

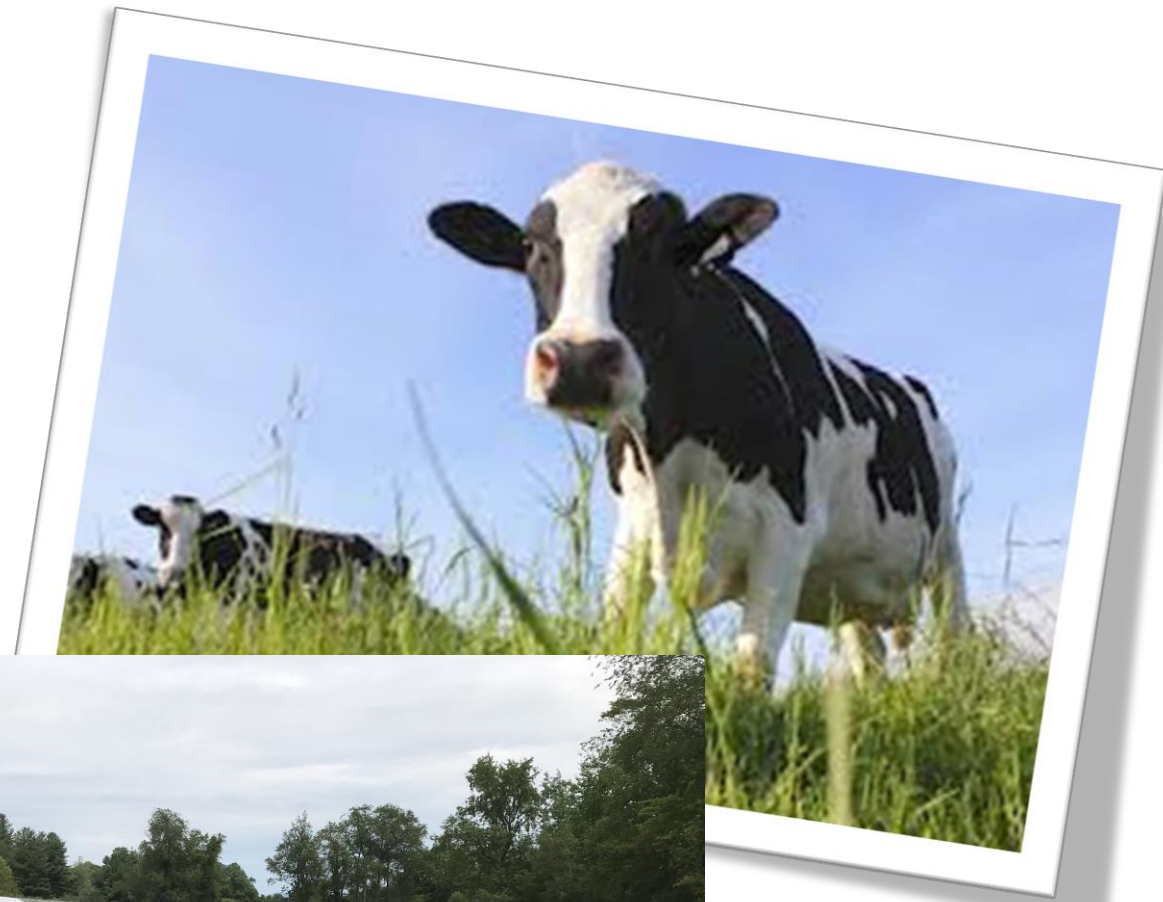
Massachusetts Agriculture Snapshot 2021

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Summary

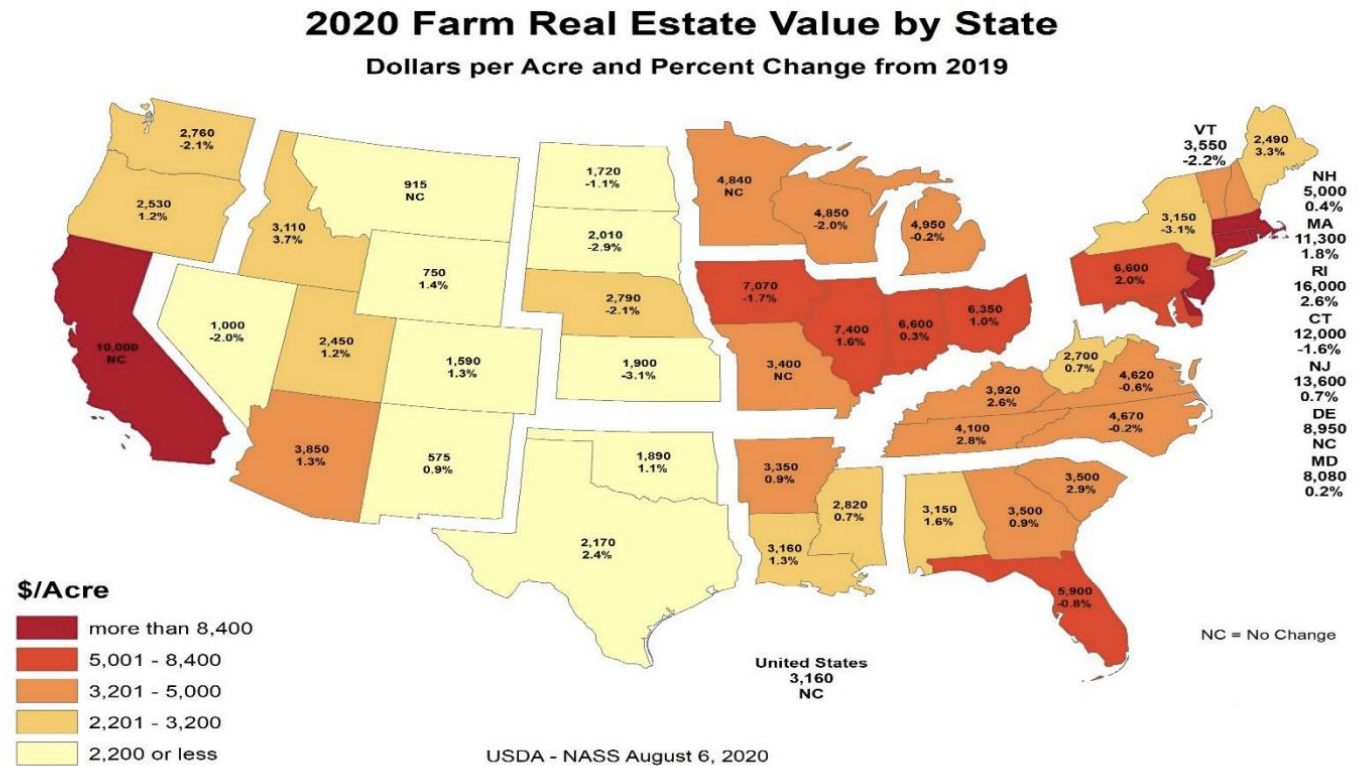
- USDA Census of Agriculture is a key source for data
- MA agriculture mainly comprises of many small family farms
- MA farmers face developmental pressure and rising costs
- Direct sales to consumers account for a large proportion of overall sales
- Succession planning is an important consideration for aging farmers
- Off-farm income is important for farm financial stability



National Comparisons: Land Expenses

Massachusetts farmers experience high land costs

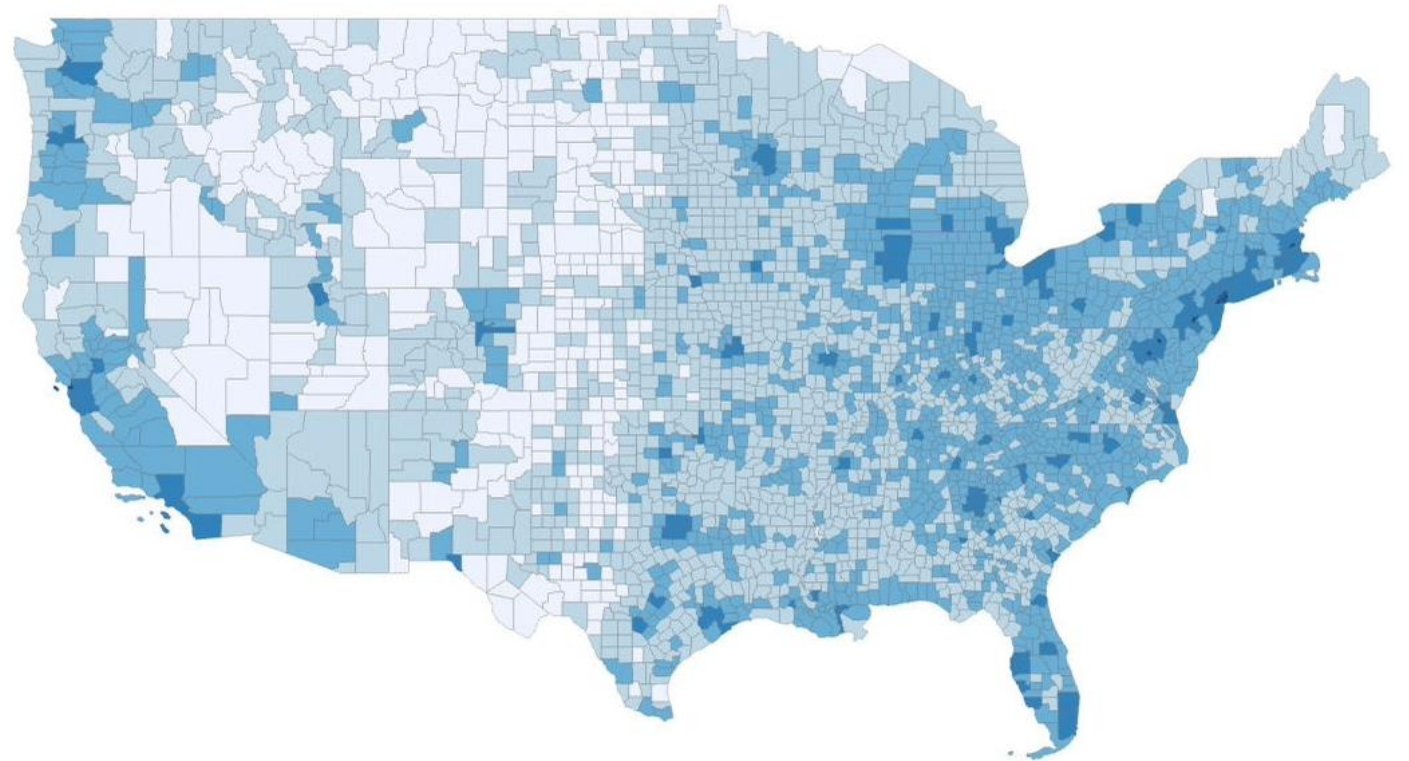
- Massachusetts Statistics
 - Farm real estate value is \$11,300 per acre
 - National average is \$3,160 per acre
 - High cost of living
 - Ranks 5th highest state for cost of living
 - Ranks 3rd highest state for median housing price



National Comparisons: Population Density

Massachusetts farmers face developmental pressures

- Massachusetts Statistics
 - The 3rd most densely populated state
 - 885 residents per sq. mile
 - Over 4 times the national average
 - Population grew 7.37% between 2010 and 2020
 - There were 15,808 new housing starts in 2020
 - For perspective, there were 18,875 new housing starts in 2020 for all 5 other New England States



Regional Comparisons

Region

Market Value of Agricultural Goods Sold



United States

~\$288.5 Billion



New England

~\$2.7 Billion



Connecticut

\$580 Million



Maine

\$666 Million



Massachusetts

\$475 Million



New Hampshire

\$187 Million



Rhode Island

\$57 Million









Vermont

\$780 Million









Regional Comparisons: New England

	<u>Region</u>	<u>Number of Farms in 2017</u>	<u>%Δ from 2012</u>
	Connecticut	5,521	-7.6%
	Maine	7,600	-7.0%
	Massachusetts	7,241	-6.6%
	New Hampshire	4,123	-6.1%
	Rhode Island	1,043	-16.1%
	Vermont	6,808	-7.2%

Using USDA sales value data, most farms lost in Massachusetts between 2012 and 2017 were small farms earning below \$1,000 in sales. Farming was likely not these farms' primary source of income.

Regional Comparisons: New England

	<u>Region</u>	<u>Average Farm Size</u>	<u>%Δ from 2012</u>
	Connecticut	69.1 acres	-5.4%
	Maine	172.1 acres	-3.3%
	Massachusetts	67.9 acres	+0.6%
	New Hampshire	103.2 acres	-4.4%
	Rhode Island	54.5 acres	-2.6%
	Vermont	175.3 acres	+2.8%

Average sized farms in Massachusetts and Vermont experienced acreage increases while average sized farms in other New England states experienced decreases between 2012 and 2017

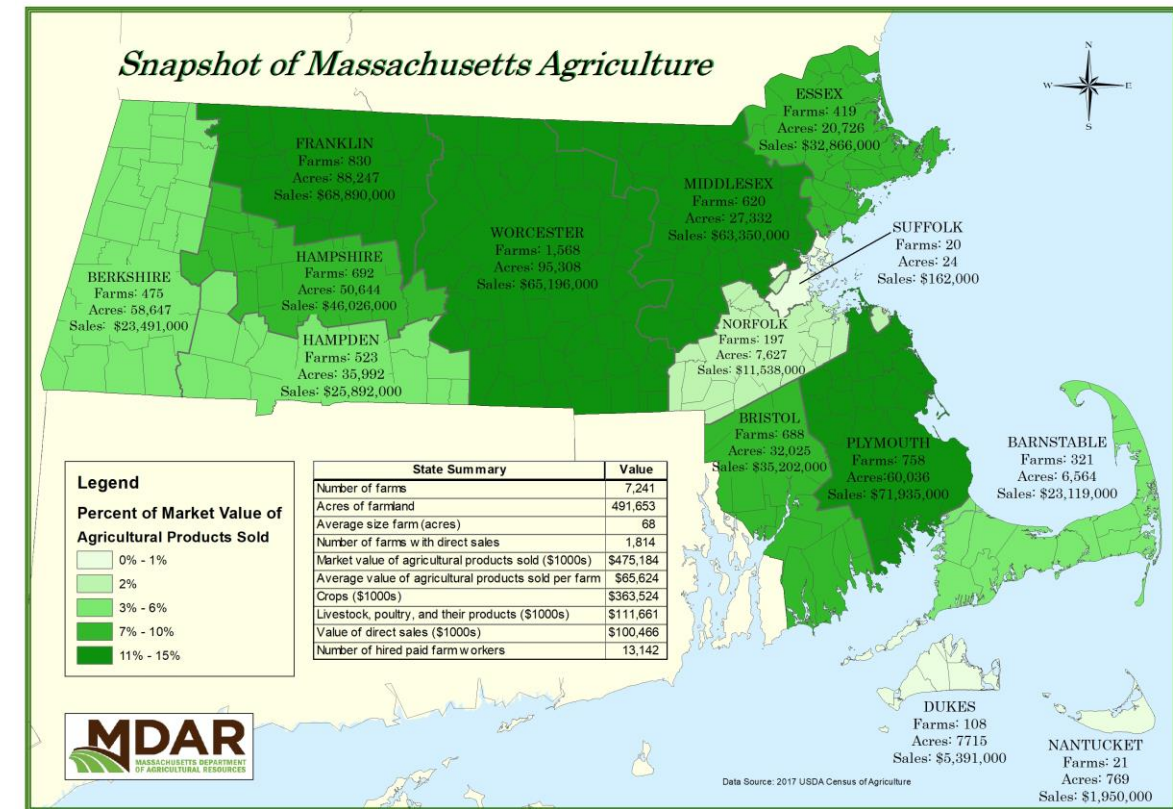
Regional Comparisons: New England

	<u>Region</u>	<u>Median Farm Size</u>	<u>%Δ from 2012</u>
	Connecticut	20 acres	-9.1%
	Maine	55 acres	-17.9%
	Massachusetts	21 acres	-8.7%
	New Hampshire	35 acres	-7.9%
	Rhode Island	20 acres	0%
	Vermont	74 acres	-7.5%

New England experienced median farm acreage decreases between 2012 and 2017

Key Massachusetts Statistics

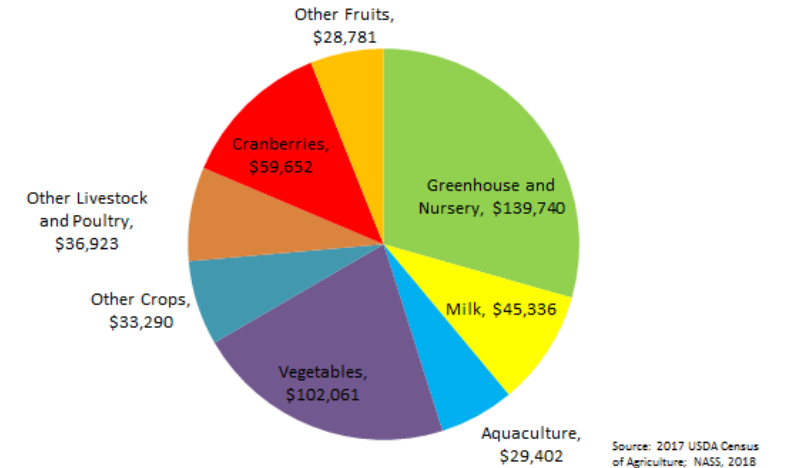
- Annual sales market value \$475 million
- Number of farms 7,241
- Acres of farmland 491,653
- Average farm acreage 68
- Average farm agricultural sales \$65,624
- Average farmland value \$11,000 per acre
 - Ranks the 4th highest state
- Total direct sales to consumers \$100,466 million



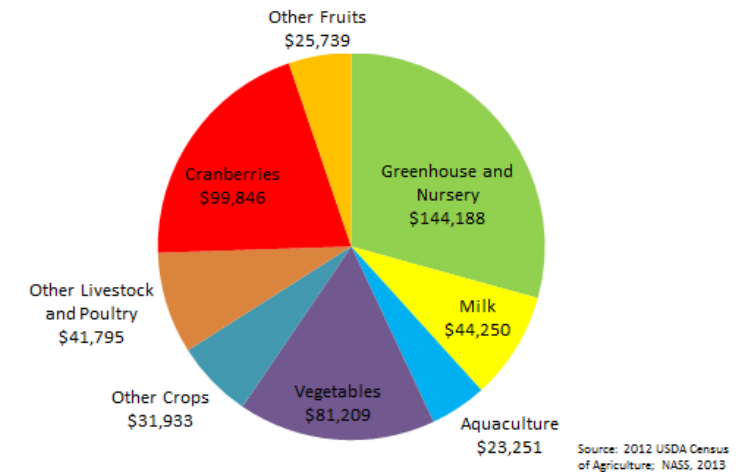
Massachusetts Agricultural Sector Pie Charts

<u>Sector</u>	<u>Dollar (\$1,000s)△</u>	<u>%△</u>
Aquaculture	+6,151	+26.5%
Cranberries	-40,194	-40.3%
Greenhouse and Nursery	-4,448	-3.1%
Milk	+1,086	+2.5%
Other Crops	+1,357	+4.2%
Fruit (non-cranberry)	+3,042	+11.8%
Livestock and Poultry	-4,872	-11.7%
Vegetables	+20,852	+25.7%

**Massachusetts 2017 Agricultural Economy
in \$1,000s**

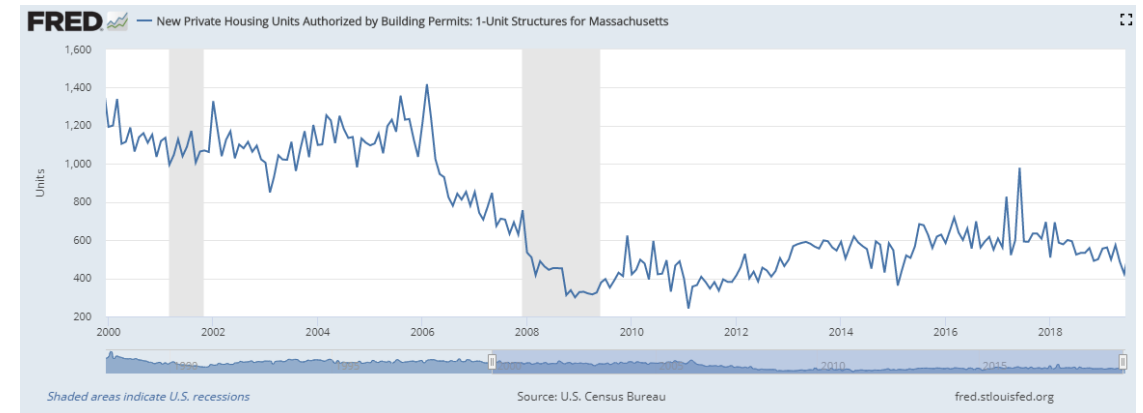


**Massachusetts 2012 Agricultural Economy
in \$1,000s**



Sectors: Greenhouse and Nursery

- Greenhouse and Nurseries account for 29% of the agricultural economy in goods sold
- Market value: \$139 million
- Number of operations: 867
- MA has the 2nd largest greenhouse and nursery industry in New England
- MA is a top 10 state for greenhouse and nursery sales value per square land mile
- One-unit housing starts is a leading indicator for the industry
 - Houses plant and maintain plants, trees, and lawns



Sectors: Vegetables and Other Fruits

<u>Sector</u>	<u>Market Value</u>	<u>%Δ</u>	<u>Farms</u>
Vegetables	\$102 million	25.7%	1,402
Other Fruits	\$29 million	11.8%	509



- Direct sales to consumers is an important component to these sectors and Massachusetts agriculture
 - Total direct sales to consumers (includes non-produce sales) account for \$100 million goods sold for all agricultural products in MA
 - That's 21.1% of the agricultural economy making MA the most reliant state for direct sales to consumers

Sectors: Cranberries

- Cranberries account for 13% of the agricultural economy in goods sold
- Market value: \$59,652 million
 - This includes both processed and fresh cranberry products
- MA is the 2nd largest cranberry state in the U.S
- A classic Thanksgiving food
- Cranberries used to have a market value of \$103.5 million in MA
 - Challenges to the industry:
 - Demand < Supply
 - Slower demand for cranberry consumption is outpaced by production
 - Industry has tried supply management in recent years
 - International competition
 - International trade policies



Sectors: Dairy

- Dairy account for 10% of the agricultural economy in goods sold
- Market value: \$45 million
- Number of Dairy Farms:
 - 121 with Bovine cows
 - 11 with Caprine
 - 1 with Ovine
 - Farms may have multiple types of cows
 - There are 9,242 total milking cows
- Value added products such as ice-cream and cheese can contribute to farmer's business model
- The annual Dairy Tax Credit administered by MDAR helps dairy farmers when the cost of production is greater than the federally set price of milk
- Challenges to the industry:
 - Supply > Demand
 - Low milk prices
 - High cost of production
 - Competition from plant-based alternatives



Producer Demographics

- **Gender**

- **Male:**

- MA: 56%
 - USA 64%

- **Female:**

- MA: 44%
 - USA: 36%

- **Age**

- **<35:**

- MA: 8%
 - USA: 8%

- **35-64:**

- MA: 57%
 - USA: 58%

- **65+:**

- MA: 33%
 - USA: 34%

- **Race**

- **Non-white:**

- MA: 3%
 - USA: 5%

- **Other Characteristics**

- **Hispanic, Latino, Spanish Origin:**

- MA: 1%
 - USA: 3

- **Military Service:**

- MA: 8%
 - USA: 11%

- **New & beginning farmers:**

- MA: 27%
 - USA: 27
 - New and Beginning farmers defined as a farmer having 10 or fewer years experience

Succession planning is an important consideration for aging farmers.

Note that the definition of a “producer” was changed between the 2012 and 2017 Census of Agriculture

New Opportunities for Farmers

- Farmers diversify their productions by producing value added products such as maple ice-cream, cheese, and beverages
- Agritourism is a fast-growing field for farmers
 - Pick-your own apple orchards or strawberries
 - Pumpkin patch
 - Sunflower fields
- Off-farm income is important for financials
 - Non-farm jobs from family bring money into the farm
 - Most farms in MA have off-farm income



Produce Availability Table

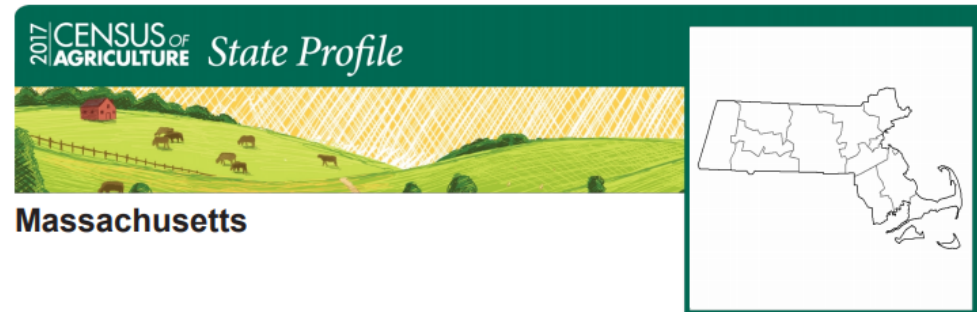
When are local products in season?



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DAIRY, CHEESE & EGGS												
HONEY												
MAPLE SYRUP												
MEAT & POULTRY												
FRUITS												
APPLES												
BLUEBERRIES												
CANTALOUPE												
CRANBERRIES												
PEACHES												
PEARS												
RASPBERRIES												
STRAWBERRIES												
WATERMELON												
VEGETABLES												
KALE, CHARD & COLLARDS												
LETTUCE & SALAD GREENS												
SPINACH												
BROCCOLI												
CABBAGE												
CAULIFLOWER												
BEEFS												
CARROTS												
POTATOES												
RADISHES												
TURNIPS												
GARLIC												
LEEK												
ONIONS												
SCALLIONS												
PUMPKINS												
SQUASH, SUMMER & ZUCCHINI												
SQUASH, WINTER												
ASPARAGUS												
BEANS												
CELERY												
CORN												
CUCUMBERS												
EGGPLANT												
PEAS												
PEPPERS												
TOMATOES												
PLANTS												
BEDDING PLANTS												
CUT FLOWERS												
HERBS												

Useful USDA Resources

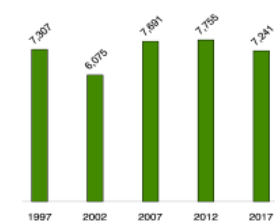
- https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Massachusetts/index.php
- The USDA provides great summaries for all states and counties



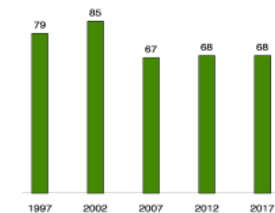
Total and Per Farm Overview, 2017 and change since 2012

	2017	% change since 2012
Number of farms	7,241	-7
Land in farms (acres)	491,653	-6
Average size of farm (acres)	68	+1
Total	(\$)	
Market value of products sold	475,184,000	-3
Government payments	4,004,000	-51
Farm-related income	70,388,000	-10
Total farm production expenses	492,665,000	-9
Net cash farm income	56,911,000	+44
Per farm average	(\$)	
Market value of products sold	65,624	+3
Government payments		
(average per farm receiving)	7,583	-27
Farm-related income	28,009	-3
Total farm production expenses	68,038	-2
Net cash farm income	7,859	+54

Number of Farms, 1997-2017



Average Farm Size, 1997-2017 (acres)



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