

# [How Nantucket Eats]

## Food Security Demand Mapping

### Problem

*Nantucket Island doesn't have adequate information available as to the level or intensity of food insecurity that exists in their community but is aware that the issue needs to be addressed. ReMain has committed to increasing the resilience of the island by utilizing local producers to ease some of the food insecurity present. Given that there isn't a formal report available providing the quantitative data required to make informed changes to the current food system, the following areas have been identified as necessary to best inform change.*

1. **Local food production** including type of food, amount of food produced, growing seasons and current amount of acreage used to produce food
2. **Food insecurity program data** to understand the number of food insecure seeking services, the amount of food that flows through these programs and the type of food

### Methodology

*The team used program data from several food-insecurity programs on the island. These programs include the Nantucket Food Pantry, Meals on Wheels, Nourishing Nantucket and Nantucket Public Schools. The food that was distributed through those programs comprised the 'demand' side of the equation. For the 'supply' side of the equation, we worked with farmers to determine the top crops that they are currently planting. The team then researched yields and growing seasons for the crops identified. Finally, we matched the top crop production with program consumption to determine the land needed to meet consumption demands.*

*Throughout this process, we made several baseline assumptions to simplify the calculations:*

- *No limitation on storage*
- [\*30% production and harvest food loss\*](#)
- [\*The acreage would be planted with mixed crops. The ratio of those mixed crops is determined by program demand\*](#)

### Data

- **Total food consumed** through FI programs:
  - *Over 310,000 pounds of food is consumed annually*
  - *Produce accounts 38.4% of total food consumed*

### [Food insecure produce consumption vs. Nantucket produce production](#)

- **Top crops grown on Nantucket (listed as greatest to least):** carrots, potatoes, onions, lettuce, cabbage, cucumber, beets, peppers, squash, tomatoes, corn
- **Total acres needed** to grow produce on island for consumption by those who are food insecure

### [Acreage needed to meet food insecurity demand](#)

## Outcomes

*What is the customer behavior we're seeking to change? Note: If this is shifting, escalate to a meeting with decision makers and stakeholders to nail down alignment*

1. *The data informs the purchase or transition of additional land for agricultural purposes*
2. *The data supports increased growth of food production by local producers*
3. *Outcomes 1 & 2 suggest a need for additional infrastructure (i.e. greenhouses and high tunnels for production or a facility for storage and processing) to support food security programs on Nantucket*

## Next Steps

*We believe that the next steps should focus on island infrastructure used to support food production and how this support impacts the local economy. The next steps are designed to create a sustainable and resilient food system, with only a subset for ReMain to tackle.*

1. **Infrastructure needs that support change.** *Quantification of current infrastructure in place on Nantucket. If greenhouses/high tunnels were used for production, how would the growing seasons be impacted? Would the extension of the growing season allow food security programs to meet the produce demand? Is there a need for storage and/or processing facilities? What technology would support increased agricultural production and economic growth?*
2. **Local food economics.** *How does the support of local agriculture affect the island's economy?*
3. **Land acquisition planning.** *Combine the data gathered from previous phases of research (i.e. amount of acreage needed to meet food security demand and increased food production) with data from Next Steps 1 and 2 to make informed decisions on land planning. Quantification of the cost of additional land used for produce production. What is the financial impact of acquiring land to meet the food security demand?*
4. **Implementation planning.** *How do we provide planning and a framework to bring this change to life on Nantucket? In what timeframe? Who on the island should own what parts?*