QUARTERLY UPDATE

New England Feeding New England
A project of the New England State Food System Planners Partnership

March 8, 2022
www.nefoodsystemplanners.org
Meeting Objectives

- Participants gain an understanding of the project goals and current status.
- Participants begin to explore how they and their work can fit into this project.
- Participants have an opportunity to connect with others in the project and understand how to stay involved.
- Participants have the opportunity to provide input and feedback into project direction.
1. Project Overview
2. Research Update: Economic Impact of the NE Food System
3. Small Group Discussions (by State and the Region)
4. Closing and Next Steps
New England Feeding New England

PROJECT GOAL

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

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

To ensure the food security of all New England residents as national and international supply chains shift.

To reduce health and economic disparities related to food in marginalized communities.

To reduce unintended costs imposed by the current food system (ie. health care costs, climate change, and biodiversity loss).

Rockefeller Foundation: True Cost of Food and Reset the Table
New England Feeding New England

PROJECT TIMELINE

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

RESEARCH
2021 through 2022

PLANNING
2022 through 2023

IMPLEMENTATION
2023 into 2030 and beyond

we are here!
Project Areas of Focus

- Production & Consumer Demand (Research)
- Communications and Engagement
- Resilience Assessment

today’s update
Project Outputs

- Relevant, timely foundational data and analysis provided for each state and the 6-state region, which can be used for public, private, nonprofit, community, and philanthropic planning and investment decisions.
- Broadened and strengthened networks within and between states -- working collaboratively to establish regionally-coordinated and prioritized implementation goals, objectives, and activities.
- Regional coordination among state-level, public sector decision makers on critical topics and priorities related to the development of a just and resilient regional food system.
Research Overview

- 14-member Research Team assembled and working across 5 research areas
- Research to inform strategy development, investment and policy recommendations that support increasing consumption of food produced in the region to 30% by 2030
- Year-long, multi-layered research to better understand the New England food supply chain, consumer and retail behavior and project what might be possible by 2030
Research Categories

- **Calculate numbers of jobs and establishments** for the 6 state New England region between 2010 – 2020. Determine the level of occupational segregation by race/ethnicity related to employment. [presented 11/16/21]


- **Update the Dietary Needs estimates** from the New England Food Vision with more current data on production and trends + current USDA MyPlate guidelines.

- **Regional market demand study** to analyze consumption and purchasing patterns and identify potential demand for regionally produced food within each market channel.

- Identify and quantify **targets necessary to produce and distribute 30% of the food needed by New Englanders**, representing the diversity of ethnic, racial, and cultural preferences, in New England, by 2030.
Measuring Economic Impact of the New England Food System

Our Presenter Today:

Nic Rockler is an economic consultant specializing in regional impact measurement, modeling, and assessment. He is highly experienced in the development and application of regional econometric, input-output, and hybrid models. He has more than 35 years experience as a regional economist. Since 2006, Dr. Rockler has been CEO of Kavet, Rockler and Associates, a Vermont consulting firm.
Measuring Economic Impact of the New England Food System

- Units of Measure: familiar ones include jobs, personal income, domestic product (GDP or value added), output (sales), establishment counts
- We look at the composition economic activity in 28 food system industries. These fall into three broad industry groupings:
  - Farm/fisheries: Crop types, animal-related activities, fisheries
  - Manufacturing: Food product including processed commodities, prepared foods, and food-related products and beverages
  - Services: Wholesale distribution, retail sales, and food/beverage service
- We are concerned with levels of activity and growth rates of the industries and interaction of these with each other and other parts of the regional economy.
- We look at variations over geography, in this case the six New England states.
How We Measure Impact

One means of analyzing the performance of an industry or collection of industries is to examine their economic multipliers. These are quantitative measures of interaction between one industry and others in a region (or nation). The greater degree with which an industry is integrated with others in the same and other industries determines how fast sectors of an economy will grow (or the converse.)

for example:

grain ➔ dairy cows ➔ fluid milk ➔ cheese ➔ packaged product
Economic Multipliers for the New England Food System

Here are the 2017 figures for New England as a whole:

<table>
<thead>
<tr>
<th>Impact</th>
<th>Employment (Jobs)</th>
<th>Labor Income ($)</th>
<th>Value Added ($)</th>
<th>Output ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Direct Total</td>
<td>932</td>
<td>25,056.6</td>
<td>37,630.0</td>
<td>76,745.6</td>
</tr>
<tr>
<td>2 - Indirect (interindustry)Total</td>
<td>219</td>
<td>10,748.4</td>
<td>15,907.9</td>
<td>29,740.5</td>
</tr>
<tr>
<td>3 - Induced (consumption)Total</td>
<td>244</td>
<td>10,248.6</td>
<td>17,509.2</td>
<td>28,267.9</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1,395</td>
<td>46,053.5</td>
<td>71,047.1</td>
<td>134,753.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multipliers</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
<td>1.2355</td>
<td>1.4290</td>
<td>1.4227</td>
<td>1.3875</td>
</tr>
<tr>
<td>Type II</td>
<td>1.4971</td>
<td>1.8380</td>
<td>1.8880</td>
<td>1.7559</td>
</tr>
</tbody>
</table>

Source: N. Rockler, Kavet, Rockler and Assoc., using the IMPLAN Model
Employment by Food Category
## Food System Importance in State GDP

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>273,282</td>
<td>8,760</td>
<td>3.2%</td>
<td>2,309,785</td>
<td>143,737</td>
<td>6.2%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Maine</td>
<td>62,409</td>
<td>3,830</td>
<td>6.1%</td>
<td>837,606</td>
<td>109,535</td>
<td>13.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>552,839</td>
<td>17,834</td>
<td>3.2%</td>
<td>4,804,782</td>
<td>457,983</td>
<td>9.5%</td>
<td>1.1%</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>83,356</td>
<td>2,676</td>
<td>3.2%</td>
<td>884,684</td>
<td>92,748</td>
<td>10.5%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>59,981</td>
<td>2,410</td>
<td>4.0%</td>
<td>641,359</td>
<td>66,333</td>
<td>10.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Vermont</td>
<td>32,536</td>
<td>2,150</td>
<td>6.6%</td>
<td>436,227</td>
<td>61,340</td>
<td>14.1%</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>New England Total</strong></td>
<td><strong>1,064,404</strong></td>
<td><strong>37,630</strong></td>
<td><strong>3.5%</strong></td>
<td><strong>9,914,443</strong></td>
<td><strong>931,676</strong></td>
<td><strong>9.4%</strong></td>
<td><strong>2.1%</strong></td>
</tr>
</tbody>
</table>

Source: KRA

*CAGR-Compound Annual Growth Rate*
Multipliers by State

NE Food System: Type I Value Added Multiplier by State

Source: KRA using IMPLAN Model
## Key Sectors by Size

<table>
<thead>
<tr>
<th>State/Industry</th>
<th>$ Value Added ($2020, millions)</th>
<th>Type I Value Added Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-Food Service and Drinking Places</td>
<td>12,083.4</td>
<td>1.35</td>
</tr>
<tr>
<td>CT-Food Service and Drinking Places</td>
<td>5,032.7</td>
<td>1.36</td>
</tr>
<tr>
<td>MA-Grocery Wholesaling</td>
<td>2,194.1</td>
<td>1.53</td>
</tr>
<tr>
<td>NH-Food Service and Drinking Places</td>
<td>1,778.9</td>
<td>1.33</td>
</tr>
<tr>
<td>CT-Grocery Wholesaling</td>
<td>1,757.3</td>
<td>1.48</td>
</tr>
<tr>
<td>RI-Food Service and Drinking Places</td>
<td>1,637.9</td>
<td>1.34</td>
</tr>
<tr>
<td>ME-Food Service and Drinking Places</td>
<td>1,617.8</td>
<td>1.32</td>
</tr>
<tr>
<td>CT-Miscellaneous Nondurable Wholesaling</td>
<td>720.8</td>
<td>1.28</td>
</tr>
<tr>
<td>VT-Food Service and Drinking Places</td>
<td>716.4</td>
<td>1.23</td>
</tr>
<tr>
<td>MA-Fisheries</td>
<td>649.8</td>
<td>1.00</td>
</tr>
<tr>
<td>MA-Bakeries and Tortillas</td>
<td>581.1</td>
<td>1.61</td>
</tr>
<tr>
<td>ME-Fisheries</td>
<td>575.0</td>
<td>1.03</td>
</tr>
<tr>
<td>ME-Other Dairy Product Manufacturing</td>
<td>500.5</td>
<td>1.43</td>
</tr>
<tr>
<td>VT-Grocery Wholesaling</td>
<td>456.0</td>
<td>1.43</td>
</tr>
<tr>
<td>MA-Other Food Product Manufacturing</td>
<td>448.5</td>
<td>2.05</td>
</tr>
</tbody>
</table>

Source: KRA using IMPLAN Model
1. New England’s Food System is important in and of itself in terms of size (jobs, sales).

2. It has not historically had high growth activity viewed as a whole, but certain industries, most recently brewing, local farm product and supply wholesaling, have seen very high growth rates.

3. Policy needs to be concerned with size, growth, and interconnections in the regional food system. Emphasis on one dimension is likely to be ineffective for the long-run.
Research: Multipliers

- Multipliers are important to measure the strength of inter-industry connections in a regional economy. They have useful policy applications for identifying the growth effects of industry-specific actions.

- They are not, by themselves, a measure of economic importance. They need to be accompanied by activity levels and growth rates. (There are a dozen industries with very high multipliers but no activity in some New England states.)

- Other factors need to be considered when looking at changes in the New England food supply and changes in the regional diet.
Multipliers Interpretation

As goods and services are produced and used by other industries, value is added along the way. (See Slide #13) The greater the value added contained within a region, the larger the impact on the local economy, with increasing income and employment.

Multiplier values are of two types:

Type I: Those that measure linked activity among producing industries (or activities)

Type II: Those that measure activity that is enabled by producing industries’ wage and income payments, i.e, consumption, savings, and investment.
Multiplier Interpretation

How to interpret multipliers: (See Slide #14)

The **Type 1-Employment** multiplier of 1.2355 means that for each added job in the New England Food System industries, a total of 1.2355 jobs are actually created, with the .2355 jobs generated to serve that added 1 job.

For the **Type 2-Employment** multiplier, 1.4971, an added job results in additional .4971 jobs, with the higher value than the Type 1 coming from worker consumption spending.
Group Discussion

Large Group Q&A

• Put your question in the chat and we will moderate chat questions

• We will compile a list of all questions and develop a Q&A document to release at a later date
Research: Next Steps

Update the Dietary Needs estimates from the New England Food Vision with current data on production and trends as well as USDA MyPlate guidelines.

Regional Market Demand Study to analyze consumption and purchasing patterns and identify potential demand for regionally produced food by market channel.

Identify and quantify targets necessary to produce and distribute 30% of the food needed by New England, representing the diversity of ethnic, racial, and cultural preferences, in New England, by 2030.

New England Food Flows will visually depict the quantity of imports and exports of food into and out of New England as well as “loops” of trade within New England.
What’s next, and how can I participate?

Quarterly newsletters/meetings (June 2022 & Sept. 2022)
Attend them all, and forward the invitation to your colleagues who might also want to attend.

Timely research reports
Help us share this data more widely with state decision makers - invite your state NEFNE lead to present to your state planning councils, climate commissions, and public finance entities.

Engagement with community-based organizations
We are reaching out to community based organizations to gain their insight on matters of food security and find out what is most important to them. Tell your state NEFNE lead who to contact.
For more information, contact your state lead, email nefne@vsjf.org, or visit www.nefoodsystemplanners.org

Thank you!