Maine's Food Sector: Industry Profile

SEPTEMBER 2023

State of Maine - DECD

Department of Economic
& Community Development

PROJECT OVERVIEW

Report Purpose

This document provides an in-depth analysis of the Agriculture, Fishing & Aquaculture, Food & Beverage Manufacturing, and Food & Beverage Wholesale Sectors in Maine, including domestic trade activity.

Industry classifications range from 2-digit industries (most broad) to 6-digit industries (most specific) under the North American Industry Classification System (NAICS). This report focuses on the 3- to 6-digit industry level to give more detailed analysis of Maine's domestic trade activity in the overall Food Sector. For details about all industries that are included in this analysis, please see the Appendix.

The focus of this report (domestic trade) may differ from other recent efforts, which may lead to discrepancies in data across reports. This report serves as one piece of the larger tapestry of research being conducted on the food sector within the state. Statewide, numerous significant efforts have been undertaken to study and quantify Maine's food sector. Understanding and takeaways from these studies have been incorporated into this report to the best of the authors' abilities.

Project Funding

This project is commissioned by the Office of Business Development through the Domestic Trade Pilot Program and is funded in part by the Maine Jobs and Recovery Plan.

Data

The most recent year of data in this report is 2022. Five-year growth rates refer to changes from 2017-2022, and five-year projections refer to 2022-2027, unless otherwise specified. For more information about the data used in this report, see the Appendix – Data Sources.

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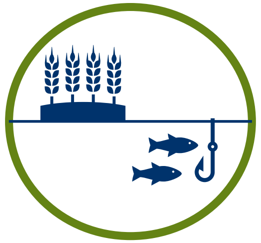
KEY COMPONENTS OF MAINE'S FOOD SUPPLY CHAIN

This chart demonstrates the typical activities that take place in the food supply chain. Farmers, processers, wholesalers, and buyers (restaurants, stores, consumers, etc.) all interact in this environment. Sometimes the process is linear, as demonstrated below, but sometimes the process takes different paths. For example, small farmers may harvest their crops and sell them directly at a farmer's market or a restaurant, bypassing all processing and wholesaling. Some products may go through this process multiple times. For example, grain may be brought to one processer to be ground into flour, then distributed through a wholesaler to a second processer where it is turned into bread or pastries. These players create a complex supply chain networks that work together to put food on our tables.



Cultivation & Harvest

Farmers cultivate crops, raise livestock, and carry out harvests. Aquaculture fisheries harvest fish, shellfish, and sea vegetables, while fisher people harvest them from the ocean.

Collection from Harvester

Crops and agricultural products are collected from farms, while seafood is collected from harvesters & fisher people. Often, these products are brought to a processer.

Processing

Raw food inputs are processed. This includes activities like cutting fish into fillets, cutting or packaging fresh fruit and vegetables, freezing fruits and vegetables, brewing beer or distilling wine, turning milk into dairy products, and any other process that turns raw food ingredients into intermediate and final food products.

Wholesale and Distribution

A wholesaler collects food products from processors. These wholesalers play the important role of distributing from factories to grocery stores, retail, and restaurants.

Final Point of Sale

Food is purchased from wholesalers by their final point of sale. This includes:

- Restaurants
- Grocery stores and supermarkets
- Caterers
- Other food service providers
- Hotels
- Institutions (Hospitals, Schools, Universities)

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EXECUTIVE SUMMARY

Maine's food sector plays an important role in the economy as a traded sector. In recent years, agriculture, seafood, and food manufacturing have all seen **strong employment growth and have high concentrations of employment in Maine**. Fish & Seafood is one of the state's strongest commodities for trade, representing 15% of all foreign exports out of Maine in 2022; **over 70% of sales in agriculture and food manufacturing and 94% of sales from fishing are exported out of the state**.

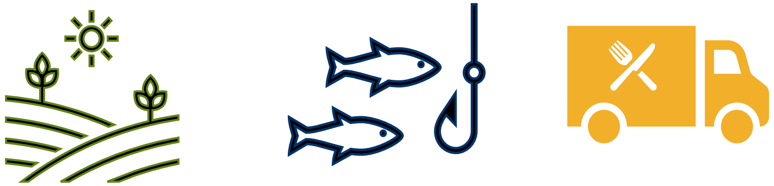
Warehousing and logistics represent key infrastructure that will be critical to the growth of the sector. For agriculture and seafood markets, producers need support to access markets, processors, and distribution networks to diversify and expand market opportunities.

It is important to note that **wholesale activities are at the crux of multiple points in the Food Sector supply chain,** both bringing raw agricultural product to producers as well as bringing processed food & beverage products to points of sale.

The Northeast and South Atlantic stand out as strong market opportunities for Maine's food sector. These areas represent markets that already import high volumes of Maine's products, and/or have high reliance on imports of agricultural, seafood, and other food products. Other states such as **Illinois and New York could provide strong markets for multiple segments of the food sector within the state.**

The food sector faces several opportunities in Maine, including **new technologies and new preferences for products** like sea vegetables, sustainable proteins, and plant-based foods. Similarly, consumer preferences and new regulations alike will lead to **opportunities for responsible sourcing, including bio-based and eco-friendly packaging.**

However, the sector also faces several threats. Agriculture and seafood industries will need to confront the many effects of **climate change** (drought, changing growing seasons, warming waters, and more); and tight **fisheries regulations**. Other challenges to domestic trade that will need to be addressed include **low volumes of production** as well as **food processing and supply chain infrastructure needs.**



AGRICULTURE

KEY FINDINGS

Agriculture

Sector Activity

The sector has seen strong growth in the last five years, adding over 2,200 jobs and growing by 47%. This far outpaced the nation, which declined during the last five years. Industries like Crops Grown Under Cover, Potato Farming, Dairy Production, and others led the charge for Agriculture's recent significant growth.

Maine's agriculture operations tend to be small and family-based. 96% of Maine farms were family farms in 2017, and about two-thirds of farms had market value of crops under $10,000.

Potato farming is the highest value agricultural product in Maine with $176.4 million of sales in 2017. Potato farming also had the highest sales per farm, averaging nearly $1.1 million each.

In 2021, the Northeast as well as the South Atlantic regions were top destination markets for Maine's Agricultural Products. All states that received $1.0 million or more of Maine's agricultural products were in these two regions of the U.S.

The sector has strong trade activity, with 72% of all sector sales being exported outside of Maine. **Illinois, New York, Virginia, and Georgia** present opportunities, as these have relatively high shares of demand met by imports as well as high demand volume.

Maine farmers need support to produce enough volume to access new markets. It is difficult for small farmers to access new markets, in large part because they are unable to produce enough product to gain market share. Another similar challenge is access to efficient and cost-effective transportation to markets.

Subsectors included in this section

- **111 Crop Production:** Industries in this subsector grow crops mainly for food or fiber. It includes establishments like farms, orchards, greenhouses, and nurseries engaged in growing crops, plants, vines, or trees and their seeds. Establishments are classified in the Crop Production subsector if crop production accounts for one-half or more of the establishment's total agricultural production.
- **112 Animal Production:** Industries in this subsector raise or fatten animals for the sale of animals or animal products. It includes establishments such as ranches, farms, and feedlots, primarily engaged in keeping, grazing, breeding, or feeding animals. Establishments are classified in the Animal Production subsector if animal production accounts for one-half or more of the establishment's total agricultural production.
- **Support for Agriculture**
    - **1151 Support Activities for Crop Production:** These establishments are engaged in providing support activities for crop farming. For example, businesses that provide aerial crop spraying, cultivation services, or farm management services belong in this industry.
    - **1152 Support Activities for Animal Production:** These establishments perform support activities related to raising livestock. For example, breeding services, pedigree records services, boarding horses, dairy herd improvement services, livestock spraying, and sheep shearing are all activities that belong in this industry.

NATIONAL TRENDS

KEY TRENDS

- Different product segments have seen a variety of market dynamics in recent years. While the price of vegetables have risen and profit is projected to hold steady, fruit farmers have seen weak demand growth and declining crop value.
- Meanwhile, dairy prices have risen in recent years, although input costs have similarly risen, cutting into profits.
- Consumer preferences are changing, and consumers are expected to spend more on premium, organic products. Similarly, dairy alternatives have become more sophisticated in recent years.
- Climate change, rising cost of irrigation, and other related factors are a significant challenge.
- Domestic farmers and producers will have the opportunity to compete with importers, as there is lower competition from imports and domestic yields grow.

RECENT DEVELOPMENTS

- Uncertainty in government expenditure may leave farmers vulnerable. For example, the 2018 Farm Bill is set to expire in September 2023, and operators are uncertain about how this legislation may be changed.
- Widespread drought has impacted crop yield and distribution
- Rapid economic expansion brings record-high inflation of food & agricultural products

Source: IBISWorld

INDUSTRY DRIVERS

- Trade-weighted index
- Per capita disposable income
- Price of raw food inputs, like vegetables, fruit, and milk
- Per capita consumption of fruit & vegetables
- Per capita dairy consumption
- Threat of natural disaster
- Demand from wholesalers

SUPPLY CHAIN

SUPPLYING INDUSTRIES

Crop Services

Tractors & Agricultural Machinery

Water Supply & Irrigation

Fertilizer Mfg.

Livestock Wholesaling

Livestock Support Services

Utilities & Power Supply

Agriculture

BUYING INDUSTRIES

Canned Fruit & Vegetable Processing

Fruit & Vegetable Wholesaling

Supermarkets and Grocery Stores

Specialty Food Stores

Dairy Product Production

Restaurants

Dairy Wholesaling

DATA NOTE:
This page provides a brief qualitative overview of macro trends facing this sector and structural causes of growth for the sector. A supply chain summary shows key industries upstream and downstream of the sector. Trends and projections noted by IBISWorld typically reflect a period of +/- 5 years

NATIONAL TRENDS

Jobs (2022)
3.2 Million

Job Growth
2017-2022: 8.3%
2022-2027 Projected: 3.9%

Establishments (2022)
2.4 Million

Avg. earnings (2022)
$12,487

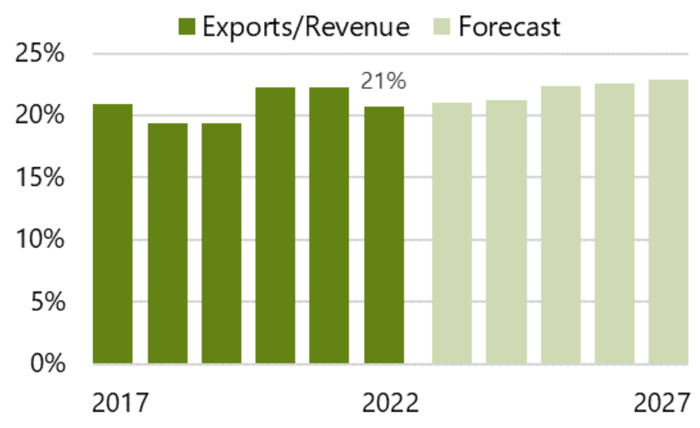
Domestic Demand (2022)
$464.8 Billion

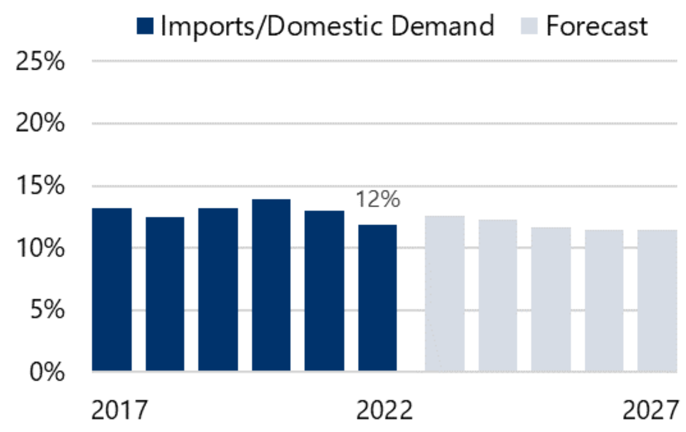
Top Countries (2022)
Imports: Mexico, Canada, Chile, Colombia, Peru
Exports: China, Mexico, Canada, Japan, South Korea

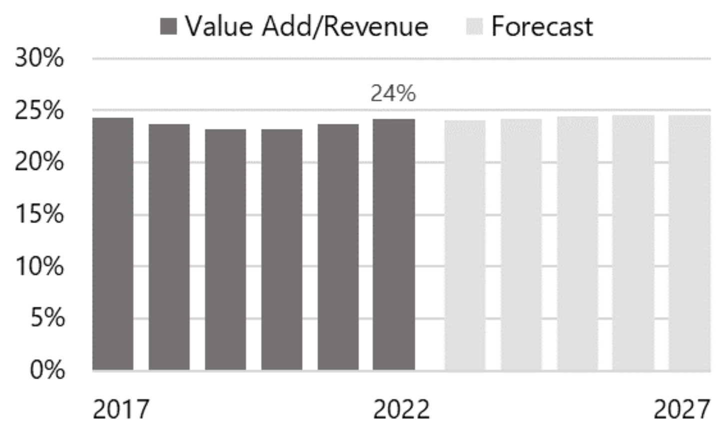
The exports share of revenue was 21% in 2022. This indicator shows the relative importance of exports to the sector's overall revenue strength.

The imports share of domestic demand was 12% in 2022. This demonstrates how much of demand for the sector's products in the US are met by foreign imports.

The value-add-to-revenue ratio was 24% in 2022. This indicator shows how much value the production process adds to products relative to the overall size of the sector.







Source: IBISWorld; Trade Partners from US Census Bureau

SECTOR SUMMARY: MAINE PERFORMANCE

Agriculture Summary

Jobs: 6,390

- Data for 2021
- 1.3% of the state's total employment

Job Growth: +2,210

- Data compares 2016-2021
- Growth in Maine was driven by Other Food Crops Grown Under Cover, which includes crops grown in greenhouses. This industry grew by over 1,600 jobs.

Job Growth Rate: +47%

- Data compares 2016-2021
- Growth significantly outperformed the United States, which declined by 1% during this period.

Concentration: 1.41

- Data for 2021
- Maine's employment in agriculture was 1.41 times more concentrated than the nation. Industries like Potato Farming & Other Crops Grown Under Cover showed the highest concentrations.

Establishments: 1,742

- Data for 2021
- Maine agriculture establishments were smaller than the nation, averaging 4 jobs per establishment in Maine compared to 12 in the U.S.

Average Earnings: $40,189

- Data for 2021
- Similar to the average earnings for Agriculture workers in the United States, but lower than the State average for all sectors.

Competitive Effect: +2,193

- Data compares 2016-2021
- Maine added 2,193 agriculture jobs more than would be expected given overall national and industry trends.

*Gross Regional Product: $781.5 Million

- Data for 2022
- 0.9% of the state's total GRP, comparable to the US (0.9%)

*Productivity: $87,169

- Data for 2022
- GRP per worker
- Lower than the US ($122,302)

*Total Sales: $1.8 Billion

- Data for 2022
- 72% of sales were exported out of state

*Demand: $1.3 Billion

- Data for 2022
- 36% of demand was met by in-state sources

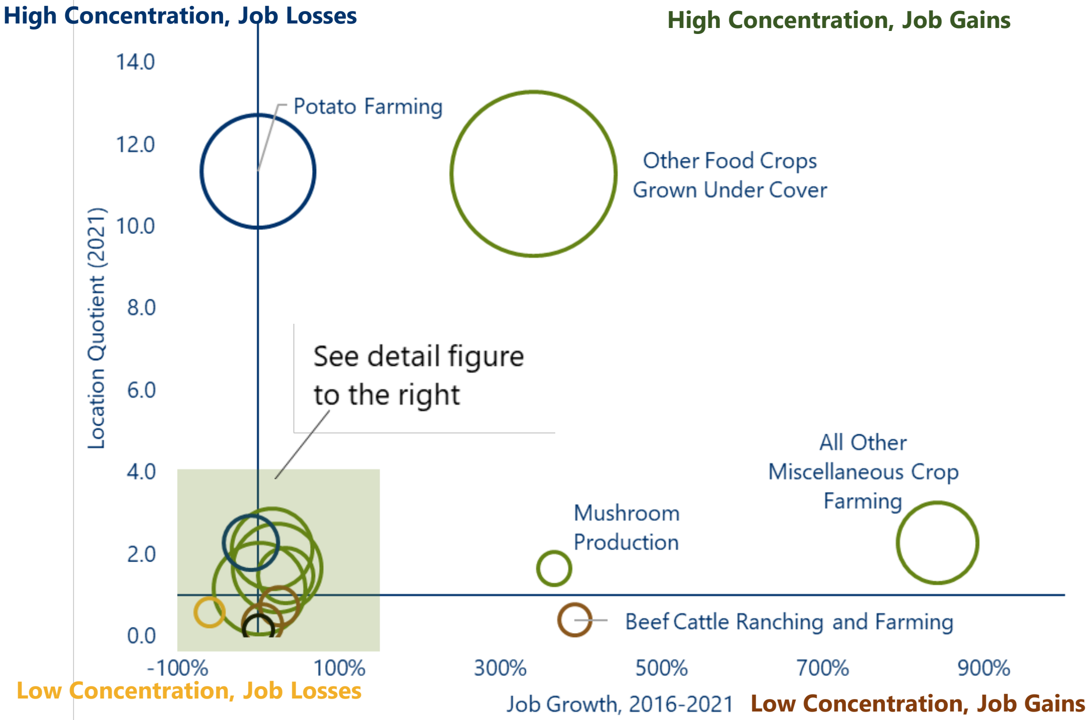
*Leakage: $860 Million

- Data for 2022
- $860 million of demand was met by out-of-state sources.

Source: IMPLAN, Lightcast
Note: Items marked with an * indicate that they are derived from Lightcast, a source that includes sole proprietors and non-traditional agriculture workers. IMPLAN data does not include these types of agriculture workers, and likely undercounts activity within the sector.

DATA NOTE:
National figures on this page were calculated using a different source than on page 8, which may lead to some differences.

KEY INDUSTRIES

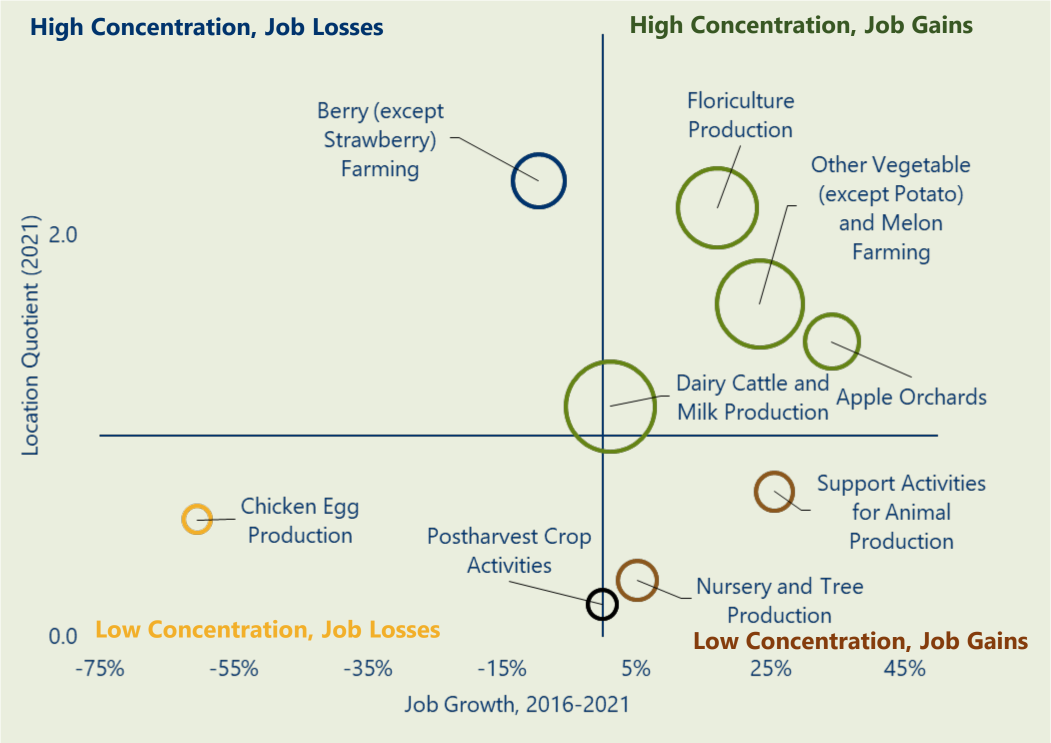


Bubble size = 2021 jobs

Source: IMPLAN, Camoin Associates

Note: Figure includes 6-digit NAICS industries with at least 50 jobs in 2021.

Industry Detail



Key Findings:

- **Potato Farming and Other Food Crops Grown Under Cover both have location quotients (LQ) of 11.3, the highest for the sector.** The latter also saw significant growth in the last five years, growing by 341% and adding over 1,200 jobs since 2016. The industry includes crops grown in a greenhouse, for example via hydroponics or vertical farming.
- **Floriculture Production, Other Vegetable & Melon Farming, Apple Orchards and Dairy Cattle & Milk Production are both strong and growing**
- **Two industries are emerging with low concentrations but positive job growth from 2016-2021**. These include Nursery and Tree Production and Support Activities for Animal Production
- Berry (Except Strawberry) farming had a high LQ (2.3) but saw slight job loss (-19 jobs)
- Chicken Egg Production is the only industry that had both low concentration and job loss, losing 79 jobs from 2016-2021
- **Mushroom Production & All Other Misc. Crop Farming has posted exceptionally high growth rates**, at over 300% and 800% from 2016-2021, respectively

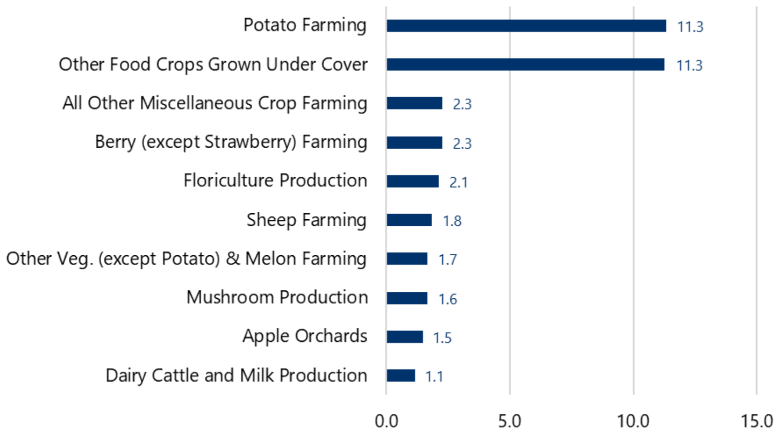
DATA NOTE:
There are three performance measures in the chart above that combine to relate the competitiveness of this activity, (1) bubble size is size of industry by jobs, (2) vertical axis measures industry concentration in Maine, (3) horizontal axis measures recent jobs growth. Note that official Payroll Jobs statistics tend to undercount agriculture-related jobs.

SUBSECTOR PERFORMANCE

In 2021, Maine had 5,039 payrolled jobs in the Agriculture

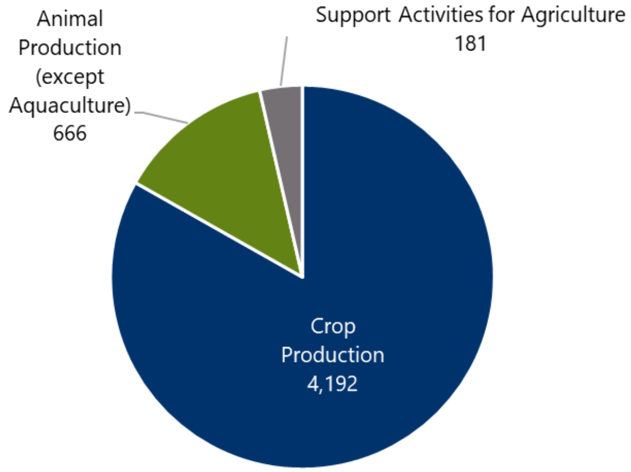
- **Crop Production** made up the largest key subsector, with 4,192 payrolled workers in 2021. It had a location quotient of 1.83, meaning it was 1.83 times more specialized than would be expected for an economy of Maine's size. Other Crops Grown Under Cover was the largest industry in this subsector, with 1,606 jobs in 2021. This industry includes food crops that are grown in a greenhouse. Potato Farming was the second-largest industry with 756 jobs. These two industries were tied for the highest location quotient, at 11.3. Crop Production overall grew 74% from 2016-2021 and had a competitive effect of 1,844. In other words, **Crop Production in Maine grew much faster than expected given national and industry trends in the subsector.**
- **Animal production was the second-largest subsector** in 2021. It was almost entirely composed of Dairy Cattle & Milk Production, with 508 jobs. It had a relatively low concentration in Maine, with a location quotient of 0.63. From 2016-2021, the subsector lost 131 jobs, driven by reductions in Chicken Egg Production (-79) and Poultry Hatcheries (-64), and partially offset by Beef Cattle Ranching and Farming (+51).
- **Support Activities for Agriculture was the smallest subsector, with 181 jobs in 2021.** The largest industry in this subsector was Support Activities for Animal Production, with 93 jobs. This industry is engaged in activities such as breeding services for animals, boarding horses, sheep shearing, and others.

To Location Quotients for Industries in the Agriculture Sector (2022)



Source: IMPLAN

Job Distribution of the Agriculture Sector (2021)



Source: IMPLAN

DATA NOTE:

Employment in the Agriculture sector is typically underreported and undercounted. The data presented here does not include self-employed workers, sole proprietors, and informal workers, which account for a large portion of agriculture workers.

Location quotient (LQ) is a measure of industry concentration within a region. An LQ of 1.0 means that an industry is as concentrated within the region as it is on a national level. An LQ greater than 1.0 indicates that an industry is more concentrated in a region than at the national level.

The **competitive effect** illustrates how much change in an industry is not explained by national economic or industry trends. A positive competitive effect means that the region has unique characteristics giving it a competitive advantage in that respective industry. However, a negative competitive effect indicates that an industry is either not growing as quickly *or* shrinking faster than national industry trends for the US.

SUBSECTOR PERFORMANCE

Agriculture in Maine: Industry Summary

Description	Jobs 2016	Jobs 2021	Jobs Change 2016-2021	Jobs Change % 2016-2021	Avg. Earnings Per Job 2021	Location Quotient 2021	Competitive Effect 2016-2021	Payrolled Business Locations 2021
Crop Production	2,407	4,192	1,785	74%	$33,414	1.83	1,844	544
Animal Production (except Aquaculture)	797	666	(131)	-16%	$36,069	0.63	-139	77
Support Activities for Agriculture	183	181	(2)	-1%	$34,307	0.12	-1	53
Total in Maine	**3,387**	**5,039**	**2,210**	**47%**	**$33,797**	**1.04**	**1,704**	**674**
Total in the United States	**1,172,325**	**1,160,018**	**(12,307)**	**-1%**	**$40,659**	**--**	**--**	**94,967**

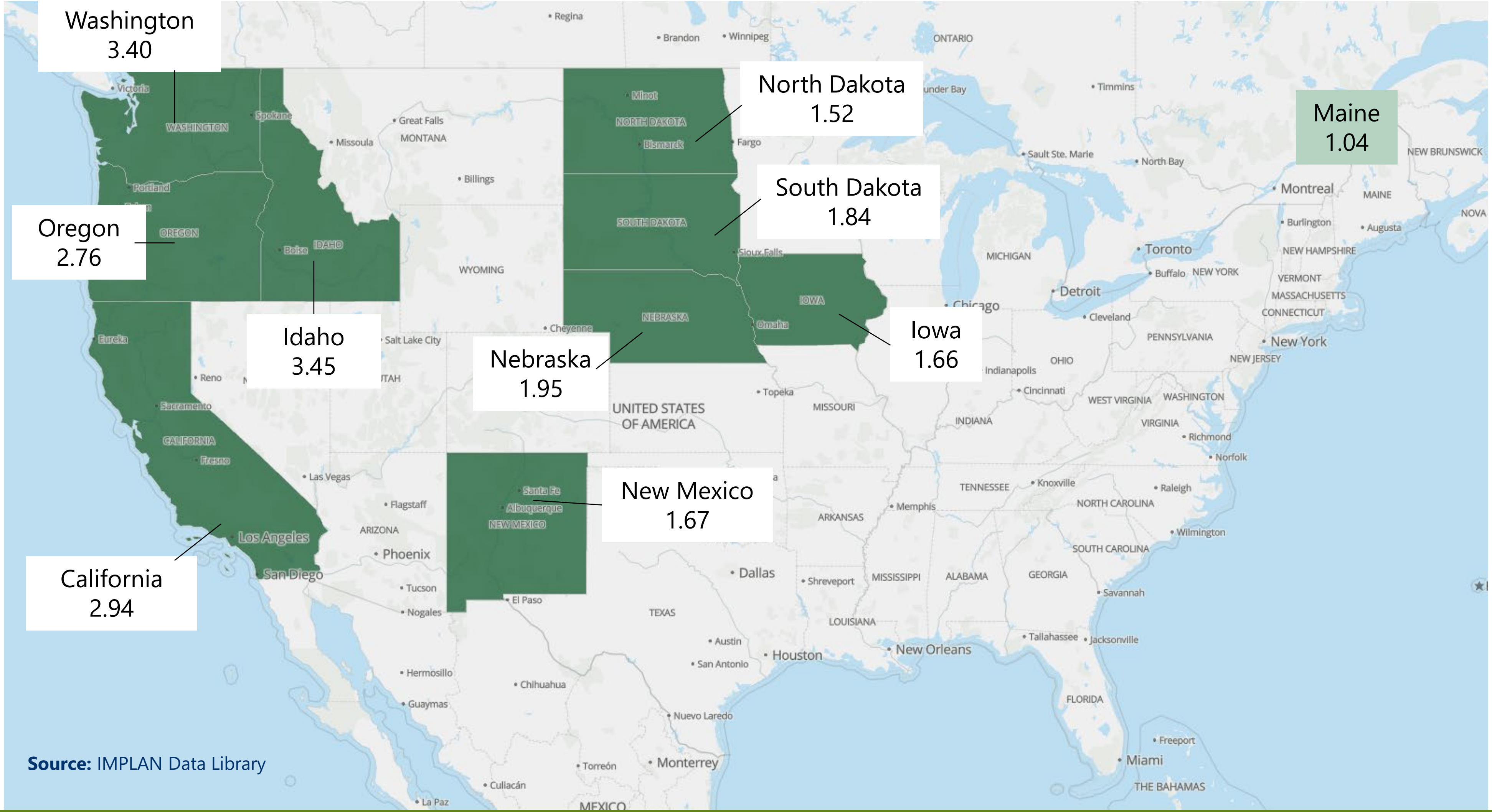
Source: IMPLAN, Camoin Associates

Agriculture employment growth far outpaced the nation, adding 2,210 jobs from 2016-2021

- **During the same time period, the nation's Agriculture sector contracted by 1%.** Given this trend, Maine's Agriculture sector has a strong competitive effect, adding over 1,700 more jobs than would be expected given national trends. This is almost entirely due to growth in the Crop Production subsector.
- **Agriculture is a low-paying sector, with average annual earnings of about $33,800.** This is significantly lower than Maine's average for all sectors and lower than the national average for the sector ($40,659). Average annual pay ranges from a low of just over $17,400 in Horses and Other Equine Production to a high of about $54,000 in Beef Cattle Ranching and Farming.
- The sector has a large number of nontraditional workers that are not typically counted in official data. According to Lightcast, Support Activities for Agriculture—Farm Labor Contractors in particular—had an additional 762 non-traditional workers that are not counted in the above employment figures.

KEY NATIONAL PLAYERS

States with >1.5 Location Quotient for the Agriculture Sector (2022)

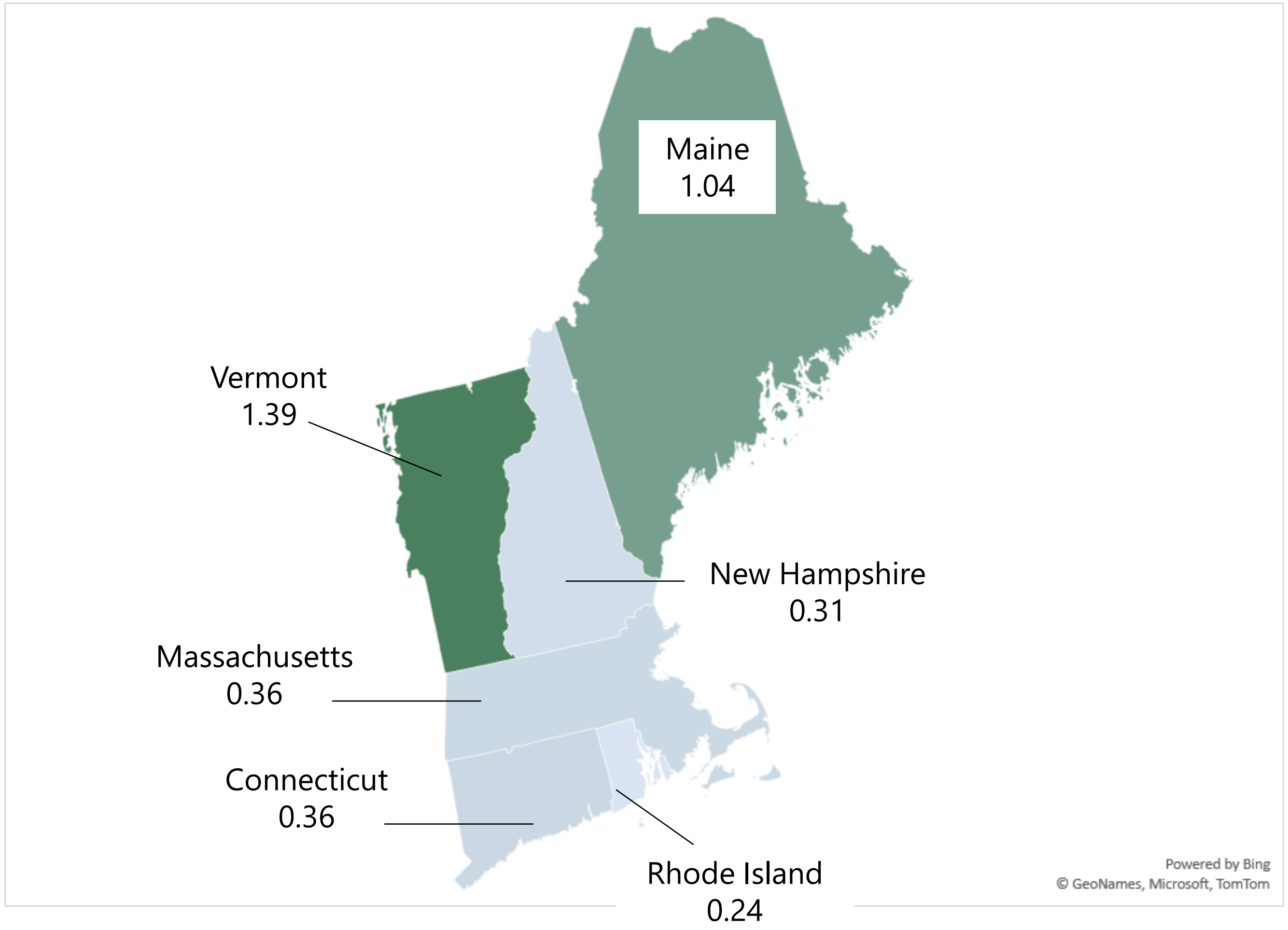


Source: IMPLAN Data Library

DATA NOTE: Location quotient (LQ) is a measure of industry concentration within a region. An LQ of 1.0 means that an industry is as concentrated within the region as it is on a national level. An LQ greater than 1.0 indicates that an industry is more concentrated in a region than at the national level.

KEY REGIONAL PLAYERS

Location Quotients for the Agriculture Sector in New England



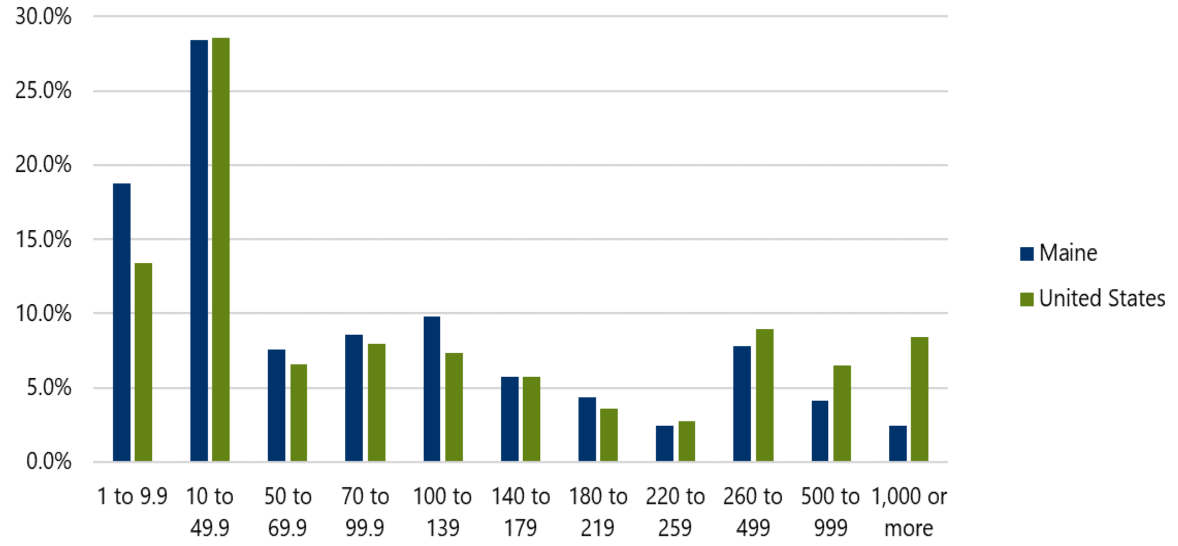
Source: IMPLAN Data Library

MAINE FARM CHARACTERISTICS

Maine's farms tend to be smaller operations, with low acreage and low annual sales.

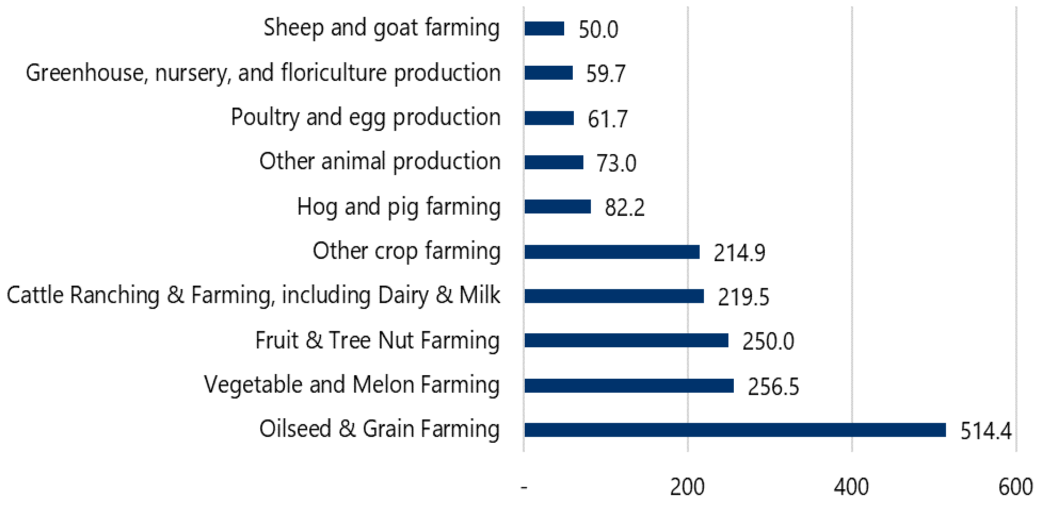
- In 2017, 1,427 farms, or 19%, operated on less than 10 acres. This compares to only 13% on average in the United States. Overall, almost half (47%) of farms in Maine operate on less than 50 acres, with the largest share being between 10-49.9 acres.
- Oilseed & Grain farming tends to have the largest farms by land usage, with an average of 514.4 acres. Vegetable & Melon Farming, Fruit & Tree Nut Farming, Cattle including Dairy & Milk, and Other Crops have average acreage between 200-300 acres in Maine, while other types of farms, primarily other types of animal production, have lower acreage.

Distribution of Farms by Acreage of Operation, Maine vs. US (2017)



Source: 2017 Census of Agriculture

Average Acres Operated by Industry

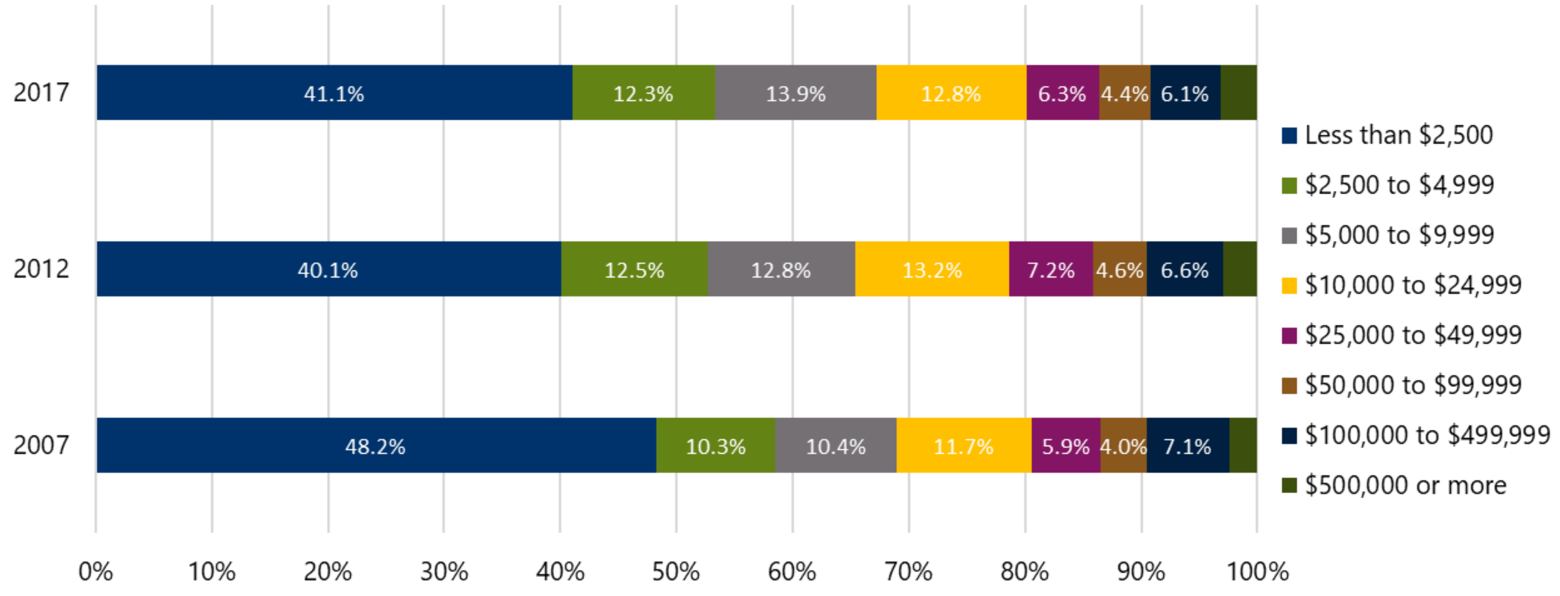


Source: 2017 Census of Agriculture

MAINE FARM CHARACTERISTICS

- Two-thirds of farms (5,112) had market value of sales under $10,000 in 2017. This figure decreased slightly from 2007, when 69% of farms (5,608) had annual sales less than $10,000.
- Of these farms with less than $10,000 in sales, the vast majority total less than $2,500 in a year. Overall, 41.1% of farms (3,122 farms) had less than $2,500 of sales.
- On average, Maine farms had about $2,600 of sales per acre in 2017.

Distribution of Maine Farms by Value of Sales



Source: USDA, Census of Agriculture

Industry Demand and Purchases

Where is Maine's Agriculture sector buying from?

PURCHASING INDUSTRIES Industries Maine Agriculture Buys From

Top 25 Industries the Agriculture Sector Purchases From (2022)

NAICS	Industry	In-Region Purchases	% In-Region Purchases	Imported Purchases	% Imported Purchases	Total Purchases
111000	**Crop Production**	$59,751,353	58.8%	$41,860,825	41.2%	$101,612,178
112000	**Animal Production**	$16,541,124	19.2%	$69,392,570	80.8%	$85,933,694
311119	Other Animal Food Manufacturing	$3,038,903	6.3%	$45,038,434	93.7%	$48,077,336
531110	Lessors of Residential Buildings and Dwellings	$23,156,194	82.0%	$5,093,470	18.0%	$28,249,664
325320	Pesticide and Other Agricultural Chemical Manufacturing	$0	0.0%	$27,688,947	100.0%	$27,688,947
115115	**Farm Labor Contractors and Crew Leaders**	$6,723,564	24.9%	$20,304,660	75.1%	$27,028,224
531210	Offices of Real Estate Agents and Brokers	$17,154,248	73.3%	$6,261,919	26.7%	$23,416,167
324110	Petroleum Refineries	$0	0.0%	$23,407,810	100.0%	$23,407,810
325311	Nitrogenous Fertilizer Manufacturing	$5,019,399	24.3%	$15,623,915	75.7%	$20,643,314
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	$17,382,984	88.2%	$2,326,841	11.8%	$19,709,825
531390	Other Activities Related to Real Estate	$9,785,855	56.9%	$7,408,655	43.1%	$17,194,510
424690	Other Chemical and Allied Products Merchant Wholesalers	$5,895,623	37.1%	$9,981,532	62.9%	$15,877,155
115114	**Postharvest Crop Activities**	$563,390	4.4%	$12,387,108	95.6%	$12,950,499
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers	$7,177,282	55.6%	$5,733,759	44.4%	$12,911,041
325314	Fertilizer (Mixing Only) Manufacturing	$3,014,787	23.4%	$9,885,718	76.6%	$12,900,505
424910	Farm Supplies Merchant Wholesalers	$2,681,654	22.2%	$9,410,246	77.8%	$12,091,900
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	$8,343,161	71.0%	$3,400,044	29.0%	$11,743,205
484121	General Freight Trucking, Long-Distance, Truckload	$7,559,457	64.5%	$4,156,891	35.5%	$11,716,348
325312	Phosphatic Fertilizer Manufacturing	$0	0.0%	$10,751,725	100.0%	$10,751,725
531311	Residential Property Managers	$8,093,202	75.6%	$2,607,005	24.4%	$10,700,207
115210	**Support Activities for Animal Production**	$2,620,675	27.2%	$7,002,331	72.8%	$9,623,006
424810	Beer and Ale Merchant Wholesalers	$8,533,512	89.0%	$1,056,042	11.0%	$9,589,554
335911	Storage Battery Manufacturing	$0	0.0%	$9,464,475	100.0%	$9,464,475
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	$122,439	1.4%	$8,437,276	98.6%	$8,559,715
482110	Rail transportation	$4,901,708	59.6%	$3,322,233	40.4%	$8,223,940

Source: Lightcast

Note: Industries that are **bolded** indicate that they are included in the overall Sector.

- **The Crop Production and Animal Production industries were the largest supplier to the Agriculture sector**, totaling over $187 million in 2022. About 41% of purchases from Crop Production were imported, compared to about 81% from Animal Production.
- **Other related industries,** like Animal Food Manufacturing, Pesticide and Agricultural Chemical Manufacturing, and Fertilizer Manufacturing, **were top suppliers to the agriculture industry. Most of the purchases for these products were met by imports, reflecting a key opportunity for Maine business to grow to support the Agriculture supply chain.**
- The top 25 purchasing industries made up 69.2% of total purchases, **indicating that purchases that the sector makes were relatively concentrated within a few industries throughout the economy.**

DATA NOTE:
This table gives greater insight into supply chain gaps within the sector. Industries that have low shares of in-region purchases indicate opportunities where Maine relies heavily on imported supply, but where Maine businesses could potentially expand to recapture transactions. The figure above is sorted by Total Purchases, from greatest to least.

DEMAND

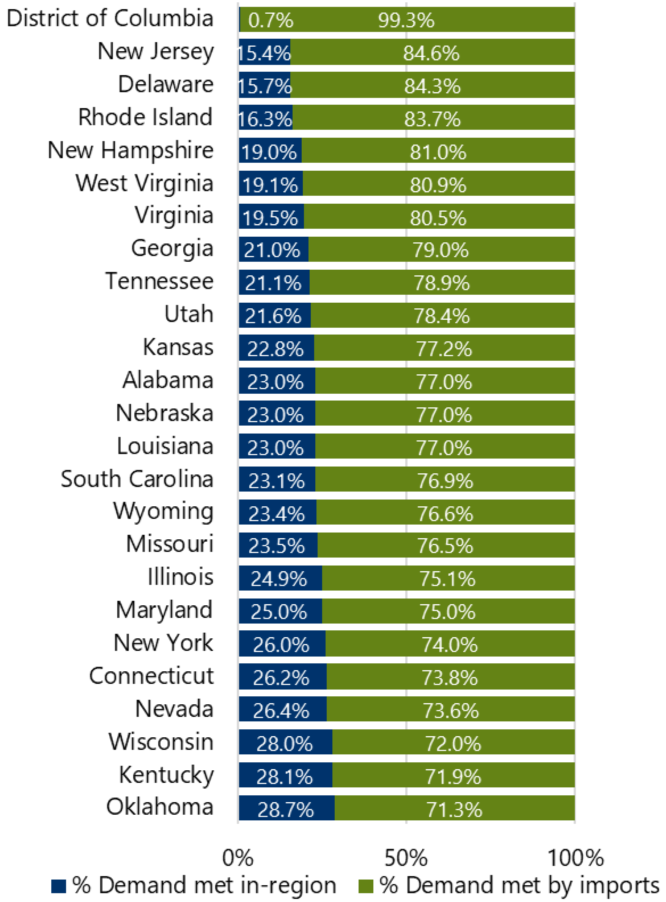
Top 10 States by Total Demand for Agriculture Sector

	Payrolled Business Locations	Demand met in-region	% Demand met in-region	Demand met by imports	% Demand met by imports	Total Demand
California	16,226	$30,577,263,939.40	68.3%	$14,194,294,692.20	31.7%	$44,771,558,632
Texas	9,810	$14,688,837,992.70	42.0%	$20,274,105,157.10	58.0%	$34,962,943,150
Illinois	2,263	$5,968,323,561.67	24.9%	$17,955,530,479.40	75.1%	$23,923,854,041
Iowa	2,693	$7,058,094,342.61	32.2%	$14,858,564,119.10	67.8%	$21,916,658,462
Wisconsin	2,422	$5,231,315,554.21	28.0%	$13,439,558,823.70	72.0%	$18,670,874,378
New York	2,763	$4,779,754,728.47	26.0%	$13,600,006,008.50	74.0%	$18,379,760,737
Ohio	1,672	$4,730,134,915.34	28.9%	$11,615,804,944.60	71.1%	$16,345,939,860
Pennsylvania	2,162	$4,538,104,917.22	29.2%	$11,015,286,585.90	70.8%	$15,553,391,503
Nebraska	2,478	$3,443,972,345.17	23.0%	$11,537,805,160.60	77.0%	$14,981,777,506
Minnesota	2,747	$4,991,195,478.05	35.3%	$9,163,928,618.51	64.7%	$14,155,124,097

Source: Lightcast

- **Maine ranked 43rd among all states for total demand**, at $1.3 billion in 2022
- The states with the highest overall demand for the sector's products tended to be those with the largest economies in the nation. However, there are some exceptions, like Iowa, Wisconsin, and Nebraska which were among the top states for demand.
- **The largest importer of the Agriculture Sector was Washington, D.C.**, with over 99% of total demand being met by imports in 2022 due to minimal agricultural capacity.
- **Maine ranked 42nd overall for percent of demand met by imports**, having a comparatively high share of demand met within Maine.
- **South Atlantic States** (DC, DE, WV, VA, GA, SC, MD) made up 7 of the top 25 for their share of demand for Agriculture demand met by imports.
- **Illinois, New York, Virginia, and Georgia** present opportunities, as these had relatively high shares of demand met by imports as well as high demand volume.

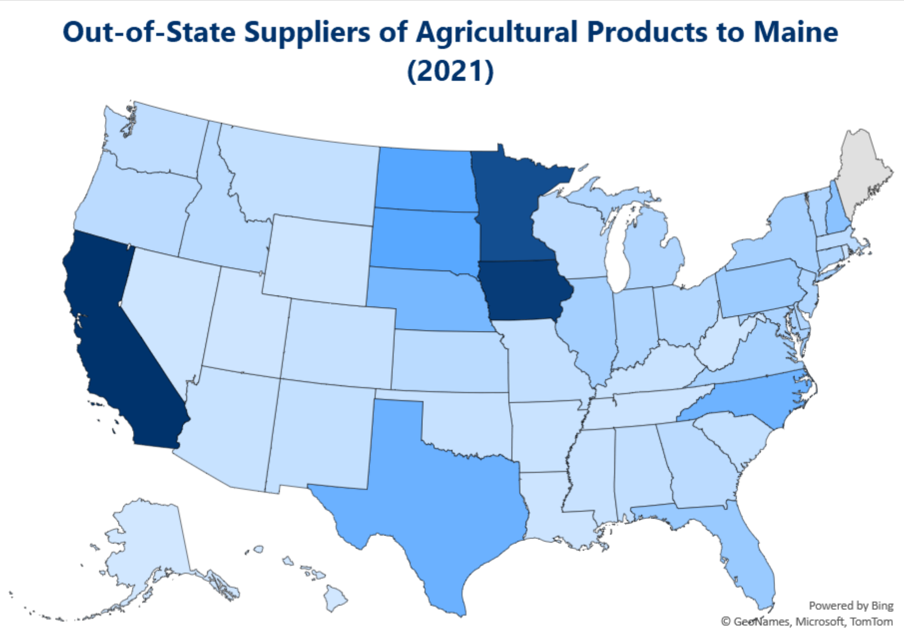
Top 25 States by Share of Demand Met by Imports (2022)



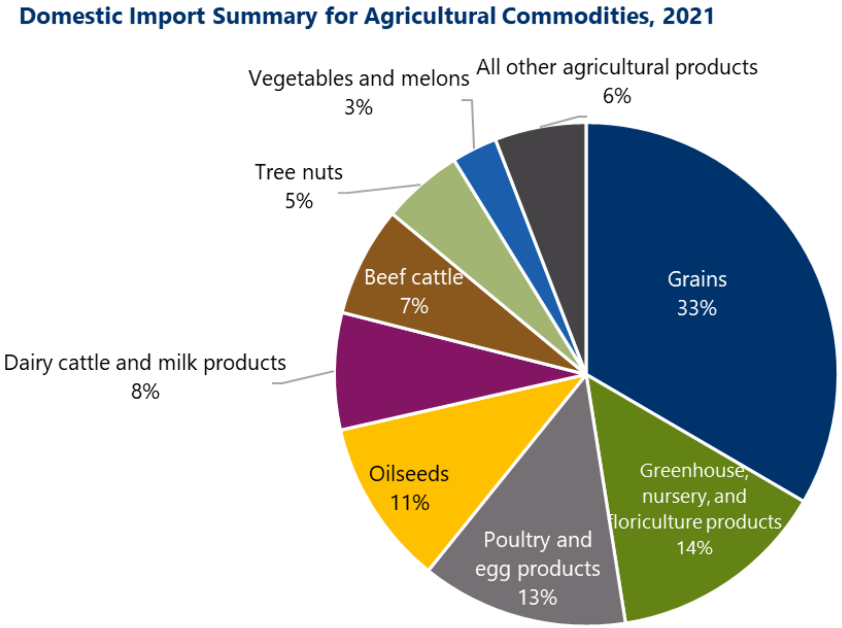
Source: Lightcast

DATA NOTE:
Metrics for sector demand by state indicate the states that have the largest local markets for this type of activity. States whose local demand is met by imports at a high rate are using imports instead of local firms and could be a good target for Maine exports.

DOMESTIC IMPORTS – AGRICULTURAL PRODUCTS



Source: IMPLAN Data Library



Source: IMPLAN Data Library

Nearly every state supplied Maine with agricultural products in 2021.

- **California, Iowa, and Minnesota were the three largest suppliers to Maine's markets**. California alone accounted for 12% of imports, with the largest commodities from CA being Tree Nuts, Dairy, and Vegetables and Melons.
- **Grain represents the largest commodity that Maine imports, making up one-third of agricultural imports in 2021**. Major suppliers of grain were Iowa and Minnesota, with over $45 million of grains each imported to Maine in 2021.
- Overall, the real import value of agricultural products increased at a compound annual growth rate of 0.5% from 2011-2021. Several commodities have seen declines over the decade, such as Dairy Cattle and Milk Products; Grains; and Fruit. Other commodities have seen growth.

DATA NOTE: Figures on this page are from IMPLAN's Data Library and may not match other data in this report. IMPLAN domestic trade flows data covers commodities, or the products and services that are produced by a sector. This differs from other data in this report, which covers NAICS industries. Industries often produce more than one commodity.

DEMAND & IMPORTS

TOTAL DEMAND (2022)
Maine: $1.3 Billion
United States: $454.5 Billion

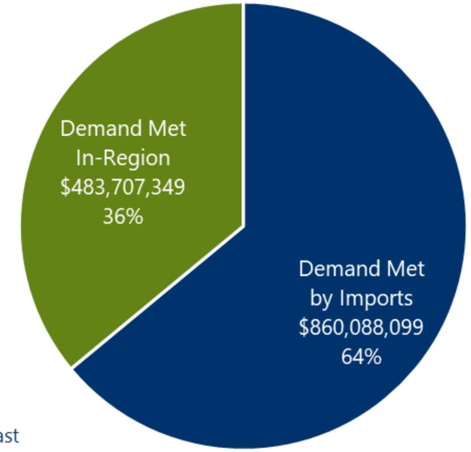
MET BY IMPORTS (2022)
Maine: $860.1 Million
United States: N/A

FOREIGN IMPORTS (2022)
Maine: $99.1 Million
United States: $56.4 Billion

Source: Lightcast, US Census Bureau

- The Agriculture Sector had a total demand of $1.3 billion in 2022, of which 64.0% ($860.1 million) was met by out-of-state sources.
- According to US Census data, the total foreign import value of the sector was $99.1 million in 2022.
- Foreign imports accounted for 7.4% of all demand met by imports, implying that 92.6% of imported demand was met by domestic sources.

Total Agriculture Demand in Maine



Source: Lightcast

Top 10 Imports of the Agriculture Sector to Maine (2022)

Code	Commodity	Total Value ($US)
0811	Fruit & Nuts (raw Or Cooked By Steam Etc), Frozen	$53,424,363
0810	Fruit Nesoi, Fresh	$18,796,221
0701	Potatoes (except Sweet Potatoes), Fresh Or Chilled	$8,835,445
0101	Horses, Asses, Mules And Hinnies, Live	$8,370,243
0710	Vegetables (raw Or Cooked By Steam Etc), Frozen	$4,064,226
0809	Apricots, Cherries, Peaches, Plums & Sloes, Fresh	$857,761
0709	Vegetables Nesoi, Fresh Or Chilled	$797,199
1005	Corn (maize)	$674,130
0702	Tomatoes, Fresh Or Chilled	$529,882
0102	Bovine Animals, Live	$344,736

Source: US Census Bureau USA Trade Online

DATA NOTE:
Maine's demand for this sector's products shows the size of the local market. The share of that market supplied in-region versus imports (either from other states in the U.S. or other countries) relates the success of local firms or the competitiveness of domestic and international import goods.

Industry Sales and Exports

Where is Maine's Agriculture sector selling to?

IN-REGION SALES INDUSTRIES Industries Maine Agriculture Sells To

Top 25 Industries the Agriculture Sector Sells To In Maine (2022)

NAICS	Industry	In-Region Sales	Percent of In-Region Sales
111000	**Crop Production**	$60,337,370	20.0%
113310	Logging	$30,464,445	11.8%
112000	**Animal Production**	$25,702,447	9.2%
312120	Breweries	$18,167,712	5.4%
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	$17,138,985	5.4%
311221	Wet Corn Milling	$12,821,462	4.6%
311511	Fluid Milk Manufacturing	$11,627,054	4.3%
311615	Poultry Processing	$ 8,962,189	4.0%
321113	Sawmills	$ 4,937,076	2.4%
311920	Coffee and Tea Manufacturing	$ 4,791,512	1.9%
311999	All Other Miscellaneous Food Manufacturing	$ 4,781,581	1.8%
311991	Perishable Prepared Food Manufacturing	$ 4,258,853	1.6%
311421	Fruit and Vegetable Canning	$ 4,191,594	1.5%
445110	Supermarkets and Other Grocery (except Convenience) Stores	$ 3,851,084	1.4%
311611	Animal (except Poultry) Slaughtering	$ 3,585,242	1.2%
311812	Commercial Bakeries	$ 3,198,078	1.2%
311119	Other Animal Food Manufacturing	$ 3,066,140	1.1%
322121	Paper (except Newsprint) Mills	$ 2,254,630	1.1%
902999	State Government, Excluding Education and Hospitals	$ 2,063,940	1.0%
311612	Meat Processed from Carcasses	$ 1,975,525	1.0%
311412	Frozen Specialty Food Manufacturing	$ 1,828,852	0.9%
312140	Distilleries	$ 1,777,889	0.9%
322110	Pulp Mills	$ 1,594,842	0.8%
311513	Cheese Manufacturing	$ 1,519,469	0.7%
313110	Fiber, Yarn, and Thread Mills	$ 1,428,023	0.7%

Source: Lightcast

Note: Industries that are **bolded** indicate that they are included in the overall Sector.

- **Crop & Animal Production are among the largest buyers of Agriculture's goods**, accounting for a collective $86.0 million, or 31.5% of in-region sales.
- **Various Food Manufacturing industries** also make up a significant portion of in-region sales, including Fluid Milk; Frozen Fruit, Juice, and Vegetable Manufacturing; Breweries; and Poultry Processing, among others**. Food Manufacturing industries make up 18 of the top 25 industries, or 38.6% of all in-region sales for the Agriculture Sector.**
- These top 25 sales industries make up 86.6% of total in-region sales, **indicating that sales of the sector's products are relatively concentrated in a few industries of the economy.**

DATA NOTE:
The sales in this table do not add up to total in-region sales because it only captures sales to other industries, and not other entities like consumers. The Percent of Total In-Region Sector Sales shows the portion of sales to a given industry as it relates to total sales to *all industries*, not total in-region sales including sales to consumers.

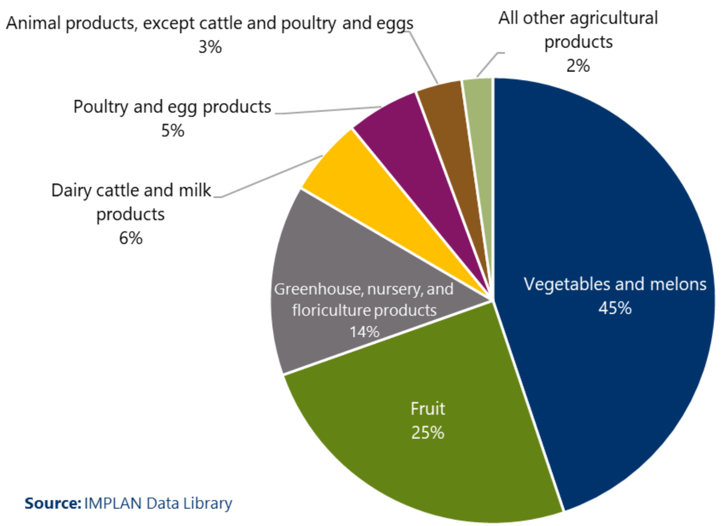
DOMESTIC EXPORTS – AGRICULTURAL PRODUCTS

Domestic Exports: States receiving $1.0 Million or More of Exports from Maine (2021)

State	Exports, Millions of Dollars
Massachusetts	$166.5
New York	$84.2
New Hampshire	$78.1
New Jersey	$33.6
Connecticut	$30.3
Rhode Island	$19.2
Pennsylvania	$5.1
Virginia	$4.7
Vermont	$4.3
Maryland	$3.5
Texas	$1.6
Florida	$1.4
North Carolina	$1.0

Source: IMPLAN Data Library

Maine Domestic Export Summary for Agricultural Commodities, 2021



Source: IMPLAN Data Library

Maine's domestic exports for Agriculture are concentrated among a few key commodities

- **Vegetables and Melons is by far the largest commodity category for Maine's domestic exports**, accounting for 45% of out-of-state trade value in 2021, nearly twice the share of the second-largest commodity. This category includes potatoes, which are the dominant crop within Vegetables and Melons in Maine.

- **Massachusetts was the largest buyer of Maine's agricultural products in 2021**, with $166.5 million. Vegetables and Melons was the largest commodity category that was exported to Massachusetts. Other large commodities to MA were Fruit, Greenhouse and Nursery Products, and Poultry and Egg Products.

- Aside from Massachusetts, **New York is a major buyer of Maine's Vegetable and Melon products**. New York bought $52.2 million of Maine's Vegetable and Melon products in 2021.

- **The Northeast as well as the South Atlantic are top destination markets for Maine's Agricultural Products.** Almost all states that buy $1.0 million or more of Maine's agricultural products are in these two regions of the U.S.

- The value of domestic exports of agricultural products in 2021 was roughly the same as in 2011. The value of exports declined from 2013-2019 but increased sharply in 2020 and 2021.

DATA NOTE: Figures on this page are from IMPLAN's Data Library and may not match other data in this report. IMPLAN domestic trade flows data covers commodities, or the products and services that are produced by a sector. This differs from other data in this report, which covers NAICS industries. Industries often produce more than one commodity.

INDUSTRY SALES

Summary of Agricultural Sales, 2017

NAICS code (see text)	Farms	Average Sales per Farm
Crop production	**4,563**	**$88,263**
Potato farming	161	$1,095,634
Other vegetable (except potato) and melon farming	772	$71,847
Berry (except strawberry) farming	518	$55,465
All other crop farming	809	$33,329
Apple orchards	218	$87,826
Nursery and tree production	364	$45,962
Hay farming	1,155	$13,002
Corn farming	23	$180,522
Other noncitrus fruit farming	61	$30,180
Strawberry farming	20	$43,350
Tree nut farming	10	$9,000
Grape vineyards	14	$5,500
Wheat farming	3	$2,333
Dry pea and bean farming	8	(D)
Other grain farming	11	(D)
Food crops grown under cover	116	(D)
Floriculture production	300	(D)
Animal production and aquaculture	**3,037**	**$87,000**
Dairy cattle and milk production	286	$540,227
Beef cattle ranching and farming, including feedlots	798	$17,289
All other animal production	388	$20,160
Sheep farming	273	$11,777
Horse and other equine production	625	$3,163
Other poultry production	46	$41,783
Apiculture	86	$18,047
Goat farming	172	$4,791
Fur-bearing animal and rabbit production	14	$3,571
Chicken egg production	118	(D)
Broilers and other meat-type chicken production	11	(D)
Turkey production	2	(D)
Total Maine	**7,523**	**$80,139**
Total United States	**2,038,239**	**$189,744**

Source: USDA Census of Agriculture

Note: Cells with (D) indicate that production takes place in Maine but that the value of sales is censored to protect privacy.

The total market value of agricultural products sold was $602.9 million in 2017

- **Potato farming is the highest value agricultural product** in Maine with $176.4 million of sales in 2017. Potato farming also has the highest sales per farm, at almost $1.1 million each.

- **Dairy cattle and milk production is the second-highest value agriculture product** with $154.5 million in 2017. On average, dairy cattle and milk production farms made over $540,000 of sales each in 2017.

- **By number of farms, hay farming had the most activity** in Maine in 2017. Hay farmers made an average of $13,000 each in 2017, indicating that they tend to be small operators.

- **Maine farms tend to be much smaller operators than the US average**. In 2017, they made an average of about $80,000 of sales each, while the US average was about 2.4 times as much at nearly $190,000 each. In 2017, 53% of farms in Maine had sales of less than $5,000, while 47% farm on less than 50 acres of land.

- **From 2012-2017, the market value of products sold by Maine farms decreased 13.6%,** while the market value per farm decreased an average of 6.8%.

SALES & EXPORTS

TOTAL SALES (2017)
Maine: $1.8 Billion
United States: $541.0 Billion

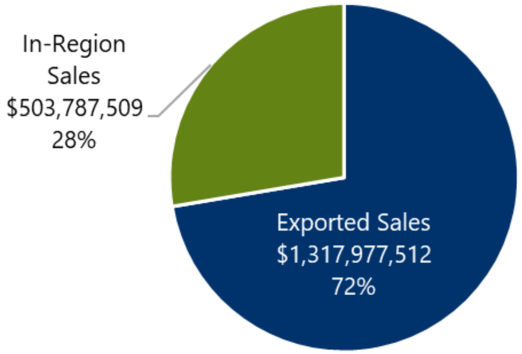
EXPORTED SALES (2022)
Maine: $1.3 Billion
United States: N/A

FOREIGN EXPORTS (2022)
Maine: $71.8 Million
United States: $77.0 Billion

Source: USDA Census of Agriculture, Lightcast, US Census Bureau

- Agricultural Products in Maine had total sales of $1.8 billion in 2022, of which 72% were exported to other states ($1.3 billion).
- Foreign exports were valued at $71.8 Million in 2022 based on US Census data, leading to foreign export value of 3.9% of total sales. Therefore, domestic exports accounted for an estimated 95.8% of all sector exports.
- Top exports in Maine's Agriculture sector are displayed in the table below. The top foreign export was Frozen Fruit and Nuts (including frozen blueberries), valued at $25.4 million of foreign exports in 2022.

Total Agriculture Sales in Maine



Source: Lightcast

Top 10 Foreign Exports of the Agriculture Sector from Maine (2022)

Code	Commodity	Total Value ($US)
0811	Fruit & Nuts (raw Or Cooked By Steam Etc), Frozen	$25,384,914
0106	Animals, Live (other than Horses, Bovine, Swine, Sheep and Goats, or Fowl)	$21,296,936
0810	Fruit Nesoi, Fresh	$9,270,735
0710	Potatoes (except Sweet Potatoes), Fresh Or Chilled	$7,010,752
0201	Meat Of Bovine Animals, Fresh Or Chilled	$2,206,840
1004	Oats	$2,073,088
0602	Live Plants Nesoi, Cuttings Etc.; Mushroom Spawn	$1,993,800
0702	Cabbages, Cauliflower, Broccoli, Kale Etc, Fresh Or Chilled	$880,604
1003	Barley	$405,060
0105	Chickens, Ducks, Geese, Turkeys, And Guineas, Live	$358,298

Source: US Census Bureau USA Trade Online

DATA NOTE:
Maine sales and exports for this sector indicate the scale of the industry activity and the share of that activity that is sold locally either as an intermediate good or to end consumers. Exports include sales to domestic (U.S.) markets as well as international exports.

FISHING AND AQUACULTURE

KEY FINDINGS

Fishing and Aquaculture

Sector Activity

All fishing and aquaculture industries in Maine are both highly concentrated and growing. Shellfish fishing employment, which includes lobster fishing, is almost 200 times more concentrated in Maine than it is in the nation on average. Meanwhile, **jobs in aquaculture more than doubled from 2016-2021.**

From 2010-2020, Maine fisheries harvested over $6.3 billion of seafood products. Lobster accounted for about 79% of this harvest value, while aquaculture products accounted for another 9%. However, harvests are volatile, and very sensitive to price changes. Maine fisheries were strongly impacted by the COVID-19 pandemic and continue to face challenges due to climate change and the regulatory environment.

Almost all of Maine's demand for the sector's products is met in-region. Beyond Maine, opportunity markets might include states like **Illinois, Georgia, Ohio, and Pennsylvania** as they have among the highest total demand for seafood and highest shares of demand for seafood met by imports.

Fish & Seafood was one of Maine's top products for foreign exports in 2022 and accounted for 15% of all foreign exports out of Maine. Lobster is Maine's biggest seafood export. However, the industry faces multiple challenges, all of which create uncertainty for fisheries management. Meanwhile, **Maine needs increased investment and better support for its processing, logistics, and distribution networks in order to diversify its fisheries.**

Subsectors included in this report

Fishing

- Finfish Fishing: Comprises establishments primarily engaged in the commercial catching of finfish from their natural habitat, i.e., wild-caught finfish (salmon, tuna, cod, etc.)
- Shellfish Fishing: Comprises establishments primarily engaged in the commercial catching of shellfish from their natural habitat, i.e., wild-caught shellfish (lobsters, clams, mussels, sea urchins, etc.)
- Other Marine Fishing: Comprises establishments primarily engaged in the commercial catching of other marine animals, i.e., other wild-caught marine animals (frogs, turtles, etc.).

Aquaculture

- Finfish Farming and Fish Hatcheries: Comprises establishments primarily engaged in 1) farm raising finfish, and/or 2) hatching fish of any kind
- Shellfish Farming: Comprises establishments primarily engaged in farm raising shellfish, such as oysters, clams, mollusks, etc.
- Other Aquaculture: Comprises establishments primarily engaged in 1) farm raising of aquatic animals other than finfish and shellfish (frogs, turtles, etc.), or 2) farm raising of aquatic plants (sea vegetables, algae, etc.)

NATIONAL TRENDS

KEY TRENDS

- Global demand for seafood is forecasted to increase in the next several years as rising per capita disposable income has enabled seafood to become more affordable to the average consumer.
- Industry profits are weakening and will likely remain stagnant, challenged by rising cost of inputs like oil and wages.
- Technology will continue to be increasingly integrated and change the way the industry operates.
- The US aquaculture market has faced stiff import competition, though a depreciating US dollar has benefitted operators as imports begin to decline and exports increase.

RECENT DEVELOPMENTS

- Escalating attention to marine mammal migration, the increase in additional marine uses, and increased costs of operations are straining the industry.
- New technology for sustainable fishing, aquaculture processes and industrial seafood processing are leading the way for critical industry diversification and expansion.

Source: IBISWorld, Lightcast

INDUSTRY DRIVERS

- Demand from seafood preparation manufacturing
- Trade-weighted index
- Price of seafood
- Price of crude oil
- Per capita seafood consumption

SUPPLY CHAIN

SUPPLYING INDUSTRIES

Livestock Production Support Services

Animal Food Production

Water Supply & Irrigation Systems

Utilities

Petroleum Refining

Boat Building

Commercial Building Construction

→

Fishing & Aquaculture

→

BUYING INDUSTRIES

Seafood Preparation

Fish & Seafood Wholesaling

Fish & Seafood Markets

Specialty Food Stores

Supermarkets & Grocery Stores

Consumers

Frozen Food Production

Restaurants

Hotels

Other Food Service

DATA NOTE:
This page provides a brief qualitative overview of macro trends facing this sector and structural causes of growth for the sector. A supply chain summary shows key industries upstream and downstream of the sector. Trends and projections noted by IBISWorld typically reflect a period of +/- 5 years

NATIONAL TRENDS

Jobs (2022)
81,000

Job Growth
2017-2022: 2.3%
2022-2027 Projected: 0.8%

Establishments (2022)
71,415

Avg. earnings (2022)
$13,197

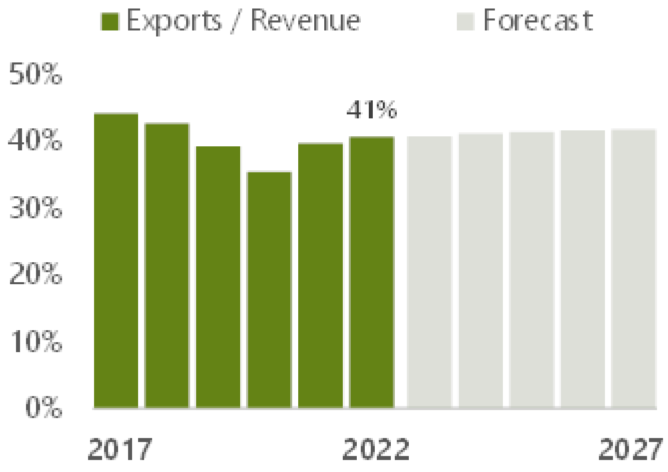
Domestic Demand (2022)
$43.4 Billion

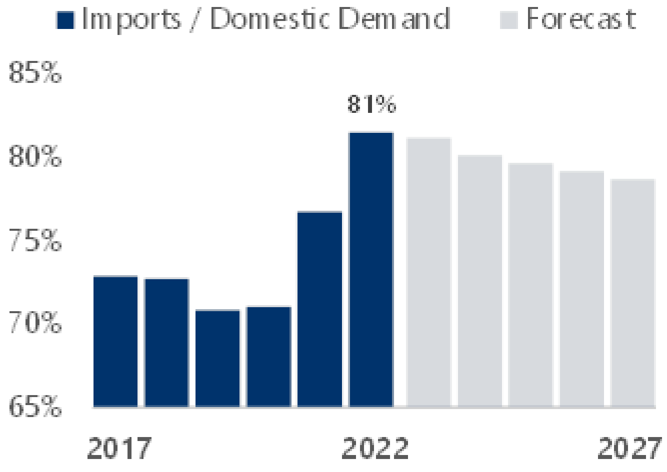
Top Countries (2022)
Imports: Canada, China, Vietnam, Chile, Indonesia
Exports: Canada, China, Italy, Japan, Spain

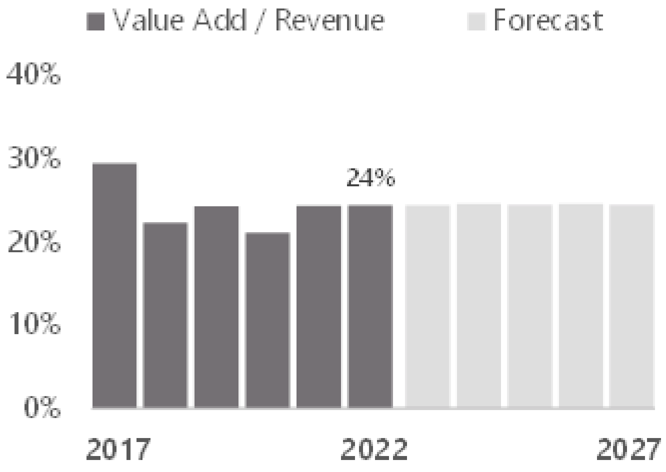
The exports share of revenue was 41% in 2022. This indicator shows the relative importance of foreign exports to the sector's overall revenue strength.

The imports share of domestic demand was 81% in 2022. This demonstrates how much of demand for the sector's products in the US are met by foreign imports.

The value-add-to-revenue ratio was 24% in 2022. This indicator shows how much value the production process adds to products relative to the overall size of the sector.







Source: IBISWorld; Trade Partners from US Census Bureau

SECTOR SUMMARY: MAINE PERFORMANCE

Fishing & Aquaculture Summary

Jobs: 1,150

- Data for 2021
- 1.3% of the state's total employment

Job Growth: +384

- Data for 2021
- Growth occurred in all sub-industries, but was driven by Shellfish Farming and Shellfish Fishing

Job Growth Rate: +50%

- Data compares 2016-2021
- Growth significantly outperformed the United States, which increased by 9% during this period.

Concentration: 20.0

- Data for 2021
- Employment was 20 times more concentrated in Maine than the nation. Shellfish Fishing was the most concentrated, with an LQ of almost 200.

Establishments: 555

- Data for 2021
- Maine seafood establishments were very small, averaging 2 jobs per establishment. This compares to 4 in the U.S.

Average Earnings: $56,230

- Data for 2021
- Lower than the average earnings for Seafood workers in the United States ($67,019)
- Lower than the overall average for all sectors in Maine ($66,730)

Competitive Effect: +338

- Data compares 2016-2021
- Maine added 338 seafood jobs more than would be expected given overall national and industry trends.

*Gross Regional Product: $651.5 Million

- Data for 2022
- 0.8% of Maine's total GRP
- Larger share than the US (0.02%) of total GRP

*Productivity: $116,881

- Data for 2022
- GRP per worker
- Compares to $172,309 for US

*Total Sales: $904.2 Million

- Data for 2022
- 94% of sales were exported out of state

*Demand: $51.6 Million

- Data for 2022
- 96% of demand was met by in-state sources

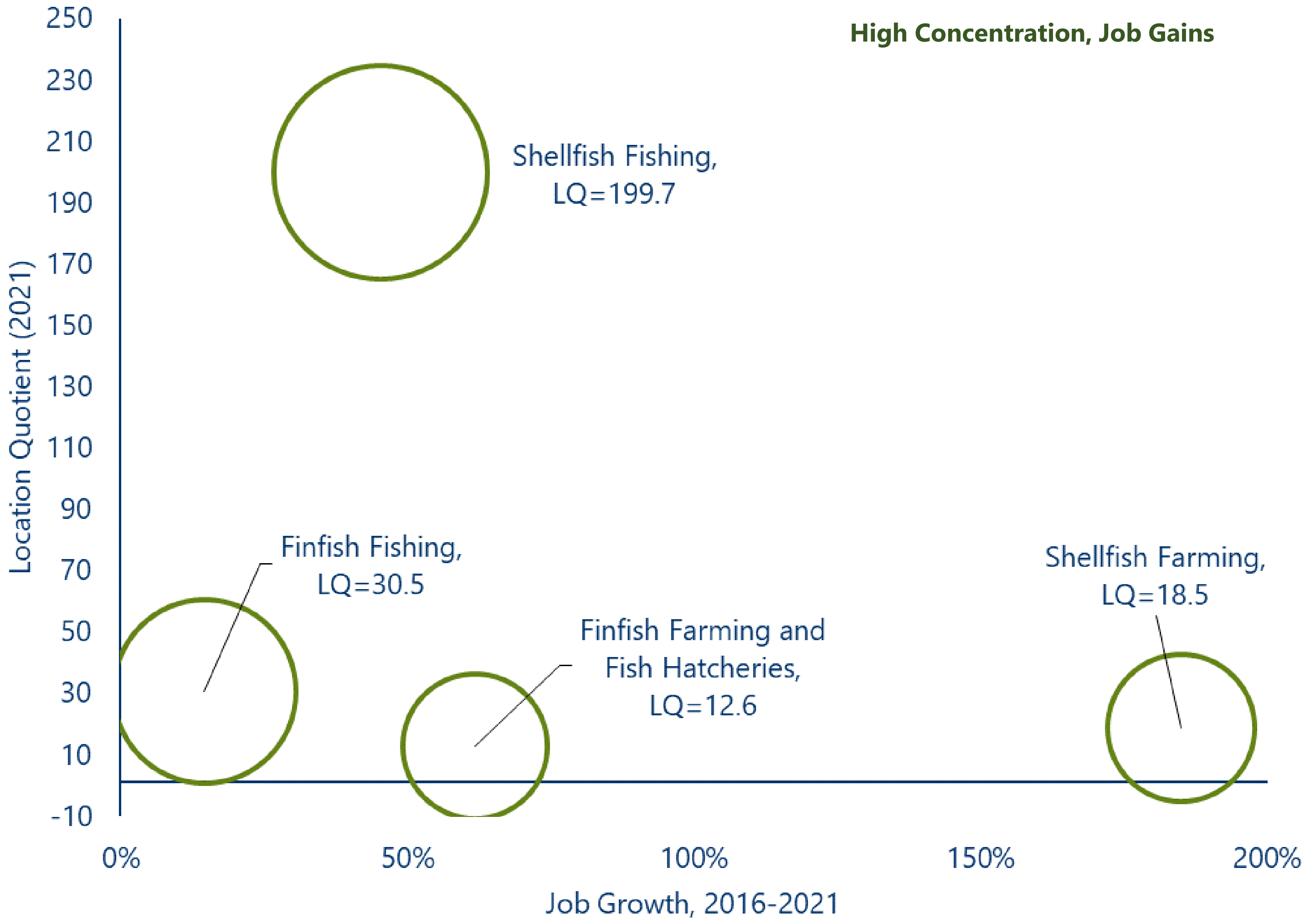
*Leakage: $1.9 Million

- Data for 2022
- A small portion, $1.9 Million of demand was met by out-of-state sources.

Source: IMPLAN, Lightcast
Note: Items marked with * indicate that figures exclude aquaculture, as data for aquaculture was not available. These variables are derived from Lightcast data, which groups aquaculture into the larger Animal Production sector and does not report on the more detailed aquaculture industry.

DATA NOTE:
National figures on this page were calculated using a different source than on page 30, which may lead to some differences.

KEY INDUSTRIES



Bubble size = 2021 jobs

Source: IMPLAN, Camoin Associates

Note: Figure includes 6-digit NAICS industries with at least 50 jobs in 2021. Therefore, Other Marine Fishing (5 jobs) and Other Aquaculture (9 jobs) were excluded.

Key Findings:

- **All fishing and aquaculture industries in Maine are both highly concentrated and experiencing job growth**
- **Shellfish Fishing is the most concentrated industry**, with a location quotient of 199.7, meaning employment is approximately 200 times more concentrated in Maine than it is nationally. This industry has also grown by 45% from 2016-2021.
- **Finfish fishing is the second-most highly concentrated industry in the sector,** with a location quotient of 30.5. Employment in the industry grew by 15% from 2016-2021.
- **Aquaculture industries saw significant growth from 2016-2021,** growing by 132 jobs (185%) in Shellfish Farming and by 75 jobs (62%) in Finfish Farming and Fish Hatcheries. These industries have location quotients of 18.5 and 12.6, respectively.

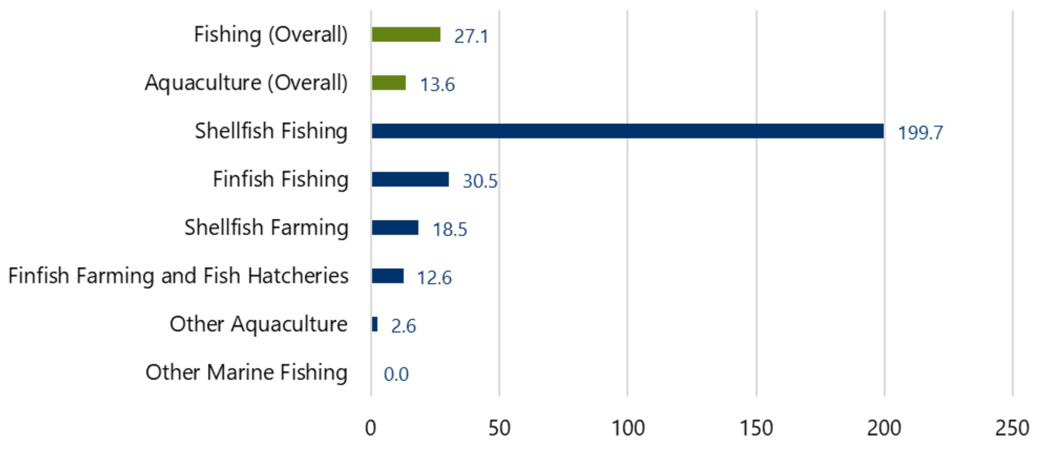
DATA NOTE:
There are three performance measures in the chart above that combine to relate the competitiveness of this activity, (1) bubble size is size of industry by jobs, (2) vertical axis measures industry concentration in Maine, (3) horizontal axis measures recent jobs growth. Note that official Payroll Jobs statistics tend to undercount agriculture-related jobs.

SUBSECTOR PERFORMANCE

In 2021, Maine had 1,150 payrolled jobs in the Fishing & Aquaculture Sector

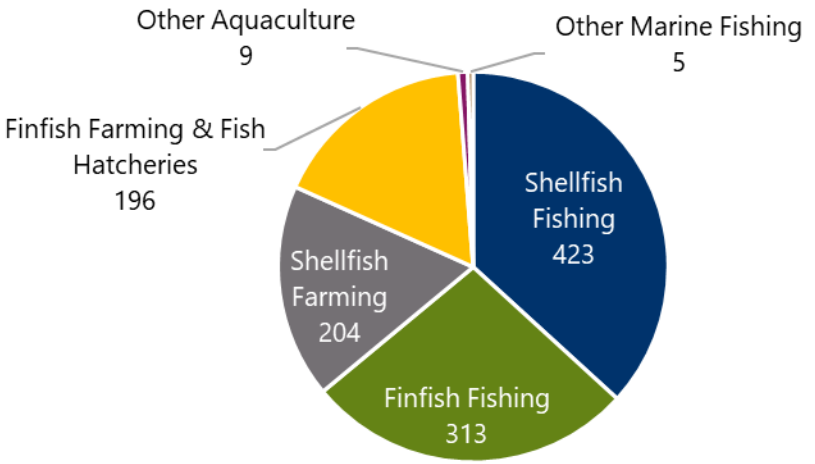
- **Shellfish fishing,** which includes lobster fishing, made up the largest key subsector, with 423 payrolled workers in 2021. It had a location quotient of 199.7, meaning it was almost 200 times more concentrated than would be expected for an economy of Maine's size. Additionally, Shellfish Fishing had a competitive effect of 129, meaning it grew faster than the national average and added 129 more jobs than would be expected given overall national and industry trends for the industry. However, this industry has high shares of non-traditional or self-employed operators which are not typically included in official employment and establishment numbers. According to Lightcast, there were approximately 4,650 non-traditional Shellfish Fishing jobs in 2021, accounting for 92% of employment in the industry. The number of non-traditional employment in Shellfish Fishing increased by 8% from 2016-2021.
- **Finfish fishing** is the second-largest industry in the sector, with 313 jobs in 2021. This industry was over 30 times more concentrated that the national average. It added 40 jobs from 2016-2021, a 15% increase, and had a competitive effect of 20. This industry also had some of the highest average earnings in the sector, at about $69,800 in 2021. A number of additional finfish farming operations in Maine have been proposed in recent years, highlighting Maine's potential for land-based aquaculture.
- **Overall, the Fishing Industry grew by 31% from 2016-2021**, with most growth occurring in the Shellfish Fishing industry.

Location Quotients in the Fishing & Aquaculture Sector in Maine, 2021



Source: IMPLAN, Camoin Associates

Jobs in the Fishing & Aquaculture Sector, 2021



Source: IMPLAN

DATA NOTE: Employment in the Fishing & Aquaculture sector is typically underreported and undercounted. The data presented here does not include self-employed workers and sole proprietors, which accounts for a large portion of these workers.

Location quotient (LQ) is a measure of industry concentration within a region. An LQ of 1.0 means that an industry is as concentrated within the region as it is on a national level. An LQ greater than 1.0 indicates that an industry is more concentrated in a region than at the national level.

The **competitive effect** illustrates how much change in an industry is not explained by national economic or industry trends. A positive competitive effect means that the region has unique characteristics giving it a competitive advantage in that respective industry. However, a negative competitive effect indicates that an industry is either not growing as quickly *or* shrinking faster than national industry trends for the US.

SUBSECTOR PERFORMANCE

Fishing & Aquaculture in Maine: Industry Summary

NAICS	Description	Jobs 2016	Jobs 2021	Jobs Change 2016-2021	Jobs Change % 2016-2021	Avg. Earnings Per Job 2021	Location Quotient 2021	Competitive Effect 2017-2021	Payrolled Business Locations 2021
	Aquaculture	*199*	*409*	*210*	*106%*	*$51,643*	*13.55*	*188*	*42*
112511	Finfish Farming and Fish Hatcheries	121	196	75	62%	$54,967	12.6	65	16
112512	Shellfish Farming	72	204	132	185%	$47,686	18.5	121	24
112519	Other Aquaculture	7	9	3	43%	$68,321	2.6	2	2
	Fishing	*567*	*741*	*174*	*31%*	*$58,761*	*27.13*	*150*	*513*
114111	Finfish Fishing	273	313	40	15%	$69,781	30.5	20	51
114112	Shellfish Fishing	291	423	132	45%	$50,695	199.7	129	458
114119	Other Marine Fishing	3	5	2	67%	$51,378	0	2	4
	Total for Maine	**766**	**1,150**	**384**	**50%**	**$56,230**	**20.00**	**338**	**555**
	Total for United States	**12,628**	**13,707**	**1,079**	**9%**	**$67,019**	**N/A**	**N/A**	**3,141**

Source: IMPLAN

Note: Totals and Change may be slightly off due to rounding.

Employment in the Aquaculture industry more than doubled from 2016-2021.

- **Shellfish farming accounted for most of this growth,** adding 132 jobs during the period. This industry grew from just 72 jobs in 2016 to over 200 in 2021, almost tripling. Shellfish farming had a location quotient of 18.5, meaning it was 18.5 times more concentrated in Maine than the national average. Of the 132 jobs it added during the 5-year period, 121 were attributable to Maine's competitive advantage.

- **Finfish Farming & Fish Hatcheries** was the second-largest aquaculture industry, with 196 jobs. In 2021, it had 16 payrolled business locations and a location quotient of 12.6. Of the 75 jobs it added from 2016-2021, 65 were attributable to Maine's competitive advantage.

- **Other Aquaculture** employment is 2.6 times more concentrated in Maine than the nation. Data for Other Aquaculture and Other Marine Fishing in this report may not be conclusive of all production in the state. In particular, it may significantly undercount Kelp harvesting activities.

SEAFOOD SECTOR ECONOMIC IMPACT

Maine Seafood Sector Economic Impact Summary (2019)

Industry	Employment	Labor Income ($M)	Value Added ($M)	Gross Output ($M)
Direct Industry Activity:				
Aquaculture	540	$28.9	$190.1	$198.4
Harvesting (Non-Lobster)	7,663	$154.7	$174.8	$196.2
Harvesting (Lobster)	5,037	$393.0	$446.9	$511.6
Total Economic Impact:				
Aquaculture	837	$36.4	$204.4	$222.9
Harvesting (Non-Lobster)	10,392	$201.2	$258.5	$345.0
Harvesting (Lobster)	6,540	$499.3	$639.2	$852.5
Total	**17,769**	**$736.9**	**$1,102.1**	**$1,420.4**

Source: Middlebury Institute of International Studies Center for the Blue Economy; Maine Center for Business and Economic Research; "The Economic Impacts of the Maine Seafood Sector" (2023)

Direct Employment in Seafood Harvesting and Aquaculture in Maine (2019)

Activity	Employment
Aquaculture	**540**
Lobster Harvesting	**5,037**
Non-Lobster Harvesting	**7,663**
Finfish	2,731
Eel/Elver	1,193
Shellfish	2,541
Echinoderms	261
Marine Worms	775
Seaweed	163
Total	**13,240**

Source: Middlebury Institute of International Studies Center for the Blue Economy; Maine Center for Business and Economic Research; "The Economic Impacts of the Maine Seafood Sector" (2023)

Why are fishing and aquaculture industries hard to measure?

Natural resource industries are notoriously difficult to measure. These industries commonly rely on non-traditional, seasonal, and part-time jobs; contractors; and unemployment-exempt workers. This makes them more difficult to count in official datasets. Fishing and Aquaculture are no exception, and most workers in this industry are not counted in government data series.

The study referenced on this page, completed for SEA Maine, uses a different approach to counting these workers. The researchers utilized both license data from the Department of Marine Resources along with establishment-level industry data from the Department of Labor to quantify employment within the fishing and aquaculture industries. For these reasons, employment numbers are much larger than the data provided elsewhere in this report, which is based on official government datasets.

According to a recent study, Maine's fishing and aquaculture industries support almost 18,000 jobs, $736.9 million of labor income, $1.1 billion of value added, and $1.4 billion of gross output to Maine's economy.

- Lobster is by far Maine's largest fishery in terms of income, value added, and gross output. In 2019, lobster harvesting accounted for over 5,000 jobs in Maine and directly contributed almost $512 million of gross output to the economy. The total impacts of lobster harvesting, including indirect and induced impacts, account for over 6,500 jobs and $852 million of gross output throughout the state.

- By employment, non-lobster harvesting is the largest seafood activity in Maine, with 7,663 jobs in 2019. After considering indirect and induced impacts, the non-lobster harvesting industry in Maine supports almost 10,400 jobs in the state.

- Aquaculture is a relatively small industry, with 540 jobs. That said, the industry plays an important role in the seafood sector and directly contributed $198.4 million of gross output to Maine's economy.

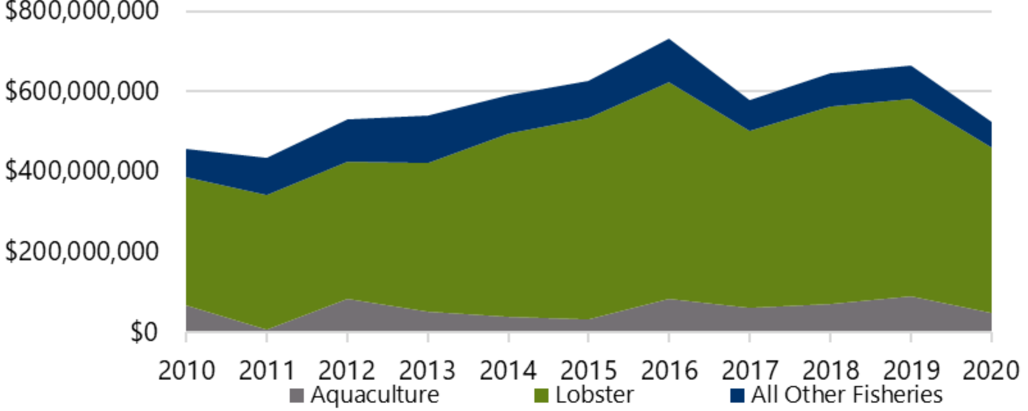
DATA NOTE: In economic impact analysis, **Direct** impacts are generated by the construction spending in the city, on-site jobs, and new household spending. **Indirect** impacts accrue through business-to-business spending in the state and **induced** impacts result from employee spending. The Total Economic Impact figures provided above reflect the sum of these impacts.

HISTORICAL FISHERIES HARVESTS

Harvest Value Trends (Aquaculture, Lobster, and All Other Fisheries)- Maine Statewide

	Aquaculture		Lobster		All Other Fisheries		Total Fisheries
	Value	Share	Value	Share	Value	Share	Value
2010	$66,602,539	15%	$318,891,895	70%	$70,544,780	15%	$456,039,214
2011	$8,008,847	2%	$334,539,734	77%	$91,691,014	21%	$434,239,595
2012	$83,003,459	16%	$342,079,520	64%	$105,970,621	20%	$531,053,600
2013	$52,624,276	10%	$370,383,981	68%	$117,773,693	22%	$540,781,950
2014	$37,612,339	6%	$459,508,386	78%	$94,416,364	16%	$591,537,089
2015	$32,221,580	5%	$502,450,309	80%	$92,643,530	15%	$627,315,419
2016	$82,550,294	11%	$540,183,010	74%	$110,469,232	15%	$733,202,536
2017	$62,058,671	11%	$438,515,983	76%	$77,810,115	13%	$578,384,769
2018	$71,750,076	11%	$492,307,298	76%	$82,080,717	13%	$646,138,091
2019	$88,408,714	13%	$493,003,762	74%	$82,419,557	12%	$663,832,033
2020	$48,638,549	9%	$412,487,339	79%	$63,700,706	12%	$524,826,594
Total	**$633,479,344**		**$4,704,351,217**		**$989,520,329**		**$6,327,350,890**

Source: Maine Department of Marine Resources



Source: Maine Department of Marine Resources

From 2010-2020 collectively, Maine fisheries harvested over $6.3 billion of seafood products.

- Lobster accounted for 79% of the total value of harvests in 2020, with over $412 million during that year alone
- Another $48.6 million was harvested from Aquaculture fisheries, accounting for 9% of total harvests in 2020.
- All other fisheries harvested a combined $63.7 million of seafood in 2020.
- Harvest values tend to be volatile from year to year, largely due to fluctuating prices. All highlighted fisheries – Aquaculture, Lobster, and Other Fisheries – saw significant declines in harvest value in 2020. The value of Aquaculture harvests declined by 45% in 2020, compared to -16% for Lobster and -23% for other fisheries. Overall, harvests for seafood in Maine as tracked by the Department of Marine Resources declined by 21% in 2020 compared to the year prior.

Industry Demand and Purchases

Where is Maine's Fishing sector buying from?

PURCHASING INDUSTRIES

Industries Maine Fishing & Aquaculture Buys From

Top 25 Industries the Fishing Sector Purchases From (2022)

NAICS	Industry	In-Region Purchases	% In-Region Purchases	Imported Purchases	% Imported Purchases	Total Purchases
324110	Petroleum Refineries	$0	0.0%	$15,200,502	100.0%	$15,200,502
541940	Veterinary Services	$10,045,003	87.2%	$1,479,696	12.8%	$11,524,699
524126	Direct Property and Casualty Insurance Carriers	$1,947,763	21.0%	$7,318,741	79.0%	$9,266,504
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	$4,068,121	47.5%	$4,491,175	52.5%	$8,559,297
524114	Direct Health and Medical Insurance Carriers	$2,185,286	27.6%	$5,736,175	72.4%	$7,921,461
524210	Insurance Agencies and Brokerages	$6,098,439	94.9%	$326,838	5.1%	$6,425,277
336611	Ship Building and Repairing	$4,344,205	76.2%	$1,357,349	23.8%	$5,701,554
484121	General Freight Trucking, Long-Distance, Truckload	$1,881,048	40.5%	$2,766,341	59.5%	$4,647,389
424710	Petroleum Bulk Stations and Terminals	$3,388,625	85.8%	$560,076	14.2%	$3,948,701
488510	Freight Transportation Arrangement	$1,186,530	30.1%	$2,758,572	69.9%	$3,945,102
423830	Industrial Machinery and Equipment Merchant Wholesalers	$607,294	21.3%	$2,249,528	78.7%	$2,856,822
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	$35,592	1.3%	$2,789,318	98.7%	$2,824,910
335911	Storage Battery Manufacturing	$0	0.0%	$2,583,217	100.0%	$2,583,217
484110	General Freight Trucking, Local	$925,866	38.5%	$1,479,919	61.5%	$2,405,785
423690	Other Electronic Parts and Equipment Merchant Wholesalers	$136,685	5.8%	$2,228,899	94.2%	$2,365,584
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	$261,090	11.4%	$2,033,620	88.6%	$2,294,711
326199	All Other Plastics Product Manufacturing	$241,735	10.8%	$1,992,815	89.2%	$2,234,550
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	$0	0.0%	$2,231,969	100.0%	$2,231,969
333111	Farm Machinery and Equipment Manufacturing	$10,612	0.5%	$2,077,773	99.5%	$2,088,384
311119	Other Animal Food Manufacturing	$77,452	3.9%	$1,905,618	96.1%	$1,983,070
484122	General Freight Trucking, Long-Distance, Less Than Truckload	$344,903	17.5%	$1,623,723	82.5%	$1,968,626
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	$0	0.0%	$1,937,304	100.0%	$1,937,304
321911	Wood Window and Door Manufacturing	$224,163	11.9%	$1,657,466	88.1%	$1,881,630
336390	Other Motor Vehicle Parts Manufacturing	$124,911	6.9%	$1,679,971	93.1%	$1,804,882
488190	Other Support Activities for Air Transportation	$655,654	37.1%	$1,112,505	62.9%	$1,768,159

Source: Lightcast

Note: Industries that are **bolded** indicate that they are included in the overall Sector. **Data in this table excludes Aquaculture, as purchasing information was not available for the Aquaculture Industry.**

- The top 25 purchasing industries make up 57% of total purchases, **indicating that purchases of the sector's products are spread moderately throughout the economy.**
- **Petroleum is by far the largest input to the Fishing Industry**. Between Petroleum Refineries, Petroleum Merchant Wholesalers, and Petroleum Bulk Stations & Terminals, fuel accounted for $27.7 million of Fishing purchases, over 14% of the total in 2022.
- **Overall, only about 34% of Fishing purchases are in-region transactions.** Most of the top 25 industries the sector purchases from have over 80% of purchases imported. While Petroleum accounts for a large share of the sector's reliance on imports, high-import inputs for the sector also include freight trucking, insurance, equipment, electronic parts and wiring supplies, and more.
- Insurance Agencies, Veterinary Services, and Ship Building & Repairing are examples of industries with high values of purchases that are met in-region. **These industries have strong B2B links with the Fishing sector.**
- **There is no intra-sector purchasing activity within the top 25 purchasing industries.** Fishing industries do not tend to rely on other fishing industries to supply inputs.

DATA NOTE:
This table gives greater insight into supply chain gaps within the sector. Industries that have low shares of in-region purchases indicate opportunities where Maine relies heavily on imported supply, but where Maine businesses could potentially expand to recapture transactions. The figure above is sorted by Total Purchases, from greatest to least.

DEMAND

Top 10 States by Total Demand for Fishing Sector

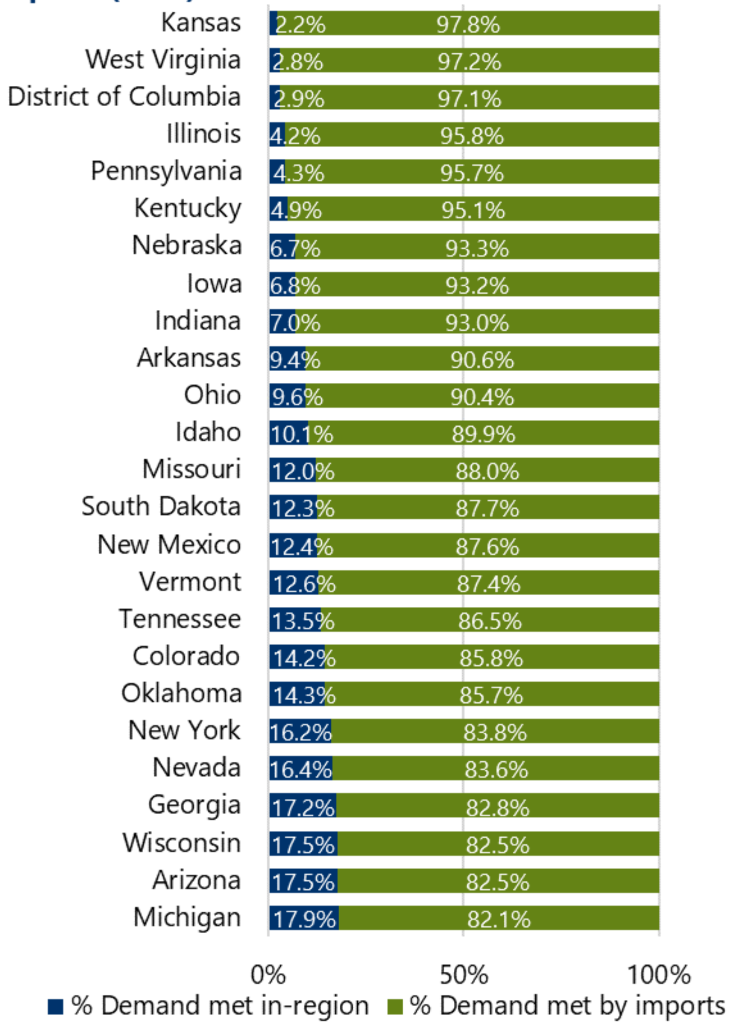
	Payrolled Business Locations	Demand met in-region	% Demand met in-region	Demand met by imports	% Demand met by imports	Total Demand
California	211	$306,954,586	35.7%	$551,716,781	64.3%	$858,671,368
Texas	101	$258,359,047	49.6%	$262,015,923	50.4%	$520,374,970
Florida	199	$215,058,413	45.1%	$262,136,187	54.9%	$477,194,600
Washington	183	$428,788,023	95.0%	$22,464,730	5.0%	$451,252,753
New York	29	$65,648,663	16.2%	$340,338,486	83.8%	$405,987,150
Alaska	99	$383,468,923	94.9%	$20,549,142	5.1%	$404,018,065
Massachusetts	308	$276,190,947	89.5%	$32,340,011	10.5%	$308,530,958
Illinois	1	$9,374,089	4.2%	$213,935,357	95.8%	$223,309,445
Georgia	6	$37,035,089	17.2%	$178,154,601	82.8%	$215,189,691
Ohio	6	$18,370,131	9.6%	$173,884,324	90.4%	$192,254,455

Source: Lightcast

Note: Data in this table excludes Aquaculture, as demand information was not available for the Aquaculture industry.

- **Maine ranked 37th among all states for total demand in this sector**, at $51.6 million in 2022
- The states with the highest overall demand for the sector's products tended to be those with the largest populations & largest economies in the nation.
- **The largest importer of the Fishing sector was California**, with over $551.7 million of imports in 2022. By share, Kansas imported the most, with almost 98% met by imports.
- **Maine ranked 1st in the nation for demand met in region**, with over 96% of demand met within the State. **West North Central** (KS, NE, IA, AR, MS) and **East North Central** (IL, KY, IN, OH, WI) states made up the majority of the top 25 states by share of demand met by imports. Other states like **Illinois, Georgia, Ohio, and Pennsylvania** present opportunities, as they had among the highest total demand and highest shares of demand met by imports.

Top 25 States by Share of Demand Met by Imports (2022)



Source: Lightcast

DEMAND & IMPORTS

TOTAL DEMAND (2022)
Maine: $51.6 Million
United States: $7.3 Billion

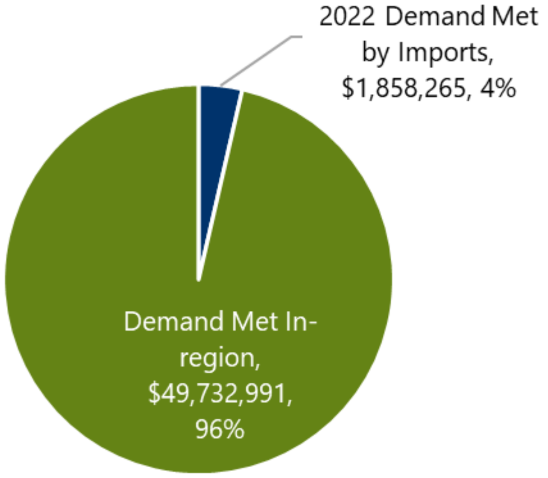
MET BY IMPORTS (2022)
Maine: $1.9 Million
United States: NA

FOREIGN IMPORTS (2022)
Maine: $381.4 Million
United States: $24.5 Billion

Source: Lightcast, US Census Bureau

- Maine had a total demand of $51.6 million for the Fishing sector in 2022, of which 4% ($1.9 million) was met by out-of-state sources.
- According to US Census data, the foreign import value of the sector was $381.4 million.
- The largest foreign import was Live, Fresh, or Chilled Lobsters. All imports of this type of Lobster came from Canada in 2022. Canada was also the largest supplier of Maine seafood's imports overall in 2022.
- Much of the seafood product that is imported into Maine is sent to further seafood processing, packaging, and eventually out-of-state distribution. Therefore, these foreign imports play a key role in Maine's value-added seafood sector, captured in the following section under Seafood Product Preparation and Packaging.

Total Seafood Demand in Maine (2022)



Source: Lightcast

Top 10 Seafood Foreign Imports, 2022

Code	Commodity Description	Total Value ($US)
30632	Lobsters, Live, Fresh,or Chilled	$148,416,122
30214	Atlantic Salmon And Danube Salmon Fresh Or Chilled	$62,456,370
30441	Pacific, Atlantic, Danube Salmon Fillet Fresh/chll	$57,562,537
30481	Pacific, Atlantic And Danube Salmon Fillets Frozen	$10,561,636
30614	Crabs, Including In Shell, Frozen	$9,103,643
30722	Scallops, Frozen	$6,490,591
30711	Oysters, Live, Fresh Or Chilled	$3,392,421
30364	Haddock, Frozen	$3,246,121
30731	Mussels, Live, Fresh Or Chilled	$1,584,864
30612	Lobsters, Including In Shell, Frozen	$1,419,815

Source: US Census Bureau USA Trade Online

DATA NOTE:
Maine's demand for this sector's products shows the size of the local market including its position as a key location for preparation and processing imported products for further US distribution. The share of that market supplied in-region versus imports (either from other states in the U.S. or other countries) relates the success of local firms or the competitiveness of domestic and international import goods. Data for foreign imports is derived from a different source (US Census Bureau) than data for demand and demand met by imports (Lightcast), which leads to discrepancies. Additionally, note that Lightcast data for demand and demand met by imports excludes aquaculture seafood.

Industry Sales and Exports

Where is Maine's Fishing sector selling to?

IN-REGION SALES INDUSTRIES

Industries Maine Fishing & Aquaculture Sells To

Top 25 Industries the Fishing Sector Sells To In Maine (2022)

NAICS	Industry	In-Region Sales	Percent of In-Region Sales
311710	Seafood Product Preparation and Packaging	$26,365,850	26.5%
722511	Full-Service Restaurants	$10,084,450	10.1%
722513	Limited-Service Restaurants	$ 3,533,945	3.6%
445110	Supermarkets and Other Grocery (except Convenience) Stores	$ 2,801,921	2.8%
311421	Fruit and Vegetable Canning	$ 1,488,858	1.5%
721110	Hotels (except Casino Hotels) and Motels	$ 1,111,451	1.1%
311615	Poultry Processing	$ 364,844	0.4%
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	$ 330,456	0.3%
445120	Convenience Stores	$ 307,491	0.3%
311422	Specialty Canning	$ 284,177	0.3%
722515	Snack and Nonalcoholic Beverage Bars	$ 274,367	0.3%
713930	Marinas	$ 183,582	0.2%
721214	Recreational and Vacation Camps (except Campgrounds)	$ 178,395	0.2%
311119	Other Animal Food Manufacturing	$ 163,365	0.2%
713910	Golf Courses and Country Clubs	$ 154,099	0.2%
722310	Food Service Contractors	$ 152,004	0.2%
713920	Skiing Facilities	$ 134,843	0.1%
721191	Bed-and-Breakfast Inns	$ 118,768	0.1%
721211	RV (Recreational Vehicle) Parks and Campgrounds	$ 112,846	0.1%
713990	All Other Amusement and Recreation Industries	$ 103,456	0.1%
813110	Religious Organizations	$ 97,863	0.1%
813410	Civic and Social Organizations	$ 96,070	0.1%
445220	Fish and Seafood Markets	$ 87,794	0.1%
713940	Fitness and Recreational Sports Centers	$ 83,209	0.1%
445310	Beer, Wine, and Liquor Stores	$ 81,256	0.1%

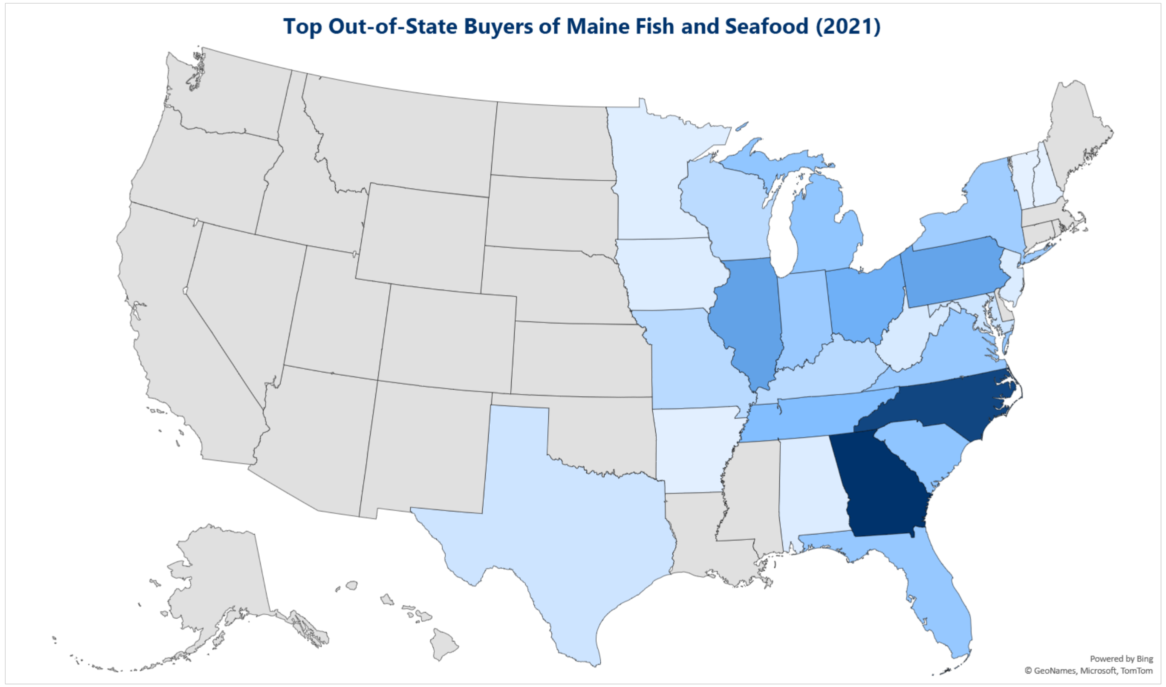
Source: Lightcast

Note: Data in this table excludes Aquaculture, as sales information was not available for the Aquaculture Industry.

- The top 25 sales industries make up 49% of total in-region sales, **indicating that sales of the sector's products are widely spread throughout the economy.**
- **Seafood Product Preparation and Packaging** alone accounts for 26.5% of all in-region sales that the Fishing industry makes. Sales to this industry totaled over $26.3 million in 2022, highlighting the broader links of the Seafood industry in Maine. This industry encompasses seafood processors, a key part of the seafood industry in terms of purchasing and distributing.
- **Restaurants, both full-service and limited-service, account for another 13.7% combined of in-region sales that the Fishing sector makes in-region.** This is followed by Supermarkets and Grocery Stores (2.8%). This indicates that seafood is much less often consumed directly by consumers, and more often used as an input for food processing, restaurants, and other accommodation and food service industries.

DATA NOTE:
The sales in this table do not add up to total in-region sales because it only captures sales to other industries, and not other entities like consumers. The Percent of Total In-Region Sector Sales shows the portion of sales to a given industry as it relates to total sales to *all industries*, not total in-region sales including sales to consumers. Additionally, note that Lightcast data for sales excludes aquaculture seafood.

DOMESTIC EXPORTS - FISH



Source: IMPLAN

Maine's domestic exports of Fish are concentrated in the Eastern half of the United States

- **Exports of fish exclude processed seafood.** For example, lobster that has been taken out of its shell or fish that has been cut into filets are included in data for Seafood Products, a manufacturing commodity, instead of Fish. Whole lobsters, whole fish, and unprocessed shellfish are the products included in the Fish commodity category. Analysis of the domestic trade of Seafood Products is covered in the related Food Manufacturing domestic trade report.

- **Georgia was the largest buyer of Maine fish in 2021,** accounting for approximately 12% of domestic exports, followed by North Carolina at about 11%.

- **The South Atlantic makes up one of Maine's largest markets for seafood.** This includes states like Georgia, North Carolina, South Carolina, Florida, and Virginia. **The East North Central region of the Midwest is another major market**, including states like Illinois, Ohio, Michigan, and Indiana.

- **Over the last 10 years, the total trade value of domestic fish exports has grown significantly.** From 2011 to 2021, the total domestic export value of fish and seafood has increased at a compound annual rate of 7.9%.

SALES & EXPORTS

TOTAL SALES (2022)
Maine: $904.1 Million
United States: $7.3 Billion

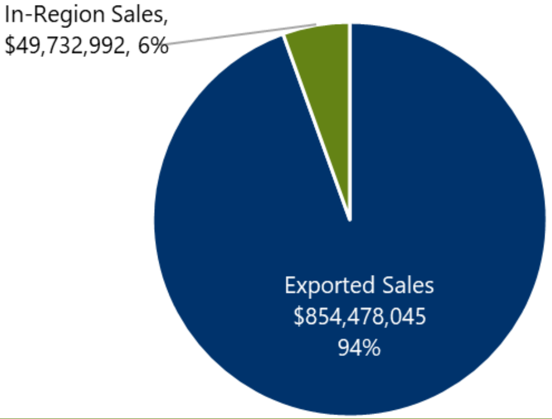
EXPORTED SALES (2022)
Maine: $854.5 Million
United States: N/A

FOREIGN EXPORTS (2022)
Maine: $502.4 Million
United States: $5.2 Billion

Source: Lightcast, US Census Bureau

- Seafood in Maine had total sales of $904.1 million in 2022, of which 94% were exported to other states ($854.5 million).
- Foreign exports were valued at $455.8 million in 2022 based on US Census data, leading to foreign export value of 50% of total exported sales. Therefore, domestic exports accounted for an estimated half of all sector exports. Live, Fresh, and Chilled Lobsters is by far the largest export, accounting for $305 million for in 2022.
- Unprocessed seafood is one of Maine's top exports overall. In 2022, it accounted for nearly 15% of all foreign exports from the state. Maine also accounts for about 10% of total foreign exports of seafood from the United States.
- Maine's largest export partner for unprocessed seafood is Canada. Much of Maine's seafood, including its top exports of lobster and salmon, are exported to Canada for further processing, then shipped back to the United States for distribution to other export markets. This indicates a strong development opportunity for further seafood processing capacity within Maine.

Total Fishing Sales (2022)



Top 10 Seafood Foreign Exports, 2022

Code	Commodity Description	Total Value ($US)
30632	Lobsters, Live, Fresh,or Chilled	$305,068,710
30214	Atlantic Salmon And Danube Salmon Fresh Or Chilled	$106,139,399
30441	Pacific, Atlantic, Danube Salmon Fillet Fresh/chll	$23,510,198
30192	EEls (anguilla Spp.), Live	$21,197,497
30821	Sea Urchins, Live, Fresh Or Chilled	$12,939,479
30389	Fish, Frozen, Nesoi	$10,379,800
30633	Crabs, Live, Fresh Or Chilled	$9,612,696
30612	Lobsters, Including In Shell, Frozen	$7,117,272
30367	Alaska Pollock, Frozen	$2,247,514
30611	Rock Lobster And Other Sea Crawfish, Frozen	$1,308,596

Source: US Census Bureau USA Trade Online

DATA NOTE:
Maine sales and exports for this sector indicate the scale of the industry activity and the share of that activity that is sold locally either as an intermediate good or to end consumers. Exports include sales to domestic (U.S.) markets as well as international exports. Data for foreign exports is derived from a different source (US Census Bureau) than data for sales and exported sales (Lightcast), which leads to discrepancies. Additionally, note that Lightcast data for sales and exported sales excludes aquaculture seafood.

FOOD & BEVERAGE MANUFACTURING

KEY FINDINGS

Food and Beverage Manufacturing

Sector Activity

The sector has seen strong growth in the last five years, adding over 750 jobs and growing by 10%, outpacing the nation. Industries like breweries, distilleries, frozen fruit manufacturing, and others have driven this growth.

Overall, **ten of the top 25 industries that buy the sector's products in Maine are part of the Food and Beverage Manufacturing Sector**, highlighting the interconnectedness of the sector. **That said, the Sector is far-reaching within Maine's economy, with major in-region sales volume to entities like Schools, Hospitals, Hotels, Family Services, and other Social Service industries.** The sector plays a vital role in feeding Maine's population through a multitude of venues.

Additionally, the sector has strong trade activity, with 77% of all sector sales being exported outside of Maine. Some opportunities for domestic trade growth can be found in South Atlantic. **Florida and New York in particular present opportunities,** as these have relatively high shares of demand met by imports as well as high demand volume.

Manufacturing related to packaging is an important part of the Food and Beverage Manufacturing supply chain that could present further opportunities in Maine. For example, expansion of businesses that engage in Box Manufacturing, Metal Can Manufacturing, or Glass Product Manufacturing specifically to support the Food and Beverage Manufacturing sector would support these intra-industry supply chain linkages and bolster the sector's growth. **This creates opportunities for bio-based packaging, an emerging strength in Maine based on its current inventory of assets.**

Subsectors included in this report

Food & Beverage Manufacturing

- **311 Food Manufacturing** Industries in this subsector turn livestock and agricultural products into products for intermediate or final consumption. The products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers. They include industries like fruit and vegetable preserving, dairy product manufacturing, bakeries, and seafood product preparation and packaging, among others.
- **3121 Beverage Manufacturing** This subsector comprises establishments primarily engaged in manufacturing soft drinks and ice; purifying and bottling water; and manufacturing brewery, winery, and distillery products.

NATIONAL TRENDS

KEY TRENDS

- America's palate is ever-changing, and many producers have introduced healthier alternatives due to increased health consciousness. The industry's proactive response to these trends has helped offset revenue declines, although health concerns have shifted consumers away from certain products, like frozen foods.
- Rising import penetration has hindered the industry and undercut domestic producers. However, a depreciating US dollar will impact the ability for imports to compete with domestic producers as they become comparatively more expensive.
- Aquaculture is projected to contribute an increasing portion of the total domestic fish supply, while total domestic seafood landing values have grown each year, reducing domestic processors' reliance on imports.
- Higher levels of disposable income will encourage consumers to produce more expensive, premium products like fresh, handmade, small-batch, all-natural or ethically sourced ingredients, and seafood. As a result, industry participation is anticipated to rise as new firms take advantage of demand for new, more expensive products.

RECENT DEVELOPMENTS

- High inflation has caused food product prices to rise.
- As inflation increases at a faster rate than wages, consumer purchasing power begins to decline, which means that demand for certain food and beverages may slightly decrease.
- Conversely, rising inflation and reduced purchasing power has the effect of driving demand for other food products, such as low-cost staples.

INDUSTRY DRIVERS

- Trade-weighted value of the dollar index
- Per capita disposable income
- Price of raw food inputs, like vegetables, milk, fish, and wheat
- Demand from restaurants and drinking places
- Demand from grocery stores and supermarkets
- Healthy eating index and changing consumer preferences

SUPPLY CHAIN

SUPPLYING INDUSTRIES

Farming

Crop Wholesaling

Meat, Beef, and Poultry Processing

Dairy Production

Container Mfg. (Plastic, glass, cardboard)

Wood Pallet Mfg.

→

Food & Beverage Manufacturing

→

BUYING INDUSTRIES

Grocery Stores

Grocery Wholesaling

Food Service Contractors

Pet Stores

Restaurants

Breweries & Distilleries

Food Production

Consumers

Hotels

Source: IBISWorld

DATA NOTE:
This page provides a brief qualitative overview of macro trends facing this sector and structural causes of growth for the sector. A supply chain summary shows key industries upstream and downstream of the sector. Trends and projections noted by IBISWorld typically reflect a period of approximately 5 years

NATIONAL TRENDS

Jobs (2022)
2.1 Million

Job Growth
2017-2022: 14.5%
2022-2027 Projected: 5.7%

Establishments (2022)
96,964

Avg. earnings (2022)
$52,575

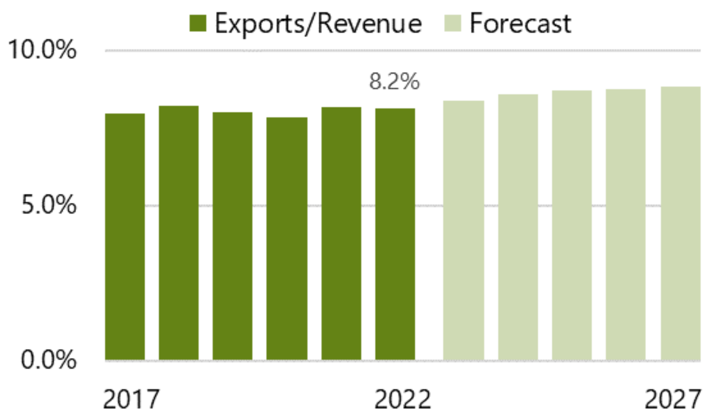
Domestic Demand (2022)
$1.2 Trillion

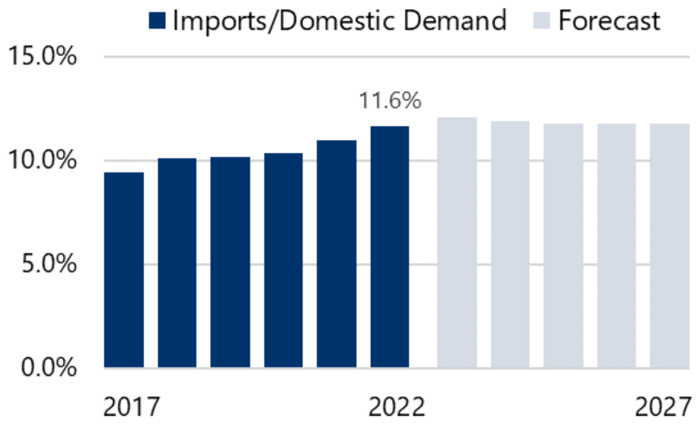
Top Countries (2022)
Imports: Canada, Mexico, France, Italy, Indonesia
Exports: Canada, Mexico, China, Japan, South Korea

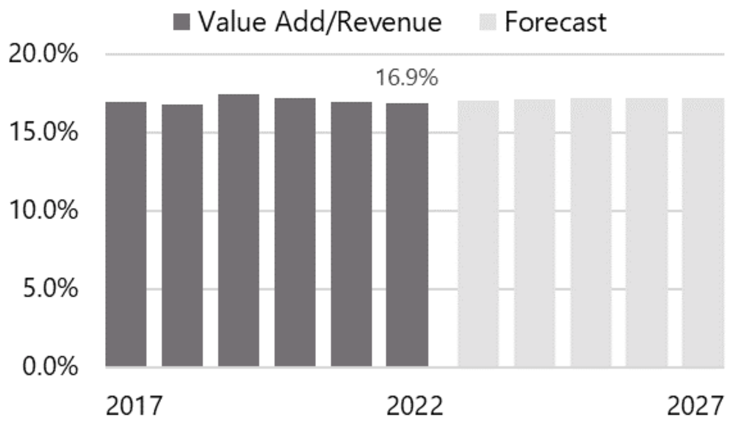
The exports share of revenue was 8% in 2022. This indicator shows the relative importance of exports to the sector's overall revenue strength.

The imports share of domestic demand was 12% in 2022. This demonstrates how much of demand for the sector's products in the US are met by foreign imports.

The value-add-to-revenue ratio was 17% in 2022. This indicator shows how much value the production process adds to products relative to the overall size of the sector.







Source: IBISWorld; Trade Partners from US Census Bureau

SECTOR SUMMARY: MAINE PERFORMANCE

Food & Beverage Manufacturing Summary

Jobs: 8,291

- Data for 2022
- 1.2% of the state's total employment

Job Growth: +755

- Data for 2017-2022
- Growth driven by Breweries, Frozen Fruit, Juice, and Vegetable Mfg., and Distilleries

Job Growth Rate: +10%

- Data compares 2017-2022
- Growth significantly outperformed the United States, which declined by 1% during this period.

Concentration: 0.96

- Data for 2022
- Jobs were slightly less concentrated in Maine than the nation, although industries like Bottled Water Mfg.; Frozen Fruit, Juice, and Vegetable Mfg.; and others were more highly concentrated

Establishments: 422

- Data for 2022
- Average 20 jobs per establishment, lower than the nation (38)

Average Earnings: $62,026

- Data for 2022
- Lower than the State's average earnings across all industries ($66,730)
- Lower than the national average for the sector ($68,952)

Competitive Effect: +9

- Data compares 2017-2022
- Local competitive factors accounted for 9 more jobs than would be expected if Maine were trending with national and industry growth

Gross Regional Product: $1.3 Billion

- Data for 2022
- 1.5% of Maine's total GRP
- Larger share than the U.S. (1.3% of total GRP)

Productivity: $156,000

- Data for 2022
- GRP per worker
- On par with the figure for the United States ($159,1323)

Total Sales: $3.3 Billion

- Data for 2022
- 77% of sales exported out of state

Demand: $3.5 Billion

- Data for 2022
- 78% of Maine's demand was met by in-state sources

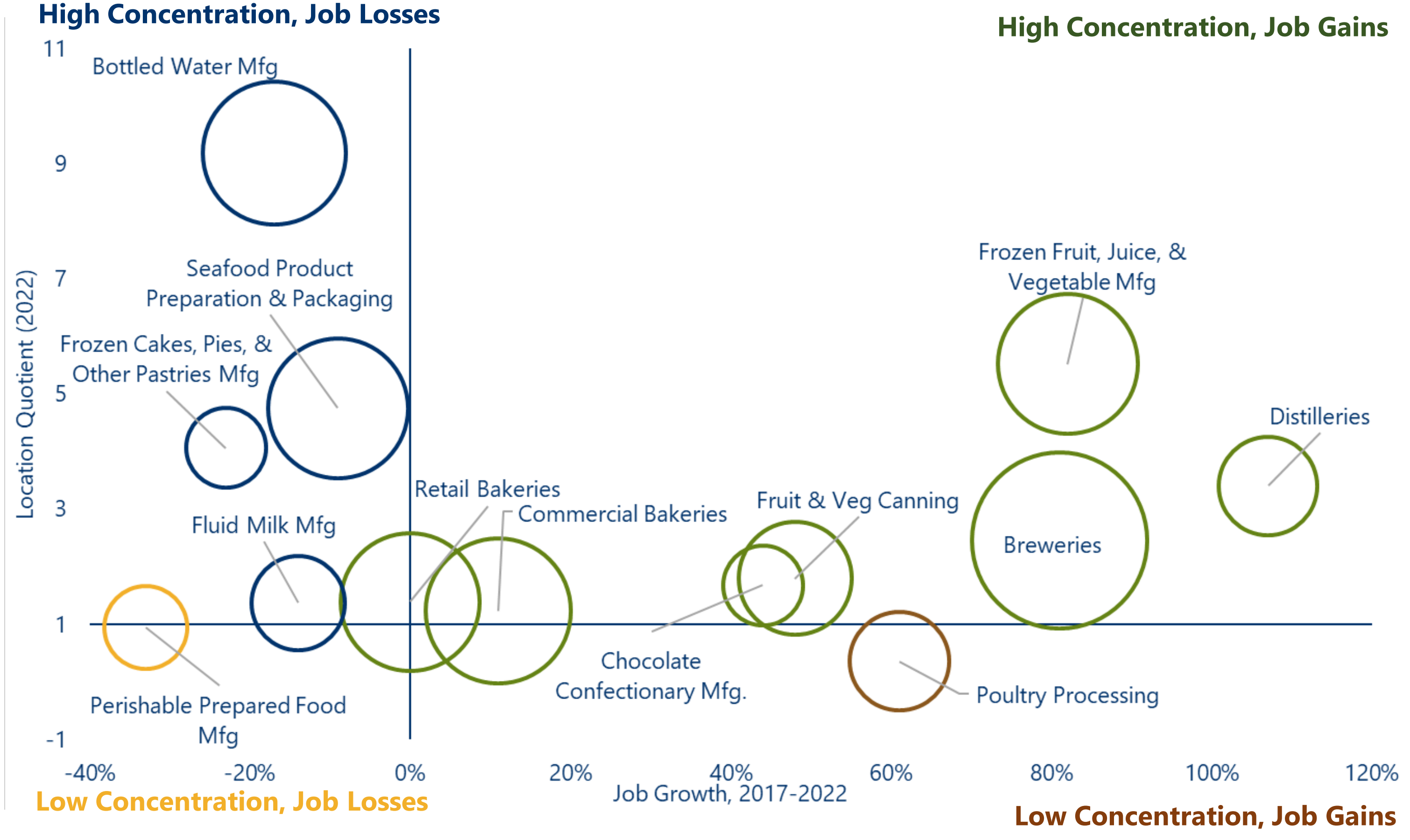
Leakage: $2.7 Billion

- Data for 2022
- $2.7 Billion of demand was met by out-of-state sources.

Source: IMPLAN, Lightcast

DATA NOTE:
National figures on this page were calculated using a different source than on page 48, which may lead to some differences.

KEY INDUSTRIES



Bubble size = 2022 jobs

Source: Lightcast, Camoin Associates
Note: Figure includes 6-digit NAICS industries with at least 200 jobs in 2022.

Findings:

- Many major industries are both strong and growing, including Breweries, Distilleries, Frozen Fruit, Juice & Vegetable Mfg., and both Retail and Commercial Bakeries.
- Only one industry, Poultry Processing, is emerging – it has a relatively low concentration, but has seen significant job growth over the 5-year period
- Only one industry, Perishable Prepared Food Manufacturing, has both low concentration and job loss.
- Two large industries, Bottled Water Manufacturing and Seafood Product Preparation & Packaging, are highly concentrated but seeing job loss.
- The most highly concentrated industries are Bottled Water Manufacturing and Frozen Fruit, Juice, and Vegetable Manufacturing.

Industries included:

- Animal Food Mfg.
- Animal Slaughtering & Processing
- Bakeries and Tortilla Mfg.
- Breweries
- Dairy Product Mfg.
- Distilleries
- Fruit & Vegetable Preserving and Specialty Food Mfg.
- Grain & Oilseed Milling
- Other Food Mfg.
- Seafood Product Preparation & Mfg.
- Soft Drink & Ice Mfg.
- Sugar & Confectionery Product Mfg.
- Wineries

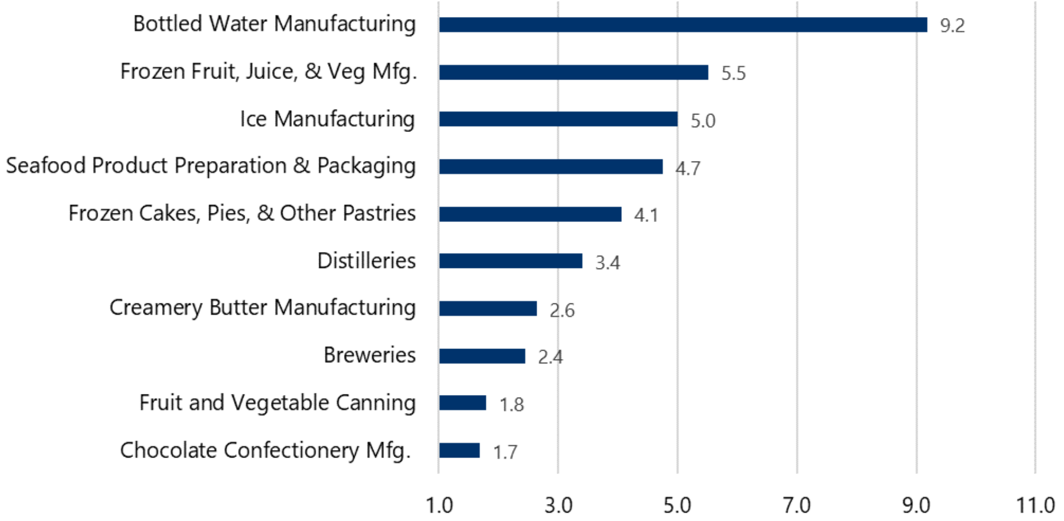
DATA NOTE:
There are three performance measures in the chart above that combine to relate the competitiveness of this activity, (1) bubble size is size of industry by jobs, (2) vertical axis measures industry concentration in Maine, (3) horizontal axis measures recent jobs growth.

SUBSECTOR PERFORMANCE

In 2022, Maine had 8,291 jobs in the Food Manufacturing Sector

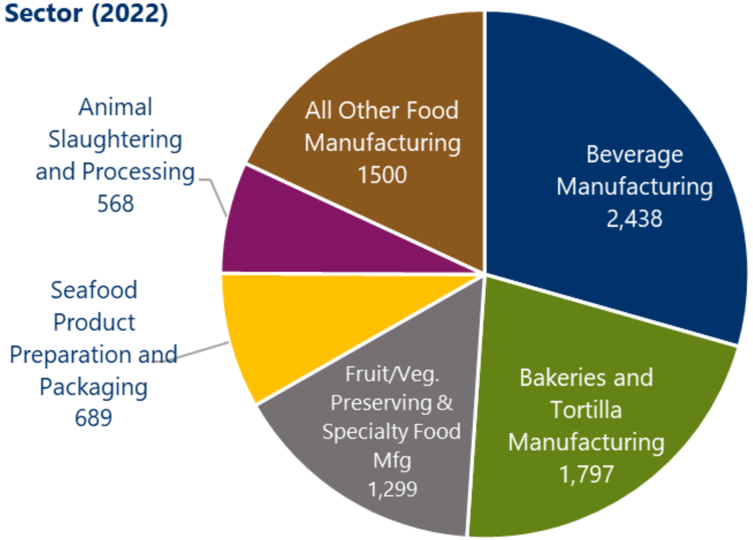
- **Beverage Manufacturing** made up the largest key subsector, with 2,438 jobs in 2022. It had a location quotient of 1.8, meaning it was 1.8 times more specialized than would be expected for an economy of Maine's size. Breweries were the largest industry in this subsector, with about 1,100 jobs and adding 493 jobs since 2017. Bottled Water Manufacturing was the second-largest industry in the subsector, with 727 jobs, although declining by 147 jobs since 2017. That said, Bottled Water Manufacturing has the highest average earnings per job in the subsector, at $93,271.
- **Bakeries and Tortilla Manufacturing** had nearly 1,800 jobs in 2022, led by Commercial Bakeries (about 750) and Retail Bakeries (about 680). The subsector had relatively low wages overall, with an average of $44,146. It was 1.2 times more concentrated in Maine than in the national economy.
- **Overall, Food Manufacturing had a negative competitive effect while Beverage Manufacturing had a positive competitive effect.** In other words, Food Manufacturing industries tended to grow slower or decline faster than would be expected given national and industry trends, while Beverage Manufacturing industries outpaced national and industrial trends. Some exceptions to this trend exist, like Frozen Fruit, Juice, and Vegetable Manufacturing and Poultry Processing (strong positive competitive effect) in the Food Manufacturing sector and Bottled Water Manufacturing (strong negative competitive effect) in the Beverage Manufacturing sector.

Top Location Quotients for Industries in the Food & Beverage Manufacturing Sector (2022)



Source: Lightcast

Job Distribution of the Food & Beverage Manfuacturing Sector (2022)



Source: Lightcast

DATA NOTE:

Location quotient (LQ) is a measure of industry concentration within a region. An LQ of 1.0 means that an industry is as concentrated within the region as it is on a national level. An LQ greater than 1.0 indicates that an industry is more concentrated in a region than at the national level.

The **competitive effect** illustrates how much change in an industry is not explained by national economic or industry trends. A positive competitive effect means that the region has unique characteristics giving it a competitive advantage in that respective industry. However, a negative competitive effect indicates that an industry is either not growing as quickly *or* shrinking faster than national industry trends for the US.

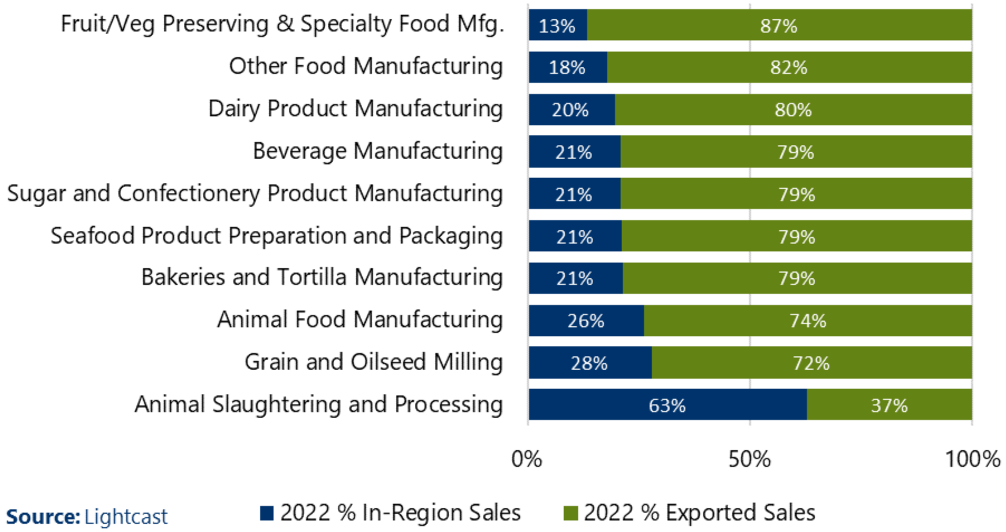
SUBSECTOR PERFORMANCE

Food and Beverage Manufacturing Summary

	Food Manufacturing	Beverage Manufacturing
Jobs (2017)	5,747	1,789
Jobs (2022)	5,853	2,438
Jobs Change (2017-2022)	105	650
Jobs Change % (2017-2022)	+2%	+36%
Avg. Earnings Per Job (2022)	$58,386	$70,764
Location Quotient (2022)	0.80	1.81
Competitive Effect (2017-2022)	(76)	85
Payrolled Business Locations (2022)	285	137
Total Demand (2022)	$2,886,110,816	$596,832,750
Demand met by Imports (2022)	$2,425,083,508	$298,249,961
Total Sales (2022)	$1,907,512,040	$1,436,605,183
GRP (2022)	$606,672,865	$686,762,447
GRP per Job	$103,656	$281,634

Source: Lightcast

Sales in Food & Beverage Manufacturing Subsectors (2022)



Source: Lightcast

The sector had a $1.3 Billion Gross Regional Product in 2022.

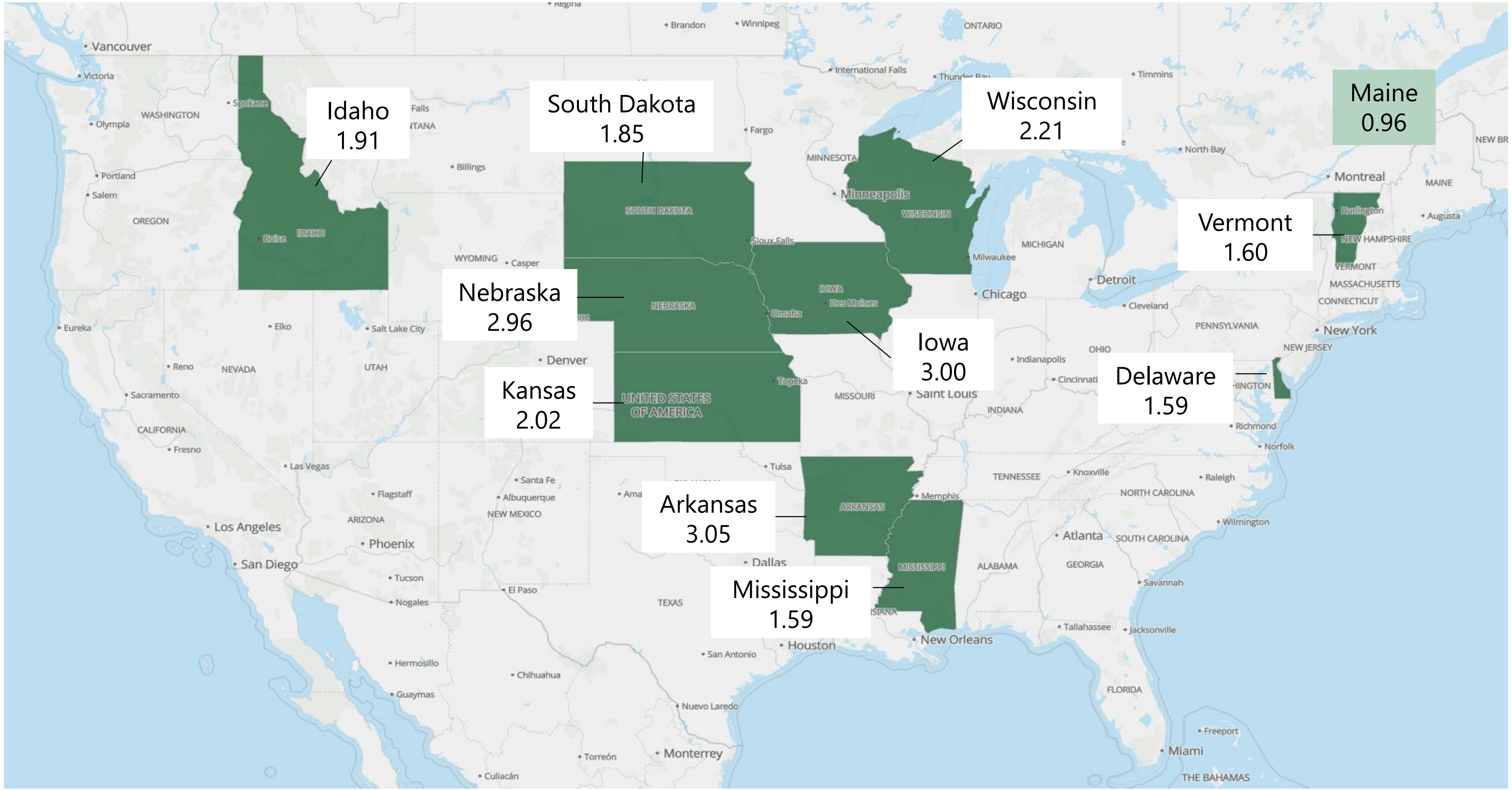
- **Seafood Product Preparation and Packaging** accounted for over $55.2 million GRP in 2022. It had a location quotient of 4.75, meaning its employment in Maine was 4.75 times more concentrated than in the nation. This industry plays an important role in the overall seafood industry in Maine.

- **Fruit & Vegetable Preserving & Specialty Food Manufacturing** was the subsector that had the highest share of sales exported out of the state, 87%. The subsector did over $477 million in sales in 2022, with almost half in the Frozen Fruit, Juice, and Vegetable Manufacturing industry, which had over $225 million in total sales. Overall, the subsector accounted for about 1,300 jobs in 2022, unchanged from five years prior.

- **Beverage Manufacturing was a highly productive sector**, contributing $281,634 to GRP for each job it had, more than double the average in Maine for all industries ($117,106). While Food Manufacturing overall lagged the state average, some industries had high productivity levels; Animal Food Manufacturing, Grain and Oilseed Milling, Fruit & Vegetable Preserving, and Dairy Product Manufacturing all had GRP per worker higher than the state average.

KEY NATIONAL PLAYERS

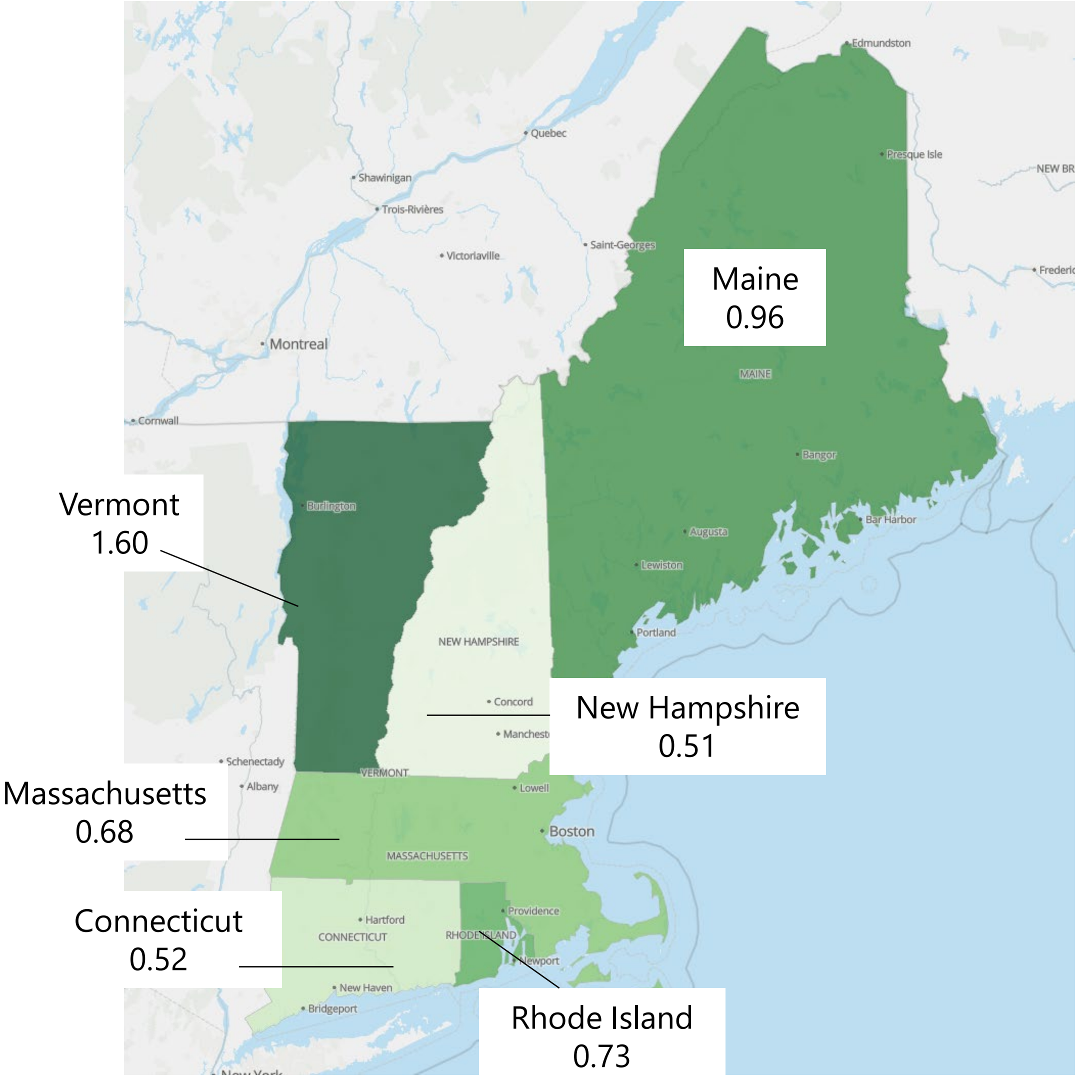
States with >1.5 Location Quotient for the Food and Beverage Manufacturing Sector (2022)



DATA NOTE: Location quotient (LQ) is a measure of industry concentration within a region. An LQ of 1.0 means that an industry is as concentrated within the region as it is on a national level. An LQ greater than 1.0 indicates that an industry is more concentrated in a region than at the national level.

KEY REGIONAL PLAYERS

Location Quotients for the Food & Beverage Manufacturing Sector in New England



Source: IMPLAN Data Library

Industry Demand and Purchases

Where is Maine's Food & Beverage Manufacturing sector buying from?

PURCHASING INDUSTRIES

Industries Maine Food & Beverage Manufacturing Buys From

Top 25 Industries the Food and Beverage Manufacturing Sector Purchases From (2022)

NAICS	Industry	In-Region Purchases	% In-Region Purchases	Imported Purchases	% Imported Purchases	Total Purchases
112000	Animal Production	$32,158,046	16.1%	$167,979,187	83.9%	$200,137,233
111000	Crop Production	$98,715,855	60.3%	$64,869,518	39.7%	$163,585,374
551114	Corporate, Subsidiary, and Regional Managing Offices	$56,679,475	70.2%	$24,031,325	29.8%	$80,710,800
322211	Corrugated and Solid Fiber Box Manufacturing	$11,117,248	21.4%	$40,882,558	78.6%	$51,999,806
326160	Plastics Bottle Manufacturing	$9,310,849	18.1%	$42,012,217	81.9%	$51,323,065
332431	Metal Can Manufacturing	$0	0.0%	$48,363,027	100.0%	$48,363,027
484121	General Freight Trucking, Long-Distance, Truckload	$27,437,605	69.9%	$11,829,341	30.1%	$39,266,945
424410	General Line Grocery Merchant Wholesalers	$16,008,096	43.5%	$20,756,808	56.5%	$36,764,904
424490	Other Grocery and Related Products Merchant	$21,402,853	60.1%	$14,218,223	39.9%	$35,621,076
311211	**Flour Milling**	$876,937	2.9%	$29,642,287	97.1%	$30,519,224
332439	Other Metal Container Manufacturing	$183,086	0.7%	$24,307,279	99.3%	$24,490,365
311224	Soybean and Other Oilseed Processing	$4,566,845	18.7%	$19,908,639	81.3%	$24,475,484
312140	**Distilleries**	$21,327,855	94.5%	$1,251,917	5.5%	$22,579,772
311615	**Poultry Processing**	$12,198,062	55.2%	$9,913,668	44.8%	$22,111,730
331318	Other Aluminum Rolling, Drawing, and Extruding	$0	0.0%	$21,872,570	100.0%	$21,872,570
311513	**Cheese Manufacturing**	$1,918,159	8.8%	$19,819,843	91.2%	$21,738,002
484110	General Freight Trucking, Local	$10,506,941	51.7%	$9,802,329	48.3%	$20,309,270
311221	**Wet Corn Milling**	$4,589,088	22.9%	$15,466,393	77.1%	$20,055,481
331315	Aluminum Sheet, Plate, and Foil Manufacturing	$0	0.0%	$18,556,610	100.0%	$18,556,610
327215	Glass Product Manufacturing Made of Purchased Glass	$14,000,243	78.7%	$3,783,946	21.3%	$17,784,189
484122	General Freight Trucking, Long-Distance, Less Than Truckload	$8,423,305	50.7%	$8,201,514	49.3%	$16,624,820
482110	Rail transportation	$8,820,054	55.2%	$7,170,645	44.8%	$15,990,699
311611	**Animal (except Poultry) Slaughtering**	$3,530,114	22.4%	$12,244,354	77.6%	$15,774,468
311612	**Meat Processed from Carcasses**	$666,038	4.4%	$14,479,450	95.6%	$15,145,488
114112	Shellfish Fishing	$14,454,549	99.3%	$99,979	0.7%	$14,554,528

Source: Lightcast

Note: Industries that are **bolded** indicate that they are included in the overall Sector.

- **The Animal Production and Crop Production industries were the largest supplier to the Food Manufacturing sector**, totaling over $363 million in 2022. Nearly 84% of purchases from Animal Production were imported, while about 40% of Crop Production purchases were imported.
- **Shellfish Fishing had the highest share of in-region purchases, at 99%.** The strength of the Shellfish Fishing industry helps create important B2B linkages within the sector.
- **Manufacturing related to packaging is an important part of the Food and Beverage Manufacturing supply chain that could present further opportunities in Maine.** For example, expansion of businesses that engage in Box Manufacturing, Metal Can Manufacturing, or Glass Product Manufacturing specifically to support the Food and Beverage Manufacturing sector would support these intra-industry supply chain linkages and bolster the sector's growth.
- The top 25 purchasing industries made up 58% of total purchases, **indicating that purchases of the sector's products were spread moderately throughout the economy.**

DATA NOTE:
This table gives greater insight into supply chain gaps within the sector. Industries that have low shares of in-region purchases indicate opportunities where Maine relies heavily on imported supply, but where Maine businesses could potentially expand to recapture transactions. The figure above is sorted by Total Purchases, from greatest to least.

DEMAND

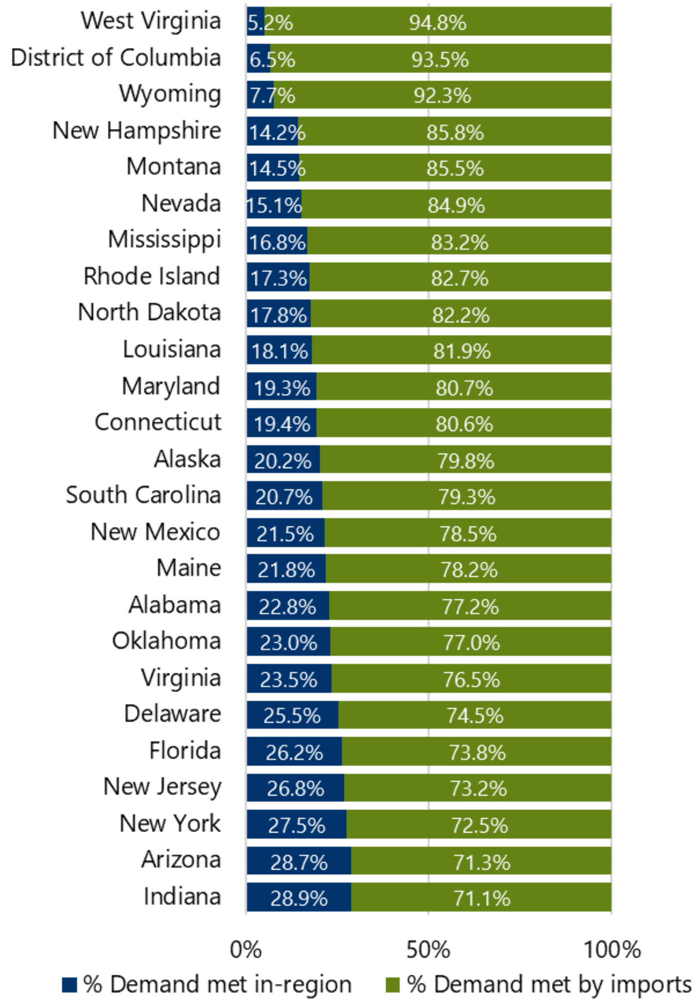
Top 10 States by Total Demand for Food and Beverage Manufacturing Sector (2022)

	Payrolled Business Locations	Demand met in region	% Demand met in-region	Demand met by imports	% Demand met by imports	Total Demand
California	7,814	$75,147,184,675	58.8%	$52,680,964,089.00	41.2%	$127,828,148,764
Texas	3,531	$35,349,578,177	45.1%	$42,965,205,337.40	54.9%	$78,314,783,515
New York	3,016	$17,771,597,373	27.5%	$46,935,656,469.60	72.5%	$64,707,253,842
Florida	2,438	$13,298,057,960	26.2%	$37,533,260,368.20	73.8%	$50,831,318,328
Illinois	2,502	$17,990,140,242	44.5%	$22,406,133,169.10	55.5%	$40,396,273,411
Pennsylvania	1,990	$13,694,551,168	36.8%	$23,520,061,000.40	63.2%	$37,214,612,168
Ohio	1,557	$12,262,727,389	37.1%	$20,746,291,763.50	62.9%	$33,009,019,152
New Jersey	1,616	$7,916,146,738	26.8%	$21,596,045,411.10	73.2%	$29,512,192,150
Georgia	1,282	$10,798,273,086	38.8%	$17,006,812,655.40	61.2%	$27,805,085,741
North Carolina	1,413	$8,877,855,151	33.8%	$17,416,602,907.50	66.2%	$26,294,458,058

Source: Lightcast

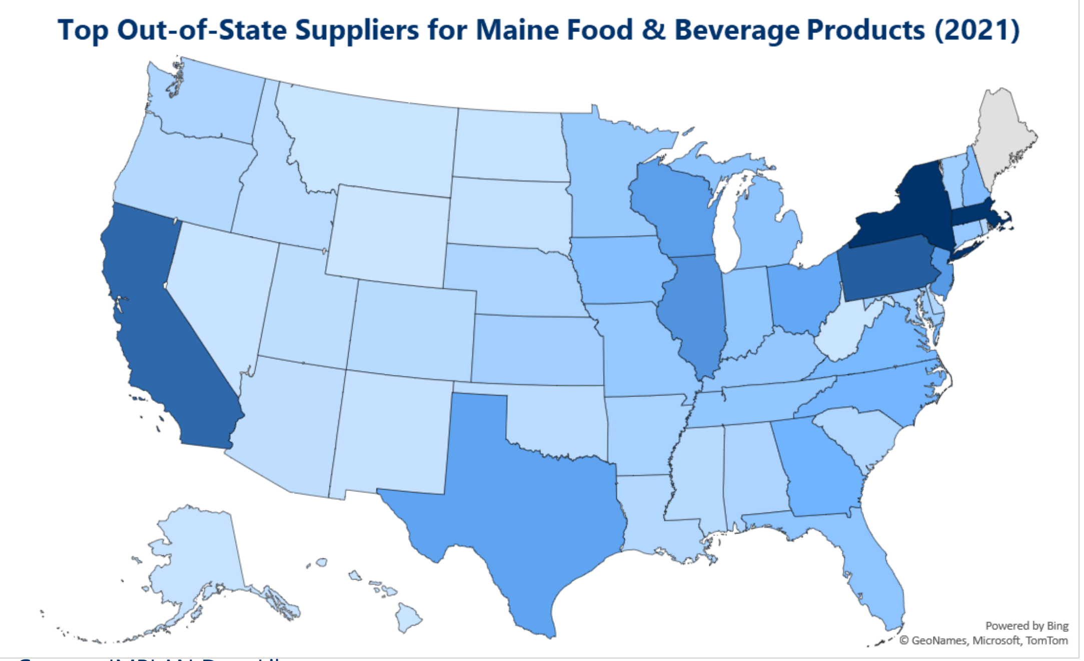
- **Maine ranked 42nd among all states for total demand**, at $3.5 billion for Food and Beverage Manufacturing in 2022.
- The states with the highest overall demand for the sector's products tended to be those with the largest economies in the nation. These states also tended to have relatively low shares of demand met by imports.
- **The largest importer of the Food and Beverage Manufacturing sector was West Virginia**, with almost 95% of total demand being met by imports in 2022.
- **Maine ranked 16th overall for percent of demand met by imports**, having a comparatively low share met within Maine.
- **South Atlantic States** (WV, DC, MD, SC, VA, DE, FL) made up 7 of the top 25 for their share of demand for Food and Beverage Manufacturing demand met by imports. In particular, **Florida and New York** present opportunities, as these had relatively high shares of demand met by imports as well as high demand volume.
- **The states with the largest share of demand met by imports had relatively small demand for the sector overall**. The top 10 states by percent demand met by imports all rank in the bottom half, and six ranked 40th or lower for total demand for Food & Beverage Manufacturing products.

Top 25 States by Share of Demand Met by Imports (2022)

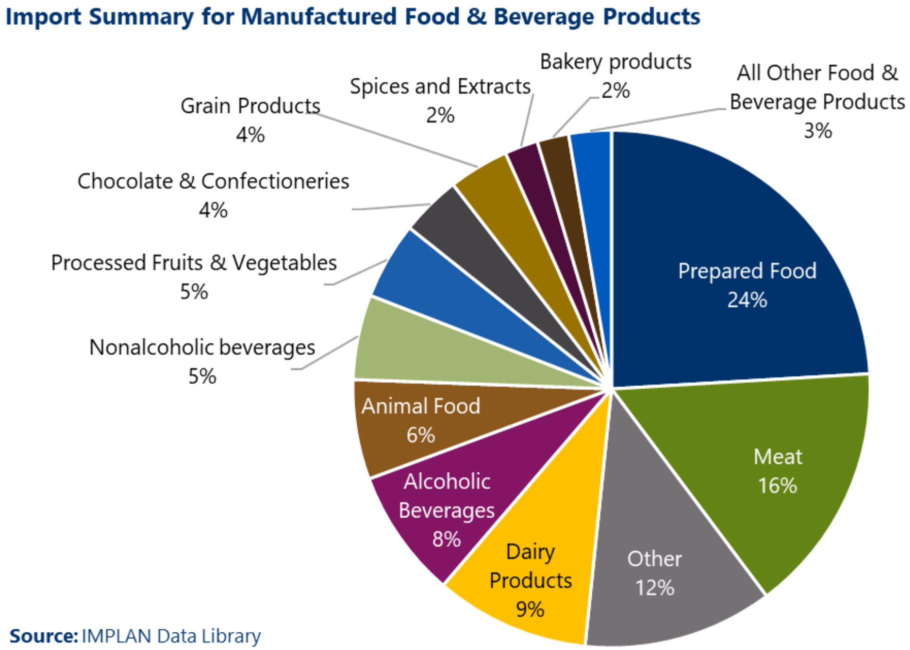


Source: Lightcast

DOMESTIC IMPORTS – FOOD & BEVERAGE PRODUCTS



Source: IMPLAN Data Library



Source: IMPLAN Data Library

Nearly every state supplied Maine with food & beverage products in 2021

- **New York, Massachusetts, Pennsylvania, and California were the three largest suppliers to Maine's markets**. These states supplied Maine with over $200 million each of food & beverage products in 2021.
- **Prepared Foods represents the largest commodity that Maine imports within this sector, making up 24% of sector imports in 2021**. This includes products like bread and bakery products, snack foods, cookies and crackers, pasta, and specialty foods, among others. Massachusetts was the largest supplier of prepared foods to Maine in 2021, supplying over $50 million of bread and bakery products.
- Overall, the real import value of food & beverage products increased at a compound annual growth rate of 1.3% from 2011-2021. Imports of Animal Food & Dairy products grew the fastest, at an annualized rate of 3.3% each. Imports of other products like grain products and manufactured ice declined over the decade.

DATA NOTE: Figures on this page are from IMPLAN's Data Library and may not match other data in this report. IMPLAN domestic trade flows data covers commodities, or the products and services that are produced by a sector. This differs from other data in this report, which covers NAICS industries. Industries often produce more than one commodity.

DEMAND & IMPORTS

TOTAL DEMAND (2022)
Maine: $3.5 Billion
United States: $964.1 Billion

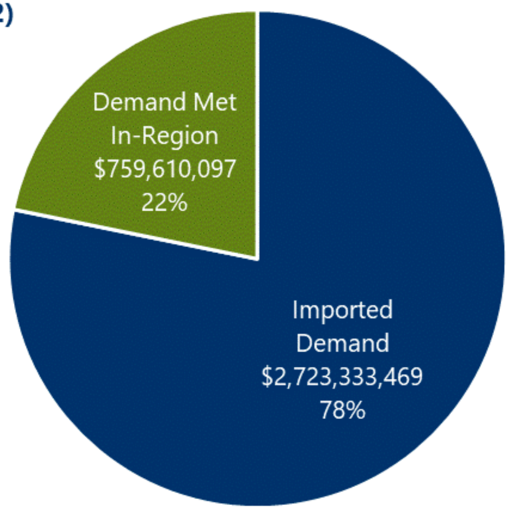
MET BY IMPORTS (2022)
Maine: $2.7 Billion
United States: NA

FOREIGN IMPORTS (2022)
Maine: $352.0 Million
United States: $137.3 Billion

Source: Lightcast, US Census Bureau

- The Food & Beverage Manufacturing Sector had a total demand of $3.5 billion in 2022, of which 78 ($2.7 billion) was met by out-of-state sources.
- According to US Census data, the foreign import value of the sector was $352.0 million.
- Foreign imports accounted for 12.9% of all demand met by imports, implying that 87.1% of imported demand was met by domestic sources.

Total Food & Beverage Manufacturing Demand in Maine (2022)



Source: Lightcast

Foreign Imports by Value for Maine Food & Beverage Manufacturing Sector, 2022

Commodity	Total Imports Value ($US)	Foreign Share of Total Imports	Industry Share of Total Foreign Exports
Beverages	73,715,030	2.7%	0.9%
Fruits & Veg Preserves & Specialty Foods	70,074,026	2.6%	0.9%
Animal Foods	45,362,235	1.7%	0.6%
Meat Products & Meat Packaging Products	41,389,286	1.5%	0.5%
Grain & Oilseed Milling Products	39,839,708	1.5%	0.5%
Foods, Nesoi	29,468,399	1.1%	0.4%
Bakery & Tortilla Products	28,867,535	1.1%	0.4%
Seafood Prods, Prepared, Canned & Packaged	20,438,677	0.8%	0.2%
Dairy Products	1,527,180	0.1%	0.0%
Sugar & Confectionery Products	1,318,921	0.0%	0.0%
Total	**$352,000,997**	**12.9%**	**4.3%**

Source: US Census Bureau

Note: Nesoi stands for Not Elsewhere Specified Or Included

Industry Sales and Exports

Where is Maine's Agriculture sector selling to?

IN-REGION SALES INDUSTRIES

Industries Maine Food & Beverage Manufacturing Sells To

Top 25 Industries the Food and Beverage Manufacturing Sector Sells To In Maine (2022)

NAICS	Industry	In-Region Sales	Percent of In-Region Sales
722511	Full-Service Restaurants	$ 31,531,030	14.0%
722513	Limited-Service Restaurants	$ 24,911,699	11.1%
312140	**Distilleries**	$ 21,625,225	9.6%
311615	**Poultry Processing**	$ 12,887,892	5.7%
902999	State Government, Excluding Education and Hospitals	$ 11,175,681	5.0%
311511	**Fluid Milk Manufacturing**	$ 7,529,407	3.4%
622110	General Medical and Surgical Hospitals	$ 7,372,079	3.3%
903999	Local Government, Excluding Education and Hospitals	$ 5,831,400	2.6%
721110	Hotels (except Casino Hotels) and Motels	$ 5,696,546	2.5%
611310	Colleges, Universities, and Professional Schools	$ 5,568,180	2.5%
311411	**Frozen Fruit, Juice, and Vegetable Manufacturing**	$ 4,814,684	2.1%
311421	**Fruit and Vegetable Canning**	$ 4,104,205	1.8%
311710	**Seafood Product Preparation and Packaging**	$ 3,847,771	1.7%
624120	Services for the Elderly and Persons with Disabilities	$ 3,618,833	1.6%
312112	**Bottled Water Manufacturing**	$ 3,475,640	1.5%
624190	Other Individual and Family Services	$ 3,325,011	1.5%
312120	**Breweries**	$ 2,888,590	1.3%
541940	Veterinary Services	$ 2,676,053	1.2%
722515	Snack and Nonalcoholic Beverage Bars	$ 2,629,830	1.2%
112000	Animal Production	$ 2,513,338	1.1%
311513	**Cheese Manufacturing**	$ 2,444,262	1.1%
322122	Newsprint Mills	$ 2,263,121	1.0%
623210	Residential Intellectual and Developmental Disability Facilities	$ 1,657,387	0.7%
311812	**Commercial Bakeries**	$ 1,643,516	0.7%
624110	Child and Youth Services	$ 1,638,203	0.7%

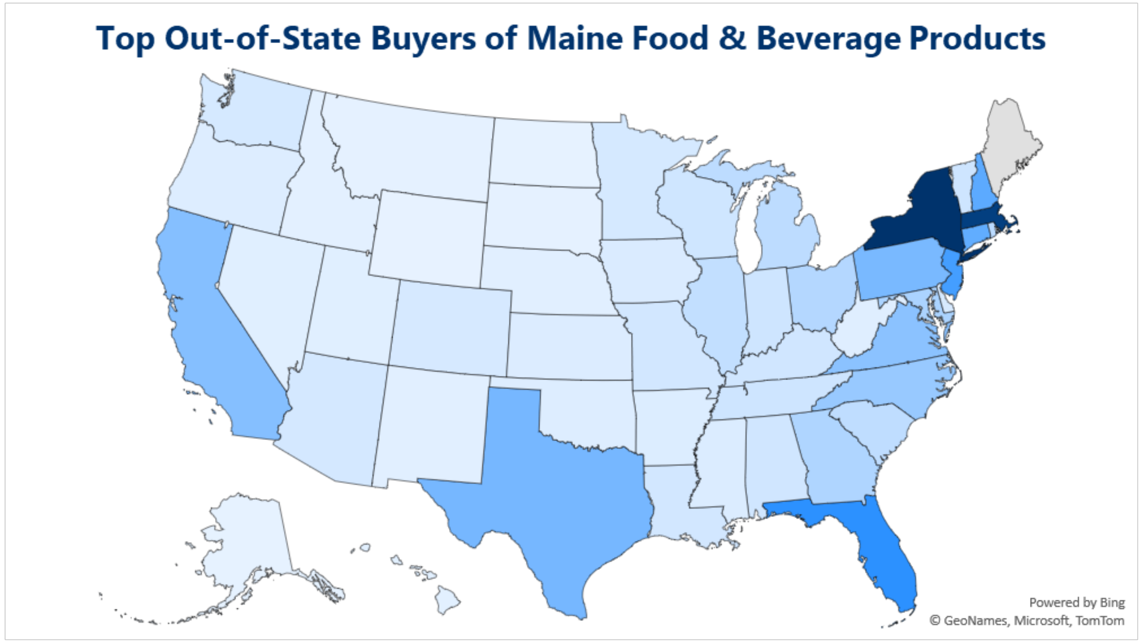
Source: Lightcast

Note: Industries that are **bolded** indicate that they are included in the overall Sector.

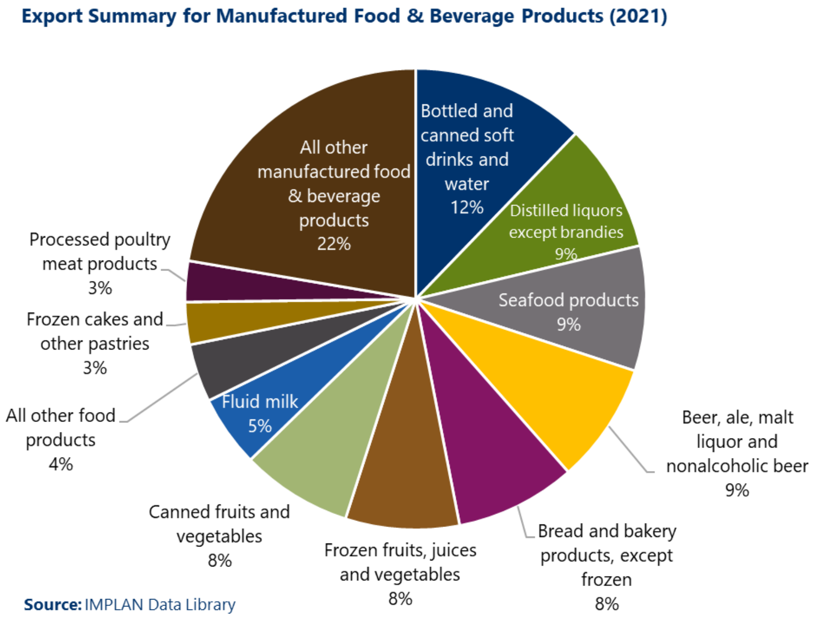
- **Restaurants, both full- and limited-service, were the largest buyers of Food and Beverage Manufacturing's goods**, accounting for a collective $56 million, or 25% of all in-region sales.
- Overall, **ten of the top 25 buying industries were part of the Food and Beverage Manufacturing Sector**, highlighting the interconnectedness of the sector. **That said, the Sector is far-reaching within Maine's economy, with major in-region sales volume to entities like Schools, Hospitals, Hotels, Family Services, and other Social Service industries.** The sector plays a vital role in feeding Maine's population through a multitude of venues.
- The top 25 sales industries made up 79% of total in-region sales, **indicating that sales of the sector's products are relatively concentrated in a few industries of the economy.**

DATA NOTE:
The sales in this table do not add up to total in-region sales because it only captures sales to other industries, and not other entities like consumers. The Percent of Total In-Region Sector Sales shows the portion of sales to a given industry as it relates to total sales to *all industries*, not total in-region sales including sales to consumers.

DOMESTIC EXPORTS – FOOD & BEVERAGE PRODUCTS



Source: IMPLAN Data Library



Maine exported food & beverage products to every state in 2021.

- **New York & Massachusetts were the largest buyers of food & beverage products produced in Maine in 2021, together accounting for over $1 billion of exports.**
- **Bottled & Canned Soft Drinks & Water was the largest export,** accounting for 12% of total exports. Massachusetts was the largest buyer of these products.
- **Alcoholic beverages** together account for a significant portion of Maine's food & beverage exports. Beer, wine, and liquor represent a combined total of over $650 million of domestic exports in 2021, almost 20% of total sector exports.
- **Seafood products** were another key domestic export, accounting for 9% of the sector's exports. New York, Massachusetts, Pennsylvania, and New Jersey all bought over $20 million each of Maine's manufactured seafood products.
- Exports of food & beverage commodities **increased an annual rate of 3.0% from 2011-2021.**

DATA NOTE: Figures on this page are from IMPLAN's Data Library and may not match other data in this report. IMPLAN domestic trade flows data covers commodities, or the products and services that are produced by a sector. This differs from other data in this report, which covers NAICS industries. Industries often produce more than one commodity.

SALES & EXPORTS

TOTAL SALES (2022)
Maine: $3.3 Billion
United States: $1.0 Trillion

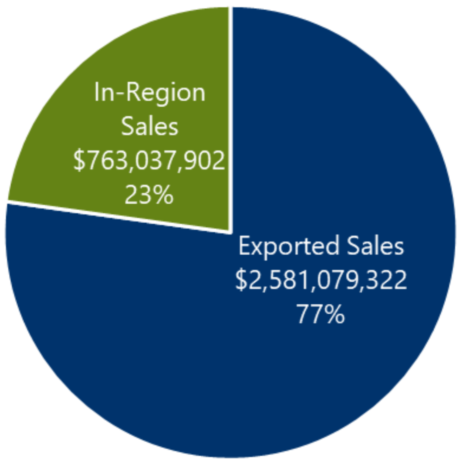
EXPORTED SALES (2022)
Maine: $2.6 Billion
United States: N/A

FOREIGN EXPORTS (2022)
Maine: $140.0 Million
United States: $93.7 Billion

Source: Lightcast, US Census Bureau

- Food & Beverage Products in Maine had total sales of $3.3 billion in 2022, of which 77% were exported out of state ($2.6 billion).
- Foreign exports were valued at $140.0 Million in 2022 based on US Census data, leading to foreign export value of 5.4% of total exported sales. Therefore, domestic exports accounted for an estimated 94.6% of all sector exports.
- Top exports in Maine's Food & Beverage Manufacturing sector are displayed in the table below. The top foreign export is Foods, Not Elsewhere Specified or Indicated at $60.9 million in 2022, accounting for 2.4% of total exports for the sector.

Total Food & Beverage Manufacturing Sales (2022)



Source: Lightcast

Foreign Exports by Value for Maine Food & Beverage Manufacturing Sector, 2022

Commodity	Total Exports Value ($US)	Foreign Share of Total Exports	Industry Share of Total Foreign Exports
Foods, NESOI	$60,932,675	2.4%	1.8%
Fruits & Veg Preserves & Specialty Foods	$48,050,012	1.9%	1.4%
Grain & Oilseed Milling Products	$11,809,382	0.5%	0.3%
Meat Products & Meat Packaging Products	$9,571,621	0.4%	0.3%
Beverages	$2,973,699	0.1%	0.1%
Seafood Prods, Prepared, Canned & Packaged	$2,708,712	0.1%	0.1%
Bakery & Tortilla Products	$1,833,853	0.1%	0.1%
Animal Foods	$1,184,241	0.0%	0.0%
Dairy Products	$885,867	0.0%	0.0%
Sugar & Confectionery Products	$100,736	0.0%	0.0%
Total	**$140,050,798**	**5.4%**	**4.1%**

Source: US Census Bureau

Note: Nesoi stands for Not Elsewhere Specified Or Included

FOOD & BEVERAGE WHOLESALING

Food and Beverage Wholesaling

Sector Activity

Maine's capacity for warehousing and storage is a key opportunity to the success of its overall food sector, and subsequently, its ability to distribute both Maine-Made and imported food & beverage products. Other opportunities include the **expansion of B2B services like Commercial Banking,** which are important for core business operations but have a relatively low share of purchases made from in-region sources.

Overall, the Food & Beverage Wholesale sector in Maine plays a critical role in keeping Maine fed through a multitude of venues, from supplying Food Manufacturing production to supporting restaurants, to providing food for schools & hospitals. It is important to note that **wholesale activities are at the crux of multiple points in the Food Sector supply chain**, both bringing raw agricultural product to producers as well as bringing processed food & beverage products to points of sale.

Proximity is a crucial component to the sector's trade flows. **Four of Maine's top 5 domestic supplier states in 2021 were located in New England.** These include Massachusetts, New Hampshire, Rhode Island, and Connecticut (New York is fifth). **New England also accounted for almost all of the sector's domestic exports**, with New Hampshire taking the lead.

Subsectors included in this report

- **4244 Grocery & Related Product Merchant Wholesalers** Industries in this subsector include businesses primarily engaged in the merchant wholesale distribution of 1) a general line of groceries; 2) packaged frozen food; 3) dairy products; 4) poultry and poultry products; 5) confectioneries; 6) fish and seafood; 7) meats and meat products; 8) fresh fruits and vegetables; and 9) other grocery and related products
- **4248 Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers** This subsector comprises establishments primarily engaged in the merchant wholesale distribution of beer, ale, wine, and/or distilled alcoholic beverages

NATIONAL TRENDS

KEY TRENDS

- Competition among industry participants is intense and will continue to intensify, driven by the disproportionate size of industry players and concentrated market share. This has also contributed to consolidation over the last decade
- Wholesalers took a major hit during the pandemic but have and will continue to experience revived demand from food services customers
- Retail chains with their own distribution facilities are projected to increase in number and size
- Small-scale craft breweries have become increasingly popular, and the sustained success of wholesalers has depended heavily on the alcohol distribution system.
- Seafood restaurants cater to wealthier customers
- Demand from grocery stores has been a strong supporter of industry activity
- Cost inflation is the driver of much of the revenue growth experienced in the most recent quarters
- A significant part of the industry relies on servicing food service providers

RECENT DEVELOPMENTS

- Wholesale prices remain under pressure, in accordance with rising inflation and largely due to soaring food & energy prices
- Food shortages contribute to price hikes. Rising consumer demand, labor shortages, and constrained trucking & shipping capacity all contribute to this dilemma

INDUSTRY DRIVERS

- Consumer spending
- Demand from supermarkets and grocery stores
- Demand from restaurants and drinking places
- Consumer confidence index
- Healthy eating index
- Per capita disposable income

SUPPLY CHAIN

SUPPLYING INDUSTRIES

Dairy Product Production

Farming

Fishing & Aquaculture

Beverage Production

Breweries & Distilleries

Food Mfg.

Utilities

Petrochemical Mfg.

→

Food & Beverage Wholesale

→

BUYING INDUSTRIES

Consumers

Seafood Preparation

Supermarkets & Grocery Stores

Specialty Markets & Food Stores

Restaurants

Food Service Contractors

Hotels

Beer, Wine, and Liquor Stores

Convenience Stores

Source: IBISWorld

DATA NOTE:
This page provides a brief qualitative overview of macro trends facing this sector and structural causes of growth for the sector. A supply chain summary shows key industries upstream and downstream of the sector. Trends and projections noted by IBISWorld typically reflect a period of +/- 5 years

SECTOR SUMMARY: MAINE PERFORMANCE

Food & Beverage Wholesale Summary

Jobs: 4,997
- Data for 2022
- 0.7% of the state's total employment

Job Growth: +25
- Data for 2017-2022
- Growth driven by Frozen Food Wholesalers and Beer, Wine, and Alcoholic Beverage Wholesalers

Job Growth Rate: +0.5%
- Data compares 2017-2022
- Growth slightly underperformed the United States, which grew by 1.7% during this period.

Concentration: 1.16
- Data for 2022
- Jobs were slightly more concentrated in Maine than the nation, although industries such as Fish & Seafood Wholesalers were more concentrated.

Establishments: 488
- Data for 2022
- Average 10 jobs per establishment, lower than the nation (18)

Average Earnings: $69,505
- Data for 2022
- Higher than the State's average earnings across all industries ($66,730)
- Lower than the national average for the sector ($84,542)

Competitive Effect: -205
- Data compares 2017-2022
- Maine's Food & Beverage Wholesale sector grew at a slower rate than would be expected given national and industry trends

Gross Regional Product: $705.9 Million
- Data for 2022
- 0.9% of Maine's total GRP
- Larger share than the U.S. (0.7% of total GRP)

Productivity: $141,273
- Data for 2022
- GRP per worker
- Lower than the figure for the United States ($163,586)

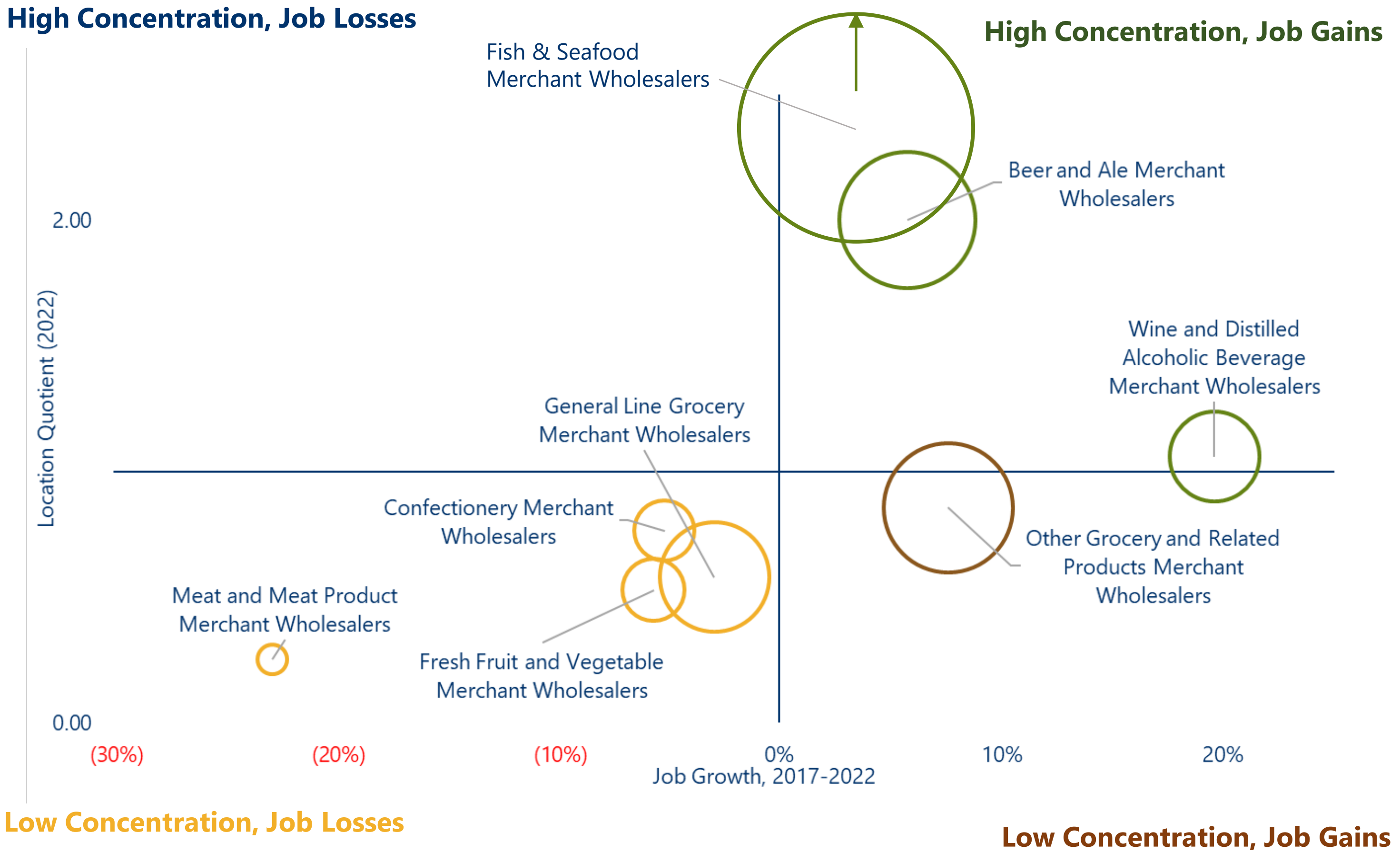
Total Sales: $1.2 Billion
- Data for 2022
- 53% of sales exported out of state

Demand: $955.4 Million
- Data for 2022
- 60% of Maine's demand was met by in-state sources

Leakage: $386.6 Million
- Data for 2022
- $386.6 million of demand was met by out-of-state sources

DATA NOTE:
National figures on this page were calculated using a different source than on page 49, which may lead to some differences.

KEY INDUSTRIES



Bubble size = 2022 jobs

Source: Lightcast, Camoin Associates
Note: Figure includes 6-digit NAICS industries with at least 50 jobs in 2022. Fish & Seafood Wholesalers has an LQ of 12.22. Dairy Product Wholesalers and Poultry & Poultry Product Wholesalers are excluded as they have <50 jobs in 2022.

Findings:

- Fish & Seafood Merchant Wholesalers is the largest and most concentrated industry in the sector. Two other industries are both concentrated and growing: Beer & Ale Merchant Wholesalers and Wine & Distilled Alcoholic Beverage Wholesalers.
- Other Grocery and Related Products Wholesalers can be considered emerging; its LQ is low, at 0.86, however, it has seen notable growth in the last five years.
- Four industries have both low concentration and job loss. These include Meat & Meat Product Wholesalers, General Line Grocery Wholesalers, Confectionary Wholesalers, and Fresh Fruit & Vegetable Wholesalers.

Industries included:

- General Line Grocery Wholesalers
- Packaged Frozen Food Wholesalers
- Dairy Product Wholesalers
- Poultry & Poultry Product Wholesalers
- Confectionery Wholesalers
- Fish & Seafood Wholesalers
- Meat & Meat Product Wholesalers
- Fresh Fruit & Vegetable Wholesalers
- Other Grocery & Related Products Wholesalers
- Beer & Ale Wholesalers
- Wine & Distilled Alcoholic Beverage Wholesalers

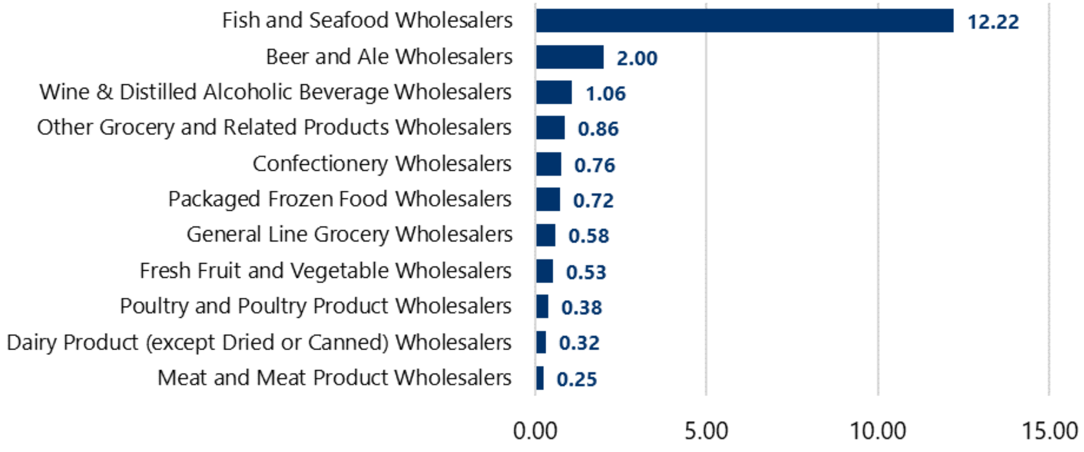
DATA NOTE:
There are three performance measures in the chart above that combine to relate the competitiveness of this activity, (1) bubble size is size of industry by jobs, (2) vertical axis measures industry concentration in Maine, (3) horizontal axis measures recent jobs growth.

SUBSECTOR PERFORMANCE

In 2022, Maine had 4,997 jobs in the Food & Beverage Wholesaling Sector

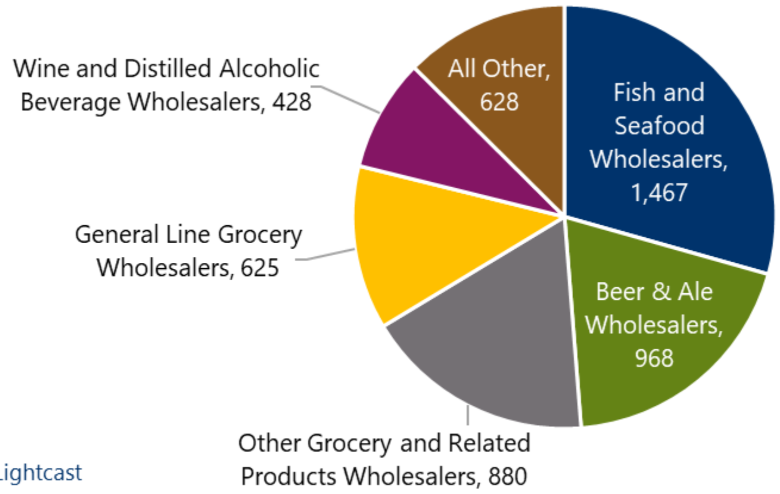
- **Fish and Seafood Wholesalers** was the largest and most concentrated subsector, with nearly 1,500 jobs and a location quotient of 12.22. It had a negative competitive effect in 2022, meaning it declined faster in Maine than it did in the nation overall; however, it played a significant role in Maine's export market, with 92% of its sales being exported out of state.
- **Beer and Ale Wholesalers** was the second-largest subsector in the Food & Beverage Wholesaling sector, with 968 jobs in 2022. This subsector saw steady growth of 6% from 2017-2022 and had a competitive effect of 50, meaning it grew by 50 more jobs in Maine than would be expected given national and industry trends. This subsector had the highest of all Food & Beverage Wholesaling subsectors, at over $167 million in 2022. This industry also had the highest GDP among industries in the sector, at $167.7 million in 2022.

Location Quotients for Industries in the Food & Beverage Wholesaling Sector



Source: Lightcast

Job Distribution of the Food & Beverage Wholesaling Sector (2022)



Source: Lightcast

DATA NOTE:

Location quotient (LQ) is a measure of industry concentration within a region. An LQ of 1.0 means that an industry is as concentrated within the region as it is on a national level. An LQ greater than 1.0 indicates that an industry is more concentrated in a region than at the national level.

The **competitive effect** illustrates how much change in an industry is not explained by national economic or industry trends. A positive competitive effect means that the region has unique characteristics giving it a competitive advantage in that respective industry. However, a negative competitive effect indicates that an industry is either not growing as quickly *or* shrinking faster than national industry trends for the US.

SUBSECTOR PERFORMANCE

Food & Beverage Wholesaling Summary

	Grocery & Related Product Wholesalers	Beer, Wine, and Distilled Alcoholic Beverage Wholesalers	Total Food & Beverage Wholesale Sector
Jobs (2017)	3,698	1,273	4,971
Jobs (2022)	3,600	1,396	4,997
Jobs Change (2017 - 2022)	(98)	123	25
Jobs Change % (2017 - 2022)	(3%)	10%	1%
Avg. Earnings Per Job (2022)	$70,875	$65,970	$69,505
Location Quotient (2022)	1.05	1.57	1.16
Competitive Effect (2017-2022)	(140)	74	(205)
Payrolled Business Locations (2022)	428	60	488
Total Demand (2022)	$674,137,986	$281,299,447	$955,437,433
Demand met by Imports (2022)	$315,642,807	$70,924,297	$386,567,104
Total Sales (2022)	$802,227,478	$416,595,927	$1,218,823,406
GRP (2022)	$455,152,309	$250,727,407	$705,879,717
GRP Per Job (2022)	$126,424	$179,561	$141,273

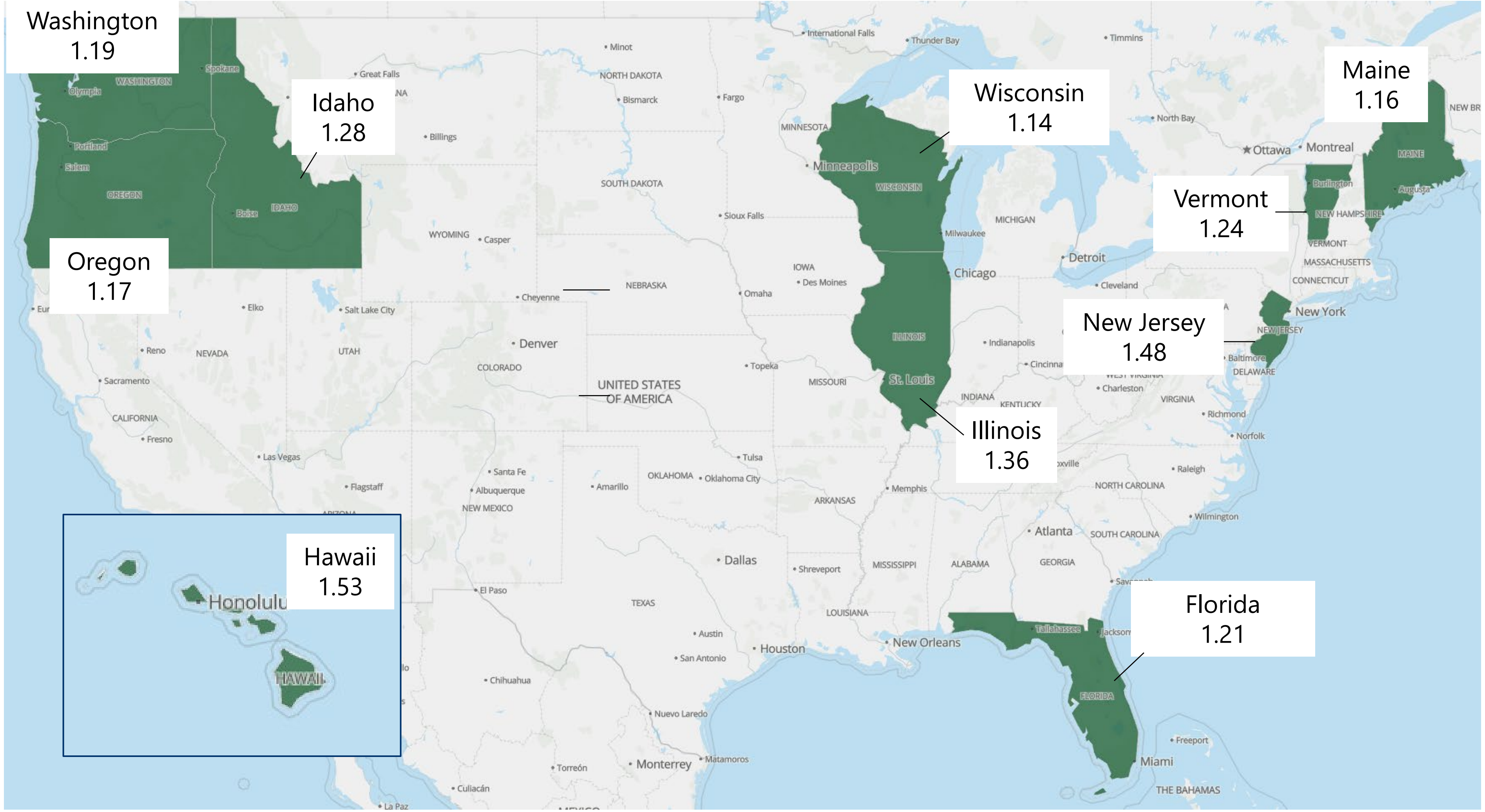
Source: Lightcast

In 2022, the Food & Beverage Wholesaling Sector generated over $141,000 of GDP per worker

- **Packaged Frozen Food Wholesalers** grew the fastest in terms of jobs, adding 101 new jobs between 2017-2022. The industry also had relatively high average earnings, at $93,870 in 2022.
- Overall, **the sector slightly underperformed the United States** on several key metrics: GDP per worker, employment growth, and average earnings. Additionally, the sector's competitive effect was negative, meaning it grew slower than would be expected given overall national economy & industry trends.

KEY NATIONAL PLAYERS

Top 10 States by Location Quotient for the Food & Beverage Wholesale Sector



DATA NOTE: Location quotient (LQ) is a measure of industry concentration within a region. An LQ of 1.0 means that an industry is as concentrated within the region as it is on a national level. An LQ greater than 1.0 indicates that an industry is more concentrated in a region than at the national level.

Industry Demand and Purchases

Where is Maine's Food & Beverage Wholesaling sector buying from?

PURCHASING INDUSTRIES

Industries Maine Food & Bev. Wholesale Buys From

Top 25 Industries the Food and Beverage Wholesaling Sector Purchases From (2022)

NAICS	Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases	Total Purchases
551114	Corporate, Subsidiary, and Regional Managing Offices	$55,993,089	75.9%	$17,789,100	24.1%	$73,782,190
492110	Couriers and Express Delivery Services	$14,822,302	71.0%	$6,054,273	29.0%	$20,876,574
493110	General Warehousing and Storage	$7,353,670	51.3%	$6,991,966	48.7%	$14,345,635
533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	$2,300,515	17.4%	$10,902,408	82.6%	$13,202,923
531110	Lessors of Residential Buildings and Dwellings	$10,250,553	88.3%	$1,364,291	11.7%	$11,614,844
561320	Temporary Help Services	$9,046,233	89.6%	$1,047,406	10.4%	$10,093,639
531210	Offices of Real Estate Agents and Brokers	$6,953,341	72.3%	$2,669,917	27.7%	$9,623,258
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	$7,487,476	92.7%	$588,862	7.3%	$8,076,338
424210	Drugs and Druggists' Sundries Merchant Wholesalers	$1,803,294	23.0%	$6,029,328	77.0%	$7,832,623
531390	Other Activities Related to Real Estate	$4,152,637	58.7%	$2,921,362	41.3%	$7,073,999
221122	Electric Power Distribution	$6,494,757	92.0%	$561,661	8.0%	$7,056,418
541611	Administrative Management and General Management Consulting Services	$3,677,424	52.8%	$3,288,822	47.2%	$6,966,246
561990	All Other Support Services	$5,139,884	74.5%	$1,757,948	25.5%	$6,897,831
541110	Offices of Lawyers	$3,770,316	65.5%	$1,986,649	34.5%	$5,756,965
425120	Wholesale Trade Agents and Brokers	$3,289,235	57.7%	$2,406,879	42.3%	$5,696,114
492210	Local Messengers and Local Delivery	$1,357,708	26.2%	$3,817,182	73.8%	$5,174,890
901149	US Postal Service	$5,062,402	100.0%	$495	0.0%	$5,062,897
541211	Offices of Certified Public Accountants	$3,624,797	72.6%	$1,366,757	27.4%	$4,991,554
519130	Internet Publishing and Broadcasting and Web Search Portals	$312,821	6.4%	$4,550,101	93.6%	$4,862,923
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	$4,149,987	85.4%	$709,384	14.6%	$4,859,371
561422	Telemarketing Bureaus and Other Contact Centers	$4,529,965	94.1%	$285,500	5.9%	$4,815,465
522110	Commercial Banking	$1,886,270	39.4%	$2,899,420	60.6%	$4,785,690
326199	All Other Plastics Product Manufacturing	$811,560	17.1%	$3,940,056	82.9%	$4,751,615
531311	Residential Property Managers	$3,626,521	82.6%	$762,983	17.4%	$4,389,504
524210	Insurance Agencies and Brokerages	$4,037,142	97.2%	$115,875	2.8%	$4,153,017

Source: Lightcast

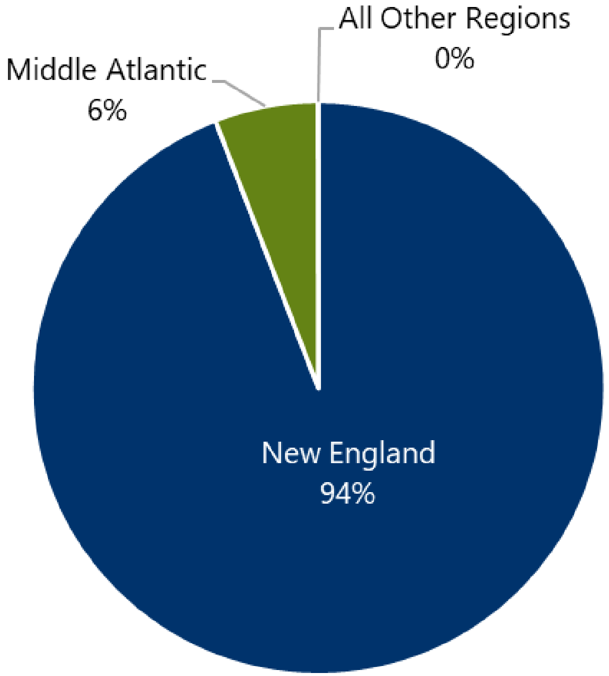
Note: Industries that are **bolded** indicate that they are included in the overall sector

- The top 25 purchasing industries made up 51% of total purchases, **indicating that purchases of the sector's products are spread moderately throughout the economy.**
- Among the top 25 purchasing industries, the largest overall categories included those related to **Real Estate** and **Warehousing,** such as Couriers, General Warehousing and Storage, Lessors of Buildings, Offices of Real Estate Brokers, Wholesale Trade Agents, Local Messengers, and more. **These two inputs are key to the success of the overall distribution of Maine's Food & Beverage products.**
- **Other B2B services are also major suppliers to the sector,** including Temporary Help Services, Management Consulting, Offices of Lawyers, Offices of CPAs, Telemarketing & Contact Centers, and Commercial Banking, and Insurance Brokers, among others**.**
- **Maine's capacity for warehousing and storage is a key opportunity to the success of its overall food sector,** and subsequently, its ability to distribute food & beverage products that were produced in Maine. Other opportunities include the **expansion of B2B services like Commercial Banking,** which are important for core business operations but have a relatively low share of purchases made from in-region sources.

DATA NOTE:
This table gives greater insight into supply chain gaps within the sector. Industries that have low shares of in-region purchases indicate opportunities where Maine relies heavily on imported supply, but where Maine businesses could potentially expand to recapture transactions. The figure above is sorted by Total Purchases, from greatest to least.

DOMESTIC IMPORTS – FOOD & BEVERAGE WHOLESALE SERVICES

Geographic Breakdown: Grocery & Related Product Wholesale Services Imports (2021)



Source: IMPLAN Data Library

New England accounted for 94% of Maine's suppliers of Grocery & Related Product Wholesale Services

- **Four of the top 5 supplier states were located in New England.** These include Massachusetts, New Hampshire, Rhode Island, and Connecticut (New York is fifth). Massachusetts was by far the largest supplier of these wholesale services, with over $17 million in trade value in 2021.
- **Middle Atlantic states made up the second-largest group of suppliers.** This includes New York, New Jersey, and Pennsylvania.
- While Maine imports some Grocery & Related Product Wholesale Services from Southern and Pacific states, these markets are very small. Overall, proximity is a crucial component to the sector's trade flows.
- Overall, the real import value of grocery & related wholesale services decreased at a compound annual growth rate of -2.6% from 2011-2021. The first half of the decade, from 2011-2016 saw steady growth, while the second half, from 2016-2021 saw volatility, increasing rapidly during COVID-19 and then decreasing.

DATA NOTE: Figures on this page are from IMPLAN's Data Library and may not match other data in this report. IMPLAN domestic trade flows data covers commodities, or the products and services that are produced by a sector. This differs from other data in this report, which covers NAICS industries. Industries often produce more than one commodity.

DEMAND & IMPORTS

TOTAL DEMAND (2022)
Maine: $955.4 Million
United States: $263.2 Billion

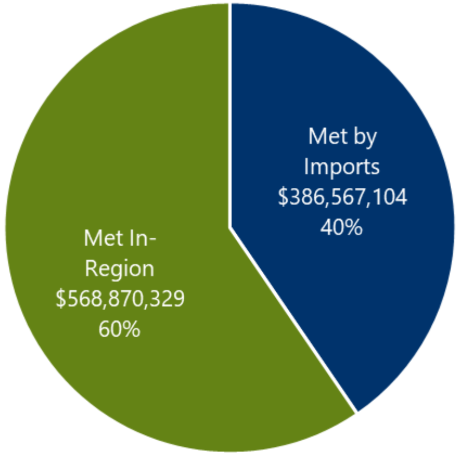
MET BY IMPORTS (2022)
Maine: $386.6 Million
United States: NA

FOREIGN IMPORTS (2022)
Maine: $N/A
United States: $N/A

Source: Lightcast, US Census Bureau

- The Food & Beverage Wholesaling Sector had a total demand of $955.4 million in Maine in 2022, of which 40% ($386.6 million) was met by imports.
- Foreign imports of Food & Beverage Wholesale services are not tracked by any official data sources.

Total Food & Beverage Wholesale Trade Demand (2022)



Source: Lightcast

FOREIGN IMPORTS
The Food & Beverage Wholesale Trade sector in Maine does not conduct significant trade with partners outside the US.

DATA NOTE:
Maine's demand for this sector's products shows the size of the local market. The share of that market supplied in-region versus imports (either from other states in the U.S. or other countries) relates the success of local firms or the competitiveness of domestic and international import goods.

This sector supplies almost exclusively to the domestic market, though some larger operators have international operations. However, the value of imports and exports for all products are accounted for at the manufacturing level, where these products are produced. For example, beer that is internationally imported via the wholesale sector is counted as imports for the Breweries industry.

Industry Sales and Exports

Where is Maine's Food & Beverage Wholesaling Sector sector selling to?

IN-REGION SALES INDUSTRIES

Industries Maine Food & Bev. Wholesale Sells To

Top 25 Industries the Food & Beverage Wholesale Sector Sells To In Maine (2022)

NAICS	Sales to	Total In-Region Sales	Percent of In-Region Sales
311511	Fluid Milk Manufacturing	$11,474,365	2.5%
902999	State Government, Excluding Education and Hospitals	$10,621,408	2.3%
111000	Crop Production	$10,462,889	2.3%
722511	Full-Service Restaurants	$10,247,504	2.2%
722513	Limited-Service Restaurants	$8,749,331	1.9%
311421	Fruit and Vegetable Canning	$6,604,704	1.4%
112000	Animal Production	$6,600,237	1.4%
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	$4,985,812	1.1%
541940	Veterinary Services	$4,713,824	1.0%
322121	Paper (except Newsprint) Mills	$4,563,815	1.0%
312112	Bottled Water Manufacturing	$4,287,636	0.9%
316210	Footwear Manufacturing	$4,252,039	0.9%
312140	Distilleries	$4,165,588	0.9%
903999	Local Government, Excluding Education and Hospitals	$4,050,011	0.9%
622110	General Medical and Surgical Hospitals	$3,970,619	0.9%
312120	Breweries	$3,964,289	0.9%
611310	Colleges, Universities, and Professional Schools	$3,755,601	0.8%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	$3,630,894	0.8%
311615	Poultry Processing	$3,562,227	0.8%
311710	Seafood Product Preparation and Packaging	$3,264,172	0.7%
721110	Hotels (except Casino Hotels) and Motels	$2,810,959	0.6%
311920	Coffee and Tea Manufacturing	$2,581,198	0.6%
311812	Commercial Bakeries	$2,435,916	0.5%
311999	All Other Miscellaneous Food Manufacturing	$2,120,881	0.5%
445110	Supermarkets and Other Grocery (except Convenience) Stores	$2,099,352	0.5%

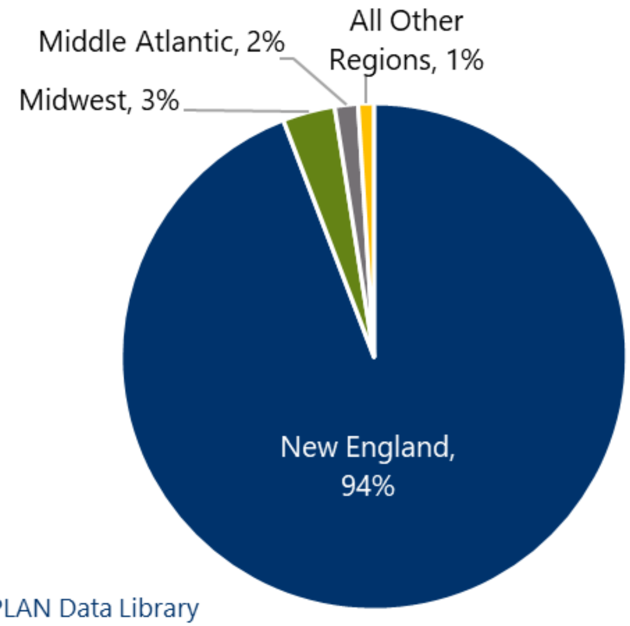
Source: Lightcast

- The top 25 sales industries made up 28% of total in-region sales, **indicating that sales of the sector's products are spread broadly throughout many industries of the economy.**
- **Fluid Milk Manufacturing** was the largest in-state source that the Food & Beverage Wholesale sector sells to, accounting for over $11.4 million of sales in 2022. Other food manufacturing industries like Fruit & Vegetable Canning; Frozen Fruit, Juice, and Vegetable Manufacturing; Seafood Product Preparation, and others made up another major group of in-state buyers.
- Restaurants, both full-service and limited-service, made up a combined 4.1% of total in-region sales.
- Institutions such as State Government, Local Government, Hospitals, and Colleges and Universities also made the list of top 25 in-state buyers.
- **Overall, the Food & Beverage Wholesale sector in Maine plays a critical role in keeping Maine Fed through a multitude of venues,** from supplying Food Manufacturing production to supporting restaurants, to providing food for schools & hospitals.

DATA NOTE:
The sales in this table do not add up to total in-region sales because it only captures sales to other industries, and not other entities like consumers. The Percent of Total In-Region Sector Sales shows the portion of sales to a given industry as it relates to total sales to *all industries*, not total in-region sales including sales to consumers.

DOMESTIC EXPORTS – FOOD & BEVERAGE WHOLESALE SERVICES

Geographic Breakdown: Grocery & Related Product Wholesale Services Exports (2021)



Source: IMPLAN Data Library

States in Northern New England & the Midwest are the most significant buyers of Maine' Grocery Wholesale Services

- Overall, New England accounts for almost all of the sector's domestic exports, with New Hampshire taking the lead.
- Other important markets are the Midwest and Mid-Atlantic, though those markets are much smaller. Top Midwest states include Michigan, Ohio, Indiana, and Wisconsin, while top Mid-Atlantic states include New York and Pennsylvania.
- Exports of food & beverage commodities have been volatile over the last 11 years but **grew by an average 16% at an annualized rate from 2011-2021.**

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SALES & EXPORTS

TOTAL SALES (2022)
Maine: $1.2 Billion
United States: $283.4 Trillion

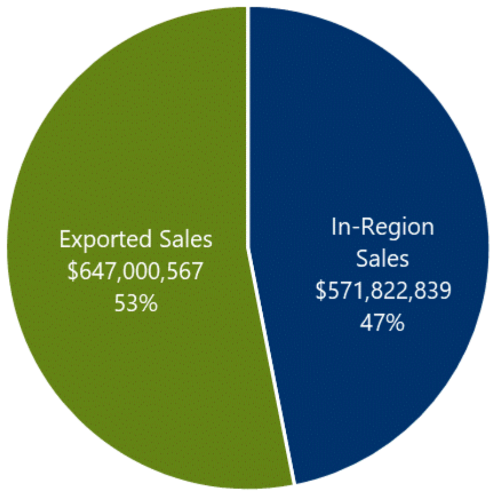
Source: Lightcast, US Census Bureau

EXPORTED SALES (2022)
Maine: $647.0 Million
United States: N/A

FOREIGN EXPORTS (2022)
Maine: N/A
United States: N/A

- Food & Beverage Wholesale Trade in Maine had total sales of $1.2 billion in 2022, of which 53% were exported out of state ($647 million).
- Foreign exports of wholesale services are not tracked by any official sources.

Total Food & Beverage Wholesale Trade Sales (2022)



Source: Lightcast

FOREIGN EXPORTS
The Wholesale Trade sector in Maine does not conduct significant trade with partners outside the US.

DATA NOTE:
Maine sales and exports for this sector indicate the scale of the industry activity and the share of that activity that is sold locally either as an intermediate good or to end consumers. Exports include sales to domestic (U.S.) markets as well as international exports.

The sector supplies almost exclusively to the domestic market, though some larger operators have international operations. However, the value of imports and exports for all products are accounted for at the manufacturing level, where these products are produced. For example, frozen blueberries that are sold internationally via the wholesale sector are counted as exports for the Frozen Fruit Manufacturing industry.

FOOD SECTOR TRENDS AND RESOURCES

EMERGING TRENDS

OPPORTUNITIES

Direct-to-consumer markets
The direct-to-consumer space is gaining traction in the United States as small brands and producers of specialty food products turn to ecommerce to streamline sales. Maine companies have the ability to ship nationwide by selling products from their website, both raw ingredients and prepared food products.

Responsible sourcing, including bio-based and eco-friendly packaging
In a similar vein, the threat of climate change has led consumers to turn towards eco-friendly packaging, away from materials like single-use plastic and Styrofoam. Additionally, state and local regulations such as banning Styrofoam food containers are becoming increasingly more common, such as Maine's Polystyrene foam food service container ban. Given the Food Manufacturing Sector's heavy reliance on packaging as an input, bio-based and eco-friendly packaging presents opportunities for Maine companies to meet these accelerating trends.

Sea Vegetables
Commonly a part of diets in Asia, sea vegetables like Kelp and other seaweed products have the opportunity to grow in popularity within the United States. Sea vegetables have a variety of uses, from snacks for human consumption to animal feed to beauty products. Seaweeds may also offer a promising new frontier for bio-based packaging. Maine is on the forefront of developing value-added products made from sea vegetables, and increased funding and investment could position Maine well for this industry.

Sustainable proteins and plant-based foods
Consumers are increasingly interested in sustainable food sources that are less energy-intensive and have lower carbon emissions than traditional protein sources. Demand for sustainable seafood products and plant-based food, including plant-based meat alternatives, has seen significant growth in recent years, a trend that is likely to continue. According to Bloomberg, the plant-based alternatives market is projected to be valued at $161.9 billion by 2030 — a five-fold increase from 2020's $29.4 billion market.

Vertical Farming, Hydroponics, and Aquaponics
These alternative forms of farming can boost year-round farming as well as optimize production with less space and fewer resources like water, soil, and pesticides. Aquaponics allows for the production of both fish and crops within a symbiotic system.

Land-Based Aquaculture
Growth is occurring in land-based aquaculture for a variety of species. In Maine, some operators utilize seawater as a source for land-based operations, and therefore would typically be located near coastal communities.

EMERGING TRENDS

THREATS

Climate Change
Climate change will continue to impact Maine's agriculture and seafood sector in a multitude of ways, such as more frequent drought, shorter or longer growing seasons, warming waters, and more.

Fisheries Regulation
Regulations to reduce lobster lines & traps for right whale conservation as well as inclusion on the Monterey Bay Aquarium's seafood "red list" have posed major challenges to the lobstering industry in recent years.

CHALLENGES

Volume
Higher volumes are needed to access markets beyond local demand and to maintain the profitability of the agriculture and seafood distribution networks. For some segments of Maine's food producers, this is a significant challenge. For example, small farmers, harvesters of less popular marine species, or small-batch food manufacturers often find it difficult to support logistics infrastructure on their own, therefore impeding access to export markets. Other segments of the market (lobster, for example) produce significant volumes, and therefore are more able to support their own logistics and distribution networks. One solution may be to support "collators," or wholesalers who purchase from various suppliers to reach enough volume to ship out of state.

Processing & Supply Chain Infrastructure
Processing raw products increases value added. By supporting processing and supply chain infrastructure, more of this value add can be captured within Maine and increase the value of domestic and foreign exports. However, without strong processing capacity, Maine is leaving value on the table by exporting raw products. Currently, Maine sells hundreds of millions of dollars of raw seafood products to be processed in Canada that is shipped back into the US and overseas; this is a major missed opportunity on significant value add for the state.

RECENT INVESTMENTS

Recent Investments

- **Maine Jobs and Recovery Plan allocates $20 Million to the Agricultural Infrastructure Investment Program.** This program provides recovery grants to Maine farms and food processing businesses that can be used on equipment, construction, facilities improvement, utility upgrades, capacity-enhancing technology, technical assistance, and other capital expenses to improve agricultural infrastructure.

- **Maine Jobs and Recovery Plan allocates $10 million to the Seafood Dealer and Processor Grant Program.** This program will provide grants to Maine seafood dealers and processors to upgrade buildings, equipment, and utilities. In addition to the $10 million allocated through the MJRP, $5 million will be provided by the federal Consolidated Appropriations Act, as well as $850,000 from the USDA Seafood Processors Pandemic Response and Safety Block Grant Program.

- **Private investment in a new industrial seaweed dehydrator, expected to arrive in May 2023, could process up to 30,000 pounds of seaweed in just one day.** Previously, most of Maine's kelp harvest has been frozen, however, due to the water content of kelp, this method of processing is considered carbon-intensive. The new dehydrator will bring large-scale opportunities to process kelp and other products, and will allow for greater distribution opportunities than previously available, when freezing was among the only options.

- **University of Maine Aquaculture Research Institute awarded $2.25 million to research land-based aquaculture systems,** funded by the U.S. Department of Agricultural Research Service.

- **Fork Food Lab invests $4.5 million to convert former office space to expand its shared commercial kitchen and food business incubator.** Fork Food Lab is Maine's only non-profit food business incubator and shared commercial kitchen. The expansion will allow 30 new members to use its space, in addition to its 60 current members.

- **USDA Value-Added Producer Grant program invests nearly $350,000 in two Maine farms**. The program provided grants two farms in Caribou and Newcastle and will be used to expand processing, marketing, and sales of agricultural and food products.

- **The Maine Agricultural Development Grant** provides cost-share grants to conduct market promotion, market research and development, value-added processing and new technology demonstration projects.

- **Maine Tastemakers Initiative has awarded $377,500 to 32 Maine food companies since 2020.** The annual initiative is a partnership between Coastal Enterprises, Inc and FocusMaine, and awards funding to food companies in a variety of sectors including farms, aquaculture, production facilities, and value-added producers. In 2023, $185,000 of funding was awarded to 20 Maine businesses.

- **FocusMaine awards $90,000 in mini-grants through its Propel Aquaculture program.** Nine aquaculture companies throughout the state were awarded these grants to increase the number of aquaculture businesses that have high growth and market potential as well as increase production capacity to grow volume and sales in new markets.

- **Various private investments at companies such as Penobscot McCrum (Washburn), Wyman's (Milbridge), Ready Seafood (Saco), and others expand Maine's processing capacity**. These include significant facilities improvements including new processing facilities, expanded processing and storage capabilities, education, and more. These developments, among others from private companies, have helped pave the way for Maine to capture opportunities to create value added within the state's food sector.

- **Vertical Harvest invests in new 70,000-square-foot building in Westbrook.** When completed in Fall 2023, operations at the building are expected to produce over 2 million pounds of produce and reduce Maine's domestic imports of agricultural goods.

OTHER RESOURCES

Coastal Enterprises, Inc. (CEI) Sustainable Agriculture & Food Systems Program
CEI's Sustainable Agriculture and Food Systems Program supports an economically just and sustainable food system that creates quality jobs for a diverse workforce and builds wealth and resilience in rural communities. In the past five years, CEI provided $10.4 million in loans and investments to 87 agricultural and food-related enterprises. This activity leveraged an additional $37.2 million, created and/or retained 634 jobs, and helped to maintain 8,377 acres of farmland production.

Maine Aquaculture Association (maineaqua.org)
The Maine Aquaculture Association (MAA) is a non-profit trade association that represents the Maine aquaculture industry at the state, federal, and international levels. Maine's aquaculture industry overall represents nearly 200 farms and more than 700 farmers who produce premium seafood–fin fish, shellfish, and sea vegetables–in Maine's cold, clean waters.

Maine Aquaculture Innovation Center (maineaquaculture.org)
The Maine Aquaculture Innovation Center was established in 1988 by the Maine Legislature with a mission to assist in developing economically and environmentally sustainable aquaculture opportunities in Maine. MAIC sponsors and facilitates innovative research and development projects involving food, pharmaceuticals, and other products from sustainable aquatic systems; invests in the enhancement of aquaculture capacity in Maine; serves as a source of educational information to enhance public visibility and acceptance of aquaculture; and encourages strategic alliances tasked with promoting research, technology transfer, and the commercialization of aquaculture research.

Maine Brewer's Guild (mainebrewersguild.org)
The Maine Brewer's Guild is a nonprofit organization dedicated to promoting and protecting the craft beer industry in Maine.

Maine Center for Entrepreneurs Food Accelerators (mced.biz/mce-food-accelerator-programs)
Since 2018, MCE has supported 70 Maine food & beverage companies through its one-of-a-kind Food Accelerator programs. These programs provide expert guidance from industry leaders in grocery, retail, e-commerce, and food service sectors, giving businesses access to industry data and resources, tactical workshops, and partnerships & connections. The MCE Food Accelerator programs are run in partnership with FocusMaine and Coastal Enterprises, Inc.

Maine Department of Agriculture, Conservation, and Forestry (DACF) (maine.gov/dacf)
DACF is Maine's support center for land-based natural resource interests, including farms and agriculture. Among other duties, it works to promote and advance Maine's agricultural resources. Through its Real Maine program, it helps connect Maine farmers and food producers to markets, both within Maine and beyond.

Maine Department of Marine Resources (DMR) (maine.gov/dmr)
According to Maine statute, DMR is established to conserve and develop marine and estuarine resources; to conduct and sponsor scientific research; to promote and develop the Maine coastal fishing industries; to advise and cooperate with local, state, and federal officials concerning activities in coastal waters; and to implement, administer, and enforce the laws and regulations necessary for these purposes.

OTHER RESOURCES

Maine Grocers and Food Producers Association (mgfpa.org)
The MGFPA is a business trade association representing main street businesses: independently owned and operated grocery stores, supermarkets, food and beverage producers and processers, wholesalers, and distributors and allied service companies. It is dedicated to the prosperity of Maine's grocery and food producer industry through excellence in advocacy, networking, and education.

Maine Organic Farmers and Gardeners Association (mofga.org)
For 50 years, MOFGA has been the premier resource for all things organic and sustainable living. MOFGA promotes legislation, offers education, and provides resources to organic farmers throughout Maine. In addition, it hosts the annual Common Ground Country Fair, which features more than 1,000 exhibitors and speakers to emphasize and highlight the communities and local economies that are part of organic agriculture.

Maine Technology Institute (mainetechnology.org)
MTI offers grants, loans, equity investments, and services to support Maine's innovation economy. It supports new ideas, products, or methods with the potential to grow and diversify Maine's economy and increase the number of quality jobs throughout the state through direct support of innovators and through support of programs and infrastructure that encourage innovation. Agriculture and Marine Technology/Aquaculture lie within the scope of MTI's seven focused technology sectors.

University of Maine Cooperative Extension: Specialty Foods (extension.umaine.edu/business/specialty-foods/)
The Cooperative Extension's website for specialty foods is useful for food manufacturers wanting to produce specialty food products. It offers specific resources to assist in the process of starting a specialty food businesses and offers twice-annual workshops for bringing products to market, a program which has received national recognition. Additionally, it offers specialized testing services at UMaine for any canned or shelf-stable food products.

TRADE SHOWS & MEETINGS

SEAFOOD & AQUACULTURE

Trade shows and resources included in this report have been vetted by industry professionals and trade show specialists.

AQUACULTURE AMERICA

Aquaculture America is the only major national aquaculture conference and exposition held in the U.S. The U.S. Aquaculture Society (formerly U.S. Chapter of WAS) joins with National Aquaculture Association and the Aquaculture Suppliers Association to produce the annual Aquaculture America meetings. The Conference is also the site for meetings organized by the Aquacultural Engineering Society, Aquatic Drug Approval Coalition, US Trout Farmers Association, Zebrafish Husbandry Association and many more associations. A critical trade show for aqua-culturists, Aquaculture America 2023, had the largest aquaculture trade show in the Western Hemisphere and one of the largest anywhere in the world with nearly 200 booths!

NATIONAL SEAWEED SYMPOSIUM

The National Seaweed Symposium is a convening of key industry, regulatory, academic, and professional leaders in and contributors to the US seaweed sector. Hosted by the National Sea Grant Network's Seaweed Hub, this 3-day conference will feature targeted presentations, unique field trips, and engaging networking sessions, providing attendees with usable knowledge and meaningful professional connections to advance innovation, emerging research, and collaboration in the domestic seaweed sector.

SEAFOOD EXPO NORTH AMERICA

This event is for seafood buyers in every market category including retail, restaurant, catering, foodservice, and processing. Meet face-to-face with suppliers from around the world and source the seafood, new products, equipment, and services to grow your business.

TRADE SHOWS & MEETINGS

SUNBELT AGRICULTURE EXHIBITION

Referred to as "North America's Premier Farm Show" the annual Sunbelt Ag Expo in Moultrie, GA has more than 1,200 exhibitors showcasing the latest in farming technology. The 100-acre expo exhibit area adjoins a 600-acre working farm, and a tram can take people from the exhibit area to the fields where cotton, peanuts, corn, soybeans, and hay are being harvested. In addition to the static exhibits, visitors can attend educational, entertaining seminars and demonstrations offered in a variety of specialized areas.

AG PROCESS DAYS

With more than 40,000 attendees annually, Ag Progress Days is a must-attend event for anyone involved in agriculture. This event features more than 600 exhibitors showcasing the latest agricultural technology and services. Visitors can also attend educational seminars on various topics, including crop management and livestock health.

FARM PROGRESS SHOW

Producers from the U.S. and around the world attend this industry-leading annual agricultural event. Ag manufacturers and suppliers from across the country and around the world are exhibitors. Field demonstrations are a show mainstay. Field demos include side-by-side tillage techniques, GPS and precision equipment, and tractor and combine performance comparisons. Live cattle-handling demonstrations include the newest cattle chutes, equipment, animal health products and work techniques. Additionally, the show features restored antique machinery and entertainment.

FARM SCIENCE REVIEW

Part of The Ohio State University's College of Food, Agricultural, and Environmental Sciences (CFAES); in 2022 more than 700 exhibitors and 114,000 visitors from across the United States and Canada traveled to London, Ohio, to attend the three-day agricultural education and industry exposition. The event featured more than 100 educational sessions, comprehensive field crop demonstrations, a career fair, and more. All farms large to small and producers from major commodities to the smallest niche markets, are searching for ways to improve their operations at Farm Science Review.

WORLD AG EXPO

World Ag Expo is the largest annual outdoor agricultural exposition with over 1,200 exhibitors and an attendance of more than 100,000 each year. It is held at the International Agri-Center in Tulare, California, starting on the second Tuesday of February. It has officially been designated by the U.S. Department of Commerce as an affiliate of the Foreign Buyer Program, which encourages export of American-made goods. Prior to its 2001 rename, the event was called the California Farm Equipment Show and International Exposition.

TRADE SHOWS & MEETINGS

FARMING & AGRICULTURE

WORLD AGRI-TECH INNOVATION SUMMIT

The World Agri-Tech Innovation Summit brings together founders, corporates, investors and experts from the agri-food community to think about the challenges in agriculture and food in new and innovative ways. The World Agri-Tech Innovation Summit has become the annual meeting place for the global agtech ecosystem. Over 2,500 growers, agribusiness leaders, technology pioneers and investors come together to exchange insights, be inspired, and identify future partners.

MAINE AGRICULTURAL TRADES SHOW

The State of Maine Agricultural Trades Show is sponsored by the Maine Department of Agriculture, Conservation, and Forestry. It typically takes place every January and is a place for Farm, Agricultural, and related sectors to network and connect around business needs and trends. Producers and consumers alike visit this three day show to get professional expertise, learn about technologies, and to gather information on the agriculture industry.

INDOOR AG-CON

Indoor Ag-Con is the largest vertical farming/controlled environment agricultural gathering. From starting or sustainably scaling up, to buying from or selling, to indoor/vertical farms producing a growing variety of crops, the business and tech-focused events are expanding to offer new opportunities to connect all agriculture and supply chain stakeholders. This event is co-located with the National Grocers Association Show to offer even more opportunities to make new connections and grow business.

AFFI-CON (AMERICAN FROZEN FOOD INSTITUTE)

AFFI-CON is the premier business event for frozen food and beverage makers, industry suppliers, and logistical partners. It brings together over 500 companies and 1,500+ attendees in a single location, allowing them to meet one-on-one to discuss current and future business opportunities. The focus of this event is networking and getting business done. The average attendee will have 20+ private business meetings that will lay the foundation for their year. If frozen foods are your business, AFFI-CON is a can't miss event!

AMERICAS FOOD & BEVERAGE SHOW & CONFERENCE

The Americas Food & Beverage Show is the largest food and beverage trade show in the Western Hemisphere. The Americas Food & Beverage Show focuses on increasing trade between food and beverage companies throughout the Americas. Decision-makers and buyers from all industry sectors come to discover new markets, products, marketing trends, and ideas from more than 500 exhibitors.

FOOD AND DRINK EXPO – United Kingdom

Food & Drink Expo provides the number one route to the UK food and drink market and helps hundreds of companies showcase their exceptional products. Buyers and decision-makers across the whole industry, from grocery, wholesale and specialty retail to foodservice and manufacturing, are invited to uncover the hottest trends, latest product launches, and the industry's vision for the future. Food & Drink Expo will run alongside Farm Shop & Deli Show, National Convenience Show and Foodex Manufacturing Solutions as part of the UK Food & Drink Shows, bringing together the grocery, specialist retail, wholesale, and foodservice sectors under one roof!

FOOD AUTOMATION & MANUFACTURING CONFERENCE & EXPO (FA&M)

(FA&M) will feature the latest food and beverage manufacturing technology, influential presentations on cutting-edge topics affecting the food and beverage manufacturing industry and immense learning opportunities. FA&M is a unique event where the industry's best and brightest come together to acquire new skills, connect, grow and share among manufacturers and suppliers. The 2023 event will have a special focus on the latest technology innovations for the food manufacturing industry. This year's event will highlight case studies and solutions to technological issues impacting food processors today. Additionally, exhibitors will share new technologies and solutions that can address your specific concerns and challenges.

INTERNATIONAL FOOD & DRINK EVENT – United Kingdom

Held in the city of innovation, London, International Food & Drink Event (IFE) brings together an immersive and interactive event taking place on 25-27 March 2024 at ExCeL London. Over the three days, IFE will welcome 27,000 key industry professionals to come and sample the latest products, develop their knowledge on the trends affecting the food and drink sector and network face-to-face with suppliers.

PROCESS EXPO

PROCESS EXPO, the global food equipment and technology show, represents the pinnacle of food technology bringing together the world's most successful food and beverage processors, packaging professionals, equipment manufacturers, and leaders in the field of academia. PROCESS EXPO is a joint venture of the Food Processing Suppliers Association (FPSA), a global trade association serving suppliers in the food and beverage industries, and show partner and manager, Messe Frankfurt.

TRADE SHOWS & MEETINGS FOOD & BEVERAGE, FOOD PROCESSING

SIAL AMERICA

SIAL America, supporting the US $1.5T Food and Beverage market, is part of the world's preeminent global food network. SIAL includes nine world-class food events delivering 700,000 attendees and 16,000 exhibitors annually at venues worldwide, including Paris and Shanghai. SIAL America unites the entire food community, showcasing all food and beverage categories to key importers, food service companies, distributors, retailers, and wholesalers. With over 50 years of experience in delivering food events that provide critical business connections, inspiring content, and an unrivaled export platform, SIAL America will unite those that are shaping the food and beverage industry both in America and globally to connect, learn and grow. The show brings a unique offering to the United States with a comprehensive display of all the key food and beverage categories from around the world, underpinned by the celebrated SIAL focus on excellence and inspiration.

SIAL CANADA

SIAL Canada is not only the meeting point of the Canadian agri-food industry, but also the privileged gateway to the American and international markets. The show is the only event of its kind in Canada, bringing together more than 1,000 national and international exhibitors from 50 countries and welcoming more than 20,000 professional visitors from Canada, the United States and 60 other countries. SIAL Canada is the only Canadian trade show to offer a complete range of food products under one roof. It meets the needs of the retail, food service and food processing industries.

IFT (INSTITUE OF FOOD TECHNOLOGISTS) FIRST Annual Meeting & Expo

IFT FIRST: Annual Event and Expo is the place where the science of food professionals gather to debate and discuss science and new innovations, explore ingredients and technologies for the future, and collaborate on key issues impacting the global food system. A food expo featuring more than 800 exhibitors offering the latest in food science intelligence, non-stop food tastings, and exposure to food tech innovation.

INTERNATIONAL PRODUCTION AND PROCESSING EXPO (IPPE)

IPPE is the world's largest annual display of technology, equipment, supplies, and services used in the production and processing of eggs, meat, and poultry, and those involved in feed manufacturing. All segments of the industry are represented: feed milling, animal food, genetics, hatchery, live production and animal health, egg production & processing, poultry, and more.

NEW ENGLAND CRAFT BREW SUMMIT

Part educational conference, part trade show, the New England Brew Summit is the premier regional craft beer industry B2B Conference and will have something for everyone involved in the craft beer industry.

CRAFT BREWERS CONFERENCE AND BREW EXPO AMERICA

BrewExpo America is the premier trade show for craft brewers. With hundreds of vendors and over 10,000 brewery industry professionals all in one location, this is the place to shop for products and services for your brewery or brewpub. This is the perfect opportunity to meet leaders in the national and international brewing arena. The trade show provides an environment that allows exhibitors and buyers to develop profitable business relationships and helps brewing and brewery restaurant professionals encounter the latest and the best products and services that industry vendors have to offer.

TRADE SHOWS & MEETINGS

SUMMER FANCY FOOD SHOW

The Summer Fancy Food Show is the largest specialty food industry event in North America. Makers, manufacturers, buyers, brokers, distributors, and other industry professionals from around the globe rely on the Summer Fancy Food Show for product discovery, networking, and business opportunities.

SWEETS AND SNACKS EXPO

Popularly known as the largest confectionery, sweets & snacks trade event in North America, the trade show is held annually. It enables the exhibitors to explore the opportunities to grow their business by showcasing their brand products before targeted prospects comprising influential business professionals, retailers, and end-users. Estimated visitor count of 15,000 and approximately 1,045 exhibitors.

MAINE GROWERS AND FOOD PRODUCERS ANNUAL SUMMIT

In partnership with the Retail Association of Maine, the annual Summit unites Maine’s business community of retailers, grocers, food producers, and industry partners for an educational event.

TRADE SHOWS & MEETINGS GROCERY

GROCERYSHOP

As the leading event for grocery and CPG products, Groceryshop is a can't-miss conference. With thousands of startups, supermarkets, investors and grocery retailers attending, this trade show is one of the best places to meet buyers. Past guests include executives from Alibaba, Sam's Club, 7-Eleven and Albertson's. Groceryshop offers attending brands a breakdown of new trends, technology and business strategies to advance their businesses. If you're in the growth stage, this is the perfect place to learn about CPG marketing, technology, merchandising, the supply chain, and store operations.

GROCERYTECH

The inaugural GroceryTech event, produced by Progressive Grocer and RIS News, brings together the combined community of business and technology grocery executives on the journey to modernize their technology infrastructure to support innovation — to help grocers replicate the "small neighborhood grocery store on the corner" concept, while still operating profitably at scale. The event's theme, Scaling With Personalization, focuses on how grocery executives — including leadership and business implementation executives across IT, supply chain, marketing, and store operations — can build a technology infrastructure to profitably serve shoppers now and into the future.

THE NGA (NATIONAL GROWERS ASSOCIATION) SHOW

The NGA Show is the largest gathering of grocery retailers and wholesalers, food retail industry executives, manufacturers, and suppliers – making it one event you don't want to miss.

GREAT LAKES EXPO

The Great Lakes Fruit, Vegetable and Farm Market EXPO is the largest show of its kind in the country. It is held each year in early December at DeVos Place Convention Center in Grand Rapids, Mich. The Great Lakes EXPO, as it's commonly known, was first held in December 2001 when the Michigan State Horticultural Society and the Michigan Vegetable Council combined their respective education and trade shows. The EXPO offers an extensive education program on a range of topics pertinent to fruit and vegetable growers and farm marketers. There are also greenhouse sessions, since the Michigan Greenhouse Growers EXPO is held concurrently with the Great Lakes EXPO. The trade show is huge, with 450 exhibitors featuring a wide array of products and services of interest to specialty crop growers and farm marketers. Nearly 4,000 registered for the most recent EXPO in December. In addition to the education program and trade show, the EXPO also offers a pre-conference bus tour for farm marketers.

SOUTHERN EXPOSURE

The Southeast Produce Council invites you to their flagship tradeshow and conference, where you'll see the best products and services the produce industry has to offer from hundreds of exhibitors. Thousands of attendees include foodservice and retail buyers, agricultural leaders, product innovators, and peers who are ready to share ideas and friendships. And there's never a dull moment with a wealth of educational sessions, keynote speakers, and entertainment!

THE GLOBAL PRODUCE & FLORAL SHOW

Formerly known as The Produce Marketing Association Fresh Summit, The Global Produce & Floral Show brings together produce and floral industry leaders, retail buyers, food safety experts, and importers/exporters from across the globe. The show is the single best place to meet the entire fresh produce and floral supply chain. You'll make lasting new connections and reconnect with your favorite peers who help your business grow.

NATURAL PRODUCTS EXPO EAST

Natural Products Expo East is part of the world's largest natural, organic, and healthy products trade show produced by the New Hope Network. The entire event includes the trade show and education conference with breakout sessions led by industry leaders.

NATURAL PRODUCTS EXPO WEST

Natural Products Expo, the world's largest natural, organic, and healthy products event, brings together an inspired community of industry members and exhibiting companies.

APPENDIX

Sectors used in Agriculture Sector

NAICS	Description
	Crop Production
111110	Soybean Farming
111120	Oilseed (except Soybean) Farming
111130	Dry Pea and Bean Farming
111140	Wheat Farming
111150	Corn Farming
111160	Rice Farming
111191	Oilseed and Grain Combination Farming
111199	All Other Grain Farming
111211	Potato Farming
111219	Other Vegetable (except Potato) and Melon Farming
111310	Orange Groves
111320	Citrus (except Orange) Groves
111331	Apple Orchards
111332	Grape Vineyards
111333	Strawberry Farming
111334	Berry (except Strawberry) Farming
111335	Tree Nut Farming
111336	Fruit and Tree Nut Combination Farming
111339	Other Noncitrus Fruit Farming
111411	Mushroom Production
111419	Other Food Crops Grown Under Cover
111421	Nursery and Tree Production
111422	Floriculture Production
111910	Tobacco Farming
111920	Cotton Farming
111930	Sugarcane Farming
111940	Hay Farming
111991	Sugar Beet Farming
111992	Peanut Farming
111998	All Other Miscellaneous Crop Farming
	Animal Production (except Aquaculture)
112111	Beef Cattle Ranching and Farming
112112	Cattle Feedlots
112120	Dairy Cattle and Milk Production
112130	Dual-Purpose Cattle Ranching and Farming
112210	Hog and Pig Farming
112310	Chicken Egg Production
112320	Broilers and Other Meat Type Chicken Production
112330	Turkey Production
112340	Poultry Hatcheries
112390	Other Poultry Production
112410	Sheep Farming
112420	Goat Farming
112910	Apiculture
112920	Horses and Other Equine Production
112930	Fur-Bearing Animal and Rabbit Production
112990	All Other Animal Production
	Support Activities for Agriculture
115111	Cotton Ginning
115112	Soil Preparation, Planting, and Cultivating
115113	Crop Harvesting, Primarily by Machine
115114	Postharvest Crop Activities (except Cotton Ginning)
115115	Farm Labor Contractors and Crew Leaders
115116	Farm Management Services
115210	Support Activities for Animal Production

APPENDIX

Agriculture in Maine: Industry Summary

NAICS	Description	Jobs 2016	Jobs 2021	Jobs Change 2016-2021	Jobs Change % 2016-2021	Avg. Earnings Per Job 2021	Location Quotient 2021	Competitive Effect 2016-2021	Payrolled Business Locations 2021
	Crop Production	**2,407**	**4,192**	**1,785**	**74%**	**$33,414**	**1.83**	**1,844**	**544**
111110	Soybean Farming								
111120	Oilseed (except Soybean) Farming								
111130	Dry Pea and Bean Farming								
111140	Wheat Farming								
111150	Corn Farming	6	11	6	106%	$48,810	0.2	6	2
111160	Rice Farming								
111191	Oilseed and Grain Combination Farming								
111199	All Other Grain Farming	4	5		3%	$44,987	0.2	0	1
111211	Potato Farming	760	756	(4)	-1%	$31,435	11.3	25	73
111219	Other Vegetable (except Potato) and Melon Farming	384	474	90	23%	$25,372	1.7	152	50
111310	Orange Groves								
111320	Citrus (except Orange) Groves								
111331	Apple Orchards	141	189	48	34%	$22,926	1.5	79	20
111332	Grape Vineyards								
111333	Strawberry Farming	47	11	(36)	-77%	$26,536	0.1	-32	5
111334	Berry (except Strawberry) Farming	200	181	(19)	-10%	$42,388	2.3	10	28
111335	Tree Nut Farming								
111336	Fruit and Tree Nut Combination Farming								
111339	Other Noncitrus Fruit Farming								
111411	Mushroom Production	15	70	55	367%	$35,617	1.6	58	3
111419	Other Food Crops Grown Under Cover	364	1,606	1,242	341%	$38,040	11.3	684	235
111421	Nursery and Tree Production	96	101	5	5%	$37,220	0.3	-3	23
111422	Floriculture Production	339	397	58	17%	$29,681	2.1	63	35
111910	Tobacco Farming								
111920	Cotton Farming								
111930	Sugarcane Farming								
111940	Hay Farming	10	5	(6)	-55%	$41,869	0.1	-5	1
111991	Sugar Beet Farming								
111992	Peanut Farming								
111998	All Other Miscellaneous Crop Farming	41	386	345	843%	$30,798	2.3	331	68

Source: IMPLAN

APPENDIX

Agriculture in Maine: Industry Summary (Continued)

NAICS	Description	Jobs 2016	Jobs 2021	Jobs Change 2016-2021	Jobs Change % 2016-2021	Avg. Earnings Per Job 2021	Location Quotient 2021	Competitive Effect 2016-2021	Payrolled Business Locations 2021
	Animal Production (except Aquaculture)	**797**	**666**	**(131)**	**-16%**	**$36,069**	**0.65**	**-139**	**77**
112111	Beef Cattle Ranching and Farming	13	64	51	392%	$54,063	0.4	50	8.00
112112	Cattle Feedlots								
112120	Dairy Cattle and Milk Production	502	508	6	1%	$33,026	1.1	0	54.00
112130	Dual-Purpose Cattle Ranching and Farming								
112210	Hog and Pig Farming	33	11	(22)	-67%	$38,248	0.1	-19	3.00
112310	Chicken Egg Production	131	52	(79)	-60%	$44,075	0.6	-87	2.00
112320	Broilers and Other Meat Type Chicken Production	20	11	(9)	-45%	$48,456	0.4	-9	1.00
112330	Turkey Production								
112340	Poultry Hatcheries	64	0	(64)	-100%	$0	0.0	-63	0.00
112390	Other Poultry Production								
112410	Sheep Farming	5	8	3	55%	$34,491	1.8	2	2.00
112420	Goat Farming	6		(6)	-100%				
112910	Apiculture	11	4	(7)	-62%	$18,524	0.3	-8	1.00
112920	Horses and Other Equine Production	8	4	(4)	-53%	$17,417	0.2	-4	1.00
112930	Fur-Bearing Animal and Rabbit Production								
112990	All Other Animal Production	4	4	0	0%	$29,892	0.1	-1	5.00
	Support Activities for Agriculture	**183**	**181**	**(2)**	**-1%**	**$34,307**	**0.12**	**-1**	**53**
115111	Cotton Ginning								
115112	Soil Preparation, Planting, and Cultivating	24	18	(6)	-26%	$48,013	0.1	-6	5.00
115113	Crop Harvesting, Primarily by Machine	11	6	(5)	-45%	$42,819	0.1	-4	6.00
115114	Postharvest Crop Activities (except Cotton Ginning)	57	57	0	0%	$33,954	0.2	3	3.00
115115	Farm Labor Contractors and Crew Leaders	14	2	(12)	-89%	$44,408	0.0	-13	5.00
115116	Farm Management Services	3	5	3	100%	$96,150	0.1	3	3.00
115210	Support Activities for Animal Production	74	93	19	26%	$27,540	0.7	16	31.00
	Total for Maine	**3,387**	**5,039**	**1,652**	**49%**	**$33,797**	**1.04**	**1,704**	**674**
	Total for US	**1,172,325**	**1,160,018**	**(12,307)**	**-1%**	**$40,659**	**--**	**--**	**94,967**

Source: IMPLAN

APPENDIX

Sectors used in Fishing & Aquaculture Sector

NAICS	Description
	Aquaculture
112511	Finfish Farming and Fish Hatcheries
112512	Shellfish Farming
112519	Other Aquaculture
	Fishing
114111	Finfish Fishing
114112	Shellfish Fishing
114119	Other Marine Fishing

APPENDIX

Fishing & Aquaculture in Maine: Industry Summary

NAICS	Description	Jobs 2016	Jobs 2021	Jobs Change 2016-2021	Jobs Change % 2016-2021	Avg. Earnings Per Job 2021	Location Quotient 2021	Competitive Effect 2017-2021	Payrolled Business Locations 2021
	Aquaculture	*199*	*409*	*210*	*106%*	*$51,643*	*13.55*	*188*	*42*
112511	Finfish Farming and Fish Hatcheries	121	196	75	62%	$54,967	12.6	65	16
112512	Shellfish Farming	72	204	132	185%	$47,686	18.5	121	24
112519	Other Aquaculture	7	9	3	43%	$68,321	2.6	2	2
	Fishing	*567*	*741*	*174*	*31%*	*$58,761*	*27.13*	*150*	*513*
114111	Finfish Fishing	273	313	40	15%	$69,781	30.5	20	51
114112	Shellfish Fishing	291	423	132	45%	$50,695	199.7	129	458
114119	Other Marine Fishing	3	5	2	67%	$51,378	0	2	4
	Total for Maine	**766**	**1,150**	**384**	**50%**	**$56,230**	**20.00**	**338**	**555**
	Total for United States	**12,628**	**13,707**	**1,079**	**9%**	**$67,019**	**N/A**	**N/A**	**3,141**

Source: IMPLAN

Note: Totals and Change may be slightly off due to rounding.

APPENDIX

Sectors Included in the Food & Beverage Manufacturing Sector

NAICS	Description
Food Manufacturing	
Animal Food Manufacturing	
311111	Dog and Cat Food Manufacturing
311119	Other Animal Food Manufacturing
Grain and Oilseed Milling	
311211	Flour Milling
311212	Rice Milling
311213	Malt Manufacturing
311221	Wet Corn Milling
311224	Soybean and Other Oilseed Processing
311225	Fats and Oils Refining and Blending
311230	Breakfast Cereal Manufacturing
Sugar and Confectionery Manufacturing	
311313	Beet Sugar Manufacturing
311314	Cane Sugar Manufacturing
311340	Nonchocolate Confectionery Manufacturing
311351	Chocolate and Confectionery Manufacturing from Cacao Beans
311352	Confectionery Manufacturing from Purchased Chocolate
Fruit & Vegetable Preserving & Specialty Food Manufacturing	
311411	Frozen Fruit, Juice, and Vegetable Manufacturing
311412	Frozen Specialty Food Manufacturing
311421	Fruit and Vegetable Canning
311422	Specialty Canning
311423	Dried and Dehydrated Food Manufacturing
Dairy Product Manufacturing	
311511	Fluid Milk Manufacturing
311512	Creamery Butter Manufacturing
311513	Cheese Manufacturing
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing
311520	Ice Cream and Frozen Dessert Manufacturing
Animal Slaughtering and Processing	
311611	Animal (except Poultry) Slaughtering
311612	Meat Processed from Carcasses
311613	Rendering and Meat Byproduct Processing
311615	Poultry Processing
Seafood Product Preparation and Packaging	
311710	Seafood Product Preparation and Packaging
Bakeries and Tortilla Manufacturing	
311811	Retail Bakeries
311812	Commercial Bakeries
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing
311821	Cookie and Cracker Manufacturing
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour
311830	Tortilla Manufacturing
Other Food Manufacturing	
311911	Roasted Nuts and Peanut Butter Manufacturing
311919	Other Snack Food Manufacturing
311920	Coffee and Tea Manufacturing
311930	Flavoring Syrup and Concentrate Manufacturing
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing
311942	Spice and Extract Manufacturing
311991	Perishable Prepared Food Manufacturing
311999	All Other Miscellaneous Food Manufacturing
Beverage Manufacturing	
312111	Soft Drink Manufacturing
312112	Bottled Water Manufacturing
312113	Ice Manufacturing
312120	Breweries
312130	Wineries
312140	Distilleries

APPENDIX

Summary Metrics for the Food and Beverage Manufacturing Sector

NAICS	Description	Jobs 2017	Jobs 2022	Jobs Change 2017-2022	Jobs Change % 2017-2022	Avg. Earnings Per Job 2022	LQ 2022	Comp. Effect 2017-2022	Business Locations 2022
Food Manufacturing		**5,747**	**5,853**	**105**	**+2%**	**$58,386**	**0.80**	**(76)**	**285**
Animal Food Manufacturing		**90**	**79**	**(11)**	**- 12%**	**$65,896**	**0.26**	**(25)**	**7**
311111	Dog and Cat Food Manufacturing	36	22	(14)	- 39%	$77,583	0.15	(24)	3
311119	Other Animal Food Manufacturing	54	57	3	+6%	$61,390	0.36	1	4
Grain and Oilseed Milling		**58**	**70**	**12**	**+21%**	**$87,701**	**0.26**	**12**	**5**
311211	Flour Milling	2	6	4	+171%	$62,240	0.10	4	1
311212	Rice Milling	-	-	-	-	-	-	-	-
311213	Malt Manufacturing	1	4	3	+381%	$48,944	0.79	3	1
311221	Wet Corn Milling	54	48	(7)	- 12%	$97,084	0.86	(6)	2
311224	Soybean and Other Oilseed Processing	-	12	-	-	$77,404	0.30	12	1
311225	Fats and Oils Refining and Blending	-	-	-	-	-	-	-	-
311230	Breakfast Cereal Manufacturing	-	-	-	-	-	-	-	-
Sugar and Confectionery Manufacturing		**251**	**323**	**71**	**+28%**	**$36,047**	**0.95**	**62**	**36**
311313	Beet Sugar Manufacturing	-	-	-	-	-	-	-	-
311314	Cane Sugar Manufacturing	-	-	-	-	-	-	-	-
311340	Nonchocolate Confectionery Manufacturing	90	87	(3)	- 3%	$44,037	0.84	(13)	9
311351	Chocolate and Confectionery Manufacturing from Cacao Beans	-	3	-	-	$39,442	0.08	3	1
311352	Confectionery Manufacturing from Purchased Chocolate	161	232	71	+44%	$33,008	1.68	73	27
Fruit & Vegetable Preserving & Specialty Food Manufacturing		**1,296**	**1,299**	**4**	**+0%**	**$70,544**	**1.70**	**(23)**	**24**
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	385	699	314	+82%	$60,417	5.52	332	9
311412	Frozen Specialty Food Manufacturing	475	79	(395)	- 83%	$60,743	0.29	(437)	1
311421	Fruit and Vegetable Canning	307	454	148	+48%	$82,196	1.80	159	12
311422	Specialty Canning	119	64	(54)	- 46%	$109,792	1.21	(68)	1
311423	Dried and Dehydrated Food Manufacturing	11	3	(8)	- 76%	$82,390	0.05	(9)	1
Dairy Product Manufacturing		**490**	**473**	**(17)**	**- 3%**	**$83,717**	**0.69**	**(59)**	**18**
311511	Fluid Milk Manufacturing	368	316	(52)	- 14%	$97,400	1.37	(41)	4
311512	Creamery Butter Manufacturing	18	39	21	+113%	$61,499	2.65	17	2
311513	Cheese Manufacturing	20	36	16	+83%	$53,581	0.15	12	7
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	-	-	-	-	-	-	-	-
311520	Ice Cream and Frozen Dessert Manufacturing	84	82	(2)	- 2%	$54,923	0.79	(11)	5

Source: Lightcast

APPENDIX

Summary Metrics for the Food and Beverage Manufacturing Sector (Continued)

NAICS	Description	Jobs 2017	Jobs 2022	Jobs Change 2017-2022	Jobs Change % 2017-2022	Avg. Earnings Per Job 2022	LQ 2022	Comp. Effect 2017-2022	Business Locations 2022
Animal Slaughtering and Processing		**466**	**568**	**101**	**+22%**	**$62,762**	**0.25**	**94**	**21**
311611	Animal (except Poultry) Slaughtering	102	140	38	+37%	$49,111	0.23	35	14
311612	Meat Processed from Carcasses	145	73	(71)	- 49%	$45,885	0.12	(88)	5
311613	Rendering and Meat Byproduct Processing	-	-	-	-	-	-	-	-
311615	Poultry Processing	220	355	135	+61%	$71,625	0.36	144	2
Seafood Product Preparation and Packaging		**758**	**689**	**(69)**	**- 9%**	**$58,096**	**4.75**	**(18)**	**31**
311710	Seafood Product Preparation and Packaging	758	689	(69)	- 9%	$58,096	4.75	(18)	31
Bakeries and Tortilla Manufacturing		**1,746**	**1,797**	**51**	**+3%**	**$44,146**	**1.21**	**(11)**	**102**
311811	Retail Bakeries	678	681	3	+0%	$31,320	1.39	(86)	55
311812	Commercial Bakeries	671	748	77	+11%	$55,251	1.23	82	28
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	301	232	(69)	- 23%	$41,369	4.06	(66)	5
311821	Cookie and Cracker Manufacturing	2	18	16	+707%	$48,183	0.12	16	5
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	81	95	14	+18%	$52,611	1.07	21	8
311830	Tortilla Manufacturing	13	22	9	+64%	$52,705	0.26	9	1
Other Food Manufacturing		**592**	**555**	**(37)**	**- 6%**	**$58,552**	**0.52**	**(108)**	**42**
311911	Roasted Nuts and Peanut Butter Manufacturing	-	-	-	-	-	-	-	-
311919	Other Snack Food Manufacturing	13	11	(1)	- 10%	$49,307	0.06	(3)	3
311920	Coffee and Tea Manufacturing	54	120	66	+121%	$46,287	1.05	57	12
311930	Flavoring Syrup and Concentrate Manufacturing	3	3	(0)	- 11%	$50,584	0.08	0	2
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	26	35	8	+32%	$44,139	0.39	2	6
311942	Spice and Extract Manufacturing	5	21	17	+366%	$36,821	0.18	16	4
311991	Perishable Prepared Food Manufacturing	371	249	(122)	- 33%	$52,053	0.94	(178)	12
311999	All Other Miscellaneous Food Manufacturing	120	117	(4)	- 3%	$94,349	0.67	(27)	3
Beverage Manufacturing		**1,789**	**2,438**	**650**	**+36%**	**$70,764**	**1.81**	**85**	**137**
312111	Soft Drink Manufacturing	31	10	(22)	- 69%	$75,433	0.03	(21)	5
312112	Bottled Water Manufacturing	874	727	(147)	- 17%	$93,271	9.18	(276)	10
312113	Ice Manufacturing	62	166	104	+166%	$76,464	5.00	101	4
312120	Breweries	606	1,099	493	+81%	$57,000	2.45	189	84
312130	Wineries	46	87	41	+89%	$45,975	0.26	34	19
312140	Distilleries	169	350	181	+107%	$70,601	3.41	58	15
	Total Maine	**7,536**	**8,291**	**755**	**10%**	**$62,026**	**0.96**	**9**	**422**
	Total US	**1,880,870**	**2,010,673**	**129,803**	**7%**	**$68,952**	**N/A**	**N/A**	**52,635**

Source: Lightcast

APPENDIX

Summary Metrics for the Food and Beverage Manufacturing Sector (Continued)

NAICS	Description	Total Demand 2022	Demand Met by Imports 2022	Total Sales 2022	GRP 2022	GRP per Job
Food Manufacturing		**$2,886,110,816**	**$2,425,083,508**	**$1,907,512,040**	**$606,672,865**	**$103,656**
Animal Food Manufacturing		**$208,835,328**	**$191,187,251**	**$67,321,679**	**$15,503,823**	**$196,741**
311111	Dog and Cat Food Manufacturing	$115,803,197	$103,803,303	$18,277,239	$7,023,633	$320,260
311119	Other Animal Food Manufacturing	$93,032,132	$87,383,948	$49,044,440	$8,480,191	$149,110
Grain and Oilseed Milling		**$278,852,821**	**$253,454,991**	**$91,509,717**	**$18,481,633**	**$264,018**
311211	Flour Milling	$59,543,333	$57,693,426	$4,712,401	$1,056,431	$167,856
311212	Rice Milling	$15,722,468	$15,722,468	-	-	-
311213	Malt Manufacturing	$5,295,770	$4,080,415	$2,602,249	$554,643	$130,103
311221	Wet Corn Milling	$59,407,538	$45,597,023	$35,891,896	$8,749,928	$183,660
311224	Soybean and Other Oilseed Processing	$65,658,018	$57,135,966	$48,303,170	$8,120,631	$688,041
311225	Fats and Oils Refining and Blending	$44,657,662	$44,657,662	-	-	-
311230	Breakfast Cereal Manufacturing	$28,568,031	$28,568,031	-	-	-
Sugar and Confectionery Manufacturing		**$117,708,451**	**$101,593,445**	**$76,720,472**	**$25,308,482**	**$78,405**
311313	Beet Sugar Manufacturing	$10,498,091	$10,498,091	-	-	-
311314	Cane Sugar Manufacturing	$12,940,558	$12,940,558	-	-	-
311340	Nonchocolate Confectionery Manufacturing	$37,847,521	$32,470,198	$25,659,493	$8,442,986	$97,116
311351	Chocolate and Confectionery Manufacturing from Cacao Beans	$17,232,183	$16,196,405	$1,219,847	$399,647	$116,511
311352	Confectionery Manufacturing from Purchased Chocolate	$39,190,098	$29,488,193	$49,841,131	$16,465,849	$70,844
Fruit & Vegetable Preserving & Specialty Food Manufacturing		**$252,921,864**	**$190,054,213**	**$477,331,180**	**$169,312,430**	**$130,326**
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	$44,493,667	$21,638,030	$225,248,563	$78,159,558	$111,858
311412	Frozen Specialty Food Manufacturing	$93,235,854	$89,090,614	$25,695,301	$8,928,048	$112,670
311421	Fruit and Vegetable Canning	$80,689,921	$54,540,965	$188,867,104	$68,715,710	$151,334
311422	Specialty Canning	$18,203,119	$10,461,151	$35,095,728	$12,637,716	$196,055
311423	Dried and Dehydrated Food Manufacturing	$16,299,303	$14,323,454	$2,424,483	$871,398	$330,964
Dairy Product Manufacturing		**$426,558,273**	**$369,853,624**	**$290,784,224**	**$80,468,379**	**$170,019**
311511	Fluid Milk Manufacturing	$128,833,302	$95,929,120	$227,387,099	$63,804,598	$201,920
311512	Creamery Butter Manufacturing	$7,766,063	$3,341,076	$18,099,099	$4,899,990	$126,525
311513	Cheese Manufacturing	$174,185,832	$159,289,649	$25,421,786	$4,656,542	$127,751
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	$86,442,142	$86,442,142	-	-	-
311520	Ice Cream and Frozen Dessert Manufacturing	$29,330,934	$24,851,637	$19,876,241	$7,107,249	$86,542

Source: Lightcast

Summary Metrics for the Food and Beverage Manufacturing Sector (Continued)

NAICS	Description	Total Demand 2022	Demand Met by Imports 2022	Total Sales 2022	GRP 2022	GRP per Job
Animal Slaughtering and Processing		**$861,408,031**	**$712,802,790**	**$236,639,437**	**$62,858,447**	**$110,708**
311611	Animal (except Poultry) Slaughtering	$296,216,532	$252,084,401	$60,535,172	$12,600,868	$90,170
311612	Meat Processed from Carcasses	$284,316,353	$274,945,104	$30,002,060	$6,243,237	$85,194
311613	Rendering and Meat Byproduct Processing	$19,749,044	$19,749,044	-	-	-
311615	Poultry Processing	$261,126,102	$166,024,242	$146,102,205	$44,014,342	$124,068
Seafood Product Preparation and Packaging		**$44,578,783**	**$5,529,589**	**$185,772,836**	**$55,238,500**	**$80,194**
311710	Seafood Product Preparation and Packaging	$44,578,783	$5,529,589	$185,772,836	$55,238,500	$80,194
Bakeries and Tortilla Manufacturing		**$266,700,286**	**$212,530,191**	**$253,530,121**	**$106,471,395**	**$59,244**
311811	Retail Bakeries	$44,382,962	$30,250,694	$63,187,259	$27,034,903	$39,705
311812	Commercial Bakeries	$100,547,899	$78,185,187	$122,954,564	$52,755,885	$70,514
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	$10,058,595	$7,031,031	$28,516,887	$12,030,922	$51,775
311821	Cookie and Cracker Manufacturing	$52,880,894	$50,364,215	$5,011,353	$1,892,074	$102,307
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	$33,735,581	$27,413,606	$27,521,880	$10,376,582	$108,838
311830	Tortilla Manufacturing	$25,094,354	$19,285,458	$6,338,178	$2,381,028	$108,646
Other Food Manufacturing		**$428,546,979**	**$388,077,414**	**$227,902,373**	**$73,029,778**	**$131,591**
311911	Roasted Nuts and Peanut Butter Manufacturing	$35,615,420	$34,986,197	$841,945	$328,105	-
311919	Other Snack Food Manufacturing	$93,829,210	$91,635,100	$9,641,672	$3,769,060	$329,538
311920	Coffee and Tea Manufacturing	$59,761,398	$48,280,524	$56,638,223	$18,601,328	$155,475
311930	Flavoring Syrup and Concentrate Manufacturing	$20,536,929	$17,974,930	$3,822,918	$2,126,441	$755,969
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	$35,076,488	$31,825,176	$11,090,540	$4,174,732	$120,799
311942	Spice and Extract Manufacturing	$55,085,774	$53,385,184	$5,301,168	$2,002,681	$93,830
311991	Perishable Prepared Food Manufacturing	$67,805,138	$57,705,718	$72,869,343	$21,782,703	$87,622
311999	All Other Miscellaneous Food Manufacturing	$60,836,621	$52,284,586	$67,696,566	$20,244,729	$173,652
Beverage Manufacturing		**$596,832,750**	**$298,249,961**	**$1,436,605,183**	**$686,762,447**	**$281,634**
312111	Soft Drink Manufacturing	$141,946,703	$139,649,398	$3,933,177	$1,215,970	$126,881
312112	Bottled Water Manufacturing	$31,928,015	$1,639,903	$372,152,880	$114,237,875	$157,200
312113	Ice Manufacturing	$10,056,857	$3,105,735	$69,861,769	$21,157,327	$127,339
312120	Breweries	$224,690,429	$69,720,471	$607,408,883	$318,068,537	$289,426
312130	Wineries	$88,404,589	$74,056,580	$21,893,242	$9,568,152	$109,528
312140	Distilleries	$99,806,156	$10,077,874	$361,355,232	$222,514,586	$636,235
	Total Maine	**$3,482,943,566**	**$2,723,333,469**	**$3,344,117,223**	**$1,293,435,312**	**$156,000**
	Total US	**$964,133,861,053**	**N/A**	**$1,044,982,885,570**	**$319,961,813,786**	**$159,132**

Source: Lightcast

APPENDIX

Summary metrics for the Food & Beverage Wholesaling Sector

NAICS	Description	2017 Jobs	2022 Jobs	2017 - 2022 Change	2017 - 2022 % Change	Avg. Earnings Per Job	2022 Location Quotient	Competitive Effect	2022 Payrolled Business Locations	2022 Total Demand	2022 Demand met by Imports	2022 Total Sales	2022 GRP	2022 GRP Per Job
	Grocery & Related Product Merchant Wholesalers	**3,698**	**3,600**	**(98)**	**(3%)**	**$70,875**	**1.05**	**(140)**	**428**	**$674,137,986**	**$315,642,807**	**$802,227,478**	**$455,152,309**	**$126,424**
424410	General Line Grocery Merchant Wholesalers	644	625	(19)	(3%)	$96,513	0.58	(42)	23	$212,811,873	$107,308,417	$180,515,225	$102,898,088	$164,659
424420	Packaged Frozen Food Merchant Wholesalers	3	104	101	3945%	$93,870	0.72	101	13	$32,726,021	$11,082,165	$34,452,870	$19,488,664	$188,296
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	141	46	(95)	(68%)	$83,241	0.32	(66)	15	$28,176,664	$18,117,547	$12,245,378	$6,930,989	$151,773
424440	Poultry and Poultry Product Merchant Wholesalers	60	19	(42)	(69%)	$113,727	0.38	(46)	7	$8,909,445	$4,701,040	$6,818,951	$3,778,701	$202,430
424450	Confectionery Merchant Wholesalers	208	197	(11)	(5%)	$70,312	0.76	(23)	27	$51,072,340	$22,450,173	$45,866,999	$26,039,994	$132,071
424460	Fish and Seafood Merchant Wholesalers	1,534	1,467	(66)	(4%)	$56,156	12.22	(42)	178	$22,341,416	$4,159,548	$242,145,144	$136,420,855	$92,964
424470	Meat and Meat Product Merchant Wholesalers	66	51	(15)	(23%)	$82,003	0.25	(17)	9	$40,094,871	$29,174,066	$12,562,900	$7,120,499	$140,536
424480	Fresh Fruit and Vegetable Merchant Wholesalers	225	212	(13)	(6%)	$74,378	0.53	7	14	$71,749,668	$36,768,139	$48,968,703	$27,847,925	$131,358
424490	Other Grocery and Related Products Merchant Wholesalers	818	880	62	8%	$71,602	0.86	24	143	$206,255,688	$81,881,712	$218,651,308	$124,626,593	$141,594
	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	**1,273**	**1,396**	**123**	**10%**	**$65,970**	**1.57**	**74**	**60**	**$281,299,447**	**$70,924,297**	**$416,595,927**	**$250,727,407**	**$179,561**
424810	Beer and Ale Merchant Wholesalers	915	968	53	6%	$66,567	2.00	50	27	$119,794,663	$11,880,510	$278,627,089	$167,684,154	$173,242
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers	358	428	70	20%	$64,622	1.06	40	33	$161,504,784	$59,043,787	$137,968,839	$83,043,253	$193,838
	Total, Maine	**4,971**	**4,997**	**25**	**0.5%**	**$69,505**	**1.16**	**(205)**	**488**	**$955,437,433**	**$386,567,104**	**$1,218,823,406**	**$705,879,717**	**$141,273**
	Total, United States	**985,335**	**1,001,959**	**16,624**	**1.7%**	**$84,542**	**N/A**	**N/A**	**55,483**	**$263,175,283,761**	**N/A**	**$283,439,322,951**	**$163,906,609,429**	**$163,586**

Source: Lightcast

GLOSSARY

Competitive Effect: Competitive effect indicates how much of the job change within a given region is the result of some unique competitive advantage of the region. This is because the competitive effect, by definition, measures the job change that occurs within a regional industry that cannot be explained by broader trends (i.e., the National Growth Effect and the Industrial Mix Effect). It's important to note that this effect can be positive even if regional employment is declining. This would indicate that regional employment is declining *less* than national employment for that sector.

Gross Regional Product (GRP): Gross Regional Product (GRP) is simply GDP for the region of study. More commonly, GRP is GDP for any region smaller than the United States, such as a state or metro. GRP measures the final market value of all goods and services produced in the region of study. GRP is the sum of total industry earnings, taxes on production & imports, and profits, less subsidies.

Location Quotient: Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region "unique." For example, if the leather products manufacturing industry accounts for 10% of jobs in your area but 1% of jobs nationally, then the area's leather-producing industry has an LQ of 10. So, in your area, leather manufacturing accounts for a larger than average "share" of total jobs—the share is ten times larger than normal.

Trade-Weighted Index: This index measures the strength of the US Dollar relative to the currencies of the nation's trading partners, weighted based on the share of trade conducted with each country. This index is produced by the Federal Reserve.

Source: Lightcast Knowledge Base

DATA SOURCES

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