLANNING



RHODE ISLAND FOOD POLICY COUNCIL



NEW ENGLAND FEEDING NEW ENGLAND



Introduction

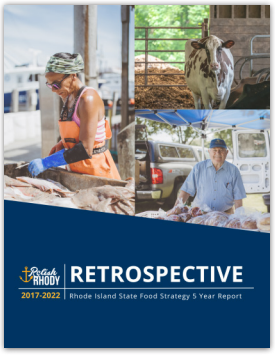
The Rhode Island Food Strategy 2030 represents the public commitment of Rhode Island state government leadership to collaborate with community-based organizations, nonprofits, businesses, Indigenous tribes, funders, and others to advance a fair, sustainable, and resilient food system for all Rhode Islanders.

Planning for the strategy began in 2022, under the direction of the Director of Food Strategy, a unique position housed at RI Commerce Corporation (RI Commerce) with responsibility to all three backbone agencies of the food strategy – RI Commerce, RI Department of Health (RIDOH), and RI Department of Environmental Management (DEM). The first activity was a review of progress since the launch of the first statewide food strategy, Relish Rhody: Rhode Island Food Strategy.



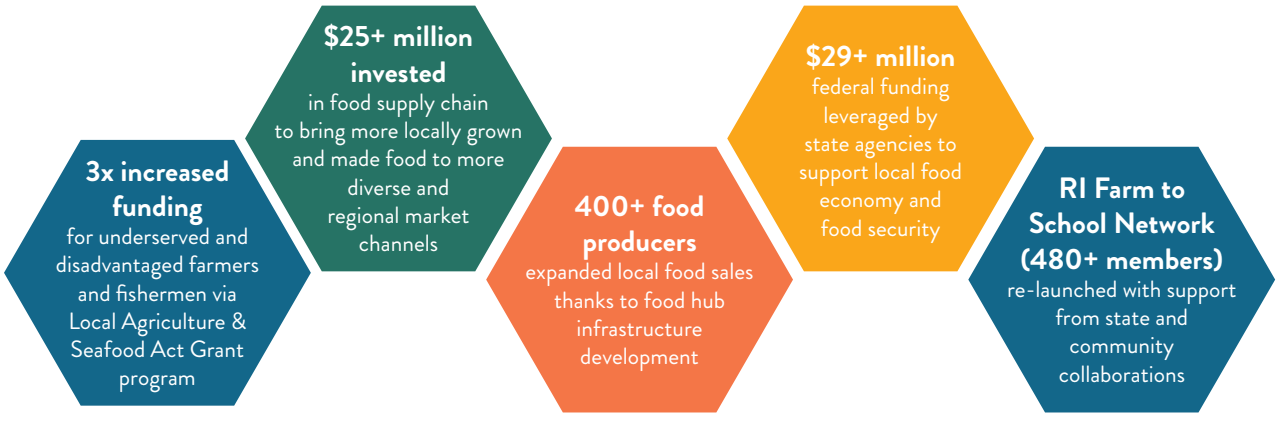
The original strategy was organized around three intersecting themes: economic development, health and access, and environment and resiliency. Relish Rhody set a course of action in five focus areas:

- **Preserve & Grow Agriculture, Fisheries Industries in Rhode Island**
- **Enhance the Climate for Food & Beverage Businesses**
- **Sustain & Create Markets for Rhode Island Food, Beverage Products**
- **Ensure Food Security for all Rhode Islanders**
- **Minimize Food Waste & Divert It from the Waste Stream**



A five-year analysis, Relish Rhody Retrospective: Rhode Island State Food Strategy 5 Year Report, highlighted three areas of impact since the Strategy's publication: catalytic investments, policy and regulatory progress, and strengthened collaboration and coordination in the food system.

Noteworthy food system advancements since launch of 2017 RI State Food Strategy



The Interagency Food and Nutrition Policy Advisory Council (IFNPAC), established in 2012 exists to overcome regulatory and policy barriers in order to develop a strong, sustainable food economy and healthful nutrition practices. IFNPAC serves as the coordinating body for the statewide food strategy. Under Rhode Island General Laws 21-36-3, IFNPAC membership is made up of the directors, or their respective designees, from these state agencies:

- **Department of Health (RIDOH)**
- **Department of Environmental Management (DEM)**
- **Department of Administration (DOA)**
- **Department of Human Services (DHS)**
- **Office of Healthy Aging (OHA)**
- **Rhode Island Department of Education (RIDE)**
- **Department of Corrections (DOC)**
- **Department of Children, Youth, and Families (DCYF)**
- **Executive Office of Commerce (EOC)**

Representatives from other State agencies and community-based organizations often join the IFNPAC quarterly meeting, which are always open to the public.

Guiding Principles

The development of the RI Food Strategy 2030 was grounded in four guiding principles—applied throughout project design, document development, and intended to carry through implementation.

Collective Impact: Long-term success depends on coordinated action across a broad, inclusive network. Collective impact creates structured collaboration that fosters shared learning and aligned efforts for systemic change. In the case of the RI Food Strategy 2030, RI Commerce serves as the backbone agency.

Fairness: Communities of color and low-income populations are disproportionately affected by negative food system outcomes. Inclusive decision-making must prioritize equitable outcomes and actively involve those most impacted.

Sustainability: The food system both affects and is vulnerable to environmental change. Future activities must align with natural systems, shifting from extractive to regenerative practices that respect ecological boundaries.



Regionality: Global and national disruptions can quickly impact Rhode Island, but limited local farming and fishing capacity makes it hard to meet demand locally. A resilient food system can absorb shocks, maintain food security, and adapt quickly. This resilience grows through flexible infrastructure, diverse and transparent supply chains, strong networks, and regional collaboration.

State-Facilitated Food System Planning

Food is vital to life and the economy, yet its production can negatively affect the environment, and nutritional access is not always fair. Recognizing this, state agencies share the responsibility to improve food production methods, increase food security, and enhance inclusive economic growth across the food value chain.

This strategy is the result of collaboration between state agencies, organizations, and industry to ensure inclusivity and responsiveness. A state food strategy straddles legislative, administrative, judicial, and regulatory policy channels by identifying interventions and how they work together to transform the system. As a state-facilitated, community-informed planning exercise, the RI Food Strategy 2030 primarily calls out administrative and regulatory policy mechanisms to be led by state agencies.

Table 2. Scope of State Agency Activities

Type	Primary Actors	Outputs	Scope
Legislative	Elected Officials	Laws/Statutes	Broad and formal
Administrative	Government Agencies	Rules/Regulations	Specific and technical
Judicial	Courts/Judges	Legal decisions	Interpretive
Regulatory	Agencies/Authorities	Standards/Guidelines	Specific industries

Table 3. Rhode Island Agency, Organization, and Program Acronyms

Acr.	Organization Name	Acr.	Organization Name
ALPC	Agricultural Lands Preservation Commission	LASA	Local Agriculture + Seafood Act Grants Program
CFCRI	Commercial Fisheries Center of RI	NIT	Narragansett Indian Tribe
CMCRI	Center for Mediation and Collaboration Rhode Island	OHA	Rhode Island Office of Healthy Aging
CRMC	RI Coastal Resources Management Council	RI Commerce	Rhode Island Commerce
DFS	Director of Food Strategy	RICFB	Rhode Island Community Food Bank
DHS	Rhode Island Department of Human Services	RIDE	Rhode Island Department of Education
DOA	Rhode Island Department of Administration	RIDEM	RI Department of Environmental Management
DOC	Rhode Island Department of Corrections	RIDOH	Rhode Island Department of Health
EOC	Executive Office of Commerce	RIFDA	Rhode Island Food Dealers Association
EOHHS	Executive Office of Health and Human Services	RIFPC	Rhode Island Food Policy Council
HETF	Hunger Elimination Task Force	RIIB	Rhode Island Infrastructure Bank
HEZ	Health Equity Zone Initiative	RINLA	Rhode Island Nursery and Landscape Association
IFNPAC	Interagency Food and Nutrition Policy Advisory Council	RIPHI	Rhode Island Public Health Institute

This strategy assumes the lens of state agencies that have several roles within the food system. Food system planning offers a process to identify common goals and establish shared metrics or outcomes of the food system across focus agencies and areas. The information and insights gleaned from the planning process are intended to inform decision-making and catalyze coordinated action. Table 4 illustrates where state partners hold responsibility for food systems issues. It highlights that the Rhode Island Department of Environmental Management has extensive purview on most food system issues, while "Food Access and Nutrition" is a topic that most state departments and agencies work on.

Table 4. Rhode Island State Agency Food System Roles

Roles	RI Commerce	RIDEM	RIDOH	DHS	DCYF	OHA	DOC	RIDE	DOA
Agriculture and Fisheries	✓	✓							
Clean Soil, Air, and Water		✓	✓						
Land Access and Infrastructure	✓	✓							
Capital Access	✓	✓							
Market Access and Business Environment	✓	✓					✓	✓	
Food Safety		✓	✓						
Food Access and Nutrition		✓	✓	✓	✓	✓	✓	✓	
Food Recovery and Donation		✓	✓						
Food Waste Diversion		✓							
Market and Industry Trends	✓								
Business Attraction	✓								
Government Contracts	✓							✓	✓

Table 5. Federal Agency and Program Acronyms

Acr.	Name	Acr.	Name
ARPA	American Rescue Plan Act	NRCS	USDA Natural Resources Conservation Service
CACFP	Child and Adult Care Food Program	SNAP	Supplemental Nutrition Assistance Program
EDA	United States Economic Development Agency	USDA	United States Department of Agriculture
NOAA	National Oceanic and Atmospheric Administration	WIC	Special Supplemental Nutrition Program for Women, Infants, and Children

Key Concepts

FOOD SYSTEM

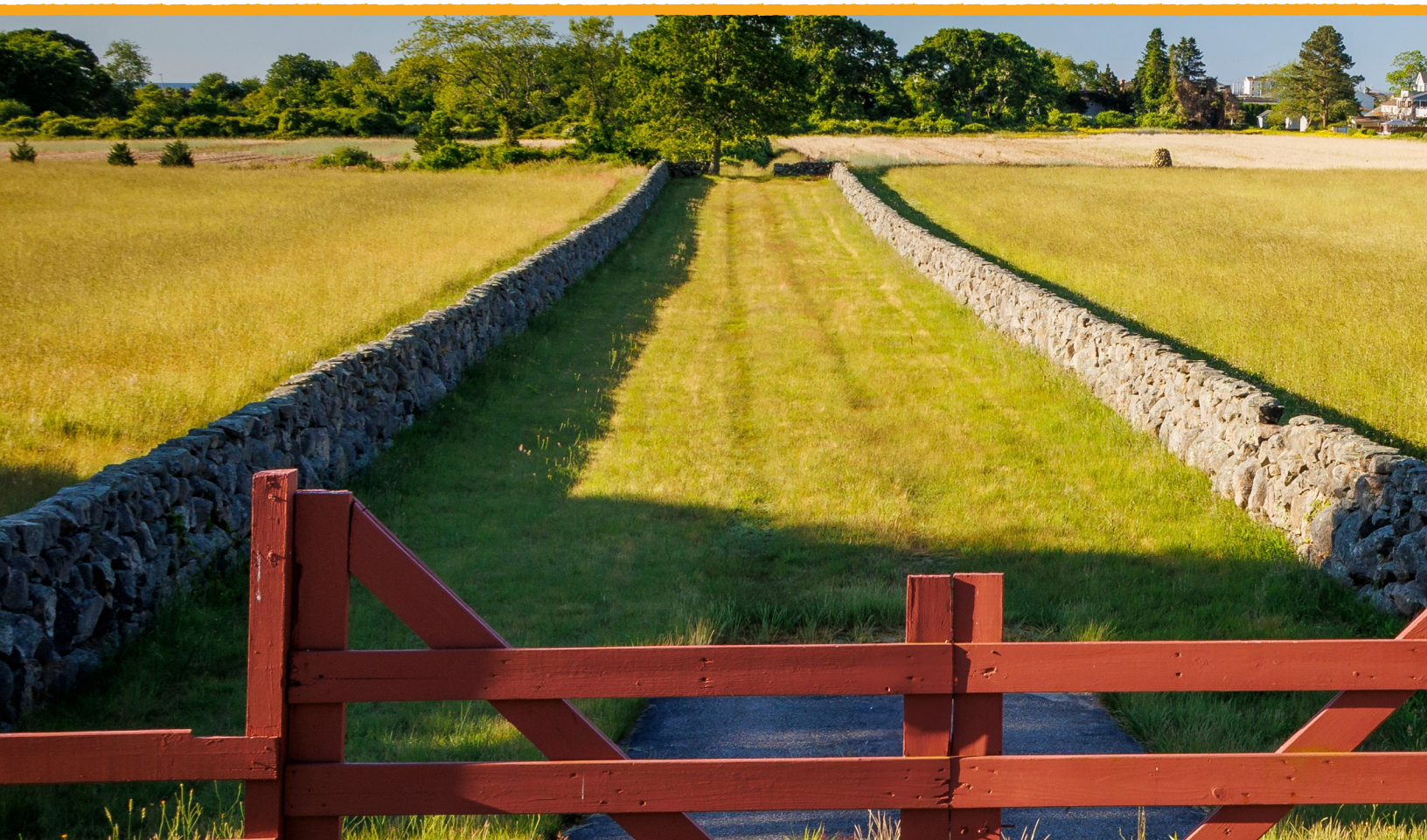
The entire range of people, organizations, and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded. The food system is composed of sub-systems (e.g. farming system, waste management system, input supply system) and interacts with other key systems (e.g. energy system, trade system, health system).

FOOD SECURITY

Food security means people can acquire sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life at times. Access requires that food be available, that people have the physical and economic means to acquire the food, that the food is culturally relevant to the consumer, and that the food match utilization constraints (e.g., cooking equipment, format, absorption). The stability of these food access dimensions contributes to higher or lower food security for individuals and households.

FOOD SOVEREIGNTY

Food sovereignty acknowledges the right of peoples to define their own food and agriculture systems. Central to food sovereignty is the restoration and stewardship of the relationship between peoples and the sources of their food – prioritizing ecologically sound and sustainable methods of production and harvesting and respect for those who assist in its production.



FOOD JUSTICE

Food justice encompasses elements of social equity, food security, food system transformation, community empowerment and environmental sustainability. Food justice is a framework that seeks to address systemic inequities in food production, distribution, and access, emphasizing the right of all individuals to healthy, culturally appropriate, and affordable food produced through environmentally sustainable and socially just systems. It advocates for equity and fairness across the food system, from farmworkers to consumers, and focuses on empowering marginalized communities to reclaim control over their food sources and systems.

FOOD SAFETY

Food safety refers to the conditions of producing, processing, preparing, and serving food in ways that preserve its quality and prevent contamination and food-borne illnesses that can harm consumers.

REGENERATIVE FOOD PRODUCTION

Utilization and treatment of land and water resources to grow, raise, or harvest food that is restorative rather than extractive. Regenerative practices capture carbon, conserve water, build healthy soils, and support biodiversity in perpetuity.

WASTED FOOD

Surplus food or food scraps that end up in the landfill instead of being recovered for recycling or redistribution to people or animals. Food scraps are parts of food, typically uneaten (peels, pits, oils,) or unfinished (plate scraps or leftovers). Surplus food is any amount of food greater than needed. In retail, this may be food that is no longer sellable but is safe for consumption.

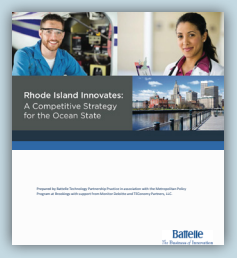


The Last Decade...

The 2030 Food Strategy represents a milestone commitment in a growing number of initiatives, policies and partnerships aimed at creating a more equitable, sustainable and resilient food system.

The following timeline highlights significant food-system related developments upon which the current strategy relies and builds.

2016
Brooking's Institute report includes economic opportunities for food & beverage sector in RI



Public-private partnership with support from RI Foundation, Kendall Foundation, Merck Foundation helps fund development of **first statewide Food Strategy and first Director of Food Strategy**

2017
The first comprehensive food strategy for the state is published



2017
Innovative **Local Ag & Seafood Grant (LASA) program** is funded at $250,000 through State and philanthropic funding to invest in local food system initiatives

The first **RI Food System Summit** is hosted in collaboration with the University of Rhode Island

Authorization of **Interagency Food and Nutrition Policy Advisory Council (IFNPAC)** to serve as coordinating agency

Creation of the **Rhode Island Emergency and Supplemental Food Site Map**

2017 Food Waste Ban expands requirements for food waste diversion

2018
Hunger Elimination Task Force (HETF) is established to implement short and long term strategies to reduce food insecurity in RI; 500+ members engaged

2019
Rhode Island Farm & Sea to School Network established

RHODE ISLAND
FARM & SEA TO SCHOOL
NETWORK



2020
Farm Fresh RI expands to 60,000 sq ft headquarters in Providence (8 co-located food retail and manufacturers, 30 FTEs created, 250+ businesses supported through sales/distribution)

Main Street Meals is launched. The program hires growing food businesses to cook delicious, high-quality dinners with locally sourced ingredients, and distributes these meals to neighbors in need of support; $500K raised and 60,000 meals delivered

2021

2nd Director of Food Strategy is hired at RI Commerce

2022

LASA grant program funding is tripled to $700,000 thanks to Governor McKee and the General Assembly

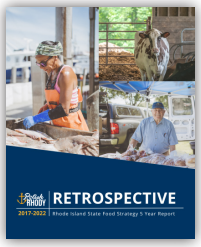
Passage of the 2022 passage of **Cottage Food Law** removes barriers for home-based food entrepreneurs

Southside Community Land Trust moves into its new offices in a 12,000-square-foot renovated building at 404 Broad Street in Providence that also will house its large farm-to-market center



2023

Release of the **Relish Rhody Retrospective**



Catalytic investments in local food economy reach over $30 million ($5 million+ in federal and COVID relief funding leveraged by the State to support food access and supports for food producers; $25+ million of state funding invested in local food, farm and seafood businesses including for infrastructure

The **Food Strategy** program secures $624,250 in funding through federal grants from the **Economic Development Administration**, **Resilient Food Systems Infrastructure program**, and **Federal-State Marketing Improvement Program** for research and studies, including those aimed at improving the economic impact of Rhode Island food brands

The **Food Strategy** program expands to 3.5 staff members: Director of Food Strategy, Project Manager, Local Food Value Chain Program Manager, and Marketing Support Specialist

Hope & Main expands its flagship shared use kitchen model in Warren to the West End Kitchens in Providence

2024

NEW ENGLAND FEEDING NEW ENGLAND

Novel research conducted by **New England Feeding New England** estimated regional food self-reliance and amount spent on local food purchases

Rhode Island is recognized for its leadership on climate change and expansion of its green economy in support of stronger and healthier communities, ranking third in the nation for natural environments in The U.S. News & World Report's 2024 Best States list

The public-private **Rhode Island Seafood Marketing Collaborative**, continued its promotion of fresh and local seafood procurement through the RI Seafood program. RI Seafood was represented at 30 events with exposure to 3,200 consumers and engaged 150 Rhode Island businesses, including fishermen, aquaculturists, and other seafood businesses.

The **LASA** grant program awarded $662,000 in funding to 40 local farmers, fishermen, and specialty food producers

The **Specialty Crop Block Grant Program** awarded over $270,000 to farmers of local fruits, vegetables, tree nuts, and nursery crops

The 2022 Census of Agriculture, ranked Rhode Island with the highest percentage of beginning farmers in the country

The Senior Farmers Market Nutrition Program modernized its benefit card system to more easily connect eligible RI seniors with local growers. The program also offered homebound senior delivery, serving over 5,500 seniors statewide with fresh, **RI Grown** fruit and vegetables.

2025

RI Commerce Food Strategy Program supports the planning of the RI Food Summit at the University of Rhode Island, marking the Summit's return to an in-person format after being held virtually since 2020.

RI Commerce announces the hire of its 3rd Director of Food Strategy.

Launch of RI Food Strategy 2030!

Priorities & Actions

The framework of Priorities and Actions has been distilled from the 5-Year Retrospective findings, Brief recommendations and strategic planning engagement process, including Summer Forum group exercises. Actions are not listed in order of importance except in the case of wasted—or surplus—food, where the order of practice should be to first reduce, then recover, recycle, and hopefully end the need for disposal.

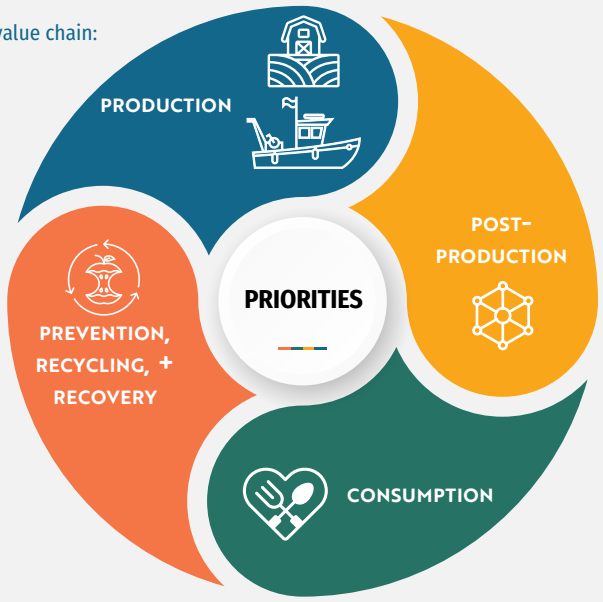
This framework's priorities span the food value chain:

Secure the state's long-term food production and harvesting capacity

Preserve and support working lands and waters

Scale up wasted food prevention, recycling, and recovery efforts

Minimize wasted food and use organic resources efficiently, responsibility, and equitably



Invest in local and regional food value chain development

Optimize food system infrastructure for local and regional utilization of food grown, raised, or harvested in Rhode Island

Create community food environments that promote equitable food access

Make market channels more accessible and equitable for local and regional producers, food system workers and consumers

Summary of Priorities and Actions

1. Secure the state's long-term food production and harvesting capacity

ACTION 1.1	Maintain Rhode Island's limited farmland in sustainable production
ACTION 1.2	Increase land access and fair succession opportunities for new and underserved farmers
ACTION 1.3	Expand urban and peri-urban food production
ACTION 1.4	Accelerate adoption of restorative ecosystem practices to mitigate climate change and ensure adequate healthy water and soils
ACTION 1.5	Incentivize new entrants to the agricultural and commercial fisheries professions
ACTION 1.6	Encourage and facilitate coordination and communication between state regulatory bodies and fishing and aquaculture industry operators
ACTION 1.7	Invest in climate-smart indoor fresh food production
ACTION 1.8	Support the long-term viability of agricultural and fishing industries

2. Invest in local and regional food value chain development

ACTION 2.1	Increase wastewater processing infrastructure to relocalize seafood processing
ACTION 2.2	Strengthen and broaden participation in the Local Agriculture and Seafood Act (LASA)
ACTION 2.3	Develop second-stage food business capacity
ACTION 2.4	Support local and regional food hubs as essential value-chain partners in small food business viability and food accessibility
ACTION 2.5	Support state and regional marketing efforts for RI Grown and RI Seafood products

3. Create community food environments that promote equitable food access and contribute to regional resiliency

ACTION 3.1	Support community-led initiatives to improve access to fresh, local, and culturally relevant food
ACTION 3.2	Ensure comprehensive access to federal nutrition programs
ACTION 3.3	Engage grocery retailers and food service establishments to source more Rhode Island and regional food
ACTION 3.4	Increase public institutional procurement of local products, including locally-landed and processed seafood
ACTION 3.5	Strengthen pathways to advancing nutrition support in schools
ACTION 3.6	Restore Indigenous sovereign rights to waterways, hunting grounds, and open space for food gathering
ACTION 3.7	Enhance economic mobility and income for food system workers

4. Scale up wasted food prevention, recycling, and recovery efforts

ACTION 4.1	Ensure compliance and capacity for Rhode Island's Food Waste Ban
ACTION 4.2	Maximize surplus food value and reduce wasted food by creating alternative pathways and partnerships
ACTION 4.3	Incentivize and remove barriers to increasing residential and commercial composting infrastructure and implementation

Reading Priorities

PRIORITIES are the desired outcomes of collective action

ACTIONS are specific interventions—capacity building, coordination, funding and investment, research and knowledge sharing, policy and regulations—identified to advance each priority

Links are provided to relevant **BRIEFS**

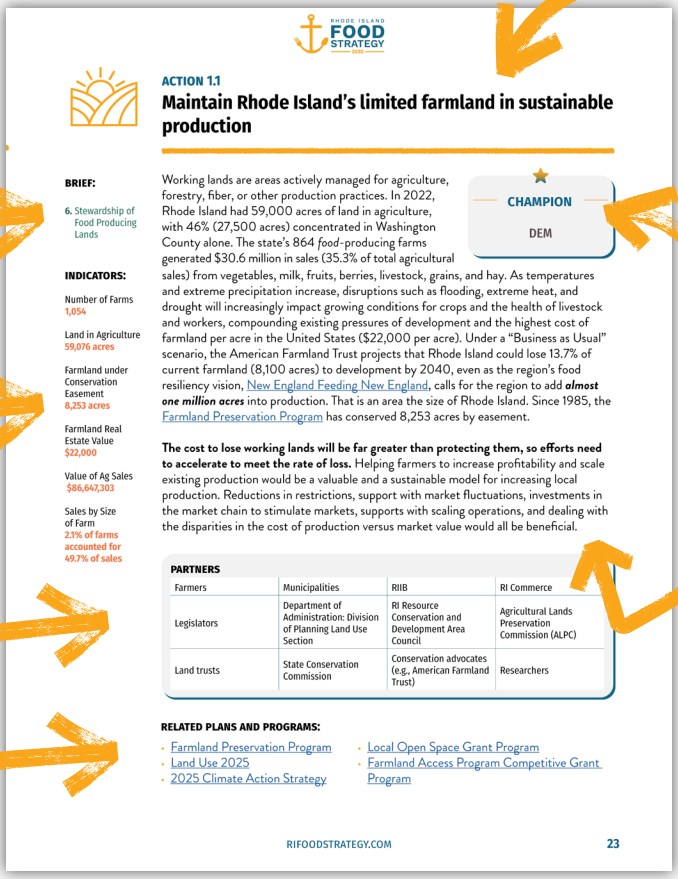
INDICATORS with publicly available data are highlighted (data sources are linked in each Brief)

PARTNERS include organizations that can increase the odds of collective success

RELATED PLANS AND PROGRAMS include other resources related to the recommended Action

A **CHAMPION** is the lead state agency or food system network organization best positioned to centralize information and coordinate activity among partners—individuals, organizations, and coalitions—who have an interest or expertise to be incorporated

DESCRIPTIONS seek to establish the current context of challenges and opportunities for each topic



RHODE ISLAND FOOD STRATEGY 2030

ACTION 1.1

Maintain Rhode Island's limited farmland in sustainable production

BRIEF:

6. Stewardship of Food Producing Lands

INDICATORS:

Number of Farms
1,054

Land in Agriculture
59,076 acres

Farmland under Conservation Easement
8,253 acres

Farmland Real Estate Value
$22,000

Value of Ag Sales
$86,647,303

Sales by Size of Farm
2.1% of farms accounted for 49.7% of sales

CHAMPION

DEM

Working lands are areas actively managed for agriculture, forestry, fiber, or other production practices. In 2022, Rhode Island had 59,000 acres of land in agriculture, with 46% (27,500 acres) concentrated in Washington County alone. The state's 864 *food*-producing farms generated $30.6 million in sales (35.3% of total agricultural sales) from vegetables, milk, fruits, berries, livestock, grains, and hay. As temperatures and extreme precipitation increase, disruptions such as flooding, extreme heat, and drought will increasingly impact growing conditions for crops and the health of livestock and workers, compounding existing pressures of development and the highest cost of farmland per acre in the United States ($22,000 per acre). Under a "Business as Usual" scenario, the American Farmland Trust projects that Rhode Island could lose 13.7% of current farmland (8,100 acres) to development by 2040, even as the region's food resiliency vision, New England Feeding New England, calls for the region to add ***almost one million acres*** into production. That is an area the size of Rhode Island. Since 1985, the Farmland Preservation Program has conserved 8,253 acres by easement.

The cost to lose working lands will be far greater than protecting them, so efforts need to accelerate to meet the rate of loss. Helping farmers to increase profitability and scale existing production would be a valuable and a sustainable model for increasing local production. Reductions in restrictions, support with market fluctuations, investments in the market chain to stimulate markets, supports with scaling operations, and dealing with the disparities in the cost of production versus market value would all be beneficial.

PARTNERS

Farmers	Municipalities	RIIB	RI Commerce
Legislators	Department of Administration: Division of Planning Land Use Section	RI Resource Conservation and Development Area Council	Agricultural Lands Preservation Commission (ALPC)
Land trusts	State Conservation Commission	Conservation advocates (e.g., American Farmland Trust)	Researchers

RELATED PLANS AND PROGRAMS:

- Farmland Preservation Program
- Land Use 2025
- 2025 Climate Action Strategy
- Local Open Space Grant Program
- Farmland Access Program Competitive Grant Program

RIFOODSTRATEGY.COM 23





1. Secure the State's Long-Term Food Production and Harvesting Capacity

Land is a critical natural resource required for agricultural production, and Rhode Island has it in short supply. Losing more farmland is dramatically more costly than preserving it; retaining remaining—and gaining more—farmland will increase the resilience of our food system. Likewise, Rhode Island's cultural identity and gastronomic traditions are rooted in the sea. Stewardship of coastal waters, offshore fisheries, and commercial ports is essential to ensuring the viability of seafood and aquaculture industries. Local fishermen, farmers, and aquaculturists are the foundation of our regional food system, but making a living is a significant challenge for the people who produce our food. Securing the long-term food production and harvesting capacity of the Ocean State requires accelerated preservation of irreplaceable natural assets, attention to the viability of our food producers' businesses, and the strengthening of social capital.

Rhode Island's reliance on out-of-state food producers poses serious economic and social risks, underscoring that preserving local farms and fisheries isn't just about tradition or aesthetics, it's essential to the state's food and economic security. Long term resilience requires preserving farms and working waterfronts while also developing housing and climate infrastructure. Local food production is an essential component in state planning and policy conversations.

ACTIONS

- **1.1 Maintain Rhode Island's limited farmland in sustainable production**
- **1.2 Increase land access for farmers through fair succession transactions and use agreements and ensure beginning, BIPOC, and veteran farmers are competitive in acquisition processes**
- **1.3 Expand urban and peri-urban food production**
- **1.4 Accelerate adoption of restorative ecosystem practices to mitigate climate change and ensure adequate healthy water and soils**
- **1.5 Incentivize new entrants to the agricultural and commercial fisheries professions**
- **1.6 Encourage and facilitate coordination and communication between state regulatory bodies and fishing and aquaculture industry operators**
- **1.7 Invest in climate-smart indoor fresh food production**
- **1.8 Support the long-term viability of agricultural and fishing industries**

ACTION 1.1

Maintain Rhode Island's limited farmland in sustainable production

BRIEF:

6. Stewardship of Food Producing Lands

INDICATORS:

Number of Farms
1,054 (2022)

Land in Agriculture
59,076 acres (2022)

Farmland under Conservation Easement
8,253 acres (1985-2023)

Farmland Real Estate Value
$22,000 (2024)

Value of Ag Sales
$79,815,042 (2022)

Sales by Size of Farm
2.1% of farms accounted for 49.7% of sales (2022)

CHAMPION

DEM

Working lands are areas actively managed for agriculture, forestry, fiber, or other production practices. In 2022, Rhode Island had 59,000 acres of land in agriculture, with 46% (27,500 acres) concentrated in Washington County alone. The state's 864 food-producing farms generated $30.6 million in sales from vegetables, milk, fruits, berries, livestock, grains, and hay accounting for 35.3% of total agricultural sales. As temperatures and extreme precipitation increase, disruptions such as flooding, extreme heat, and drought will increasingly impact growing conditions for crops and the health of livestock and workers, compounding existing pressures from development and the highest cost of farmland per acre in the United States ($22,000 per acre). Under a "Business as Usual" scenario, the American Farmland Trust projects that Rhode Island could lose 13.7% of current farmland (8,100 acres) to development by 2040, even as the region's food resiliency vision, New England Feeding New England, calls for the region to add ***almost one million acres*** into production.

Returning land to agricultural production is nearly impossible. Ultimately, the long-term viability of farming in the state depends on profitability. Helping farmers increase profitability and scale existing production ensures that farms remain in operation. Ensuring that food is produced within Rhode Island is a matter of both physical and economic security, reducing our dependence on global supply chains that are increasingly prone to disruption. Reductions in regulatory barriers, support with market fluctuations, investments in local processing and distribution infrastructure, assistance in scaling operations, and addressing the gap between production costs and market value would all strengthen the profitability of the state's food system.

PARTNERS

Farmers	Municipalities	RI Infrastructure Bank	RI Commerce
Legislators	DOA: Division of Planning Land Use Section	RI Resource Conservation and Development Area Council	Agricultural Lands Preservation Commission (ALPC)
Land trusts	State Conservation Commission	Conservation advocates	Researchers
RI Dept of Housing	RI Farm Bureau	USDA NRCS	

RELATED PLANS AND PROGRAMS:

- Farmland Preservation Program
- Land Use 2025
- 2025 Climate Action Strategy
- Local Open Space Grant Program
- Farmland Access Program Competitive Grant Program

ACTION 1.2

Increase Land Access and Fair Succession Opportunities for New and Underserved Farmers

BRIEFS:

6. Stewardship of Food Producing Lands
7. Stewardship of Working Waterfronts
9. Fisheries, Agriculture, and Aquaculture Business Viability

INDICATORS:

# of Indigenous Farmers
7 on 542 acres

Number of Black Farmers
19 on 90 acres

Number of Asian Farmers
12 on 576 acres

Number of Hispanic Farmers
27 on 1,743 acres

Number of New & Beginning Farmers
802 on 15,064 acres

Number of Young Farmers
188 on 4,439 acres

Number of Farmers with Military Service
135 on 7,925 acres

(All indicators are 2022)

CHAMPIONS

DEM, Dept. of Housing, Dept. of Administration Division of Statewide Planning

With only 59,000 acres in agriculture, Rhode Island has the least amount of farmland of any state in the country. It also has the highest per-acre farmland costs in the country, $22,000 per acre, pushing some new and established farmers to consider moving to places where land is more accessible and affordable. Acquiring farmland is made more difficult for farmers of color, who have typically not had the same wealth-building opportunities and access to capital as White farmers (White farmers make up 97.2% of all farmers, operating 97.7% of all farms on 98.7% of all farmland acres). Significant urbanization and suburbanization trends also mean the state's agricultural land base is increasingly fragmented, creating operational, access, and stewardship challenges for farmers, many of whom must farm on multiple, noncontiguous parcels.

Rhode Island is investing heavily in new housing and adopting policies that make it easier to build — a vital step toward meeting the state's housing needs. At the same time, farmland and open spaces are under increasing pressure from development. By working together, state agencies can help ensure that Rhode Island's approach to land use supports both thriving communities and the long-term viability of local agriculture.

PARTNERS:

RI Land Trust	Farm Credit East	CMCRI	RIFPC
USDA Natural Resources Conservation Service	Southside Community Land Trust	ALPC	RIIB
RI Commerce	Land & Sea Together		

RELATED PLANS AND PROGRAMS:

- Farmland Access Program
- Rhode Island Grower Certification Program
- Ocean State Accelerates

ACTION 1.3

Expand urban and peri-urban food production

BRIEFS:

8. Community-Based Food Production

6. Stewardship of Food Producing Lands

INDICATORS:

Number of Community Gardens
80 (2023)

Number of Urban Farms
33 (2023)

Number of Farmers Contributing to Farmer-to-Market Center
27 (2023)

CHAMPION

DEM

Urban and peri-urban agriculture is not meant to replace rural-based agriculture but provides its own benefits, including those that extend beyond food production. In addition to providing local economic development opportunities for urban farmers and growers, urban agriculture has mental health benefits, provides educational opportunities, and promotes ecological restoration. Community gardens and urban farms can be key access points to food production and green space for Black, Hispanic/Latino, immigrant, and other historically underinvested communities. The United States Department of Agriculture (USDA) and the U.S. Environmental Protection Agency (EPA) definitions of urban agriculture are broad, and as a result, how community gardens, rooftop farms, hydroponic, aeroponic, and aquaponic facilities, and vertical production facilities develop is left to the discretion of local policymakers and is subject to zoning laws. A state definition of urban agriculture would bring awareness to the different forms urban food production can take and provide valuable baseline guidance to communities wanting to support urban growers.

Urban farms are often left out of state and federal farm support programs due to their size (under five acres), and funding opportunities are not consistent or reliable. In addition to securing more consistent and reliable funding for urban agriculture activities, land preservation and access protection strategies should be extended in the face of other development pressures (e.g., community land trust development, public land allocations, designated zoning classifications for urban agriculture, right-to-farm laws).

PARTNERS:

Southside Community Land Trust	African Alliance of RI	Lots of Hope	RIFPC
USDA Natural Resources Conservation Service	Northern RI Conservation District	Municipal planning and zoning departments	

RELATED PLANS AND PROGRAMS:

- URI Mapping Alternative Urban Food Networks Project



ACTION 1.4

Accelerate adoption of restorative ecosystem practices to mitigate climate change and ensure adequate healthy water and soils

BRIEFS:

2. Climate Change
6. Stewardship of Food Producing Lands
10. Water Quality and Soil Health
18. Composting and Downstream Waste Diversion

INDICATORS:

Priority Areas Near Impacted Water Bodies
78% (2017)

Shellfish Harvest Restrictions
DEM Map (2025)

USDA Conservation Programs Funding
$14,964,167
(2017-2022)

Percent of Farms using No-Till Practices
2.3% (2022)

Percent of Farms Cover Cropping
4.6% (2022)

Number of People Introduced to TEK through Trainings
No data

CHAMPIONS
DEM
Narragansett Indian Tribe

Our food system relies on healthy water and soils; contamination poses risks to food safety and can limit land available for production and the ability of water bodies to support sea life. Legacy contaminants disproportionately affect environmental justice communities, exacerbating existing disparities in access to healthy food, clean water, and economic opportunities. When properly maintained, soil supports agricultural productivity, water retention, carbon sequestration, flood mitigation, and the minimization of groundwater contaminants.

The health of Rhode Island's waterways and coastal ecosystems is intrinsically interconnected with the prosperity of its economy. Past and ongoing pollution limits the places where fish and shellfish can be safely harvested, resulting in harm to the populations that rely on these resources. Simultaneously, food is part of the solution. Increasing sugar kelp cultivation can help draw down carbon, filter nutrients from the water, and support the production of bio-based materials and fuel. Oysters can also filter water and sequester carbon, as well as heavy metals, thereby improving water quality and mitigating the effects of industrial pollution and climate change.

There are incentives and programs available to support the adoption of regenerative production practices. These efforts should be combined with engaging the Narragansett Indian Tribe's generational land stewardship knowledge in planning for agricultural land stewardship and conservation, which prioritizes reciprocity, responsibility, and cultural connections. Integrating Traditional Ecological Knowledge (TEK) and increasing its visibility and understanding among scientists, policymakers, and the general public will help not only to restore ecosystems but also to restore cultural practices and relationships to place, fostering reciprocal restoration.

PARTNERS:

URI Cooperative Extension	RI Coastal Resources Management Council	RIIB	Save the Bay
RI Shellfishing Association	Narragansett Bay Commission	Ocean Hour Farm	Wild Harmony Farm

RELATED PLANS AND PROGRAMS:

- Narragansett Indian Tribe Food Sovereignty Program



ACTION 1.5

Incentivize new entrants to the agricultural and commercial fisheries professions

BRIEFS:

9. Fisheries, Agriculture, and Aquaculture Business Viability

13. Labor and Workforce Development

INDICATORS:

Number of Farmers
1,938 (2022)

Average Age of Farmers
56.6 (2022)

Percent of Farmers Over 55 Years Old
60.6% (2022)

Number of New & Beginning Farmers
802 (2022)

Number of Young Farmers
188 (2022)

Number of Black, Asian, Indigenous Farmers
38 (2022)

Number of Hispanic Farmers
27 (2022)

Number of Fishermen
842 (2023)

Average Age of Fishermen
No data

The average age of farmers and fishermen is increasing, creating critical inflection points for Rhode Island's food system. As these producers approach retirement, decisions about succession will affect the availability of supply chain partners, infrastructure, licenses, land use, and the preservation of institutional knowledge.

CHAMPIONS

RI Department of Labor and Training, DEM

Losing seasoned farmers or fishermen diminishes business viability, and the prospect of business viability determines who is drawn to these professions. In 2022, 56.6% of Rhode Island's farmers had a job other than farming. The number of Rhode Island fishermen counted in official employment statistics decreased by 37.3%, from 1,342 in 2002 to 842 in 2023. More needs to be done to attract new candidates to these occupations. Supporting the long-term viability of farmers and fishermen requires both strengthening existing businesses and preparing the next generation of producers. Expanding apprenticeship and aquaculture training programs can help build a pipeline of new entrants, while improving operational cost supports, expanding market opportunities, and strengthening the physical and emotional health of current producers are critical to ensuring these businesses can continue to operate and succeed.

PARTNERS:

Farmers	URI Cooperative Extension	Commercial Fisheries Center of RI	Roger Williams University
RI Sea Grant	USDA Natural Resources Conservation Service	Young farmer network	USDA Farm Service Agency (FSA)
Ocean Hour	Conservation Districts	RI Nursery and Landscaping Association	

RELATED PLANS AND PROGRAMS:

- Ocean State Accelerates



ACTION 1.6

Encourage and facilitate coordination and communication between state regulatory bodies and fishing and aquaculture industry operators

BRIEFS:

2. Food System Policies
7. Stewardship of Working Waterfronts

INDICATORS:

Number of Jobs in Fisheries and Seafood Sector
3,147 (2016)

Gross sales
$538.3 million (2016)

Pounds of Seafood Landings
77,344,214 (2023)

Value of Seafood Landings
$89,639,504 (2023)

Value of Aquaculture Sales
$8,496,065 (2023)

CHAMPIONS

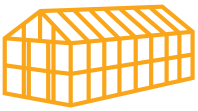
DEM
RIDOH

Rhode Island's fisheries and seafood sector has been estimated to support 3,174 jobs and contribute over over $538 million in revenue to the state's economy. Rhode Island's commercial fisheries and aquaculture industries are an essential component of the state's economy and cultural heritage but face a complex business environment, declining workforce, significant and costly challenges from climate change, cost/profit imbalances, and regional regulations. Regional regulations add a layer of complexity because the Mid-Atlantic and New England Fishery Management Council regions have catch quotas that Rhode Island does not control, but many fish either migrate between those waters or are experiencing climate change impacts differently (e.g., species whose state-based landing quotas have not kept up with their current high abundance off the Southern New England coast). Commercial fishermen must remain central to conversations that drive industry planning and regulatory changes.

Addressing regulatory challenges within the fishing industry requires both streamlining rules and ensuring that commercial fishermen are actively included in shaping solutions. Simplifying regulatory processes could ease administrative burdens and support better planning across the sector. For example, exploring the development of a single digital identity for fishermen that could be used to register and interact with multiple agencies may help reduce duplicative requirements. Regular convenings of state leaders led by the Marine Fisheries Council are open to the public and provide an important opportunity for industry voices to be heard, particularly during pre-season and post-season discussions when new changes are implemented and evaluated. Providing commercial fishermen with assistance in navigating the industry's rules and regulations could help reduce administrative burdens and support compliance. Focusing on how to support the profitability of this industry and making investments in the sustainability of the fleet will help mitigate current profit/loss issues faced by operators related to the truncation of the season through constant closures of different fisheries, the value chain across all species eligible to land, the relative overhead of fishing, and the reality that many who hold commercial licenses aren't doing this work full-time. This industry needs support with data (e.g., catch totals, barriers, closure days, sales) to drive meaningful changes.

PARTNERS:

Fishermen	Industry associations	RI Commerce	RICRMC
CMCRI	IFNPAC	Coastal communities	



ACTION 1.7

Invest in climate-smart indoor fresh food production

BRIEFS:

2. Climate Change
6. Stewardship of Food Producing Lands

INDICATORS:

Total Greenhouse Vegetables & Fresh Cut Herbs
70 farms on 328,520 sq. ft.
(2022)

Value of Greenhouse Vegetables & Herbs Sales
$7,020,605
(2022)

Other CEA Data
There is currently no system in place to collect data from CEA businesses

CHAMPION

DEM

Rhode Island's limited amount of farmland, coupled with increasing climate change impacts on agriculture, calls for increased diversification of growing environments to include the development of indoor, climate-smart production or controlled environment agriculture (CEA). Gotham Greens' 100,000-square-foot greenhouse in Providence is already producing millions of heads of leafy greens each year, and Rhode Island Grows is in the process of developing over 1,000 acres of greenhouses to grow tomatoes in Exeter.

Rhode Island's central location along the Northeast corridor, transportation system, distribution network, and proximity to 47 million consumers make it an inviting base for CEA operations. The infrastructure investments required for CEA are substantial and expensive, but the technological advances of indoor grow operations are increasingly sophisticated, and their efficiencies, along with market demand, are driving consistent industry growth across growing methods (e.g., hydroponics, aquaponics, aeroponics). Fragility in North American trade agreements may accelerate CEA expansion in the United States to replace fresh produce that currently comes predominantly from Mexico or Canada.

As part of preparing to manage and support this growing industry, Ocean State decision-makers are encouraged to explore opportunities for working with operators and others to determine how best to invest in more controlled environment spaces for food production. This might take the form of coordinating a public-private working group to analyze research and development, business services, technical assistance, infrastructure, and financing needs for controlled environment food production.

PARTNERS:

RI Department of Labor and Training	RI Nursery and Landscape Association	RI Nursery and Landscape Institute	URI
Rhode Island College	Community College of RI	RIFPC	State Assembly
Private sector	Funders/investors		

RELATED PLANS AND PROGRAMS:

- Rhode Island Climate Strategy 2025
- Ocean State Accelerates
- Growing Futures RI Program



ACTION 1.8

Support the long-term viability of agricultural and fishing industries

BRIEFS:

6. Stewardship of Food Producing Lands
7. Stewardship of Working Waterfronts
9. Fisheries, Agriculture, and Aquaculture Business Viability

INDICATORS:

Value of Seafood Landings
$89,639,504 (2023)

Value of Agriculture Sales
$79,815,042 (2022)

Value of Aquaculture Sales
$8,496,065 (2023)

Food production serves as a powerful driver of local economic resilience. As a universal necessity that every Rhode Islander consumes multiple times per day, strengthening local food consumption, along with the demand for Rhode Island products within regional markets, creates a steady foundation for economic growth.

CHAMPIONS

DEM
RI Commerce

However, the profitability of both the farming and fishing sectors is essential for their survival. Without viable, profitable operations, farms risk being sold for development, eroding the state's ability to produce its own sustenance. Investment in the farming and fishing industries is therefore critical to maintaining the infrastructure, capacity, and future that underpin the state's food economy.

Current state funding geared toward small farms and fishing ventures through programs like LASA is vital; however, medium-sized businesses also play an essential role in the state's food system. These operations face many of the same threats and challenges, including rising land values and climate-related risks, but their scale offers a significant opportunity to boost in-state food production. By bolstering farms and fishing businesses across all scales of production, Rhode Island can make meaningful progress toward the "50 by 60" goal, increasing local food security and ensuring that farming and fishing remain economically viable businesses for future generations.

PARTNERS:

Fishermen	Industry associations	RI Commerce	RICRMC
CMCRI	IFNPAC	Coastal communities	

RELATED PLANS AND PROGRAMS:

Explore creation of a program like the Vermont Farm and Forest Viability Program, which has a track record of success for increasing food production business viability.



2. Invest in local and regional food value chain development

Food manufacturers, processors, aggregators, and distributors play an instrumental role in transforming and transporting food from production to food service, retailer shelves, and consumer food baskets. Distribution and wholesaling made up $6.1 billion of the total $18.1 billion in Rhode Island food system sales in 2022. The COVID-19 pandemic revealed vulnerabilities in our food supply chains, including overreliance on consolidated and distant food sources.

Failing to strengthen Rhode Island's food system leaves us increasingly vulnerable to external market disruptions. As parts of our local supply chain continue to contract, we become more dependent on out-of-state and foreign producers. This makes Rhode Island susceptible to price spikes and shortages, such as the sharp rise in non-local egg prices and the food access challenges experienced during COVID-19. Developing a responsive network of manufacturers, processors, aggregators, and distributors is a strategic necessity for the business viability of farm and fishing products, for food security, and ultimately for national security.

Valuing our food system workforce and building supply chain resilience are our insurance policies against future risks. Because demand and supply for local and regional food need to be advanced in tandem, middle-of-the-supply-chain partners can be instrumental in supporting the scaling of the supply side.

ACTIONS

2.1 Increase wastewater processing infrastructure to relocalize small-to-medium capacity seafood processing

2.2 Increase funding for and expand participation in the Local Agriculture and Seafood Act (LASA)

2.3 Develop second-stage food business capacity

2.4 Support local and regional food hubs as essential value chain partners in food business viability and food accessibility

2.5 Support state and regional marketing efforts for RI Grown and RI Seafood products

ACTION 2.1

Increase wastewater processing infrastructure capacity to relocalize seafood processing

BRIEFS:

7. Stewardship of Working Waterfronts
9. Fisheries, Agriculture, and Aquaculture Business Viability
10. Water Quality and Soil Health
11. Supply Chain Resilience
12. Food and Beverage Manufacturing Viability

INDICATORS:

None identified

CHAMPION

DEM

Much of New England's seafood processing infrastructure has evolved to service the largest commercial operators but establishing and right-scaling processing facilities required for distribution within Rhode Island is difficult. Seafood processing effluent, or wastewater—particularly that coming from squid processing—carries a high biological oxygen demand that cannot be handled by municipal wastewater treatment facilities. As a result, seafood processors are forced to either move their processing activities to an off-site location or ship their wastewater to an off-site treatment facility. Wastewater remains a top challenge for Rhode Island processors, as it inhibits the growth and expansion of operations. While this is one specific challenge, other processing capacity barriers still need to be identified and potential solutions evaluated.

PARTNERS:

Port of Galilee	Coastal communities	RI Infrastructure Bank	General Assembly
Researchers	RI Commerce		



ACTION 2.2

Strengthen and broaden participation in the Local Agriculture and Seafood Act (LASA)

BRIEFS:

2. Food System Policies
5. Economic Development
9. Fisheries, Agriculture, and Aquaculture Business Viability
11. Supply Chain Resilience

INDICATORS:

Total LASA Awards
$3,241,054
(2014-2024)

Amount Requested
$10,885,111
(2014-2024)

CHAMPION

DEM

LASA has been instrumental in supporting the startup and continuation of small food and beverage businesses in Rhode Island. This funding has helped to advance underinvested, beginning, small, women, and veteran agricultural and aquaculture producers and fishermen; climate change mitigation and adaptation initiatives; connections between producers and food-insecure communities; and many other approaches to ensuring business viability. Since its debut in 2014, requests for LASA funding have outpaced awards by a ratio of 3 to 1, and it is likely that overall need is much greater, as those with higher project funding goals may not be applying to a program with a $20,000 grantmaking cap.

LASA has shown strong results in helping Rhode Island's food and beverage businesses grow. Increasing funding would make it possible to invest in more projects, offer larger awards, and expand program capacity with additional staff support. Building on the success of the Resilient Food Systems Infrastructure (RFSI) Program, LASA could also reach more mid-sized farms and food producers, further strengthening Rhode Island's local food economy.

PARTNERS:

General Assembly	RI Commerce	RIFPC	Philanthropic community
Farmers			

RELATED PLANS AND PROGRAMS:

- 2024 Resilient Food System Infrastructure Grant Program



ACTION 2.3

Develop second-stage food business capacity

BRIEFS:

5. Economic Development
9. Fisheries, Agriculture, and Aquaculture Business Viability
12. Food & Beverage Manufacturing Viability

INDICATORS:

Number of Food & Beverage Manufacturers
417 (2023)

Food and Beverage Manufacturing Employment
4,954 (2023)

Food and Beverage Manufacturing Sales
$1,338,108,882 (2022)

CHAMPION

RI Commerce

A dynamic food and beverage manufacturing sector is key to the viability of Rhode Island's food system. The availability of licensed commercial kitchen spaces, like Hope & Main, that provide food entrepreneurs with shared equipment, business planning, and marketing assistance, has allowed hundreds of food and beverage businesses to launch innovative food products and create good jobs in Rhode Island. Many of these businesses are women- and/or immigrant-owned, and their specialty foods feature ingredients uniquely reflective of Rhode Island's landscape and diversity. With success comes the need for larger manufacturing spaces, additional labor, and sophisticated processes to scale efficiently and effectively.

"Second-stage" food businesses are those that have proven consistent demand for their products and have reached a business growth inflection point where embracing potential market growth opportunities requires expanded infrastructure and additional support (e.g., processing capacity, distribution, volume purchasing). These businesses often face barriers such as limited access to capital, production space, workforce, and supply chain inefficiencies. The recent economic analysis of Rhode Island's Second-Stage Food Business Report recommended maintaining an organizational framework for ongoing advising, launching a shared-use business accelerator infrastructure project, and providing targeted financial incentives to support growth and innovation.

Additionally, Rhode Island is uniquely positioned to meet regional needs for co-manufacturing while residing in an economic corridor between Boston and New York City. Strengthening this segment is crucial not only for economic development but also for enhancing the resilience and sustainability of Rhode Island's local food system.

PARTNERS:

Facility operators	RI Commerce	Hope & Main	Small Business Development Center
PolarisMEP			

RELATED PLANS AND PROGRAMS:

- Understanding the Current and Potential Economic Impacts of RI Grown and RI Seafood

ACTION 2.4

Support local and regional food hubs as essential value chain partners in food business viability and food accessibility

BRIEFS:

3. Food System Policies
5. Economic Development
11. Supply Chain Resilience

INDICATORS:

Reach of LFPA and LFS in Rhode Island **$1,035,000 of local food from 90 farmers delivered to 62 community-based organizations serving 35,000 people**

CHAMPION

DEM

The USDA defines a food hub as a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products, primarily from local and regional producers, to strengthen their ability to meet wholesale, retail, and institutional demand. Food hubs are an important part of a resilient food system, as they can reduce risks associated with wholesale distribution, expand market opportunities for small farmers, fishermen, and food producers, and enable increased access to fresh, locally and regionally grown, raised, and harvested food for consumers, institutions, independent retailers, and restaurants.

Both the pandemic and recent federal funding investments have underscored how essential food hubs are in the New England food distribution landscape. Northeast food hubs like Farm Fresh Rhode Island rapidly mobilized in 2022 to fulfill state obligations of the Local Food Purchasing Assistance Cooperative Agreement Program (LFPA) and Local Food for Schools Cooperative Agreement Program (LFS) with the USDA. Food hubs assumed significant financial risk to scale up staff, lease or purchase more trucks, hire drivers, and invest in facility expansions to accommodate the increased volume of demand.

In Rhode Island alone, these programs directed a combined $1,035,000 worth of locally grown food, sourced from 90 small and socially disadvantaged farmers, to 62 community-based organizations serving approximately 35,000 individuals per month and 84 school food authorities. As food hubs make a transition away from reliance on federal funding sources, it is important that state agencies work together with these critical distribution partners to develop sustainable market demand for local and regional products.

PARTNERS:

RI Commerce	RIDE	DHS	Farm Fresh Rhode Island
Farmers Community Food Hub	Red Tomato	Southside Community Land Trust	African Alliance of RI
Commercial Fisheries Center of Rhode Island	RIFPC	General Assembly	RI Food Bank
Retail, institutional, hospitality food buyers			

ACTION 2.5

Support state and regional marketing efforts for RI Grown and RI Seafood products

BRIEFS:

5. Economic Development
9. Fisheries, Agriculture, and Aquaculture Business Viability

INDICATORS:

Number of Businesses Using RI Grown
29 (2024)

Average Annual Sales Attributed to RI Grown Branded Products
$23,500 (2024)

Number of Businesses Using RI Seafood
128 (2024)

Average Annual Sales Attributed to RI Seafood Branded Products
$1.5 million (2024)

CHAMPION

DEM
RI Commerce

The two state-facilitated "Buy Local" marketing brands, RI Grown and RI Seafood, housed at the Department of Environmental Management, help to promote Rhode Island-grown, harvested, and caught products. Overall, state branding efforts play a vital role in increasing awareness and demand for local goods. Shared marketing helps to raise the profile of Rhode Island products both within the state and across the region.

Marketing campaigns can help protect species, markets, and operations at risk of becoming nonviable, such as local oyster farms, ensuring that small- and large-scale producers alike can thrive in the face of challenges. The RI Grown and RI Seafood brands can amplify consumer recognition of Rhode Island's high-quality agricultural and seafood products, strengthening the competitive advantage of these products against non-domestic items.

These state-funded branding efforts directly translate to revenue for Rhode Island businesses. RI Grown businesses report an average of $23,500 in annual sales to the nascent brand program, while each RI Seafood business generates approximately $1.5 million in sales linked to the brand. The economic return on state investment is significant, with every $1 invested in RI Grown yielding $13 in earnings and $49 in statewide sales. RI Seafood delivers $991 in earnings and $2,630 in sales for each dollar invested. Beyond direct sales, these programs also contribute to state tax revenues, with annual income tax revenues estimated at over $7,100 from RI Grown and nearly $3.3 million from RI Seafood, underscoring their value to the state's economy.

PARTNERS:

RI Food Dealers Association	Commercial Fisheries Center of RI	URI Cooperative Extension	Farm Fresh RI
Young Farmers Network	RI Food Policy Council		

RELATED PLANS AND PROGRAMS:

- Understanding the Current and Potential Economic Impacts of RI Grown and RI Seafood

3. Create community food environments that promote equitable food access and contribute to regional resiliency

Regional resiliency depends on achieving food security for all Rhode Islanders and decreasing reliance on highly externalized supply chains. Demand for local food must increase to support local and regional food supply and every market channel has a role to play. Consumers purchase most of their food at grocery stores, supercenters, and restaurants. Nearly 30% of Rhode Islanders spend time at an institution—school, college, healthcare facility, government building—every day. These locations present compelling opportunities for sourcing, selling and serving local food. Direct food sales to consumers (e.g., farmers markets, community supported agriculture shares) are key to cultivating consumer connections to the people and places that provide our food. Food supports tourism (26% of visitor spending), place-making, economic development, and is a means of retaining traditions, cultural heritage, and values. Food banks and food relief agencies can also partner with local distributors and farms to prioritize local food options for Rhode Islanders who rely on supplemental food sources.

Importantly, community food environments that prioritize local purchasing not only enhance food access but also serve as engines for community-based wealth generation. By supporting local producers, processors, and distributors, dollars spent on food stay in Rhode Island's economy—creating jobs, raising incomes, strengthening small businesses, and providing pathways for economic mobility for families. Over time, this localized economic activity can shift household outcomes, offering more stable employment and income growth in historically marginalized communities.

ACTIONS

- **3.1 Support community-led initiatives to improve access to fresh, local and culturally relevant food**
- **3.2 Support streamlined application and recertification of federal nutrition programs**
- **3.3 Engage grocery retailers and food service establishments to source more Rhode Island and regional food**
- **3.4 Increase public institutional procurement of local products, including locally-landed and processed seafood**
- **3.5 Pathways to advancing nutrition support in Rhode Island schools**
- **3.6 Restore Indigenous sovereign rights to waterways, hunting grounds and open space for food gathering**
- **3.7 Provide a living wage to food preparation and serving workers**

ACTION 3.1

Support community-led initiatives to improve access to fresh, local, and culturally relevant food

BRIEFS:

4. Equity, Food Justice, and Community Well-Being
5. Economic Development
15. Eating Behaviors and Foodways
16. Food and Nutrition Security
23. Grocery and Retail

INDICATORS:

Percent of Rhode Islanders in Poverty
11.4% (2023)

Percent of Food Insecure Rhode Islanders
9.7% (2023)

Percent of Hispanic, Black, Asian, and Indigenous Rhode Islanders who live in Low-Income Low-Access Census Tracts
40.8% (2023)

Percent of White Rhode Islanders who live in Low-Income Low-Access Census Tracts
17.8% (2023)

CHAMPIONS

RI Commerce
RIDOH

Despite years of effort and innumerable initiatives designed to improve individuals' access to food, food insecurity among Rhode Island households is increasing rather than decreasing, with higher rates among communities of color. While 20% of White households rated themselves as food insecure, the rate is 32% among Black households, 36% among Latino households, and 24% among all other households (including Asian, Native American, and more than one race/ethnicity). According to its 2024 Status Report on Hunger, the Rhode Island Community Food Bank and it statewide network of member agencies are serving a record 84,400 people each month.

Maximizing surplus food donations (Action 4.2) can help meet the substantial need, while additional consistent food access points are established that reflect Rhode Islanders' right to choose what they eat. Availability must be combined with affordability, reliability, and the tools, equipment, and knowledge to make ingredients useful.

- Developing member-owned food cooperatives to support food affordability and shared wealth-building
- Implementing zoning changes and laws to limit the density of fast food outlets and encourage the establishment of grocery stores;
- Improving public transportation routes around grocery stores and farmers' markets;
- Exploring opportunities to increase mobile markets in hard-to-reach communities.

Community action programs and other collaboratives of neighborhood stakeholders, organizations, and residents play a critical role in developing community-driven solutions that are tailored to the needs of each locality.

PARTNERS:

Food Retailers	RI Department of Transportation	RIDOH, including HEAL program	RI Community Food Bank
Farm Fresh RI, including Bonus Buck Program	EforAll	RI Small Business Development Center	Rhode Island Community Bank
Eat Well, Be Well (DHS)	Hope & Main	RIFPC	

ACTION 3.2

Ensure comprehensive access to federal nutrition programs

BRIEFS:

14. Food System and Nutrition Education

15. Eating Behaviors and Foodways

16. Food and Nutrition Security

INDICATORS:

Percent of Indigenous Households Receiving SNAP Benefits
35.7% (2023)

Percent of Hispanic Households Receiving SNAP Benefits
32.8% (2023)

Percent of Black Households Receiving SNAP Benefits
26.4% (2023)

Percent of White Households Receiving SNAP Benefits
9.6% (2023)

Percent of Asian Households Receiving SNAP Benefits
7.7% (2023)

CHAMPION

Department of Health

Too many Rhode Islanders struggle to meet their basic needs, including access to high-quality, culturally relevant, and nutritious foods. Food insecurity, together with the lack of other social, health, and economic supports, increases the risk of chronic disease, including hypertension, diabetes, and cancer, particularly among underserved groups. Integrative and functional nutrition considers that dietary needs vary by person, and supplying indiscriminate calories alone is not sufficient to manage and maintain physical and mental well-being.

Several state-administered programs exist to provide food assistance and strengthen nutrition security. Sustaining enrollment requires clear communication about maintaining eligibility, providing information in multiple languages, and addressing stigma-related barriers. Reducing administrative error rates in SNAP is critical for ensuring eligible resident receive and retain the support they qualify for. Simplifying the application and recertification processes for SNAP, WIC, Medicaid, and other incentive programs can further help eligible residents stay enrolled. Addressing "benefit cliffs," where small increases in income result in disproportionate losses of assistance, is also essential to prevent sudden disruptions in food access and to support economic mobility. Changing the requirement for applicants from submitting gross income to net income factors cost of living and may help more Rhode Islanders maintain enrollment.

Integrating existing fruit and vegetable voucher incentive programs, including Eat Well, Be Well (EWBW) and Bonus Bucks, into a single program would enable farmers to accept EWBW at farmers markets, increase investment in the local economy, and reduce participation burdens among SNAP recipients. EWBW should also be expanded to smaller retailers and bodegas. Increasing choice across food outlets will allow individuals more control over their nutritional needs. Transitioning food pantries to a client-choice model provides autonomy, reduces wasted food, and decreases the stigma associated with going to a food pantry. Program recipients and grant awardees should be meaningfully engaged in the design, implementation, and evaluation of programs and services.

PARTNERS:

Department of Human Services	DEM	RIFPC	RI Food Bank
Restaurant Meals Program	Fruit and Vegetable Voucher Incentives	Supplemental Nutrition Assistance Program	HEAL programs
Farm Fresh Rhode Island			

ACTION 3.3

Engage grocery retailers and food service establishments to source more Rhode Island and regional food

BRIEFS:

- **15.** Eating Behaviors and Foodways
- **19.** Direct to Consumer Sales
- **20.** Institutions
- **21.** Distribution and Wholesale
- **22.** Restaurants and Hospitality
- **23.** Grocery and Retail

INDICATORS:

Estimate of Local Food Expenditures **$234 million** (2022)

Per Capita Food Expenditures **$7,263** (2022)

Retail Food Sales **>$10 billion** (2022)

Farm to Retail Direct Sales **$10,182,822** (2022)

Grocery Store Market Concentration **81% of states have markets that are less concentrated than RI.** Ahold Delhaize (Stop & Shop) accounts for 42.1% of RI market share. (2024)

CHAMPIONS

DEM, RI Commerce, IFNPAC

New England Feeding New England, a regional food system partnership that includes representation from RI Commerce, DEM, and RIFPC, has set a goal of 30% regional self-reliance by 2030. A 2022 "Local Food Count" found that Rhode Islanders spend about $234 million—or 2.7% of total food spending—on food grown, raised, or harvested in the state. Achieving this ambitious goal will require broad market and consumer engagement. Grocery retailers and restaurants collectively account for 80% of how people obtain their food, but local and regional products face significant competitive disadvantages in a highly commoditized space that favors low cost and convenience over qualities like local sourcing, fair labor, animal welfare, environmental sustainability, and nutrition.

Programs like RI Grown and RI Seafood have shown success in raising consumer awareness and building vendor relationships for producers, but advocates would like to see more funding directed toward marketing and one-on-one technical support to help food businesses utilize marketing and online promotional platforms. Retaining state capacity would help to maintain momentum for local procurement and value chain coordination. Efforts may include engaging with retailers to source and promote local and regional products with better signage and labeling and helping restaurants and other food service establishments develop more direct relationships with producers to increase the purchase of local ingredients and highlight these on menus. Producers may need support to scale up supply, and collaboration with distributors is key to meeting service, ordering schedules, and negotiating viable price points. All segments of the consumer sector will need to procure local products at or above market-rate prices to ensure the profitability and viability of the system. RI Commerce's SupplyRI program provides technical training and coordination necessary for local suppliers to navigate rigorous procurement processes and successfully connect with regional buyers.

PARTNERS:

Supply RI	DOC	DHS (SNAP incentives)	RIDOH
Farm Fresh RI	Hope & Main	New England Feeding New England	Distributors and retailers

RELATED PLANS AND PROGRAMS:

- New England Feeding New England
- RI Seafood
- RI Grown



ACTION 3.4

Increase public institutional procurement of local products, including locally-landed and processed seafood

BRIEF:

3. Food System Policies

20. Institutions

INDICATORS:

Number of Institutions in Rhode Island
>1,200 (2022)

Number of Rhode Islanders Who Spend Time in Institutions Daily
>315,000 (2022)

Amount Spent on Local Food by RI Institutions
>$9 million (2019)

CHAMPION

RIDE

Institutions—K–12 schools, colleges and universities, hospitals, and prisons—are generally a smaller market channel than groceries and restaurants, but they still host an important daily audience of consumers and therefore hold significant purchasing power. As public institutions, it is important that purchasing practices reflect the values and economic interests of taxpayers, including preferences for supporting underrepresented producers, sustainability and regenerative growing practices, fair labor, and products of local or regional origin.

Longstanding efforts such as farm-to-school programs, recent national policy trends like statewide local food purchasing incentives, and federal funding dedicated to local and regional school food purchases all help to boost the procurement of local foods by public institutions. The reinvigoration of the Rhode Island Farm and Sea to School Network and the release of its strategic plan in 2024 provide a nexus around which to build local and regional partnerships, share knowledge and infrastructure, and strategize around best practices for these efforts.

In addition to near-term support of the network's strategic plan, a long-term investment such as adopting a local food or broader values-based purchasing framework and incentive will help ensure public institutions are central to supporting a resilient Rhode Island food system.

PARTNERS:

DEM	RI Commerce	RIDOH	Chartwells
Farm Fresh Rhode Island	RIFPC	Rhode Island Healthy Schools Coalition	College/School staff
Farm to Institution New England	Distributors	Farmers and fishermen	Early childhood centers
Hospitals	Assisted living centers	Corporate cafeterias	Leisure destinations

RELATED PLANS AND PROGRAMS:

- USDA National School Lunch and Breakfast Programs
- RI Farm and Sea to School Strategic Plan

ACTION 3.5

Strengthen pathways to advancing nutrition support in schools

BRIEFS:

3. Food System Policies
4. Equity, Food Justice, and Community Well-Being
16. Food and Nutrition Security
20. Institutions

INDICATORS:

Number of Meals Served by National School Lunch Program
11.9 million (2024)

Number of Meals Served by School Breakfast Program
5,132,804 (2024)

Number of Meals Served by Summer Food Service Program
263,159 (2024)

Farm to School Participation
77.5% of School Food Authorities, representing 224 schools and 49,047 students (2023)

Percent of School Food Authorities Providing Food, Nutrition, or Ag Education
57.5% (2023)

CHAMPION

RIDE
RIDOH

School meals play an integral role in educational outcomes for Rhode Island students. Currently, in Rhode Island, children from households earning less than 130% of the federal poverty level (equivalent to $33,566 for a family of three) are eligible for free school meals, with the full cost reimbursed by the USDA. Those from households with incomes between 130% and 185% of the federal poverty level (up to $47,767 for a family of three) qualify for reduced-price meals, where families pay a small portion and the USDA covers the remaining cost.

The RI 2030 Plan seeks to elevate student outcomes to meet or exceed Massachusetts standards by 2030, supported by Learn 365 and Community Learning Centers. In 2024, Rhode Island expanded access to free school breakfasts and lunches to include students who qualify for reduced-price meals per federal qualifications. In 2025, about 62,000 of 138,000 enrolled students were eligible to receive free school meals.

A pathway to stronger nutrition support in Rhode Island schools means establishing a more reliable budget for food service and dining directors—covering food budgets, kitchen upgrades, staff training, and livable wages—while also ensuring fair access to nutritious meals for all children. Programs that ensure all children attending public schools can access a majority of their daily nutritional requirements to learn without stigma are essential for students to thrive. Likewise, integrating locally grown, harvested, caught, and made products into schools creates reliable markets for local producers.

PARTNERS:

RIDE	State Assembly	RIDOH	Executive Office of Health and Human Services
RIFPC	RI Farm to School Network	Healthy School Meals for All Coalition	

RELATED PLANS AND PROGRAMS:

- USDA National School Lunch and Breakfast Programs
- RI Farm and Sea to School Strategic Plan



ACTION 3.6

Restore Indigenous sovereign rights to waterways, hunting grounds, and open space for food gathering

BRIEFS:

- **4.** Equity, Food Justice, and Community Well-Being
- **15.** Eating Behaviors and Foodways
- **16.** Food and Nutrition Security

CHAMPIONS

Narragansett Indian Tribe, DEM

Indigenous people face specific challenges around traditional foodways in Rhode Island, including obtaining fishing and hunting licenses, accessing salt ponds due to the privatization of the water through shellfisheries and shellfish farming, and accessing federal and state lands for harvesting culturally relevant foods (e.g., berries and mushrooms). Currently, the state does not acknowledge the Narragansett tribal identification card as valid for accessing state-held land and waterways for fishing, hunting, and foraging. A potential path forward is for Indigenous communities and the Rhode Island Department of Environmental Management (DEM) to explore the creation of a pathway or process that could improve access to fishing, hunting, and foraging practices that are culturally significant, while remaining consistent with state law.

INDICATORS:

None identified

PARTNERS:

RIDEM Bureau of Natural Resources			

RELATED PLANS AND PROGRAMS:

- Narragansett Indian Tribe Food Sovereignty Program

ACTION 3.7

Enhance economic mobility and income for food system workers

BRIEFS:

13. Labor and Workforce Development

INDICATORS:

Food System Employment
74,681 (2023)

Median Hourly Wage - Food Preparation and Serving Occupations
$15.96 (2023)

Median Hourly Wage Increase from 2002 to 2023 for Food Preparation and Serving Occupations
$2.56 (2023)

Living Wage: 1 Adult
$24.36 (2023)

Living Wage: 2 Adults (1 Working), 1 Child
$40.07 (2023)

Living Wage: 2 Adults (Both Working), 2 Children
$24.66 (2023)

CHAMPION

Department of Labor

Efforts to keep food prices low and maintain profit margins have often disadvantaged workers across every level of the food supply chain. Food preparation and service occupations are the largest category of employment in Rhode Island's food system (85%), but these jobs have the lowest median hourly wage—$15.96—of any major occupational category. These positions traditionally rely on tips as part of total compensation, and many hourly food workers struggle due to variable and low wages.

Other challenges are irregular hours, costs of commuting, limited access to transportation, and difficulties securing affordable and consistent childcare.

Lack of substantial benefits such as health insurance and retirement plans is an additional occupational drawback, making it difficult to attract and retain workers in an industry all Rhode Islanders rely upon. The U.S. Government Accountability Office (GAO) has found that restaurants and other eating places employ the largest percentage of working adult Medicaid enrollees and SNAP recipients in states that provided employer data. While the minimum wage in Rhode Island increased to $15.00 per hour on January 1, 2025, the living wage for an adult, the hourly rate that a household member needs to earn to support themselves and their family, is $24.36, leaving a considerable financial gap.

PARTNERS:

Fuerza Laboral	United Food and Commercial Workers Union Local 328	UNITE HERE	Teamsters Local 251
Business Owners	General Assembly	Department of Transportation	

RELATED PLANS AND PROGRAMS:

- Ocean State Accelerates
- 2030 Future of the Ocean State



4. Scale up wasted food prevention, recovery, and recycling efforts

Rhode Island residents and food generators, including farms, food service, manufacturing, and retail, disposed of 77,000 tons of surplus food into landfills in 2023, representing 46% of all surplus food in the state and accounting for one-third of the state's total solid waste. Meanwhile, Rhode Island's sole landfill is projected to reach capacity by 2043. If Rhode Island cannot dispose of its own waste—and with other nearby states facing similar capacity constraints—who will? Organic waste in landfills isn't just a waste of space—it's squandering a valuable resource. Disposing of it is inefficient, costly, and unnecessary when there are viable alternatives, such as proven source reduction strategies, pathways for donation that also address food insecurity, and market opportunities to scale compost production.

ACTIONS

- **4.1 Ensure compliance and capacity for Rhode Island's Food Waste Ban**
- **4.2 Maximize surplus food value and reduce wasted food by creating alternative pathways and partnerships**
- **4.3 Incentivize and reduce barriers to increasing residential and commercial composting infrastructure and implementation**



ACTION 4.1

Ensure compliance and capacity for Rhode Island's Food Waste Ban

BRIEFS:

3. Food System Policies

16. Food and Nutrition Security

17. Wasted Food Source Reduction and Recovery

INDICATORS:

Tons of Wasted Food
100,030
(2015 Waste Characterization Study)

Tons of Wasted Food
76,688
(2023 ReFED estimate)

CHAMPIONS

DEM
RI Commerce

Many businesses remain either unaware of or non-compliant with the 2017 Food Waste Ban (R.I. Gen. Laws § 23-18.9-17). Additionally, the law does not require a state agency to promulgate or enforce rules and regulations, making it effectively voluntary. Recent research suggests that of the nine state-led efforts to ban the waste of food, all have failed to reduce wasted food except Massachusetts. Massachusetts' success in reducing organic waste disposal is credited to the simplicity of its regulations, sufficient infrastructure (i.e., composting sites), a low cost of compliance, strong enforcement, and robust technical assistance to food businesses to help them comply or return to compliance post-enforcement.

The state should spearhead an initiative to gather baseline data about Rhode Island businesses' existing food recovery and source reduction efforts to gain a better understanding of current industry awareness around food donation safety guidelines and policies; discover opportunities within the private sector to reach recovery and source reduction goals; and develop communication strategies to expand awareness and adoption of progress goals within Rhode Island's business community. Promoting efforts that incentivize Rhode Island businesses to donate surplus food through food donation tax credits could help offset associated costs, as would ensuring that future "Green Bonds" include funding for waste reduction and composting. Advocates and lawmakers should also work to maintain and expand federal and state funding sources available to bolster existing Rhode Island food recovery and source reduction programs that offer technical support, logistics management, surplus rescue and redistribution, and surplus food purchasing from local farmers.

PARTNERS:

RI Food Dealers Association	RI Hospitality Association	Center for EcoTechnology	Farm Fresh RI
Food Recovery for RI	Rescuing Leftover Cuisine	Epic Renewal	Groundwork RI
FeedRI	Commercial Fisheries of RI	Chambers of Commerce	

RELATED PLANS AND PROGRAMS:

- RI Solid Waste Management Plan

ACTION 4.2

Maximize surplus food value and reduce wasted food by creating alternative pathways and partnerships

BRIEF:

16. Food and Nutrition Security

17. Wasted Food Source Reduction and Recovery

INDICATORS:

Number of People Served By Food Bank and Partners
84,400 (2024)

Tons of Food Donated by Foodservice, retail, manufacturing, and farms
4,210
(2023 ReFED estimate)

Number of Meals Uneaten/Unsold
223,000,000
(2023 ReFED estimate)

CHAMPIONS

RIDOH
DEM

Confusion about food donation liability continues to limit the efficient use of available surplus food. There are uncertainty and a lack of awareness across all food generator sectors, as well as nuances within hunger relief agencies, regarding food donation and acceptance guidelines afforded by federal and state food donation laws. Various educational communication tools, programs, and resources already exist, including technology platforms designed to assist in matching those with surplus food to eligible food distribution outlets (e.g., FoodRecovery.org). Questions remain about how to incentivize food donation on the production side, especially given existing processing capacity issues for fish and shellfish. When production peaks and overwhelms the market, causing prices to decline for specific products, offering an alternative option in which commercial food generators (farms, fisheries, food service, manufacturing facilities, and retail) could claim an incentive for donating food, particularly high-value staple and fresh foods, would be helpful.

PARTNERS:

RIFPC	University of Rhode Island	Farm Fresh RI	Rescuing Leftover Cuisine
Center for EcoTechnology	Feed RI	Hope & Main	FoodRecovery.org
Plates with Purpose	We Share Hope/Feed RI	The Elisha Project	

RELATED PLANS AND PROGRAMS:

- Matching Excess and Need for Stability (MEANS) Database
- University of Rhode Island Extension, Food Recovery for Rhode Island
- Rhode Island School Recycling Project



ACTION 4.3

Incentivize and reduce barriers to increasing residential and commercial composting infrastructure and implementation

BRIEF:

2. Climate Change

18. Composting & Downstream Waste Diversion

CHAMPION

DEM

If unaddressed, the cost of waste disposal for municipalities and businesses will become increasingly difficult in the decades ahead. In addition to taking up space, organic waste in landfills is the third-largest emitter of methane, a major cause of greenhouse gas emissions. Organic waste (e.g., produce, meat, dairy, shellfish, fish scraps, seaweed, brewery waste) can be mixed with carbon-based materials such as leaves and wood chips to create nutrient-rich compost. Compost revitalizes soil health, making farming and surrounding ecosystems more resilient. It can also reduce reliance on chemical fertilizers, contributing to sustainable agricultural practices. In addition to composting, food scraps can be turned into biogas, a renewable source of energy.

Incentives for households and commercial or institutional producers to reduce or recover organic waste include offering curbside collection and free storage bins, managing tipping fees at landfills to encourage composting and anaerobic digestion, and offering finished compost back to clients for their gardens. Agreements to donate compost to local community and school garden programs and farms, along with retailers discounting items nearing their "best by" dates, are also strategic approaches.

INDICATORS:

Tons of Compost Produced
41,400* (2023 ReFED estimate)

Number of On-Farm Food Scrap Composters
1 (2024)

Number of Jobs Per 10,000 Tons of Material Handled
6.2 (2022)

PARTNERS:

Municipalities	Commercial composting facilities	RIFPC	Center for EcoTechnology
Aquidneck Community Table	Groundwork RI	Eastern Rhode Island Conservation District	URI Cooperative Extension
Rhode Island Schools Recycle Project	ReFED		

RELATED PLANS AND PROGRAMS:

- RI Solid Waste Management Plan
- RIFPC Municipal Composting Readiness Report

*Note: Composters in Rhode Island believe that the ReFED compost estimate is too high. This discrepancy highlights the substantial data challenge stakeholders face in analyzing and addressing wasted food in Rhode Island.

Methodology

Project Design

To inform the updated strategy, the project team drew inspiration from Vermont's Farm to Plate 2.0 process which used a portfolio of food system briefs to inform strategic priorities and actions. This approach aligned with the project team's goals of transparency, inclusivity, and collaboration. The project team also reviewed several municipal, state, and regional food system plans—Transforming Together: Hawaii's Food System, San Diego County Food Vision 2030, Seattle Food Action Plan 2024 and the New England Feeding New England research volumes along with other Rhode Island state plans—to benchmark best practices and align efforts.

Early in the strategic planning process, the Director of Food Strategy attended and led sessions at community events to raise awareness of the strategy update and gather insights on challenges, needs and opportunities from participants. The Director of Food Strategy, in partnership with the Steering Committee, formed a phased project plan to gather feedback and facilitate goal setting conversations regarding a broad swath of topics related to Rhode Island's food system.

Project Phases

Process Development & Fundraising	Initial Outreach & Early Engagement	Research & Development of RI Food Strategy 2030	Public Launch, Outreach & Implementation
Form a Steering Committee	Establish Advisory Board	Hold listening sessions and engagement forums	Launch RI Food Strategy 2030
Fundraise for project	Conduct and publish a 5 Year Retrospective Report	Draft actions and priorities to summarize recommendations in briefs	Implement and integrate
Select consulting firm	Develop Crosscutting, Issue, and Market Briefs co-authored by subject matter experts	Conduct internal review of strategy with state leadership	
Develop project plan			

This strategy references deliverables of all phases of the planning process including the Retrospective, Briefs, engagement sessions, secondary research, and one-on-one conversations with food system representatives.

Project Advising

This project was overseen by the Director of Food Strategy, a position housed at RI Commerce Corporation with responsibility to all supporting agencies of the food strategy –RI Commerce, DEM, and RIDOH. Representatives from these agencies, including the Executive Office of Health and Human Services, formed the project's Steering Committee. The committee also included a representative of the Narragansett Indian Tribe, under a formal letter of partnership between RI Commerce and tribal leadership, and later welcomed Fuerza Laboral, a workers' rights organization. The Steering Committee met regularly to provide project design advising and accountability for the project team.

A 32-member Community Advisory Board was established to assist in informing and co-creating the strategy content. Advisory Board members were eligible to receive stipends to support their participation over the course of the project. A number of Community Advisory Board members also served as brief co-authors or contributors.

At the middle of the process, Justice, Equity, Diversity and Inclusion (JEDI) Committee of six members was formed. The JEDI committee members most significantly contributed to the brief process design, helping to determine the topics to be addressed, define the co-authorship approach, and identify brief co-authors. The JEDI Committee proposed an alternative tri-party project governance model that could not be accommodated by the funding and capacity parameters of the project midstream and, ultimately, a single Steering Committee was retained for the remainder of the project.

5-Year Retrospective

At the project's genesis, a retrospective report on the first food strategy was undertaken to assess what was accomplished in the last five years; acknowledge how the food system landscape has changed for Rhode Island; and inform and invigorate the next phase of collective action.

Primary research included key informant interviews and a survey to food system leaders, community members, farmers, fishermen, food business owners, and nonprofit organizations operating within the food system over a six-month period. The project team utilized secondary sources as well, including background documentation and prior reports and research from a wide range of state agencies, organizations, work groups, and websites.

Brief Development

Brief development involved input from the Steering Committee, Community Advisory Board, and JEDI Committee to select 23 topics and corresponding subject matter experts to co-author and contribute to each. Brief teams were provided with detailed guidance on how to structure their writing, suggestions of how to engage additional contributors, and resource folders of existing research.



The multi-author model was envisioned by the JEDI Committee to ensure each brief benefited from the perspective of historically underrepresented groups. Co-authors were invited to contribute to the brief through the

lens of the Indigenous "two-eyed seeing" framework, which values multiple ways of knowing—recognizing that expertise can stem from academic or western scientific backgrounds as well as generational and lived experience. Brief teams were encouraged to engage with other subject matter experts in whatever format they deemed most appropriate. Co-authors used one-on-one interviews, focus groups, custom questionnaires, and peer review to gather diverse perspectives and feedback on brief content.

With many different authors contributing to the draft briefs, the project team and consultants worked with co-authors through 3-4 rounds of revisions and review to ensure the completeness, comprehension, and accuracy of brief content as well as a cohesive design.

While each brief focuses on a subject, they invariably cross-reference key data that is relevant to multiple components of the food system. In addition to providing foundational context to the current food system for this strategy, the project team imagines the briefs as a helpful tool to the General Assembly and other decision-makers in need of basic information about food system-related concerns.

Engagement, Listening Sessions & Review

In 2024, an in-person Summer Forum was held at the Tilted Barn in Exeter, RI, bringing together 80 participants from 52 organizations and supporting 10 local small businesses. The event marked a key step in co-creating the RI 2030 Food System Plan. Its goals were to: (1) share progress and identify knowledge gaps, (2) prioritize focus areas and draft the initial plan framework, and (3) coordinate partner roles and capacity needs. Organized into three sessions, the forum included reflection, discussion, and group work. Nine small groups submitted worksheets outlining priority objectives, guiding principles, indicators, and key partners based off the of over 180 recommendations listed in the 23 Briefs.







The project team then distilled the worksheets along with feedback from other conversations into a draft framework encompassing four priorities and 21 actions. Special listening sessions were held throughout the strategy framework development to discuss specific issues and engage underrepresented groups. Advisory Board members were invited to host listening sessions for any group they felt had not yet had the opportunity to be adequately engaged in the planning process.

Throughout all phases of development, the project team provided progress updates at quarterly IFNPAC meetings. All those in attendance were able to ask questions and contribute input in these public convenings.

Implementation

While assessing the impact of Rhode Island's first food strategy, it became clear that there are existing streams of activity into which the priorities of this plan are merging. While some ideas are newer, many actions are designed to reinforce what is working well, accelerate emerging initiatives, re-establish connections that have been lost, engage new voices, and shift mindsets from aspirational to achievable.

This strategy also acknowledges that planning should happen continuously. While this strategy represents a step in elevating and reinvigorating awareness of priority issues and interventions, there is still much work to be done to further understand how to move initiatives forward. Reasonable and required timelines to expect outcomes are unspecified and myriad resources and partners have yet to be coordinated into collective action. A consideration throughout the planning process has been how to ensure the plan will sustain engagement and demonstrate progress. Like its 2017 predecessor, the 2030 Food Strategy suggests dozens of indicators that can be used to evaluate progress against priorities and actions. Given how challenging, and in many cases impossible, it was to retrace five years of activity for the Retrospective against the original strategy's proposed metrics, this strategy requests a more frequent evaluation process, with core partners reporting for their respective areas of responsibility.

Rhode Island is fortunate that the Interagency Food and Nutrition Policy Council (IFNPAC) provides the exact platform required for this type of continuous shared accountability. IFNPAC is designed to support multi-sectoral planning. This is necessary to address related issues within the food systems concurrently—housing, transportation, childcare, insurance, healthcare and education costs—helping keep food system considerations top of mind in decision-making.

Additionally, the financial and capacity resources required to create a strategic plan make it unsustainable to do every few years. The project team proposes a continuous planning model that will regularly evaluate and update the priorities and actions as circumstances shift. Continuous planning throughout the implementation phase of this work will include regular data analysis and reporting; continued community engagement; and iterative adjustments. Some ways the RI Food Strategy program is seeking to operationalize this concept are:

- Updated food strategy website with a dashboard for each priority, action, and associated metrics that integrates with the Rhode Island Food Policy Council's Data Dashboard
- Develop quarterly reports for IFNPAC that include both qualitative and quantitative progress of state agencies activities for the IFNPAC meetings and share these reports for public review and comment
- Form IFNPAC action groups addressing specific, measurable, actionable, realistic, and timely actions to move the goals of the food strategy forward. These action groups should involve state agency representatives and key organizational program leads to more collaboration between state government and community in non-legislative policy changes
- Hold bi-annual convenings with the RI Food Strategy 2030 Community Advisory Board to promote continuous planning and action

- Both the IFNPAC action groups and Community Advisory Board will have the opportunity to update the strategy's priorities as circumstances change, allowing for ongoing adaptation for a shared vision and progress; and
- Send regular RI Food Strategy communications via a newsletter or other digital format.

Within the continuous planning model is embedded the principle of co-creating a state strategy that serves all those who live and work in Rhode Island. The goal is to move this effort from strategic planning and ideation to tangible impacts. RI Commerce engaged E2 EmpowerED, an equity-first learning and development firm, to conduct an equity baseline assessment as part of the food strategy development process. The assessment's recommendations will guide the strategy's implementation through a continuous planning model that includes ongoing engagement, training, capacity assessments, metric tracking, and relationship-building tools. Recognizing that no single plan can fully address every challenge or opportunity, the strategy is designed to evolve with new insights, solutions, and partnerships. These tactics aim to increase accountability, foster active participation in systems change, and support adaptability as the food system and its priorities shift over time.

Many actions and recommendations require funding for implementation. Since 2017, Rhode Island state agencies have collectively leveraged over $29 million in federal grants to support strategic projects towards the food strategy. At the publication of this document, there have been considerable shifts in federal funding availability. Funding from various public and private sources will be important in implementing the actions recommended in this strategy, especially to ensure the economic viability of fishing, farming and food businesses in the state. If interventions are not enacted now, there will be irreversible impacts on soils, farmland, waterways, and the ocean deeply affecting our food system.

As the coordinating organization for this RI Food Strategy 2030, the Food Strategy program at RI Commerce will develop recommended next steps for each champion agency. These recommendations will address budgetary restrictions and offer ways to make progress on critical issues through coordination efforts. The year 2030 will be here in a blink of the eye. In the meantime, the world around us will continue to generate distractions capable of derailing even the most focused and well-intentioned activities. As the acute consequences of climate change and persistent injustices in the food system pressure the people of Rhode Island and demand immediate attention, investment in long-term outcomes must also continue. This is the key to stewarding a more equitable, sustainable, and resilient food system and this strategy is our collective call to action.





Briefs

The project team facilitated the coordination of 23 Cross-Cutting, Issue, and Market Briefs to serve as the foundational research for RI Food Strategy 2030. RI Commerce invited 33 individuals to co-author the Briefs. The co-author teams gathered input and feedback from recommended contributors and others to gather feedback from diverse perspectives and viewpoints. Throughout the process over 150 Rhode Island private and public sector experts participated in the development of the 23 Briefs. The project team led the co-author teams through rounds of copy editing and provided data visualizations to highlight key themes.

Cross-Cutting Issues: These 5 Briefs examine thematic issues that relate to all Issue and Market Briefs. These Briefs should be read as context for the remaining 18 Briefs.

1. NARRAGANSETT FOODWAYS
2. CLIMATE CHANGE
3. FOOD SYSTEM POLICIES
4. EQUITY, FOOD JUSTICE & COMMUNITY WELL-BEING
5. ECONOMIC DEVELOPMENT

Issue Briefs: These 13 Briefs cover critical topics and persisting challenges in our food system.

6. STEWARDSHIP OF FOOD PRODUCING LANDS
7. STEWARDSHIP OF WORKING WATERFRONTS
8. COMMUNITY-BASED FOOD PRODUCTION
9. FISHERIES, AGRICULTURE, & AQUACULTURE BUSINESS VIABILITY
10. WATER QUALITY & SOIL HEALTH
11. SUPPLY CHAIN RESILIENCE
12. FOOD & BEVERAGE BUSINESS VIABILITY
13. LABOR & WORKFORCE DEVELOPMENT
14. FOOD SYSTEMS & NUTRITION EDUCATION
15. EATING BEHAVIORS & FOODWAYS
16. FOOD & NUTRITION SECURITY
17. SURPLUS FOOD SOURCE REDUCTION & RECOVERY
18. COMPOSTING & DOWNSTREAM FOOD WASTE DIVERSION

Market Briefs: These 5 briefs discuss 5 channels which food is sold and accessed.

19	20	21	22	23
DIRECT TO CONSUMER	INSTITUTIONAL MARKETS	DISTRIBUTION & WHOLESALE	RESTAURANTS & HOSPITALITY	GROCERY & RETAIL

A note on changes since the Briefs were developed: Since the briefs were developed in 2024, there have been significant changes in federal programs and funding. The co-authors wrote the briefs within this context. The RI Food Strategy 2030's priorities and actions are based on the recommendations of these briefs but are aimed to be responsive to the changing government climate.

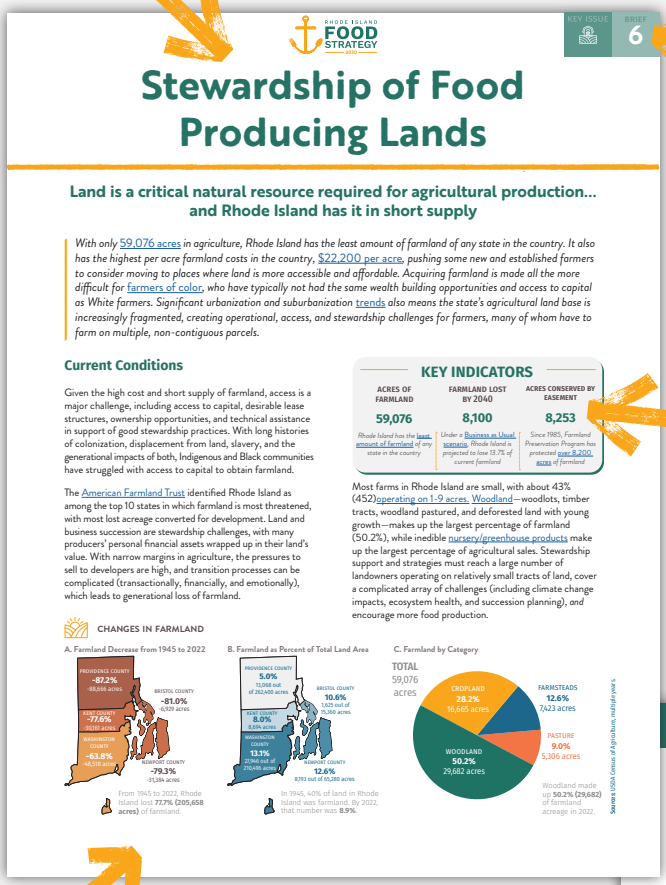


Reading Briefs

Brief titles

Briefs are color-coded and numbered.

Blue = Crosscutting Issues
Green = Key Issues
Orange = Market Channels



RHODE ISLAND FOOD STRATEGY 2030

KEY ISSUE BRIEF 6

Stewardship of Food Producing Lands

Land is a critical natural resource required for agricultural production... and Rhode Island has it in short supply

With only 59,076 acres in agriculture, Rhode Island has the least amount of farmland of any state in the country. It also has the highest per acre farmland costs in the country, $22,200 per acre, pushing some new and established farmers to consider moving to places where land is more accessible and affordable. Acquiring farmland is made all the more difficult for farmers of color, who have typically not had the same wealth building opportunities and access to capital as White farmers. Significant urbanization and suburbanization trends also means the state's agricultural land base is increasingly fragmented, creating operational, access, and stewardship challenges for farmers, many of whom have to farm on multiple, non-contiguous parcels.

Current Conditions

Given the high cost and short supply of farmland, access is a major challenge, including access to capital, desirable lease structures, ownership opportunities, and technical assistance in support of good stewardship practices. With long histories of colonization, displacement from land, slavery, and the generational impacts of both, Indigenous and Black communities have struggled with access to capital to obtain farmland.

The American Farmland Trust identified Rhode Island as among the top 10 states in which farmland is most threatened, with most lost acreage converted for development. Land and business succession are stewardship challenges, with many producers' personal financial assets wrapped up in their land's value. With narrow margins in agriculture, the pressures to sell to developers are high, and transition processes can be complicated (transactionally, financially, and emotionally), which leads to generational loss of farmland.

KEY INDICATORS

ACRES OF FARMLAND	FARMLAND LOST BY 2040	ACRES CONSERVED BY EASEMENT
59,076	8,100	8,253
Rhode Island has the least amount of farmland of any state in the country	*Under a Business as Usual scenario, Rhode Island is projected to lose 13.7% of current farmland*	*Since 1985, Farmland Preservation Program has protected over 8,200 acres of farmland*

Most farms in Rhode Island are small, with about 43% (452)operating on 1-9 acres. Woodland—woodlots, timber tracts, woodland pastured, and deforested land with young growth—makes up the largest percentage of farmland (50.2%), while inedible nursery/greenhouse products make up the largest percentage of agricultural sales. Stewardship support and strategies must reach a large number of landowners operating on relatively small tracts of land, cover a complicated array of challenges (including climate change impacts, ecosystem health, and succession planning), *and* encourage more food production.

CHANGES IN FARMLAND

A. Farmland Decrease from 1945 to 2022

From 1945 to 2022, Rhode Island lost **77.7% (205,658 acres)** of farmland.

B. Farmland as Percent of Total Land Area

In 1945, 40% of land in Rhode Island was farmland. By 2022, that number was **8.9%**.

C. Farmland by Category

Woodland made up **50.2% (29,682)** of farmland acreage in 2022.

Source is USDA Census of Agriculture, multiple years.

2-3 **KEY INDICATORS** for each Brief topic are synopsized

Major **CHALLENGES** for each Brief topic are explained

Graphical presentations of key indicators or trends are included with each Brief

OPPORTUNITIES for overcoming challenges and strengthening Rhode Island's food syste

RECOMMENDATIONS for addressing Challenges and advancing Opportunities highlighted in each Brief are summarized

ISSUE BRIEF: STEWARDSHIP OF FOOD PRODUCING LANDS 6

Challenges

- **Financing Gaps for Entrepreneurs:** Land access challenges are felt most acutely by Hispanic/Latino, Black, Indigenous, and other people of color, as these groups face higher rates of rejection to requests for financing than White entrepreneurs.
- **Competing Land Uses:** Agriculture competes with other land uses, including residential and commercial building development, and large scale solar arrays.
- **Aging Farmers:** The average age of farmers was 56.6 in 2022, and 60.5% of farmers are over the age of 55. Farmers face individualized financial and other hurdles to transitioning their land and business to the next generation of farmers.
- **Assistance With Climate Change Adaptation and Mitigation:** Farmers struggle to navigate and access incentive programs that exist for climate-smart agriculture.

Opportunities

- **Explore Payment for Ecosystem Services:** Farm revenues come from products grown and raised, not ecosystem services provided, but they could and should come from both.
- **Raise Awareness of Existing Programs:** The Department of Environmental Management supports increased access to farmland through programming like the Local Open Space Grant Program, the Farmland Preservation Program, and Farmland Access Program competitive grant program. Land trusts across the state—and a Land Trust Council that links them together—work to preserve and increase farmer access to rural farmland, while Southside Community Land Trust's properties increase access to urban and peri-urban land for food production (including for a large number of farmers who are immigrants and refugees).
- **Expand Use of Buy-Protect-Sell Model:** Utilize the buy-protect-sell model in conservation easements. This may take the shape of an agrarian or farmland commons, or within existing land trusts, so that farmers have affordable access to farmland.
- **Invest in Indoor Food Production:** With a limited amount of farmland currently available—and increasing climate change impacts on agriculture—public-private partnerships should explore opportunities for investing in more controlled environment spaces for food production, as Westland (Netherlands), Almeria (Spain), and Leamington (Canada) have done.

Losing more farmland is dramatically more costly than preserving it: retaining remaining—and gaining more—farmland will increase the resilience of our food system

Recommendations

Increase State Investment in Farmland Protection: Prioritize increased state investment in farmland protection at a pace that is responsive to farmland loss. Conservation easements generally need 12-36 months to bring to closure. The Rhode Island Agricultural Land Preservation Commission (ALPC) estimates that an investment of at least $25M will be needed to protect the high priority farmland that has already been approved for conservation. Include $5 million in funding for farmland access in the state's Green Bond. A consistently funded farmland access program included in each budget cycle is key to not only protect farmland, but to increase access to it.

Prioritize Equitable Farmland Access: Develop policies and programs that increase farmland access for historically disadvantaged farmers, such as a tax exemption for small producers on less than five acres. Engage the Narragansett Indian Tribe's generational land stewardship knowledge in planning for agricultural land stewardship and conservation.

Explore Payment for Ecosystem Services: Create policy to monetarily value agricultural ecosystem services and stewardship practices that contribute to and align with the state's climate goals

Invest in Indoor Production: Coordinate a public-private working group to analyze research and development, business services, technical assistance, infrastructure, and financing needs for controlled environment food production.

PREVIOUS
Economic Development

This brief was prepared by:
Shayna Cohen, KK&P
Clare Bramhall, KK&P

UP NEXT
Stewardship of Waters and Working Waterfronts

Brief authors and affiliations are listed

RI Food System Indicators at a Glance

Cross-Cutting Issues

1	2	3	4	5
NARRAGANSETT FOODWAYS	CLIMATE CHANGE	FOOD SYSTEM POLICIES	EQUITY, FOOD JUSTICE & COMMUNITY WELL-BEING	ECONOMIC DEVELOPMENT
% OF INDIGENOUS HOUSEHOLDS RECEIVING SNAP: 35.7% (2023)	AIR TEMPERATURE INCREASE OVER 20TH CENTURY: 4°F (2022)	LASA GRANTS: >$3.2M (2024)	% OF FARMLAND WITH BLACK, HISPANIC, OR ASIAN FARMERS: 4.7% (2022)	EMPLOYMENT: 77,351 (2023)

Key Issues

6	7	8	9	10
STEWARDSHIP OF FOOD PRODUCING LANDS	STEWARDSHIP OF WORKING WATERFRONTS	COMMUNITY-BASED FOOD PRODUCTION	FISHERIES, AGRICULTURE, & AQUACULTURE BUSINESS VIABILITY	WATER QUALITY & SOIL HEALTH
ACRES OF FARMLAND: 59,076 (2022)	ECONOMIC IMPACT OF FISHERIES + SEAFOOD: $538M (2016)	COMMUNITY GARDENS: 80 (2023)	FISHERIES, AGRICULTURE + AQUACULTURE SALES: $195M (2022)	% OF PRIORITY AREAS NEAR IMPACTED WATER BODIES: 78% (2021)

Note: "priority areas" are defined as communities where one or more of four demographic factors met an 80th percentile cutoff. The factors are: 1) percent non-White and/or Hispanic/Latino; 2) percent low-income; 3) percent limited English proficiency; 4) percent less than high school education.

Note: Data sources for Indicators are referenced in each Brief.

Key Issues

11 SUPPLY CHAIN RESILIENCE

LOCAL FOOD PURCHASES AS % OF TOTAL FOOD PURCHASES
2.7%
2022

12 FOOD & BEVERAGE BUSINESS VIABILITY

FOOD + BEVERAGE MFG SALES
$1.34B
2022

13 LABOR & WORKFORCE DEVELOPMENT

MEDIAN HOURLY WAGE FOR FOOD PREP + SERVING
$15.96
2023

14 FOOD SYSTEMS & NUTRITION EDUCATION

%OF SCHOOL FOOD AUTHORITIES THAT PARTICIPATE IN F2S
78%
2023

15 EATING BEHAVIORS & FOODWAYS

% OF RI ADULTS WITH OBESITY
30.8%
2023

16 FOOD & NUTRITION SECURITY

FOOD INSECURITY
9.7%
2023

17 SURPLUS FOOD SOURCE REDUCTION & RECOVERY

TONS OF WASTED FOOD
76,688
2023

18 COMPOSTING & DOWNSTREAM FOOD WASTE DIVERSION

TONS OF COMPOSTED FOOD
41,400
2023

Market Channels

19 DIRECT TO CONSUMER

DIRECT SALES AS % OF TOTAL AG SALES
12.7%
2022

20 INSTITUTIONAL MARKETS

% OF RHODE ISLANDERS IN INSTITUTIONS
30%
2022

21 DISTRIBUTION & WHOLESALE

WHOLESALE + DISTRIBUTION SALES
$6.1B
2022

22 RESTAURANTS & HOSPITALITY

RESTAURANT SALES
$5.1B
2024

23 GROCERY & RETAIL

RETAIL EARNINGS
$3.2B
2023

CROSSCUTTING ISSUE:

Narragansett Foodways

The impacts of colonization have caused many Indigenous people to be separated from their homelands and traditions of hunting, fishing, and foraging

For thousands of years before the Europeans arrived, food was plentiful within Narragansett Territory. As the traditional stewards of the land, the Narragansett people lived off the abundance of the forest, oceans and woodlands. There were no restrictions, regulations or limitations to access. The Narragansett people cultivated crops that provided them nutrition throughout the year. The impacts of colonization has caused many Indigenous people to be separated from their homelands and the knowledge of these traditions. Climate change in the forms of invasive plants, irregular migration patterns, and new diseases and pests has further exacerbated the challenges of indigenous people to access and preserve traditional food ways. Preservation of indigenous knowledge and culture with food remains important for the well-being of tribal communities and the natural environments threatened by competing uses.

Narragansett Indian Tribe

The Narragansett Indian Tribe received Federal Recognition and acknowledgment in April 1983. The Narragansett Tribe is the only Federally Recognized Tribe in Rhode Island with jurisdiction over approximately 2,500 acres of trust and fee land in Charlestown, Westerly and West Kingstown. The Tribe is composed of over 3,600 citizens, most of whom live in Rhode Island, Connecticut and Massachusetts.

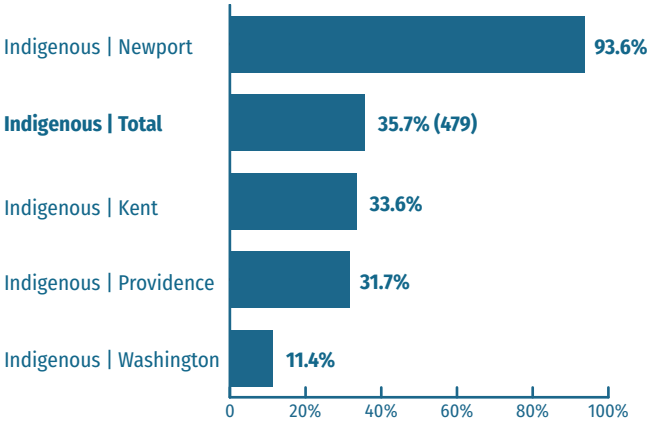
In 2015, the Narragansett Food Sovereignty Initiative (NFSI) was established by the Tribal Government to connect the Tribal community to culturally significant traditional foods, encourage healthy eating habits, and cultivate wellness to honor tradition, promote sustainability, and nurture the next seven generations. In 2019, the Tribal Government formally created the Division of Agriculture to continue its food sovereignty and food insecurity efforts at the Tribe's Minaccomuck Farm. The Division of Agriculture Food Sovereignty Program focuses on wellness, culture, values, communities and families by rebuilding relationships with the land, water, plants and animals that have sustained us since time immemorial. By focusing on the development and strengthening efforts to build traditional food systems tribal households and families are empowered to address issues of hunger and health by cultivating their own healthy, fresh foods.

The Tomaquag Museum provides education on Indigenous food sovereignty, emphasizing that it is an essential part of preserving and "reclaiming Indigenous cultural identity, solving health and nutritional issues among Indigenous communities throughout the hemisphere, extends to land rights and acknowledgements, self-governance, self-reliance, community building and environmental sustainability."

KEY INDICATORS

# OF INDIGENOUS FARMERS	INDIGENOUS INCOME AS % OF WHITE INCOME	% INDIGENOUS HOUSEHOLDS RECEIVING SNAP BENEFITS
7	**68.1%**	**35.7%**
Indigenous farmers make up just 0.4% of Rhode Island farmers	*Median household income of Indigenous RIs ($63,750) equal to 68% of White income*	*35.7% of Indigenous households received SNAP benefits, the highest % of any race*

PERCENT OF INDIGENOUS HOUSEHOLDS RECEIVING SNAP BENEFITS BY COUNTY, 2023

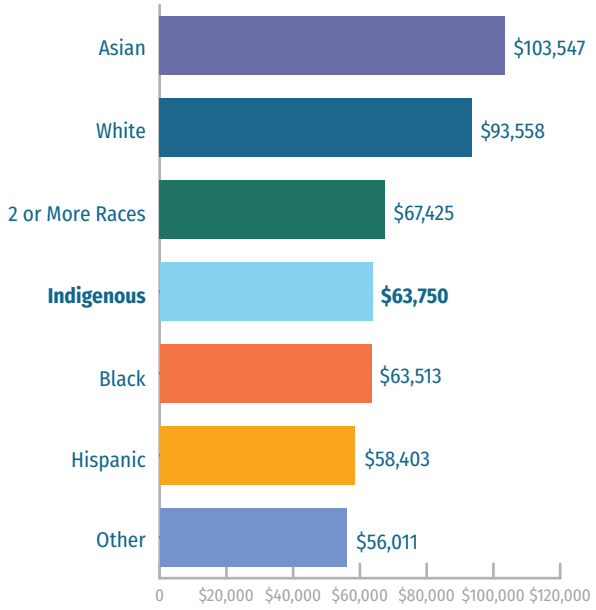


Source: U.S. Census Bureau American Community Survey, Receipt of Food Stamps/SNAP in Past 12 Months by Race of Householder, 2023 5-Year Estimates.

Challenges

- **Loss of Access to Traditional Lands:** The privatization of lands, restrictions on fishing and shellfishing, and regulations against foraging have made it difficult for Indigenous communities to access and practice their traditional foodways.
- **Impact of Climate Change:** Climate change threatens the sustainability of traditional harvesting practices, such as shell fishing, by altering ecosystems and growth patterns.
- **Barriers to Food Sovereignty:** Indigenous peoples face obstacles in reclaiming control over their food systems due to legal and regulatory challenges, as well as the erosion of cultural practices tied to land and food access.
- **Environmental Degradation:** Invasive species, habitat loss and climate-induced changes disrupt the natural food sources critical to Indigenous diets and cultural practices.
- **Food Insecurity and Health Disparities:** Food insecurity, exacerbated by historical injustices, contributes to poor physical, mental and spiritual health outcomes within Indigenous communities.
- **Loss of Traditional Knowledge:** Disconnection from ancestral food practices due to colonization and environmental changes threatens the preservation of Indigenous knowledge and cultural heritage.

MEDIAN HOUSEHOLD INCOME BY RACE/ETHNICITY, 2023

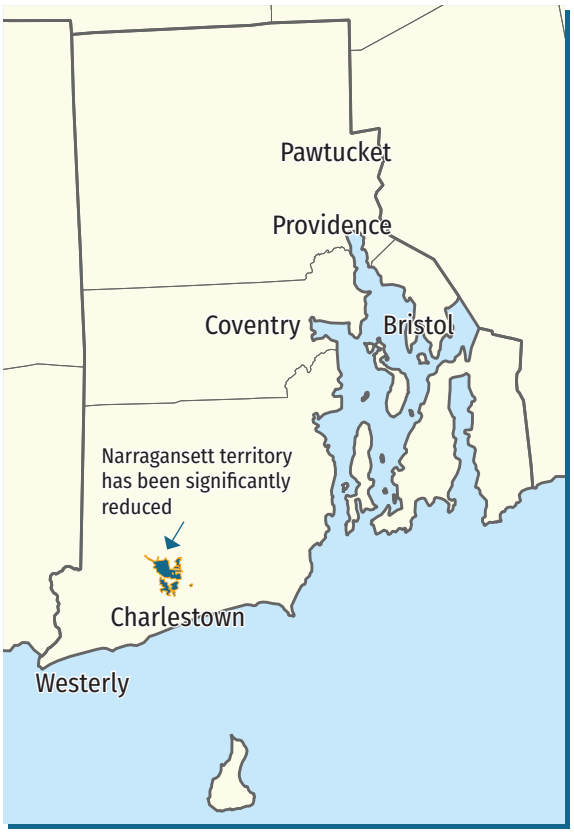


Source: U.S. Census Bureau American Community Survey, Median Household Income in the Past 12 Months, 2023 5-Year Estimates.

Opportunities

- **Traditional Eating for Holistic Well-Being:** Eating traditional foods helps reverse the negative effects of modern processed foods, offering benefits for physical, mental and spiritual health. Reconnecting with nature through activities like hunting, foraging and cultivating fosters a deeper sense of well-being.
- **Traditional Ecological Knowledge:** Expand research and collaboration on Traditional Ecological Knowledge (TEK) with Indigenous knowledge keepers, academic institutions and governmental agencies to improve land stewardship and resource management.
- **Preserve Cultural Food Practices:** Support policies to protect access to traditional food sources, addressing the environmental and regulatory barriers to Indigenous food sovereignty through projects such as the Narragansett Indian Food Sovereignty Program and other privately owned Indigenous farms and food sovereignty projects.
- **Indigenous Harvesting Access:** Improve coordination between agencies and Indigenous farmers to clarify regulations and support sustainable aquaculture and harvesting practices.

NARRAGANSETT INDIAN TRIBE RESERVATION



Source: Wikimedia Commons, Narragansett Reservation Locator Map.

Building an equitable food system relies on learning about, partnering with, and supporting Native American and Indigenous communities

Recommendations

Consult and Partner with Tribal Leaders and Communities First: Local and state government can and must do more to support a more racially equitable food system, in consultation with and following the leadership of Tribal Leaders and Indigenous communities to make equitable and just transformations. Always initiate dialogue by seeking input from the Narragansett Indian Tribal Government and Indigenous communities to understand their specific needs and priorities related to food sovereignty.

Promote the Sustainable Use of Indigenous Foods: Advocate for land restoration and repatriation and respect cultural practices and knowledge. Learn about traditional food systems, harvesting methods and cultural significance of culturally significant foods.

Promote Access to Research, Funding, and Resources: Currently, there is limited research, agricultural extension support and political attention given to Indigenous foods, their conservation, production and use. There is also limited awareness of the role that nutrient-rich foods can play in the health and nutrition status of the Indigenous communities. The potential of Indigenous foods to address food and nutrition security, climate change and environmental challenges is largely unexploited due to lack of investment to improve yields and markets, and negative perceptions of Indigenous foods as poor man's food. Assist in securing grants and technical support to facilitate Indigenous food production initiatives.

Integrate Indigenous Food Knowledge into Curriculum: Promote teaching traditional food practices and cultural connections to food in schools and community settings.

Lobby for Legislation Supporting Indigenous Food Systems: Deep rooted, structural racism in the food system has perpetuated racial inequity within farming and food production, to food access and food security, to the workforce and beyond. Advocate for policies that protect traditional food sources, hold decision-makers accountable for upholding Indigenous food rights, support tribal land management and prioritize Indigenous food production.

This brief was prepared by:

Dinalyn Spears, Narragansett Indian Tribe

UP NEXT

Climate Change

CROSSCUTTING ISSUE:

Climate Change

Climate change poses a threat to every facet of Rhode Island's food system

More frequent and extreme weather events—destructive hurricanes, extended high temperatures, inundating rainfall, flooding, drought—sea level rise, saltwater intrusion, the introduction of new pests, and more, threaten Rhode Island's farmers, fishermen, aquaculturists, food business operators, and communities. The 2021 Act on Climate calls for Rhode Island to reach net-zero emissions by 2050, and state greenhouse gas reduction trends are moving in the **right** *direction. However, 2024 was the hottest year on record — and warming trends are moving in the* **wrong** *direction.*

Current Conditions

Food system activities—cultivating crops and raising livestock, land use changes, energy and resource use throughout supply chains, and the generation of waste—are major sources of greenhouse gas emissions. Food system activities are also uniquely vulnerable to climate change since crops, livestock, and aquatic species thrive in specific habitat ranges that are being disrupted and critical supply chain infrastructure is vulnerable.

Rhode Island imports the majority of its food from around the country and world, including places experiencing significant climate and freshwater problems, like California's Central Valley and the Midwest. As climate change exacerbates problems globally, an overreliance on imported food could impact Rhode Island's food security. Recent research estimates that the New England states have low regional self-reliance for most food products, with the exception of milk, potatoes, berries, and a variety of seafood. Rhode Island grows, raises, harvests, and lands many food products but, the largest percentage—about 28%—of the value of total agriculture, seafood, and aquaculture sales in 2022 was made up by inedible greenhouse or nursery products (e.g., sod, garden plants).

KEY INDICATORS

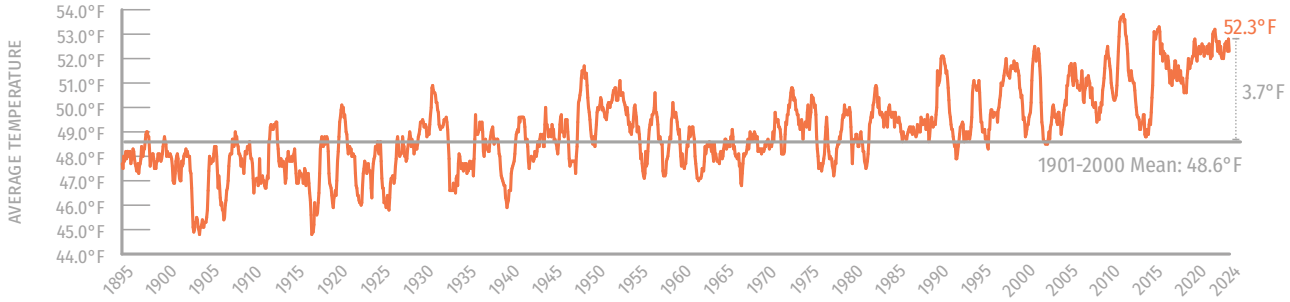
AIR TEMPERATURE INCREASE	# OF BILLION-DOLLAR WEATHER DISASTERS	SEAFOOD AT-RISK TO CLIMATE CHANGE
4°F	**33**	**29%**
Temperatures have increased by about 4°F since the start of the 20th century	*Frequency of destructive events, including hurricanes, impacting RI has increased since 1980*	*About 1/3 of seafood catch, including oysters, is vulnerable to changes in abundance and range*

Agriculture

In 2022, Rhode Island had 59,000 acres of land in agriculture, with 46% (27,500 acres) of acres in Washington County. The state's 864 *food*-producing farms generated $30.6 million (35.3% of total agricultural sales) in sales of vegetables, milk, fruits, berries, livestock, grains, and hay.

As temperatures and extreme precipitation increase, disruptions such as flooding, extreme heat, and drought will increasingly impact growing conditions for crops and the health of livestock and workers. Rhode Island farmers are exploring regenerative practices, indoor production, irrigation, and more, but additional investments in long-term food production are needed.

STATEWIDE AVERAGE TEMPERATURE, 1895-2024



Source: NOAA, National Centers for Environmental Information, Rhode Island Average Temperature, 12-Month Period.

Fisheries

In 2022, Rhode Island fishermen generated over $131 million in sales, with longfin squid and sea scallops accounting for 42% of sales. Squid may be able to tolerate warmer conditions, while sea scallops will likely be harmed by heat and acidification. Evidence is emerging of species composition changing from southwest to northeast along the Northeast Shelf (i.e., cold-water species, like lobster, are moving out, while warm-water species, like scup and black sea bass are moving in).

Aquaculture

The state's $8 million aquaculture industry is threatened by warming waters—ocean temperatures in the Northeast have increased faster than the global ocean—that impact the health of Eastern oysters and other species, and introduce new pathogens into marine ecosystems. Rhode Island and Southern Massachusetts are ranked as the most vulnerable coastal communities in the U.S. for ocean acidification, which dramatically impacts shell growth on mollusks.

Food Businesses

Food businesses—food processors/manufacturers, stores, distributors, and restaurants—employ over 60,000 Rhode Islanders and generate the majority of food system sales. These businesses depend on global supply chains, which climate change can interrupt at any time, leading to product shortages, higher prices, and other business impacts.

Communities

Rhode Island's first climate resilience strategy, Resilient Rhody, notes that inequality and structural conditions have set the stage for disproportional climate change impacts on Hispanic/Latino, Black, Indigenous, and other Rhode Islanders that are *under*invested in and *over*burdened with challenges. For example, low-income communities of color in Providence are already unequally exposed to air pollution. While climate change will impact infrastructure that we all depend on, some Rhode Islanders are "already less able to prepare for, deal with, and recover from weather disasters" to their homes and communities. Severe climate change impacts may also increase food insecurity, which would disproportionately hurt Hispanic/Latino, Black, Indigenous, and other Rhode Islanders.

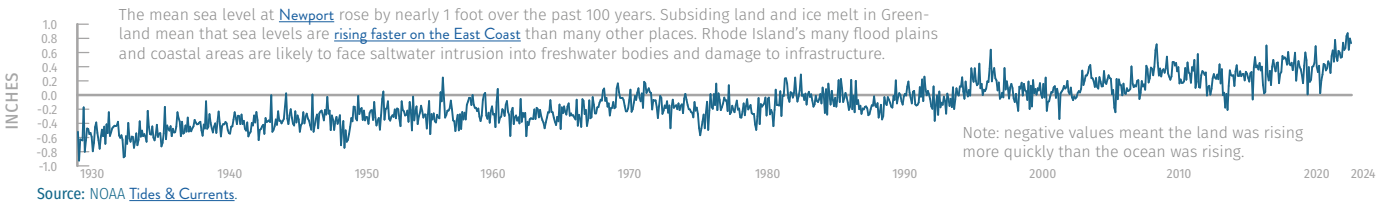
Challenges

- **Food System Role in State Planning:** Our food system does not hold a prominent role in state climate change policies and strategies, which tend to focus on energy sectors, including transportation, electricity, and heating.
- **Climate Change Mitigation and Adaptation Support:** Farmers, fishermen, aquaculturists, and businesses will need additional technical assistance and financing to adapt practices and equipment, and mitigate damages.
- **Adapting to Climate Disruptions:** Farms in floodplains that rely on natural water sources for irrigation are at increased risk of damage with higher precipitation levels predicted for the Northeast.
- **Managing Wasted Food:** An estimated 100,000 tons of vegetative and protein material goes to Rhode Island's Central Landfill annually, which is near capacity. There is currently no plan to reduce wasted food, a major source of greenhouse gas emissions.
- **Steep Decline in Bivalve Populations:** Bivalve populations that could offer key benefits in climate mitigation and adaptation face increased risks from climate change and ocean acidification. Wild oyster populations in Rhode Island are at about 1% of historic levels.
- **Intersection of Renewable Energy and Food Production:** Intentional research and implementation, involving farmers and fisherman, remains important for offshore wind and solar farm development to ensure the viability of water and land-based food production.

Opportunities

- **Existing Financing Tools:** Existing financial instruments such as the 2022 Green Bond and the Local Agriculture and Seafood Act (LASA) can be used to fund farmland preservation, food waste prevention, recycling, and recovery, and other improvements to food system resilience to climate change.
- **Expansion of Regenerative Agriculture Practices:** Regenerative agricultural practices such as no-till farming, cover cropping, and no or limited use of synthetic fertilizer and pesticides, are techniques to build healthy soils,

RELATIVE SEA LEVEL RISE: NEWPORT



Source: NOAA Tides & Currents.

which sequester more carbon, improve crop health, increase drought resistance, provide animal habitat, and manage stormwater.

- **Increasing Sugar Kelp Production:** Increasing sugar kelp cultivation at existing aquaculture operations can help draw down carbon, filter nutrients from the water, add to the food supply, and support production of bio-based materials and fuel.
- **Expand Urban Agriculture:** Rhode Island can explore policies and programs to expand urban agriculture to improve food sovereignty, provide environmental justice benefits, and assist with stormwater management.
- **Invest in Win-Win Scenarios for Renewable Energy and Food System:** Rhode Island's existing Agricultural Energy Program provides grants for renewable energy and energy efficiency to farmers. Additional resources should be explored to invest in win-win scenarios for renewable energy and energy efficiency at all types of food system businesses.

Investing in long-term food security is key to fighting climate change

Recommendations

Augment Adaptation and Mitigation Fund: In anticipation of new risks to the food system caused by increased extreme weather events, grow the state's disaster contingency fund to proportionally match other New England states based on potential damages in Rhode Island. For example, following heavy precipitation in July 2023, Massachusetts passed a $20 million supplemental budget to offset farms' losses.

Invest in Climate-Smart Infrastructure and Practices: Pursue and promote federal, state, philanthropic, and private sector investments for food producers to practice regenerative agriculture, retrofit equipment and infrastructure, build systems for on-farm energy generation, expand urban agriculture, and explore controlled environment food production. Ensure that future "Green Bonds" include funding for food waste reduction, composting, and rural and urban farmland preservation.

Further integrate urban agriculture into existing stormwater management plans, building off RIDEM's increased focus on green infrastructure and low-impact development. Urban agriculture can absorb 20% of precipitation and soil interventions can improve infiltration. In particular, cover crops and an emphasis on continuous root systems can increase water absorption substantially.

Scale Up Food Waste Prevention, Recovery, and Recycling Initiatives: Develop policies that champion reducing wasted food, such as composting and tax credits for food donations, and build food recovery infrastructure.

Prioritize Climate Justice: Center "Frontline Communities," the Narragansett Indian Tribe, and other community stakeholders in all climate change adaptation and mitigation planning.

Ensure Indigenous Access to Harvesting: Harvesting oysters and clams in Rhode Island has long been a farming practice of the Narragansett Indian Tribe, which is threatened by climate change. Improve coordination between federal and state agencies, municipal decision-makers, the Narragansett Indian Tribe, and other Indigenous farmers to clarify regulatory processes and facilitate data collection in aquaculture operations.

Research Impact of Wind Energy on Marine Systems: As Rhode Island seeks to build out offshore wind power capacity, continue research on understanding impacts on marine systems, the fishing industry and critical regional food supply.

Engage in Regional Food System Planning: Ensure Rhode Island is an active participant in New England planning for regional food security and resiliency as outlined in New England Feeding New England.

PREVIOUS
Narragansett Foodways

This brief was prepared by:
M. Dawn King, PhD, Brown University
Carla Losada, Brown University
Juliana Merullo, Brown University
Logan Torres, Brown University
Emma Venarde, Brown University

UP NEXT
Food System Policy

CROSSCUTTING ISSUE:

Food System Policies

Policies impact how our food system operates, including who it benefits and who it harms

Federal, state, county, and municipal governments shape and administer food system policies (i.e., laws, regulations, practices, and incentives). Given the diversity of food system issues—supporting food businesses, ensuring food security, protecting public health and the natural environment—an interagency and intergovernmental approach is required for public servants and policymakers to proactively communicate and collaborate to advance Rhode Island's food system goals. Ensuring a thriving, equitable, and resilient Rhode Island food system also requires meaningful public engagement in policy development and implementation.

Current Conditions

Federal Government

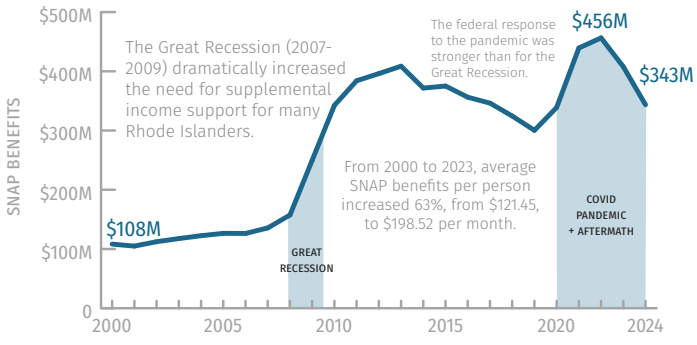
Federal policies have accelerated market concentration—essentially monopolies—across all components of the U.S. food system, making it challenging for small and midsize businesses to succeed. The USDA Equity Commission recently acknowledged that historic injustices also created barriers to USDA programs that have led to "wealth disparity, heirs' property issues, lack of awareness and use of innovative technology, and relatively smaller farm sizes" for Black, Indigenous, Hispanic/Latino, and other farmers, as well as a "staggering" amount of Tribal land loss. In order to start addressing the impacts of USDA discrimination, over $2.2 billion has been paid to 43,000 people in all states.

Federal policies primarily impact food systems through a package of legislation known as the Farm Bill, which includes support for farmers and ranchers, conservation programs (e.g., Environmental Quality Incentives Program, EQIP), disaster assistance, and social safety net programs (e.g., the Supplemental Nutrition Assistance Program, SNAP). As a practical matter, SNAP—which provides food benefits to low-income families—accounts for more than 75% ($326 billion) of the latest Farm Bill. Average monthly participation in SNAP in Rhode Island increased 94% from 2000 to 2024, from 74,256 to 144,197 people, while total benefits grew 217%, from $108 million to $343 million. In comparison, Rhode Island farmers received only about $15 million from five major USDA conservation programs from 2017-2022.

KEY INDICATORS

% HISPANIC RI'S RECEIVED SNAP	UNMET DEMAND FOR LASA GRANTS	AVERAGE VALUE PER ACRE OF FARMLAND
32.8%	**>$1 million**	**$22,000**
Higher rates of poverty mean that Hispanic Rhode Islanders need more supplemental income	*Annual demand for LASA grants far outweighs existing funding*	*Rhode Island has the highest value per acre of farmland in the country*

RHODE ISLAND SNAP BENEFITS



Source: USDA, Food and Nutrition Service, SNAP Data Tables.

State Government & Advocacy Organizations

Federal policies are administered via state offices of federal agencies, state agencies, and other institutions. For example, RI state agencies have received over $29 million in federal funding for food system projects since 2017. Several nonprofits and state government agencies influence the development of food system policies in Rhode Island. For example, the Rhode Island Food Policy Council (RIFPC) is a member-based network that serves as both a forum for elevating issues and a platform for coordinated action. RIFPC publishes a briefing book for elected officials with five policy priorities:

- Preserve and Protect Agricultural Land
- Ensure Access to Affordable, Culturally-Appropriate Food For All People
- Promote Climate-Smart, Environmentally Sustainable Practices

- Support a Vibrant and Just Local Food Economy
- Preserve and Support Commercial Fisheries

The Rhode Island Land Trust Council, the Rhode Island Public Health Institute and many others are also leading coalitions and campaigns to pass legislation to increase food system resiliency and equity.

Rhode Island's Interagency Food and Nutrition Policy Advisory Council (IFNPAC) comprises nine state agency directors tasked with overcoming policy and regulatory barriers to a sustainable food system and healthy nutrition. IFNPAC serves as a coordinating body for the statewide food strategy, Relish Rhody, the implementation of which is led by the Director of Food Strategy.

Launched in 2017, Relish Rhody had five integrated focus areas:

- Preserve and Grow Agriculture, Fisheries Industries in Rhode Island
- Enhance the Climate for Food and Beverage Businesses
- Sustain and Create Markets for Rhode Island Food, Beverage Products
- Ensure Food Security for All Rhode Islanders
- Minimize Food Waste and Divert it From the Waste Stream

A five-year retrospective suggests that progress has been made in three key areas:

- **Catalytic Investments:** In 2021, the General Assembly allocated to $20 million to the Rhode Island Foundation to address food insecurity, behavioral health, and housing. State agencies received over $29 million in federal grants for food system projects, including relief funds for commercial fishing, aquaculture, and seafood processing businesses from the American Rescue Plan Act.
- **Policy and Regulatory Progress:** Successes of Rhode Island food system policy collaboration include the 2017 Local Agriculture and Seafood Act Grants Program (small grants to farmers and fishers); creation of the Hunger Elimination Task Force in 2017 (a network of organizations working to reduce food and nutrition insecurity); the 2021 Act Relating to Fish and Wildlife - Commercial Fisheries (permits dockside sale of seafood); and the 2022 Cottage Food Law (allows sales from home-based food and beverage producers. Rhode Island was the last state in the country to pass a cottage food law).
- **Increased Coordination and Collaboration:** Network activities are taking place across Rhode Island's food system, including the RIDEM Seafood Marketing Collaborative; the Hunger Elimination Task Force; and the RI Farm to School Network.

These state policies and support activities help to maintain and improve supply chain resiliency, strengthen local food production, increase market access, and incentivize economic development across the food system.

Challenges

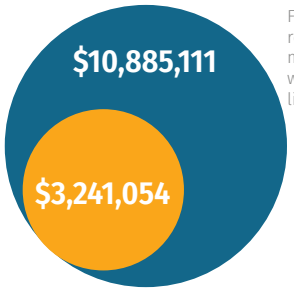
- **Many Population Indicators Moving in the Wrong Direction:** Considerable progress has been made in Rhode Island, whether in terms of leveraging federal funding to support food producers, food insecure people, and many other programs, or in crafting policies and increasing collaboration to strengthen our food system. At the same time, as documented in the RI Food System Factbook, many population indicators continue moving in the wrong direction.

  Limited progress has been made reducing food insecurity, diet-related health problems, and the cost of farmland. As the Factbook notes, "Every dataset with demographic information also reveals that Hispanic, Black, Indigenous, and Rhode Islanders of two or more races are disproportionately impacted by inequities in income, poverty, food security, farm and land ownership, and more." This suggests that existing policies are not adequately addressing the root causes of our problems.

- **Policy Does Not Adequately Address the Needs of Rhode Islanders of Color and Other Underserved Communities:** Although LASA, for example, includes a call out for Rhode Islanders of color and underserved producers, many other state policies and regulations do not explicitly address equity for historically underserved and -invested in communities.

- **Existing Investments Do Not Meet the Needs of Food Businesses:** Food is unique among all products created, bought, sold, traded, shipped, and consumed: *food is life itself*. And yet, federal and state support is often uncertain and competitive, creating gaps that the state must shoulder with competing budget priorities. For example, demand far outweighs supply for LASA grants.

LASA GRANT REQUESTS VS AWARDS



From 2014 to 2024, LASA received funding requests of more than $10.8 million, but was only able to award out a little more than $3.2 million.

Source: Analysis of LASA data.

- **Complexity of Regulations Can Be Overwhelming:** A one fishermen noted, "the number and complexity of commercial fishing rules and regulations that one is required to follow are problematic. It's like a full time job just staying up on all the things you need to know to stay in compliance."

Opportunities

- **Strengthen Community Ownership of Food System Policies:** State and municipal governments can leverage existing networks and programs like the Health Equity Zones, IFNPAC, the Executive Climate Change Coordinating Councils, and Real Jobs RI to intentionally engage communities of color, the Narragansett Indian Tribe, other indigenous communities, people with lived experience of food system disparities, and historically underserved and underinvested geographies to shape food system policies.
- **New Federal Resources Are Available:** Renewed interest in resilient and sustainable food systems, resulting from pandemic-era supply chain disruptions and diet-related health disparities, has created new federal funding programs such as the Local Food Purchase Assistance Cooperative Agreement Program (LFPA), Urban Agriculture and Innovative Production programs, Local Food for Schools Cooperative Agreement Program (LFS) and Resilient Food System Infrastructure Program (RFSI) that must be continued to sustain Rhode Island's long-term food security. Advocacy with federal delegates and other federal decision-makers that can show the impacts and effectiveness of these programs will be key to ensuring their continuation.
- **Farmers, Fishermen, Aquaculturists, and Food Businesses Have Important Insights:** Rhode Island's food producers have intimate knowledge of a variety of challenges, including climate change impacts, business development and technical assistance needs, and market access. Food system policies should reflect this expertise.
- **Re-Imagine the Future of Rhode Island's Food System:** The destructive consequences of climate change, the unfulfilled promise of justice in this country, and the repercussions of the COVID-19 pandemic all suggest that significant effort needs to be put into re-imagining our food system. For example, the Netherlands demonstrated that a common agenda based on national aspirations could lead to major transformations in our food system in a short time frame with investments in infrastructure, logistics and distribution networks, technology, research and development, and sustainable practices, including reduced resource use.

Rhode Island's food system policies have supported many important changes, but more work remains

Recommendations

Make Equity the Centerpiece of Food System Policies: Many food system outcomes—food insecurity, diet-related health problems—are the result of historic inequities that have not been addressed. Rhode Island can empower food producers and food businesses through engagement with disadvantaged communities that are impacted by underinvestment and overburdened with challenges.

Coordinate Food System Legislation and Investments: Prioritize joint agency legislation and investment to advance and sustain programs like SNAP Bonus Bucks, Food as Medicine, Eat Well Be Well, Healthy School Meals for All, and Farmland Access Program, while also maximizing federal funding. Program recipients and grant awardees should be meaningfully engaged in design, implementation, and evaluation.

Fund Farmland Access Program: Allow the RI DEM to re-invest the annual revenues generated by agricultural fees and permits back into the agriculture sector in the form of grants, land management services, technical services, state marketing support, and other funding supports for farmers.

Prioritize Communication and Collaboration with Food Producers and Businesses: State and federal regulators should regularly communicate with food producers and businesses about day-to-day concerns (e.g., question and answer sessions between businesses and regulators; email lists with contact information), as well as co-creation of regulatory frameworks.

PREVIOUS
Climate Change

This brief was prepared by:
Max Mason De Faria, RI Food Policy Council

UP NEXT
Equity, Food Justice, and Community Well-Being

CROSSCUTTING ISSUE:

Equity, Food Justice, and Community Well-Being

Food is essential for everyone in all stages of life and while all Rhode Islanders have a stake in the state's food system, not all Rhode Islanders have equitable access to healthy food.

Food is essential for everyone in all stages of life and therefore all Rhode Islanders have a stake in the state's food system. Building strong communities where all Rhode Islanders have the resources to lead full, healthy lives rests on our ability to properly nourish our bodies. As such, all Rhode Islanders should have fair access to nutritious, affordable and culturally appropriate food in their local communities. Today, not everyone has the equal opportunity to participate in Rhode Island's food system, especially Rhode Islanders from marginalized communities.

Current Conditions

≠ Disparities in Access to Farmland, Hunting, Fishing, and Foraging Grounds

Rhode Islanders of color make up 31.3% of the state's population, and 22% of Rhode Islanders speak a language other than English at home. Yet, only 2.8% of farmers are Black, Asian, Indigenous, or biracial, 1.6% are Hispanic/Latino, and 4.7% of farmland had a non-White farmer. White-owned farms are overrepresented among Rhode Island's highest earning farms. Despite Indigenous Rhode Islanders owning a proportional number of farms in Rhode Island, none of these farms earn $25,000 or more, and the majority of Black-owned, Hispanic-owned and Asian-owned farms earn less than $5,000 per year.

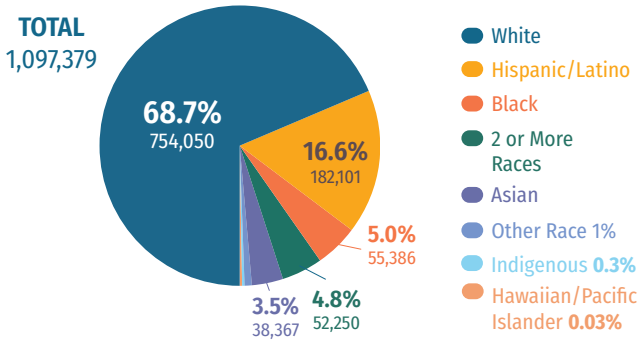
Systematic racism has plagued the Indigenous population since the colonial era. In *A History of the Narragansett Tribe of Rhode Island keepers of the Bay*, Robert A. Geake writes,

KEY INDICATORS

FARMLAND WITH BLACK, HISP. + ASIAN FARMERS	% INDIGENOUS HHS RECEIVED SNAP BENEFITS	DIFF. IN MED. INC. FOR WHITE + HISP. HHS
4.7%	**35.7%**	**$35,155**
In 2022, farmers of color worked on 2,786 acres out of 59,076 acres.	*Indigenous Rhode Islanders receive more SNAP benefits than White residents*	*White households had median incomes 1.5x higher than Hispanic households*

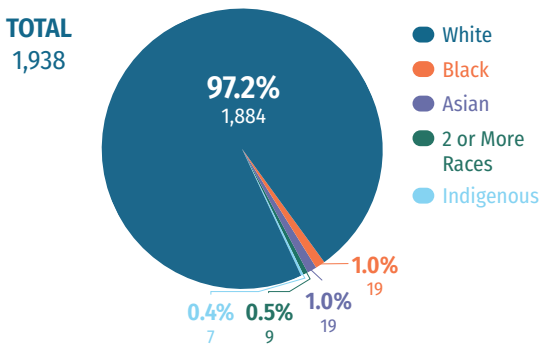
"At the period of their greatest authority, the Narragansett had a domain that extended throughout most of what is now Rhode Island…and Conanicut Island in Narragansett Bay." Yet, agreements with what were tributary tribes (i.e., non-Narragansett tribes paying tribute to inhabit the land) are still used to prevent access to Narragansett people from food harvesting places at Misquamicut Beach, most recently with concrete barricades and state signage with false narratives.

RHODE ISLAND POPULATION



Source: American Community Survey, DP05 | ACS Demographic and Housing Estimates, 2023 5-Year Estimates.

RHODE ISLAND FARMERS BY RACE, 2022



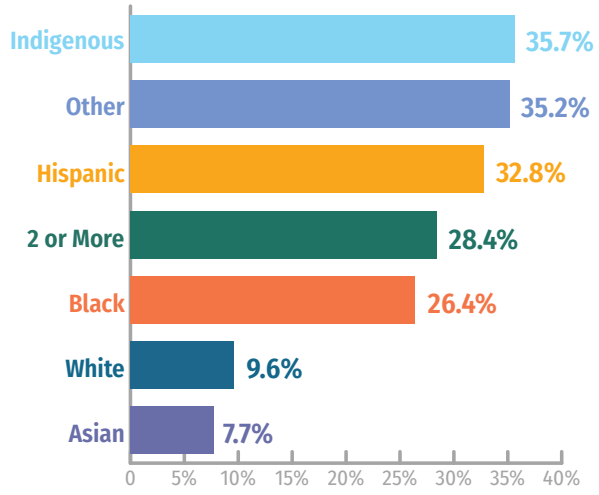
Source: USDA 2022 Census of Agriculture, Table 62: Selected Producer Characteristics by Race.

This data demonstrates a disparity whereby Rhode Island's BIPOC (Black, Indigenous, and people of color) communities have not had fair access to opportunities to participate competitively in farm production (including access to farmland ownership or usage, technological resources, and staffing support). Limited opportunities for BIPOC farmers to access land or participate competitively in the food industry market not only locks such farmers out of opportunities for their own economic security, but it also affects how and what foods are made available on the market.

Disparities in Food Access

Food security continues to be a challenge for Rhode Island's communities of color. Whereas only 20% of White households in Rhode Island faced food insecurity in 2024, 36% of Hispanic/Latino households, 32% of Black households, and 24% of households of other or mixed races experienced food insecurity in 2022. The percentage of food insecurity in Rhode Island's households of color are nearly double that of White households, which is reflected in participation in the Supplemental Nutrition Assistance Program (SNAP).

HOUSEHOLDS RECEIVING SNAP BY RACE/ ETHNICITY, 2023



Sources: U.S. Census Bureau, American Community Survey, 2023 5-Year Estimates, Receipt of Food Stamps/SNAP by Race of Householder.

Colonization, federal Indigenous policy, slavery, Jim Crow, redlining, and centuries of discrimination have created conditions of food apartheid, a "system of segregation that divides those with access to an abundance of nutritious food and those who have been denied that access due to systemic injustice." Alternatively, the concept of food sovereignty emphasizes the valuation of traditional knowledge, agro-ecological management practices, promotion of justice and equity, and a transformation of social structures in order to support self-determination. Food sovereignty means community-driven decision-making is used to unlock the collective power and capacity of historically underserved communities.

Challenges

Challenges requiring mitigation are embedded in the systemic racist modes of land distribution, limited financial access for BIPOC communities, and historically exclusive practices (e.g., detribalization and land grabs as far back as the 17th century, redlining, especially in Providence, racial disparities in valuing property) favoring White Rhode Islanders. For example, on September 27, 2023, the Department of Justice reported that Washington Trust—one of Rhode Island's oldest lending institutions—agreed to pay a $9 million dollar fine for its redlining practices within the state. The results of these challenges can be seen in disproportionate farm ownership, access to waterways, and laws limiting hunting, fishing, foraging and other methods of gathering food.

Challenges to developing an equitable food system in Rhode Island include the following:

- **Food Access Challenges:** Nearly 1 in 3 Rhode Island households cannot afford adequate food. Affordable, healthy, and culturally relevant foods continue to be inaccessible in marginalized communities. Residents in these communities often have limited time and means to travel further to markets that offer healthier food choices. The more accessible stores leave residents with a choice between either cheaper processed foods or higher-priced produce. Dollar stores (Dollar Tree, Family Dollar, and Dollar General) are the most common type of national grocery stores in RI, with most located in Providence, the city with the most diverse and low income neighborhoods. Dollar stores typically lack the fresh food options of other national grocery stores.

- **Access to Farmland, Capital, and Other Resources:** Marginalized community members have limited access to and ownership of sizable and viable land. Financial barriers and regulatory barriers make it difficult for food producers and distributors from underserved backgrounds to secure permits, raise capital, and access supportive resources to maintain and grow food businesses.

  Accessing capital to start, expand, and grow a business is a significant hurdle for minority-owned businesses in all parts of the food system. Only about 7.4% of Rhode Island businesses owners were people of color.

- **Regulatory Barriers:** Regulatory barriers including cottage food policies make it difficult to secure permits, access supportive resources, pay fair wages and grow food businesses.

- **Income Disparities:** Low wages disproportionately impact women, Black, and Hispanic/Latino Americans, and one of the reasons is that women, Black, and Hispanic/ Latino workers are disproportionately employed in the lowest paying sectors of our economy: service sector food system jobs.

Opportunities

To become self-sufficient, communities must have the means to feed their residents quality food. Opportunities empowering BIPOC communities to make meaningful contributions to the food system as producers, gatherers and distributors is paramount to obtaining food justice.

- **New Financing Vehicles:** Use some of the Washington Trust $9 million dollar fine to support BIPOC farmers, gardeners, fishermen, and other food gatherers and distributors, with emphasis on providing training, financial support, and access to uncontaminated land and waterways. The Rhode Island BIPOC Small Business Ecosystem Assessment's recommends creating a new targeted Community Development Finance Institution. Financing options for BIPOC farmers, fishermen, manufacturers, store owners, and restaurateurs could reduce costs, (e.g., utilizing the buy-protect-sell model in conservation easements to prioritize selling farmland to people of color), provide grants, and deliver tax relief targeted at historically under-invested in communities.
- **Indigenous Knowledge:** Indigenous technical environmental strategies— natural filtering systems in waterways; maintaining open spaces for food foraging; ensuring ocean access to waters for mollusk collecting, crabbing, and fishing; and programs that promote Indigenous land and water use practices—can help to mitigate climate change impacts.
- **Local Sourcing:** Make sustainable long-term investments in farms, restaurants, and caterers that are providing healthy meals in RI schools using locally sourced foods.
- **BIPOC Businesses and Support System:** Although RI's business support system—business planning, technical assistance, financing—has expanded outreach to Hispanic/Latino residents, a "disconnect" still exists. Bridging that disconnect through improved and targeted support services can be further advanced, for example, with support of the Rhode Island Black Business Association, Rhode Island Minority Business Accelerator, and Rhode Island Business Empowerment Network.

Everyone has the right to access safe and nutritious food, dignified work, and access to opportunities and resources

Recommendations

Institutionalize Equity: Center equity in food system policies, investments, practices, and support services. Government, nonprofit, and business entities should prioritize and be accountable for increasing equity for underserved and under-represented Rhode Islanders. Remove barriers to participating in the local food system by restoring Indigenous hunting and fishing access, offering urban farm tax exemptions, expanding allowable cottage foods, reducing small livestock restrictions, and streamlining and expanding social services like SNAP and WIC. Implement an equity impact analyses to evaluate equitable outcomes.

Prioritize Food Sovereignty: Ensure diverse representation on regulatory entities and directly engage people of color at all levels of decision making to direct investments and develop policies. Engage Indigenous leadership communities in land buy back initiatives and restore Indigenous peoples' uninhabited (without licenses) right to state held land and waterways for fishing, hunting, and foraging. Embrace Indigenous technical environmental strategies and expand opportunities for non-BIPOC groups to connect to and learn from BIPOC communities.

Support Local Food Retailers: Work with Health Equity Zones, corner markets, bodegas, other small stores, and other stakeholders to re-imagine food access possibilities in "low income and low access" communities.

Build Community Resilience: Strengthen the network of business services, technical assistance, and financing providers for BIPOC small farmers, fishermen, aquaculturists, food business owners, and other historically underinvested in entrepreneurs.

Provide Transparent Support: Identify revenue streams to rectify inequities in RI's food system. Maintain transparency in how funds are appropriated. Ensure funds intended for Indigenous governments are actually provided to them.

PREVIOUS
Food System Policies

This brief was prepared by:
Nwando Egbuche Ofokansi, RI Department of Health
Wanda Hopkins, Narragansett Tribal Citizen
Julius Kolawole, African Alliance of Rhode Island
Raffini, Southside Community Land Trust

UP NEXT
Economic Development

CROSSCUTTING ISSUE:

Economic Development

Rhode Island's food system is a significant contributor to the state's economy

Rhode Island's food system accounted for over $18.1 billion in sales in 2022, and employed more than 12.8% of the workforce, or about 77,000 people at more than 8,900 businesses. It comprises a broad range of interconnected sectors across food supply chains, including agriculture, aquaculture, fisheries, food and beverage manufacturing, distribution, retail stores, food service, and waste disposal. Our food system is deeply intertwined with housing, transportation, labor dynamics, and other components of the wider economy. Given the importance of Rhode Island's food system to the economy, all of this is at stake when the state chooses how to cultivate, catalyze, direct, and measure food system economic development.

Current Conditions

Full-service (i.e., sit-down) and limited-service (i.e., fast food) restaurants and retail stores account for the majority (85%) of food system jobs. In 2022, retail stores, including warehouse clubs and supercenters, accounted for 36.2% ($6.4 billion) of food system sales. Wholesalers/distributors—businesses that buy food products from food producers, manufacturers and processors and resell those products to stores, institutions, and other businesses—accounted for over 33.8% of total ($6.1 billion), followed by all types of restaurants and food serving places ($3.9 billion, 21.5%). Rhode Island is one of the few states where fisheries sales ($107 million) exceed agricultural sales ($80 million).

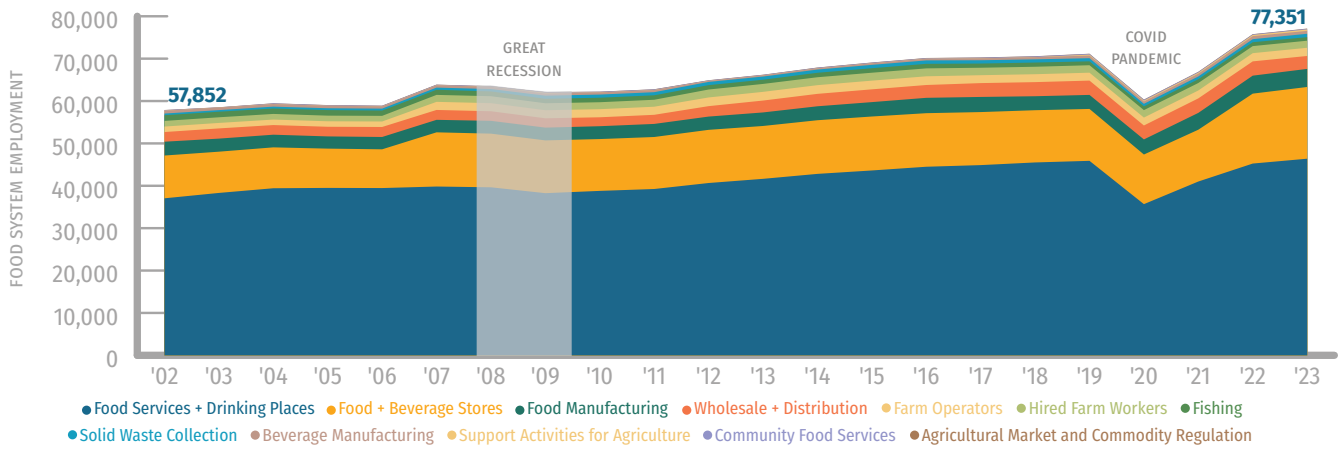
Food system economic impacts are most often measured in job creation (as jobs and career opportunities grow), community and individual wealth (as businesses thrive, wages grow, and dollars circulate), and quality of life and place (investment in community development, agricultural landscapes, public access to green and blue spaces). Human health and environmental sustainability are also critically impacted by and linked to our food system.

While our food system is strong in aggregate, its benefits are unevenly distributed. "Food Preparation and Serving" occupations account for most of food system jobs in the state, but receive the lowest median hourly wages of any major occupational category. Food system jobs are marked by disproportional rates of occupational segregation, where women, Black, and Hispanic/Latino Americans are concentrated in the lowest paying jobs - and consequently

KEY INDICATORS

VALUE OF TOTAL FOOD SYSTEM SALES	FOOD SYSTEM EMPLOYMENT	MED. HRLY WAGE FOR FOOD PREP + SERV. JOBS
$18.1 billion	**77,351**	**$15.96**
Rhode Island's food system sales increased 0.9% ($160 million) from 2017 to 2022	*More than 12% of RI workforce is employed in the food system*	*Food preparation + serving jobs have lowest median hourly wage of major occupations*

RHODE ISLAND FOOD SYSTEM EMPLOYMENT



Sources: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; U.S. Census Bureau, Nonemployer Statistics.

experience more food insecurity. Over the past 20 years, the number of farmers and hired farmworkers has remained flat, while the number of fishermen has decreased, posing a serious risk to long-term food production.

The 2017 statewide food system strategy, Relish Rhody, and the state's economic strategy, Ocean State Accelerates, both emphasize increasing prosperity for all via public-private partnerships that invest in people, places, and technology, and policies supporting sustained growth and advancing diversity, equity, and inclusion. Over the past decade, several programs have focused on building food system capacity through access to markets (e.g., RI Tabletop Show, SupplyRI) and capital (e.g., Small Business Loan Fund, LASA Grants Program). A support system of business services, technical assistance, and financing resources has developed, including incubators and mid-supply chain entities like Hope & Main, Farm Fresh RI and Southside Community Land Trust's 404 Broad Market. Still, access to the capital, connections, and know-how to launch, operate, and grow food businesses is uneven, and socially disadvantaged communities of color have experienced sharper barriers to entry.

Challenges

- **Low Wages:** Most food system jobs are lower wage service sector jobs that pay some of the lowest wages of any industry, and are segregated by race/ethnicity and gender.
- **Maintaining Working Land and Seascapes:** The natural resource bases for agriculture, aquaculture, and fisheries need to be protected and made accessible/affordable to producers. Loss of farmland and access to working waterfronts threatens the survival of these industries.
- **Perception of Available Resources:** Many farmers, fishermen, and food business owners feel they lack access to economic development programs, funds, and other resources.
- **Regulatory Environment:** RI's regulatory environment can be difficult to navigate and at times inhibits food business start-up, growth, development, and innovation.

Opportunities

- **Success at All Scales:** Improve economic development incentives, access to capital, technical assistance, and assistance navigating the regulatory environment for small and midsize food businesses' growth.
- **Invest in Community Wealth Building:** Explore and invest in community wealth building opportunities in historically underserved communities, including targeted support services, cooperatives, employee ownership, community land trusts, local institutional equity, and more.
- **Value Chain Facilitation:** Promote business-to-business value chain connections that could increase utilization of Rhode Island grown and harvested products in manufactured foods, food service, and hospitality.
- **Increase Local Procurement:** Revise state policy to reduce barriers to local procurement at public institutions, including raising the small purchase threshold and revising Rhode Island's local food preference law to decentralize price among product/supplier criteria.

Food system development *is* economic development

Recommendations

Align State Plans and Strategies: Cross-reference statewide strategies (e.g., Ocean State Accelerates) in their design and implementation to center and direct economic benefits and protections to the people and natural resources that are the food system's foundation.

Develop Wraparound Support Services: Close existing support service gaps by creating economic development tools and incentives for small farmers, fishers, aquaculturists, food business owners, and historically underinvested in entrepreneurs.

Expand Workforce Opportunities: Introduce economic development strategies that expand workforce opportunities for higher wage food jobs such as nonprofits, academia/research, agri-food tech and innovation.

Link to Regional Goals: Codify the Rhode Island Food Strategy's regional food targets such as the New England Feeding New England goal of 30% regional food resiliency into law, and allocate funds for implementation and evaluation of progress.

PREVIOUS
Equity, Food Justice, and Community Well-Being

This brief was prepared by:
Shayna Cohen, KK&P
Clare Bramhall, KK&P
Kavya Gopinath, Economic Progress Institute
Dawn Spears, Ashawaug Farm

UP NEXT
Stewardship of Food Producing Lands

Stewardship of Food Producing Lands

Land is a critical natural resource required for agricultural production... and Rhode Island has it in short supply

With only 59,076 acres in agriculture, Rhode Island has the least amount of farmland of any state in the country. It also has the highest per acre farmland costs in the country, $22,000 per acre, pushing some new and established farmers to consider moving to places where land is more accessible and affordable. Acquiring farmland is made all the more difficult for farmers of color, who have typically not had the same wealth building opportunities and access to capital as White farmers. Significant urbanization and suburbanization trends also means the state's agricultural land base is increasingly fragmented, creating operational, access, and stewardship challenges for farmers, many of whom have to farm on multiple, non-contiguous parcels.

Current Conditions

Given the high cost and short supply of farmland, access is a major challenge, including access to capital, desirable lease structures, ownership opportunities, and technical assistance in support of good stewardship practices. With long histories of colonization, displacement from land, slavery, and the generational impacts of both, Indigenous and Black communities have struggled with access to capital to obtain farmland.

The American Farmland Trust identified Rhode Island as among the top 10 states in which farmland is most threatened, with most lost acreage converted for development. Land and business succession are stewardship challenges, with many producers' personal financial assets wrapped up in their land's value. With narrow margins in agriculture, the pressures to sell to developers are high, and transition processes can be complicated (transactionally, financially, and emotionally), which leads to generational loss of farmland.

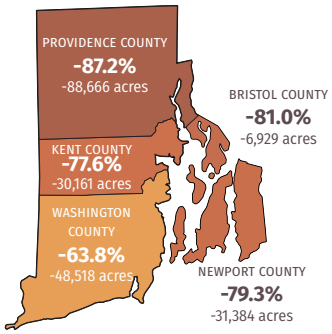
KEY INDICATORS

ACRES OF FARMLAND	FARMLAND LOST BY 2040	ACRES CONSERVED BY EASEMENT
59,076	**8,100**	**8,253**
Rhode Island has the least amount of farmland of any state in the country	*Under a Business as Usual scenario, Rhode Island is projected to lose 13.7% of current farmland*	*Since 1985, Farmland Preservation Program has protected over 8,200 acres of farmland*

Most farms in Rhode Island are small, with about 43% (452) operating on 1-9 acres. Woodland—woodlots, timber tracts, woodland pastured, and deforested land with young growth—makes up the largest percentage of farmland (50.2%), while inedible nursery/greenhouse products make up the largest percentage of agricultural sales. Stewardship support and strategies must reach a large number of landowners operating on relatively small tracts of land, cover a complicated array of challenges (including climate change impacts, ecosystem health, and succession planning), *and* encourage more food production.

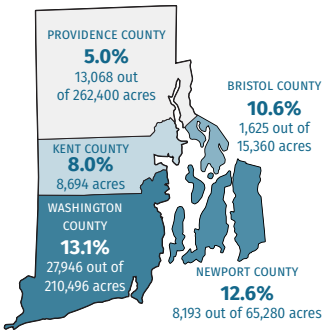
CHANGES IN FARMLAND

A. Farmland Decrease from 1945 to 2022



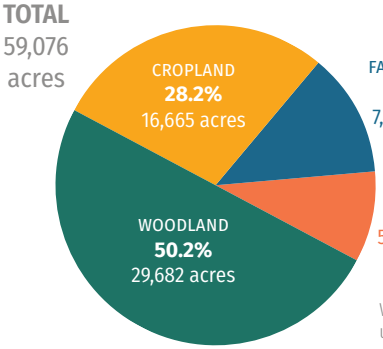
From 1945 to 2022, Rhode Island lost **77.7% (205,658 acres)** of farmland.

B. Farmland as Percent of Total Land Area



In 1945, 40% of land in Rhode Island was farmland. By 2022, that number was **8.9%**.

C. Farmland by Category



Woodland made up **50.2% (29,682)** of farmland acreage in 2022.

Sources: USDA Census of Agriculture, multiple years.

Challenges

- **Financing Gaps for Entrepreneurs:** Land access challenges are felt most acutely by Hispanic/Latino, Black, Indigenous, and other people of color, as these groups face higher rates of rejection to requests for financing than White entrepreneurs.
- **Competing Land Uses:** Agriculture competes with other land uses, including residential and commercial building development, and large scale solar arrays.
- **Aging Farmers:** The average age of farmers was 56.6 in 2022, and 60.5% of farmers are over the age of 55. Farmers face individualized financial and other hurdles to transitioning their land and business to the next generation of farmers.
- **Assistance With Climate Change Adaptation and Mitigation:** Farmers struggle to navigate and access incentive programs that exist for climate-smart agriculture.

Opportunities

- **Explore Payment for Ecosystem Services:** Farm revenues come from products grown and raised, not ecosystem services provided, but they could and should come from both.
- **Raise Awareness of Existing Programs:** The Department of Environmental Management supports increased access to farmland through programming like the Local Open Space Grant Program, the Farmland Preservation Program, and Farmland Access Program competitive grant program. Land trusts across the state—and a Land Trust Council that links them together—work to preserve and increase farmer access to rural farmland, while Southside Community Land Trust's properties increase access to urban and peri-urban land for food production (including for a large number of farmers who are immigrants and refugees).
- **Expand Use of Buy-Protect-Sell Model:** Utilize the buy-protect-sell model in conservation easements. This may take the shape of an agrarian or farmland commons, or within existing land trusts, so that farmers have affordable access to farmland.
- **Invest in Indoor Food Production:** With a limited amount of farmland currently available—and increasing climate change impacts on agriculture—public-private partnerships should explore opportunities for investing in more controlled environment spaces for food production, as Westland (Netherlands), Almeria (Spain), and Leamington (Canada) have done.

Losing more farmland is dramatically more costly than preserving it: retaining remaining—and gaining more—farmland will increase the resilience of our food system

Recommendations

Increase State Investment in Farmland Protection: Prioritize increased state investment in farmland protection at a pace that is responsive to farmland loss. Conservation easements generally need 12-36 months to bring to closure. The Rhode Island Agricultural Land Preservation Commission (ALPC) estimates that an investment of at least $25M will be needed to protect the high priority farmland that has already been approved for conservation. Include $5 million in funding for farmland access in the state's Green Bond. A consistently funded farmland access program included in each budget cycle is key to not only protect farmland, but to increase access to it.

Prioritize Equitable Farmland Access: Develop policies and programs that increase farmland access for historically disadvantaged farmers, such as a tax exemption for small producers on less than five acres. Engage the Narragansett Indian Tribe's generational land stewardship knowledge in planning for agricultural land stewardship and conservation.

Explore Payment for Ecosystem Services: Create policy to monetarily value agricultural ecosystem services and stewardship practices that contribute to and align with the state's climate goals

Invest in Indoor Production: Coordinate a public-private working group to analyze research and development, business services, technical assistance, infrastructure, and financing needs for controlled environment food production.

PREVIOUS
Economic Development

This brief was prepared by:
Shayna Cohen, KK&P
Clare Bramhall, KK&P

UP NEXT
Stewardship of Waters and Working Waterfronts

Stewardship of Working Waterfronts

From our state appetizer, calamari, to our state shell, the quahog, Rhode Island's cultural identity and gastronomic traditions are rooted in the sea

Rhode Island's fisheries and seafood sector has been estimated to support 3,174 jobs and contribute over $538 million in revenue to the state's economy. Rhode Island's commercial fisheries and aquaculture industries are an essential component of the State's economy and cultural heritage that contribute to local jobs and carry on the longstanding traditions of harvesting natural resources from local waters that began with the Narragansett Indian Tribe and other Indigenous peoples. The sustainable management and stewardship of coastal waters, offshore fisheries, and commercial ports are essential to ensuring the viability of seafood and aquaculture industries.

Current Conditions

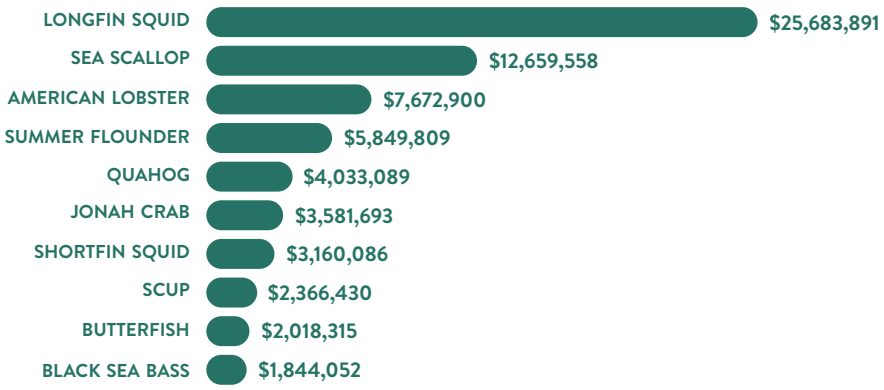
Commercial fisheries in Rhode Island trace back over 350 years, with local Indigenous populations relying on the ocean's natural resources for thousands of years before that. The first aquaculture lease was granted in 1798 to cultivate two acres in the Providence River near Sabin Point for oysters. Rhode Island's commercial fishermen depend on 25 commercial ports to land seafood. Of these, Galilee (Point Judith), North Kingstown (Wickford), and Newport are the top three ports, by value, of seafood products landed in the state.

The Port of Galilee is Rhode Island's largest commercial fishing port, comprising 38 acres of commercial property managed by RI Division of Coastal Resources. Currently, DEM DCR manages 27 commercial land leases in the Port of Galilee. State ownership and management of these land leases in Galilee provide a stable working waterfront to support this intricate web of businesses. Businesses in the Port support a larger coastal community and include seafood wholesalers, processors, and distributors that have a global reach in seafood markets. This community supports all aspects of the working waterfront, with Galilee viewed as a one-stop shop for the commercial fishing fleet in Rhode Island and beyond. While working waterfront businesses and communities continue to thrive in Rhode Island, they face significant and compounding challenges. DEM has recently

KEY INDICATORS

ECONOMIC IMPACT OF FISHERIES + SEAFOOD	VALUE OF SEAFOOD LANDED IN 2023	VALUE OF AQUACULTURE
$538 million	**$89,700,000**	**$8,197,825**
Fishing, shellfishing, processing, wholesaling, etc. generated $538 million in sales (2016)	*Squid, served as calamari around the world, made up 35% of the value of seafood landings*	*RI has 84 aquaculture sites covering about 374 acres*

TOP 10 COMMERCIAL SPECIES BY VALUE, 2023



In 2023, Rhode Island landed over 65 million pounds of seafood valued at $81.7 million. The top five species by value were longfin squid, sea scallop, American lobster, summer flounder, and quahog. The Port of Galilee remained the top port in RI in 2023 landing ~69% of Rhode Island's seafood by value and ~55% by pounds.

Source: Rhode Island Department of Environmental Management - Division of Marine Fisheries, 2024, 2023 Rhode Island Annual Fisheries Report.

been making significant investments to repair and replace port infrastructure at the Port of Galilee. State capital investment funds and federal grants through EDA and FEMA and will be used at the Port of Galilee to raise bulkheads and dock to optional heights that maximize operational usage and resilience to sea-level rise and storm events. Electric infrastructure is also being upgraded to ensure safe use in the marine environment. While these efforts aim to ensure the longevity and operations of our working waterfront, the future of our businesses and industry stakeholders is still in question as they face their own social, economic, and ecological pressures.

Aquaculture

In 2022, 84 aquaculture sites farmed over 370 acres in RI. The total value of products farmed for consumption and seed was $8.3 million, with oysters leading production with over 10 million pieces sold. Both oyster seed sales and sugar kelp sales increased in 2022 by 25% and 60.6% respectively. Total aquaculture employment increased for the third consecutive year with 246 individuals employed.

Challenges

- **Climate Change Impacts:** Working waterfronts are geographically positioned in low-lying coastal areas that are naturally exposed and vulnerable to infrastructure damage from coastal hazards such as wind and flooding. A key challenge identified for working waterfronts in the Rhode Island Blue Economy Report was the threat of damage from coastal storms and sea level rise (SLR). Rhode Island has experienced over 10 inches of SLR since 1930 and has an annual rate of SLR—0.16 inches—greater than the global average, 0.12 inches. According to the IPCC, SLR will continue into the distant future due to ice melt and ocean warming. Rhode Island has taken steps to help safeguard its working waterfronts, including appropriating $46 million for infrastructure projects in the Port of Galilee.

  The impacts of climate change extend beyond coastal infrastructure with ocean warming and acidification impacting our fisheries and aquaculture industries. Species distribution shifts and changes in productivity will have varying effects on working waterfronts depending on their reliance on commercial fishing. The decrease in pH from ocean acidification impacts species whose external shells are composed of calcium carbonate. This process is likely to have significant impacts on aquaculture industries that are heavily focused on mollusks such as oysters, mussels, and clams.

- **Wastewater and Environmental Pollution:** It has been widely recognized that the limitations of the wastewater treatment facility in the Town of Narragansett have posed a significant challenge to seafood processors in the Port of Galilee. Seafood processing effluent, or wastewater, in particular that coming from squid processing, carries a high biological oxygen demand that cannot be processed by municipal wastewater treatment facilities. As a result, seafood processors are forced to either move their processing activities to an off-site location or ship their wastewater to an off-site treatment facility. Wastewater remains a top challenge for processors, which inhibits growth and expansion of operations in the Port of Galilee and statewide.

- **Navigating a Complicated Regulatory Environment:** The commercial fishing industry is highly regulated and managed by state and federal fishery management agencies through commercial quota allocations, size limits, possession limits, closed areas, vessel permits, fishing licenses, harvest control rules, etc. The science that informs our stock assessments, and is the basis from which these harvest control rules are set, is lagged with only the most recent year of data being available to stock assessment scientists. The lag in data coupled with the lengthy adaptive management process, or time it takes for a fishery management plan amendment or addenda to be adopted, can often result in rules being set based on science that does not reflect the most recent trends and conditions in the fishery. While major strides have recently been made to address this problem by reallocating state-by-state commercial quota allocations for species such as black sea bass and menhaden, it still poses significant challenges to the commercial fishing industry and working waterfronts.

> ***"The number and complexity of commercial fishing rules and regulations that one is required to follow are problematic, it's like a full time job just staying up on all the things you need to know to stay in compliance."***
>
> COMMERCIAL FISHERMAN

  Aquaculture industries in Rhode Island are permitted by the Rhode Island Coastal Resources Management Council in cooperation with DEM. The permitting process is also subject to review and input from federal, state, and municipal agencies, nonprofits, and public stakeholders. This creates a complex regulatory environment that can be difficult for aquaculture farmers to navigate, and opposition to more farms in some coastal communities remains a challenge.

- **Gentrification and Competing Uses of Waterfronts:** Gentrification, or land-use changes that support other industries and not necessarily the commercial fishing industry, is accelerating in New England. Because of their strategic location, the Port of Galilee and State Pier #9 (Newport) have been targets of alternate uses such as wind farm development and recreational use. Statewide, ports that support commercial and charter fishing businesses have experienced pressure from private

development groups seeking to cater to a marina customer base that is interested in using waterfronts for recreation.

- **Graying of the Fleet:** The challenges of an aging commercial fishermen population has been well documented in the U.S. and in Rhode Island. As described in the RI Commercial Fisheries Blueprint for Resilience, the graying of the fleet is "as much regulatory (limited licenses, specialization, individual quota systems) as it is cultural (emphasis on the college-to-profession pathway, discouragement by current fishermen), economic (rising costs of doing business, market stagnation and volatility), financial (lack of loans or information on where to get them), and educational (shortage of training programs). Every one of these dimensions has changed in profound ways since today's senior fishermen entered the industry and built their careers. All of them need to be addressed simultaneously to reverse the problem." The DEM Division of Marine Fisheries issues a limited number of new commercial licensing opportunities each year based on the exit/entry ratios for the unlimited finfish and shellfish endorsements. A recent analysis presented by the DEM DMF at a commercial licensing workshop in July, 2024, indicated that the individuals who have received new license opportunities in the past two calendar years have had limited commercial landings indicating under-utilization of these opportunities.

Opportunities

- **Analyze Climate Change Impacts on Working Waterfronts:** DEM DCR should continue to leverage state and federal funding opportunities to upgrade marine assets and infrastructure in state-owned port facilities to increase port resilience to climate change impacts.
- **Improve Wastewater Treatment Technologies:** Engage with industry stakeholders and academia on new and upcoming research to treat wastewater through emerging filtration technologies.
- **Review Regulatory Hurdles and Bottlenecks:** Work through the RI regulatory process to re-visit RIDOH regulations and DEM commercial licensing regulations to better understand current challenges and provide additional business opportunities for the fisheries and aquaculture sectors within the state.
- **Encourage New Entrants:** Incentivize new entrants through the expansion of commercial fisheries apprenticeship programs (currently offered through the Commercial Fisheries Center of RI and funded by the RI Department of Labor and Training), and aquaculture training programs with Roger Williams University, the RI Sea Grant, and Education Exchange.

Stewardship of coastal waters, offshore fisheries, and commercial ports is essential to ensuring the viability of seafood and aquaculture industries

Recommendations

Update Economic Analysis of Rhode Island's Blue Economy: Update and expand the work of Sproul & Michaud (2018) to understand the full economic impact of the commercial fishing industry on the RI economy.

Invest in Waterfront Infrastructure Resilience: Evaluate existing working waterfront vulnerabilities with qualified engineering firms to inform future planning and policy aimed at increasing resilience.

Reduce Barriers for New Entrants: Examine barriers for new entrants in Rhode Island's commercial fishing industry and develop programs and/or policies to combat graying of the fleet while preserving the overall health of our state's natural resources.

Streamline Regulatory Process and Improve Communication Between Stakeholders: Continue to evaluate ways to simplify state regulatory processes governing our fishing and aquaculture industries. State agencies should regularly engage industry stakeholders to identify knowledge gaps on challenges and opportunities.

This brief was prepared by:

Daniel Costa, DEM Division of Coastal Resources
Nicole Lengyel Costa, DEM Division of Marine Fisheries
Molly Moran-Ogren, DEM Bureau of Natural Resources

PREVIOUS
Stewardship of Food Producing Lands

UP NEXT
Community-Based Food Production

Community-Based Food Production

Community-based food production puts the food system *in* our neighborhoods

> *If we are to address this critical moment facing Rhode Island farmland, urban agriculture and community gardens should be among the solutions considered. Done well, urban agriculture and community gardens can enhance Rhode Island's urban neighborhoods and ecosystems, provide a pathway for community development, support farmers' livelihoods and local economies, increase access to urban greenspace, and support racial equity work.*

Current Conditions

The vital role of community-based food production—via community gardens and urban agriculture—was evident during the supply chain disruptions, inflated food prices, and increased in food insecurity seen during the COVID-19 pandemic. Consumers sought out locally sourced food and farmers worked creatively and quickly to meet this demand.

Urban agriculture does not have a formal definition by the United States Department of Agriculture (USDA) but generally includes "community gardens, rooftop farms, hydroponic, aeroponic, and aquaponic facilities, and vertical production facilities" that grow and distribute agricultural products across cities. Set definitions are often left to the discretion of local policymakers and are subject to zoning laws. In 2023, the Rhode Island Food Policy Council estimated that there were as many as 113 community gardens and urban farms active across Rhode Island.

KEY INDICATORS

# OF COMMUNITY GARDENS	# OF URBAN FARMS	# OF FARMERS CONTRIB. TO FARM-TO-MARKET CENTER
80	33	27
RIFPC counts at least 80 sites across Rhode Island, with 49 in Providence	*Rhode Island has at least 33 urban farms, including many at Urban Edge Farm*	*The Southside Community Land Trust aggregates food for hunger relief distribution*

There are structures in place to support the integration of produce grown on urban farms into our local food system. Cooperative and hybrid business structures, like at Urban Edge Farm or the Good Earth Farm through the Southside Community Land Trust, serve as successful examples. On the federal level, there is increased attention to this work, as seen through funding and technical assistance offered by the USDA's new Office of Urban Agriculture and Innovation Production and newly established Urban Hubs in select cities across the country (but not including Providence). There are also some funding opportunities through the Natural Resources Conservation Service (NRCS) and the Northern RI Conservation District.

The benefits of urban agriculture reach far beyond food production: In addition to providing local economic development opportunities for urban farmers and growers, urban agriculture has mental health benefits, provides educational opportunities, and promotes ecological restoration. Community gardens and urban farms can be key access points to food production and green space for Black, Hispanic/Latino, immigrant, and other historically underinvested in communities. Many residents, including those in immigrant populations and populations of color, are already growing their own food in creative ways with limited access to space. Despite this, urban growers continue to be largely left out of funding opportunities at the state and federal levels and community-based food production is frequently not part of conversations about access to affordable housing, water, and land use.

NUMBER OF COMMUNITY GARDENS + URBAN FARMS

CITY	COUNT	CITY	COUNT
Providence	61	Lincoln	1
Cranston	18	North Kingstown	1
Pawtucket	5	Portsmouth	1
Warwick	4	Rockville	1
Central Falls	2	Rumford	1
Middletown	2	Smithfield	1
Newport	2	South Kingstown	1
West Warwick	2	Tiverton	1
Westerly	2	Wakefield	1
Woonsocket	2	Warren	1
Coventry	1	West Kingston	1
Kingston	1		

Source: Rhode Island Food Policy Council, Urban Farming and Small Scale Farming Fact Sheet.

Challenges

- **Lack of Funding Opportunities for Smaller, Urban Farmers and Growers:** Urban farms are oftentimes left out of state and federal farm support programs due to their size (under five acres), and funding opportunities are not consistent or reliable.
- **Urban Farmers and Growers Don't Have the Resources to Scale Up:** Due to current costs of land, labor, and inputs, as well as difficulties with succession planning and long-term land tenure, it is extremely difficult for urban farms to be commercially viable. Urban farmers are largely unable to participate in institutional purchasing as they generally cannot meet food safety standards and cannot produce at a scale that matches the needs of institutional purchasers. Many urban farmers of color rely on local nonprofits to connect them to government resources and contacts, but these farmers do not feel comfortable navigating government resources on their own.
- **Competing Priorities:** There is no consensus on how to use vacant land and underutilized lots. The current focus on developing accessible housing has pushed policymakers to reconsider farmland held in conservation easements and deprioritize access to green space and growing spaces in urban centers.

Opportunities

- **Mapping Alternative Urban Food Networks:** University of Rhode Island researchers received an award from the USDA to begin mapping alternative food provisioning networks of immigrant communities and communities of color across Providence. This work will reveal new information about how constituents grow food in urban spaces across the city.
- **Support New and Immigrant Urban Farming Communities:** The Southside Community Land Trust works to connect new and immigrant farmers to farmland and other resources central to a success farm business. Recent completion of the 404 Broad Street food hub and Farm to Market Center provides an avenue for small urban farmers to drop off their produce for processing, aggregation, and distribution. This program has grown exponentially in recent years, indicating that these structures are needed and can build bridges to small farmers and historically underinvested in communities. Since 2004, the African Alliance of Rhode Island has existed to bridge gaps in culturally relevant health and food access for African immigrants and refugees. A community garden, 6-acre farm, health and wellness programs, and events are part of the organization's vision for a self-sustaining community.

Community-based food production is key to advancing food sovereignty

Recommendations

Consistent Funding Streams: Expand and utilize existing funding for programs dedicated to urban farm and garden access. By utilizing flexible and new ownership financing mechanisms, policies, and models, such as performance mortgages, shared equity models, ground leases, policy incentives to encourage multiple tenants or owners on larger tracts of land, and low-cost and long-term farm leasing on publicly held lands, this funding can be an impactful way to provide long-term and consistent land access. Advise the USDA, NRCS, and NRICD on improving funding for urban agriculture so programs are adopted to reach producers growing on less than five acres.

Support Current Policy Efforts: There are multiple opportunities to support urban food production today. The Rhode Island Food Policy Council is backing a bill that would eliminate property and income taxes for urban and small farms. Passing this bill would marginally impact the state's tax revenue but would greatly impact the viability of these small enterprises.

Multi-Sector Planning: The work of local farmers is impacted by sectors that reach far past food and agriculture. Access to housing, childcare, healthcare, public transportation, and living wages may stand as barriers. By building a cross-sector coalition that reaches across government agencies, these issues can be addressed concurrently. Create a fund that prioritizes projects that work towards addressing access to housing and green space that supports food production. These conversations must prioritize racial equity in a way that represents the farming and gardening community.

PREVIOUS
Stewardship of Working Waterfronts

This brief was prepared by:
Grace Feisthamel, Southside Community Land Trust

UP NEXT
Fisheries, Agriculture, Aquaculture, and Business Viability

Fisheries, Agriculture, and Aquaculture Business Viability

Making a living is a significant challenge for the people who produce our food

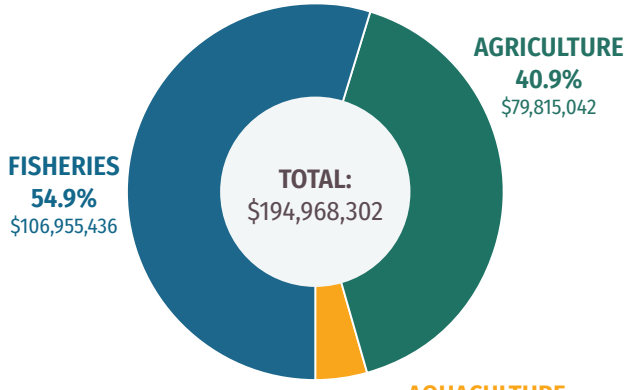
*Rhode Island's fishermen, farmers, and aquaculturists generated nearly **$195 million in sales** in 2022. In addition to the foods they produce and harvest, these industries contribute to our collective identity, sense of community, quality of life, and environmental resiliency. A significant number of Rhode Island fishermen, farmers, and aquaculturists operate at a very small scale, by national standards, and a variety of factors impact their viability. A support system—including policies, business services, infrastructure, and financing—that minimizes barriers to entry, shrinks operational costs, enhances market opportunities, **and** bolsters physical and emotional health, is key to helping these businesses succeed.*

Current Conditions

The skills that fishermen, farmers, and aquaculturists must possess in complex occupations is astonishing: scientist, laborer, mechanic, navigator, marketer, regulatory expert, and more. These jobs require hard work—work that must happen regardless of the weather and with limited control over outcomes—commonly without a day off, or benefits. In some instances, achieving viability may require offering services that are not directly related to food production and that stretches already finite capacity and expertise (e.g., operating a wedding venue).

Our local food producers must also compete within a global context of substantial food industry consolidation, competing land and water uses, narrow profit margins, regulatory compliance, workforce recruitment and retention, succession planning, climate change, and expectations of cheap food.

TOTAL FISHERIES, AGRICULTURE, AND AQUACULTURE SALES, 2022



Sources: Rhode Island Department of Environmental Management - Division of Marine Fisheries, 2023, 2022 Rhode Island Annual Fisheries Report; USDA 2022 Census of Agriculture; CRMC, Aquaculture in Rhode Island 2022. Adjusted for inflation to 2024 dollars.

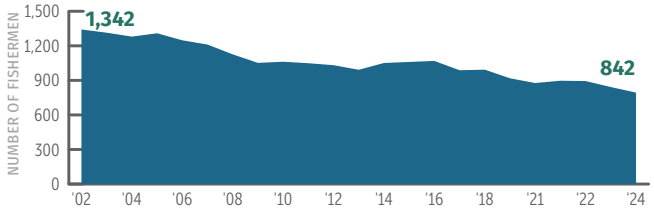
KEY INDICATORS

NUMBER OF FISHERMEN	NUMBER OF FARMS	NUMBER OF AQUACULTURE SITES
842	**1,054**	**84**
The number of fishermen in Rhode Island has decreased over the past 20 years	*The number of farms and farmers has been relatively consistent over the past 20 years*	*The # of aquaculture farms has steadily increased over the past 20 years, but employment is modest*

Fisheries

Rhode Island's fisheries consist of diverse species, including longfin squid, sea scallop, American lobster, summer flounder, and quahog. From 2000 to 2006, Rhode Island fishermen landed an average of 108.5 million pounds of seafood per year, with an average value of $154 million. From 2007 to 2022, Rhode Island fishermen landed an average of about 79 million pounds per year and generated an average of $138 million in sales. The number of Rhode Island fishermen counted in official employment statistics decreased 33.4%, from 1,342 in 2002, to 842 in 2023.

NUMBER OF FISHERMEN, 2002-2023



Sources: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; U.S. Census Bureau, Nonemployer Statistics.

The Rhode Island Commercial Fisheries Blueprint for Resilience laments "When fishery participants pause to look at the horizon and imagine the future of their industry, few feel optimistic." The Blueprint identifies many challenges to viability, including:

- Mounting regulatory strain (e.g., the level of government management is unique among food industries in RI)
- Regulatory discards (e.g., catching species that they are not allowed to land),
- Time lags between data collection and policy decisions
- Regulatory fragmentation
- Business specialization (e.g., toward squid fishing)
- Aging equipment, vessels, and waterfronts
- Rising business expenses
- Market dynamics (e.g., the majority of seafood consumed by Americans is *imported* while much of the seafood landed in Rhode Island is *exported*)
- Perception of public apathy
- Climate change and ecosystem degradation
- Competing ocean uses
- Shifting fish migration patterns and fishermen's access to formerly productive harvesting grounds

Historically, the Blueprint notes, wild fisheries have lagged behind agriculture and aquaculture in taking advantage of the local food movement. In response to COVID pandemic market closures—and lobbying for this change by fishermen—Rhode Island created a new direct sale dealer license to enable small-scale fishermen to sell many species of finfish directly to consumers, under certain conditions. Many fishermen see direct marketing as a game-changing opportunity to elevate, celebrate, and promote Rhode Island's different species, the fishermen who catch them, and the working waterfronts where they are landed.

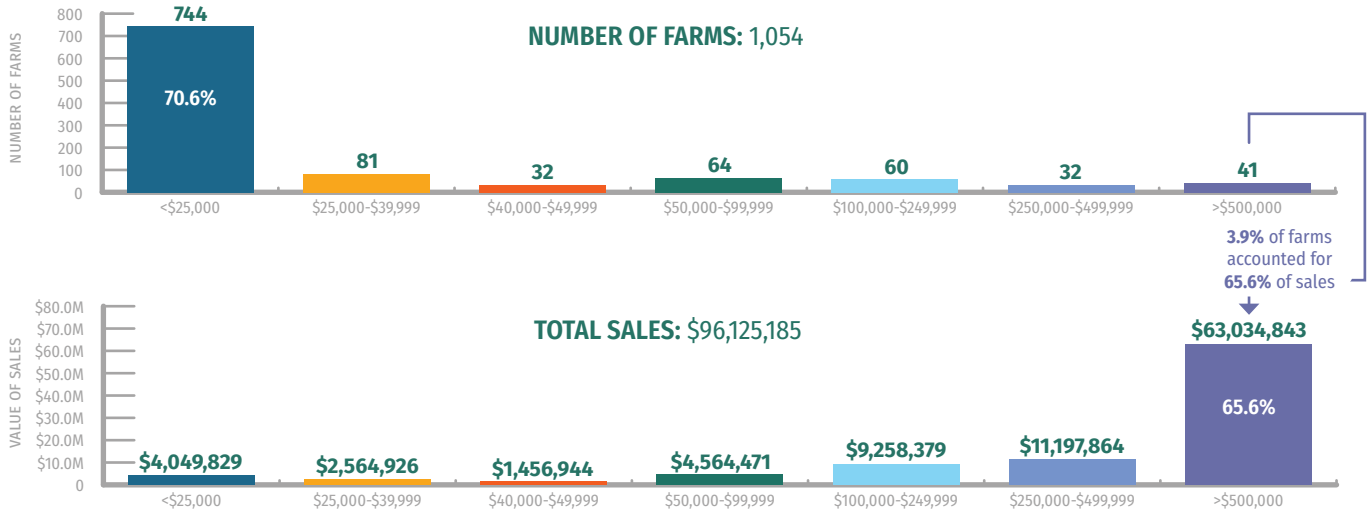
Agriculture

As of 2022, 70.6% of Rhode Island's 1,054 farms accounted for only 4.2% of total agricultural sales. Conversely, 3.9% (just 41 farms) generated about 66% of total agricultural sales. The USDA reports many indicators of farm viability, including:

- **Primary occupation:** 56.6% (1,097) of Rhode Island's farmers had a job *other than* farming in 2022
- **Days of work off-farm:** 41.5% of farmers worked more than 200 days off-farm
- **Net cash farm income:** 37.6% (396) of farms had net gains, while 62.4% (658) had net losses
- **Production expenses:** hired labor, repairs and supplies, animal feed, and property taxes were the top expenses
- **Size of farm:** 43% (452) of farms were operating on nine acres or less
- **Cost of farmland:** With the highest per acre farmland costs in the nation, $22,000, long-term stable access to farmland is a major challenge to business viability, particularly for beginning farmers and farmers of color

Farm viability is hampered by a dearth of agricultural support services, such as veterinary care, equipment purchase and repair services, and feed and seed dealers. Respondents to the brief team's outreach described a landscape of limited access to capital and technical assistance compared with other New England states. They spoke to generational and cultural gaps between older and often White farmers and younger, more racially diverse first generation farmers. Loss of knowledge-sharing across generations and limited candidates for business and land succession planning also impact viability. Notably, nursery/greenhouse product sales, and not food production, account for the majority of agricultural sales in Rhode Island.

NUMBER OF FARMS AND VALUE OF SALES BY SALES CLASS, 2022



Source: USDA 2022 Census of Agriculture. Note: this total sales value includes the *USDA* estimate of aquaculture sales.

Aquaculture

As of 2022, there were 84 active aquaculture farms, with cultivation of about 374 acres, up from 38 farms on about 157 acres in 2010. Eastern oysters make up 99% of all Rhode Island aquaculture production, and are marketed in and out of state by individual businesses as well as shellfish marketing cooperatives. Aquaculturists are working on raising and finding new markets for crops such as sugar kelp, soft shell clams, surf clams and bay scallops, in addition to building local oyster seed/spat production capacity. A challenge for aquaculturists is competition for water uses, in particular with some waterfront homeowners, who see working waterfronts as a compromise to their view and/or barrier to recreational water uses. In addition to costs associated with infrastructure and food safety regulations, legal fees to secure water rights can be costly for aquaculture businesses.

Challenges

Common challenges for fishermen, farmers, and aquaculturists include:

- **Accessing Key Development:** Needs include capital, infrastructure, permits, land and waterfront, business services, and technical assistance, especially for under-represented businesses. These industries are capital intensive at start-up, a challenge to viability that is compounded by generational access—or lack of access—to fundamental infrastructure (such as fishing permits, land and water leases, vessels, and farmland).

  Working waterfront space for landing and vessel docking is required but difficult for fishermen to find reliably and affordably. Within agriculture, the high cost—and limited amount—of farmland create significant barriers to entry and to growth for small and mid-size producers, especially (but not exclusively) for farmers of color. Aquaculturists struggle to access seed (shellfish, kelp, oyster) for production.

- **Production Expenses:** Rising production expenses—for labor, equipment, repairs, fees, etc.—mean that profit margins are shrinking.

- **Aging Workforce:** The average age of farmers and fishermen is increasing, requiring important decisions about succession planning for businesses, infrastructure, catch allocations, leases, and land. Losing seasoned farmers or fishermen doesn't just diminish business viability, it also impacts the transfer of institutional knowledge.

- **Competing Uses:** Rhode Island's food producing resources must compete for land and water uses with housing and commercial development, solar and off-shore wind installations, recreational uses, and more.

- **Shrinking Pipeline of New Fishermen:** It has become consistently more difficult for young people to enter fisheries and access permits over the past two decades for a variety of reasons, including federal regulations, uncertainty of business viability, and access to capital.

- **Consumer Purchasing Habits:** Although direct agricultural sales make up 12.7% of total agricultural sales—the second highest percentage in the nation—the bulk of Rhode Island's seafood sales are not aligned with existing consumer preferences (e.g., for shrimp, tuna, and salmon). The diversity of Rhode Island's seafood landings are not well represented in local markets.

- **Climate Change:** The increasing frequency and intensity of climate-related weather disasters poses significant and unique risks to our food producers. Regulatory and management regimes, infrastructure investments, and technical assistance are not keeping pace with rapidly changing conditions.

- **Wastewater and Nutrient Levels:** Rhode Island has insufficient wastewater handling capacity where commercial fishing and processing are concentrated, which limits seafood processing capacity. A Special Legislative Commission studied a steep drop—56%—in quahog landings in Narragansett Bay from 2012 to 2022. They found that the decline was correlated with a reduction in nitrogen loads from wastewater treatment facilities, but production could also be impacted by climate change. The Commission recommends increasing quahog transfer and seeding programs, studying a potential shellfish hatchery, increasing Bay nutrient monitoring programs, and creating a permanent Quahog Advisory Commission or board of stakeholders.

- **Low Wages/Income:** Many farmers, farmworkers, fishermen and aquaculturists do not make a living wage, making food production a driver of economic prosperity for some and economic inequality for others.

Opportunities

- **Fulfill Workforce Development Needs:** Utilize the Registered Apprenticeship Program to attract, train and retain the land and sea production industry workforce. A significant number of Rhode Island farmers are also "new and beginning," a USDA term that means under 10 years of experience. Create and fund a network of existing farmers—and fishermen and aquaculturists—to be mentors to pass on their institutional knowledge to the next generation.

- **Expand Cooperative Research:** Utilize Rhode Island's educational institutions and cooperative extension to work with farmers, fishermen, and aquaculturists to address existing and emerging production challenges, and explore new products.

- **Create Comprehensive Support Services for Food Producers:** Convene existing business service providers, technical assistance specialists, capital providers, and food production businesses and analyze challenges to accessing services, identify missing support services, and emerging needs for all stages of business development (i.e., from start-up to succession). For example:

  1) Developing business plans that build financial, management, and marketing skills;
  2) Providing assistance for accessing state, federal, philanthropic, and private funding;
  3) Helping navigate complex business transitions;
  4) Advocating for simplifying state regulatory requirements for value-added processing on farm;
  5) Exploring work-life balance best practices;
  6) Providing technical assistance to small scale producers to expand on-farm sales, online sales, and overall profitability;
  7) Providing technical assistance for climate-smart practices;
  8) Providing tailored services to Black, Hispanic/Latino, Indigenous, and other historically underserved and underinvested in entrepreneurs and businesses.

- **Demonstrate State Government's Commitment to Food Producer Viability:** Increase investment by RI Commerce and other state agencies in fishermen, farmers, aquaculturists, working landscapes and seascapes.
- **Continue Making Progress with Institutional Markets:** After direct sales, institutional markets (i.e., schools, colleges, URI) may represent the most accessible market channel for small and midsize producers, including fishermen.
- **Education and Marketing:** Build on the success of recent pilot programs to strengthen the market opportunity for fishermen to supply the emergency food system. Promote the numerous "opportunity species" available to Rhode Island fishermen—defined by stock abundance, good climate change outlook, and favorable regulatory framework—and increase market demand for these species. Educate restaurants, stores, and consumers on purchasing local seafood species that are abundant in Rhode Island ecosystems, and build capacity to cook seafood at home. Promote shellfish aquaculture as a part of Rhode Island's seafood producing heritage, and enhance the social capital of aquaculture through education and storytelling.

Fishermen, farmers, and aquaculturists are the foundation of our food system

Recommendations

Explore Creation of New Organization or Network: Adopt/scale up a program like the Vermont Farm and Forest Viability Program, which has a track record of success for increasing food production business viability. Such an organization, or network of existing organizations, can increase producer access to scale-appropriate, industry, and market-specific business services. Emulate the best of what the other states and countries are doing to invest in agriculture, aquaculture, and fisheries business viability (e.g., scale LASA significantly).

Protect Remaining Working Landscapes and Seascapes: Strengthen state policies and incentives to preserve and enhance the natural resource base for food production industries and to increase production businesses' access to water and land. Incorporate ecosystem-driven management systems and ecosystem-responsive policies and regulations.

Maximize Funding Streams: Pursue federal funding opportunities (e.g., USDA and NOAA grants) to service Rhode Island fisheries, agriculture, and aquaculture. Continue efforts such as the state's Local Agriculture and Seafood Act (LASA) grant program to support new product and market development and overall business viability. Explore ways to fund state agencies at a higher level to provide critical support and targeted technical assistance to land and sea industries.

Continue to Grow Institutional Purchases: Increase institutional procurement of local products, including locally-landed and processed seafood.

Encourage Peer-to-Peer Learning: Strengthen coordination and collaboration within food producing industries to support mentorship, knowledge and resource-sharing, and succession.

PREVIOUS
Community-Based Food Production

This brief was prepared by:
Shayna Cohen, KK&P
Clare Bramhall, KK&P

UP NEXT
Water Quality and Soil Health

Water Quality & Soil Health

Contamination poses risks to food safety and long-term food production

Our food system relies on clean water and healthy soil, yet legacy contamination poses risks to food safety and may limit land available for production. These legacy contaminants disproportionately affect environmental justice communities, exacerbating existing disparities in access to healthy food, clean water, and economic opportunities. Soil and water health are integrally connected as farming practices, such as fertilizer and pesticide use, lead to runoff that affects water quality, while irrigation with contaminated water, in turn, impacts soil health.

Current Conditions

Rhode Island's soil health and water quality are vital components of its natural environment, supporting ecosystems, public health, and economic activities. Contaminants such as heavy metals, polyaromatic hydrocarbons (PAHs) and emerging pollutants like PFAS are of concern in our soil and water.

Soil health, although often overlooked, is crucial for agricultural productivity, water retention, carbon sequestration and potentially minimizing ground water contaminants. Contamination of soil limits the places where we can safely produce food, in both rural and urban areas. For example, lead is present in urban soils at sometimes harmful levels due to its past use in gasoline and paint. Other contaminants are also commonly found in soils from air pollution, past industrial use, or improper waste disposal, and can pose a health risk to people consuming food produced with those resources.

The health of Rhode Island's waterways and coastal ecosystems are intrinsically interconnected to the prosperity of its blue economy. Legacy contaminants and continuing pollution affect the sustainability of Rhode Island's seafood industry, as well as the ability of people to feed themselves or their family through fishing or shellfishing. Past and ongoing pollution limits the places where fish and shellfish can be safely harvested, with resulting harms to the populations that rely on these resources.

The state's water systems face various challenges, including contamination from industrial, agricultural and stormwater activities, as evidenced by contaminants found in water utilities above health guidelines. These are often found as disinfection byproducts and nitrates raising concerns for public health.

Environmental justice considerations are paramount, as overburdened and underserved communities often bear the brunt of soil and water contamination. These communities

KEY INDICATORS

PRIORITY AREAS NEAR IMPACTED WATER BODIES

78%

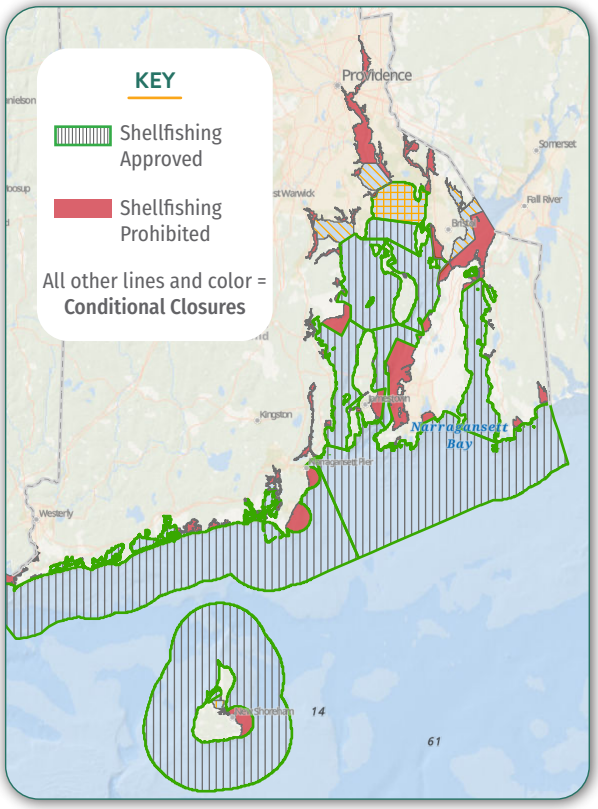
Priority areas—non-White, low-income, limited English, less than High School education—are disproportionately near polluted water bodies

FUNDING RECEIVED FROM USDA NRCS

$14,964,167

Rhode Island farmers received $14.9 million in USDA NRCS funding to integrate conservation into working lands from 2017 to 2022.

SHELLFISH HARVEST RESTRICTIONS



Source: R.I. Department of Environmental Management, Shellfish Harvest Restrictions.

face disproportionate exposure to pollutants, exacerbating existing health disparities.

PFAS: Contamination of soil and groundwater with PFAS from the application of biosolids from sewage sludge as fertilizer has been a major concern in Maine and other states. In 2023, DEM tested a sample set of wells near or within land in the state that historically received biosolids, primarily from the Massachusetts Water Resource Authority. None of the wells tested in Rhode Island found evidence of contamination that DEM attributed to the application of biosolids, suggesting that this is currenlty not a widespread problem in Rhode Island.

Challenges

- **Defining Soil Health:** The lack of a clear definition for soil health complicates assessment and management efforts.
- **Contamination:** Contamination from heavy metals, PAHs and emerging pollutants like PFAS pose risks to soil and water quality.
- **Unequal Burdens:** Overburdened and underserved communities disproportionately bear the burden of soil and water contamination, exacerbating health disparities.
- **Limited Funding and Capacity:** Limited funding and capacity hinder effective soil and water management, including stormwater control and pollution mitigation.
- **Development Pressure:** Increasing pressure on land resources due to urbanization and development, leading to soil degradation and loss of agricultural land.

Opportunities

- **Explore Traditional Ecological Knowledge:** Expand research and collaboration that includes Traditional Ecological Knowledge (TEK) to facilitate cumulative, comprehensive assessment and management strategies. Center partnership with the Narragansett Indian Tribe on leadership and opportunities for land stewardship.
- **Prioritize Environmental Justice:** Prioritize environmental justice considerations in policy making and resource allocation to address disparities in soil and water quality.
- **Protect Remaining Farmland:** Promote sustainable land use practices and conservation efforts to protect soil health, preserve agricultural land and mitigate the impacts of urbanization on natural resources.
- **Invest in Innovative Remediation:** Implement remediation techniques and sustainable practices to address soil and water contamination, such as phytoremediation and green infrastructure.
- **Fund Soil and Water Management Programs:** Secure additional funding and build capacity of soil and water management programs, including investments in storm-water infrastructure and pollution control measures.
- **Explore the Future of Urban Food Production:** Reimagine what non-traditional farming may look like in the urban context so that land legacy contaminants do not prohibit food sovereignty.

Clean water and healthy soils are our bequest to future generations

Recommendations

Integrate Traditional Ecological Knowledge in Decision-making: Integrate TEK into restoration projects to ensure a holistic approach that addresses cultural, ecological, and community needs. Recognize and respect indigenous perspectives on land management, which prioritize reciprocity, responsibility, and cultural connections. Increase visibility and understanding of TEK among scientists, policymakers, and the general public through education initiatives and curriculum development. Emphasize the importance of mutualistic relationships between humans and the environment, understanding that all flourishing is interconnected. Support projects that aim to restore not only ecosystems but also cultural practices, languages, and relationships to place, fostering reciprocal restoration.

Expand Water and Soil Management Programs: Develop comprehensive strategies for preventing water and soil pollution, preserving farmland, building out mitigation/remediation programs, and monitoring risks from known (e.g., PFAS) and potential pollutants.

PREVIOUS
Fisheries, Agriculture, and Aquaculture Business Viability

This brief was prepared by:
Rubén Parrilla, Northeast Organic Farming Association
Michael Byrns, Rhode Island Dept. of Health
Cassius Spears, Jr., USDA

UP NEXT
Supply Chain Resilience

Supply Chain Resilience

The COVID pandemic revealed vulnerabilities of our food supply chains, including an overreliance on consolidated and distant food sources

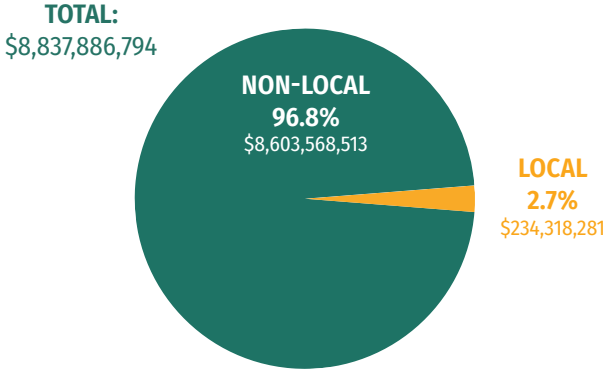
Rhode Island imports more than 90% of its food from outside of New England. Lack of corporate transparency makes it difficult to assess if the supply chains we depend on are equitable, sustainable, or resilient. Future supply chain shocks may come from public health crises, climate change, geopolitical instability, infrastructure failures, workforce shortages, or other events. The critical goal of resilient supply chains is reliable access to food, every day, for every person.

Current Conditions

Resilience is a spectrum of potential vulnerability, or risk. Resilience refers to our collective ability to respond and recover from adverse conditions. Resilient supply chains are adaptive, diverse, redundant, inclusive, equitable, and aware. Conversely, *brittle* supply chains could *break*, or significantly impact the regular and predictable flow of products to consumers.

The supply chains that make bananas a year-round fruit in Rhode Island are complex, opaque, and incentivized to keep prices low without sacrificing corporate earnings. Food industry market consolidation has brought increased private investment in proprietary and highly specialized infrastructure and supply chains (e.g., serving just food service businesses, or just grocery stores) and associated market pressures and imbalances. Additionally, convenience and choice come at a significant cost, some of which we experience as diet-related health problems, and some of which are externalized around the world as pollution, climate change, and the exploitation of food system workers.

ESTIMATED LOCAL FOOD SPENDING IN RHODE ISLAND, 2022



Source: New England Feeding New England, Rhode Island Local Food Count, 2022.

KEY INDICATORS

ESTIMATE OF LOCAL FOOD EXPENDITURES	VALUE OF DISTRIBUTION SALES	PEOPLE SERVED BY FOOD BANK
2.7%	**$6.1 billion**	**84,400**
NEFNE estimated $234 million in local food spending	*Distribution sales accounted for 34% of total RI food system sales*	*In 2024, RI Community Food Bank agencies served 84,400 people*

Supply chain resilience begins with food production. Previous Briefs have highlighted a flat or decreasing number of farms and fishermen as well as agricultural and seafood sales. Additionally, inedible nursery/greenhouse products account for the majority of agricultural sales. Providing supportive policies, business and technical assistance, and financing that is specific to the scale, challenges, and opportunities facing farmers and fishermen is a critical step in building resilience.

While some states, like Maine, have codified a "right to food" in policy, others have invested significantly in public infrastructure (e.g., terminal markets, wholesale farmers markets) to secure and cultivate a locally based food cluster. Examples of RI's key food system infrastructure include the second largest commercial fishing port in New England, ample cold storage capacity, a range of aggregation, distribution, and supply chain coordination entities, and a strong emergency food distribution sector.

Although food production is not currently growing in Rhode Island, food processing and manufacturing, distribution, and retailing have continued to expand. In fact, Rhode Island is home to the largest publicly traded wholesale distributor of health and specialty food in the U.S., UNFI, as well as to Red Tomato, a unique, value-driven aggregator of Northeastern produce.

There are many planning and investment efforts that could inform and impact food resilience, including at the

regional level (New England Feeding New England), state level (Climate Resilience Fund), and municipal level (City of Providence's Food Security Prioritization and Planning Process, the Infrastructure Bank's Municipal Resilience Program.)

Challenges

- **Industry Consolidation:** Industry consolidation and supply chain specialization mean that not all infrastructure or entities that are present in RI are connected with each other (e.g., a RI-based meatpacking plant that sources globally, or local locations of supermarket chains that have national sourcing strategies).
- **Making Market Connections:** Local farmers, particularly small ones, struggle to build reliable connections to retailers, distributors, and suppliers to reach larger local and regional markets.
- **Sources of Supplemental Food:** Anchor sources of food for low-income people and children (such as the School Lunch Program, institutional food programs, and most emergency food) depend heavily on long, national and international supply chains.
- **Workforce Challenges:** Empty positions in food businesses inhibit business growth, compromise the ability to meet current demand, and are a form of supply chain vulnerability.

Opportunities

- **Invest in Increasing Food Production and Building Supply Chains:** Investment in local food supply chains and infrastructure serves resiliency, emergency preparedness, *and* economic development goals. Opportunities include:

  1) Prioritizing and incentivizing *expanding* food production through expanded business services;
  2) Commiting to intensive and strategic supply chain coordination—with public and nonprofit support—to build the relationships that enable producers to reach markets (e.g., first mile connections);
  3) Investigating and resolving workforce needs (e.g., following the lead of Growing Futures); and
  4) Investing in the infrastructure needed to build supply chain resiliency.

  Recent USDA funding (e.g., the Resilient Food System Infrastructure Program) and LASA state funding are important tools to bolster food production by small and midsize farmers and fishermen.

Supply chain resilience is our insurance policy against future risks

Recommendations

Sustain Commitment to Local Purchasing: Sustain state funding for initiatives that prioritize local food purchases every day and in an emergency (e.g., temporary USDA RFSI program, LASA grants, Annual RI Tabletop Food Show, RI Farm & Sea to School Network and procurement gathering, RI Grown and RI Seafood).

Explore Infrastructure Needs: Engage with food business owners across food categories and scale of operation to understand how modified or new infrastructure could better align Rhode Island food supply and demand. Study relevant agricultural regions to identify strategic infrastructure investments (e.g. aggregation, packing, shipping) that enable efficient, reliable regional supply chain development. Determine how to continue these investments post RFSI funding.

Connect Statewide Planning Initiatives: Connect food supply chain resilience planning with all other related planning processes (e.g., transportation, energy, climate change, sea level rise).

Link Support System Together: Leverage ongoing research, federal funding opportunities, and RI Commerce incentive programs, funding opportunities, B2B cultivation and other assets to serve food businesses of all scales, individually and in coordination with each other. Support continued investment and prioritization of the RI Food Strategy 2030 priorities and the RI Food Disruption Plan.

PREVIOUS
Water Quality and Soil Health

This brief was prepared by:
Shayna Cohen, KK&P
Clare Bramhall, KK&P
Angel Mendez, Red Tomato

UP NEXT
Food and Beverage Manufacturing Viability

Food & Beverage Manufacturing Viability

Small and midsize food and beverage manufacturers face unique challenges

Many food and beverage manufacturers have been able to grow and create good jobs in Rhode Island, while some have also faltered. Successful companies, like Chi Kitchen, Feast & Fettle, and Paleonola, have found appropriate funding, production space, and market access and distribution. By analyzing thriving businesses, identifying common obstacles, and proposing strategic enhancements to the state's food business ecosystem, Rhode Island can better support the growth of food and beverage manufacturers, ensuring they thrive locally, regionally, and nationally.

Current Conditions

The total number of food and beverage manufacturers in Rhode Island increased 61.0% from 2002 to 2023 (from 259 to 417), while employment increased 26.1%, from 3,928 in 2002 to 4,954 in 2023. Bakeries and Tortilla Manufacturing (e.g., Calise Bakery) and Animal Slaughtering and Processing (e.g., Quality Food Co.) account for the largest percentages of businesses and employment. From 2014 to 2021, Rhode Island food and beverage manufacturers averaged over $872 million in sales, and meat processors, bakeries, and other food products generated the majority of sales. Food and beverage manufacturing jobs typically have higher wages than food system service sector jobs. Large businesses with employees make up 59% of food and beverage manufacturers and account for 96% of jobs. Businesses with no employees—nonemployers, typically sole proprietors—make up ***41%*** of food and beverage manufacturers and 4% of jobs.

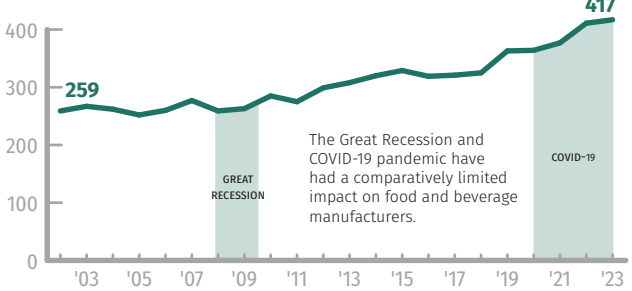
Rhode Island supports start-up food and beverage businesses through the Cottage Food Law—which sanctions food production in home kitchens for specific products such as baked goods—and public and private investments in food incubators like Hope & Main, Town Made, and Farm Fresh RI that help to seed and grow start-up food businesses. The landscape becomes more complex for these businesses as they scale up. For example, many businesses have shown a market need and the viability of their product, often with help from an incubator or accelerator. But these businesses may experience *second-stage* growth differently as they scale from small-scale manufacturing to a larger facility or co-manufacturer, and may require continued, targeted support to accomplish their goals. Those that have been able to successfully grow have some key factors in common: access to funding, production space, market access and distribution, and a network of resources. For example, the Backyard Food Company worked with a local co-packer, Plants to Food, to increase viability.

Food manufacturers must also adhere to federal and state food safety regulations like the Rhode Island Food Code, Good Manufacturing Practices, and the Produce Safety Rule, and develop Food Safety Plans.

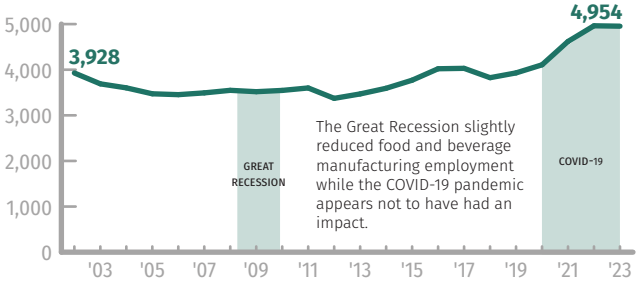
KEY INDICATORS

FOOD + BEVERAGE MFG SALES	FOOD + BEVERAGE MFG EMPLOYMENT	FOOD MFG COMPANIES REGISTERED MBES/WBES
$1.34 billion	**4,954**	**4**
Food and beverage manufacturing sales were equal to 7.4% of total food system sales	*Food and beverage manufacturing employment has increased 26.1% over the past 20 years.*	*Only 4 companies currently registered as Minority or Women Business Enterprises*

FOOD + BEVERAGE MANUFACTURING BUSINESSES



FOOD + BEVERAGE MANUF. EMPLOYMENT



Sources: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; U.S. Census Bureau, Nonemployer Statistics.

Challenges

- **Financing Gaps for Entrepreneurs:** Traditional bank financing does not fit the needs of food manufacturers as they scale, especially within communities that are historically underinvested in. Financing terms are often too rigid and make it difficult for scaling businesses to access capital.
- **Lack of Affordable Next Step Infrastructure:** As companies grow there is a lack of affordable next step infrastructure to rent or buy. Rhode Island has two predominant co-packing spaces (typically co-packers package finished food and beverage products): Plants to Foods for plant-based food and Palate Pack for beverages.
- **Lack of Language and Cultural Support:** Although 22% of Rhode Islanders speak a language other than English at home, there is currently not a strong language support system for food and beverage manufacturing entrepreneurs who speak another language. By recognizing and addressing the varied needs and cultural dynamics of all communities, we can ensure that all entrepreneurs have the opportunity to thrive and contribute.
- **Accessing Distribution Channels:** Many food businesses and manufacturers will need distribution to markets outside of Rhode Island to be successful. Finding distribution in new markets can be very difficult without anchor customers, and obtaining new customers is impossible without distribution.

Opportunities

- **Identify Funding Opportunities Across the Capital Continuum:** Food and beverage manufacturers need both traditional (e.g., small business loans, lines of credit) and non-traditional forms of funding (e.g., peer-to-peer lending, near equity financing, and program-related investments). Business support providers should prioritize helping communities that are underinvested in find appropriate sources of financing.
- **Create New Manufacturing Spaces:** Support creation of several affordable second-stage kitchen spaces across the state. This can be done through public-private partnerships, which would allow companies to scale past their home kitchen or the hourly rental space they're in now. This has been done successfully in other states, for example, CommonWealth Kitchen in Massachusetts.
- **Streamlining Regulations and Food Safety Funding:** Collaborate with relevant agencies to identify and address areas of struggle in the permitting process. This could involve creating a single point of contact for food businesses seeking permits and developing clear timelines for permit approvals. Provide grants and training for manufacturers to create, implement, and pay for third-party Food Safety and Good Management Practices audits.

A dynamic food and beverage manufacturing sector is key to the viability of Rhode Island's food system

Recommendations

Establish a Second-Stage Food and Beverage Manufacturing Space: Develop a facility, or multiple facilities, offering affordable production space with shared equipment and utilities. This would provide a stepping stone for companies transitioning out of home kitchens or hourly rentals but not yet needing a large-scale facility. This second-stage space can also offer step-wise co-manufacturing for those ready to offload their process but may not be at a scale for a traditional co-packer.

Create a Food Venture Fund: Launch a state-backed or state-incentivized private sector-led venture fund specifically for small and midsize food and beverage manufacturers that are scaling up. This fund could offer flexible financing options and prioritize investments in underrepresented communities.

Expand MBE/WBE Grant Programs: Increase funding and streamline application processes for existing Minority Business Enterprise (MBE) and Women Business Enterprise (WBE) grant programs that support food businesses as they scale up.

Develop Wraparound Support Services: Coordinate and strengthen network of business services, technical assistance, and financing providers to focus on the financing, regulatory compliance, marketing, and development needs of food and beverage manufacturers.

PREVIOUS
Supply Chain Resilience

This brief was prepared by:
Luca Carnevale, Hope & Main
Minnie Luong, Chi Kitchen

UP NEXT
Labor and Workforce Development

Labor & Workforce Development

The strength of our food system depends on the well-being of our workforce

The food industry significantly contributes to Rhode Island's economy, accounting for more than 12% of total employment and 6% of all businesses in the state over the past two decades. In 2023, the industry employed at least 77,351 people. Employment in the food system spans roles in farming and fishing, manufacturing, distribution, food preparation, service and retail, but the majority of food system jobs have notoriously low wages and limited benefits.

Current Conditions

While food preparation and service is the largest category of employment in Rhode Island's food system (85%), these jobs have the lowest wages of any occupational category with a median hourly wage of $15.96. These positions traditionally rely on tips as part of total compensation and many hourly food workers struggle due to variable and low wages. Other challenges for this portion of the workforce are irregular hours, costs of commuting, limited access to public transportation, and difficulties securing affordable and consistent child care. Lack of substantial benefits such as health insurance and retirement plans are additional occupational drawbacks, making it difficult to attract and retain employment in an industry all Rhode Islanders rely upon. The U.S. GAO has found that restaurants and other eating places employ the largest percentage of working adult Medicaid enrollees and SNAP recipients in states that provided employer data.

Unemployment in Rhode Island reached a 50-year low in June 2023, dipping to just 2.6%, but has since climbed back to 4.6%, just above the national average of 4.1%. The total workforce population in 2023 was approximately 573,848 with the highest concentration of jobs around the cities of Providence and Warwick. Between 2022-23, employment in Rhode Island increased 1.5%. People who identify as Hispanic or Latino (of any race) represent the largest ethnic group in Rhode Island (16.7% of the population) and contribute significantly to the food industry workforce - nationally 43% of farming, fishing and forestry workers are Hispanic and 27.3% of food preparation and service workers.

In 2020, Rhode Island was ranked second in the nation for food manufacturing jobs per square mile and Rhode Island continues to experience notable expansion in food processing, manufacturing, and distribution employment. Unfortunately, average salaries in the food system workforce are much lower than in other critical sectors like healthcare, utilities, construction, education, and waste services, and most fall well below the state's median annual household income of $81,860 (2023). With the industry's rising contribution to the economy, there is no doubt that skilled workers with opportunities for continuous advancement are crucial to its sustainable success.

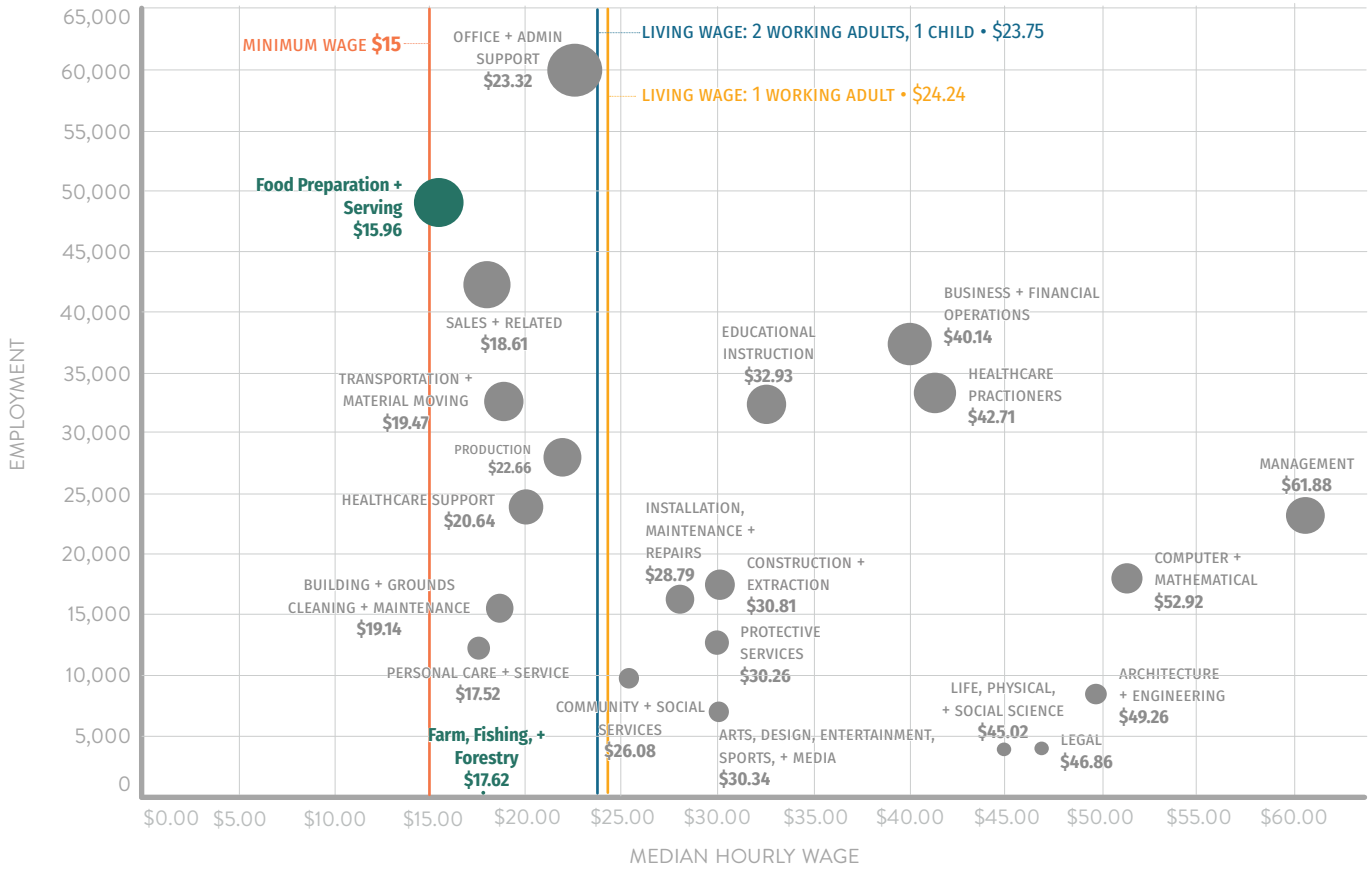
KEY INDICATORS

MED. HRLY WAGE FOR FOOD PREP + SERV. JOBS	FOOD SYSTEM EMPLOYMENT	% OF HISP. POPULATION WITH LOW INCOME
$15.96	**77,351**	**60%**
Food preparation + serving jobs have lowest median hourly wage of major occupations	*Food and beverage manufacturing employment has increased 25.6% over the past 20 years.*	*The EPI estimates that 60% of Hispanic/Latino Rhode Islanders earn less than $46,900*

The Governor's Workforce Board (GWB) is Rhode Island's primary policy-making body on workforce development issues under the federally mandated Workforce Innovation and Opportunity Act (WIOA). The GWB administers state and federal funded programming including Work Immersion, Incumbent Worker Training Grants, Real Jobs RI, and Real Skills for Youth. Collectively, these programs provide over $4.5 million annually in grants aimed at helping Rhode Island employers and employees to be more competitive.

Additionally, Real Jobs RI represents over 60 partnerships between employers, training providers, and community organizations addressing demand-driven workforce solutions. Rhode Island is also home to many vocational programs and higher education institutions catering to food sector jobs. Johnson & Wales University offers over 30 undergraduate and graduate degrees in food related disciplines and hosts the College of Food Innovation & Technology (CFIT). Through the University of Rhode Island Cooperative Extension program, students of all ages can train for agriculture and food systems careers from aquaculture to animal husbandry to food safety and food recovery. Ten career and technical institutions across the state are providing pathways to careers benefitting the food industry from HVAC engineers to culinary arts professionals to commercial truck drivers.

MEDIAN HOURLY WAGES FOR MAJOR OCCUPATIONAL CATEGORIES IN RHODE ISLAND



Sources: U.S. Bureau of Labor Statistics, Occupational Employment and Wage Statistics, https://www.bls.gov/oes/current/oessrcma.htm#C.
Living Wage Calculator: https://livingwage.mit.edu/metros/31080.

Challenges

- **Worker Protections:** While Rhode Island is among the most unionized states, including those primarily focused on retail and institutional food environments, many food business employers have little to no stipulations regarding adequate employment conditions (e.g., fair wages, healthcare, adequate and affordable child care, housing and transportation in proximity to the job location).
- **Lack of Workforce Development Coordination:** Workforce program development and implementation for food industries is happening in siloes, which limits its intended impact and borders on being a disincentive.
- **New People, Same Challenges:** New groups of people entering the workforce have different priorities and boundaries than previous generations. However, they will still face the same kinds of challenges, including access to adequate and affordable housing and other pre-requisites to employment.

Opportunities

- **Utilizing Workforce Training Programs:** Organizations such as Fuerza Laboral, Polaris MEP, RI Nursery and Landscape Association are using the Real Jobs RI program to improve workforce conditions and growth. Real Jobs RI currently facilitates eight partnerships funded in the food industry, compared to 14 in healthcare and 15 in energy, manufacturing, and construction, so there is room to expand the reach of this program.
- **Improved Working Conditions:** Improving the experience of food system workers can produce cascading positive benefits to the many households that rely on employment in the food system and the state's economy in general.
- **Improved Coordination and Collaboration:** Improved coordination and collaboration across the food industry to support workforce development efforts can reduce duplication and streamline efforts for greater collective impact through state-funded initiatives like Real Jobs RI.

Food system jobs with career pathways exist across Rhode Island's food system

Recommendations

Tackle Cost of Living Challenges: Work across government and industry siloes to address barriers to employment through strategies aimed at creating affordable and accessible housing, child care, and transportation.

Expand Workforce Training Programs: Enhanced or expanded training opportunities could include ESOL (English as a Second Language) classes, training on products and food production, food handling, food safety, alcohol serving training, business management, customer service, and time management training and other training like those achieved as part of apprenticeships and CTE (Career and Technical Education) programs. These can also include soft skills, like customer service and time management training. Provide conflict resolution, leadership management training, and DEIA (Diversity, Equity, Inclusion, and Accessibility) training.

Establish a Culture of Compliance with Labor Laws: Establish a culture of compliance and enforcement of solutions for programs and employers like those created by a State Compliance Commission and amend the Labor Relations Act to bring it up to date to reflect current workforce and employment needs.

Expand Workforce Development Opportunities for Immigrants: Immigrant workers are essential to Rhode Island's food production system, supporting agriculture and food processing. They bring vital skills and labor that ensure a steady supply of fresh produce, benefiting local economies and enhancing food security. Additionally, they help fill labor shortages in critical sectors, demonstrating resilience in challenging conditions.

Build Labor and Workforce Coalitions: Bring together community based-organizations, funders, resource partners, businesses, employers, employees and other beneficiaries to collaborate and coordinate food industry workforce development efforts. Streamlining efforts and reducing duplication will promote greater collective impact to inform state-funded initiatives like Real Jobs RI. Collect data and stories to ensure mitigation effort measures are successful. Now more than ever, respect and a culture of belonging are associated with job satisfaction and intent to stay.

Develop a Clear Statewide Initiative to Fill, Repair, and Maintain the Pipeline of Working Individuals for Multiple Generations: With an aging workforce in certain food industries such as agriculture and fisheries, if there is no succession plan for younger generations or workers to take over the business the farms will close. There needs to be earlier exposure to food system jobs and opportunities for apprenticeship programs, vocational programs and pathways to jobs in the green, plant, agriculture or seafood industry. Provide workforce development programming by addressing K-12 exposure to industries along with those adult-aged citizens experiencing the greatest barriers to job access.

PREVIOUS
Food and Beverage Manufacturing Viability

This brief was prepared by:
Aarin B. Clemons, Polaris MEP
Raul Figueroa, Fuerzal Laboral (Power of Workers)

UP NEXT
Food System and Nutrition Education

Food System & Nutrition Education

Food advertising significantly impacts our food choices and purchasing habits

A robust and sustainable local food system depends on people who understand the value of their food system and its effect on their health, the health of their communities and the environment. Food system and nutrition literacy are foundational in supporting these skills, from our youngest to our oldest citizens. Making informed choices about these topics ensures that we will have a future where Rhode Islanders have more control over their food, better mental and physical health, increased food security, a growing workforce, and relationships and skills that will adeptly shift to meet the food and environmental challenges that lay ahead.

Current Conditions

There is increased focus and energy around food systems literacy—understanding how food is produced, who can access it, and who can't, and where it goes when we're done with it—in Rhode Island. Many organizations work in this space, with future opportunity for greater collaboration.For example, the University of Rhode Island (URI), Southside Community Land Trust, Farm Fresh Rhode Island, and Save the Bay reach tens of thousands of people yearly with education on food systems, environmental issues, gardening, and cooking skills. Other organizations, delve deeply into their communities providing full-access food, environmental and skills programming, such as Ashawaug Farm, Aquidneck Community Table, and Movement Education Outdoors. Community partners are relied on heavily in this work, providing trained and knowledgeable staff, and access to information and skills.

Nutrition education, although limited in scope and priority, is required in health classes in RI, and efforts are underway to integrate more locally-focused experiences into new Rhode Island Department of Education (RIDE) science curriculum. Farm to Institution programs are rapidly growing, with help from state agencies, universities, and the RI Farm & Sea to School Network. About 14% of Rhode Island schools have school gardens, but they are in need of support. Institutional cafeterias across the state are also being used as learning spaces, with local food purchasing, taste tests and food recovery programs. New programs such as Johnson and Wales' Sustainable Food Systems Program and URI's Agriculture and Food Systems Fellows Program offer opportunities to engage future leaders as well.

KEY INDICATORS

MAJORITY OF SCHOOL FOOD AUTHORITIES PARTICIPATE IN F2S

78%

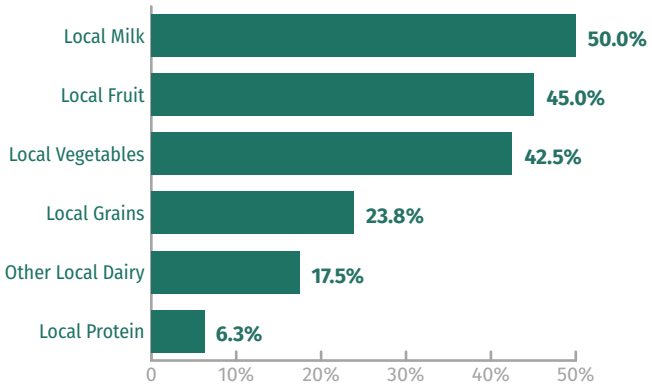
Of responding school food authorities (38 out of 49), the majority participate in farm to school activities

% OF SCHOOL FOOD AUTHORITIES PARTICIPATING >3 YEARS

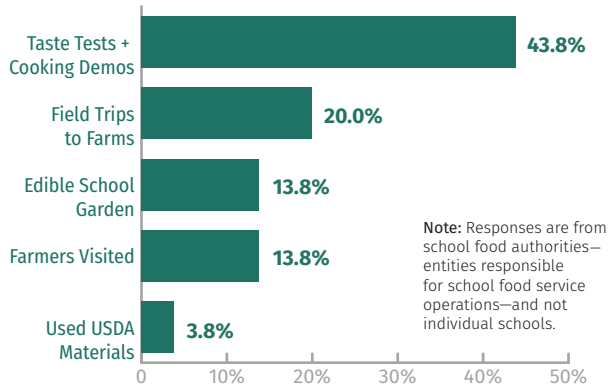
77.4%

The majority of schools food authorities have participated in farm to school activities longer than 3 years

FARM TO SCHOOL ACTIVITIES: LOCAL FOODS SERVED WEEKLY IN MEALS OR SNACKS



FARM TO SCHOOL ACTIVITIES: FOOD AND NUTRITION EDUCATION



Note: Responses are from school food authorities—entities responsible for school food service operations—and not individual schools.

Source: USDA Food and Nutrition Service, 2023 Farm to School Census.

Challenges

- **Community Engagement:** Engagement with food system and nutrition education programs is unequally distributed due to funding and a lack of access to Rhode Island's natural assets in core cities.
- **Prevalence of Ultra-Processed Food:** Our food options, which favor ultra-processed food, is in direct competition with health behavior change, particularly among low-access populations.
- **Incorporating Hands-on Learning:** Hands-on learning, such as gardening or cooking, does not fit easily into the rigidity of educational systems—some schools do not have necessary space or equipment—and can make it difficult to integrate new content. These barriers limit comprehensive, equitable implementation.
- **Challenging to Coordinate:** It is complicated to integrate food education across all relevant sectors, including health, education, and agriculture, as policies and efforts are siloed.
- **Consistent Funding Sources:** A lack of consistent and stable funding for these programs creates many barriers for implementation and efficacy.

Opportunities

- **Enhance School Curriculum:** Advocacy for inclusion of food literacy in RIDE science curriculum and health curriculum will provide a key way to utilize schools to increase access universally.
- **Link Food System and Nutrition Education Networks:** Leverage coordinating bodies like the RI Farm & Sea to School Network and RI Environmental Education Association to convene and align nonprofit partners doing this work.
- **Community Outreach:** Raise awareness of resources like the RIDOH State Physical Activity and Nutrition (SPAN) grant program, Community Health Workers, URI SNAP-Ed Nutrition Education, and RIFPC Food Leaders Lab, to support healthy eating habits.
- **Use Local Academic Talent:** Collaborate with Johnson and Wales, URI, and Brown University for research on food system and nutrition education implementation and efficacy.
- **The Power of Families, Communities, and Tradition:** Families and communities should be at the heart of the knowledge and cultural traditions that move Rhode Islanders toward healthier eating habits.

Food system and nutrition literacy encourage healthy eating habits, supports food producers, and strengthens communities

Recommendations

Coordinate Efforts and Community Partnerships: RI should assess the landscape of food literacy efforts and identify gaps and opportunities for coordination and partnerships between nonprofits, universities, and public-private relationships, and how to fund those relationships.

Establish Sustained Funding: a unified vision should be funded through the state, providing stable support for community organizations and schools to develop, maintain, and grow effort (e.g., a Farm & Sea to School grant program as a funding source for schools, and food literacy coordinator positions).

Develop Policy Framework: A comprehensive framework of policy support should be established, at multiple levels, and education must be elevated in social discourse. These policies must support small organizations as well as large organizations, and incentivize or require food and environmental literacy in multiple areas, supported by a healthy food environment and connected to institutional and state purchasing that is already happening.

Include Community Vision: Include community in co-creating a unified vision that celebrates cultural diversity and alternate ways of knowing (e.g., oral tradition) into curricula and programs. Food is an end product of a system of relationships, and including everyone from producers to parents is necessary to developing meaningful community level interventions.

PREVIOUS
Water Quality and Soil Health

This brief was prepared by:
Stephanie Pike, RD, LDN, RI Farm to School Network
Raffini, Southside Community Land Trust
Cassius Spears, Jr., USDA

UP NEXT
Eating Behaviors and Foodways

Eating Behaviors & Foodways

While having enough food is important, the quality—and cultural and religious appropriateness—of food also matters

Dietary behaviors are multi-faceted and require careful consideration of individual-, community-, and state-level factors across Rhode Island's food system. Social determinants of health—the conditions where people are born, live, learn, work, play, worship, and age—are closely linked to access, or lack of access, to high quality and culturally relevant foods. Addressing the eating behaviors and foodways of Rhode Islanders requires an awareness of the historical and inter-generational experiences that has driven food systems that are neither equitable nor sustainable.

Current Conditions

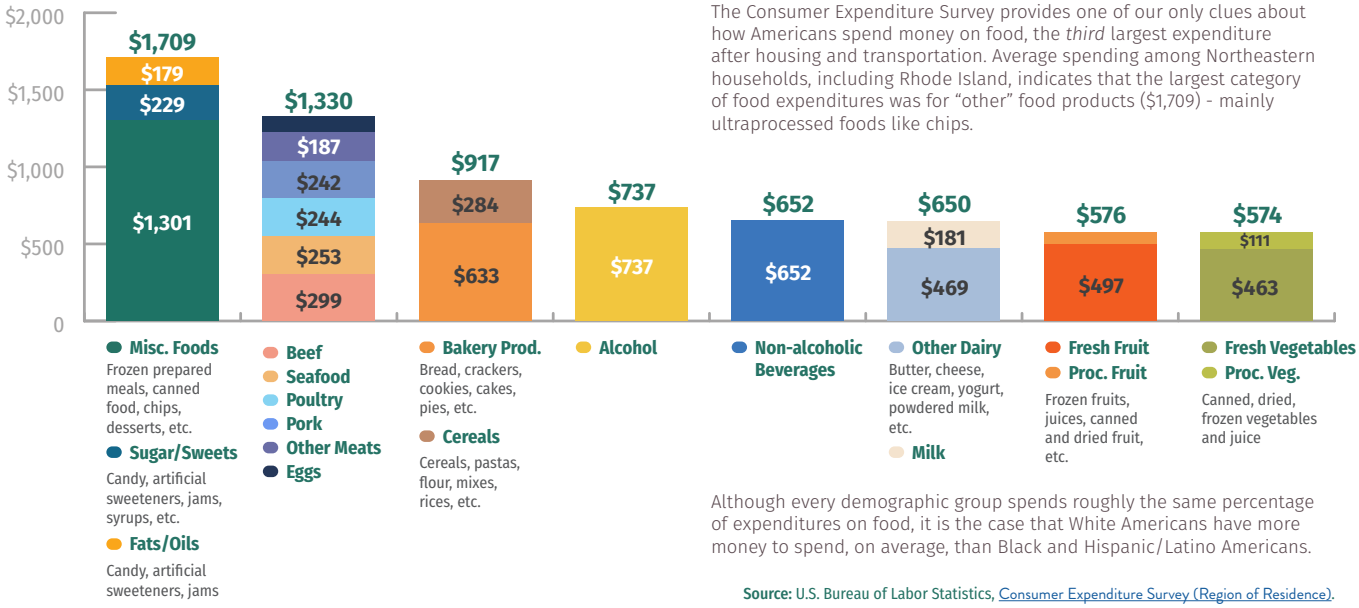
Social determinants of health set the stage for shaping our health, well-being, and quality of life. Social determinants of health refers to conditions of economic stability, education access and quality, health care access and quality, characteristics of neighborhoods and built environments, and social and community context. Not surprisingly, variations in social determinants of health, including food/nutrition insecurity and food access challenges, disproportionately impact Black, Hispanic/Latino, Indigenous, low income, and rural Rhode Islanders.

Another framework, commercial determinants of health refers to the responsibility of corporations—particularly corporations in four industry sectors: tobacco, ultra-processed foods, alcohol, and fossil fuels—in escalating rates of poor health, social and health inequities, and ecological degradation. Additionally the political, financial, labor and employment, marketing, scientific, and supply chain practices of major corporations impact the policies and regulatory approaches of governments in order to externalize the true costs of their operations.

KEY INDICATORS

HEALTHY EATING INDEX SCORE: AGES 2-18	% OF RI ADULTS WITH OBESITY	CALORIES FROM ULTRA-PROCESSED FOODS
54	**31.6%**	**58%**
The Healthy Eating Index measures diet quality, with a maximum score of 100	*RI has one of the lowest % of adults with obesity in the U.S., but Black (33.3%) and Hispanic (38.1%) Rhode Islanders have higher percentages*	*One study found ultra-processed foods made up 58% of energy intake in America*

NORTHEAST CONSUMER EXPENDITURE SURVEY, 2022-2023: AVERAGE ANNUAL FOOD AT HOME EXPENDITURES

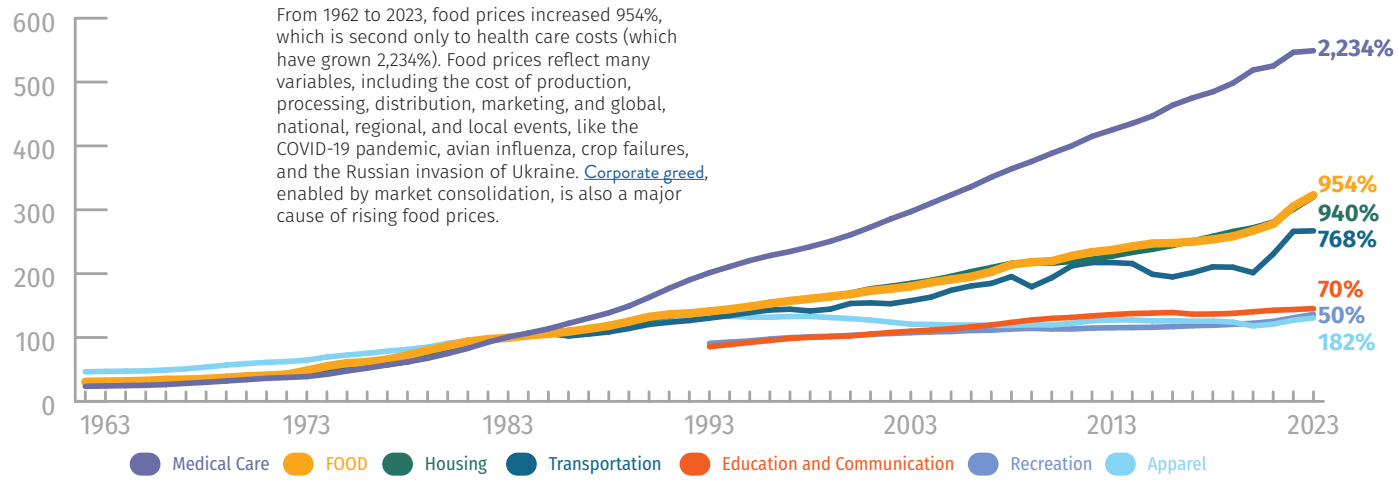


The Consumer Expenditure Survey provides one of our only clues about how Americans spend money on food, the *third* largest expenditure after housing and transportation. Average spending among Northeastern households, including Rhode Island, indicates that the largest category of food expenditures was for "other" food products ($1,709) - mainly ultraprocessed foods like chips.

Although every demographic group spends roughly the same percentage of expenditures on food, it is the case that White Americans have more money to spend, on average, than Black and Hispanic/Latino Americans.

Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Survey (Region of Residence).

INDEX OF MAJOR CONSUMER PRICE INDEX CATEGORIES, 1962-2023



Source: USDA Economic Research Service, Food Price Environment, and Federal Reserve Bank of St. Louis (FRED), Consumer Price Index.

Taken together, social and commercial determinants of health shape the eating behaviors and *foodways* of our communities. Foodways includes food acquisition (hunting, fishing, gathering, foraging, farming, gardening, and access to grocery and other food stores), as well as the ceremony of harvest, the medicine of food, health/wellness, and our connections to food systems and other lifeways. For example, deer are a food, but they also provides tools, clothing, adornment, blankets, water vessels, sewing tools, and more, but tribal communities are denied access to seasonal foraging and harvesting of traditional plants that have holistic, edible, spiritual and medicinal benefits.

According to the 50-State Food System Scorecard, Rhode Island ranked in the bottom half (27th) of the U.S.—and the lowest in New England—in diet and health outcomes based on the prevalence of household-level food insecurity; percentages of adults who consume fruit, or vegetables, less than once daily; age-adjusted percentage of adults with fair or poor self-reported health; percentage of adults who are overweight or obese; percentage of children 10-17 years old who are overweight or obese; age-adjusted percentages of adults with type 2 diabetes or diagnosed hypertension; and health care expenditures per capita.

Despite growing opportunities for local foods, social and commercial determinants of health perpetuate food injustice across the limited resource and urban communities of Central Falls, Pawtucket, Providence, and Woonsocket, where almost two thirds (65%) of Rhode Island's children living in poverty reside. These communities continue to be disproportionately impacted by limited access to affordable, nutritious food, coupled with excess fast food chains and convenience stores.

Food and nutrition insecurity is associated with diet-related disparities, characterized by a lack of fruits, vegetables, whole grains and plant-based proteins and excess of added sugars, saturated fats, and sodium (ultraprocessed foods). The connection between our dietary behaviors and chronic disease and mortality is profound: poor nutrition is responsible for up to 45% of all cardiometabolic disease deaths.

Rhode Island's food system is characterized by a strong emphasis on local agriculture, seafood, and community-supported initiatives. Rhode Island has a rich maritime heritage, and supports numerous small farms and urban agriculture projects, contributing to a diverse array of locally-grown produce. Farmers markets, community supported agriculture, and community/school gardens foster a culture of direct-to-consumer sales and promote access to fresh and sustainable food. However, until the foodways in communities like Central Falls and Pawtucket changes, efforts to improve food access and diet quality among youth and their families will continue to be challenged. As we learned during the pandemic, enhanced collaboration and communication amongst and between state-level and smaller "boots on the ground" local partners is critical to ensuring community voices are heard when it comes to food and nutrition programs and policies.

Challenges

- **Durable Challenges:** Systemic and historical factors including structural racism, land and water access, and socio-economic and environmental disparities continue to impact dietary behaviors and drive chronic disease rates among Black, Hispanic/Latino, and Indigenous Rhode Island communities.
- **Limited Healthy Food Options in Some Communities:** Options for fresh, local, culturally relevant and nourishing foods are either cost prohibitive or not available in Central Falls, Pawtucket, Providence, and Woonsocket, where the rates of poverty and food insecurity are

highest. Barriers to transportation further challenge these communities to meet their daily food needs.

- **Concentrated Poverty:** Almost two-thirds of Rhode Island children living in poverty reside in these core cities, with 19% more homeless children in the state's public schools in the 2022 academic year compared to the previous year.

- **Rising Prices:** Rising costs of food, housing, and living expenses prevent food dollars from being stretched to meet family dietary needs. Food prices alone increased by 25% from 2019 to 2023. SNAP benefits only last families around two to three weeks of the month. With families having to choose between paying for food or other living costs, the loss of COVID-19 food assistance waivers left families worse off in this financial climate.

- **Accessing Indigenous Foodways:** Indigenous people face specific challenges around traditional foodways in Rhode Island that include: obtaining fishing and hunting licenses, accessing salt ponds due to privatization of the water through shellfisheries and shellfish farming, and accessing federal and state lands for harvesting culturally relevant foods (e.g., berries and mushrooms).

Opportunities

- **Invest in Community-Based Food Production:** Current community-based food production efforts, including community gardens, school gardens and urban farming initiatives, can be scaled to boost local food production and availability in historically underserved communities.

- **Increase Fruit and Vegetable Retail Incentives:** The SNAP Eat Well, Be Well Pilot Incentive Program can inform how retail incentives for fruits and vegetables can be expanded to corner stores/bodegas and small retailers, near where people live.

- **Support Food Justice and Sovereignty Initiatives:** Existing food justice and food sovereignty initiatives (e.g., Narragansett Indian Tribe; Sankofa) can be amplified by supporting Rhode Island organizations working to address inequities in food access and advocate for systemic changes.

- **Culturally Relevant Food Literacy Education:** Culturally relevant food literacy education initiatives across age groups—starting at the early care and education (ECE) settings—can be expanded to empower individuals and families with cooking and food resource management skills.

Healthy eating behaviors and resilient foodways are preventative medicine

Recommendations

Address Challenging Food Environments: The food and retail environments of Pawtucket, Central Falls, Providence, and Woonsocket communities are in a state of emergency. Community-led efforts towards improving access to local and culturally relevant foods should encompass: developing food cooperatives to support food affordability; implementing zoning changes and laws to limit the density of fast food outlets and encourage the establishment of grocery stores; improving public transportation routes around grocery stores and farmers' markets, while also exploring opportunities to increase mobile markets in hard-to-reach communities.

Increase SNAP Benefits: SNAP benefits should be increased to address rising costs around food, living, and housing in RI. Nutrition incentive programs (EWBW) should be expanded to smaller retailers/bodegas where SNAP customers are more likely to shop in their communities.

Pass Healthy School Meals for All Legislation: Healthy School Meals for All legislation should be passed to ensure that all children attending public schools can access healthy and culturally relevant school meals in order to learn and thrive without stigma. This should be complemented by efforts to improve youth food literacy by expanding Farm & Sea to School and Farm to ECE efforts across all communities.

Prioritize Food Sovereignty: Food justice and food sovereignty initiatives that resonate with the culturally diverse communities across Rhode Island should be prioritized. Tribal foodways must be supported with removing applications for fishing and hunting licenses as a first step, followed by access to state lands for foraging.

PREVIOUS
Food System and Nutrition Education

This brief was prepared by:
Sarah Amin, University of Rhode Island
Dawn Spears, Narragansett Indian Tribe
Lorén Spears, Tomaquag Museum

UP NEXT
Food and Nutrition Security

Food & Nutrition Security

Food and nutrition insecurity are on the rise again

Many Rhode Islanders are grappling to meet their basic needs, including access to high quality, culturally relevant nutritious foods. Food insecurity, together with the lack of other social, health and economic needs, increases the risk of chronic disease, including hypertension, diabetes, and cancer, particularly among underserved groups. Not only does this impact the health and quality of life of all Rhode Islanders, but also contributes to higher healthcare costs and loss of economic productivity. Addressing these intertwined challenges demands urgent attention and comprehensive solutions to ensure the well-being of all Rhode Islanders.

Current Conditions

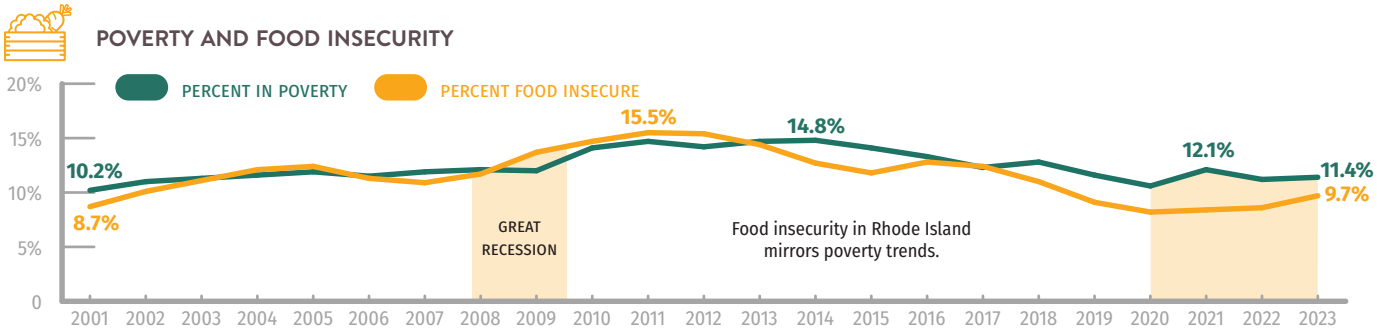
Food insecurity in Rhode Island is again on the rise, particularly among historically underserved communities, including Hispanic/Latino, Black, and Indigenous individuals, propelled by long-standing inequities entrenched in the state's history. The factors influencing disparities in food insecurity are complex and compounding. Some key factors include structural racism, land dispossession, poverty, and economic, educational, and healthcare disparities. While food security ensures that all people have availability and access to food, nutrition security expands the concept to consistent and equitable access to healthy, safe, culturally relevant, and affordable foods essential to optimal health and well-being.

The COVID-19 pandemic exacerbated nutrition insecurity and exposed systemic inequities in food availability. While pandemic benefits provided critical food and financial safety, the termination of these benefits, between 2022 and 2023—coupled with rising food costs and competing living expenses—has forced households and individuals to choose between housing and food costs in a given month. In response to these pandemic challenges, the development of the State of Rhode Island Food Disruption Plan aims to ensure food security during recovery from systems disruptions.

KEY INDICATORS

PEOPLE SERVED BY FOOD BANK, 2024	% IN POVERTY IN PROVIDENCE COUNTY	% OF SINGLE PARENT HISP. FAMILIES IN POV.
84,400	**13.0%**	**27.2%**
In 2019, RI Community Food Bank agencies served 52,000 people	*About 82,000 people live in poverty in Providence County, the highest % in RI*	*3,800 Hispanic/Latina female households with no spouse present live below poverty level*

In Rhode Island, a variety of individual-, community-, and state-level factors promote access to high-quality, nutritious foods. At the individual and household level, culturally relevant nutrition and cooking education empower those with limited food budgets to purchase and prepare healthy meals. At the community level, resources such as farmers markets (approximately 39 statewide), food pantries (143 member agencies), and community gardens (about 80, often requiring plot rentals) are widespread. At the state level, food assistance programs and fruit and vegetable voucher incentive programs (FVVI), including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Supplemental Nutrition Assistance Program (SNAP), and Bonus Bucks, support food security. Additionally, new policies like the Eat Well, Be Well Program and the CDC's State Physical Activity and Nutrition (SPAN) grant help strengthen nutrition security across the state.

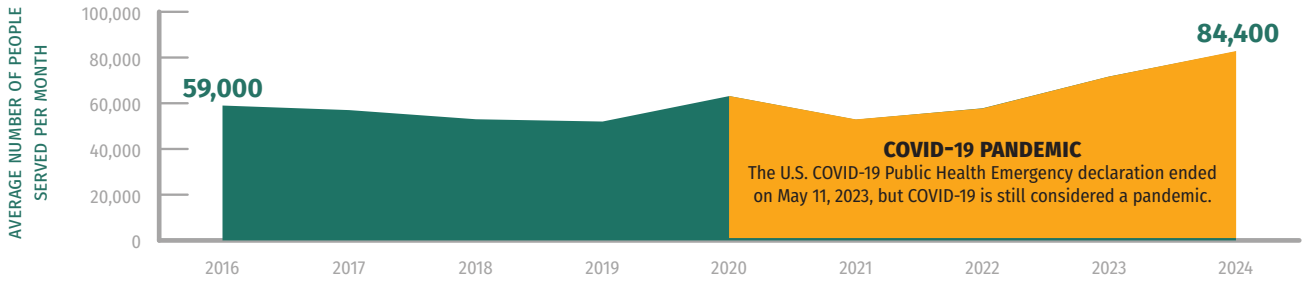


Sources: U.S. Census Bureau Small Area Income and Poverty Estimates (via FRED) and USDA Economic Research Service, Household Food Security in the United States.

Challenges

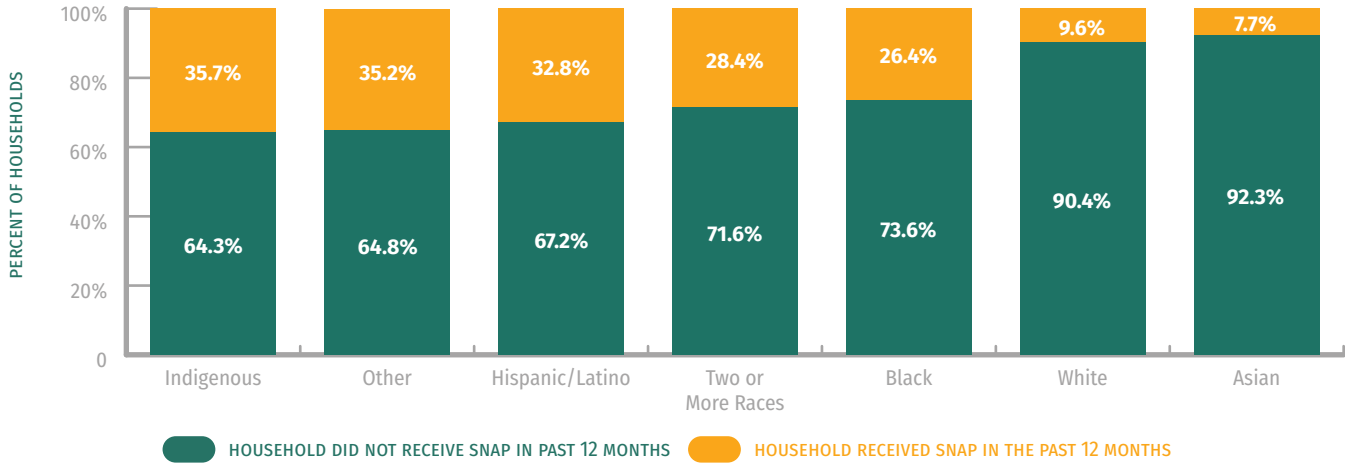
- **Durable Challenges:** Poverty, low wages, housing insecurity, and homelessness disproportionately impact Hispanic/Latino, Black, Indigenous, and immigrant families, and lead to higher rates of food insecurity.
- **Rising Food Prices Also Impact Charitable Food System:** The high cost of food places a strain on food pantries to accommodate community needs and limits purchases and participation in incentive programs at farmers markets.
- **Benefits Cliffs:** Across federal food assistance programs (e.g., SNAP, free and reduced-price school meals, and WIC), narrow income eligibility requirements create a benefit cliff—an unexpected decrease in benefits when an increase in income level excludes people from program eligibility—that excludes families in need, forcing them to choose between groceries, medical payments and essential utilities each month.
- **Stigma:** People face stigma and judgment when accessing food assistance programs, which deters participation.
- **Prevalence of Ultra-Processed Food:** The prevalence of ultraprocessed foods (e.g., high sugar and sodium content) offered in some food pantries and federal commodity food programs, including the Commodity Supplemental Food Program (CSFP) reinforces nutrition insecurity.
- **Promote Food Sovereignty:** Expand grassroots efforts to promote Indigenous and culturally relevant knowledge and foodways for food sovereignty in underserved communities.

AVERAGE NUMBER OF RHODE ISLANDERS SERVED BY FOOD BANK / PANTRIES PER MONTH



Source: Rhode Island Community Food Bank, Status Report on Hunger in Rhode Island, multiple years.

RECEIPT OF FOOD STAMPS/SNAP BY RACE/ETHNICITY OF HOUSEHOLDER, 2019-2023



Source: U.S. Census Bureau, American Community Survey, Receipt of Food Stamps/SNAP in Past 12 Months by Race of Householder, 2023 5-Year estimates.

Opportunities

- **Make Applying for and Using Programs Easier:** Leverage existing resources to streamline the application process for families eligible for SNAP, WIC, and NSLP/SBP, including via healthcare portals, the alignment of Medicaid and SNAP recertification and Community Health Worker training. Strengthen collaboration between advocacy and community-based groups to more effectively advocate for state-level policies and practices.
- **Maximize Use of Federal Benefits:** Expand existing outreach efforts to increase participation in federal food and nutrition programs in Rhode Island.
- **Promote Dignity and Inclusion at Rhode Island Food Pantries:** Expand the shopper-choice food pantry model throughout the state (e.g., Jonnycake Center for Hope, RI Community Food Bank pantries).
- **Expand Food Delivery, Recovery and Gleaning:** Enhance food system resilience by expanding existing food delivery, recovery and gleaning initiatives, including Meals on Wheels, CSAs, small storefronts, local farms, Farm Fresh RI, URI Food Recovery, the Elisha Project, and Hope's Harvest.

Food and nutrition security for *all* is achievable

Recommendations

Free School Meals: Support access to healthy schools meals for students. For example, Rhode Island House Bill 7400 and Senate Bill 2320, "An Act Relating to Education - Federal Aid," would mandate and fund "Healthy School Meals for All" for students enrolled in school food authorities participating in national school meal programs.

Fix Benefits Cliff Challenge: Income-based programs should determine eligibility using "net income," taking household utility expenses into account. This approach ensures that multi-generational or multi-family households sharing the same address are not penalized based on combined income. As a result, only the homeowner(s) or the lessee in rental situations should be required to provide income information.

Make it Easier to Maximize Available Benefits: Align SNAP and Medicaid recertification requirements to reduce barriers to sustained enrollment.

Explore Novel Options: Expand the Restaurant Meals Program to additional retailers and SNAP participants (it is currently limited to older adults, disabled, and homeless) to ensure prepared food options are available and accessible to all SNAP shoppers. Expand SNAP access to lawful permanent residents and create state-level SNAP participation opportunities for non-citizens who are ineligible.

Expand Shopper-Choice Model: Support food pantries to transition to a client-choice model, which provides autonomy, reduces wasted food and minimizes stigma associated with utilizing a food pantry.

Promote Food Sovereignty and Support Indigenous Food Systems: Policies should recognize Indigenous rights to cultivate, harvest, and distribute traditional foods, enhancing food security, cultural preservation, and community resilience.

PREVIOUS
Eating Behaviors and Foodways

This brief was prepared by:
Sarah Amin, University of Rhode Island
Sarah Blau, Rhode Island Department of Health
Chrystal Mars Baker, Narragansett Indian Tribal Citizen
Alison Tovar, Brown University School of Public Health

UP NEXT
Wasted Food Source Reduction and Recovery

Surplus Food Source Reduction & Recovery

It is inefficient, costly, and fundamentally immoral for good food to go to waste while anyone is hungry

When edible food is wasted—whether unharvested in farmers' fields, thrown away at a restaurant or university food court, or left to rot in our refrigerators—the result is that we are not making the best possible use of the land, water, fuel, and labor inputs and costs that went into the production and distribution of that food. Prompt and strategic measures to prioritize food sustainability practices across Rhode Island have the potential to improve the economic stability of Rhode Island households and businesses, increase food and nutrition security, and slow down climate change.

Current Conditions

The unnecessary waste of food is a human-made problem that can be solved through thoughtful systems: In fact, the Narragansett Indian Tribe historically practiced regenerative agriculture, returning nutrients to the soil through controlled burns and circular gardens. Rhode Island has the opportunity to honor their legacy, while leading the nation in this effort by implementing sensible food policies, fostering collaboration among stakeholders, and tracking and measuring progress effectively toward Food Strategy 2030 Goals.

A 2015 Rhode Island Solid Waste Characterization Study estimated that vegetative and protein wasted food equaled 100,030 tons, or 18.9% of total landfilled municipal solid waste (MSW). This is the *highest percentage of any material in RI's waste stream*. The ReFED Food Waste Monitor provides more recent estimates of how much food goes uneaten by sector, food types, and destination. ReFED defines "surplus food" as a combination of uneaten food that is wasted, as well as food that is donated, fed to animals, repurposed to create other products, composted, or anaerobically digested. They estimated that Rhode Islanders generated 138,000 tons of surplus food in 2023, which equals 223 million unsold or uneaten meals (at about 1.2 pounds per meal).

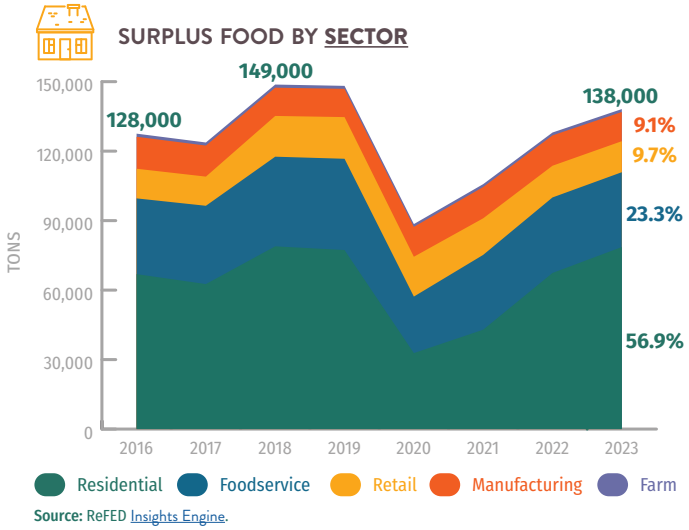
ReFED estimates surplus food tons by sector, food types destination, and causes. The residential sector generated 56.9% (78,600 tons) of surplus food, while foodservice (i.e., restaurants) accounted for 23.3% (32,300 tons). Among food types, produce and prepared foods were estimated to account for 57.9% of surplus food. The majority of surplus food—55.6% (76,688 tons)—was landfilled, sent down the drain, dumped, or unharvested, while 41.6% (57,320 tons) was recycled via composting, anaerobic digestion, animal feed, land application, and industrial uses. A little more than 7% (4,210 tons) was estimated to be donated by the food-service, retail, manufacturing, and farm sectors.

***Note:** The Rhode Island Community Food Bank reports distributing 18.3 million pounds in 2023, more than double the amount estimated by ReFED. This discrepancy highlights the substantial data challenge stakeholders face in analyzing and addressing wasted food in Rhode Island.

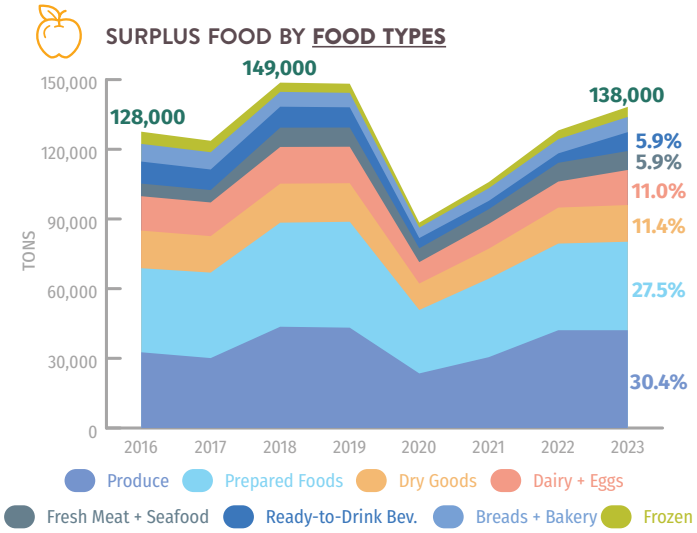
KEY INDICATORS

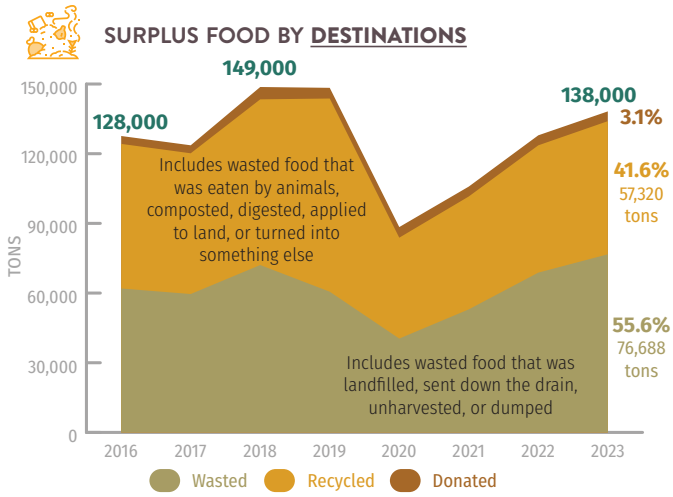
TONS OF WASTED FOOD	# OF MEALS UNEATEN/UNSOLD	PROJECTED CLOSING DATE OF LANDFILL
76,688	**223,000,000**	**2046**
ReFED estimates 76,688 tons of wasted food sent to landfills, down drains, dumped, and unharvested	ReFED estimate of what 138,000 tons of surplus food is equal to	Rhode Island's only landfill in Johnston is now projected to close by 2046

As described in *Issue Brief 16: Food and Nutrition Security*, food and nutrition insecurity are on the rise again. When wholesome foods that would otherwise have gone to waste are recovered, redistributed, and repurposed, it has a positive impact on health equity for Rhode Islanders. Additionally, if global wasted food were its own country, it would be the



Source: ReFED Insights Engine.





third largest emitter of greenhouse gases after China and the U.S. Source reduction and recovery strategies present a *win-win-win* opportunity to improve food and nutrition security and reduce methane emissions, while saving households and businesses money.

Over the last several years, local food rescue organizations like Feed RI, FoodRecovery.org, Rescuing Leftover Cuisine, and Hope's Harvest have played vital roles in streamlining food recovery from businesses for donation to human service programs that provide essential food assistance, while the Food Recovery for Rhode Island program at URI teaches about how to reduce wasted food at the community and household levels. These efforts complement one another and have shown great promise in reducing wasted food while increasing food and nutrition security in underinvested communities.

Simultaneously—with support from new federal funding opportunities such as the USDA Local Food Purchase Assistance Cooperative Agreement (LFPA) program—RI farmers have been able to sell agricultural products to hunger relief organizations instead, a previously untapped wholesale market that will infuse at least $1 million into our economy between 2023-2025.

Challenges

- **Compliance with Food Waste Ban:** Many businesses remain unaware of, or noncompliant with, the 2017 Food Waste Ban (R.I. Gen. Laws § 23-18.9-17). Additionally, the law does not require a state agency to promulgate or enforce rules and regulations, making it effectively voluntary. Recent research suggests that, of the nine state-led efforts to ban wasted food, all have failed to reduce wasted food except Massachusetts. The researchers suggest this is the case because Massachusetts has reduced organic waste disposal due to the simplicity of its regulations, sufficient infrastructure (i.e., composting sites), a low cost of compliance, and/or strong enforcement.
- **Potential Funding Shortfalls:** Funding for programs that support purchasing local farm surplus, such as the successful USDA-funded LFPA, has been renewed through dedicated funding from the Commodity Credit Corporation. However, new restrictions on this funding (i.e., food purchasing only, no administrative spending) will strain organizations without support from other sources.
- **Insufficient Funding for Business Technical Assistance and Compliance:** Businesses that want to participate in food recovery may have to direct staff time and resources towards donation coordination, even with the support of community-based organizations, which have the opportunity to be offset through supportive policies, or through tax benefits, as described in Supportive Policies.
- **Residential Wasted Food:** At the household level, lack of meal planning, education around food safety and food expiration dates, and food storage best practices contributes to wasted food. Programs like "Food: Too Good to Waste" that address these issues often lack awareness or utilization.
- **Confusion About Food Donation Liability:** Uncertainty and lack of awareness regarding food donation and acceptance guidelines such as through federal and state food donation laws across all business sectors and within hunger relief agencies stunts progress towards efficient uses of available surplus.

Opportunities

- **Surplus Food Logistics:** Surplus food can be reused and recycled across sectors if food generators work with existing platforms to align surplus types, packaging and distribution logistics; while recipient organizations can partner with these organizations to compensate for challenges they experience such as lack of staff, storage (including refrigerators and freezers), while utilizing their existing technologies for ease and donation acceptance.

- **More Timely and Accurate Data:** Baseline statewide data about food surplus and recovery/diversion is limited, making it difficult to set realistic targets.
- **Negative Perceptions of Surplus Food:** Negative perceptions around food recovery causes disengagement. For example, it is suggested to use the term "wasted food" over "food waste" when applicable, "food scraps" for recyclable food, and "surplus food" when being donated. The term "food waste" for donated food suggests that of poor quality and not worth redirecting to people, and can even be an affront to the dignity of those receiving the food.
- **Supportive Policies:** New policies around wasted food include the 2019 Rhode Island Food Donation Act and the 2021 federal Food Donation Improvement Act. Rhode Island's 2017 Food Waste Ban offers a strong starting point, with legislation introduced in 2024 to increase its adoption and effectiveness. The proposed Rhode Island Tax Credit for Food Donation Act of 2025 would offset costs associated with food recovery and redirect surplus to organizations.
- **Scaling Up Existing Programs/Models:** Previous state programs like RIDOH's Rhode to End Hunger Initiative could be refreshed, while Green Certification programs through DEM have much potential. URI's Food Recovery for Rhode Island course, the Rhode Island School Recycling Project, Food Recovery.org, Hope's Harvest, Rescuing Leftover Cuisine, the Center for Ecotechnology (CET), Feed RI, and Harvest Cycle Compost are just a few examples of successful local models that could scale up their current efforts.
- **Embrace Emerging Opportunities:** Increased national support for addressing surplus food has brought opportunities to Rhode Island, including the EPA's New England Healthy Communities and Solid Waste Infrastructure For Recycling grants, and ReFED's Catalytic Grant Fund, while Newport-based Ocean Hour Farm supports community composting.

Recommendations

Expand Resources for Wasted Food Prevention, Recovery, and Recycling: Advocates and lawmakers should work to maintain and expand federal and state funding sources available to bolster existing RI food recovery and source reduction programs that offer technical support (e.g., the Center for EcoTechnology), logistics management/surplus rescue and redistribution (Farm Fresh RI, Food Recovery for Rhode Island, Rescuing Leftover Cuisine, etc.), household composting (Harvest Cycle, Bootstrap Compost), food preservation (Food Recovery for RI), and surplus food purchasing from local farmers (Rhody Feeding Rhody, Hope's Harvest, Commercial Fisheries Center of Rhode Island).

Expand Communication and Coordination: Consistent relationship building between existing food recovery and source reduction programs via participation in the RI Food Policy Council's Surplus Food Donation Work Group would facilitate growth and collaboration through the coordination of resources, advocacy, innovation, and the measuring of collective impacts.

Strengthen RI Wasted Food Policies: RI lawmakers should strengthen the statewide Food Waste Ban by passing H7856 for waste disposal charges, and ensure sufficient funding for agencies to provide staffing for enforcement and pass legislation that incentivizes RI businesses to donate surplus through food donation tax credits to offset associated costs.

Revitalize Existing Programs: State agencies should update and/or revitalize existing programs such as RI Department of Environmental Management's Green Certification Programs (GCP) and the RI Department of Health's Rhode to End Hunger Initiative (REHI) and ensure staffing is provided for ongoing implementation, management, and oversight of these programs.

Develop Public-Private Partnership: State agencies should spearhead an initiative to gather baseline data about RI businesses existing food recovery and source reduction efforts; gain a better understanding of current industry awareness around food donation safety guidelines and policies; discover opportunities within the private sector to reach recovery and source reduction goals; and develop communications strategies in partnership with the RI Food Dealers Association, RI Hospitality Association, and Chambers of Commerce to expand awareness and adoption of progress goals within RI's business community.

Consistent Language: Consistent use of accessible and dignified terminology by all stakeholders (i.e., "wasted" and "surplus" food instead of "food waste") will support all goals around surplus food source reduction and recovery.

PREVIOUS
Food and Nutrition Security

This brief was prepared by:
Eva Agudelo, Hope's Harvest
Dana Siles, Rhode Island Food Policy Council
Dinalyn Spears, Narragansett Indian Tribe

UP NEXT
Composting & Downstream Waste Diversion

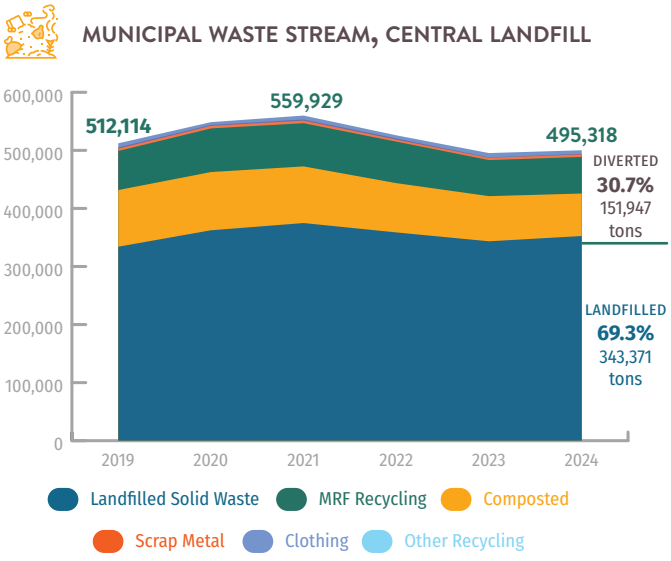
Composting & Downstream Waste Diversion

Food in landfills isn't just a waste of space—it's squandering a valuable resource

Rhode Island residents annually dispose of over 100,000 tons of food into landfills, accounting for one-third of our total waste. Rhode Island's sole landfill is projected to reach capacity by 2043. Unaddressed, the cost of waste disposal for municipalities and businesses will be economically devastating in the decades ahead. In addition to taking up space, organic waste in landfills is the third largest emitter of methane, the major cause of greenhouse gas emissions. Food in landfills isn't just a waste of space; it's squandering a valuable resource. Organic waste (e.g., produce, meat, dairy, shellfish, fish scraps, seaweed, brewery waste) can be mixed with carbon based materials such as leaves and wood chips to create nutrient-rich compost. Compost revitalizes soil health, making farming and the surrounding ecosystems more resilient. Compost can eliminate the reliance on chemical fertilizers, contributing to sustainable agricultural practices. In addition to composting, food scraps can be turned into biogas, a renewable source of energy.

Current Conditions

Rhode Islanders generate over 620,000 tons of municipal solid waste (MSW) per year, with the majority of that waste landfilled at the Rhode Island Resource Recovery Central Landfill (RIRRC), the only disposal site in the state. Over 120,000 tons of that waste is exported to Massachusetts landfills, which are slated to close in 2030. In 2023, RIRRC estimated that 69.3% (343,371 tons) of total MSW was landfilled, while 12.5% (62,092 tons) was composted. However, this composted material consists of leaf and yard waste, Christmas trees, brush, and stumps, and *not wasted food*.



Source: Rhode Island Resource Recovery Corporation, 2023 Municipal Summary.

KEY INDICATORS

JOBS PER 10,000 TONS OF MATERIAL HANDLED

6.2

ILSR census of community composters *suggests 6.2 jobs created for composting compared to 2 jobs for landfilling*

COST ESTIMATES FOR HOUSEHOLD WASTE COLLECTION SCENARIOS

>$38 million

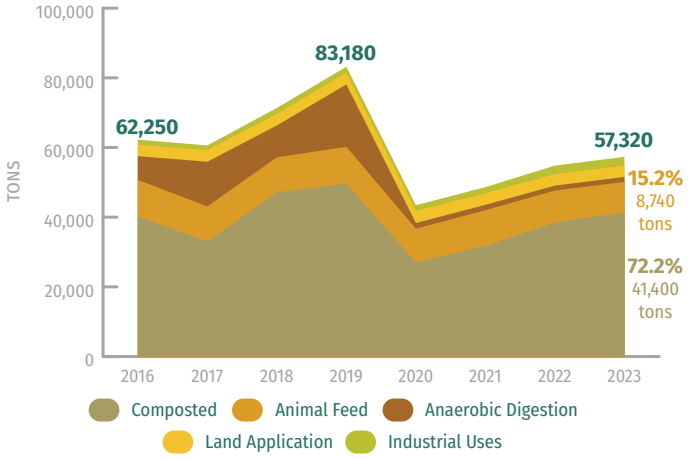
DSM Environmental Services *estimates the costs for statewide household food waste collection would be relatively high*

ReFED provides one of our only sources of data on wasted food that is recycled via composting. They estimate about 72.2% (41,400 tons) of the surplus food generated in Rhode Island *that was recycled* was composted in 2023.* Surplus food that was used for animal feed (15.2%) made up the next highest percentage of recycled food, followed by land applications, industrial uses, and anaerobic digestion. The state's one anaerobic digester, the Rhode Island Bioenergy Facility in Johnston, has the capacity to process over 100,00 tons of organic waste per year, while generating electricity and heat.

Rhode Island currently has one large farm composter that accepts food scraps (Earth Care Farm in Charlestown), 5 compost facilities that accept yard materials only, and roughly six small-scale community-based compost sites. Composters and digesters in neighboring Connecticut and Massachusetts are used as well.

***Note:** Composters in Rhode Island believe that the ReFED compost estimate is too high. This discrepancy highlights the substantial data challenge stakeholders face in analyzing and addressing wasted food in Rhode Island.

REFED ESTIMATE OF SURPLUS FOOD RECYCLED



Source: ReFED Insights Engine.

Rhode Island's 2016 food waste ban applies to organizations—including distributors, grocery stores, processors and manufacturers, restaurants, and colleges—that generate over 2 tons of waste per week. These organizations are required to sort their organics and send them to composting facilities, the anaerobic digester, or use some other recycling method, but compliance has been problematic.

To expand composting programs to communities, the Rhode Island Food Policy Council's Municipal Composting Readiness Report recommends tailoring composting programs to municipal needs and interests, sharing successful models, passing state legislation to fund municipal composting programs, and establishing a municipal technical assistance support network.

Getting compost education incorporated into school curriculum, from the earliest grades through college, is another key to building Rhode Island's compost industry. There are some current resources for schools (Share Table and Food Donation Guidance and the Food Waste Reduction Toolkit for Rhode Island Schools) but without a consistent program it has been sparsely used. The Center for EcoTechnology (CET), Rhode Island School Recycling Project, and Bootstrap Compost have aided various schools in RI in establishing composting programs.

Waste Shell Reuse

An overlooked aspect of food waste is that nearly 100% of waste seafood shell consumed is disposed of in the trash. Waste shell literally takes up tons of space in the landfill, despite the fact that shells do not biodegrade unless pulverized. Unfortunately, waste shell data is not captured in local waste characterization studies or by receipts at RIRRC unless transporters communicate that loads are dedicated to waste shell and not contaminated or mixed with other waste.

Disposing of waste shells is needlessly costly for communities and generators of the waste due to its heavy weight and volume. While some waste shells are composted, there is an opportunity to utilize these materials in a better way. For example, waste oyster and clam shells act as substrate for growing more shellfish, usually oysters, and can filter water and sequester carbon as well as metal ions (heavy metals), thereby improving water quality and mitigating the effects of climate change. Whole shells can be bagged to buffer storm surge along coastlines or to create artificial reefs for fish habitat. Perhaps because of a lack of data and awareness of the value of waste shell, there is no state plan that acknowledges the problems of disposing of it and opportunities for reusing it.

Challenges

- **Lack of Education:** There is a lack of public education on what can be composted, collection options, and how to compost at home/business.
- **Challenges of Starting a Composting Facility:** There are three compost facilities that tried to start up in the last 10 years that have been closed due to neighbor complaints. Compost permitting requirements to start a compost operation differ between towns, state, municipal, agricultural, and commercial operations.
- **Need for Carbon-based Materials:** Many Rhode Island municipalities and the Central Landfill take in carbon based materials such as leaves and wood chips, but not food waste. This bifurcation of the inputs for composting limits the development of food composting since a lot of carbon-based materials are needed to compost nitrogen-rich food scraps.

The U.S. Environmental Protection Agency (EPA) estimates that national food retail, food service, and residential sectors generated 66.2 million tons of wasted food in 2019, with an additional 40.0 million tons generated by the food manufacturing and processing sector. About 60% (39.6 million tons) of the waste generated by the food retail, food service, and residential sectors was sent to landfills, while just 917,630 tons from food manufacturing and processing went to landfills. Together, 40.5 million tons from wasted food reaches landfills, *more than any other material* in the municipal solid waste (MSW) stream in the country.

Opportunities

- **Many Benefits of Composting:** By capturing organic waste and returning it to our soils, we can stabilize erosion, support vegetative growth and a healthy soil microbiome, and increase carbon sequestration. By adding compost to soils, we also reduce the need for pesticides and fertilizers, which are harmful for human health, water quality, and pollinators and other beneficial insects.
- **Adopt Lessons From the Most Successful Food Waste Ban:** To date, the Massachusetts food waste ban, alone, has reduced landfill waste compared to other states. Research indicates Massachusetts has reduced organic waste disposal due to the simplicity of its regulations, sufficient infrastructure (i.e., composting sites), a low cost of compliance, and/or strong enforcement.
- **Job Opportunities:** The Institute for Self-Reliance (ILSR) conducted a study in 2013 and found 1,400 full-time jobs were created for every one million tons of organic material composted. In contrast, ILSR found 120–220 jobs were created per one million tons of material processed. These jobs are also significantly more inclusive of diverse employees, equitable hiring, and folks who face barriers to employment.
- **Develop a Plan for Addressing Waste Shells:** For example, R&D could encompass shell crushing technology and alternative treatment technology—all driven by the highest value end uses and market potential—as well as regulatory requirements for waste shell.

> "There are more microorganisms in one handful of compost than there are humans on the entire planet. **Living soil is the foundation of our well-being.** Nourishing soil, enriched with compost, produces healthy plants, which leads to healthy animals, people, and a sustainable planet."
>
> **Mike Merner, Earth Care Farm**

Recommendations

Enforce Existing Food Waste Ban and Expand to Residential Sector: Rhode Island's existing food waste ban refers to large generators. Expand the food waste ban to the residential sector, as Massachusetts and California have done.

Institute Funding Mechanisms for Composting: Support RI House bill 7856, which provides funding mechanisms for developing, implementing, or expanding equipment, infrastructure, and education for surplus food rescue, compost production, and shell recovery and waste shell diversion. Enact recommendations from Municipal Composting Readiness Report.

Integrate Compost Education into Farm to School Curriculum: Integrate compost education into public school farm to school curriculum.

Use State Purchasing Power to Incentize Compost Production: Incentivize compost procurement and application for State projects. State policy can be a critical driver to scale the production, purchase and application of finished compost for a variety of use cases.

Develop a Shell Waste Recycling Plan: Convene stakeholders to develop a statewide plan for shell waste processing.

PREVIOUS
Wasted Food Source Reduction and Recovery

This brief was prepared by:
Jayne Merner, Earth Care Farm
Rubén Parrilla, Northeast Organic Farming Association
Cassius Spears, Jr., USDA

UP NEXT
Direct to Consumer Sales

MARKET CHANNELS:

Direct to Consumer Sales

Direct sales help to build and sustain farms given their flexibility, relatively low startup costs, and opportunity to build relationships

Direct to consumer sales channels (e.g., farmers markets, farmstands, Community Supported Agriculture/Fishery shares, online/home delivery) are especially important ways to build and sustain farm viability given their flexibility, relatively low startup costs, and opportunity to build meaningful relationships with customers. For many local farmers and producers, direct to consumer sales may be the only, or main, option to continue operating in RI due to availability and cost of land, which can limit scales of production. With our high proportion of small and beginning farmers—and their limitations in accessing wholesale markets—building strong direct to consumer market opportunities is vital to ensuring farm viability and preserving greenspace in Rhode Island.

Current Conditions

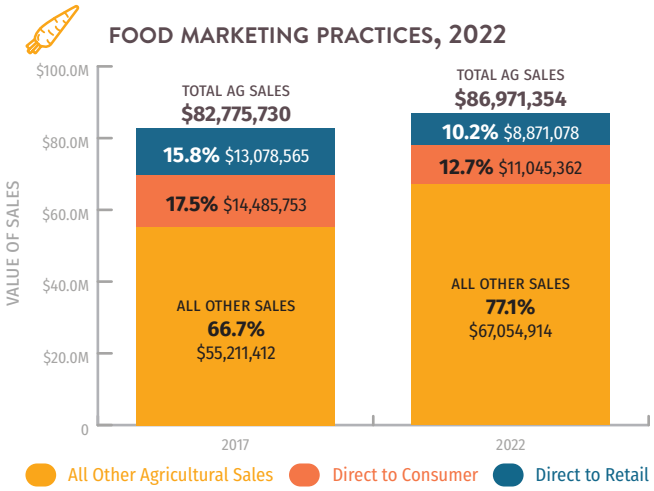
Simply put, key ways to support farmers in Rhode Island are to help them cut costs and help them make more money. Direct sales typically remove the "middleman" in transactions, have low startup costs, are flexible, and are generally understood to be the easiest method for farmers, including new and beginning farmers, to establish and sustain their businesses. For most people, the easiest way to access local food is via direct to consumer outlets, making them important venues to build connections between farmers and eaters. Rhode Island is home to a mix of urban, suburban, and rural farmers, and gardeners, many of whom generate sales through direct to consumer sales, given their lack of access land and capital to meet wholesale or institutional demands.

The USDA Census of Agriculture estimates two types of direct sales: 1) from farm to consumer (e.g., farmers markets), and 2) from farm to retail markets, institutions, and food hubs. In 2022, Rhode Island farmers reported $11.0 million in direct sales to consumers and about $8.9 million in direct sales to retailers. **This is equal to $19.9 million, or 22.9%, of total agricultural sales, the *third* highest percentage in the country.** A variety of possible reasons have been offered for why direct sales tend to be concentrated in the Northeast and West Coast: large metropolitan areas mean a large customer base, consumer preferences for local food, developed networks of farmers markets, and comparatively more fruit and vegetable production.

The 2022 Census of Agriculture estimated that 26.3% (277 farms) of farms engaged in direct to consumer sales, while 11.9% (125 farms) farms engaged in direct to retail sales. **However, just 12.6% (35 farms) of farms engaged in direct to consumer sales accounted for 88.4% ($9,764,100) of total direct to consumer sales, while 20.8% (26 farms) of farms engaged in direct to retail sales accounted for 91.9% ($8,152,521) of total direct to retail sales.** This suggests that the possible benefits of direct sales are not being widely experienced by most farmers and that sales data are likely underreported.

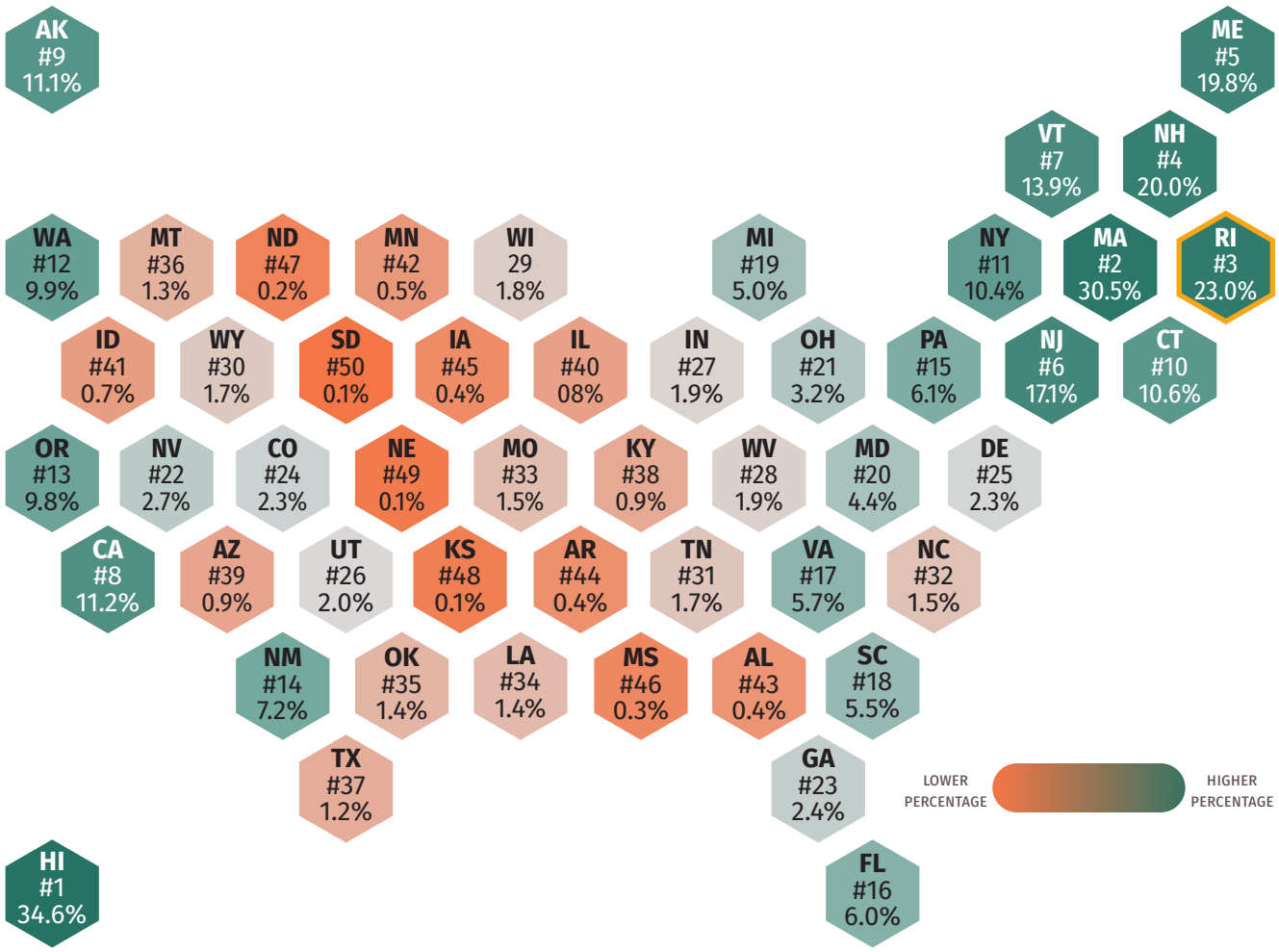
KEY INDICATORS

DIRECT SALES AS % OF TOTAL AG SALES	DIRECT TO RETAIL AS % OF TOTAL AG SALES	# OF SUMMER + WINTER MARKETS
12.7%	**10.2%**	**41**
Rhode Island has the 2nd highest % of direct sales as a % of total ag sales in the U.S.	*Rhode Island has the 5th highest % of direct retail sales as a % of total ag sales in the U.S.*	*RI has at least 41 summer and winter farmers markets*



Source: USDA Census of Agriculture. Adjusted for inflation to 2024 dollars. Note: this figure *uses* the USDA's estimates for aquaculture sales in Rhode Island.

DIRECT SALES AS PERCENT OF TOTAL SALES, 2022



Source: USDA Census of Agriculture. Adjusted for inflation to 2024 dollars.

Rhode Island state agencies and nonprofit organizations administer federal food assistance funds to support healthy local food access for all Rhode Islanders through a variety of programs, the WIC Farmers Market Nutrition Program (WIC FMNP), Senior Farmers Market Nutrition Program (SFMNP), Supplemental Nutrition Assistance Program, and Bonus Bucks. In 2023, over $685,000 was applied as a nutrition benefit for shoppers while at the same time providing an economic benefit for local food producers. This funding is restricted to be used via direct to consumer sales at farmers markets or farmstands only.

The COVID-19 pandemic upended supply chains across the country and made significant impacts to direct to consumer sales channels in Rhode Island. National trends in customers being concerned about the safety in their food supply coupled with interest in supporting their local community resulted in many new customers seeking out local opportunities to purchase farm and seafood products in 2020. In turn, many farm businesses established online sales profiles and systems which led to an increase in pre-purchasing and guaranteed sales in new ways.



Challenges

- **Lack of Data:** There is no formalized system, authority, or incentive for farmers to report their direct to consumer sales, making it challenging for state and local partners to track market channel trends.
- **Balancing Many Responsibilities:** Establishing an online presence, setting up payment processing systems, and marketing farm businesses takes time out of the day when farmers could be in the field, but these systems are vital to securing customers.
- **Program Restrictions:** While many food assistance programs are aimed at being spent at direct to consumer outlets, they are also restricted to only be used on fresh fruits and vegetables and cannot support any other nutritious and locally harvested/produced meat or docked food items such as fish or shellfish.
- **Communicating the Value Proposition of Local Foods:** Rising food costs have continued to impact the perception that local food is more expensive, while many programs are now available that allow for free distribution of produce to low income consumers which makes communicating the value proposition to all customers a challenge.

Opportunities

- **Existing Support Network:** State agencies and community partners that support food producers are well networked and many collect and share information about direct to consumer outlets. The state of Rhode Island receives an annual block grant from the USDA to support the RI Grown marketing campaign. Rhode Island has an informal farmers market managers network, managed by Farm Fresh Rhode Island, that is in regular communication with market vendors as well as farmers market operators who facilitate the Bonus Bucks SNAP Match and state FMNP programs.
- **Producers Have More Ways to Reach Consumers:** The COVID-19 pandemic pushed forward technology enhancements to make setting up online sales platforms and websites easier than ever, with many options and features (e.g., Local Food Marketplace, Open Food Network).
- **Improved Administration of Services:** Rhode Island is one of only four states in the country that has invested in an integrated SNAP EBT Nutrition Incentive technology to make it easier for retailers to facilitate SNAP Match incentives directly.

Direct sales are key to cultivating consumer connections to the people and places that provide their food

Recommendations

Improve Direct Sales Data Collection: Establish the Department of Environmental Management (DEM) as the central point of contact to update all direct to consumer sales outlet information annually and communicate changes to all other state agencies and community partners as needed throughout the year.

Increase Benefit Issuance Levels: Secure additional funding to increase benefit issuance levels for WIC Farmers Market Nutrition Programs, Senior Farmers Market Nutrition Programs, and the Supplemental Nutrition Assistance Program/Bonus Bucks shoppers and expand benefit categories to allow all locally harvested and docked products to be incentivized.

Expand Marketing Capacity: Expand funding to support the DEM in establishing a marketing team by hiring 2 FTE and providing dedicated funds to expand the existing RI Grown marketing campaign to deepen its impact and potential for partners and farms to access materials. Enhance digital and online market impact of the RI Grown marketing campaign through social media and other modern channels and provide 1:1 technical support to farms on marketing and social media.

Expand Technical Assistance: Establish a staff position to support farm businesses in establishing an online presence as well as payment processing systems to ensure they can accept all payment types, along with funding to support this position and translation or interpretation needs to reach all farmers.

PREVIOUS
Composting & Downstream Waste Diversion

This brief was prepared by:
Thea Upham, Farm Fresh Rhode Island

UP NEXT
Institutions

MARKET CHANNELS:

Institutions

Nearly 30% of Rhode Islanders spend time at an institution every day... a compelling opportunity for serving local food

Institutions—K-12 schools, colleges/universities, hospitals, prisons—have significant purchasing power and a reliable audience (e.g., students, patients, employees). Many institutions are tax-exempt nonprofits with missions that address equity, improve health outcomes (i.e., promote access to healthy, fresh, culturally connected food), and support local producers. Other institutions have government purview, with dedicated funding streams and regulatory authority. Concentrating efforts on institutions allows these unique markets to reinforce efforts for a just and resilient food system that promotes improvements in eating behaviors.

Current Conditions

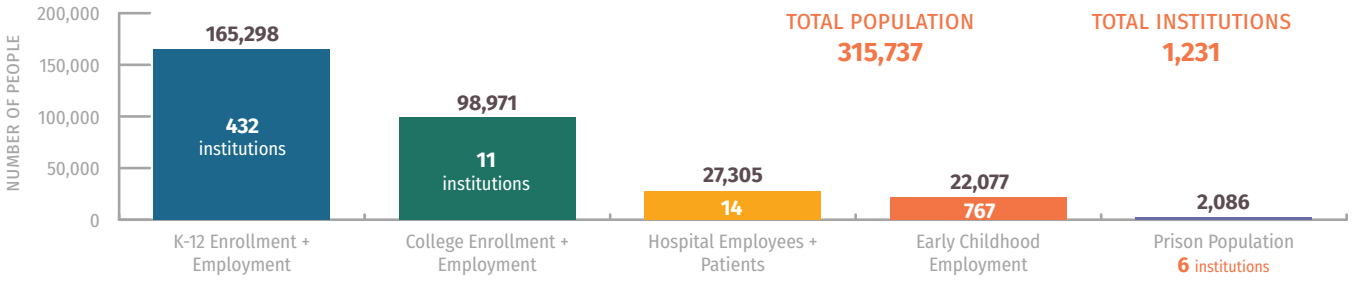
The closure of schools and other institutions due to the COVID-19 pandemic helped to spotlight our dependence on *food away from home* for so many of our meals. There are over 1,200 institutions in Rhode Island, representing childcare, schools, colleges, hospitals, senior living facilities, prisons, government offices, corporations, and cultural and recreational destinations. It is conservatively estimated that nearly 30% (≈316,000 people) of Rhode Island's population interacts with one of these institutions every day.

The scale and diversity of institution types allows producers who access these markets to sell larger volumes than via direct sales and other market channels. Institutions can also collaborate to buy local produce at prices closer to traditional market rates. K-12 schools help shape the habits of our youngest eaters, while offering stability around volume and types of products. Rhode Island's Farm & Sea to School movement is strong and growing, as evidenced by participation in the Rhode Island Farm & Sea to School Network, increased purchasing by school food authorities, and policy efforts to incorporate local into "Healthy School Meals for All" campaigns. Postsecondary institutions tend to have greater flexibility in purchasing, and often more dollars spent per meal, as well as significant student interest in food sourcing. Health care settings represent unique opportunities to connect food consumption to health and well-being. "Farm to Corrections" provides an opportunity for improving the well-being of incarcerated people by supporting local

KEY INDICATORS

# WHO SPEND TIME IN INSTITUTIONS DAILY	$ SPENT ON LOCAL FOOD BY RI INST.	LOCAL FOOD SOLD TO NE INSTITUTIONS
315,737	**>$9 million**	**$59 million**
About 30% of total state population potentially eats at an institution every day	*FINE estimates more than $9 million spent on local food by RI institutions*	*FINE survey of 56 distributors indicates a significant regional market for local producers*

NUMBER OF PEOPLE AND INSTITUTIONS IN RHODE ISLAND



Source: Farm to Institution New England (FINE). FINE estimated the number of people enrolled at schools, as patients, and incarcerated in prisons, as well as the number of people employed at statewide institutions. These estimates do not include elder care, government offices, corporations, and cultural and recreational destinations, which are sometimes considered "institutions." It is possible that individuals could be counted twice in these estimates if they belong to more than one of the listed populations, thus skewing the total number and percent of population. For example, an individual could be a hospital employee and a college student. Even so, these are likely conservative estimates based on the various populations for whom data is not included or available.

producers. Other institutions include government and corporate cafeterias, and cultural and recreational destinations, like Rhode Island FC soccer games.

The pandemic also exposed the weaknesses of the dominant supply chain system and, as a partial response, we have witnessed an unprecedented infusion of federal funding designed to support local and regional food systems. Schools in Rhode Island are purchasing more local food items than ever before, due in large part to an infusion of $10.8 million—$1.5 million of the federal funding was earmarked specifically to support local purchasing— via the USDA Local Food for Schools (LFS) and Supply Chain Assistance (SCA) programs.

In addition, food service providers such as Providence Public Schools are looking for ingredients grown by local farmers that are more culturally connected to children living in the areas they serve. In K-12 settings, momentum is building with champions in place in key roles, while RI colleges and universities have increased local purchasing due to their own internal targets and with support from programs like SupplyRI and Farm Fresh RI's Market Mobile platform. The RI Department of Health's new State Physical Activity and Nutrition program is an investment intended to increase local purchasing activities in institutions.

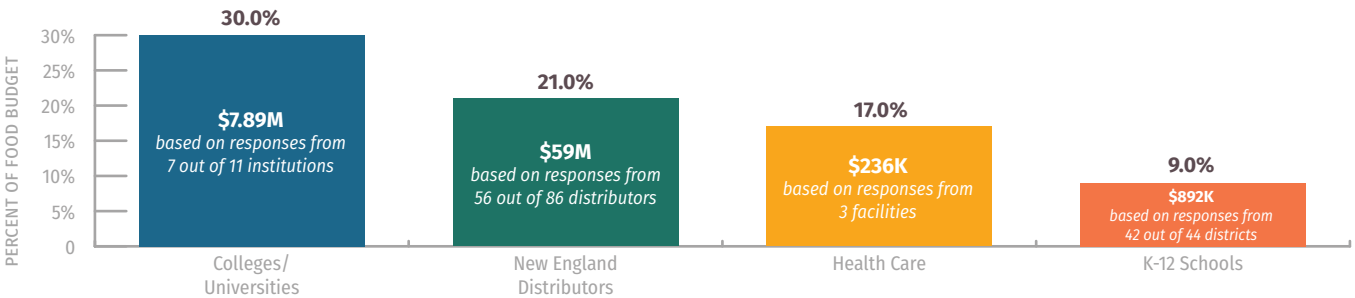
Challenges

- **Lack of Consistent Funding:** A lack of consistent, sustainable funding to support food purchasing, staff training, living wages, and kitchen renovations makes it challenging to support local food purchases in a meaningful way. Failure to make investments in local food for institutions demonstrates a lack of recognition that institutional food purchases impact other priorities such as economic resilience for local farmers, reducing greenhouse gas emissions, and equitable food access. Limited funding for school food exerts price pressure on food service management companies to try to deliver local food for cheaper, leading to unfavorable prices for Rhode Island producers.
- **Sustaining Momentum:** Because momentum in institutional procurement often depends on strong, sustained relationship building and motivated individuals rather than structured, institutionalized programs, after initial efforts purchasing institutions can "lose steam" without additional supports in place. Barring additional coordination, competition between food service providers, contract restrictions/limitations, and other obstacles can stall local purchasing efforts.
- **Providing Culturally Relevant Food:** Public policies and state agencies lack the capacity and resources to provide sufficient incentives and technical assistance for making local purchasing more accessible to institutions and guiding them towards best practices. In particular, lack of defined guidelines or prioritization around culturally appropriate and relevant foods in institutions can lead to significant food waste and alienation of customers from familiar flavors and favorite foods.
- **Limited Small-Scale Food Processing Infrastructure:** Smaller farms often having issues accessing institutional markets due to a lack of processing and distribution infrastructure that would make it easier for food service staff to utilize (e.g., hamburger patties) in terms of consistent quantities and specifications.

Opportunities

- **Prioritize Local Food Purchases in Schools:** The temporary Local Food for Schools (LFS) and Supply Chain Assistance (SCA) allocations (2021-2024) provided RI schools with $10,813,609 to purchase local produce, dairy, and meat during the years of 2021 - 2024. These funds demonstrated how financial incentives to purchase local food are a win for RI food producers, students, and schools. Long term funding that subsidizes local food purchases by schools will allow RI food producers to continue to access this important market.
- **Universal School Meals Could Increase Budgets for Buying Local Food:** A coalition of organizations support RI's Healthy School Meals for All legislation, up for

AVERAGE PERCENT OF FOOD BUDGET SPENT ON LOCAL FOOD



Source: Farm to Institution New England, Rhode Island Farm to Institution by the Numbers. The estimate for distributors is based on estimated local food sold to institutions in *New England*, not just Rhode Island.

adoption in 2024. Providing universal school meals for all students in the state would increase meal participation and provide additional revenue for schools to purchase and serve more local foods.

- **Increase Culturally Relevant Food at Institutions:** Institutional food service management companies like Chartwells are creating school meal menus that serve a range of cultural backgrounds. There is much to be gained in terms of program utilization and thus efficiency by incorporating diverse flavor profiles and pride of presentation.
- **Federal Procurement Specifications:** In April 2024, USDA issued a final ruling that allows for "locally grown," "locally raised," or "locally caught" to be used as procurement specifications with an implementation date of July 1, 2024.
- **Technology for Tracking Food Procurement:** The Department of Education is funding a research and demonstration project for a web-based platform to help schools (and other public organizations) track food procurement to measure and increase the amount of local food purchased.

Institutions can be a stable market for local food producers and conduit for consumers to connect with their food system

Recommendations

Create a Local Food Purchasing Incentive Program: Work with RIDE to appropriate Local Food Purchasing Incentives (LFPI) in the state budget to support school purchasing and ensure sustainable opportunities for local growers/producers.

Create Farm to School Positions in State Government: Secure permanent funding for statewide Farm to School positions at RIDE and/or DEM to maintain momentum for local procurement, value chain coordination, and food literacy.

Pass Healthy School Meals for All Legislation: Pass the Healthy School Meals for All bill to establish a more steady budget for food service and dining directors to food budgets, kitchen upgrades, staff training, and living wages, while creating equity in nutrition access.

Support Local Producer Access to Institutions: Build up hard and soft infrastructure and tools to support local producers' ability to access institutional markets and remove barriers to entry including: technical assistance, light processing facilities, cooperative infrastructure/purchasing models, and improved contract language for flexibility in purchasing.

Ramp Up Culturally Relevant Food Procurement at Institutions: Incorporate guidelines and education around cultural relevance for procurement and preparation for institutional food service providers in order to support program utilization, economic efficiencies, and reductions in plate waste. As described in *Issue Brief 13: Food System and Nutrition Education*, it is important to include diverse voices in co-creating a unified vision that celebrates cultural diversity and alternate ways of knowing (e.g., lived experience, artistic expression) into curricula and community programs, particularly at K-12 schools.

Continue to Build Partnerships and Expertise: Continue to build and participate in local and regional networks/partnerships to share knowledge and infrastructure and strategize around best practices for institutional procurement efforts.

Implement Recommendations of Farm & School to Sea Strategic Plan: Support implementation of the Rhode Island Farm & Sea to School Network's 2024 Farm & Sea to School Strategic Plan by providing funding for the goals laid out in the plan, increasing state agency capacity, and building goals and strategies into other state plans.

Codify Value-Based Procurement Guidelines: Request that the IFNPAC Local and Healthy State Food Procurement Sub-Committee define a set of values-based procurement guidelines to be used by institutions and food service management companies that focus on supporting underserved producers, environmental and labor practices, and regional sourcing.

PREVIOUS
Direct to Consumer Sales

This brief was prepared by:
Eva Agudelo, Hope's Harvest
Angelo Garcia, Segue Institute for Learning

UP NEXT
Distribution and Wholesale

MARKET CHANNELS:

Distribution & Wholesale

Distribution drives Rhode Island's food system economy

Distribution and wholesale sales make up $6.1 billion of the $18.1 billion in total economic activity for Rhode Island's food system economy. Much of the food that is distributed in Rhode Island comes from out of the region and has a large environmental footprint. Distributors are challenged with tight profit margins, high-operating costs, industry consolidation, and changing regulations that challenge business viability. Finding consistent wholesale distribution can be challenging for local farmers, fishermen, and food producers. At the heart of this issue is the opportunity to connect more local and regional businesses to wholesale opportunities to help us increase our ability to meet regional 30% by 2030 goals and improve food security.

Current Conditions

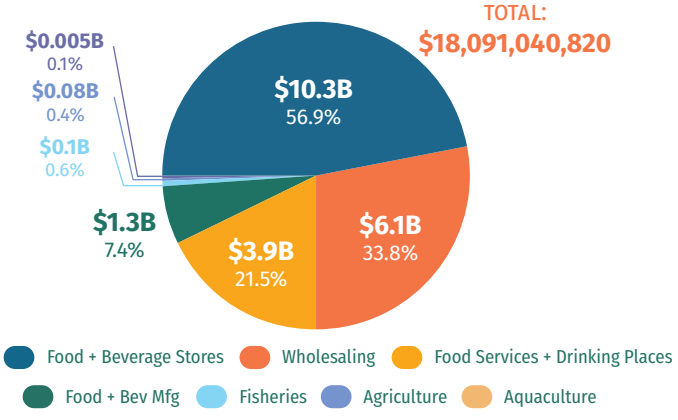
Rhode Island's strategic advantage in distribution and wholesale is our central location in the Northeast and our proximity to major population centers and key transportation routes. To capitalize on opportunities such as supplying bigger markets like Boston and Hartford, technology continues to provide ways to streamline operations and reach customers more effectively. However, since 2020, there have been many disruptions in distribution and wholesale including intense supply chain issues and rising labor costs that increase operating expenses and make it more difficult to do business. In particular, trucking and insurance expenses have increased by 9% and 12.5%, respectively, over the past year.

Comparing the local/regional supply chain to the national/global supply chain, those same issues affect local businesses more acutely as they lack the purchasing power of national companies. In Rhode Island, food hubs like Farm Fresh's Market Mobile, Farmers Community Food Hub, Red Tomato and Southside Community Land Trust are working to lower the cost of entry for local businesses to scale their wholesale operations. Food hubs help farmers and food producers by becoming preferred suppliers for food service management companies and taking on the liability and insurance requirements that can be prohibitive for small growers who may only gross $2,500 a year. Food hubs connect growers, fishermen, and food businesses to market opportunities including K-12 school meals, hunger relief centers, and other wholesale markets such as restaurants and grocery stores.

KEY INDICATORS

ECONOMIC IMPACT OF WHOLESALING	WHOLESALING EMPLOYMENT
>$6.1 billion	≈3.0K
Wholesaling/distribution generates the 2nd largest % of sales in RI's food system	*At least 3,000 people are employed at a variety of wholesaling and distribution businesses*

FOOD SYSTEM SALES, 2022



Source: US Census Bureau 2022 Economic Census. Adjusted for inflation to 2024 dollars. Solid waste collection is not shown in this chart.

Food wholesaling: the process where goods are assembled, stored, and transported to customers, including retailers, food service operators, other wholesalers, government, and other types of businesses.

Distribution: the process where food products are sold and transported from their point of production to a market channel where consumers access food.

Rhode Island is served by at least a dozen national and regional distributors, including UNFI, the largest wholesale distributor of health and specialty food in North America.

Challenges

- **Rising Costs of Vehicles, Insurance, and Fluctuating Gasoline Prices:** The costs associated with infrastructure needed for distribution and wholesale continue to rise and fluctuate based on national trends. This instability can hit small and independent operators especially hard. Large-scale electric vehicles for wholesale distribution are currently not widely available as an alternative.
- **Business as Usual:** It is difficult to disrupt the status quo. Asking wholesale buyers to consider options that take them more time or effort can limit the abilities of local farmers to penetrate those markets.
- **Seasonal Variability:** Rhode Island experiences distinct seasons, impacting the availability of locally grown produce throughout the year. This seasonal variability—exacerbated by climate change—can lead to fluctuations in supply and demand, affecting distribution.
- **Limited Agricultural Production:** Rhode Island has a small land area, limiting its capacity for large-scale agricultural production. This means the state often relies on food imports from other states in New England or other regions throughout the country, which in turn can affect availability and pricing.

Opportunities

- **Specialty Food Products:** Rhode Island has a broad and rich network of specialty food items such as cheeses and baked goods. Connecting these producers to specialty food service distributors customers can provide access to new market opportunities.
- **Tourism and Hospitality:** Tourism is a large source of revenue for the state, which presents opportunities for distributing local products to hotels, tourist attractions (e.g., waterfront restaurants) or venues used for concerts and sporting events.
- **Expand Local Farm Distribution:** Distributors and wholesalers establishing relationships with farms is integral to the growth of local farms and producers being featured more in local and regional markets.
- **Leverage Food Hubs as Trusted Intermediaries:** Rhode Island's food hubs can reduce risks associated with wholesale distribution and introduce small farmers, fishermen, and food producers to new market opportunities.
- **Explore Culturally Appropriate Markets:** Identify niche markets in Rhode Island's food landscape that may be underserved or have specific needs. Introducing farmers/producers to these markets will provide goods to meet the current needs for culturally relevant products.

Connecting more local food producers to wholesale markets is a significant opportunity

Recommendations

Community Engagement: Engage with community partners to identify needs, fostering collaboration to bridge gaps between farmers, producers, and consumers, ensuring a more resilient and sustainable food ecosystem.

Establish Partnerships: Strong relationships with farmers/producers can address diverse consumer needs and lead to opportunities for collaboration tailored to certain consumer bases.

Focus on Local: Emphasizing local products can resonate well with consumers who value sustainability and community support. Doing this across many wholesale markets (K-12, colleges, hospitals, fine dining, casual dining, farm stands, caterers and small, independent grocers) can have a big impact on overall sales.

Leverage Technology: Embrace technology to streamline ordering and delivery processes making it easier for farmers/producers.

Increase Regional Collaboration to Grow Supply and Demand: Food hubs can reduce the overall costs of moving local and regional food and return more profit to growers. The New England Food Hub & Processors Network can help to coordinate regional supply and grow overall demand. Hubs connect growers with sales and work with customers to buy more local and regional products.

PREVIOUS
Institutions

This brief was prepared by:
Cayne Cabral, Farm Fresh Rhode Island
Angel Mendez, Red Tomato
Jesse Rye, Farm Fresh Rhode Island

UP NEXT
Restaurants and Hospitality

MARKET CHANNELS:

Restaurants & Hospitality

Restaurants are the second largest private employer in Rhode Island

Rhode Island's hospitality scene, renowned for its strong culinary launchpads like Johnson & Wales University and density of eateries per capita nationwide, presents a significant opportunity for establishments to forge partnerships with local food producers. This collaboration extends beyond culinary delight to encompass sustainability, community support, and promoting Rhode Island's unique gastronomic identity. By sourcing locally, restaurants can offer fresher ingredients, distinctive flavors — sweet corn, briny seafood, artisanal cheeses, and products from local aquaculture - while also contributing to the resilience of our agricultural sector and food producers. Moreover, embracing this synergy enhances the region's appeal to tourists, driving economic growth. To preserve our culinary excellence and bolster economic vitality, it's imperative that restaurants utilize local sourcing.

Current Conditions

Rhode Island's dining scene aims to support local food producers, but this goal faces challenges due to economic, logistical, and cultural factors. While local ingredients offer excellent quality and flavor, their higher cost poses a challenge for many restaurants with narrow profit margins. As a result, finding a balance between quality and affordability is crucial for remaining competitive in a crowded market. Accessibility issues further hinder the widespread adoption of local food producers among Rhode Island restaurants. Challenges related to delivery logistics and awareness of available local sources impede establishments' ability to integrate locally sourced ingredients into their menus effectively.

Moreover, small-scale producers may struggle to meet the demands of high-volume restaurants or accommodate specialized needs, such as organic certification or the consistent supply of unique heirloom varieties. In such cases, businesses may turn to larger distributors or alternative sources to secure the ingredients they require.

Furthermore, menu flexibility and culinary traditions significantly influence sourcing decisions at restaurants. Some prioritize menu diversity, while others rely on established supplier relationships, shaping their offerings

KEY INDICATORS

# OF RESTAURANT LOCATIONS	DIRECT OUTPUT GENERATED IN 2024	INDIRECT OUTPUT GENERATED IN 2024
3,082	**$5.1 billion**	**$3.7 billion**
The National Restaurant Association estimates over 3,000 restaurant locations in RI	*The National Restaurant Association estimates over $5 billion in direct output in RI*	*The NRA estimates an additional indirect and induced impacts of nearly $4 billion*

ECONOMIC CONTRIBUTIONS OF RESTAURANTS, 2024

Research conducted by the National Restaurant Association highlights significant direct, indirect, and induced benefits of Rhode Island's restaurants. **A total of $8.69 billion was generated in 2024, with more than 72,000 jobs**

		OUTPUT		EMPLOYMENT		LABOR INCOME		TAXES
FULL SERVICE RESTAURANTS	Direct	$2.34B	Direct	23,601	Direct	$849.97M	Direct	$415.57M
	Total	$4.07B	Total	32,142	Total	$1.42B	Total	$658.03M
LIMITED SERVICE RESTAURANTS	Direct	$1.43B	Direct	13,160	Direct	$436.34M	Direct	$239.90M
	Total	$2.54B	Total	18,690	Total	$789.83M	Total	$391.79M
ALL OTHER EATING AND DRINKING PLACES	Direct	$1.31B	Direct	15,877	Direct	$557.65M	Direct	$252.28M
	Total	$2.37B	Total	21,342	Total	$940.77M	Total	$404.04M

Source: National Restaurant Association, Economic Contributions of the Restaurant & Foodservice Industry: Rhode Island. Analysis based on 2022 IMPLAN data.

based on factors like ingredient availability, pricing, consistency, innovation, and sustainability. Rhode Island's dining scene is shaped by rich culinary traditions rooted in diverse immigrant communities like Italian and Portuguese. These traditions dictate sourcing decisions and contribute to the state's unique culinary identity.

Challenges

- **Barriers to Local Sourcing:** Smaller production scales, higher per-unit logistics costs, limited distribution networks, and limited economies of scale all contribute to elevated expenses for local food products.
- **Regulatory Hurdles:** The FDA's Food Code requirements mandate purchases from approved vendors, suggesting a need for a list of approved local suppliers.
- **Time, Convenience, and Cost Factors:** Time constraints, convenience, and inflation are significant factors that influence food sourcing decisions. Delivery and cost concerns were also prominent for restaurant owners: The majority of restaurant owners interviewed for this brief stated they simply don't have time to pick up orders.

Opportunities

- **Varied Adoption of Local Sourcing:** Authenticity in culinary traditions sometimes necessitates sourcing ingredients from beyond local producers to maintain traditional flavors when an ingredient is not locally grown.
- **Incorporate Local Food Products in Broadline Distribution:** Broadline distributors (e.g., PFG, Sysco, Gordon Food Service, US Foods) need to source from more local producers and offer more local products to restaurant owners and chefs.
- **Connect Local Producers to Restaurant Owners:** Educate restaurant owners on the local producers which are available to them. A large portion of owners just do not know where to purchase local food.
- **Expand Opportunities for Local Seafood:** Restaurant owners interviewed for this brief had a perception that Rhode Island is lacking in local fisheries to supply restaurants. The reality is quite different. This is another example where bridging the gap between perception and reality presents an opportunity to educate restaurant owners and stakeholders about the abundance of local seafood available.

To preserve our culinary excellence and bolster economic vitality, it's imperative that restaurants utilize local sourcing

Recommendations

Connect Local Producers to Restaurant Owners: Educate restaurant owners about the annual RI Tabletop Show at Hope and Main by highlighting its benefits, including access to local vendors, networking opportunities, and support for the local food economy.

Assist Local Producers to Scale Up: Provide grants and technical assistance to help local producers invest in crop diversification and infrastructure improvements such as equipment upgrades, storage facilities, or transportation logistics, enabling those who wish to, to scale to meet the needs of restaurant buyers more efficiently.

Articulate Win-Win Scenarios: Local producers offering price discounts to restaurant owners stimulates demand and fosters new recurring customers. Educating stakeholders about how resources like the Farm Fresh Market app streamlines sourcing and boosts awareness. Incorporating local produce into corporate dining supports regional agriculture, enhances tourism by showcasing unique flavors, and improves food safety by reducing transportation distances, promoting transparency, and ensuring freshness and quality.

Utilize Buy Local Campaign: Utilize the Buy Local campaign managed by the Providence Warwick Convention Visitors Bureau to promote local businesses and drive tourism. Highlight a different local producer each month and encourage support for local restaurants that feature local and regional ingredients (e.g., RI Grown and RI Seafood programs).

PREVIOUS
Distribution and Wholesale

This brief was prepared by:
Traci Dufresne, Rhode Island Hospitality Association

UP NEXT
Grocery and Retail

MARKET CHANNELS:

Grocery & Retail

Consumers purchase more of their food at grocery stores and supercenters than through any other market channel

The grocery industry in Rhode Island is one of the most important business drivers in the state, with earnings of $3.2 billion in 2023. There are a number of chain, independent, international, and specialty markets in operation. Supermarkets and grocery retailers are among the largest private sector employers in the state, employing over 12,000 Rhode Islanders. In a small and densely populated state like Rhode Island, our local markets are more than a convenient place to shop for groceries, they are a place for connection.

Current Conditions

There have been a number of challenges facing the retail industry and, specifically, the grocery retail industry, in the COVID age. During the pandemic, grocery retailers were deemed essential services. They rose to the occasion to support their communities even at great up front cost to accommodate social distancing, severe supply chain issues, and difficulty maintaining staff. Other challenges facing the grocery industry persist. Employment stability is low, and operation and food costs are continuing to rise despite inflation leveling off.

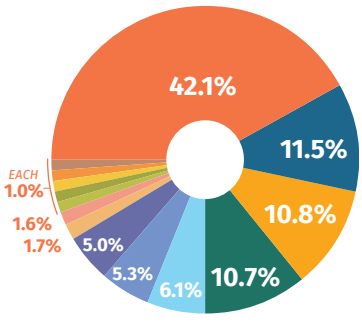
Grocery retail is a very competitive and complex industry that is always changing to meet the needs of customers. The use of technology in the form of online grocery shopping, self check-out services, and digital marketing have all been implemented to create a convenient shopping experience for the modern consumer. Some markets are focusing on a value-driven philosophy, focusing on value and lower price points as the primary drivers. Some smaller and local markets are focusing on the in-store experience to attract and maintain customers by preserving the shopping experience their base has grown to love. Consolidation is altering the perception of what a community market looks like. In the past twenty years, many of our regional supermarket chains, such as Shaw's and Stop and Shop, have merged with national and international grocers. As more national competitors come into Rhode Island, the more difficult it is for smaller independent grocers to compete from a pricing perspective.

KEY INDICATORS

# OF GROCERY STORES	VALUE OF EARNINGS IN 2023	# OF STORE EMPLOYEES
288	**$3.2 billion**	**>13,000**
IBISWorld estimates 288 grocery store businesses in Rhode Island	IBISWorld estimates that RI grocery stores generated $3.2 billion in revenue in 2023	More than 13,000 people are employed at RI grocery stores

ESTIMATED MARKET SHARE OF GROCERY STORES IN RHODE ISLAND

The Grocery Gap Atlas estimates that 81% of state markets are *less* concentrated than Rhode Island, while 19% of all states are *more* concentrated.



All Others includes dozens of corner markets, specialty food stores (e.g., meat markets) and independent grocery stores.

Source: Grocery Gap Analysis.

Challenges

- **Consolidation:** A trend in the last two decades has been the consolidation of our regional markets into larger international conglomerates. It is more difficult to be competitive as a locally owned market.
- **Employment Stability:** Since the COVID-19 pandemic, it has been increasingly difficult to not only hire, but to retain staff. Industry members state that turnover is extremely high and the number of quality applicants has declined.
- **Inflation:** Food prices reflect many variables, including the cost of production, processing, distribution, marketing, and global, national, regional, and local events, like the COVID-19 pandemic, avian influenza, crop failures, and the Russian invasion of Ukraine. From 1962 to 2023, food prices increased 954%, which is second only to health care costs (which have grown 2,234%). From 2020 to 2023, food inflation increased 21%.
- **Changing Consumer Needs:** Grocery shoppers are shopping online more than ever, and grocery stores have evolved to offer home delivery, in store and curbside pickup, creating new challenges for store operations.
- **Regulations:** The grocery industry is highly regulated in terms of employment practices, operation restrictions, new environmental policies and food safety regulations. Proposed legislation on digital coupons and loyalty programs, self-checkout and automation practices, employment/human resources and environmental bills all directly affect the grocery retail industry.

Opportunities

- **Targeted Marketing:** The manner in which food retailers are able to reach their consumers and send them offers targeting their specific needs continues to grow via loyalty programs and retail based mobile apps. They are able to offer customers the best deals on the items they are looking for.
- **Improved Technology:** Technology is evolving to make the shopping experience more streamlined for the modern consumer. Advancements in loyalty programs, omnichannel marketing, and automated checkout allow for enhanced data collection and store operations.
- **Improving In-Store Experiences:** While some markets embrace sophisticated marketing techniques and tech driven enhancements to the shopping experience, others have invested in the customers in-store experience: Offering more fresh foods, on-the-go eating, and embracing the personal relationship a store can have with their customers.
- **Supportive Industry Associations:** Organizations like Rhode Island Food Dealers Association offer legislative support, networking, and industry updates to its members, which includes both chain and independent super-markets, as well as affiliated business.

All types of grocery stores are needed in RI's food system

Recommendations

Grocery Stores Should Emphasize Sustainability and Local Sourcing: Consumers are increasingly concerned about sustainability and environmental issues. Grocers should consider continuing to invest in eco-efficient operation practices and locally sourced products.

Provide Technical Assistance to Independent Stores: Create guidance documents via the internet for small independent grocery and international market retailers to both encourage and educate them on past, current, and future sustainability initiatives. Allowing for easy access to opportunities for grocery retailers to know what initiatives, innovations, vendors and providers are available to them.

Create Partnerships With Local Food Stakeholders: Grocery retailers should continue strategic partnerships that help brands improve consumer value and diversify their demographics through engagement with local organizations that affect the local food system.

Organize Wasted Food Logistics: Create a hub for grocery retailers to centralize the movement of surplus food to the appropriate channels: food banks, community centers, etc.

PREVIOUS
Restaurants and Hospitality

This brief was prepared by:
Scott Bromberg, Rhode Island Food Dealers Association
Angel Mendez, Red Tomato

Briefs Endnotes

1. Narragansett Foodways

"Traditional stewards of the land"
Tomaquag Museum. (Jan-Mar 2024). https://static1.squarespace.com/static/52c6cfe3e4b02b1e85cae962/t/660afd877da94c0b929c502c/1711996300411/2024+Edc+News+1ST+QTR+Final+PDF.pdf

"Knowledge of these traditions"
Tomaquag Museum. (Apr-Jun 2024). https://static1.squarespace.com/static/52c6cfe3e4b02b1e85cae962/t/669012b0e784e06a94d81a53/1720718001188/2024_Edc+News+2nd+QTR+FINAL+PDF.pdf

"Federally Recognized Tribe"
Narragansett Indian Tribe. (n.d.). https://narragansettindiannation.org/history/perseverance/

"Narragansett Food Sovereignty Initiative"
Narragansett Indian Tribe. (n.d.). https://narragansettindiannation.org/wp-content/uploads/2018/01/Intertribal-Food-Sovereignty-Summit.pdf

"Tomaquag Museum"
Tomaquag Museum. (November 26, 2020). https://www.tomaquagmuseum.org/belongingsblog/2020/11/2/dovecrest-restaurant-and-thanksgiving?rq=Narragansett%20Food%20Sovereignty%20Initiative%20%28NFSI%29

"Eating traditional foods"
Tomaquag Museum. (Jan-Mar 2024). https://static1.squarespace.com/static/52c6cfe3e4b02b1e85cae962/t/660afd877da94c0b929c502c/1711996300411/2024+Edc+News+1ST+QTR+Final+PDF.pdf

2. Climate Change

"2021 Act on Climate"
RI Legislature. (n.d.). https://webserver.rilegislature.gov/Statutes/

"State greenhouse gas reduction trends"
State of Rhode Island Department of Environmental Management. (n.d.). Rhode Island Greenhouse Gas Inventory. https://dem.ri.gov/environmental-protection-bureau/air-resources/rhode-island-greenhouse-gas-inventory

"2023 was the hottest year on record"
NOAA National Centers for Environmental Information. (January 17, 2024). 2023 was the warmest year in the modern temperature record. https://www.climate.gov/news-features/featured-images/2023-was-warmest-year-modern-temperature-record

"California's Central Valley"
Union of Concerned Scientists. (n.d.). Climate Change in California's Central Valley. https://blog.ucsusa.org/series/climate-change-in-californias-central-valley/

"Midwest"
Baker, J. M., Wilson, A. B., Ainsworth, E. A., Andresen, J., Austin, J. A., Dukes, J. S., Gibbons, E., Hoppe, B. O., LeDee, O. E., Noel, J., Roop, H. A., Smith, S. A., Todey, D. P., Wolf, R., & Wood, J. D. (n.d.) Midwest. https://nca2023.globalchange.gov/chapter/24/. THIS WEBSITE WAS REMOVED BY FEDERAL GOVERNMENT.

"Low regional self-reliance"
New England Food System Planners Partnership. (n.d.). Report Components. https://nefoodsystemplanners.org/projects/report-components/

"Total agriculture, seafood, and aquaculture sales"
New England Food System Planners Partnership. (n.d.). Regional Self-Reliance. https://nefoodsystemplanners.org/dashboard_posts/regional-self-reliance/

"Increased"
Runkle, J., K.E. Kunkel, D.R. Easterling, B.C. Stewart, S.M. Champion, L.E. Stevens, R. Frankson, W. Sweet, and J. Spaccio. (2022). Rhode Island State Climate Summary 2022. https://statesummaries.ncics.org/chapter/ri/

"Destructive events"
NOAA National Centers for Environmental Information U.S. Billion-Dollar Weather and Climate Disasters. (2025). Rhode Island Summary. https://www.ncei.noaa.gov/access/billions/state-summary/RI

"Vulnerable to changes"
NOAA Fisheries Office of Science and Technology. (November 27, 2023). Northeast Vulnerability Assessment. https://www.fisheries.noaa.gov/new-england-mid-atlantic/climate/northeast-vulnerability-assessment#more-information

"59,000 acres"
USDA National Agricultural Statistics Service. (2022). 2022 Census of Agriculture-County Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_2_County_Level/Rhode_Island/st44_2_002_002.pdf

"Increase"
Runkle, J., K.E. Kunkel, D.R. Easterling, B.C. Stewart, S.M. Champion, L.E. Stevens, R. Frankson, W. Sweet, and J. Spaccio. (2022). Rhode Island State Climate Summary 2022. https://statesummaries.ncics.org/chapter/ri/

"Drought"
Farm Service Agency U.S. Department of Agriculture. (August 11, 2022). USDA Offers Disaster Assistance to Rhode Island Farmers and Livestock Producers Impacted by Drought. https://www.fsa.usda.gov/news-events/news/08-11-2022/usda-offers-disaster-assistance-rhode-island-farmers-livestock

"National Centers for Environmental Information"
NOAA National Centers for Environmental information. (January 2025). Climate at a Glance: Statewide Time Series. https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/time-series

"Tolerate normal conditions"
Guerreiro, M.F., Borges, F.O., Santos, C.P. et al. (September 1, 2023). Impact of climate change on the distribution and habitat suitability of the world's main commercial squids. https://link.springer.com/article/10.1007/s00227-023-04261-w#Sec5

"Changing from southwest to northeast along the Northeast Shelf"
NOAA Fisheries Northeast Fisheries Science Center. (November 8, 2024). Current Conditions of the Northeast U.S. Shelf Ecosystem: Spring 2024 Update. https://www.fisheries.noaa.gov/new-england-mid-atlantic/ecosystems/current-conditions-northeast-us-shelf-ecosystem-spring-2024

"Lobster"
WPRI. (November 12, 2024). As lobsters shift north due to rising temps, RI fishing industry changes their catch. https://www.wpri.com/community/environment/as-lobsters-shift-north-due-to-rising-temps-ri-fishing-industry-changes-their-catch/

"Black sea bass"
NOAA Greater Atlantic Regional Fisheries Office. (May 12, 2021). The Northeast Shelf: A Changing Ecosystem. https://storymaps.arcgis.com/stories/b3321ee343c9424eb6557332f81509c6

"Aquaculture industry"
RI Coastal Resources Management Council. (n.d.). Aquaculture. http://www.crmc.ri.gov/aquaculture.html

"Increased faster than the global ocean"
NOAA Fisheries Northeast Fisheries Science Center. (December 2, 2024). Climate Change in the Northeast U.S. Shelf Ecosystem. https://www.fisheries.noaa.gov/new-england-mid-atlantic/climate/climate-change-northeast-us-shelf-ecosystem

"New pathogens into marine ecosystems"
Mugwanya, M., Dawood, M.A.O., Kimera, F., and Sewilam, H. (2022). Anthropogenic temperature fluctuations and their effect on aquaculture: A comprehensive review. Aquaculture and Fisheries, Volume 7, Issue 3, Pages 223-243, https://www.sciencedirect.com/science/article/pii/S2468550X21001611

"Most vulnerable coastal communities"
"Ekstrom, J., Suatoni, L., Cooley, S. et al. (2015). Vulnerability and adaptation of US shellfisheries to ocean acidification. Nature Clim Change 5, 207–214. https://doi.org/10.1038/nclimate2508.

"Global supply chains"
Tchonkouang, R.D., Onyeaka, H., and Nkoutchou, H. (2024). Assessing the vulnerability of food supply chains to climate change-induced disruptions. Science of The Total Environment, Volume 920. https://doi.org/10.1016/j.scitotenv.2024.171047. https://www.sciencedirect.com/science/article/pii/S0048969724011860

"Resilient Rhody"
State of Rhode Island. (July 3, 2024). Introduction to Climate Change. https://climatechange.ri.gov/climate-science

"Providence"
The City of Providence. (2019). The City of Providence's Climate Justice Plan. https://www.providenceri.gov/wp-content/uploads/2019/10/Climate-Justice-Plan-Report-FINAL-English-1.pdf

"State climate change policies and strategies"
State of Rhode Island. (January 15, 2025). 2025 Climate Action Strategy. https://climatechange.ri.gov/act-climate/2025-climate-update

"Northeast"
Whitehead, J.C., Mecray, E.L., Lane, E.D., Kerr, L., Finucane, M.L., Reidmiller, D.R., Bove, M.C., Montalto, M.A., O'Rourke, S., Zarrilli, D.A., Chigbu, P., Thornbrugh, C.C., Curchitser, E.N., Hunter, J.G., and Law, K. (2023). Ch. 21. Northeast. https://doi.org/10.7930/NCA5.2023.CH21. https://nca2023.globalchange.gov/chapter/21/ THIS WEBSITE WAS REMOVED BY FEDERAL GOVERNMENT.

"100,000 tons of vegetative and protein material"
Rhode Island Resource Recovery Corporation. (December 31, 2015). Rhode Island Solid Waste Characterization Study. https://www.rirrc.org/sites/default/files/2017-02/Waste%20Characterization%20Study%202015.pdf

"1% of historic levels"
Petit, D. (August 5, 2021). Helping Oyster Growers and Marine Ecosystems in Rhode Island. https://www.farmers.gov/blog/helping-oyster-growers-and-marine-ecosystems-in-rhode-island

"2022 Green Bond"
State of Rhode Island Department of Environmental Management. (July 9, 2024). 2022 Green Bond. https://dem.ri.gov/green-bond-2022-green-bond

"Local Agriculture and Seafood Act"
State of Rhode Island Department of Environmental Management. (November 14, 2024). Local Agriculture and Seafood Act (LASA) Grants Program. https://dem.ri.gov/agriculture/grants/lasa

"Newport"
NOAA Tides & Currents, Relative Sea Level Trend, 8452660 Newport, Rhode Island, https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8452660

"Rising faster on the East Coast"
Voiland, A. (n.d.). America's Sinking East Coast. https://earthobservatory.nasa.gov/images/152452/americas-sinking-east-coast

"Tides & Currents"
NOAA Tides & Currents. (n.d.). Sea Level Trends. https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8452660

"Sugar kelp"
NOAA Fisheries. (September 6, 2024). Sugar Kelp. https://www.fisheries.noaa.gov/species/sugar-kelp

"Agricultural Energy Program"
State of Rhode Island Department of Environmental Management. (January 14, 2025). RI Agricultural Energy Program. https://dem.ri.gov/agriculture/financial-assistance/farm-energy-program

"State's disaster contingency fund"
The Pew Charitable Trusts. (May 2020). How States Pay for Natural Disasters in an Era of Rising Costs. https://www.pewtrusts.org/-/media/assets/2020/05/how-states-pay-for-natural-disasters-in-an-era-of-rising-costs.pdf

"RIDEM's increased focus"
URI Cooperative Extension. (n.d.). Low Impact Development for Your Community: Better site design to conserve land, protect water quality, and reduce development costs. https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/benviron/water/permits/ripdes/stwater/pdfs/lidfactsheet.pdf

"20% of precipitation"
Ebissa, G., Desta, H., (2022). Review of urban agriculture as a strategy for building a water resilient city. City and Environment Interactions, Volume 14, https://doi.org/10.1016/j.cacint.2022.100081

"Increase water absorption substantially"
Schrage, Scott, (October 12, 2019). "Which Farming Practices Help Soils Absorb Heavy Rains?," No-Till Farmer, https://www.no-tillfarmer.com/articles/9187-which-farming-practices-help-soils-absorb-heavy-rains

"New England Feeding New England"
New England State Food System Planners Partnership. (n.d.). New England Feeding New England: Cultivating A Reliable Food Supply. https://nefoodsystemplanners.org/

3. Food System Policies

"Market concentration"
Farm Action, Agriculture Concentration Data, https://farmaction.us/concentrationdata/

"Equity Commission"
USDA Equity Commission, Interim Report 2023, https://www.usda.gov/sites/default/files/documents/usda-ec-interim-report-2023.pdf

"43,000 people"
USDA, https://www.usda.gov/about-usda/news/press-releases/2024/07/31/biden-harris-administration-issues-financial-assistance-more-43000-farmers-ranchers-and-forest. THIS WEBSITE WAS REMOVED BY FEDERAL GOVERNMENT.

"The Farm Bill"
USDA. (n.d.). Farm Bill Home. https://www.fsa.usda.gov/tools/informational/farm-bill

"Environmental Quality Incentives Program"
USDA Natural Resources Conservation Service, Environmental Quality Incentives Program, https://www.nrcs.usda.gov/programs-initiatives/eqip-environmental-quality-incentives

"SNAP Data Tables"
USDA. (January 10, 2025). SNAP Data Tables. https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap

"Hispanic/Latino Rhode Islanders"
U.S. Census Bureau. (2023). Receipt of Food Stamps/SNAP in the Past 12 Months by Race of Householder (Hispanic or Latino) American Community Survey 1-year estimates. https://censusreporter.org/data/table/?table=B22005I&geo_ids=04000US44&primary_geo_id=04000US44

"LASA grants"
State of Rhode Island Department of Environmental Management. (November 14, 2024). Local Agriculture and Seafood Act (LASA) Grants Program. https://dem.ri.gov/agriculture/grants/lasa

"Highest value per acre of farmland"
USDA. (August 2023). Land Values 2023 Summary. https://downloads.usda.library.cornell.edu/usda-esmis/files/pn89d6567/9w033j15z/2v23xb225/land0823.pdf

"Supplemental Nutrition Assistance Program"
USDA. (January 30, 2025). Supplemental Nutrition Assistance Program (SNAP). https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program

"$15 million"
EWG. (n.d.). Conservation in Rhode Island. https://conservation.ewg.org/region.php?fips=44000&statename=RhodeIsland

"Over $29 million"
Stelmaszyk, J., Fowler, H., Lynch, D., Fairchild, D., Ayars, K., Belhumeur, R., Ausura, C., & Macbeth, A. (n.d.). Rhode Island State Food Strategy 5 Year Report. https://assets.simpleviewinc.com/simpleview/image/upload/v1/clients/rhodeisland/RI_State_Food_Strategy_5_Year_Retrospective_HEZACT_update__a8c7c8be-76cf-4bd8-b565-ebaf344d8e91.pdf

"Rhode Island Food Policy Council"
Rhode Island Food Policy Council. (n.d.). Home - Rhode Island Food Policy Council. https://rifoodcouncil.org/

"Briefing book"
Rhode Island Food Policy Council. (n.d.). Policy Recommendations for Rhode Island's Food System 2023-2030. https://rifoodcouncil.org/wp-content/uploads/2022/12/RI-Food-Policy-Recommendations-for-Elected-Officials-2023-2030.pdf

"Rhode Island Land Trust Council"
Rhode Island Land Trust Council. (n.d.). Rhode Island Land Trust Council. https://rilandtrusts.org/

"Rhode Island Public Health Institute"
Rhode Island Public Health Institute. (n.d.). Rhode Island Public Health Institute. https://riphi.org/

"Interagency Food and Nutrition Policy Advisory Council"
Relish Rhody. (n.d.). Inter-Agency Food & Nutrition Policy Advisory Council. https://www.visitrhodeisland.com/relish-rhody/initiatives/inter-agency-food-nutrition-policy-advisory-council/

"Relish Rhody"
Relish Rhody. (n.d.). Rhode Island's State Food Strategy. https://www.visitrhodeisland.com/relish-rhody/

"Director of Food Strategy"
Rhode Island Commerce Corporation. (n.d.). Food and Beverage Sector. https://commerceri.com/industries/food-processing-innovation/

"Five-year retrospective"
Stelmaszyk, J., Fowler, H., Lynch, D., Fairchild, D., Ayars, K., Belhumeur, R., Ausura, C., & Macbeth, A. (n.d.). Rhode Island State Food Strategy 5 Year Report. https://assets.simpleviewinc.com/simpleview/image/upload/v1/clients/rhodeisland/RI_State_Food_Strategy_5_Year_Retrospective_HEZACT_update__a8c7c8be-76cf-4bd8-b565-ebaf344d8e91.pdf

"Rhode Island Foundation"
Rhode Island Foundation. (n.d.). Rhode Island Foundation. https://rifoundation.org/

"Local Agriculture and Seafood Grants Program"
State of Rhode Island Department of Environmental Management. (November 14, 2024). Local Agriculture and Seafood Act (LASA) Grants Program. https://dem.ri.gov/agriculture/grants/lasa

"Hunger Elimination Task Force"
Rhode Island Food Policy Council. (n.d.). Hunger Elimination Task Force Q4 Meeting Scheduled for October 18. https://rifoodcouncil.org/hunger-elimination-task-force-q4-meeting-scheduled-for-october-18/

"Act Relating to Fish and Wildlife - Commercial Fisheries"
State of Rhode Island General Assembly. (June 16, 2021). An Act Relating to Fish and Wildlife - Commercial Fisheries. https://webserver.rilegislature.gov/BillText/BillText21/HouseText21/H6432A.pdf

"Cottage Food Law"
State of Rhode Island Department of Health. (November 7, 2024). Cottage Foods. https://health.ri.gov/food-safety/cottage-foods

"RIDEM Seafood Marketing Collaborative"
State of Rhode Island Department of Environmental Management. (June 18, 2024). Rhode Island Seafood Marketing Collaborative. https://dem.ri.gov/about-us/dem-offices/commissions/rhode-island-seafood-marketing-collaborative

"RI Farm to School Network"
RI Farm to School Network. (n.d.). Communities of Practice & Action Committees. https://www.rifarmtoschool.org/communities-of-practice-action-committees/

"RI Food System Factbook"
Rhode Island Food Policy Council. (n.d.). RI Food System Factbook. https://rifoodcouncil.org/factbook/

"Demand far outweighs supply for LASA grants"
Rhode Island Food Policy Council. (June 2018). Five Years Of The Rhode Island Local Agriculture And Seafood Act Small Grant Program. https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/agriculture/documents/lasa-5-year-evaluation.pdf

"Five Years of the Rhode Island Local Agriculture and Seafood Act Small Grant Program"
Rhode Island Food Policy Council. (June 2018). Five Years Of The Rhode Island Local Agriculture And Seafood Act Small Grant Program. https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/agriculture/documents/lasa-5-year-evaluation.pdf

"Health Equity Zones"
State of Rhode Island Department of Health. (January 22, 2025). Rhode Island's Health Equity Zones (HEZ). https://health.ri.gov/health-equity/rhode-islands-health-equity-zone-hez-initiative?pgm_id=1108

"Executive Climate Change Coordinating Councils"
State of Rhode Island Climate Change. (September 25, 2024). EC4 Overview. https://climatechange.ri.gov/ri-executive-climate-change-coordinating-council-ec4-overview

"Real Jobs RI"
State of Rhode Island Department of Labor and Training. (June 23, 2022). Real Jobs Rhode Island. https://dlt.ri.gov/employers/real-jobs-rhode-island

"Local Food Purchase Assistance Cooperative Agreement Program"
USDA. (n.d.). Local Food Purchase Assistance Cooperative Agreement Program. https://www.ams.usda.gov/selling-food-to-usda/lfpacap

"Urban Agriculture and Innovative Production"
USDA. (n.d.). Urban Agriculture and Innovative Production. https://www.usda.gov/topics/urban/innovative-production

"Local Food for Schools Cooperative Agreement Program"
USDA. (n.d.). Local Food for Schools Cooperative Agreement Program. https://www.ams.usda.gov/selling-food-to-usda/lfs

"Resilient Food System Infrastructure Program"
USDA. (n.d.). Resilient Food Systems Infrastructure Program. https://www.ams.usda.gov/services/grants/rfsi

"Repercussions of the COVID-19 pandemic"
The Rockefeller Foundation. (July 28, 2020). Reset the Table: Meeting the Moment to Transform the U.S. Food System. https://www.rockefellerfoundation.org/reports/reset-the-table-meeting-the-moment-to-transform-the-u-s-food-system/

"The Netherlands"
Frank Viviano, "This Tiny Country Feeds the World," National Geographic, https://www.nationalgeographic.com/magazine/article/holland-agriculture-sustainable-farming

"SNAP Bonus Bucks"
Farm Fresh RI. (n.d.). Bonus Bucks: Local Food Bonuses. https://www.farmfreshri.org/programs/farmers-markets/bonus-bucks/

"Eat Well Be Well"
State of Rhode Island Department of Human Services. (September 3, 2024). SNAP Eat Well, Be Well Pilot Incentive Program. https://dhs.ri.gov/programs-and-services/supplemental-nutrition-assistance-program-snap/supplemental-nutrition-8

"Healthy School Meals for All"
Rhode Island Healthy School Meals for all Coalition. (n.d.). Support Healthy School Meals for All. https://rischoolmeals4all.com/

"Farmland Access Program"
State of Rhode Island Department of Environmental Management. (January 10, 2024). RI Farmland Access Clearinghouse. https://dem.ri.gov/natural-resources-bureau/agriculture-and-forest-environment/agriculture/farmland-access-clearinghouse

"RI DEM"
State of Rhode Island Department of Environmental Management. (January 29, 2025). Welcome. https://dem.ri.gov/

4. Food Sovereignty

"Redlining"
U.S. Department of Justice. (September 27, 2023). Justice Department Secures $9 Million Agreement with Washington Trust Company to Resolve Redlining Claims in Rhode Island. https://www.justice.gov/archives/opa/pr/justice-department-secures-9-million-agreement-washington-trust-company-resolve-redlining

"Food apartheid"
Jensen, E. (n.d.). Food Apartheid. https://regeneration.org/nexus/food-apartheid#:~:text=Food%20apartheid%20is%20a%20system,access%20due%20to%20systemic%20injustice

"RI Food System Factbook"
Rhode Island Food Policy Council. (n.d.). RI Food System Factbook. https://rifoodcouncil.org/factbook/

"31.3%"
United States Census Bureau. (n.d.). P9: Hispanic or Latino, and Not Hispanic or Latino by Race. https://data.census.gov/table/DECENNIALCD1182020.P9?g=040XX00US44

"22%"
United States Census Bureau. (n.d.). Rhode Island - Census Bureau Profile. https://data.census.gov/profile/Rhode_Island?g=040XX00US44

"2.8%"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_062_062.pdf

"1.6%"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_060_060.pdf

"7.4%"
Cornejo, C. (March 23, 2022). Rhode Island BIPOC Small Business Ecosystem Assessment: Supporting the startup, sustainability, and growth of BIPOC businesses in Rhode Island. https://rifoundation.org/news/rhode-island-bipoc-small-business-ecosystem-assessment

"2,786 acres"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_063_063.pdf

"SNAP benefits"
U.S. Census Bureau. (n.d.). Table B22005A: Receipt of Food Stamps/SNAP by Race of Householder (White Alone). https://censusreporter.org/tables/B22005A/

"White households"
U.S. Census Bureau. (2023). Median Household Income in the Past 12 Months (In 2023 Inflation-adjusted Dollars) (White Alone, Not Hispanic or Latino Householder) American Community Survey 1-year estimates. https://censusreporter.org/data/table/?table=B19013H&geo_ids=04000US44&primary_geo_id=04000US44

"Hispanic/Latino households"
U.S. Census Bureau. (2023). Median Household Income in the Past 12 Months (In 2023 Inflation-adjusted Dollars) (Hispanic or Latino Householder) American Community Survey 1-year estimates. https://censusreporter.org/data/table/?table=B19013I&geo_ids=04000US44&primary_geo_id=04000US44

"5th highest per capita food expenditures"
USDA. (n.d.). Food Expenditure Series. https://www.ers.usda.gov/data-products/food-expenditure-series

"Food sovereignty"
U.S. Food Sovereignty Alliance. (n.d.). Food Sovereignty. https://usfoodsovereigntyalliance.org/what-is-food-sovereignty/

"Rhode Island Population"
United States Census Bureau. (n.d.). P9: Hispanic or Latino, and Not Hispanic or Latino by Race. https://data.census.gov/table/DECENNIALCD1182020.P9?g=040XX00US44

"2022 Census of Agriculture"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1%2C_Chapter_1_State_Level/Rhode_Island/st44_1_062_062.pdf

"Receipt of Food Stamps/SNAP by Race of Householder"
U.S. Census Bureau. (n.d.). Table B22005A: Receipt of Food Stamps/SNAP by Race of Householder (White Alone). https://censusreporter.org/tables/B22005A/

"1 in 3 Rhode Island households"
Rhode Island Community Food Bank. (2023). 2023 Status Report on Hunger in Rhode Island. https://rifoodbank.org/wp-content/uploads/2023/11/2023-RICFB-StatusReport-FINAL-digital.pdf

"Dollar Stores"
Donahue, M. & Mitchell, S. (December 6, 2018). Dollar Stores Are Targeting Struggling Urban Neighborhoods and Small Towns. One Community Is Showing How to Fight Back. https://ilsr.org/articles/dollar-stores-target-cities-towns-one-fights-back/

"Dollar Stores"
Donahue, M. & Mitchell, S. (December 6, 2018). Dollar Stores Are Targeting Struggling Urban Neighborhoods and Small Towns. One Community Is Showing How to Fight Back. https://ilsr.org/articles/dollar-stores-target-cities-towns-one-fights-back/

"Minority-owned businesses"
Fairlie, R.W. & Robb, A.M. (January 2010). Disparities in Capital Access between Minority and Non-Minority-Owned Businesses: The Troubling Reality of Capital Limitations Faced by MBEs. https://www.mbda.gov/sites/default/files/migrated/files-attachments/DisparitiesinCapitalAccessReport.pdf

"Rhode Island BIPOC Small Business Ecosystem Assessment's"
Cornejo, C. (March 23, 2022). Rhode Island BIPOC Small Business Ecosystem Assessment: Supporting the startup, sustainability, and growth of BIPOC businesses in Rhode Island. https://rifoundation.org/news/rhode-island-bipoc-small-business-ecosystem-assessment

"Community Development Financial Institution"
U.S. Department of the Treasury Community Development Financial Institutions Fund. (n.d.). What Does the CDFI Fund Do? https://www.cdfifund.gov/

"Buy-protect-sell model"
American Farmland Trust. (n.d.). Land Protection Projects. https://farmland.org/project/land-protection-projects/

"Disconnect"
Rhode Island Foundation. (March 23, 2022). Rhode Island BIPOC Small Business Ecosystem Assessment. https://issuu.com/rifoundation/docs/20220225_-_final_report_-_bipoc_small_business_ass

"Land buy-back initiatives"
U.S. Department of the Interior. (n.d.). Land Buy-Back Program for Tribal Nations. https://www.doi.gov/buybackprogram

"Health Equity Zones"
State of Rhode Island Department of Health. (January 22, 2025). Rhode Island's Health Equity Zones (HEZ). https://health.ri.gov/health-equity/rhode-islands-health-equity-zone-hez-initiative?pgm_id=1108

"Re-imagine food access possibilities"
Master, K. & Daniels, J. (2019). Desert wonderings: reimagining food access mapping. https://www.researchgate.net/publication/330647985_Desert_wonderings_reimagining_food_access_mapping

"Low income and low access communities"
USDA. (February 20, 2025). Food Access Research Atlas - Go to the Atlas. https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas

5. Economic Development

"74,000 people"
Rhode Island Food Policy Council. (n.d.). RI Food System Factbook. https://rifoodcouncil.org/factbook/

"$6.5 billion"
United States Census Bureau. (2022). EC2200BASIC: All Sectors: Summary Statistics for the U.S., States, and Selected Geographies: 2022. https://data.census.gov/table/ECNBASIC2022.EC2200BASIC?q=EC2200BASIC&g=040XX00US44&n=N0000.00

"Over 12%"
United States Census Bureau. (2022). EC2200BASIC: All Sectors: Summary Statistics for the U.S., States, and Selected Geographies: 2022. https://data.census.gov/table/ECNBASIC2022.EC2200BASIC?q=EC2200BASIC&g=040XX00US44&n=N0000.00

"Food preparation + serving jobs"
U.S. Bureau of Labor Statistics. (April 3, 2024). May 2023 State Occupational Employment and Wage Estimates: Rhode Island. https://www.bls.gov/oes/2023/may/oes_ri.htm

"Lowest median hourly wages"
New England Food System Planners Partnership. (n.d.). Inequality. https://nefoodsystemplanners.org/dashboard_posts/inequality/

"Occupational segregation"
Zhavoronkova, M., Khatter, R., & Brady, M. (March 29, 2022). Occupational Segregation in America. https://www.americanprogress.org/article/occupational-segregation-in-america/

"Quarterly Census of Employment and Wages"
U.S. Bureau of Labor Statistics. (n.d.). Quarterly Census of Employment and Wages. https://www.bls.gov/cew/

"Nonemployer Statistics"
United States Census Bureau. (December 12, 2024). Nonemployer Statistics. https://www.census.gov/programs-surveys/nonemployer-statistics.html

"Relish Rhody"
Rhode Island Commerce Corporation. (n.d.). Relish Rhody. https://www.visitrhodeisland.com/relish-rhody/

"Ocean State Accelerates"
Rhode Island Commerce Corporation. (n.d.). Ocean State Accelerates: Five-Year Economic Development Strategy. https://commerceri.com/wp-content/uploads/2023/12/00_OceanStateAccelerates_Strategy_FINAL.APPROVED_optimized.pdf

"RI Tabletop Show"
Hope & Main, RI Tabletop Show: A Buyers Marketplace, https://www.makefoodyourbusiness.org/ri-tabletop-show/

"SupplyRI"
SupplyRI. (n.d.). Supply Assistance, Networking, Opportunities & Resources. https://www.supplyrhodeisland.com/

"Small Business Loan Fund"
Rhode Island Commerce Corporation. (n.d.). Business Financing Overview. https://commerceri.com/financing/

"LASA Grants Program"
State of Rhode Island Department of Environmental Management. (November 14, 2024). Local Agriculture and Seafood Act (LASA) Grants Program. https://dem.ri.gov/agriculture/grants/lasa

"Hope & Main"
Hope & Main. (n.d.). Hope & Main. https://www.makefoodyourbusiness.org/

"Farm Fresh RI"
Farm Fresh RI. (n.d.). Farm Fresh Rhode Island - A hub for local food since 2004. https://www.farmfreshri.org/

"404 Broad Market"
Southside Community Land Trust. (n.d.). With our successful GROW! Capital Campaign behind us, 404 Broad Street is now a bustling Healthy Food Hub. https://www.southsideclt.org/grow/

"Community wealth building"
Theodos, B., Marx, R., & Nunna, T. (December 2021). Community Wealth-Building Models. https://www.urban.org/sites/default/files/2022-04/community-wealth-building-models_1.pdf

"Ocean State Accelerates"
Rhode Island Commerce Corporation. (n.d.). Ocean State Accelerates: Five-Year Economic Development Strategy. https://commerceri.com/wp-content/uploads/2023/12/00_OceanStateAccelerates_Strategy_FINAL.APPROVED_optimized.pdf

"New England Feeding New England"
New England Food System Planners Partnership. (n.d.). Report Components. https://nefoodsystemplanners.org/projects/report-components/

6. Stewardship of Food Producing Lands

"59,076 acres"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_001_001.pdf

"$22,000 per acre"
USDA. (August, 2024). Land Values 2024 Summary. https://downloads.usda.library.cornell.edu/usda-esmis/files/pn89d6567/vh53zm770/1c18g799h/land0824.PDF

"Farmers of color"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_063_063.pdf

"Trends"
American Farmland Trust. (2022). 2040 Future Scenarios: Rhode Island. https://storage.googleapis.com/csp-fut2040.appspot.com/state-reports/FUT2040_RI.pdf

"American Farmland Trust"
Hunter, M., Sorensen, A., Nogeire-McRae, T., Beck, S., Shutts, S., & Murphy, R. (June 29, 2022). Farms Under Threat 2040: Choosing an Abundant Future. https://farmlandinfo.org/publications/farms-under-threat-2040/

"Least amount of farmland"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_2_US_State_Level/st99_2_008_008.pdf

"Business as Usual scenario"
American Farmland Trust. (2022). 2040 Future Scenarios: Rhode Island. https://storage.googleapis.com/csp-fut2040.appspot.com/state-reports/FUT2040_RI.pdf

"Over 8,200 acres"
State Rhode Island Department of Environmental Management. (n.d.). Purchase of Farmland Development Rights. https://dem.ri.gov/sites/g/files/xkgbur861/files/2023-06/protectedfarmlandmaster.pdf

"Operating on 1-9 acres"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_009_010.pdf

"Woodland"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_007_008.pdf

"Nursery/greenhouse products"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_002_002.pdf

"Higher rates of rejection"
Minority Business Development Agency. (September 4, 2017). Executive Summary - Disparities in Capital Access between Minority and Non-Minority Businesses. https://archive.mbda.gov/page/executive-summary-disparities-capital-access-between-minority-and-non-minority-businesses.html

"56.6"
USDA. (2022). 2022 Census of Agriculture - State Data. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_052_052.pdf

"Climate-smart agriculture"
USDA, Climate-Smart Agriculture and Forestry, https://www.farmers.gov/conservation/climate-smart

"Department of Environmental Management"
State of Rhode Island Department of Environmental Management. (January 9, 2024). Farmland Preservation. https://dem.ri.gov/natural-resources-bureau/agriculture-and-forest-environment/agriculture/farmland-preservation

"Land Trust Council"
Rhode Island Land Trust Council. (n.d.). Rhode Island Land Trust Council. https://rilandtrusts.org/

"Southside Community Land Trust's"
Southside Community Land Trust. (n.d.). Southside Community Land Trust - We Help People Grow Food. https://www.southsideclt.org/

"Buy-protect-sell model"
American Farmland Trust. (n.d.). Land Protection Projects. https://farmland.org/project/land-protection-projects/

"Westland"
Reiley, L. (n.d.). Cutting-edge tech made this tiny country a major exporter of food. https://www.washingtonpost.com/business/interactive/2022/netherlands-agriculture-technology/

"Almeria"
Voiland, A. (n.d.). Almeria's Sea of Greenhouses. https://earthobservatory.nasa.gov/images/150070/almerias-sea-of-greenhouses

"Leamington"
Municipality of Leamington. (n.d.). Key Industries. https://www.leamington.ca/en/business/utilitiesandrates.aspx#Agriculture

"Rhode Island Agricultural Land Preservation Commission"
State of Rhode Island Department of Environmental Management. (January 9, 2024). Farmland Preservation. https://dem.ri.gov/natural-resources-bureau/agriculture-and-forest-environment/agriculture/farmland-preservation

7. Stewardship of Working Waterfronts

"$538 million"
Sproul, J., & Michaud, D. (2018). The Economic Impact of Rhode Island's Fisheries and Seafood Sector. https://static1.squarespace.com/static/5669f27fa128e6a7fba76540/t/5c1be77d575d1f5bdd0d8ad4/1545332611260/Fisheries+Report+FINAL+Web.pdf

"Commercial fisheries in Rhode Island"
Rhode Island Department of Environmental Management Division of Marine Fisheries (RIDEM DMF). (2024). Rhode Island Annual Fisheries Report: 2023. https://dem.ecms.ri.gov/sites/g/files/xkgbur861/files/2024-06/Annual_Fisheries_Report_2023.pdf

"First aquaculture lease"
Coastal Resources Management Council. (n.d.). Aquaculture in Rhode Island: 2006 Yearly Status Report. http://www.crmc.ri.gov/aquaculture/aquareport06.pdf

"RI Division of Coastal Resources"
Procaccianti Companies, Inc. & Rhode Island Department of Environmental Management. (September 30, 2021). Request For Proposals For the redevelopment and use of up to 5.03 acres of land situated at: The Galilee Fishing District 307 Great Island Road, Narragansett, Rhode Island. https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/bnatres/coastal/pdf/rfp-lighthouse-inn-parcels.pdf

"$538 million in sales (2016)"
University of Rhode Island. (2016). The Economic Impact of Rhode Island's Fisheries and Seafood Sector. https://static1.squarespace.com/static/5669f27fa128e6a7fba76540/t/5c1be77d575d1f5bdd0d8ad4/1545332611260/Fisheries+Report+FINAL+Web.pdf

"2023 Rhode Island Annual Fisheries Report"
Rhode Island Department of Environmental Management Division of Marine Fisheries (RIDEM DMF). (2024). Rhode Island Annual Fisheries Report: 2023. https://dem.ecms.ri.gov/sites/g/files/xkgbur861/files/2024-06/Annual_Fisheries_Report_2023.pdf

"EDA"
U.S. Economic Development Administration. (n.d.). U.S. Economic Development Administration. https://www.eda.gov/

"FEMA"
U.S. Department of Homeland Security. (n.d.). FEMA. https://www.fema.gov/

"2022"
Coastal Resources Management Council. (2022). Aquaculture in Rhode Island 2022. http://www.crmc.ri.gov/aquaculture/aquareport22.pdf

"Rhode Island Blue Economy Report"
McCann, J., Poli, S., Kennedy, S., O'Neil, E., Robadue, D., & Kotowicz, D. (March 2020). The Value of Rhode Island's Blue Economy. https://web.uri.edu/gso/wp-content/uploads/sites/916/BE-Report_2020_FINAL_edited-3-14-24-1-compressed.pdf

"Rhode Island has experienced over 10 inches of SLR"
Rhode Island Coastal Resources Management Council. (2018). BeachSAMP: Coastal trends and conditions. https://www.beachsamp.org/wp-content/uploads/2018/07/BeachSAMP_Ch2_Trends_061218_CRMCApproval.pdf

"IPCC"
Intergovernmental Panel on Climate Change. (2023). Sixth Assessment Report: Summary for policymakers. https://www.ipcc.ch/report/ar6/syr/

"$46 million for infrastructure projects"
Governor of Rhode Island. (2023). Governor McKee's proposed $46 million infrastructure investment. https://governor.ri.gov/press-releases/governor-mckees-proposed-46-million-infrastructure-investment-fy-2023-budget-aims

"Ocean warming and acidification"
Gattuso, J.-P., Magnan, A., Bille, R., Cheung, W. W. L., Howes, E. L., Joos, F., ... Turley, C. (2015). Contrasting futures for ocean and society from different anthropogenic CO_2 emissions scenarios. ICES Journal of Marine Science, 72(2), 563–576. https://www.sciencedirect.com/science/article/pii/S0308597X16302123?via%3Dihub

"Varying effects on working waterfronts"
Cooley, S. R., & Doney, S. C. (2009). Anticipating ocean acidification's economic consequences for commercial fisheries. Environmental Research Letters, 4(2), 024007. https://www.sciencedirect.com/science/article/pii/S0308597X16302123?via%3Dihub

"Town of Narragansett"
Town of Narragansett. (n.d.). Comprehensive Wastewater Facilities Plan. https://narragansettri.gov/DocumentCenter/View/16599/B23026-FULL-SPECS-Comprehensive-Wastewater-Facilities-Plan?bidId=

"Significant challenge to seafood processors"
Zhou, P., & Smith, D. R. (2000). Wastewater treatment in the seafood processing industry: Current practices and future directions. Journal of Cleaner Production, 8(6), 467–479. https://www.sciencedirect.com/science/article/abs/pii/S0959652600000743?via%3Dihub

"Seafood Processing effluent"
Zhou, P., & Smith, D. R. (2000). Wastewater treatment in the seafood processing industry: Current practices and future directions. Journal of Cleaner Production, 8(6), 467–479. https://linkinghub.elsevier.com/retrieve/pii/S0959652600000743

"Off-site location"
Town of Narragansett. (n.d.). Comprehensive Wastewater Facilities Plan. https://narragansettri.gov/DocumentCenter/View/16599/B23026-FULL-SPECS-Comprehensive-Wastewater-Facilities-Plan?bidId=

"Black sea bass"
Atlantic States Marine Fisheries Commission. (2021). Black Sea Bass Addendum XXXIII. https://asmfc.org/uploads/file/63e3ee81BSB_AddendumXXXIII_Revised_Aug_2021.pdf

"Menhaden"
Atlantic States Marine Fisheries Commission. (2023). Atlantic Menhaden Addendum I. https://asmfc.org/uploads/file/63efbc23AtlMenhadenAddendumI_RevisedFeb2023.pdf

"Aquaculture Industries"
Shellfish Restoration Initiative. (n.d.). The Shellfish Restoration Plan. https://www.shellfishri.com/the-plan/

"Rhode Island Coastal Resources Management Council"
Rhode Island Coastal Resources Management Council. (n.d.). Rhode Island Coastal Resources Management Council homepage. http://www.crmc.ri.gov/

"Gentrification"
National Oceanic and Atmospheric Administration. (n.d.). Working waterfronts and climate resilience. https://repository.library.noaa.gov/view/noaa/41656

"U.S."
Cutler, M., Silva, A., Gentile, L., & Colburn, L. (April 2022). Tracking shifts in the vulnerability and resiliency of commercial fishing vessel crew and hired captains in New England and the Mid-Atlantic. https://www.sciencedirect.com/science/article/abs/pii/S0308597X22000276?via%3Dihub

"Rhode Island"
Commercial Fisheries Research Foundation. (n.d.). The Rhode Island commercial fishing industry: Development of a profile. https://www.cfrfoundation.org/the-rhode-island-commercial-fishing-industry-development-of-a-profile

"RI Commercial Fisheries Blueprint for Resilience"
Commercial Fisheries Center of Rhode Island. (2018). Rhode Island Commercial Fisheries Blueprint for Resilience. https://571318.a2cdn1.secureserver.net/wp-content/uploads/2018/04/RI-Commercial-Fisheries-Blueprint-for-Resilience-1.pdf

"Commercial Fisheries Center of RI"
Commercial Fisheries Center of Rhode Island. (n.d.). Homepage. https://www.cfcri.org/

"Roger Williams University"
Roger Williams University. (n.d.). Aquaculture and Aquarium Science Program. https://www.rwu.edu/undergraduate/academics/programs/aquaculture-and-aquarium-science

"RI Sea Grant"
Rhode Island Sea Grant. (n.d.). Sustainable seafood. https://seagrant.gso.uri.edu/our-work/sustainable-seafood/

"Education Exchange"
Education Exchange. (n.d.). Trainings. https://edexri.org/trainings

"Sproul & Michaud (2018)"
Sproul, J., & Michaud, D. (2018). Rhode Island fisheries report. https://static1.squarespace.com/static/5669f27fa128e6a7fba76540/t/5c1be77d575d1f5bdd0d8ad4/1545332611260/Fisheries+Report+FINAL+Web.pdf

8. Community Based Food Production: Community Gardens and Urban Agriculture

"Urban agriculture"
U.S. Department of Agriculture. (n.d.). Urban Agriculture. National Agricultural Library. https://www.nal.usda.gov/farms-and-agricultural-production-systems/urban-agriculture

"Zoning laws"
Healthy Food Policy Project. (n.d.). Zoning for urban agriculture. https://healthyfoodpolicyproject.org/key-issues/zoning-for-urban-agriculture

"113 community gardens and urban farms"
Rhode Island Food Policy Council. (December 2023). Urban farming and small scale farming fact sheet. https://docs.google.com/document/d/1GywFNY36ghu50Hb9-_inPGhh_fRdx4Yo/edit

"Southside Community Land Trust"
Southside Community Land Trust. (July 14, 2024). Farm-to-Market Center comes alive in July. https://www.southsideclt.org/farm-to-market-center-comes-alive-in-july/

"Urban Edge Farm"
U.S. Department of Agriculture. (n.d.). Urban agriculture. National Agricultural Library. https://www.nal.usda.gov/farms-and-agricultural-production-systems/urban-agriculture

"Good Earth Farm"
Southside Community Land Trust. (n.d.). The Good Earth Farm & Garden Center. https://www.southsideclt.org/gef/

"Southside Community Land Trust"
Southside Community Land Trust. (n.d.). Homepage. https://www.southsideclt.org/

"Office of Urban Agriculture and Innovation Production"
U.S. Department of Agriculture. (n.d.). Urban agriculture and innovative production. https://www.usda.gov/topics/urban/innovative-production

"Urban Hubs"
U.S. Department of Agriculture. (n.d.). Urban service centers for urban growers. https://www.farmers.gov/your-business/urban-growers/urban-service-centers

"Natural Resources Conservation Service"
U.S. Department of Agriculture, Natural Resources Conservation Service. (n.d.). Rhode Island state office contacts. https://www.nrcs.usda.gov/contact/state-office-contacts/rhode-island-state-office

"Northern Rhode Island Conservation District"
Narragansett Bay Research Institute & Conservation District. (n.d.). Home. https://www.nricd.org/

"Urban Farming and Small Scale Farming Fact Sheet"
Rhode Island Food Policy Council. (December 2023). Urban farming and small scale farming fact sheet. https://docs.google.com/document/d/1GywFNY36ghu50Hb9-_inPGhh_fRdx4Yo/edit

"Work"
University of Rhode Island. (April 5, 2023). The Green City URI team wins $970,000 grant to map alternative urban food networks. https://www.uri.edu/news/2023/04/the-green-city-uri-team-wins-970000-grant-to-map-alternative-urban-food-networks/

"Farm to Market Center"
Southside Community Land Trust. (July 10, 2023). Farm to market center comes alive in July. https://www.southsideclt.org/farm-to-market-center-comes-alive-in-july/

9. Fisheries, Agriculture, and Aquaculture, Business Viability

"Relatively consistent"
U.S. Department of Agriculture, National Agricultural Statistics Service. (2022). 2022 Census of Agriculture: Rhode Island state and county data (Vol. 1, Ch. 1). https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_001_001.pdf

"Steadily increased"
Rhode Island Coastal Resources Management Council. (2022). Rhode Island aquaculture report: 2022. http://www.crmc.ri.gov/aquaculture/aquareport22.pdf

"2022 Rhode Island Annual Fisheries Report"
Rhode Island Department of Environmental Management. (2023). Annual report 2022. https://dem.ecms.ri.gov/sites/g/files/xkgbur861/files/2023-07/AnnualRpt_2022.pdf

"2022 Census of Agriculture"
U.S. Department of Agriculture, National Agricultural Statistics Service. (2022). 2022 Census of Agriculture: Rhode Island state and county data (Vol. 1, Ch. 1). https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_002_002.pdf

"Aquaculture in Rhode Island 2022"
Rhode Island Coastal Resources Management Council. (2022). Rhode Island aquaculture report: 2022. http://www.crmc.ri.gov/aquaculture/aquareport22.pdf

"Quarterly Census of Employment and Wages"
U.S. Bureau of Labor Statistics. (n.d.). Covered employment and wages. https://www.bls.gov/cew/

"Nonemployer Statistics"
U.S. Census Bureau. (n.d.). Nonemployer statistics. https://www.census.gov/programs-surveys/nonemployer-statistics.html

"Rhode Island Commercial Fisheries Blueprint for Resilience"
Rhode Island Department of Environmental Management. (2018). Rhode Island commercial fisheries blueprint for resilience. https://571318.a2cdn1.secureserver.net/wp-content/uploads/2018/04/RI-Commercial-Fisheries-Blueprint-for-Resilience-1.pdf

"Direct sale dealers license"
Rhode Island Department of Environmental Management. (2024). Direct sales and farm market regulations. https://dem.ri.gov/sites/g/files/xkgbur861/files/2024-05/directsales.pdf

"USDA"
U.S. Department of Agriculture, National Agricultural Statistics Service. (2022). 2022 Census of Agriculture: Rhode Island state and county data (Vol. 1, Ch. 1). https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_001_001.pdf

"2022 Census of Agriculture"
U.S. Department of Agriculture, National Agricultural Statistics Service. (2022). 2022 Census of Agriculture: Rhode Island state and county data (Vol. 1, Ch. 1). https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_002_002.pdf

"2022"
Rhode Island Coastal Resources Management Council. (2022). Rhode Island aquaculture report: 2022. http://www.crmc.ri.gov/aquaculture/aquareport22.pdf

"Rising Production Expenses"
U.S. Department of Agriculture, National Agricultural Statistics Service. (n.d.). Farm production expenditures: Charts and maps. https://www.nass.usda.gov/Charts_and_Maps/Farm_Production_Expenditures/arms3cht1.php

"Farmers"
U.S. Department of Agriculture, National Agricultural Statistics Service. (2022). 2022 Census of Agriculture: Rhode Island state and county data (Vol. 1, Ch. 1). https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_052_052.pdf

"12.7%"
U.S. Department of Agriculture, National Agricultural Statistics Service. (2022). 2022 Census of Agriculture: U.S. state and county data (Vol. 1, Ch. 2). https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_2_US_State_Level/st99_2_002_002.pdf

"Special Legislative Commission"
Rhode Island General Assembly. (May 31, 2024). Quahog Commission final report. https://www.rilegislature.gov/commissions/QJC/commdocs/05-31-2024-Quahog%20Commission%20Final%20Report%20PDF%20Signed%20by%20Co-Chairs.pdf

"Living wage"
Massachusetts Institute of Technology. (n.d.). Living wage calculator: Rhode Island. https://livingwage.mit.edu/states/44

"Registered Apprenticeship Program"
Rhode Island Department of Labor and Training. (n.d.). Apprenticeship programs. https://dlt.ri.gov/regulation-and-safety/apprenticeship

"New and beginning"
U.S. Department of Agriculture, National Agricultural Statistics Service. (2022). 2022 Census of Agriculture: Rhode Island state and county data (Vol. 1, Ch. 1). https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_070_070.pdf

"Cooperative extension"
University of Rhode Island, Cooperative Extension. (n.d.). University of Rhode Island Cooperative Extension. https://web.uri.edu/coopext/

"Vermont Farm and Forest Viability Program"
Vermont Housing & Conservation Board. (n.d.). Farm viability program. https://vhcb.org/viability

10. Water Quality and Soil Health

"Environmental justice communities"
Rhode Island Department of Environmental Management. (n.d.). Environmental justice initiatives. https://dem.ri.gov/environmental-protection-bureau/initiatives/environmental-justice

"Polyaromatic hydrocarbons"
Barton, D. J., & Mathews, K. H. (2015). Environmental justice in agriculture: An examination of the racial/ethnic disparities in land access and ownership. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4673601/

"PFAS"
U.S. Environmental Protection Agency. (n.d.). PFAS explained. https://www.epa.gov/pfas/pfas-explained

"Soil health"
U.S. Department of Agriculture, Natural Resources Conservation Service. (n.d.). Soil health. https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/soils/soil-health

"Lead"
Rhode Island Department of Health. (n.d.). Lead in water. https://health.ri.gov/water/about/lead/

"Blue economy"
Rhode Island Commerce Corporation. (n.d.). Blue economy. https://commerceri.com/industries/blue-economy/

"Shellfishing"
Rhode Island Department of Education. (n.d.). Rhode Island school facilities map. https://ridemgis.maps.arcgis.com/apps/webappviewer/index.html?id=110a7a4aec914a3492117e9848fe67da#

"Shellfish can be safely harvested"
Rhode Island Department of Environmental Management. (May 2024). Shellfish regulations. https://dem.ri.gov/sites/g/files/xkgbur861/files/2024-05/shellfish.pdf

"Water systems"
MacLeod, L. (April 7, 2024). What's on tap in Rhode Island's state water system. https://www.browndailyherald.com/article/2024/04/whats-on-tap-in-rhode-islands-state-water-system

"Priority areas"
Narragansett Bay Estuary Program. (2021). Environmental Justice in the Narragansett Bay Region. https://storymaps.arcgis.com/stories/61682f2963364fbbbc832c53a7cc7d09

"USDA NRCS funding"
Environmental Working Group. (n.d.). Rhode Island conservation scores. https://conservation.ewg.org/region.php?fips=44000&regionname=RhodeIsland

"Shellfish Harvest Restrictions"
Rhode Island Department of Education. (n.d.). Rhode Island school facilities map. https://ridemgis.maps.arcgis.com/apps/webappviewer/index.html?id=110a7a4aec914a3492117e9848fe67da

"Maine"
Baker, M. (September 21, 2024). Farmers face rising risk of PFAS contamination in meat and soil. https://www.nytimes.com/2024/09/21/climate/farm-pfas-meat-poison-sewage-sludge.html

"DEM tested a sample set of wells"
Rhode Island Department of Environmental Management. (November 2023). PFAS source investigation plan. https://dem.ri.gov/sites/g/files/xkgbur861/files/2023-11/pfas-source-investigation-plan_0.pdf

"Traditional Ecological Knowledge"
Bureau of Indian Affairs. (n.d.). Traditional knowledge in fuels management. https://www.bia.gov/service/fuels-management/traditional-knowledge

"Narragansett Indian Tribe"
Narragansett Indian Tribe. (n.d.). Home. https://narragansettindiannation.org/

11. Supply Chain Resilience

"More than 90%"
New England Food System Planners Partnership. (2024). Rhode Island Local Food Count 2022. https://nefoodsystemplanners.org/wp-content/uploads/Rhode-Island-Local-Food-Count_2022.pdf

"Resilience"
Harris, J., & Spiegel, E. J. (2019). Food systems resilience: Concepts & policy approaches. https://www.vermontlaw.edu/wp-content/uploads/2024/07/Food-Systems-Resilience_Concepts-Policy-Approaches.pdf

"Food industry market consolidation"
Hendrickson, M. K., Howard, P. H., Miller, E. M., & Constance, D. H. (2024). The food system: Concentration and its impacts. https://farmaction.us/concentrationreport/

"Significant cost"
The Rockefeller Foundation. (2021, July 14). True cost of food: Measuring what matters to transform the U.S. food system. https://www.rockefellerfoundation.org/report/true-cost-of-food-measuring-what-matters-to-transform-the-u-s-food-system/

"Rhode Island Local Food Count, 2022"
New England Food System Planners Partnership. (2024). Rhode Island Local Food Count 2022. https://nefoodsystemplanners.org/wp-content/uploads/Rhode-Island-Local-Food-Count_2022.pdf

"$234 million"
New England Food System Planners Partnership. (2024). Rhode Island Local Food Count 2022. https://nefoodsystemplanners.org/wp-content/uploads/Rhode-Island-Local-Food-Count_2022.pdf

"84,400 people"
Rhode Island Community Food Bank. (2024). 2024 Status Report on Hunger in Rhode Island. https://rifoodbank.org/wp-content/uploads/2024/11/2024-Status-Report_Web.pdf

"Right to food"
Maine Municipal Association. (2021, November 19). Maine's new 'right to food'. https://www.memun.org/Training/maines-new-right-to-food

"UNFI"
United Natural Foods, Inc. (n.d.). UNFI: Better food. Better future. https://www.unfi.com/

"Red Tomato"
Red Tomato. (n.d.). Home. https://redtomato.org/

"New England Feeding New England"
New England Food System Planners Partnership. (n.d.). New England Feeding New England: Cultivating A Reliable Food Supply. https://nefoodsystemplanners.org/

"Climate Resilience Fund"
Rhode Island Department of Environmental Management. (n.d.). Climate Resilience Fund. https://dem.ri.gov/environmental-protection/initiatives/acting-climate-change/financial-assistance/climate-resilience

"Infrastructure Bank's Municipal Resilience Program"
Rhode Island Infrastructure Bank. (n.d.). Municipal Resilience Program. https://www.riib.org/solutions/programs/municipal-resilience-program/

"Growing Futures"
Growing Futures RI. (n.d.). Home. https://growingfuturesri.org/

"Resilient Food System Infrastructure Program"
U.S. Department of Agriculture, Agricultural Marketing Service. (n.d.). Resilient Food Systems Infrastructure Program. https://www.ams.usda.gov/services/grants/rfsi

"LASA"
Rhode Island Department of Environmental Management. (n.d.). Local Agriculture and Seafood Act (LASA) Grants Program. https://dem.ri.gov/agriculture/grants/lasa

"RI Farm & Sea to School Network"
Rhode Island Farm to School Network. (n.d.). Home. https://www.rifarmtoschool.org/

"RI Grown"
Rhode Island Department of Environmental Management. (n.d.). RI Grown: Buy Fresh, Get Local. https://dem.ri.gov/natural-resources-bureau/agriculture-and-forest-environment/agriculture/ri-grown-buy-fresh-get

"RI Seafood"
Rhode Island Seafood Marketing Collaborative. (n.d.). Welcome. https://seafood.ri.gov/

12. Food and Beverage Business Viability

"Chi Kitchen"
Chi Kitchen. (n.d.). Home. https://chikitchen.com/

"Feast & Fettle"
Feast & Fettle. (n.d.). Meals you love, without the cooking. https://www.feastandfettle.com/

"Paleonola"
Paleonola. (n.d.). Home. https://paleonola.com/

"Bakeries and Tortilla Manufacturing"
U.S. Bureau of Labor Statistics. (2023, May). Bakeries and tortilla manufacturing: May 2023 occupational employment and wage estimates. https://www.bls.gov/oes/2023/may/naics4_311800.htm

"Calise Bakery"
Calise & Sons Bakery, Inc. (n.d.). Home. https://www.calisebakery.com/

"Animal Slaughtering and Processing"
U.S. Bureau of Labor Statistics. (2023, May). Animal slaughtering and processing: May 2023 occupational employment and wage estimates. https://www.bls.gov/oes/2023/may/naics4_311600.htm

"Quality Food Co."
Quality Food Company, Inc. (n.d.). Home. https://www.qualityfoodcompany.com/

"Over $872 million in sales"
U.S. Census Bureau. (n.d.). Annual Survey of Manufactures: Data tables. https://www.census.gov/programs-surveys/asm/data/tables.html

"Nonemployers"
U.S. Census Bureau. (n.d.). Nonemployer Statistics: Data tables. https://www.census.gov/programs-surveys/nonemployer-statistics/data/tables.html

"Cottage Food Law"
Rhode Island Department of Health. (n.d.). Cottage foods. https://health.ri.gov/food/about/cottagefoods/

"Hope & Main"
Hope & Main. (n.d.). Make Food Your Business. https://makefoodyourbusiness.org/

"Town Made"
Town Made. (n.d.). Home. https://www.townmade.com/

"Farm Fresh RI"
Farm Fresh Rhode Island. (n.d.). Home. https://www.farmfreshri.org/

"11.2% of total manufacturing sales"
U.S. Census Bureau. (2024). 2022 Economic Census: All sectors: Summary statistics for the U.S., states, and selected geographies: Table EC2200BASIC for Rhode Island. https://data.census.gov/table/ECNBASIC2022.EC2200BASIC?q=EC2200BASIC&g=040XX00US44&n=N0000.00

"Minority or Women Business Enterprises"
Rhode Island Division of Equity, Diversity & Inclusion. (n.d.). Home. https://dedi.ri.gov/

"Backyard Food Company"
The Backyard Food Company, https://thebackyardfoodcompany.com/

"Plants to Food"
Plants to Food. (n.d.). Home. https://plantstofoods.com/

"Rhode Island Food Code"
Rhode Island Department of State. (2025). Rhode Island Food Code (216-RICR-50-10-1). https://rules.sos.ri.gov/regulations/part/216-50-10-1

"Good Manufacturing Practices"
Rhode Island Department of State. (2022). Good Manufacturing Practices for Food (216-RICR-50-10-4). https://rules.sos.ri.gov/regulations/part/216-50-10-4

"Produce Safety Rule"
U.S. Food and Drug Administration. (2016, January 26). FSMA final rule on produce safety. https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-produce-safety

"Food Safety Plans"
Rhode Island Department of Health. (n.d.). Food protection, center for. https://health.ri.gov/programs/detail.php?pgm_id=134

"Quarterly Census of Employment and Wages"
U.S. Bureau of Labor Statistics. (n.d.). Quarterly Census of Employment and Wages. https://www.bls.gov/cew/

"Nonemployer Statistics"
U.S. Census Bureau. (n.d.). Nonemployer Statistics. https://www.census.gov/programs-surveys/nonemployer-statistics.html

"Palate Pack"
Palate Pack. (n.d.). Home. https://www.palatepack.com/

"22%"
U.S. Census Bureau. (n.d.). Rhode Island profile. https://data.census.gov/profile/Rhode_Island?g=040XX00US44

"Peer-to-peer lending"
Investopedia, (September 5, 2024), "What is Peer-to-Peer (P2P) Lending? Definition and How It Works," https://www.investopedia.com/terms/p/peer-to-peer-lending.asp

"Near equity financing"
Flexible Capital Fund. (n.d.). Home. https://flexiblecapitalfund.com/

"Program-related investments"
Reinvestment Fund. (n.d.). Equitable food systems. https://www.reinvestment.com/focus-areas/equitable-food-systems/

"CommonWealth Kitchen"
CommonWealth Kitchen. (n.d.). Home. https://commonwealthkitchen.org/

13. Labor and Workforce Development

"U.S. GAO"
U.S. Government Accountability Office. (2020). Federal social safety net programs: Millions of full-time workers rely on federal health care and food assistance programs (Report No. GAO-21-45). https://www.gao.gov/assets/d2145.pdf

"4.6%"
Federal Reserve Bank of St. Louis. (n.d.). Unemployment rate in Rhode Island (RIUR). https://fred.stlouisfed.org/series/RIUR

"Providence and Warwick"
Rhode Island Department of Labor and Training. (2024). State of the state: Profiles of Rhode Island cities and towns. https://dlt.ri.gov/sites/g/files/xkgbur571/files/2024-08/stateofthestate.pdf

"1.5%"
Rhode Island Department of Labor and Training. (2024). State of the state: A statistical profile of Rhode Island's cities and towns. https://dlt.ri.gov/sites/g/files/xkgbur571/files/2024-08/stateofthestate.pdf

"16.7%"
Rhode Island Department of Labor and Training. (2024). State of the state: A statistical profile of Rhode Island's cities and towns. https://dlt.ri.gov/sites/g/files/xkgbur571/files/2024-08/stateofthestate.pdf

"Ranked second"
Rhode Island Commerce. (2022). Rhode Island food industry fact sheet 2022. https://commerceri.com/wp-content/uploads/2022/09/RI-Food-Industry-Fact-Sheet-2022.pdf

"EPI"
Economic Progress Institute. (2024). 2024 Rhode Island Standard of Need. https://rhodeislandcurrent.com/wp-content/uploads/2024/09/RISN_2024_web_14.pdf

"$81,860"
Federal Reserve Bank of St. Louis. (2024). Real median household income in Rhode Island (MEHOINUSRIA672N). https://fred.stlouisfed.org/series/MEHOINUSRIA672N

"Governor's Workforce Board"
Governor's Workforce Board. (n.d.). Home. https://gwb.ri.gov/

"Work Immersion"
Governor's Workforce Board. (n.d.). Work Immersion. https://gwb.ri.gov/programs-services/work-immersion

"Incumbent Worker Training Grants"
Governor's Workforce Board. (n.d.). Incumbent Worker Training Grants. https://gwb.ri.gov/programs-services/incumbent-worker-training-grants

"Real Jobs RI"
Rhode Island Department of Labor and Training. (n.d.). Real Jobs Rhode Island. https://dlt.ri.gov/employers/real-jobs-rhode-island

"Real Skills for Youth"
Governor's Workforce Board. (n.d.). Real Skills for Youth. https://gwb.ri.gov/programs-services/real-skills-youth

"College of Food Innovation & Technology"
Johnson & Wales University. (n.d.). College of Food Innovation & Technology. https://www.jwu.edu/academics/colleges/college-of-food-innovation-technology.html

"University of Rhode Island Cooperative Extension"
University of Rhode Island Cooperative Extension. (n.d.). Home. https://web.uri.edu/coopext/

"U.S. Bureau of Labor Statistics, Occupational Employment and Wage Statistics"
U.S. Bureau of Labor Statistics. (2024). May 2024 metropolitan and nonmetropolitan area occupational employment and wage estimates. https://www.bls.gov/oes/current/oessrcma.htm#C

"Living Wage Calculator"
Glasmeier, A. K. (2025). Living wage calculation for Rhode Island. https://livingwage.mit.edu/states/44

"Most unionized states"
U.S. Bureau of Labor Statistics. (2023, February 15). Union members in Rhode Island — 2022. https://www.bls.gov/regions/northeast/news-release/unionmembership_rhodeisland.htm

"Fuerza Laboral"
Fuerza Laboral. (n.d.). Home. https://www.fuerza-laboral.org/

"Polaris MEP"
Polaris MEP. (n.d.). Home. https://polarismep.org/

"RI Nursery and Landscape Association"
Rhode Island Nursery & Landscape Association. (n.d.). Home. https://rinla.org/

"Real Jobs RI"
Rhode Island Department of Labor and Training. (n.d.). Real Jobs Rhode Island. https://dlt.ri.gov/employers/real-jobs-rhode-island

14. Food Systems and Nutrition Education

"Food systems literacy"
Krause, C., Sommerhalder, K., Beer-Borst, S., & Abel, T. (2016). Nutrition and food literacy: Framing the challenges to health communication. https://doi.org/10.3389/fpubh.2016.00248

"University of Rhode Island"
University of Rhode Island. (n.d.). Home. https://www.uri.edu/

"Southside Community Land Trust"
Southside Community Land Trust. (n.d.). Home. https://www.southsideclt.org/

"Farm Fresh Rhode Island"
Farm Fresh Rhode Island. (n.d.). Home. https://www.farmfreshri.org/

"Save the Bay"
Save The Bay. (n.d.). Home. https://savebay.org/

"Ashawaug Farm"
Spears, D., & Spears, C. (n.d.). The Ashawaug Project. https://www.ashawaugproject.com/

"Aquidneck Community Table"
Aquidneck Community Table. (n.d.). Home. https://aquidneckcommunitytable.org/

"Movement Education Outdoors"
Movement Education Outdoors. (n.d.). Home. https://meoutdoorsri.com/

"Majority participate"
U.S. Department of Agriculture, Food and Nutrition Service. (2025). Census Data Explorer. https://farmtoschoolcensus.fns.usda.gov/census-results/census-data-explorer

"Longer than 3 years"
U.S. Department of Agriculture, Food and Nutrition Service. (2025). Rhode Island Farm to School Census Results. https://farmtoschoolcensus.fns.usda.gov/census-results/states/ri

"Rhode Island Department of Education"
Rhode Island Department of Education. (n.d.). Home. https://ride.ri.gov/

"RI Farm & Sea to School Network"
Rhode Island Farm to School Network. (n.d.). Home. https://www.rifarmtoschool.org/

"About 14%"
USDA Farm to School Census. (2023). https://farmtoschoolcensus.fns.usda.gov/census-results/states/ri

"Johnson and Wales' Sustainable Food Systems Program"
Johnson & Wales University. (2024). Sustainable Food Systems – B.S. https://catalog.jwu.edu/courses/sfs/

"URI's Agriculture and Food Systems Fellows Program"
University of Rhode Island Cooperative Extension. (n.d.). Agriculture and Food Systems Fellows Program. https://web.uri.edu/coopext/programs/food-systems/afsfp/

"2019 Farm to School Census"
U.S. Department of Agriculture, Food and Nutrition Service. (2025). Rhode Island Farm to School Census results. https://farmtoschoolcensus.fns.usda.gov/census-results/states/ri

"RIDOH State Physical Activity and Nutrition (SPAN)"
Centers for Disease Control and Prevention. (2024, November 13). State Physical Activity and Nutrition. https://www.cdc.gov/span/php/about/index.html

"Community Health Workers"
Rhode Island Department of Health. (n.d.). Community health workers. https://health.ri.gov/communities/about/workers/

"URI SNAP-Ed Nutrition Education"
University of Rhode Island. (n.d.). SNAP-Ed – Community Nutrition Education. https://web.uri.edu/community-nutrition/snaped/

15. Consumer Demand, Eating Behaviors, and Foodways

"Social determinants of health"
Centers for Disease Control and Prevention. (2024, January 17). Why is addressing social determinants of health important? https://www.cdc.gov/about/priorities/why-is-addressing-sdoh-important.html

"Social determinants of health"
Centers for Disease Control and Prevention. (2024, January 17). Why is addressing social determinants of health important? https://www.cdc.gov/about/priorities/why-is-addressing-sdoh-important.html

"Commercial determinants of health"
The Lancet. (2023). Commercial determinants of health. https://www.thelancet.com/series/commercial-determinants-health

"Healthy Eating Index"
U.S. Department of Agriculture, Food and Nutrition Service, & U.S. Department of Health and Human Services, National Cancer Institute. (2023). Average Healthy Eating Index-2020 scores for the U.S. population – Total ages 2 and older and by age groups, WWEIA, NHANES 2017–2018. https://fns-prod.azureedge.us/sites/default/files/media/file/AverageHealthyEatingIndex-2020ScoresfortheUSPopulation.pdf

"Lowest % of adults with obesity"
America's Health Rankings. (2023). Obesity in Rhode Island. https://www.americashealthrankings.org/explore/measures/Obesity/Obesity_Male_C/RI

"Black"
America's Health Rankings. (2023). Obesity in Rhode Island: Non-Hispanic Black adults. https://www.americashealthrankings.org/explore/measures/Obesity/Obesity_Black_C/RI

"Hispanic/Latino"
America's Health Rankings. (2023). Obesity in Rhode Island: Hispanic adults. https://www.americashealthrankings.org/explore/measures/Obesity/Obesity_Hispanic_C/RI

"Study"
Martínez Steele, E., Baraldi, L. G., da Costa Louzada, M. L., Moubarac, J.-C., Mozaffarian, D., & Monteiro, C. A. (2016). Ultra-processed foods and added sugars in the US diet: Evidence from a nationally representative cross-sectional study. https://doi.org/10.1136/bmjopen-2015-009892

"Consumer Expenditure Survey (Region of Residence)"
U.S. Bureau of Labor Statistics. (2024). Consumer Expenditure Survey: Geographic mean tables. https://www.bls.gov/cex/tables/geographic/mean.htm#state

"Food Price Environment"
U.S. Department of Agriculture, Economic Research Service. (2025, January 5). Food price environment: Interactive visualization. https://www.ers.usda.gov/data-products/food-price-outlook/food-price-environment-interactive-visualization/

"Consumer Price Index"
U.S. Bureau of Labor Statistics. (2025, April 10). Consumer Price Index for All Urban Consumers: Food in U.S. City Average. https://fred.stlouisfed.org/series/CPIUFDSL

"50-State Food System Scorecard"
Union of Concerned Scientists. (2018, June 20). 50-state food system scorecard. https://www.ucsusa.org/resources/50-state-food-system-scorecard#bystate

"Fruit"
Centers for Disease Control and Prevention. (2025). BRFSS Prevalence & Trends Data: Explore by Location – Fruit Consumption, 2021: Minnesota. https://nccd.cdc.gov/BRFSSPrevalence/rdPage.aspx?rdReport=DPH_BRFSS

"Vegetables"
Centers for Disease Control and Prevention. (2025). BRFSS Prevalence & Trends Data: Explore by Location – Vegetable Consumption, 2021: Minnesota. https://nccd.cdc.gov/BRFSSPrevalence/rdPage.aspx?rdReport=DPH_BRFSS

"Where almost two thirds (65%) of Rhode Island's children living in poverty reside"
Rhode Island KIDS COUNT. (2024, May). 2024 Rhode Island KIDS COUNT Factbook. https://rikidscount.org/wp-content/uploads/2024/05/factbook2024_final-1.pdf

"Diet-related disparities"
Mullin, G. E., Fan, L., Sulo, S., & Partridge, J. (2018). The association between oral nutritional supplements and 30-day hospital readmissions of malnourished patients at a US academic medical center. https://doi.org/10.1016/j.jand.2018.06.007

"45%"
Cameron, A. J., Hodge, A. M., & Zimmet, P. Z. (2018). Association between dietary factors and mortality from heart disease, stroke, and type 2 diabetes in the United States. https://doi.org/10.1001/jama.2018.10065

"25% from 2019 to 2023"
U.S. Department of Agriculture, Economic Research Service. (2025, February 14). Food prices and spending. https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-prices-and-spending/

"SNAP benefits"
U.S. Department of Agriculture, Food and Nutrition Service. (2025, January 24). Benefit redemption patterns in the Supplemental Nutrition Assistance Program (SNAP). https://www.fns.usda.gov/research/snap/benefit-redemption-patterns

"Two to three weeks"
Hamrick, K. S., & Andrews, M. (2016). SNAP participants' eating patterns over the benefit month: A time use perspective. https://doi.org/10.1371/journal.pone.0158422

"SNAP Eat Well, Be Well Pilot Incentive Program"
Rhode Island Department of Human Services. (2025, April 25). SNAP Eat Well, Be Well pilot incentive program. https://dhs.ri.gov/programs-and-services/supplemental-nutrition-assistance-program-snap/supplemental-nutrition-8

"Narragansett Indian Tribe"
Narragansett Indian Tribe. (2025). Official website of the Narragansett Indian Tribe. https://narragansettindiannation.org/

"Sankofa"
West Elmwood Housing Development Corporation. (n.d.). Sankofa Initiative. https://www.westelmwood.org/sankofa

"Food literacy"
Silva, P., Araújo, R., Lopes, F., & Ray, S. (2023). Nutrition and food literacy: Framing the challenges to health communication. https://doi.org/10.3390/nu15224708

16. Food and Nutrition Security

"Hypertension"
Vazquez, J. T., Feng, S. N., Orr, C. J., & Berkowitz, S. A. (2021). Food insecurity and cardiometabolic conditions: A review of recent research. https://doi.org/10.1007/s13668-021-00364-2

"Diabetes"
Hill-Briggs, F., Adler, N. E., Berkowitz, S. A., Chin, M. H., Gary-Webb, T. L., Navas-Acien, A., Thornton, P. L., & Haire-Joshu, D. (2020). Social determinants of health and diabetes: A scientific review. https://doi.org/10.2337/dci20-0053

"Cancer"
Chen, K. Y., Blackford, A. L., & Hussaini, S. M. Q. (May 31, 2023). County-level food insecurity to predict cancer incidence and mortality in the United States, 2015-2020. https://ascopubs.org/doi/10.1200/JCO.2023.41.16_suppl.10539

"Higher healthcare costs"
Palakshappa, D., Garg, A., Peltz, A., Wong, C. A., Cholera, R., & Berkowitz, S. A. (2023). Food insecurity was associated with greater family health care expenditures in the US, 2016–17. https://doi.org/10.1377/hlthaff.2022.00414

"COVID-19 pandemic"
Chang, L. (April 3, 2024). Hunger after crisis: Exploring post-pandemic trends in food insecurity. https://sites.brown.edu/publichealthjournal/2024/04/03/hunger-after-crisis-exploring-post-pandemic-trends-in-food-insecurity/

"2024"
Rhode Island Community Food Bank. (2024). 2024 Status Report on Hunger in Rhode Island. https://rifoodbank.org/wp-content/uploads/2024/11/2024-Status-Report_Web.pdf

"52,000 people"
Rhode Island Community Food Bank. (2023). 2023 Status Report on Hunger in Rhode Island. https://rifoodbank.org/wp-content/uploads/2023/11/2023-RICFB-StatusReport-FINAL-digital.pdf

"88,000 people live in poverty"
U.S. Census Bureau. (n.d.). Small Area Income and Poverty Estimates (SAIPE): Rhode Island counties. https://www.census.gov/data-tools/demo/saipe/#/?s_state=44&s_county=44001,44003,44005,44007,44009&s_district=&s_geography=county

"3,800"
U.S. Census Bureau American Community Survey, Table B17010I: Poverty Status in the Past 12 Months of Families by Family Type by Presence of Related Children Under 18 Years by Age of Related Childen (Hispanic or Latino), 2023 5-Year Estimates, https://data.census.gov/table/ACSDT5Y2023.B17010I?q=Table+B17010I&g=040XX00US44

"Live below poverty level"
U.S. Census Bureau. (2024). Table B17010I: Poverty status in the past 12 months by household type by presence of related children under 18 years by household income in the past 12 months (in 2022 inflation-adjusted dollars) for the population in households: 2022 American Community Survey 5-Year Estimates. https://data.census.gov/table/ACSDT5Y2022.B17010I?q=Table%20B17010I&g=040XX00US44

"Special Supplemental Nutrition Program for Women, Infants, and Children"
Rhode Island Department of Health. (n.d.). Women, Infants and Children (WIC) Services. https://health.ri.gov/find/services/detail.php?id=44

"Supplemental Nutrition Assistance Program"
Rhode Island Department of Human Services. (n.d.). Supplemental Nutrition Assistance Program (SNAP). https://dhs.ri.gov/programs-and-services/supplemental-nutrition-assistance-program-snap

"Bonus Bucks"
Farm Fresh Rhode Island. (n.d.). Bonus Bucks: Local food bonuses. https://www.farmfreshri.org/programs/farmers-markets/bonus-bucks/

"Eat Well, Be Well Program"
Rhode Island Department of Human Services. (n.d.). SNAP Eat Well, Be Well Pilot Incentive Program. https://dhs.ri.gov/programs-and-services/supplemental-nutrition-assistance-program-snap/supplemental-nutrition-8

"CDC's State Physical Activity and Nutrition"
Centers for Disease Control and Prevention. (n.d.). State Physical Activity and Nutrition (SPAN) program. https://www.cdc.gov/span/php/about/index.html

"Small Area Income and Poverty Estimates"
U.S. Census Bureau. (2024). Estimated percent of people of all ages in poverty for Rhode Island (PPAARI44000A156NCEN). https://fred.stlouisfed.org/series/PPAARI44000A156NCEN

"USDA Economic Research Service, Household Food Security in the United States"
Rabbitt, M. P., Reed-Jones, M., Hales, L. J., & Burke, M. P. (2024). Household food security in the United States in 2023. https://doi.org/10.32747/2024.8583175.ers

"Benefit cliff"
Stevens, W. (January 17, 2024). Mitigating SNAP benefits cliffs. https://www.ncsl.org/human-services/mitigating-snap-benefits-cliffs

"Status Report on Hunger in Rhode Island"
Rhode Island Community Food Bank. (2023). 2023 Status Report on Hunger in Rhode Island. https://rifoodbank.org/wp-content/uploads/2023/11/2023-RICFB-StatusReport-FINAL-digital.pdf

"Receipt of Food Stamps/SNAP in Past 12 Months by Race of Householder"
U.S. Census Bureau. (2024). Table B22005B: Receipt of Food Stamps/SNAP in the past 12 months by race of householder for Rhode Island: 2022 American Community Survey 5-Year Estimates. https://data.census.gov/table/ACSDT5Y2022.B22005B?q=Owner/Renter%20(Householder)%20Characteristics&t=SNAP/Food%20Stamps&g=040XX00US44

"Shopper-choice food pantry model"
Pruden, B., Poirier, L., Gunen, B., Park, R., Hinman, S., Daniel, L., Gu, Y., Katragadda, N., Weiss, J., & Gittelsohn, J. (February 10, 2023). Client Choice Distribution Model Is Associated with Less Leftover Food in Urban Food Pantries. https://www.sciencedirect.com/science/article/pii/S2475299123077843

"Jonnycake Center for Hope"
Jonnycake Center for Hope. (n.d.). Jonnycake Center for Hope – Here to help, since 1974. https://www.jonnycakecenter.org/

"Farm Fresh RI"
Farm Fresh Rhode Island. (n.d.). Farm Fresh Rhode Island – A hub for local food since 2004. https://www.farmfreshri.org/

"URI Food Recovery"
University of Rhode Island Cooperative Extension. (n.d.). Food Recovery for Rhode Island. https://web.uri.edu/coopext/programs/food-systems/foodrecovery/

"Elisha Project"
Elisha Project. (n.d.). Elisha Project – Serving communities with love and dignity. https://elishaproject.org/

"Hope's Harvest"
Farm Fresh Rhode Island. (n.d.). Hope's Harvest – On-farm food rescue & donation. https://www.farmfreshri.org/programs/hopes-harvest/

"An Act Relating to Education - Federal Aid"
Rhode Island General Assembly. (2024). Senate Bill 2320: An act relating to education – federal aid. https://webserver.rilegislature.gov/BillText24/SenateText24/S2320.htm

"Restaurant Meals Program"
Rhode Island Department of Human Services. (n.d.). Online Purchasing & Restaurant Meals Program. https://dhs.ri.gov/programs-and-services/supplemental-nutrition-assistance-program-snap/supplemental-nutrition-5

17. Wasted Food Source Reduction and Recovery

"2015 Rhode Island Solid Waste Characterization Study"
Rhode Island Resource Recovery Corporation. (December 31, 2015). Rhode Island solid waste characterization study: Final report. https://www.rirrc.org/sites/default/files/2017-02/Waste%20Characterization%20Study%202015.pdf

"ReFED Insights Engine"
ReFED. (2023). Food Waste Monitor: Rhode Island – Surplus Food Destinations. https://insights-engine.refed.org/food-waste-monitor?break_by=destination&indicator=tons-surplus&state=RI&view=detail&year=2023

"Rhode Island Community Food Bank"
Rhode Island Community Food Bank. (2024). FY24 Facts & Figures. https://rifoodbank.org/wp-content/uploads/2024/09/FY24-Facts-Figures.pdf

"Third largest emitter"
ReFED. (n.d.). Climate and resources. ReFED. https://refed.org/food-waste/climate-and-resources

"Insights Engine"
ReFED. (2024). Food waste monitor: Rhode Island, 2022. ReFED. https://insights-engine.refed.org/food-waste-monitor?break_by=sector&indicator=tons-surplus&state=RI&view=detail&year=2023

"Methane"
U.S. Environmental Protection Agency. (n.d.). Importance of methane. https://www.epa.gov/gmi/importance-methane

"Feed RI"
Feed RI. (n.d.). Every meal matters: Feeding Rhode Island today, and tomorrow. https://feedri.org/

"FoodRecovery.org"
FoodRecovery.org. (n.d.). Home. https://foodrecovery.org/

"Rescuing Leftover Cuisine"
Rescuing Leftover Cuisine. (n.d.). Home. https://www.rescuingleftovercuisine.org/

"Hope's Harvest"
Farm Fresh Rhode Island. (n.d.). Hope's Harvest. https://www.farmfreshri.org/programs/hopes-harvest/

"Food Recovery for Rhode Island program"
University of Rhode Island Cooperative Extension. (n.d.). Food Recovery for Rhode Island. https://web.uri.edu/coopext/programs/food-systems/foodrecovery

"Local Food Purchase Assistance Cooperative Agreement"
Food Systems Leadership Network. (September, 2024). Rhode Island LFPA Spotlight: Growing resilient supply chains from farm to fork and dock to dish. https://foodsystemsleadershipnetwork.org/wp-content/uploads/2024/09/Rhode-Island-LFPA-Spotlight_Final.pdf

"Food Waste Ban"
Rhode Island General Assembly. (2023). General Laws of Rhode Island § 23-18.9-17: Food waste ban. https://webserver.rilin.state.ri.us/Statutes/TITLE23/23-18.9/23-18.9-17.HTM

"Recent research"
Sanders, R. E., Anglou, F., & Gage, F. H. (2024). Study reveals food waste bans ineffective in reducing landfill waste, except in Massachusetts. Science, 384(6691), 53. https://doi.org/10.1126/science.adn4216

"USDA-funded LFPA"
Food Systems Leadership Network. (2024, September). Rhode Island LFPA Spotlight: Growing resilient supply chains from farm to fork and dock to dish. https://foodsystemsleadershipnetwork.org/wp-content/uploads/2024/09/Rhode-Island-LFPA-Spotlight_Final.pdf

"Commodity Credit Corporation"
U.S. Department of Agriculture. (October 1, 2024). USDA invests $1.7 billion to support farmers, deliver nutrition assistance, and bolster rural economies. https://www.fns.usda.gov/news-item/usda-185.24

"Food: Too Good to Waste"
U.S. Environmental Protection Agency. (April 8, 2025). Preventing wasted food at home. https://www.epa.gov/recycle/preventing-wasted-food-home

"Federal"
U.S. Congress. (December 13, 2021). H.R. 6251 — Food Donation Improvement Act of 2021. https://www.congress.gov/bill/117th-congress/house-bill/6251

"State"
Rhode Island General Assembly. (2019). General Laws of Rhode Island § 21-34.1-4: Expiration dates. https://webserver.rilin.state.ri.us/Statutes/TITLE21/21-34.1/21-34.1-4.HTM

"2019 Rhode Island Food Donation Act"
Rhode Island General Assembly. (2023). General Laws of Rhode Island § 21-34.1-3: Immunity from liability for food donors. https://webserver.rilegislature.gov//Statutes/TITLE21/21-34.1/21-34.1-3.htm

"Food Donation Improvement Act"
McGovern, J. P., Newhouse, D., Pingree, C., & Walorski, J. (December 13, 2021). H.R. 6251: Food Donation Improvement Act of 2021. https://www.congress.gov/117/bills/hr6251/BILLS-117hr6251ih.pdf

"Legislation introduced in 2024"
Cortvriend, T.-D., Boylan, J., Speakman, J., Carson, L., McGaw, M., Fogarty, K., Kislak, R., Handy, A., Tanzi, T., & Bennett, D. (March 1, 2024). H7856: An Act Relating to State Affairs and Government – Composting and Organic Waste Diversion. https://webserver.rilegislature.gov/BillText/BillText24/HouseText24/H7856.pdf

"Tax Credit for Food Donation Act of 2024"
McEntee, H., Fogarty, K., Tanzi, T., Cortvriend, T.-D., McGaw, M., Knight, J., Handy, A., Casimiro, J., Edwards, J., & Spears, T. (March 5, 2024). H7995: An Act Relating to Taxation – Tax Credit for Food Donation. https://webserver.rilegislature.gov/BillText/BillText24/HouseText24/H7995.pdf

"RIDOH's Rhode to End Hunger Initiative"
Rhode Island Department of Health. (n.d.). Rhode to End Hunger Initiative. https://health.ri.gov/programs/detail.php?pgm_id=1118

"Green Certification programs"
Rhode Island Department of Environmental Management. (n.d.). Green certification programs. https://dem.ri.gov/environmental-protection-bureau/customer-and-technical-assistance/green-certification-program

"URI's Food Recovery for Rhode Island course"
University of Rhode Island Cooperative Extension. (n.d.). Food Recovery for Rhode Island. https://web.uri.edu/coopext/programs/food-systems/foodrecovery/

"Rhode Island School Recycling Project"
Rhode Island School Recycling Project. (n.d.). RI School Recycling Project. https://rirecyclingclub.org/

"Feed RI"
Feed RI. (n.d.). Supporting Rhode Island through food access. https://feedri.org/

"Harvest Cycle Compost"
Groundwork Rhode Island. (n.d.). Harvest Cycle Compost. https://groundworkri.org/harvest-cycle-compost/

"New England Healthy Communities"
U.S. Environmental Protection Agency. (July 12, 2024). EPA New England makes Healthy Communities grants available to protect public health and the environment in New England. https://www.epa.gov/newsreleases/epa-new-england-makes-healthy-communities-grants-available-protect-public-health-and

"Solid Waste Infrastructure For Recycling"
U.S. Environmental Protection Agency. (February 25, 2025). Solid Waste Infrastructure for Recycling Grant Program. https://www.epa.gov/infrastructure/solid-waste-infrastructure-recycling-grant-program

"ReFED's Catalytic Grant Fund"
ReFED. (n.d.). The ReFED Catalytic Grant Fund. https://grantfund.refed.org/

"Ocean Hour Farm"
Ocean Hour Farm. (n.d.). Ocean Hour Farm. https://oceanhourfarm.org/

"Center for EcoTechnology"
Center for EcoTechnology. (n.d.). Resilient Climate Solutions. https://www.cetonline.org/

"Farm Fresh RI"
Farm Fresh Rhode Island. (n.d.). Farm Fresh Rhode Island. https://www.farmfreshri.org/

"Harvest Cycle"
Groundwork Rhode Island. (n.d.). Harvest Cycle Compost. https://groundworkri.org/harvest-cycle-compost/

"Bootstrap Compost"
Bootstrap Compost. (n.d.). Compost collection in Massachusetts and Rhode Island. https://www.bootstrapcompost.com/

"Rhody Feeding Rhody"
Rhody Feeding Rhody. (n.d.). Rhody Feeding Rhody. https://rhodyfeedingrhody.org/

"Commercial Fisheries Center of Rhode Island"
Commercial Fisheries Center of Rhode Island. (n.d.). About. https://www.cfcri.org/

"Food Waste Ban"
Rhode Island General Assembly. (2023). General Laws of Rhode Island § 23-18.9-17: Food waste ban. https://webserver.rilegislature.gov//Statutes/TITLE23/23-18.9/23-18.9-17.HTM

"H7856"
Cortvriend, T.-D., Boylan, J., Speakman, J., Carson, L., McGaw, M., Fogarty, K., Kislak, R., Handy, A., Tanzi, T., & Bennett, D. (March 1, 2024). H7856: An Act Relating to State Affairs and Government – Composting and Organic Waste Diversion. https://webserver.rilegislature.gov/BillText/BillText24/HouseText24/H7856.pdf

"Food donation tax credits"
Kallman, M., DiMario, A., Miller, J., Valverde, B., Rogers, G., LaMountain, M., & Gu, V. (2024, March 8). S2757: An Act Relating to Taxation – Tax Credit for Food Donation. https://webserver.rilegislature.gov/BillText/BillText24/SenateText24/S2757.pdf

"Green Certification Programs"
Rhode Island Department of Environmental Management. (n.d.). Green certification programs. https://dem.ri.gov/environmental-protection-bureau/customer-and-technical-assistance/green-certification-program

"Rhode to End Hunger Initiative"
Rhode Island Department of Health. (n.d.). Rhode to End Hunger Initiative. https://health.ri.gov/programs/detail.php?pgm_id=1118

"RI Food Dealers Association"
Rhode Island Food Dealers Association. (n.d.). Rhode Island Food Dealers Association. https://rifda.com/

"RI Hospitality Association"
Rhode Island Hospitality Association. (n.d.). About RIHA. https://www.rihospitality.org/About-RIHA

18. Composting and Downstream Food Waste Diversion

"Methane"
U.S. Environmental Protection Agency. (January 16, 2025). Importance of methane. https://www.epa.gov/gmi/importance-methane

"Rhode Island Resource Recovery Central Landfill"
Rhode Island Resource Recovery Corporation. (n.d.). Home. https://www.rirrc.org/

"Over 120,000 tons"
Massachusetts Department of Environmental Protection. (November, 2023). 2022 solid waste data update. https://www.mass.gov/doc/2022-solid-waste-data-update/download

"2023 Municipal Summary"
Rhode Island Resource Recovery Corporation. (April 1, 2024). 2023 municipal summary (detailed): Quantities of municipal sector waste recycled, composted, and disposed by Rhode Island municipalities in calendar year 2023. https://rirrc.org/sites/default/files/2023%20Municipal%20Summary%20Detailed%20with%20Charts%2020240401.pdf

"ILSR census of community composters"
Libertelli, C., Platt, B., & Matthews, M. (March 22, 2023). A growing movement: 2022 community composter census. Institute for Local Self-Reliance. https://ilsr.org/articles/composting-2022-census/

"DSM Environmental Services"
Rhode Island Resource Recovery Corporation. (March, 2022). Final report: Organics collection alternatives. https://www.rirrc.org/sites/default/files/2022-05/Final%20Report%20Organics%20Collection%20Alternatives%20March%202022%20to%20RIRRC.pdf

"76.4% (53,500 tons)"
ReFED. (2025). Food waste monitor: Rhode Island 2023—Surplus food by destination. https://insights-engine.refed.org/food-waste-monitor?break_by=destination&indicator=tons-surplus&state=RI&view=detail&year=2023

"Rhode Island Bioenergy Facility"
Anaergia Inc. (August 3, 2021). Largest industrial anaerobic digestion facility in New England now part of the Anaergia Group. https://www.anaergia.com/about-us/media-center/largest-industrial-anaerobic-digestion-facility-in-new-england-now-part-of-the-anaergia-group/

"Earth Care Farm"
Merner, M. P., & Merner Senecal, J. (n.d.). Earth Care Farm. https://www.earthcarefarm.com/

"Insights Engine"
ReFED. (2024). Food waste monitor: Rhode Island 2022—Surplus food by sector. ReFED. https://insights-engine.refed.org/food-waste-monitor?break_by=sector&indicator=tons-surplus&state=RI&view=detail&year=2022

"2016 food waste ban"
Rhode Island General Assembly. (2023). R.I. Gen. Laws § 23-18.9-17: Food waste ban. https://webserver.rilin.state.ri.us/Statutes/TITLE23/23-18.9/23-18.9-17.HTM

"Municipal Composting Readiness Report"
Rhode Island Food Policy Council. (October, 2024). Rhode Island municipal composting readiness report. https://rifoodcouncil.org/wp-content/uploads/2024/10/Rhode-Island-Municipal-Composting-Readiness-Report-RI-Food-Policy-Council.pdf

"Share Table and Food Donation Guidance"
Center for EcoTechnology. (April, 2019). Share table and food donation guidance for schools. https://wastedfood.cetonline.org/wp-content/uploads/2019/04/ShareTables-RI-FINAL.pdf

"Food Waste Reduction Toolkit for Rhode Island Schools"
Rhode Island School Recycling Project. (May 3, 2021). Food waste reduction toolkit for Rhode Island schools. https://rirrc.org/sites/default/files/2021-05/Food-Waste-Reduction-Toolkit-for-RI-Schools-5.3.21.pdf

"Center for EcoTechnology"
Center for EcoTechnology. (n.d.). Resilient Climate Solutions. https://www.cetonline.org/

"Rhode Island School Recycling Project"
Rhode Island School Recycling Project. (n.d.). Help us prevent school food waste! https://rirecyclingclub.org/

"Bootstrap Compost"
Bootstrap Compost. (n.d.). Bootstrap Compost. https://bootstrapcompost.com/

"U.S. Environmental Protection Agency (EPA) estimates"
U.S. Environmental Protection Agency. (April, 2023). 2019 wasted food report: Estimates of generation and management of wasted food in the United States in 2019 (EPA 530-R-23-005i). https://www.epa.gov/system/files/documents/2023-03/2019%20Wasted%20Food%20Report_508_opt_ec.pdf

"Study"
Institute for Local Self-Reliance. (May 11, 2013). Pay dirt: Composting in Maryland to reduce waste, create jobs, & protect the Bay. https://ilsr.org/wp-content/uploads/2013/05/ILSR-Pay-Dirt-Report-05-11-13.pdf

"7856"
Rhode Island General Assembly. (March 1, 2024). H7856 – An Act Relating to State Affairs and Government – Composting and Organic Waste Diversion. https://webserver.rilegislature.gov/BillText24/HouseText24/H7856.pdf

19. Direct to Consumer

"Farmers Markets"
Farm Fresh Rhode Island. (n.d.). Rhode Island farmers markets. Farm Fresh Rhode Island. https://www.farmfreshri.org/programs/farmers-markets/rifarmersmarkets/

"Possible reasons"
Low, S. A., & Vogel, S. (2011). Direct and intermediated marketing of local foods in the United States (Economic Research Report No. 128). https://www.ers.usda.gov/webdocs/publications/44924/8276_err128_2_.pdf

"2022 Census of Agriculture"
U.S. Department of Agriculture, National Agricultural Statistics Service. (2024). 2022 Census of Agriculture: Rhode Island State Data (Report No. st44_1_002_002). https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Rhode_Island/st44_1_002_002.pdf

"41"
Farm Fresh Rhode Island. (n.d.). Farmers markets. https://www.farmfreshri.org/programs/farmers-markets/

"WIC Farmers Market Nutrition Program"
Rhode Island Department of Health. (n.d.). WIC Farmer's Markets. https://health.ri.gov/find/services/detail.php?id=38

"Senior Farmers Market Nutrition Program"
Rhode Island Department of Environmental Management. (n.d.). Senior Farmers Market Nutrition Program (SFMNP). https://dem.ri.gov/natural-resources-bureau/agriculture-and-forest-environment/agriculture/senior-farmers-market-nutrition-program

"Supplemental Nutrition Assistance Program"
Rhode Island Department of Environmental Management. (n.d.). Senior Farmers Market Nutrition Program (SFMNP). https://dem.ri.gov/natural-resources-bureau/agriculture-and-forest-environment/agriculture/senior-farmers-market-nutrition-program

"Bonus Bucks"
Farm Fresh Rhode Island. (n.d.). Bonus Bucks: Local food bonuses. https://www.farmfreshri.org/programs/farmers-markets/bonus-bucks/

"Upended supply chains"
The Rockefeller Foundation. (July 27, 2020). Reset the table: Meeting the moment to transform the U.S. food system. https://www.rockefellerfoundation.org/report/reset-the-table-meeting-the-moment-to-transform-the-u-s-food-system/

"RI Grown"
Rhode Island Department of Environmental Management. (n.d.). RI Grown: Buy Fresh, Get Local. https://dem.ri.gov/natural-resources-bureau/agriculture-and-forest-environment/agriculture/ri-grown-buy-fresh-get

"Local Food Marketplace"
Local Food Marketplace. (n.d.). Software for farms & food hubs. https://home.localfoodmarketplace.com/

"Open Food Network"
Open Food Network. (n.d.). Home. https://openfoodnetwork.org/

20. Institutions

"FINE"
Farm to Institution New England. (2019). New England Farm to Institution Metrics Project: Rhode Island state profile 2019. https://static1.squarespace.com/static/5611a020e4b00b12a23c69fe/t/5dc1a77a27165521817841b2/1572972410851/FINE-RI-Profile-2019.pdf

"Rhode Island Farm & Sea to School Network"
Rhode Island Farm to School Network. (n.d.). Home. https://www.rifarmtoschool.org/

"Healthy School Meals for All"
Healthy School Meals for All Coalition. (n.d.). Healthy School Meals for All: Meeting the moment to transform the U.S. food system. https://rischoolmeals4all.com/

"Farm to Institution New England"
Taylor, A., Johnson, B., & Lee, C. (2022). New England institutions - sector data 2022. https://docs.google.com/spreadsheets/d/1u_Ebxkuxcg87Lk5wfcOt_ZYl2QjKvLzkF_S6cB-p-7w/edit?gid=0#gid=0

"Local Food for Schools"
Rhode Island Department of Education. (March, 2023). Local Food for Schools (LFS) Cooperative Agreement Program: Frequently Asked Questions (FAQ). https://ride.ri.gov/sites/g/files/xkgbur806/files/2023-03/FAQ_LFS_Updated_March2023.pdf

"Supply Chain Assistance"
Rhode Island Department of Education. (March, 2023). Supply Chain Assistance (SCA) Funds: Frequently Asked Questions (FAQ). https://ride.ri.gov/sites/g/files/xkgbur806/files/2023-03/FAQ_Supply_Chain_Assistance_3.0.pdf

"Farm Fresh RI's Market Mobile"
Farm Fresh Rhode Island. (n.d.). Market Mobile. https://www.farmfreshri.org/programs/market-mobile/

"State Physical Activity and Nutrition program"
Centers for Disease Control and Prevention. (November 13, 2024). State Physical Activity and Nutrition (SPAN). https://www.cdc.gov/span/php/about/index.html

"Local Food for Schools"
Rhode Island Department of Education. (March, 2023). Local Food for Schools (LFS) Cooperative Agreement Program: Frequently Asked Questions (FAQ). https://ride.ri.gov/sites/g/files/xkgbur806/files/2023-03/FAQ_LFS_Updated_March2023.pdf

"RI's Healthy School Meals for All legislation"
Kashdan, J. (March 7, 2024). H7225 Article 8: Education overview. https://www.rilegislature.gov/Special/comdoc/House%20Finance%202024/03-07-2024--H7225--Article%208--Jason%20Kashdan.pdf

"Rhode Island Farm to Institution by the Numbers"
Farm to Institution New England. (2019). New England Farm to Institution Metrics Project: Rhode Island state profile 2019. https://static1.squarespace.com/static/5611a020e4b00b12a23c69fe/t/5dc1a77a27165521817841b2/1572972410851/FINE-RI-Profile-2019.pdf

"Local Food Purchasing Incentives"
National Farm to School Network. (n.d.). Local Food Purchasing Incentives (LFPI). https://www.farmtoschool.org/policy/lfpi

"2024 Farm & Sea to School Strategic Plan"
RI Farm & Sea to School Network, Rhode Island Farm & Sea to School Strategic Plan, 2024-2027, https://www.canva.com/design/DAGUWE4Qss8/Inc34_x31zHhwhLETJQEew/view?utm_content=DAGUWE4Qss8&utm_campaign=designshare&utm_medium=link&utm_source=editor

21. Distribution and Wholesale

"30% by 2030 goals"
New England State Food System Planners Partnership. (n.d.). Report components. https://nefoodsystemplanners.org/projects/report-components/

"9% and 12.5%"
Land Line Media. (June 26, 2024). Trucking costs up, study says. https://landline.media/trucking-costs-up-study-says/

"Volume 3: Economic Impact of New England's Food System"
Rockler, N. (May, 2023). Economic impact of New England's food system: Volume 3. https://nefoodsystemplanners.org/wp-content/uploads/NEFNE_Volume-3_Economic-Impact-of-Regional-and-State-Production.pdf

"Farm Fresh's Market Mobile"
Farm Fresh Rhode Island. (n.d.). Market Mobile. https://www.farmfreshri.org/programs/market-mobile/

"Red Tomato"
Red Tomato. (n.d.). About us. https://redtomato.org/about-us/

"Southside Community Land Trust"
Southside Community Land Trust. (n.d.). Home. https://www.southsideclt.org/

"Small growers who may only gross $2,500 a year"
Rhode Island Farm Bureau. (n.d.). So you want to start a farm? https://rifb.org/interested-in-starting-a-farm-want-to-expand-the-one-you-have/

"Process"
Byrne, A., & Zeballos, E. (2025, January 7). Wholesaling. https://www.ers.usda.gov/topics/food-markets-prices/retailing-wholesaling/wholesaling/

"UNFI"
United Natural Foods, Inc. (n.d.). Home. https://www.unfi.com/

22. Restaurants and Hospitality

"Johnson & Wales University"
Johnson & Wales University. (n.d.). College of Food Innovation & Technology. https://www.jwu.edu/academics/colleges/college-of-food-innovation-technology.html

"Density of eateries per capita nationwide"
Young, H. (November 4, 2023). States with the highest concentration of restaurants. https://philomathnews.com/states-with-the-highest-concentration-of-restaurants/

"Economic Contributions of the Restaurant & Foodservice Industry: Rhode Island"
National Restaurant Association. (2024). Economic contributions of the restaurant & foodservice industry: Rhode Island. https://restaurant.org/getmedia/1b8d1431-1634-4e05-8c34-ea202826fa5b/ri_econ_impact_study_fs-3.pdf

"FDA's Food Code"
U.S. Food and Drug Administration. (2023). Food Code 2022. https://www.fda.gov/media/164194/download

"Hope and Main"
Hope & Main. (n.d.). Make Food Your Business. https://makefoodyourbusiness.org/

23. Grocery and Retail

"$3.2 billion"
IBISWorld. (October, 2023). Supermarkets & Grocery Stores in Rhode Island. https://drive.google.com/file/d/1oVmDZTDLshxOaFNYvqewpL1_sZGGPC6k/view

"IBISWorld"
IBISWorld. (October, 2023). Supermarkets & Grocery Stores in Rhode Island. https://drive.google.com/file/d/1oVmDZTDLshxOaFNYvqewpL1_sZGGPC6k/view

"IBISWorld"
IBISWorld. (October, 2023). Supermarkets & Grocery Stores in Rhode Island. https://drive.google.com/file/d/1oVmDZTDLshxOaFNYvqewpL1_sZGGPC6k/view

"Grocery Gap Atlas"
Halpern, D., Paykin, S., Johnson, A., & Canales, M. (2024). Grocery Gap Atlas (1.0). https://grocerygapatlas.rafiusa.org/

"Grocery Gap Atlas"
Halpern, D., Paykin, S., Johnson, A., & Canales, M. (2024). Grocery Gap Atlas (1.0). https://grocerygapatlas.rafiusa.org/

"Food prices"
U.S. Department of Agriculture, Economic Research Service. (April 25, 2025). Food price environment: Interactive visualization. https://www.ers.usda.gov/data-products/food-price-outlook/food-price-environment-interactive-visualization/

"Rhode Island Food Dealers Association"
Rhode Island Food Dealers Association. (n.d.). Home. https://rifda.com/

Strategic Planning Collaborators

Steering Committee

Chris Ausura
Chief of Strategy Planning & Evaluation
Rhode Island Executive Office of Human Services

Randi Belhumeur
Program Administrator, Healthy Eating and Active Living
Rhode Island Department of Health

Raul Figueroa
Cooperative Program Director
Fuerza Laboral

Dinalyn Spears
Director of Community Planning & Natural Resources
Narragansett Indian Tribe

Ken Ayars
Chief of the Division of Agriculture and Forestry
Rhode Island Department of Environmental Management

Daniela Fairchild
Chief Strategy Officer
Rhode Island Commerce Corporation

Chris Gaynor
Climate Justice Specialist, Bureau of Env. Protection
Rhode Island Department of Environmental Management

Melody Weeks
Executive Vice President
Rhode Island Commerce Corporation

Community Advisory Board

Eva Agudelo, Principal, Full Bloom Fundraising

Annie Bayer, Coordinator, Young Farmers Network

Luca Carnevale, Executive Director, Hope & Main

Dan Costa, State Port Manager, RI Department of Environmental Management

Margaret DeVos, Executive Director, Southside Community Land Trust

Traci Dufresne, Director of Education Foundation, RI Hospitality Association

Roberta Groch, Assistant Chief of the Community Coordination Team, RI Division of Statewide Planning

Julius Kowale, Co-founder & Executive Director, African Alliance of Rhode Island

Maggie Longo, Restaurant and Hospitality Business Consultant, RI Small Business Development Center

Vernon Martin, Founder & C.E.O., Kinfolk Benefit Trust

Rachel Newman Greene, Food Access & Nutrition Security Program Director, RI Food Policy Council

Jennifer Pereira, Vice President of Grants & Community Investments, Rhode Island Foundation

Nessa Richman, Executive Director, Rhode Island Food Policy Council

Kate Sayles, Executive Director, RI Land Trust Council

Sarah Schumann, Commercial Fisherman, Shining Sea Fisheries Consulting/ Commercial Fisheries Center RI

Betsy Skoda, Program Manager of Healthy Food in Health Care Program, Health Care Without Harm

Karen Voci, President Emeritus of the Harvard Pilgrim Health Foundation, Harvard Pilgrim HealthCare Foundation

Sarah Amin, Assistant Professor, Director of Community Nutrition Education, University of Rhode Island

Patrick Baur, Assistant Professor of Food Systems Policy & Innovation, University of Rhode Island

Kerri Connolly, Deputy Director, RI Public Health Institute

Azure Cygler, RI Sea Grant Extension Specialist & Research Associate, URI Coastal Resources Center

David Dadekian, President, Eat Drink RI

Chelsea Gazillo, New England Policy Manager, American Farmland Trust

Rose Jones, Executive Director, Aquidneck Community Table

Bevan Linsley, Aquidneck Community Table (until April 2024)

Diane Lynch, Board President, Rhode Island Food Policy Council

Terrence McNamara, Administrator of Physical Resources, RI Department of Corrections

Jessica Patrolia, Child Nutrition Programs Coordinator, RI Department of Education (until November 2024)

Heidi Quinn, Executive Director, RI Farm Bureau

Jesse Rye, Executive Director, Farm Fresh Rhode Island

Andrew Schiff, Chief Executive Officer, RI Community Food Bank

Dana Siles, Photographer (formerly Partnerships Director, Rescuing Leftover Cuisine)

Rachel Stancil, Community Health Worker, East Bay Community Action Program

RI Project Team

Juli Stelmaszyk
Director of Food Strategy (until October 2024)
Rhode Island Commerce Corporation

Georgina Sarpong
Director of Food Strategy (2025-2026)
Rhode Island Commerce Corporation

Alison Macbeth
Food Strategy Project Manager
Rhode Island Commerce Corporation

Project Consultants
Holly Fowler, Northbound Ventures Consulting
Scott Sawyer

Community Meeting Hosts & Vendors

Black Beans PVD
Cultro
The Event Factory
Southside Community Land Trust
Community College of RI
Epic Renewal
Hope & Main
Tilted Barn

Brief Co-Authors and Contributors

1. Narragansett Foodways

Dinalyn Spears, Narragansett Indian Tribe

2. Climate Change

M. Dawn King, PhD, Brown University
Carla Losada, Brown University
Juliana Merullo, Brown University
Logan Torres, Brown University
Emma Venarde, Brown University

Sarah Schumann, Fishery Friendly Climate Action Campaign

3. Food System Policies

Max Mason De Faria, Rhode Island Food Policy Council

Vanessa Garcia Polanco, National Young Farmers Coalition
Dinalyn Spears, Narragansett Indian Tribe
Diane Lynch, Rhode Island Food Policy Council

4. Equity, Food Justice, and Community Well-Being

Nwando Egbuche Ofokansi, RI Department of Health
Wanda Hopkins, Narragansett Indian Tribe
Julius Kolawole, African Alliance of Rhode Island
Raffini, Southside Community Land Trust

Jason Lawrence, NeighborWorks Blackstone River Valley
Loren Spears, Tomaquag Museum and Narragansett Tribal Citizen
Vange Hopkins, Narragansett Tribal Citizen and URI Senior
Evangeline Hankinson, Narragansett Tribal Elder
Robin Jones, Narragansett Tribal Elder
Dinalyn Spears, Narragansett Natural Resources Director

5. Economic Development

Shayna Cohen, KK&P
Clare Bramhall, KK&P
Kavya Gopinath, Economic Progress Institute
Dawn Spears, Ashawaug Farm

Tarshire Battle, Southside Community Land Trust
Josh Daly, Rhode Island Food Policy Council
Nina Harrison, The Economic Progress Institute
Addison Kerwin, Student, Brown University
Michael Roles, Climate Jobs Rhode Island
Rozie Schleinig, RI Food Policy Council

6. Stewardship of Food Producing Lands

Shayna Cohen, KK&P
Clare Bramhall, KK&P

Molly Allard, Northern Rhode Island Conservation District
Josh Daly, Rhode Island Food Policy Council
Dawn Spears, Ashawaug Farm

7. Stewardship of Working Waterfronts

Daniel Costa, RIDEM Division of Coastal Resources
Nicole Lengyel Costa, RIDEM Division of Marine Fisheries
Molly Moran-Ogren, RIDEM Bureau of Natural Resources

Fred Mattera, Commercial Fisheries Center of Rhode Island
Ben Goetsch, Coastal Resources Management Council
Azure Cygler, URI Sea Grant
Marta Gomez-Chiarri, URI Coastal Institute
Sarah Schumann, Fishery Friendly Climate Action Campaign
Brendan Elba, URI Sea Grant
Dinalyn Spears, Narragansett Indian Tribe

8. Community-Based Food Production

Grace Feisthamel, Southside Community Land Trust

Jessica Patrolia, RIDE
Matt Tracy, Southside Community Land Trust
Rich Pederson, Southside Community Land Trust
Margaret DeVos, Southside Community Land Trust
John Taylor, University of Rhode Island
Julie Keller, University of Rhode Island
Patrick Baur, University of Rhode Island
Kate Sayles, RI Land Trust Council
Kendra Mode, Blue Skys Farm, RI Farm to School
Ananda Fraser, RIDEM
Erin Achenbach, The Flower District

9. Fisheries, Agriculture, and Aquaculture Viability

Shayna Cohen, KK&P
Clare Bramhall, KK&P

Ben Goetsch, Coastal Resources Management Council
Rob Hudson, University of Rhode Island
Brendalee Viveiros, Rhode Island Department of Health
Azure Cygler, University of Rhode Island
Josh Daly, Rhode Island Food Policy Council
Bob Rheault, East Coast Shellfish Growers Association
Dawn Spears, Ashawaug Farm
Nicole Lengyel Costa, RIDEM Division of Marine Fisheries

10. Water Quality & Soil Health

Rubén Parrilla, Northeast Organic Farming Association
Michael Byrns, RIDOH
Cassius Spears, Jr., USDA

Kelly Owens, RIDEM
Jane Sawyers, RIDEM
Joseph Haberek, RIDEM

11. Supply Chain Resilience

Shayna Cohen, KK&P
Clare Bramhall, KK&P
Angel Mendez, Red Tomato

Eva Agudelo, Full Bloom Fundraising
Benny Barber, BSquared Kitchen, Hope & Main
Candace Clavin, NOFA-RI
Josh Daly, Rhode Island Food Policy Council
Rachel Newman Greene, RI Food Policy Council
Jesse Rye, Farm Fresh RI

12. Food & Beverage Manufacturing Viability

Luca Carnevale, Hope & Main
Minnie Luong, Chi Kitchen

Lauren Abda, Branchfood
Nathan Bonds, Polaris MEP
Josh Daly, Rhode Island Food Policy Council
Peter Dorsey, Business Development Company of Rhode Island
Maggie Longo, Rhode Island Small Businuess Development Center
Walther Morales, Innovation Studio
Lisa Raiola, Hope & Main
Jesse Rye, Farm Fresh RI
Dinos Stamoulas, Paleonola
Lorén Spears, Tomaquag Museum
Carlos Ventura, Feast & Fettle

13. Labor & Workforce Development

Aarin B. Clemons, Polaris MEP
Raul Figueroa, Fuerzal Laboral (Power of Workers)

Sarah McBain, Rhode Island Department of Labor & Training
Anita Bruno, RI Women in The Trades

14. Food System & Nutrition Education

Stephanie Pike, RD, LDN, RI Farm to School Network
Raffini, Southside Community Land Trust
Cassius Spears, Jr., USDA

Bevan Linsley, Aquidneck Community Table
Caitlin Mandel, RI Department of Education
Camryn Kennedy, Rhode Island Food Policy Council
Heidi Hetzler, URI Community Nutrition Education Programs
Jo Ayuso, Movement Education Outdoors
Rachel Newman Greene, Rhode Island Food Policy Council
Sarah Amin, URI Community Nutrition Education Programs
Sara Churgin, Eastern Rhode Island Conservation District
Jon Poyourow, Johnson & Wales University
Branden Lewis, Johnson & Wales University

15. Eating Behaviors & Foodways

Sarah Amin, University of Rhode Island
Dawn Spears, Narragansett Indian Tribe
Lorén Spears, Tomaquag Museum

Randi Belhumeur, Rhode Island Department of Health
Kate Masury, Eating with the Ecosystem
Dinalyn Spears, Narragansett Indian Tribe

16. Food & Nutrition Security

Sarah Amin, University of Rhode Island
Sarah Blau, Rhode Island Department of Health
Chrystal Mars Baker, Narragansett Indian Tribal Citizen
Alison Tovar, Brown University School of Public Health

17. Surplus Food Source Reduction & Recovery

Eva Agudelo, Hope's Harvest
Dana Siles, Rhode Island Food Policy Council
Dinalyn Spears, Narragansett Indian Tribe

James Corwin, RI School Recycling Project
Vanessa Venturini, URI Food Recovery for RI
Sue AnderBois, The Nature Conservancy
Rose Forrest, Sodexo
Shelby Doggett, Hope & Main
David McLaughlin, RIDEM
Adam Silkes, American Mussel Harvesters
David Weisberger, University of Rhode Island
Lorenzo Macaluso, Center for Ecotechnology
Christine Beling, U.S. Environmental Protection Agency
Fred Mattera, Commercial Fisheries Center of Rhode Island
Elizabeth Stone, RIDEM
Traci Dufresne, RI Hospitality Association
Isaac Bearg, Rhode Island Food Policy Council
Ella Kilpatrick Kotner, Harvest Cycle Compost
Scott Bromberg, RI Food Dealers Association

18. Composting & Downstream Waste Diversion

Jayne Merner, Earth Care Farm
Rubén Parrilla, Northeast Organic Farming Association
Cassius Spears, Jr., USDA

Josh Daly, Rhode Island Food Policy Council
Greg Gerritt, Retired
Tess Feigenbaum, Epic Renewal
B. Baba, Epic Renewal
Jesse Mermell, Dewitt Impact Group
Isaac Bearg, Rhode Island Food Policy Council
Tyson Bottenus, Groundwork RI
Brian Monteverde, Community Member
Ella Kilpatrick Kotner, Groundwork RI
Stewart Martin, Groundwork RI
Sam Burgess, Bootstrap Compost
Rosie Warburton, Black Earth Compost
Carla Doughty, Zero Waste Providence
Lisa Pellegrino, Center for EcoTechnology
Kevin Proft, City of Providence Office of Sustainability
Leo Pollock, ReMix Organics

19. Direct to Consumer Sales

Thea Upham, Farm Fresh RI

Pat McNiff, Pat's Pastured
Robbie Hudson, Coastal Resource Center URI
Brendan Elba, Coastal Resource Center URI
Rich Peterson, Southside Community Land Trust
Amelia Lopez, Southside Community Land Trust
Cara Mitchell, Farm Fresh RI
Julius Kolawole, African Alliance of RI
John Kenny, Big Train Farm
Jack Sisson, RIDEM
Ananda Fraser, RIDEM
Cathryn Kennedy, Wrights Dairy Farm

20. Institutions

Eva Agudelo, Hope's Harvest
Angelo Garcia, Segue Institute for Learning

Jessica Patrolia, Rhode Island Department of Education
Caitlin Mandel, Rhode Island Department of Education
Jesse Rye, Farm Fresh RI
Pierre St. Germain, University of Rhode Island
Stephanie Pike, RI Farm to School Network
Betsy Skoda, Healthcare Without Harm
Peter Allison, Farm to Institution New England
Hannah Leighton, Farm to Institution New England

21. Distribution & Wholesale

Cayne Cabral, Farm Fresh Rhode Island
Angel Mendez, Red Tomato
Jesse Rye, Farm Fresh Rhode Island

22. Restaurants & Hospitality

Traci Dufresne, Rhode Island Hospitality Association

Joaquin Meza, Dolores
Lauren Spears, Tomaquag Museum/Narragansett Indian Tribal Member
David Moore, The General Stanton Inn
Pin Minyvong, Pin's Kitchen
Stacy Deetz, Hangry Kitchen
Sai Viswanath, Dewolf Tavern
Billy Liu, China Gourmet, Inc.
Andy Teixeira, Newport Vineyards
Ashley Burba, Argento dba Bettola

23. Grocery & Retail

Scott Bromberg, Rhode Island Food Dealers Association
Angel Mendez, Red Tomato

Maura O'Brien, Stop and Shop



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