



NORTHEASTERN REGION FARM COMPUTER USAGE AND OWNERSHIP REPORT

NATIONAL AGRICULTURAL STATISTICS SERVICE



United States Department of Agriculture • Washington, D.C. 20250
Northeastern Regional Field Office • Harrisburg, PA 17112
4050 Crums Mill Rd, Suite 203 • www.nass.usda.gov

Regional Contacts

Phone: 717-787-3904 Email: nassrfoner@usda.gov

- Pennsylvania – King Whetstone, Regional Director
- Delaware-Maryland– Shareefah Williams, State Statistician
- New England – Pam Hird, State Statistician
- New Jersey – Bruce Eklund, State Statistician
- New York – Donnie Fike, State Statistician

Posted online August 19, 2021

Special Note

The questions for the Farm Computer Usage and Ownership questionnaire have changed since the last publication in 2019 to reflect modern internet access and usage. Therefore, there may not be direct comparisons between certain data points. Some changes included reporting multiple types of internet access, consolidating redundant questions, and the addition of a precision agriculture question.

Farm Computer Usage and Ownership Highlights

Nationally, 82 percent of farms reported having access to the internet with 98 percent paying for access. In 2021, 29 percent of farms used the internet to purchase agricultural inputs, which was an increase of 5 percent from 2019. Additionally, 21 percent of farms used the internet to market agricultural activities, which was an increase of 2 percent from 2019. Farms which conducted business with non-agricultural websites in 2021 decreased by 6 percent to 47 percent.

In 2021, 50 percent of internet connected farms utilized a broadband connection while 70 percent of internet connected farms had access through a cellular data plan. Additionally, 67 percent of farms had a desktop or laptop computer while 77 percent of farms had a smart phone.

Farm Computer Usage – Northeastern States and United States: 2019 and 2021

State	Farms				
	Own or use desktop or laptop computer ¹		Own or use smart phone	Own or use a tablet or other portable wireless computer	Own or use some other type of computer
	2019	2021	2021	2021	2021
	(percent)	(percent)	(percent)	(percent)	(percent)
Maryland ²	71	70	62	17	2
New Hampshire ³	84	88	70	46	5
New Jersey	80	84	72	33	(Z)
New York	77	69	69	41	(Z)
Pennsylvania	62	52	53	20	(Z)
United States ⁴	69	67	77	29	2

(Z) Less than half of the unit shown.

¹ 2019 values are not directly comparable to 2021.

² Includes Delaware and Maryland.

³ Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

⁴ Excludes Alaska and Hawaii.

Farm Internet Access – Northeastern States and United States: 2019 and 2021

State	Farms			
	With internet access		Internet access by paying a cell phone company or internet service provider	Internet access without paying a cell phone company or internet service provider
	2019	2021	2021	2021
	(percent)	(percent)	(percent)	(percent)
Maryland ¹	77	80	99	1
New Hampshire ²	94	97	93	7
New Jersey	91	91	100	(Z)
New York	81	81	92	8
Pennsylvania	64	64	99	1
United States ³	75	82	98	2

(Z) Less than half of the unit shown.

¹ Includes Delaware and Maryland.

² Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

³ Excludes Alaska and Hawaii.

Use of Internet – Northeastern States and United States: 2019 and 2021

[Agricultural inputs include seed, fertilizer, chemicals, veterinarian supplies, feed, machinery, replacement parts, farm supplies, office equipment, etc. Agricultural marketing activities include direct sales of commodities, on-line crop and livestock auctions, on-line market advisory services, commodity price tracking, etc.]

State	Farms			
	Purchase agricultural inputs over internet		Conduct agricultural marketing activities over internet	
	2019	2021	2019	2021
	(percent)	(percent)	(percent)	(percent)
Maryland ¹	36	32	31	35
New Hampshire ²	41	45	33	30
New Jersey	44	35	27	19
New York	42	46	24	27
Pennsylvania	24	28	14	18
United States ³	24	29	19	21

¹ Includes Delaware and Maryland.

² Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

³ Excludes Alaska and Hawaii.

Internet Access of Reports, Services, and Websites – Northeastern States and United States: 2019 and 2021

[Reference period for access and usage of USDA reports, research information, and services is the last 12 months prior to June 1 of survey year]

State	Farms					
	Access USDA/NASS reports over internet		Access other USDA reports/services over internet		Access other Federal government websites over internet	
	2019	2021	2019	2021	2019	2021
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Maryland ¹	11	16	28	30	26	26
New Hampshire ²	20	25	34	31	30	25
New Jersey	9	14	18	26	33	31
New York	9	9	16	25	27	27
Pennsylvania	10	11	15	18	14	17
United States ³	12	13	20	22	21	21

¹ Includes Delaware and Maryland.

² Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

³ Excludes Alaska and Hawaii.

Conducting Business on the Internet – Northeastern States and United States: 2019 and 2021

State	Farms					
	Conduct business with any USDA website		Conduct business with any other Federal government website		Conduct business with any non-agricultural website	
	2019	2021	2019	2021	2019	2021
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Maryland ¹	14	15	12	18	51	43
New Hampshire ²	16	23	10	10	62	53
New Jersey	7	11	11	14	64	51
New York	12	17	17	13	60	51
Pennsylvania	10	12	7	9	41	33
United States ³	11	16	9	12	53	47

¹ Includes Delaware and Maryland.

² Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

³ Excludes Alaska and Hawaii.

Methods of Internet Access – Northeastern States and United States: 2021

[Various methods of internet access for those operators who have access to the Internet. May not add to 100% due to operators with multiple types of internet access]

State	Farms				
	Dialup	Broadband (DSL, cable, fiber optic)	Cellular	Satellite	Other
	2021				
	(percent)	(percent)	(percent)	(percent)	(percent)
Maryland ¹	1	50	63	24	3
New Hampshire ²	2	72	81	11	1
New Jersey	(Z)	68	83	14	(Z)
New York	(Z)	63	58	11	(Z)
Pennsylvania	3	61	49	5	3
United States ³	2	50	70	19	2

(Z) Less than half of the unit shown.

¹ Includes Delaware and Maryland.

² Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

³ Excludes Alaska and Hawaii.

Precision Agriculture Practices

Beginning in 2021, data were collected for precision agriculture practices with the question: “In the last 12 months, did this farm or ranch use precision agriculture practices to manage crops or livestock? This would include the use of global positioning (GPS) guidance systems, GPS yield monitoring and soil mapping, variable rate input applications, use of drones for scouting fields or monitoring livestock, electronic tagging, precision feeding, robotic milking, etc..” Results are presented in the following table.

Farm Precision Agriculture Practices – Northeastern States and United States: 2021

State	Farms	
	Using precision agriculture practices to manage crops or livestock	
	2021	
	(percent)	
Maryland ¹	27	
New Hampshire ²	24	
New Jersey	27	
New York	26	
Pennsylvania	20	
United States ³	25	

¹ Includes Delaware and Maryland.

² Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

³ Excludes Alaska and Hawaii.

Farm Numbers

To help equate the percentages published in this report to actual farm counts, a table showing "Number of Farms by States and United States" from the February 2021 NASS publication *Farms, Land in Farms* is included below. A farm is "any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the year."

Number of Farms – Northeastern States and United States: 2019 and 2020

[2021 number of farms not available until February 2022]

State	Farms	
	2019 (number)	2020 (number)
Delaware	2,300	2,300
Maryland	12,400	12,400
New Hampshire ¹	32,300	32,300
New Jersey	9,900	9,900
New York	33,400	33,400
Pennsylvania	52,700	52,700
United States ²	2,015,050	2,010,650

¹ Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

² Excludes Alaska and Hawaii.

For the complete "Farm Computer Usage and Ownership" report, go to:
<https://usda.library.cornell.edu/concern/publications/h128nd689>

The "Farm Computer Usage and Ownership" report and all other NASS reports are available online at www.nass.usda.gov.

###

NASS is the federal statistical agency responsible for producing official data about U.S. agriculture and is committed to providing timely, accurate and useful statistics in service to U.S. agriculture.

USDA is an equal opportunity provider, employer, and lender. To file a complaint of discrimination, write to USDA, Assistant Secretary for Civil Rights, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, S.W., Stop 9410, Washington, DC 20250-9410, or call toll-free at (866) 632-9992 (English) or (800) 877-8339 (TDD) or (866) 377-8642 (English Federal-relay) or (800) 845-6136 (Spanish Federal-relay).