

CHAPTER III

**FARM FACILITIES, FARM
EQUIPMENT**

(191)

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Chapter III.—FARM FACILITIES, FARM EQUIPMENT

Introduction.—The farm machinery and facility items for which census statistics have been collected at five-year intervals since 1920 include a considerable number that are used in conducting the farm business, some that are used both in the home and in the farm business, and others such as home freezers that are used primarily in the farm operator's home. The inquiry relating to the number of items specified that an item be counted if on the place at the time of enumeration whether owned by the farm operator or another person. The statistics presented in this chapter afford a picture of the proportion of farms with farm facility and equipment items for which facts were gathered in the 1959 Census of Agriculture. These figures, when compared with data for prior censuses, indicate the growth or decline in the number of farms reporting an item.

For the 1959 Census of Agriculture, the location of all items was specified "on this place" in the questionnaire inquiry. Data were collected for the following items:

Item	How reported	
	Presence or absence	Number
Telephone.....	X	
Home freezer.....	X	
Milking machine.....	X	
Electric milk cooler.....	X	
Bulk-type milk cooler ¹	X	
Crop drier.....	X	
Power-operated elevator, conveyor, or blower.....	X	
Electricity ²	X	
Grain combines ³		X
Corn pickers ⁴		X
Pick-up balers ⁵		X
Field forage harvesters.....		X
Motortrucks.....		X
Wheel tractors.....		X
Crawler tractors.....		X
Garden tractors.....		X
Automobiles.....		X
Potato diggers ⁶		X
Silos (upright and pit) ⁷		X
Electric motors of 1 or more horsepower ⁸		X
Power-spraying and dusting machines ⁹		X

¹ Data obtained in 6 States only—Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

² Alaska and Hawaii only.

³ Not asked for Hawaii.

⁴ Not asked for Alaska and Hawaii.

⁵ Not asked for Alaska.

⁶ Alaska only.

⁷ Hawaii only.

In computing its farm-operator family level-of-living index for counties of the United States, the Agricultural Marketing Service of the U.S. Department of Agriculture considers such general indicators as the proportions of all farms having telephones and automobiles. These two items have been included in seven of the last nine census enumerations. Other repetitive items deal with the new sources of power—tractors, motortrucks, and electricity—which have brought striking changes to our farms during the last four decades. Increased use of mechanical power and labor-replacing machinery has been accompanied by large scale reductions in the number of draft animals and farm workers required to produce food and fiber for a rapidly expanding population. Some farm implements for which inquiry was made in 1959 have been coming into general use in recent years and few or no comparable figures are available for these items. In this chapter data on farm equipment and farm facilities for earlier censuses are shown only for items included in the 1959 Census of Agriculture. Statistics for prior censuses for items not included in this chapter may be found in the volumes for the censuses in

which the most recent inquiry was made. The X's in the following tabular presentation indicate the items for which the nationwide censuses of agriculture have obtained information during the period 1920 to 1959.

FARM FACILITY AND EQUIPMENT ITEMS FOR WHICH AN INQUIRY WAS INCLUDED IN THE CENSUS OF AGRICULTURE: 1920 TO 1959¹

[The data for various census years may not be entirely comparable for reasons such as wording of the inquiry, instructions to enumerators, processing of data, etc. An X in the following table indicates the inquiry was included in the census of the year specified]

Item on census questionnaire	1959	1954	1950	1945	1940	1930	1925	1920
Telephone.....	X	X	X	X	X	X		X
Running water.....		X		X		X		X
Electric water pump.....			X					
Water piped into a bathroom.....						X		
Electric hot water heater.....			X					
Kitchen sink with drain.....				X				
Electricity.....	² X	X	X	X	X	X		
Power line.....	² X		X	X	X			
Amount of last monthly bill.....			X		X			
Home plant.....			X		X			
Gas or electric light.....	² X							X
Electric distribution line.....				X	X			
Television set.....		X						
Radio.....				X			X	
Home freezer.....	X	X	X					
Mechanical refrigeration.....			X	X				
Electric washing machine.....				X				
Power-driven washing machine.....				X				
Electric motors for farm work.....	³ X			X		X		
Milking machine.....	X	X	X	X				
Electric chick brooder.....			X					
Electric pig brooder.....		X						
Electric milk cooler.....	X							
Power feed grinder.....		X						
Electric power feed grinder.....			X					
Power-operated elevator, conveyor, or blower.....	X							
Stationary gasoline engines.....				X		X		
Crop drier.....	X							
Grain combines.....	⁴ X	X	X	X		(⁵)		
Corn pickers.....	⁶ X	X	X					
Pick-up balers.....	⁷ X	X	X					
Field forage harvesters.....	X	X						
Automobiles.....	X	X	X	X	X	X		X
Year of newest model.....			X	X	X			
Motortrucks.....	X	X	X	X	X	X		X
Year of newest model.....			X	X	X			
Tractors.....				X	X	X	X	X
Year of newest model.....					X			
Wheel tractors other than garden.....	X	X	X	X				
Year of newest model.....			X	X				
Garden tractors.....	X	X	X	X				
Crawler tractors.....	X	X	X	X				
Year of newest model.....			X					
Artificial ponds, reservoirs, and earth tanks.....		X						
Upright silos.....	⁸ X		X					
Pit or trench silos.....	⁸ X		X					
Kind of road surface.....	X		X	X	X	X	X	
Distance to trading center.....			X				X	
Value of implements and machinery.....				X	X	X	X	X
Bulk-type milk cooler.....	⁹ X							
Potato diggers.....	¹⁰ X							
Power-spraying and dusting machines.....	¹¹ X							

¹ The 1935 questionnaire did not have any questions on farm equipment and farm facilities.

² Alaska and Hawaii only.

³ Hawaii only. Question specified "Electric motors of 1 or more horsepower."

⁴ Not asked for Hawaii.

⁵ Inquiry was for number of combines on this farm. Data requested were for grain combines used for harvesting and threshing grains or seeds in one operation; however, many types or combinations of equipment were reported instead of grain combines and the results of this inquiry were considered not satisfactory for publication.

⁶ Not asked for Alaska or Hawaii.

⁷ Not asked for Alaska.

⁸ Alaska only. Approximate data on number of farms using silos in 1959 are available for other States indirectly through the number of farms reporting production of silage.

⁹ Data were obtained on bulk-type milk coolers in 6 States—Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

¹⁰ Alaska only.

¹¹ Hawaii only.

The capacity of farm workers to produce has been directly related to the development and use of new and improved items of farm equipment and facilities. The productive capacity of the farm worker apparently changed very little between 1820 and 1850 during which time he produced farm products, on the average, for fewer than 5 persons at home and abroad (see table 1). New inventions and resultant new equipment began to appear on the farm after 1850 and the farm worker was able to produce farm products for an increasing number of persons. By the turn of the twentieth century, he was producing for almost 7 persons. More than 8 persons were being provided food and other farm products by a farm worker in 1920; by 1930, the number had increased to almost 10. The productive capacity of the farm worker increased moderately to 1940 when there were almost 11 persons supported, and with a rapid increase occurring during and immediately following World War II, there were nearly 15 persons at home and abroad supplied in 1950 by a farm worker. Further phenomenal increases occurred between 1950 and 1959. In 1954 a farm worker produced enough for 18 persons while in 1959 one farm worker was producing for 24 persons at home and abroad.¹ More than 46 percent of the increase in productivity of farm workers over the 140-year period came during the last decade. In connection with this recognition of the improved technology and increased specialization which have enabled farmers to provide increasing quantities of farm products with a decreasing number of farm workers it should be noted that the decrease in the number of workers on the farm has been accompanied by an almost equal increase in the off-the-farm employment in the farm equipment and supplies industry. Approximately 23 million employed workers are involved in some

way with agriculture on and off the farm and include the 7 million workers on farms as well as over 6 million who develop, manufacture, and sell farm supplies, and provide services in connection therewith; and another 10 million who serve to assemble, transport, process, and distribute farm products.

Table 1.—TOTAL FARM EMPLOYMENT, TOTAL POPULATION, AND PERSONS SUPPLIED WITH FARM PRODUCTS PER FARM WORKER, FOR THE CONTERMINOUS UNITED STATES: 1820 TO 1959

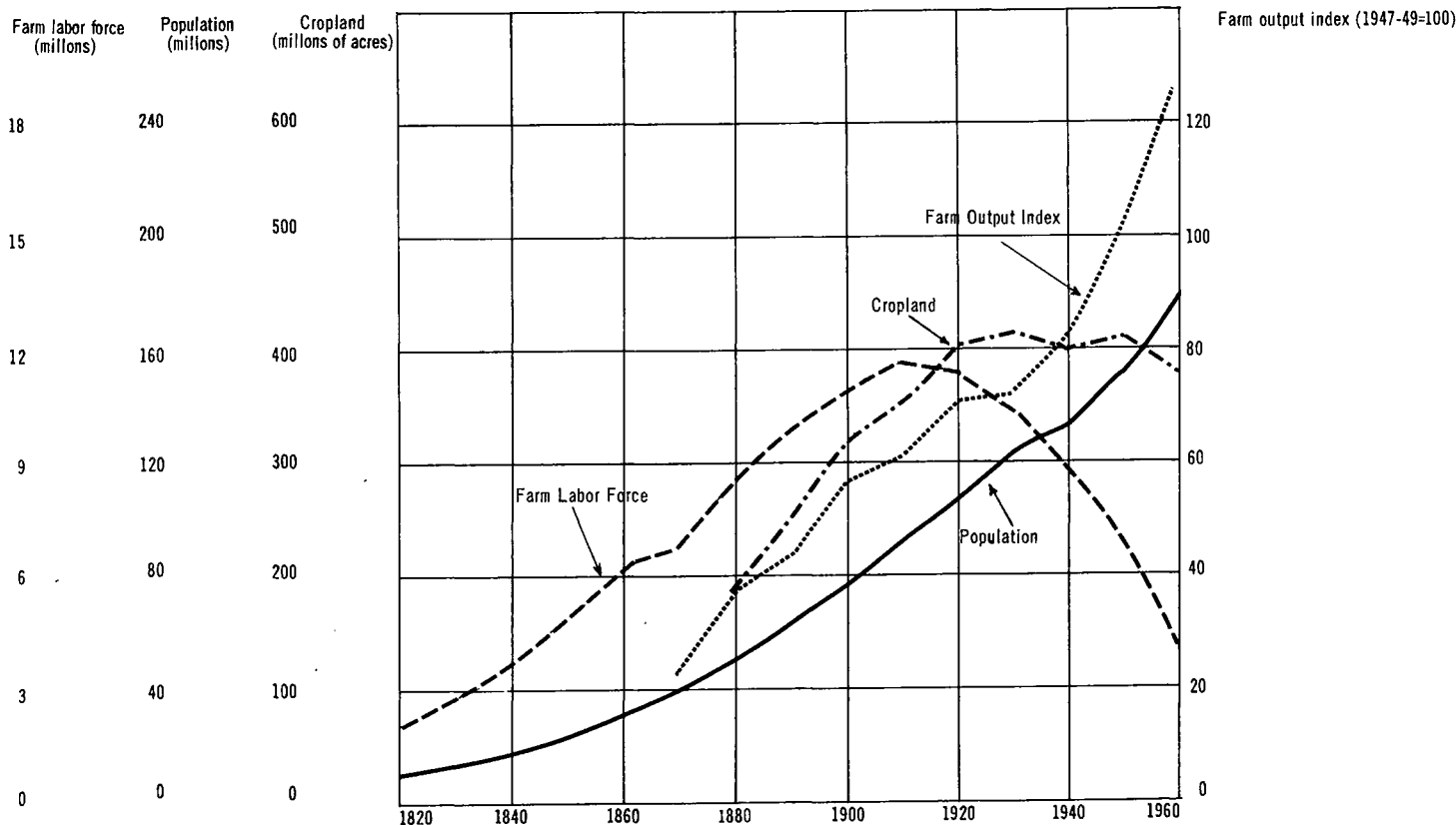
Year	Total farm employment (millions)	Total United States population July 1 (millions)	Persons supplied with farm products per farm worker ¹			
			Total		At home	Abroad
			Persons	Percent change from previous period		
1959 ²	7.4	177.1	23.69	28	21.06	2.63
1954.....	8.6	162.4	18.50	27	16.61	1.89
1950.....	9.9	151.7	14.56	35	12.87	1.69
1940.....	11.0	132.1	10.81	11	10.45	0.36
1930.....	12.5	123.1	9.75	18	8.77	0.98
1920.....	13.4	106.5	8.27	17	6.84	1.43
1910.....	13.6	92.4	7.07	2	6.05	1.02
1900.....	12.8	76.1	6.95	20	5.23	1.72
1890.....	11.7	63.1	5.77	4	4.69	1.08
1880.....	10.1	50.3	5.57	8	4.48	1.09
1870.....	8.0	39.9	5.14	13	4.64	0.50
1860.....	7.3	31.5	4.53	8	4.06	0.47
1850.....	5.7	23.3	4.18	6	3.97	0.21
1840.....	4.4	17.1	3.95	-1	3.72	0.23
1830.....	3.3	12.9	4.00	-3	3.76	0.24
1820.....	2.4	9.6	4.12	...	3.84	0.28

¹1820 to 1940: *Agricultural Statistics 1954*; Table 646, p. 460. 1950 to 1959: *Agricultural Statistics 1960*; Table 669, p. 466.

²Total persons supplied with agricultural products from United States farm production divided by farm employment.

³Preliminary.

TRENDS IN POPULATION, FARM LABOR FORCE, AND FARM OUTPUT IN THE UNITED STATES: 1820 TO 1959



Sources of Data.—The data presented in this chapter are from the 1959 Census of Agriculture, with comparative data from earlier censuses. The data for 1959, 1954, and 1950, and a portion of the data for 1945, for all the items included in this chapter represent estimates based upon the enumeration of data for a sample consisting of approximately 20 percent of all farms for 1959, 1954, and 1950, and one out of 18 farms in 1945. A description of the procedures used in the enumeration and in the processing of the statistics, a description of the sampling technique, and measures of the reliability of estimates are provided in the Introduction to this volume.

Presentation of Statistics.—The statistics are presented for the United States, the conterminous United States (48 conterminous States), three regions, nine geographic divisions, and for each of the 50 States. The admission into the Union of two new States (Alaska and Hawaii were admitted in 1959) since the 1954 census has resulted in a change in the method of presentation of data for the United States as well as for the West and the Pacific geographic division. Totals are shown first for the present area of the Nation including data for all 50 States. Then, in order to provide 1959 data for the area comparable to that shown for previous censuses of agriculture, totals are presented for the "conterminous United States," representing the 48 States prior to the admission of Alaska and Hawaii. Likewise, data for Alaska and Hawaii have been included in the figures for 1959 for the West and for the Pacific geographic division. The 1959 totals are presented also for the "conterminous area" of the West and for the "conterminous area" of the Pacific geographic division (excluding, in both instances, data for the States of Alaska and Hawaii). An outline map, showing the States comprising the geographic divisions and the regions for which totals are shown, appears in the Introduction to this volume.

Comparable data for earlier censuses provide a measure of the changes that have occurred from census to census. Most of the available comparative data are shown for the United States. Historical data for regions, divisions, and States are shown only

for selected census years. In presenting statistics for earlier census years, headnotes, footnotes, or the wording of the table stub or column headings indicate any significant differences in comparability which may have resulted from changes in the wording of the inquiries, in the instructions or definitions, or in the procedures followed in collecting and compiling the data. The text discussion for the various items gives further information in regard to the comparability of the data. The tabular presentation is supplemented by graphic presentation through the use of maps and charts.

Other Published Data.—Data on farm facilities and farm equipment for the 1959 Census of Agriculture, in addition to those published in this volume, are given in other reports as indicated in the table below. Data for prior censuses of agriculture are available for some equipment and facility items not enumerated in the 1959 Census of Agriculture. The table—Farm Equipment and Facility Items for Which an Inquiry was Included in the Census of Agriculture: 1920 to 1959—indicates the censuses for which an inquiry was included on the census questionnaire. Data for earlier censuses for items not included in this chapter are in the reports for those censuses.

History of Census Inquiries on Farm Equipment and Farm Facility Items.—Information on farm equipment and farm facility items was first obtained in the census of agriculture for the United States for 1920. Data were obtained for the 6 items shown on page 193. Although the wording of the inquiries varied slightly, data were collected for these 6 items in 1954 and for 4 of the 6 items in the 1959 census. For each census since 1920, the number of items and the wording of the inquiry have been designed to obtain data for items for which there was significant interest.

A rough measure of farm mechanization was obtained in most censuses from 1850 to 1945 through the inclusion of an inquiry for the value of implements and machinery in the census questionnaire. Such data were last published in volume II for the 1945 Census of Agriculture.

OTHER PUBLISHED DATA FOR FARM EQUIPMENT, FARM FACILITIES: 1959 CENSUS OF AGRICULTURE

[All data for 1959, 1954, and 1950, and a part of the data for 1945 are based on reports for only a sample of farms. See text]

Where found	Geographic area for which available	Period ¹	Presentation of data
Volume I.—Parts 1 to 50.....	Counties ² and State.....	1959	County Table 4.—State and county totals for equipment and facility items enumerated in the 1959 Census of Agriculture for commercial farms only.
		1959 and 1954	County Table 6.—State and county totals for equipment and facility items enumerated in the 1959 Census of Agriculture with available comparative data from the 1954 Census of Agriculture.
	State only.....	1920 to 1959	State Table 4.—Totals for equipment and facility items enumerated in the 1959 Census of Agriculture with available comparative data from earlier censuses.
		1959	State Table 17.—Economic class of farm. Totals for equipment and facility items enumerated in the 1959 Census of Agriculture for each economic class of commercial farms and for part-time, part-retirement, and abnormal farms.
		1959	State Table 18.—Type of farm. Totals for equipment and facility items enumerated in the 1959 Census of Agriculture for specified types of commercial farms by economic class of farm.
		1959	State Table 19.—Type of farm. Totals for equipment and facility items enumerated in the 1959 Census of Agriculture for each type of commercial farm.
		1959	State Table 20.—Size of farm. Totals for equipment and facility items enumerated in the 1959 Census of Agriculture for each size of farm.
Volume II.—General Report Chapter X.	States, Geographic Divisions, Regions, and United States.	1959 and 1954	State Table 21.—Tenure of operator. Totals for equipment and facility items enumerated in the 1959 Census of Agriculture for commercial farms by tenure of operator.
		1959 and 1954	Tenure of operator. Totals for equipment and facility items enumerated in the 1959 Census of Agriculture for each tenure of operator for commercial farms only. Also, United States totals by tenure of operator for commercial farms, part-time farms, part-retirement farms, and abnormal farms.
Volume II.—General Report Chapter XI.	States, Geographic Divisions, Regions, and United States.	1959 and 1954	Tenure and color of operator. Totals for equipment and facility items enumerated in the 1959 Census of Agriculture by tenure of operator for commercial farms and for all other farms, with similar data for farms of nonwhite farm operators.
Volume II.—General Report Chapter XII.	States, Geographic Divisions, Regions, and United States.	1959 and 1954	Economic class of farm. Totals for equipment and facility items enumerated in the 1959 Census of Agriculture for each economic class of commercial farms and for part-time, part-retirement, and abnormal farms.
			Type of farm. Totals for equipment and facility items enumerated in 1959 Census of Agriculture for each type of commercial farm and for miscellaneous and unclassified farms.

¹ Conterminous States only for 1954, 1945, 1935, and 1925.

² The term "county" as used in this report refers to election districts in Alaska, parishes in Louisiana, municipios (municipalities) in Puerto Rico, etc.

DEFINITIONS AND EXPLANATIONS

The descriptive terms and explanations refer principally to the 1959 Census of Agriculture. In general, they are applicable to earlier censuses. The definitions consist primarily of a résumé of the questionnaire wording, occasionally supplemented by the more essential parts of instructions and procedures for enumerating and processing the questionnaires. For the exact phrasing of the inquiries, reference should be made to the facsimile of the 1959 agriculture questionnaire shown in the appendix to this volume.

Definitions having a general application, such as those for "farms reporting" and "operators reporting" and factors influencing the reliability of the data are discussed in the Introduction to this volume and will not be considered in this chapter, unless of particular significance in respect to the subject under consideration.

A Farm.—For 1959, places of 10 or more acres were counted as farms if the value of agricultural products sold during 1959 amounted to \$50 or more. Places of less than 10 acres were counted as farms only if the value of sales of agricultural products during 1959 amounted to \$250 or more. Places for which the value of agricultural products sold during 1959 was less than these minima because of crop failure or other unusual conditions, and places operated at the time of the census for the first time were counted as farms if normally they could be expected to produce and sell these minimum quantities of agricultural products.

Count of Farms Reporting Specified Facility and Equipment Items.—The agriculture questionnaire provided for a "no" or "yes" response to indicate the absence or the presence on the place of each of the following specified facility and equipment items:

Do you have on this place—	300. Telephone?	No <input type="checkbox"/> Yes <input type="checkbox"/>
	301. Home freezer (for quick freezing and storing food)?	No <input type="checkbox"/> Yes <input type="checkbox"/>
	(Do not include refrigerators.)	
	302. Milking machine?	No <input type="checkbox"/> Yes <input type="checkbox"/>
	303. Electric milk cooler?	No <input type="checkbox"/> Yes <input type="checkbox"/>
	304. Bulk-type milk cooler?	No <input type="checkbox"/> Yes <input type="checkbox"/>
	305. Crop drier (for grain, forage, or other crops)?	No <input type="checkbox"/> Yes <input type="checkbox"/>
	306. Power-operated elevator, conveyor, or blower?	No <input type="checkbox"/> Yes <input type="checkbox"/>

Question 304 appeared on the questionnaire for only six States—New York, Pennsylvania, Ohio, Michigan, Wisconsin, and Minnesota.

An answer of "no" represents the absence of a specified item and an answer of "yes" represents the presence of a specified item. For some farm reports, neither the "no" nor the "yes" box was checked by the respondent. The omission of a response should not be considered the same as a report of "no." For those farms "not reporting" a specified item, the response for some should have been "no" while the response for others should have been "yes." The percentage of the farms not reporting was negligible for all items. The inquiry for facility and equipment items normally used in the farm home was designed to obtain information for items located "on this place." Facility and equipment items temporarily out of order were included, and all equipment on the place was included whether owned by the person in charge or by others.

Telephone.—In 1959, the questionnaire inquiry, "Do you have on this place—Telephone?" is identical to the 1954 inquiry. In 1950 the inquiry read, "Is there a telephone on this place?" and in 1945 it read, "Does farm dwelling have telephone?" In 1940, 1930, and 1920, the inquiry for telephones merely specified "on farm." The more restricted inquiry in 1945 may have resulted in the omission of some farms from the count of those with

telephones. This could have been true if (a) the telephone were in a second dwelling on the farm, or (b) if the telephone were in a nondwelling structure on the farm.

Electricity.—The use of electricity in 1954 was so widespread throughout the 48 conterminous States that there seemed to be no further need for obtaining a count of the farms having it in those States. In 1959, an inquiry regarding the availability of electric service on farms and the source of the electric power used was made only in Alaska and Hawaii. The 1959 inquiry on electricity in Alaska and Hawaii specified "on this place." In 1954, there was no inquiry regarding the source of electricity; however, in 1950, it was determined whether the electricity was from a power line or from a home plant.

In 1945, 1940, and 1930, the inquiry on electricity was less inclusive than the inquiry in 1954 and 1950. In 1945 and 1940, the inquiry referred to electricity in the "farm dwelling," and in 1930, to electricity in the "farmer's dwelling house." In these earlier years, some farms with electricity in buildings other than the farmer's dwelling or with electricity used only for the purpose of pumping water, etc., may not have been enumerated as farms with electricity. In 1920, the inquiry was for "gas or electric light in operator's house."

Home Freezer.—A count of farms with home freezers was obtained for the 1959, 1954, and 1950 censuses.

Milking Machine.—A question on milking machines has been included on the questionnaire for each census beginning with 1945. The figures represent the number of farms with milking machines and do not represent the number of machines or units.

Table 2.—FARMS REPORTING "YES" TO INQUIRIES ON SPECIFIED FACILITIES AND EQUIPMENT, FOR THE UNITED STATES: 1959 AND 1954

[Data for conterminous United States are based on reports for only a sample of farms. See text.]

Item	Farms reporting			
	Number		Percent of all farms	
	1959	1954 ¹	1959	1954 ¹
Telephone.....	2,410,982	2,332,309	65.0	48.8
Home freezer.....	2,067,425	1,541,415	55.8	32.2
Milking machine.....	666,197	712,022	18.0	14.9
Electric milk cooler.....	428,380	NA	11.6	NA
Crop drier.....	51,523	NA	1.4	NA
Power-operated elevator, conveyor, or blower.....	925,450	NA	25.0	NA

NA Not available.

¹Data for Alaska and Hawaii not included.

Table 3.—SPECIFIED ITEMS OF FARM EQUIPMENT FOR WHICH DATA WERE OBTAINED IN ONLY A FEW STATES: 1959

Item	Alaska ¹		Hawaii				
	Farms reporting	Number	Farms reporting	Number			
Silos (upright and pit).....	103	174	NA	NA			
Potato diggers.....	82	99	NA	NA			
Electric motors 1 hp. or more..	NA	NA	1,167	2,943			
Power spraying and dusting machines.....	NA	NA	1,578	1,941			
Electricity:							
From power line.....	306	...	5,211	...			
From home plant.....	23	...	68	...			
	Farms reporting						
	Total	Michi- gan	Minne- sota	New York	Ohio	Pennsyl- vania	Wis- consin
Bulk-type milk coolers.....	59,215	8,426	10,012	7,271	7,439	6,572	19,495

NA Not available.

¹April 1, 1960.

FARM FACILITIES, FARM EQUIPMENT

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Table 4.—SPECIFIED FARM EQUIPMENT FOR THE UNITED STATES: 1920 TO 1959

[Data for conterminous United States for 1959, 1954, and 1950, and data for grain combines and milking machines for 1945 are based on reports for only a sample of farms. See text.]

Item and year	Farms reporting		Number			
	Number	Percent of all farms	Total	Average per farm reporting	Increase or decrease (-) ¹	
					Number	Percent
Grain combines.....1959...	974,735	26.3	1,041,553	1.1	62,477	6.4
.....1954 ¹ ...	923,709	19.3	979,050	1.1	265,417	37.2
.....1950 ¹ ...	665,378	12.4	713,633	1.1	339,946	91.0
.....1945 ¹ ...	349,576	6.0	373,687	1.1	...	...
Corn pickers.....1959 ¹ ...	766,948	20.7	792,379	1.0	104,913	15.3
.....1954 ¹ ...	676,088	14.1	687,466	1.0	231,947	50.9
.....1950 ¹ ...	447,387	8.3	455,519	1.0	...	...
Pick-up balers.....1959...	669,540	18.1	679,776	1.0	231,845	51.8
.....1954 ¹ ...	442,872	9.3	447,909	1.0	252,051	128.7
.....1950 ¹ ...	191,658	3.6	195,858	1.0	...	...
Field storage harvesters.....1959...	275,282	7.4	290,985	1.1	89,177	44.2
.....1954 ¹ ...	197,265	4.1	201,605	1.0	...	...
Motortrucks.....1959...	2,177,080	58.7	2,833,763	1.3	122,682	4.5
.....1954 ¹ ...	2,212,892	46.3	2,702,811	1.2	496,141	22.5
.....1950...	1,843,107	34.2	2,213,735	1.2	716,370	48.1
.....1945 ¹ ...	1,299,350	22.2	1,490,300	1.1	443,216	42.3
.....1940 ¹ ...	944,184	15.5	1,047,084	1.1	146,699	16.3
.....1930 ¹ ...	845,335	13.4	900,385	1.1	761,216	547.0
.....1920 ¹ ...	131,551	2.0	139,169	1.1	...	...
Tractors.....1959...	2,679,561	72.3	5,138,921	1.9	442,044	9.4
.....1954 ¹ ...	2,876,572	60.1	4,692,341	1.6	1,083,060	30.0
.....1950...	2,526,421	46.9	3,612,325	1.4	1,187,534	49.0
.....1945 ¹ ...	2,002,662	34.2	2,421,747	1.2	854,317	54.5
.....1940 ¹ ...	1,409,697	23.1	1,567,430	1.1	647,409	70.4
.....1930 ¹ ...	851,457	13.5	920,021	1.1	414,088	81.8
.....1925 ¹ ...	473,848	7.4	505,933	1.1	259,850	105.6
.....1920 ¹ ...	229,332	3.6	246,083	1.1	...	...
Tractors, other than garden.....1959...	2,586,788	69.8	4,688,493	1.8	339,618	7.8
.....1954 ¹ ...	2,773,074	58.0	4,345,234	1.6	951,474	28.0
.....1950 ¹ ...	2,433,168	45.2	3,393,760	1.4	...	...
1 tractor ².....1959...	1,294,040	34.9	1,294,040	1.0	-405,430	-23.9
.....1954 ¹ ...	1,698,435	35.5	1,698,435	1.0	-42,567	-2.4
.....1950 ¹ ...	1,741,002	32.4	1,741,002	1.0	62,633	3.7
.....1945 ¹ ...	1,678,369	28.6	1,678,369	1.0	...	...
2 tractors ².....1959...	809,969	21.8	1,619,938	2.0	70,610	4.6
.....1954 ¹ ...	774,382	16.2	1,548,764	2.0	477,760	44.6
.....1950 ¹ ...	535,502	10.0	1,071,004	2.0	536,614	100.4
.....1945 ¹ ...	267,195	4.6	534,390	2.0	...	...
3 or more tractors ².....1959...	482,779	13.0	1,774,515	3.7	674,423	61.4
.....1954 ¹ ...	300,257	6.3	1,098,035	3.7	516,281	88.7
.....1950 ¹ ...	156,664	2.9	581,754	3.7	372,766	178.4
.....1945 ¹ ...	57,098	1.0	208,988	3.7	...	...
3 tractors ².....1959...	321,363	8.7	964,089	3.0	342,255	55.1
.....1954 ¹ ...	207,194	4.3	621,582	3.0	...	...
4 tractors ².....1959...	97,429	2.6	389,716	4.0	170,628	77.9
.....1954 ¹ ...	54,730	1.1	218,920	4.0	...	...
5 or more tractors ².....1959...	63,987	1.7	420,710	6.6	161,555	62.7
.....1954 ¹ ...	38,333	0.8	257,533	6.7	...	...
Wheel tractors.....1959...	2,556,266	68.9	4,489,286	1.8	301,696	7.2
.....1954 ¹ ...	2,741,841	57.3	4,185,780	1.5	935,914	28.8
.....1950...	2,383,705	44.2	3,251,119	1.4	962,205	42.1
.....1945 ¹ ...	NA	NA	2,287,661	NA	...	...
Crawler tractors.....1959...	161,091	4.3	199,207	1.2	37,922	23.8
.....1954 ¹ ...	129,716	2.7	159,454	1.2	15,560	10.8
.....1950...	120,558	2.2	145,284	1.2	42,672	42.2
.....1945 ¹ ...	NA	NA	101,222	NA	...	...
Garden tractors.....1959...	424,790	11.5	450,428	1.1	102,426	29.5
.....1954 ¹ ...	335,121	7.0	347,107	1.0	131,586	61.1
.....1950...	206,391	3.8	215,922	1.0	145,776	209.0
.....1945 ¹ ...	NA	NA	69,745	NA	...	...
Automobiles.....1959...	2,956,713	79.7	3,635,419	1.2	-634,106	-14.9
.....1954 ¹ ...	3,391,557	70.9	4,262,785	1.3	63,561	1.5
.....1950...	3,393,011	63.0	4,204,194	1.2	50,949	1.2
.....1945 ¹ ...	3,630,433	62.0	4,148,275	1.1	4,139	0.1
.....1940 ¹ ...	3,542,036	58.1	4,144,136	1.2	9,461	0.2
.....1930 ¹ ...	3,650,003	58.0	4,134,675	1.1	1,988,313	92.6
.....1920 ¹ ...	1,979,564	30.7	2,146,362	1.1	...	...
Milking machine.....1959...	666,197	18.0	NA	NA	NA	NA
.....1954 ¹ ...	712,022	14.9	NA	NA	NA	NA
.....1950...	636,448	11.8	NA	NA	NA	NA
.....1945 ¹ ...	365,065	6.2	NA	NA	...	...
Electric milk cooler.....1959...	428,380	11.6	NA	NA	NA	NA
Crop drier.....1959...	51,523	1.4	NA	NA	NA	NA
Power-operated elevator, conveyor, or blower.....1959...	925,450	25.0	NA	NA	NA	NA

NA Not available.

¹Data for Alaska and Hawaii not included.

²Figures for 1959, 1954, and 1950 relate to tractors other than garden tractors; figures for 1945 relate to all tractors.

GENERAL REPORT

Table 5.—SPECIFIED FARM EQUIPMENT—FARMS REPORTING AND NUMBER, FOR COMMERCIAL FARMS AND FOR OTHER FARMS, FOR THE UNITED STATES: 1959 AND 1954

[Data for conterminous United States are based on reports for only a sample of farms. See text]

Item	Total farms		Commercial farms		Other farms	
	1959	1954 ²	1959	1954 ²	1959	1954 ²
Grain combines.....farms reporting...	974,735	923,709	900,375	896,024	74,360	27,685
percent distribution...	100.0	100.0	92.4	97.0	7.6	3.0
number...	1,041,553	979,050	965,160	950,483	76,393	28,567
percent distribution...	100.0	100.0	92.7	97.1	7.3	2.9
average per farm reporting...	1.1	1.1	1.1	1.1	1.0	1.0
Corn pickers.....farms reporting...	² 766,948	676,088	² 712,486	662,935	² 54,462	13,153
percent distribution...	² 100.0	100.0	² 92.9	98.1	² 7.1	1.9
number...	² 792,379	687,466	² 737,191	674,180	² 55,188	13,286
percent distribution...	² 100.0	100.0	² 93.0	98.1	² 7.0	1.9
average per farm reporting...	² 1.0	1.0	² 1.0	1.0	² 1.0	1.0
Pick-up balers.....farms reporting...	669,540	442,872	615,327	427,279	54,213	15,593
percent distribution...	100.0	100.0	91.9	96.5	8.1	3.5
number...	679,776	447,909	624,744	432,010	55,032	15,899
percent distribution...	100.0	100.0	91.9	96.5	8.1	3.5
average per farm reporting...	1.0	1.0	1.0	1.0	1.0	1.0
Field forage harvesters.....farms reporting...	275,282	197,265	266,353	193,457	8,929	3,808
percent distribution...	100.0	100.0	96.8	98.1	3.2	1.9
number...	290,985	201,605	281,402	197,583	9,583	4,022
percent distribution...	100.0	100.0	96.7	98.0	3.3	2.0
average per farm reporting...	1.1	1.0	1.1	1.0	1.1	1.1
Motortrucks.....farms reporting...	2,177,080	2,212,892	1,633,579	1,774,407	543,501	438,485
percent distribution...	100.0	100.0	75.0	80.2	25.0	19.8
number...	2,833,763	2,702,811	2,234,212	2,223,361	599,551	479,450
percent distribution...	100.0	100.0	78.8	82.3	21.2	17.7
average per farm reporting...	1.3	1.2	1.4	1.3	1.1	1.1
Tractors.....farms reporting...	2,679,561	2,876,572	1,995,728	2,398,982	683,833	477,590
percent distribution...	100.0	100.0	74.5	83.4	25.5	16.6
number...	5,138,921	4,692,341	4,234,453	4,129,111	904,468	563,230
percent distribution...	100.0	100.0	82.4	88.0	17.6	12.0
average per farm reporting...	1.9	1.6	2.1	1.7	1.3	1.2
Tractors other than garden.....farms reporting...	2,586,788	2,773,074	1,965,606	2,364,935	621,182	408,139
percent distribution...	100.0	100.0	76.0	85.3	24.0	14.7
number...	4,688,493	4,345,234	3,946,920	3,895,507	741,573	449,727
percent distribution...	100.0	100.0	84.2	89.7	15.8	10.3
average per farm reporting...	1.8	1.6	2.0	1.6	1.2	1.1
1 tractor.....farms reporting...	1,294,040	1,698,435	768,858	1,322,243	525,182	376,192
percent distribution...	100.0	100.0	59.4	77.9	40.6	22.1
2 tractors.....farms reporting...	809,969	774,382	728,892	747,196	81,077	27,186
percent distribution...	100.0	100.0	90.0	96.5	10.0	3.5
3 tractors.....farms reporting...	321,363	207,194	310,109	204,012	11,254	3,182
percent distribution...	100.0	100.0	96.5	98.5	3.5	1.5
4 tractors.....farms reporting...	97,429	54,730	95,132	54,069	2,297	661
percent distribution...	100.0	100.0	97.6	98.8	2.4	1.2
5 or more tractors.....farms reporting...	63,987	38,333	62,615	37,415	1,372	918
percent distribution...	100.0	100.0	97.9	97.6	2.1	2.4
Wheel tractors.....farms reporting...	2,556,266	2,741,841	1,946,305	2,341,370	609,961	400,471
percent distribution...	100.0	100.0	76.1	85.4	23.9	14.6
number...	4,489,286	4,185,780	3,778,230	3,751,410	711,056	434,370
Crawler tractors.....farms reporting...	161,091	129,716	133,687	115,696	27,404	14,020
percent distribution...	100.0	100.0	83.0	89.2	17.0	10.8
number...	199,207	159,454	168,690	144,097	30,517	15,357
Garden tractors.....farms reporting...	424,790	335,121	268,139	224,006	156,651	111,115
percent distribution...	100.0	100.0	63.1	66.8	36.9	33.2
number...	450,428	347,107	287,533	233,604	162,895	113,503
Automobiles.....farms reporting...	2,956,713	3,391,557	2,016,235	2,480,220	940,478	911,337
percent distribution...	100.0	100.0	68.2	73.1	31.8	26.9
number...	3,635,419	4,262,785	2,522,507	3,201,011	1,112,912	1,061,774
percent distribution...	100.0	100.0	69.4	75.1	30.6	24.9
average per farm reporting...	1.2	1.3	1.3	1.3	1.2	1.2
Milking machine.....farms reporting...	666,197	712,022	610,256	686,402	55,941	25,620
percent distribution...	100.0	100.0	91.6	96.4	8.4	3.6
Electric milk cooler.....farms reporting...	428,380	NA	401,350	NA	27,030	NA
percent distribution...	100.0	NA	93.7	NA	6.3	NA
Crop drier.....farms reporting...	51,523	NA	48,745	NA	2,778	NA
percent distribution...	100.0	NA	94.6	NA	5.4	NA
Power-operated elevator, conveyor, or blower.....farms reporting...	925,450	NA	875,783	NA	49,667	NA
percent distribution...	100.0	NA	94.6	NA	5.4	NA

NA Not available.

¹Data are for "part-time," "part-retirement," and "abnormal" farms. See text.

²Data for Alaska and Hawaii not included.

Electric Milk Coolers, Crop Driers, and Power-operated Elevators, Conveyors, or Blowers.—Inquiries regarding these items were asked for the first time during the 1959 enumeration. A question regarding bulk-type milk coolers, used for the first time in 1959, appeared on the questionnaires for six States—New York, Pennsylvania, Ohio, Michigan, Wisconsin, and Minnesota.

Questions for such items as running water, television sets, electric pig brooders, power feed grinders, and artificial ponds, reservoirs, and earth tanks were not carried on the 1959 agriculture questionnaire. A brief discussion of the questions used in earlier censuses but not used in 1959 is found in Volume II: General Report, 1954 Census of Agriculture, Chapter III.

Number of Farm Machinery and Equipment Items on Farms.—Data in terms of the actual number were obtained for the following specified items of farm equipment "on this place" in 1959:

Section XIV.—EQUIPMENT AND FACILITIES NOW ON THIS PLACE		Number
Include equipment, whether owned by you or by others, on this place. Include equipment and facilities that are temporarily out of order.		
How many of the following are on this place—	[291] Grain combines?	
	292. Corn pickers (include picker-shellers and corn combines)?	
	293. Pick-up balers?	
	294. Field forage harvesters (for field chopping of silage and forage crops)?	
	295. Motortrucks (include pick-ups)?	
	296. Wheel tractors other than garden?	
	297. Garden tractors?	
	298. Crawler tractors (tracklaying, caterpillar)?	
	299. Automobiles?	

Enumerators were specifically instructed to exclude stationary balers but to include both hand-tie and automatic balers in the pick-up baler count. Corn pickers related to all types of machines used for picking corn whether used in separate or in combined picking-shelling operations. Motortrucks were to include pick-up trucks and truck-trailer combinations; jeeps and station wagons were also to be included if they were used primarily as trucks, but school buses were specifically excluded. Wheel tractors were to include home-built tractors but specifically excluded garden tractors, implements with built-in power units, such as self-propelled combines or powered buckrakes, and the power unit of a truck-trailer combination. Garden tractors were not defined. Automobiles were to include jeeps and station wagons if they were used primarily as passenger vehicles. The automobile count was to include automobiles owned by the farm operator, by hired workers, or by others living on the place.

Within the last 40 years, mechanical power has almost completely displaced animal power for farming purposes. The displacement of horses and mules by tractors, trucks, and automobiles is now so widespread that there is no longer any need for a classification of farms by type of work power. Consequently such a classification is not presented in the 1959 Census of Agriculture. Data on farms by class of work power for 1954, 1950, and 1945 are provided in the census of agriculture reports for those years.

Changes in the Number of Farms Reporting Farm Machines, Equipment, and Facilities.—Mechanical power with its complement of adapted machines has enabled the average farm family or farm worker to handle a larger acreage. From 1920 to 1959, the number of farm workers declined 45 percent, from 13.4 million

to 7.4 million, while the acreage of cropland handled per worker increased 70 percent, from 30 acres to 52 acres. During this period the average size of farm in the United States increased from 148 acres to 303 acres. This increase resulted mainly from farm consolidations. Total land in farms increased only 17.2 percent during the 4-decade period while the number of farms decreased from 6.5 million in 1920 to 3.7 million in 1959. Fewer families with fewer workers now handle more land and produce substantially more products for sale than they did in 1920.

The number of farms in the United States declined 22.6 percent (conterminous United States only) or 1,079,000 from 1954 to 1959. Approximately 232,000 of the 1,079,000 decrease in the number of farms resulted from a change in the definition of a farm. Using the 1954 definition, the 1959 count would have shown approximately 3,935,000 farms, or a decrease of 847,000 (17.7 percent) from 1954 to 1959. The number of farms in 1959 was smaller than in 1954 in every State and in all except 42 counties of the 3,067 in the 48 conterminous States. (Comparative data for 1954 are not available for Alaska and Hawaii.) Almost three-fifths (59.8 percent) of the decrease in number of farms was in farms of fewer than 50 acres each. Between 1954 and 1959, the number of farms of 500 to 999 acres increased by 4.3 percent while the number of those 1,000 acres and over rose by 4.5 percent. Farms of 500 acres or more have increased 62.3 percent in number during the last 35 years and farms in this size group now comprise over 9 percent of the Nation's farms. The trend toward fewer but larger farm operating units has continued as farmers in general have combined smaller farms units to obtain greater efficiency in the use of their modern power and equipment.

Nearly two farms out of three had telephones in 1959. The proportion of farms with telephones was higher in 1959 than in 1954 in every State. The number of farms with telephones was 3.2 percent higher in 1959 than in 1954 but the percent of all farms having telephones increased from 48.8 to 65.0 (conterminous United States only, see table 6). Despite the increase from 1954 to 1959 in the number of farms with telephones, fewer farms were equipped with this facility in 1959 than in 1920, when 38.7 percent of all farms in the United States had telephone

Table 6.—FARMS REPORTING SPECIFIED FACILITIES, FOR THE UNITED STATES: 1920 TO 1959

[Data for conterminous United States for 1959, 1954, and 1950 are based on reports for only a sample of farms. See text. Figures for divisions and States in Tables 10 and 11.]

Year	Farms reporting			
	Number	Percent of all farms	Increase or decrease (-) ¹	
			Number	Percent
Telephone				
1959.....	2,410,982	65.0	74,096	3.2
1954 ¹	2,332,309	48.8	274,753	13.4
1950.....	2,059,659	38.2	191,447	10.3
1945 ¹	1,866,109	31.8	339,155	22.2
1940 ¹	1,526,954	25.0	-612,240	-28.6
1930 ¹	2,139,194	34.0	-359,299	-14.4
1920 ¹	2,498,493	38.7	...	...
Home freezer				
1959.....	2,067,425	55.8	523,435	34.0
1954 ¹	1,541,415	32.2	890,903	137.0
1950.....	650,687	12.1	...	...

¹Data for Alaska and Hawaii not included.

service. The disappearance of farmer- or cooperative-owned telephone facilities in rural areas accounts for a part of the decline in the number of farms with telephones following 1920.

Significant progress in the number of farms equipped with telephones came in the South where, despite a 29 percent decrease in the number of farms, the farms with telephones increased 23 percent. The South's 140,000 gain in farms with telephones more than counterbalanced the combined decreases of 58,000 in the North and 8,000 in the West and provided the net increase of more than 74,000 for the country as a whole.

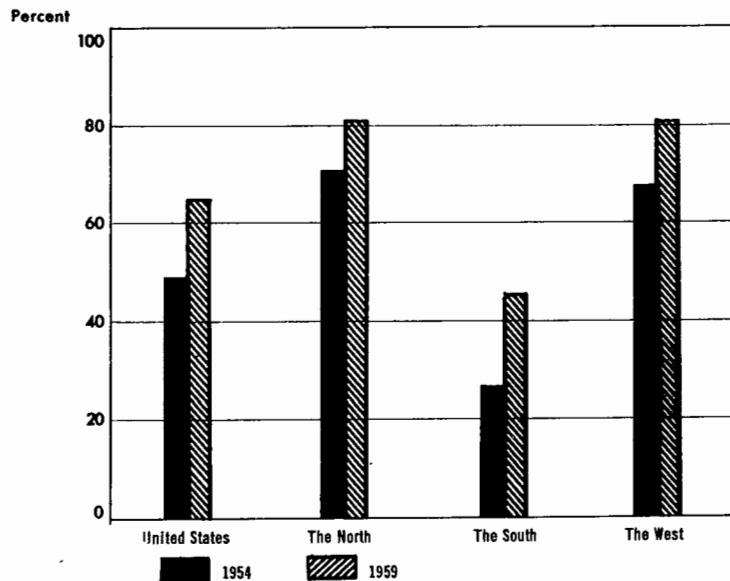
By geographic divisions, the percent of all farms having telephones in 1959 ranged from 87.5 in the New England States to 40.1 in the East South Central States. The greatest gain occurred in the East South Central States with an increase of 56,000 farms (33.0 percent) reporting telephones compared with a 24.8 percent decline in the number of farms with telephones in New England. The number of farms in New England equipped with telephones as a percent of all farms increased from 80.9 in 1954 to 87.5 in 1959 indicating that the decline in the number of farms with telephones was a result of the decrease in number of farms in the New England States. There were fewer total farms in 1959 in New York, New Jersey, New Hampshire, Massachusetts, Rhode Island, and Connecticut than there were farms with telephones in 1954. North Carolina, with an increase of more than 22,000, or 49.3 percent, reported the greatest gain in the number of farms having telephones, but Montana, with 49.8 percent increase, had the highest percent gain in the number of farms equipped with telephones. Although about half of the States had fewer farms with telephones in 1959 than in 1954, a large part of

this decrease resulted from the diminution in total number of farms rather than from the discontinuation of telephone service.

The number of farms with home freezers increased from 1954 to 1959 in spite of the rapid decrease in the overall number of farms. In 1959, five farms out of nine had a home freezer while in 1954 and 1950 only one farm in three (32.2 percent) and one farm in eight (12.1 percent), respectively, had such equipment. The 2,065,000 farms (conterminous United States only) reporting home freezers in 1959 represent an increase of 34 percent over the 1,541,000 listed in 1954 and is more than three times the 651,000 reported in 1950.

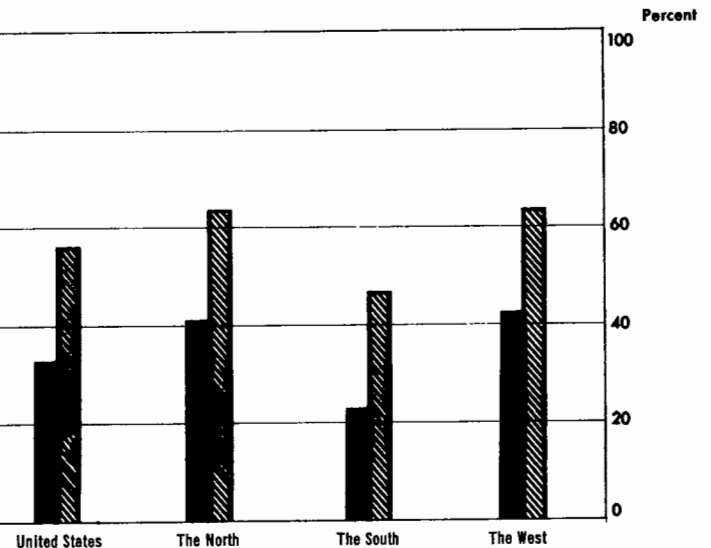
In the Middle Atlantic, East North Central, Mountain, and Pacific States about two farms out of three had home freezers in 1959. Only in the East South Central and South Atlantic States did fewer than half the farmers have home freezers. The highest percent of increase in farms reporting home freezers was the 74.2 percent reported in the East South Central States. Nearly a third of the total increase in farms with home freezers occurred in the West North Central States where the gain of over 160,000 represented an increase of 51 percent over 1954. Increases were found in 43 of the 48 States with New Hampshire, Massachusetts, Rhode Island, Connecticut, and New Jersey showing slight decreases resulting primarily from the notable drop in the total number of farms. Every State showed a higher proportion of farms with home freezers in 1959 than in 1954. Iowa's increase of nearly 37,000 farms reporting freezers was the largest gain for any State. Tennessee with a gain of more than 30,000, or 85.6 percent, had the highest percent increase over 1954.

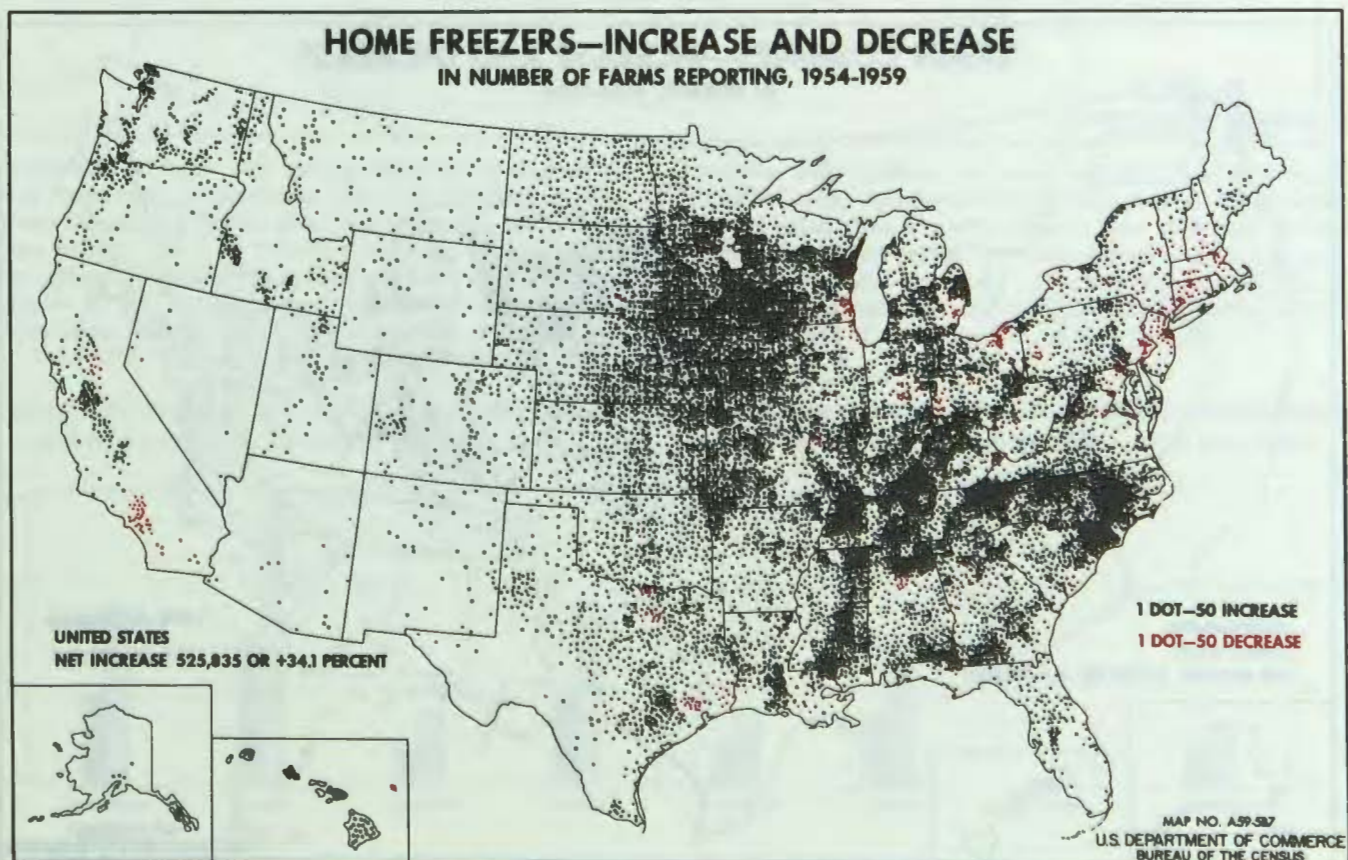
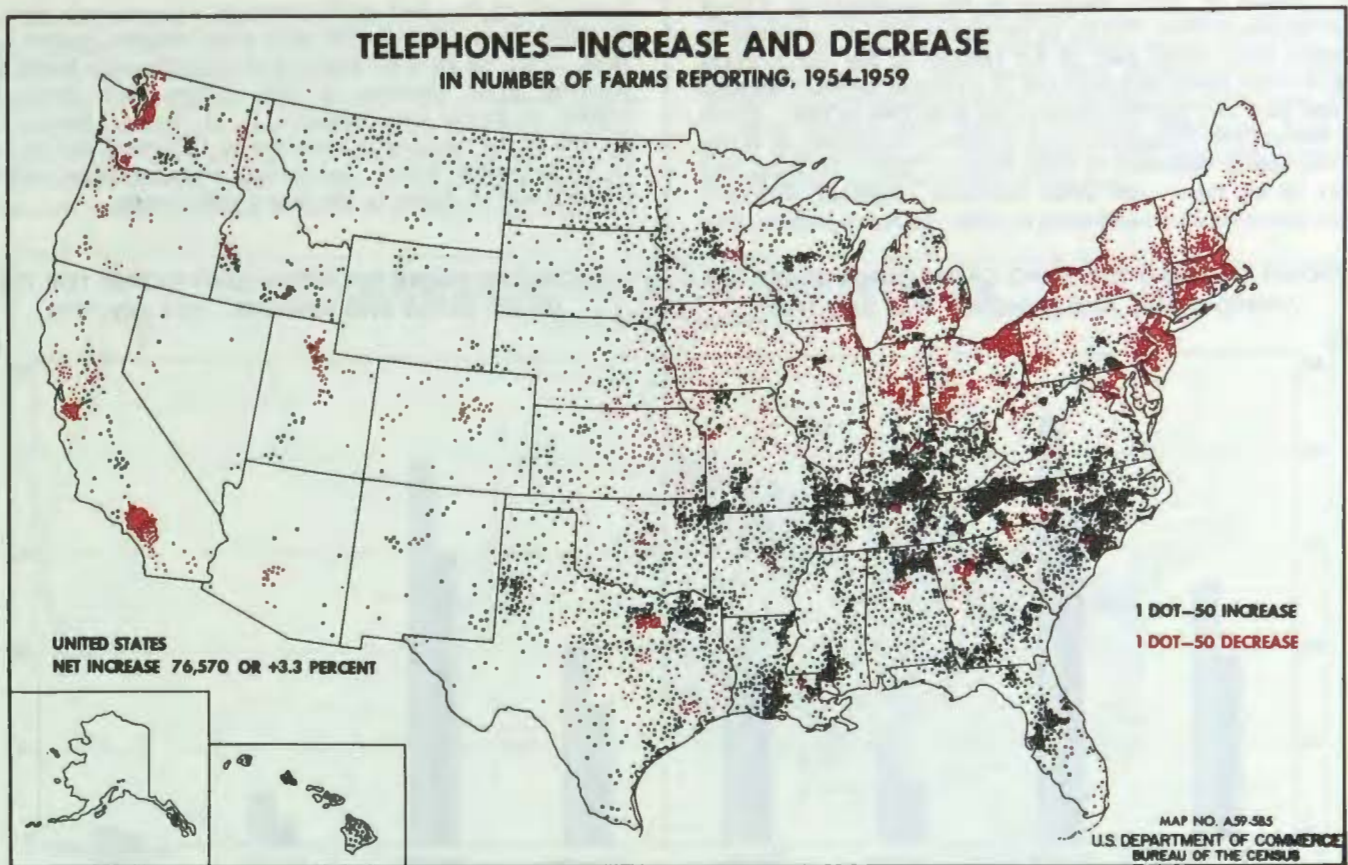
PERCENT OF FARMS REPORTING TELEPHONE FOR THE UNITED STATES AND REGIONS: 1954 AND 1959



Data for Alaska and Hawaii not included.

PERCENT OF FARMS REPORTING HOME FREEZER FOR THE UNITED STATES AND REGIONS: 1954 AND 1959





The number of grain combines in the conterminous United States increased from 979,000 in November 1954 to 1,042,000 in November 1959. This gain of 6.4 percent in the last 5 years was at a much lower rate than the 37.2 percent increase between 1950 and 1954, and the 91.0 percent rise from 1945 to 1950. Every State except New Hampshire had a higher proportion of farms reporting grain combines in 1959 than in 1954. In 1954, 19.3 percent of all farms had grain combines compared with 26.3 percent reporting such equipment in 1959. In North Dakota, four

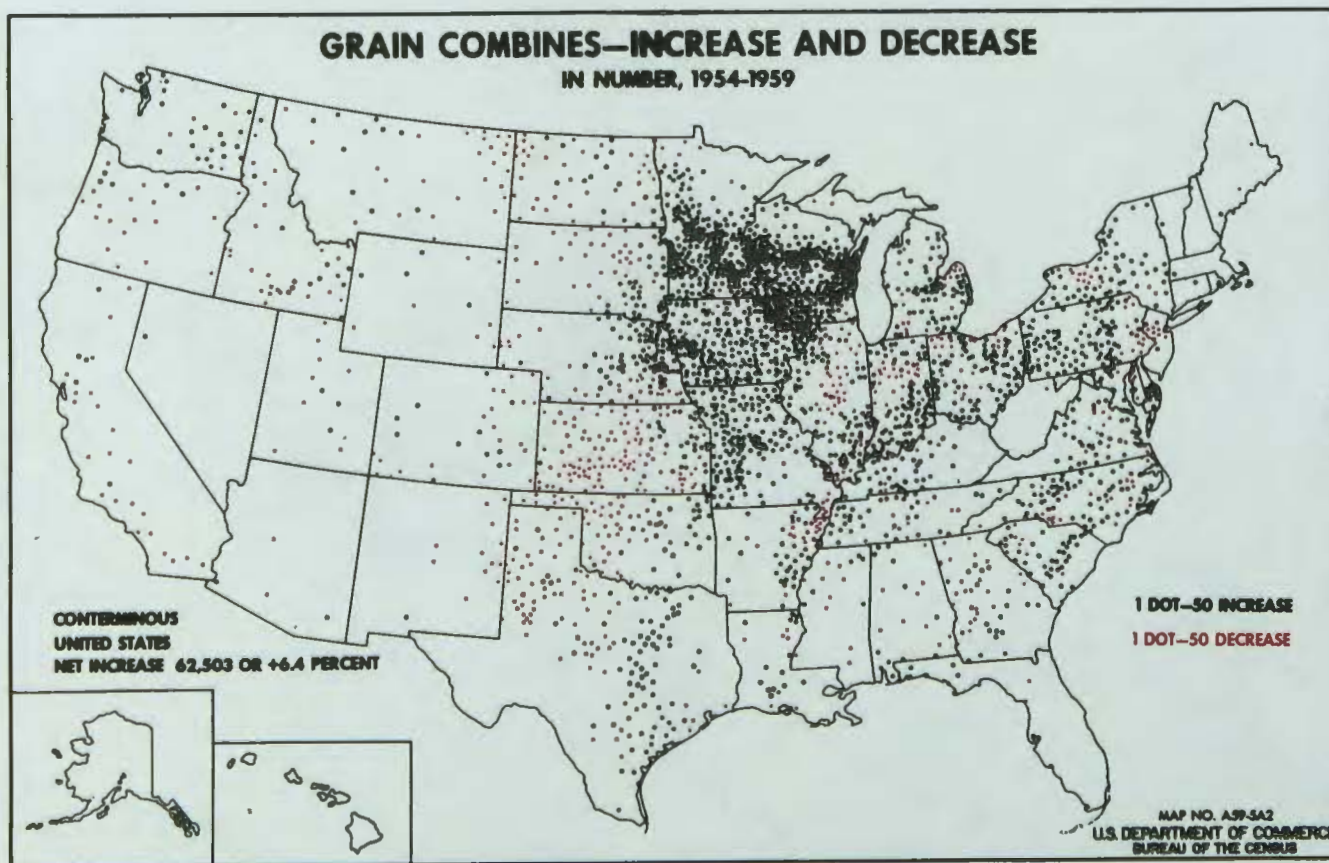
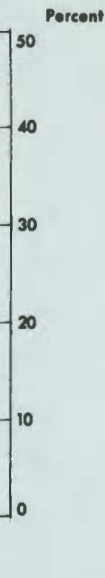
farms out of five had grain combines as compared with New Hampshire's one farm in 200 with grain combine harvest equipment. Iowa led all other States with approximately 98,000 farms reporting grain combines in 1959. There were decreases in number of farms with combines in 21 States. Nearly three-fourths of the farms with combines in 1959 were located in the 12 North Central States. In general, grain combines tend to be concentrated on farms in the larger size groups.

PERCENT OF FARMS REPORTING GRAIN COMBINES FOR THE UNITED STATES AND REGIONS: 1954 AND 1959



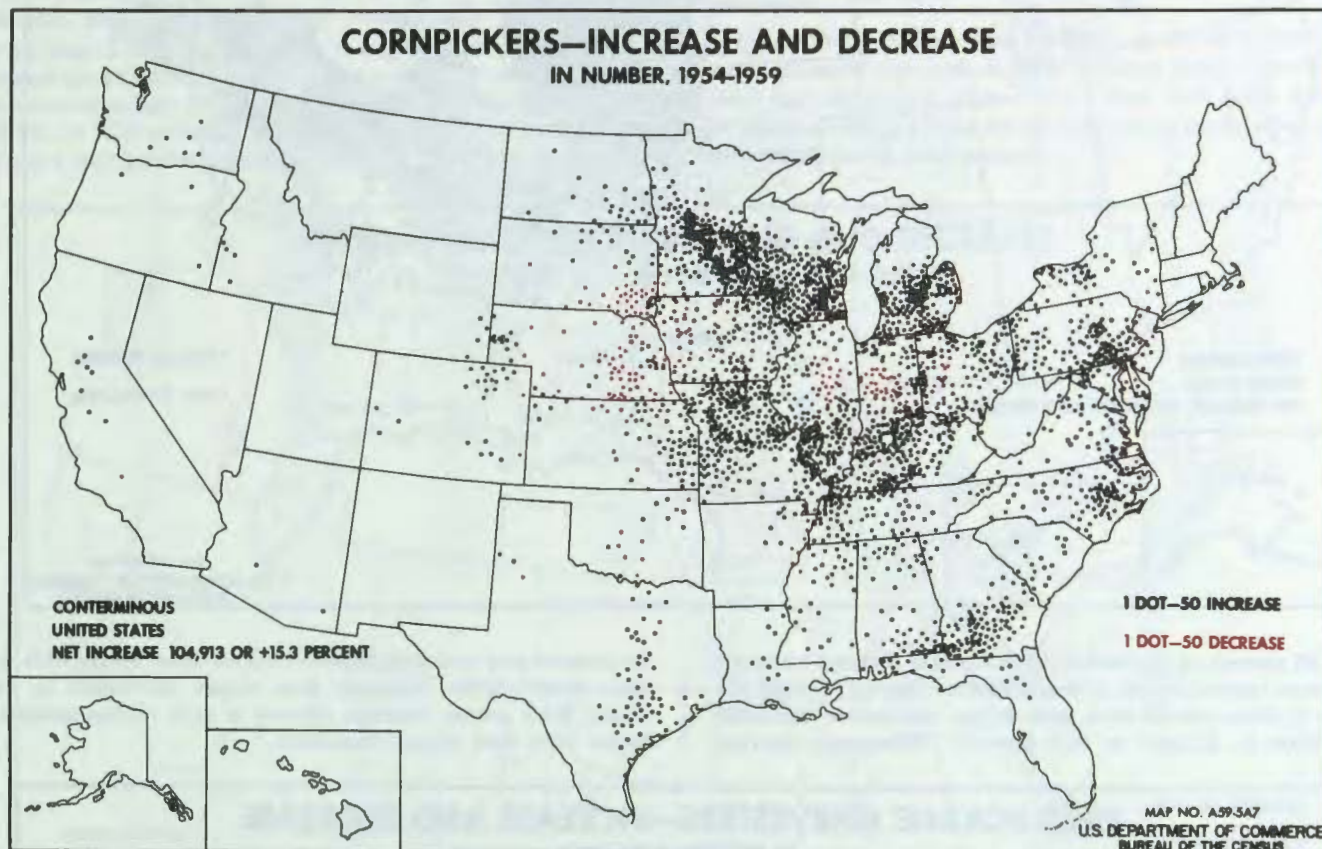
Data for Alaska and Hawaii not included.

PERCENT OF FARMS REPORTING CORN PICKERS FOR THE UNITED STATES AND REGIONS: 1954 AND 1959



The 105,000, or 15.3 percent, increase in farms reporting corn pickers during the 5 years ending in 1959 brought the total number of farms having such equipment to a new high of 767,000, or approximately 21 percent of all farms. The percent of farms with corn pickers had increased in every State even though there were four States (New Hampshire, Connecticut, South Dakota, and Nebraska) showing slight declines in the number of farms having corn pickers. Farms with corn pickers were more nu-

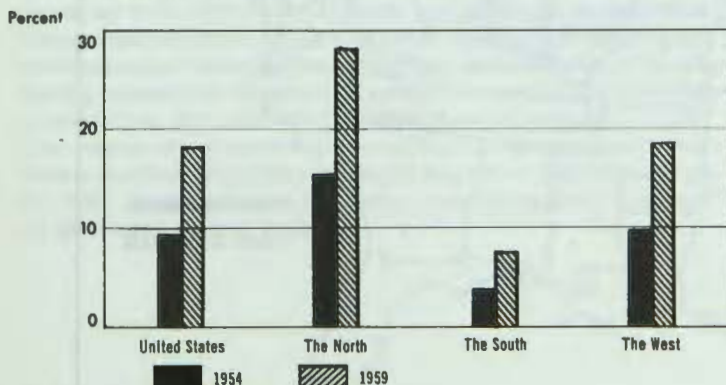
merous in Iowa than in any other State. Illinois reporting just over 100,000 farmers with corn pickers was next in line below Iowa's 122,000. In 1959, more than 517,000 farms with corn pickers, comprising 67.4 percent of the Nation's total, were located in seven States—Ohio, Indiana, Illinois, Minnesota, Iowa, Missouri, and Nebraska. These States each reported more than 40,000 farms equipped with corn pickers.



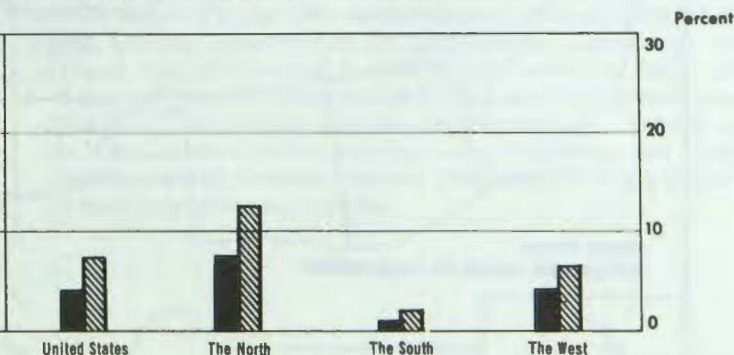
The proportion of farms with pick-up balers about doubled in the last 5 years, from 9.3 percent in 1954 to 18.1 percent in 1959. A relatively new addition to the farm implement line, the pick-up baler has found a place on 670,000 farms and there are now nearly as many farms with pick-up balers as there are farms with corn pickers in the United States. Every State reported an increase in farms with pick-up balers but the bulk of the increase came in the North Central States where the number of farms

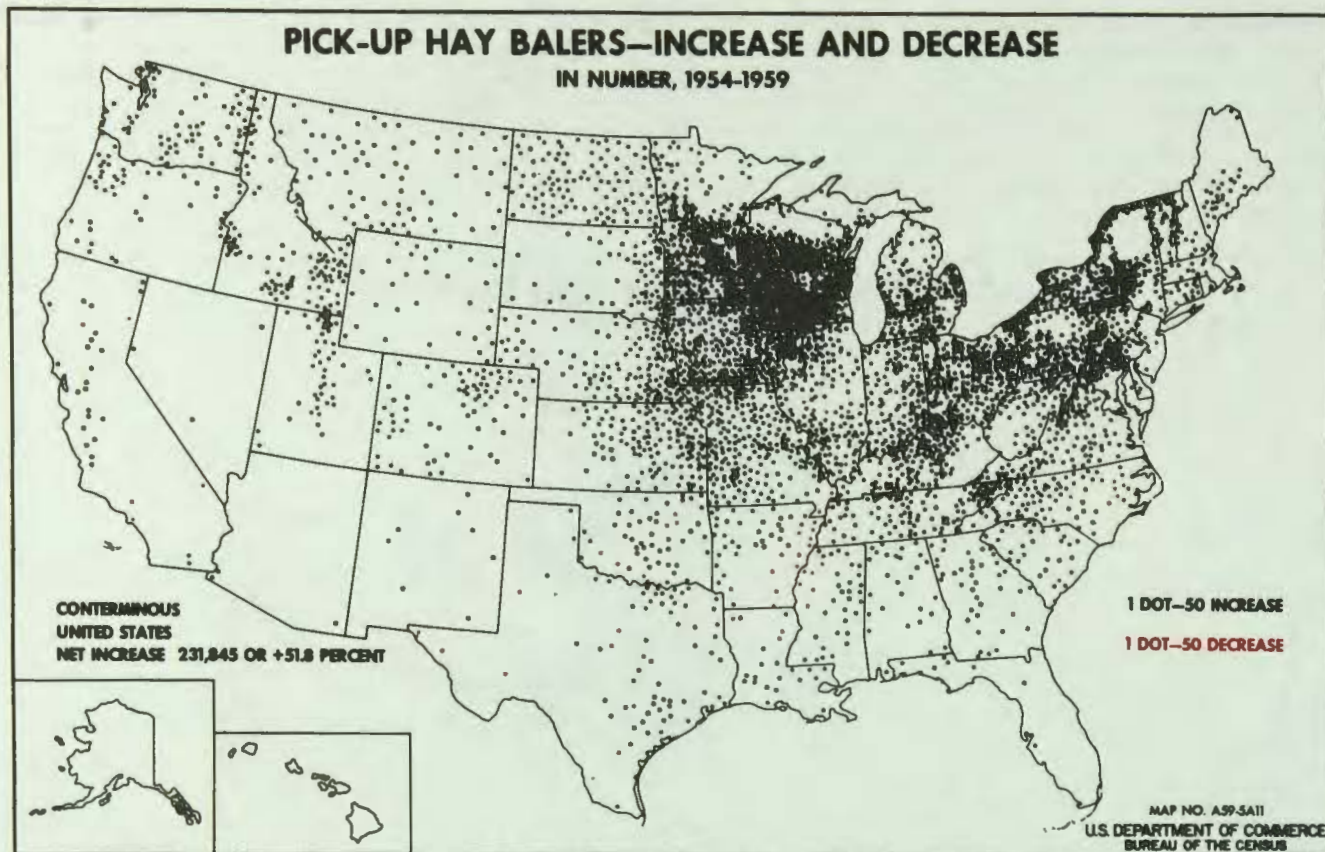
reporting pick-up balers increased from 255,000 in 1954 to 392,000 in 1959. Iowa, with more than 58,000, had more farms reporting pick-up balers than any other State. New York had the highest proportion with 44 percent. Florida reported the lowest percent of farms with pick-up balers. Fourteen States, including New York, Pennsylvania, and the 12 North Central States, accounted for 70 percent of all farms with pick-up balers.

PERCENT OF FARMS REPORTING PICK-UP BALERS FOR THE UNITED STATES AND REGIONS: 1954 AND 1959



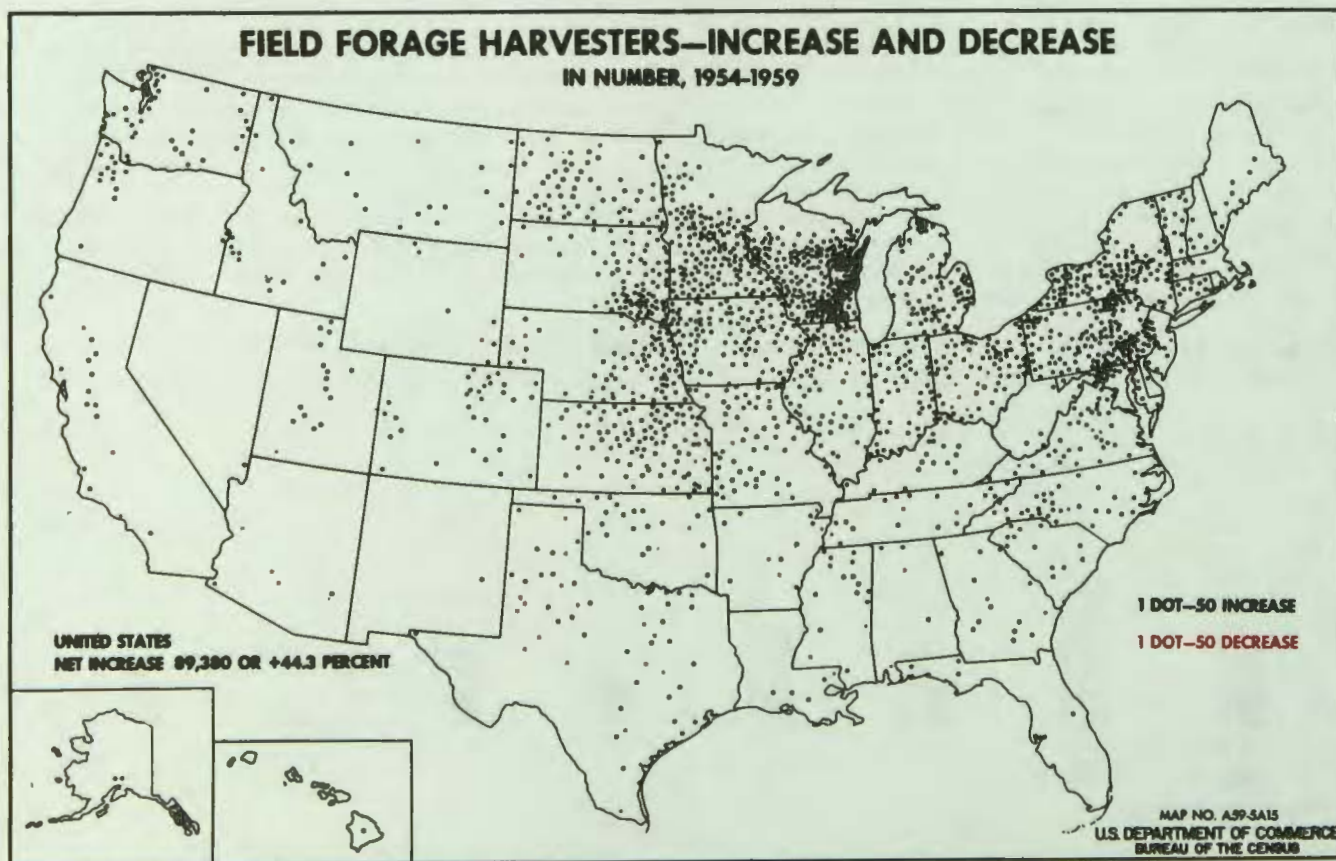
PERCENT OF FARMS REPORTING FIELD FORAGE HARVESTERS FOR THE UNITED STATES AND REGIONS: 1954 AND 1959





About 65 percent of the farms reporting field forage harvesters in 1959 were located in the 12 North Central States. During the previous 5 years, farms with field forage harvesters increased from 197,000 to 275,000, or 39.5 percent. Wisconsin reported

the largest gain and continued to lead all other States with more than 36,000 farms reporting field forage harvesters in 1959. Every State except Arizona showed a gain in the number of farms with field forage harvesters.

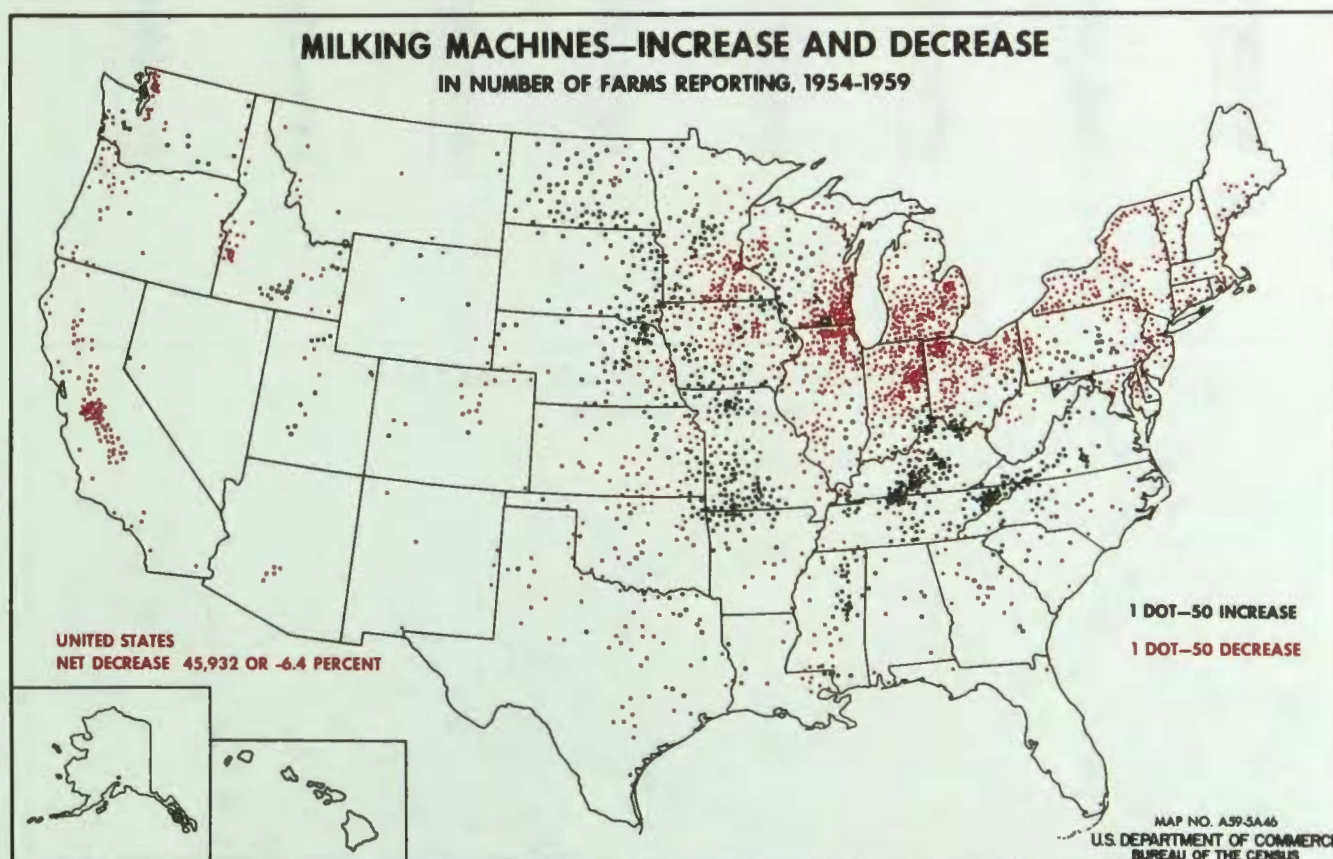


The presence of a power-operated elevator, conveyor, or blower was reported on more than 925,000 farms in the United States in 1959. Of the total, approximately 73 percent were located in the 12 North Central States. In reports on this type of farm equipment, Iowa led with more than 109,000 farms and Illinois was second with about 81,000. In total, about 51,000 farms reported crop driers for grain, forage, or other crops. Nearly 58 percent was reported in the 12 North Central States. In all, six States each had more than 3,000 farms with crop driers—Minnesota, Iowa, Nebraska, Ohio, Pennsylvania, and Illinois.

From 1954 to 1959, the number of farms with milking machines decreased from 712,000 to 666,000, or 6.5 percent. Farms reporting milk cows decreased during the same period from 2,957,000 to 1,837,000, or 37.9 percent. In 1954, 24.1 percent of farms with milk cows had milking machines while in 1959, 36.3 percent of

farms with milk cows had milking machines. Wisconsin, despite a reported decline in farms with milking machines, from 101,000 to 94,000, was the leading State in number of farms with milking machines. Minnesota with 72,000 farms with milking machines and Iowa with 47,000 followed Wisconsin in order of number of farms reporting. Of the 10 States which reported more farms with milking machines in 1959 than in 1954, Missouri showed the largest gain with an increase of nearly 4,000 farms having such equipment.

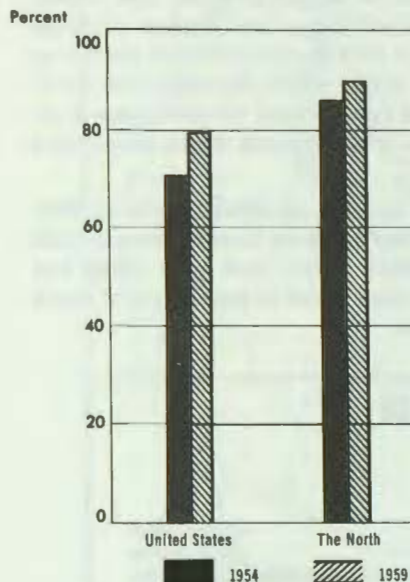
Electric milk coolers were reported on 428,000 farms in 1959. Approximately one farm in four of those farms reporting milk cows had an electric milk cooler. New York with 44,000 and Wisconsin with 39,000 led all other States in the number of farms reporting electric milk coolers.



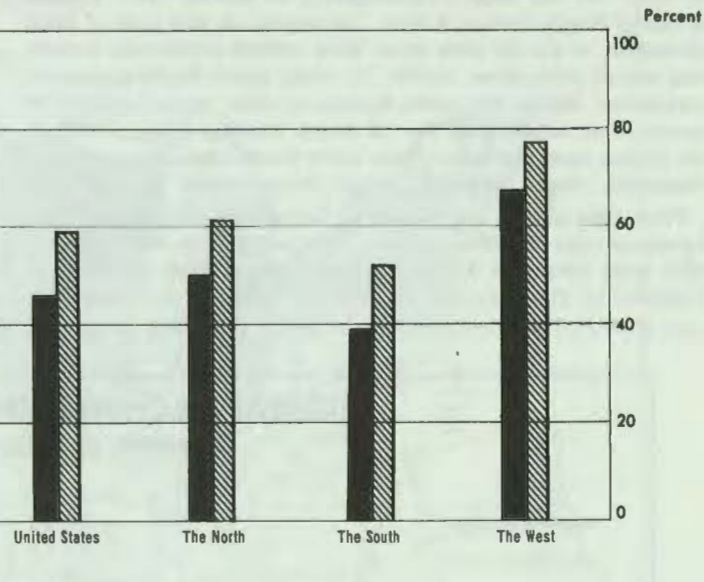
Even though the number of farms reporting automobiles decreased from 3,392,000 in 1954 to 2,952,000 in 1959 in the conterminous United States, the percent of all farms with automobiles increased from 70.9 to 79.8. Every one of the 48 conterminous States reported fewer farms with automobiles in 1959 than in the previous count 5 years earlier. However, the proportion of farms having automobiles increased in every State and in 1959 ranged upward from 52.8 percent in Mississippi to 94.8 percent in Iowa. The number of automobiles on farms in the conterminous United States declined about 634,000, from 4,263,000 in 1954 to 3,629,000 in 1959. Contributing to the decline was the marked reduction in the overall number of farms.

In 1920, only 132,000, or 2 percent of all farms in the United States, reported motortrucks. Since 1920, each census showed an increase until 2,213,000 farms reported motortrucks in 1954. The number of farms with motortrucks declined to 2,173,000 in 1959, but the proportion of all farms having motortrucks increased from 46.3 percent in 1954 to 58.7 percent in 1959. All of the North Central States except Kansas and North Dakota had increases in the number of farms with motortrucks. Outside of the North Central States, only Kentucky, Tennessee, and North Carolina showed increases between 1954 and 1959 in the number of farms reporting motortrucks.

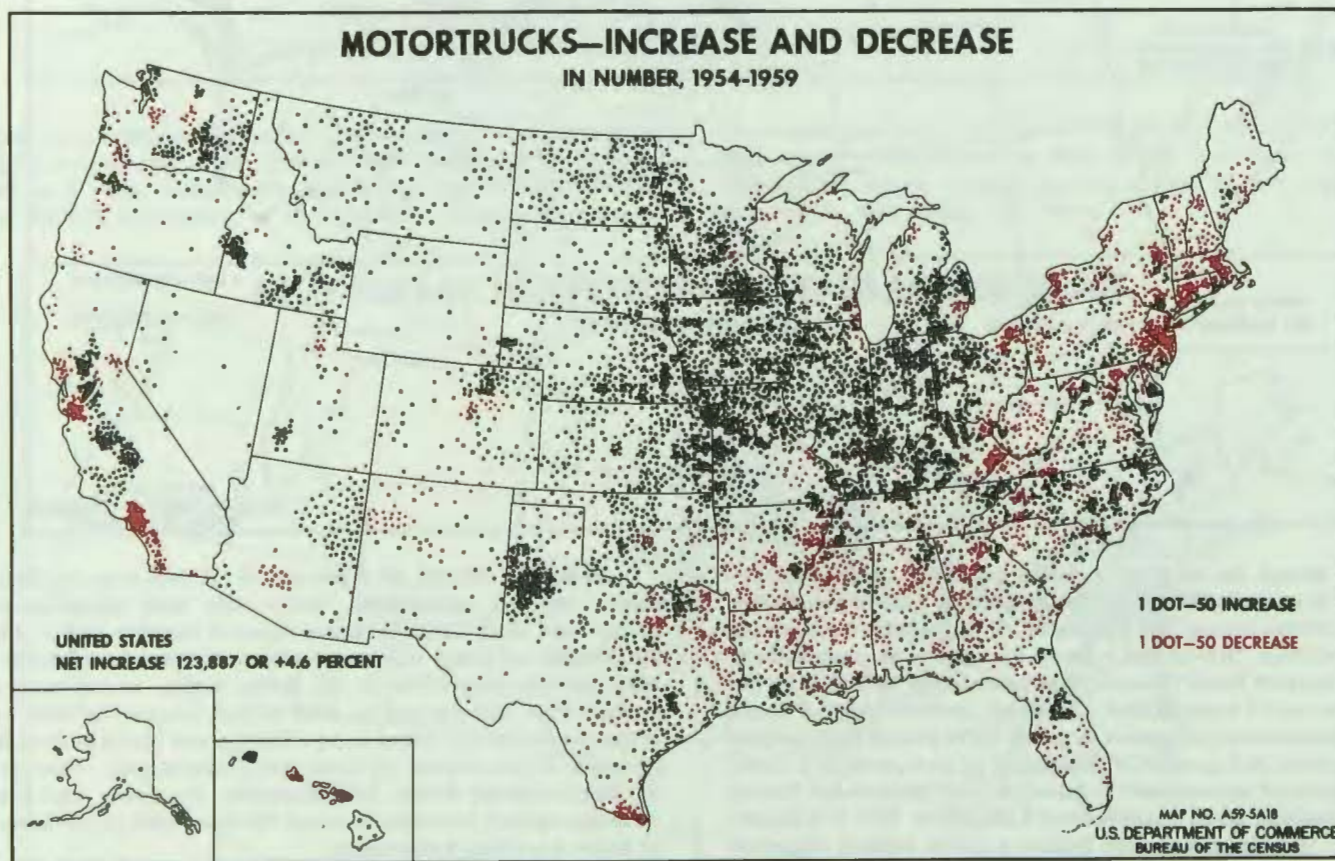
PERCENT OF FARMS REPORTING AUTOMOBILES FOR THE UNITED STATES AND REGIONS: 1954 AND 1959



PERCENT OF FARMS REPORTING MOTORTRUCKS FOR THE UNITED STATES AND REGIONS: 1954 AND 1959



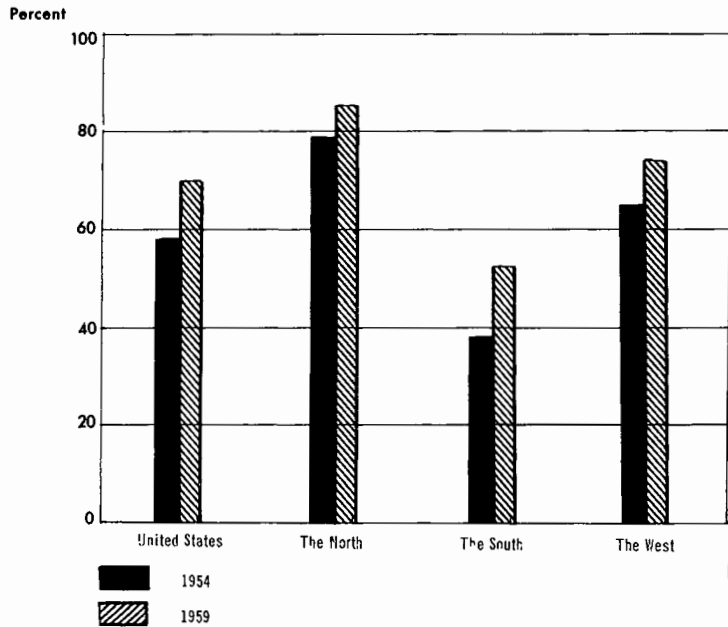
Data for Alaska and Hawaii not included.



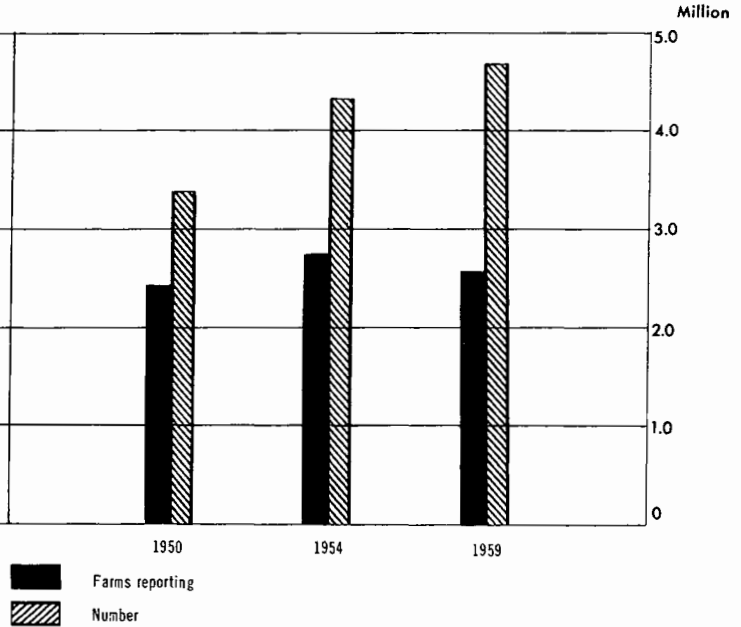
There are now on farms of the conterminous United States approximately 4,685,000 tractors of all types, sizes, and ages, but not including some 450,000 garden tractors and a considerable number of self-propelled machines, most of which are harvest machines. The 278 farms reporting 518 tractors in Alaska and 1,226 farms reporting 3,123 tractors in Hawaii are not included in these 1959 figures for the United States. The number of tractors, excluding garden tractors, increased 7.8 percent since

1954. The number of farms with tractors decreased from 2,877,000 to 2,677,000, but the proportion of all farms having tractors increased from 60.1 percent to 72.3 percent throughout the Nation. Even though the number of farms declined 22.6 percent, the total number of farms reporting tractors, excluding garden tractors, decreased only 6.8 percent from 2,773,000 in 1954 to 2,585,000 in 1959.

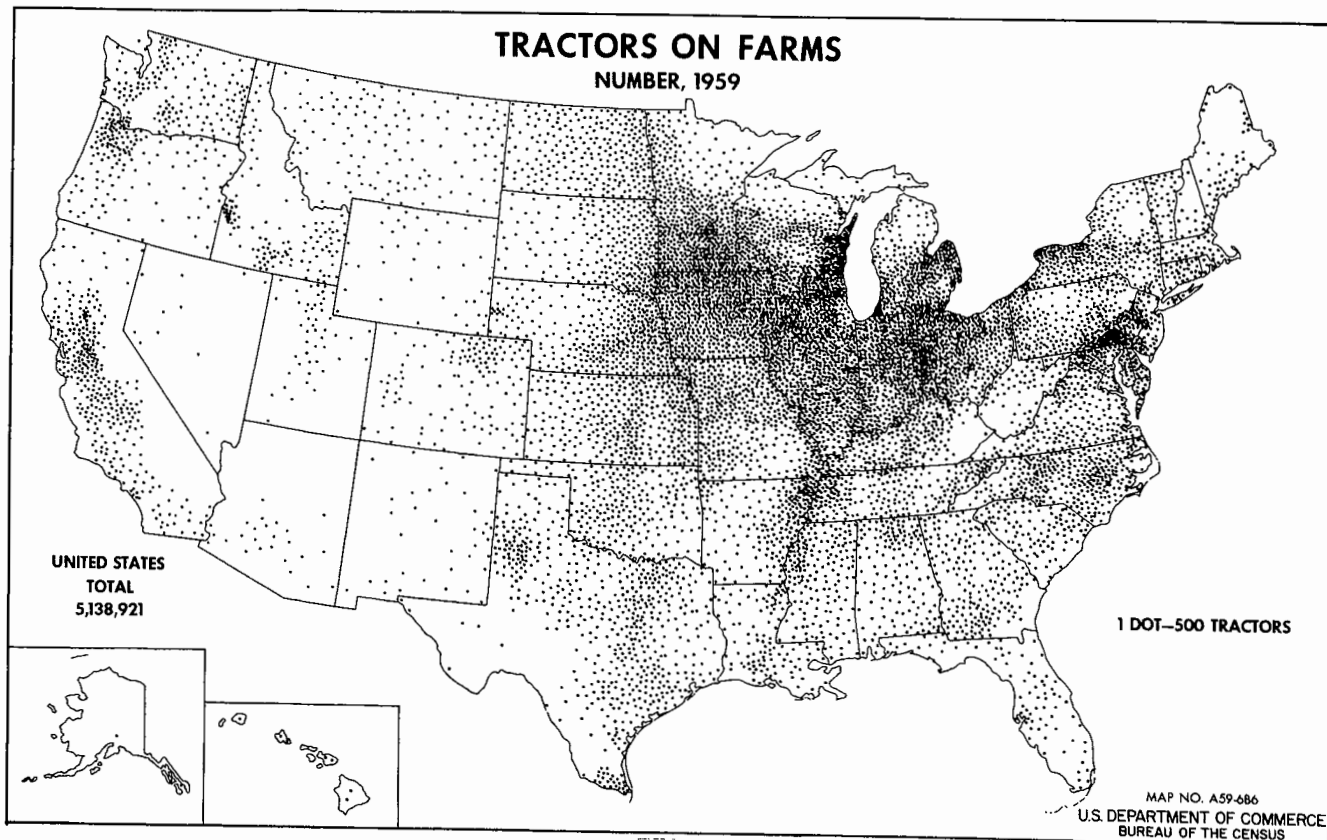
PERCENT OF FARMS REPORTING TRACTORS, OTHER THAN GARDEN, FOR THE UNITED STATES AND REGIONS: 1954 TO 1959

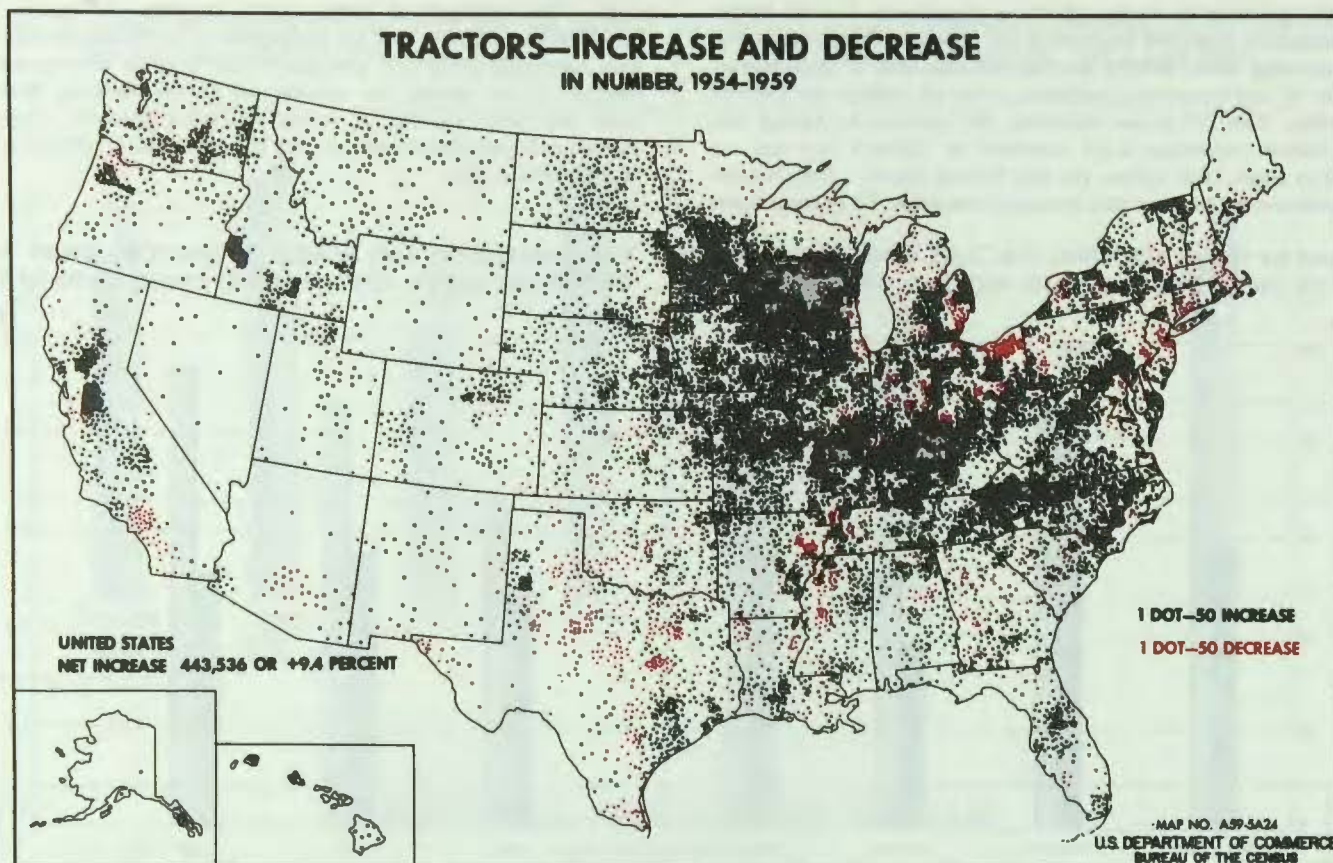


FARMS REPORTING AND NUMBER OF TRACTORS, OTHER THAN GARDEN, ON FARMS, FOR THE UNITED STATES: 1950 TO 1959



Data for Alaska and Hawaii not included.





Of the 2,773,000 farms reporting wheel and crawler tractors (garden tractors excluded) in 1954, 1,698,000 had only one tractor on each farm while 1,075,000 had two or more tractors per farm. Farms with one tractor accounted for 61.2 percent of all farms reporting tractors but they had only 39.1 percent of all wheel and crawler tractors on farms. The number of farms with one tractor decreased from 1,698,000 in 1954 to 1,293,000 in 1959, or 23.9 percent, while the number of farms with two or more tractors increased from 1,075,000 to 1,292,000, or 20.3 percent. The number of tractors on farms with two or more tractors increased from 2,647,000 to 3,393,000, or 28.2 percent. For the two or more trac-

tors per farm group, the average number of tractors per farm increased from 2.46 to 2.62. During the interval from November 1954 to November 1959, the number of farms reporting wheel and crawler tractors decreased 6.8 percent as the number of wheel and crawler tractors on farms increased 7.8 percent with a resultant increase in the average number of tractors per farm reporting from 1.57 in 1954 to 1.81 in 1959. The number of garden tractors increased nearly 30 percent during the 5-year period. The use of more tractors per farm is consistent with the increase in the average size of farm and particularly with the increase in the number of farms containing 500 acres or more.

Table 7.—FARMS REPORTING NUMBER OF TRACTORS, OTHER THAN GARDEN, PERCENT DISTRIBUTION, AND AVERAGE NUMBER OF TRACTORS PER FARM, BY SPECIFIED NUMBER OF TRACTORS, FOR THE UNITED STATES: 1959 AND 1954

[Data for conterminous United States are based on reports for only a sample of farms. See text.]

Item	All farms	Farms reporting tractors				Farms not reporting tractors
		Any tractors	1 tractor	2 tractors	3 or more tractors	
Farms reporting.....1959...	3,707,973	2,586,788	1,294,040	809,969	482,779	1,121,185
.....1954 ¹	4,783,021	2,773,074	1,698,435	774,382	300,257	2,009,947
Increase or decrease.....percent ¹	-22.6	-6.8	-23.9	4.4	57.8	-44.5
Percent distribution.....1959...	100.0	69.8	34.9	21.9	13.0	30.2
.....1954 ¹	100.0	58.0	35.5	16.2	6.3	42.0
Number of tractors.....1959...	4,688,493	4,688,493	1,294,040	1,619,938	1,774,515	...
.....1954 ¹	4,345,234	4,345,234	1,698,435	1,348,764	1,098,035	...
Increase or decrease.....percent ¹	7.8	7.8	-23.9	4.4	58.1	...
Percent distribution.....1959...	...	100.0	27.6	34.6	37.8	...
.....1954 ¹	...	100.0	39.1	35.6	25.3	...
Average number of tractors per farm.....1959...	1.26	1.81	1.00	2.00	3.68	...
.....1954 ¹	0.91	1.57	1.00	2.00	3.66	...

¹Data for Alaska and Hawaii not included.

Table 8.—PERCENT OF FARMS REPORTING TRACTORS, OTHER THAN GARDEN, BY ECONOMIC CLASS OF FARM, FOR THE UNITED STATES: 1959

[Data for conterminous United States are based on reports for only a sample of farms. See text.]

Economic class ¹	Percent of farms reporting by number of tractors reported					
	No tractors	1 tractor	2 tractors	3 tractors	4 tractors	5 or more tractors
All farms.....	30.2	34.9	21.8	8.7	2.6	1.7
Commercial farms.....	18.6	31.8	30.2	12.8	3.9	2.6
Other farms.....	51.9	40.7	6.3	0.9	0.2	0.1
Commercial:						
Class I (Farm sales of \$40,000 or more).....	8.1	9.8	16.4	21.2	16.2	28.4
Class II (Farm sales of \$20,000 to \$39,999).....	7.4	12.0	30.2	29.6	13.0	7.8
Class III (Farm sales of \$10,000 to \$19,999).....	6.9	18.3	43.2	23.3	6.1	2.1
Class IV (Farm sales of \$5,000 to \$9,999).....	11.0	33.6	40.3	12.1	2.4	0.7
Class V (Farm sales of \$2,500 to \$4,999).....	22.1	47.8	24.0	4.9	0.9	0.3
Class VI (Farm sales of \$50 to \$2,499).....	52.9	37.4	8.0	1.3	0.3	0.1
Other farms:						
Part-time (Farm sales of \$50 to \$2,499).....	48.2	43.6	7.0	1.0	0.2	0.1
Part-retirement (Farm sales of \$50 to \$2,499).....	60.2	34.4	4.6	0.6	0.1	(Z)
Abnormal (Farm sales of \$50 or more).....	25.7	18.9	15.2	11.1	7.9	21.2

² Less than 0.05 percent.

¹The classification of commercial farms and other farms was made on the basis of total value of farm products sold, days of off-farm work by the operator, and the age of the operator. Farms with a value of sales of farm products of \$50 to \$2,499 were classified as "part-time" if the operator was under 65 years of age and he either worked off the farm 100 or more days or the income he and members of his household received from nonfarm sources was greater than the total value of farm products sold. "Part-retirement" farms include those with a value of sales of farm products of \$50 to \$2,499 if the farm operator was 65 years of age or older. Many of these are farms on which the income from nonfarm sources exceeded the value of sales of farm products. Others are residential, subsistence, or marginal farms. "Abnormal" farms comprise institutional and similar kinds of farms.

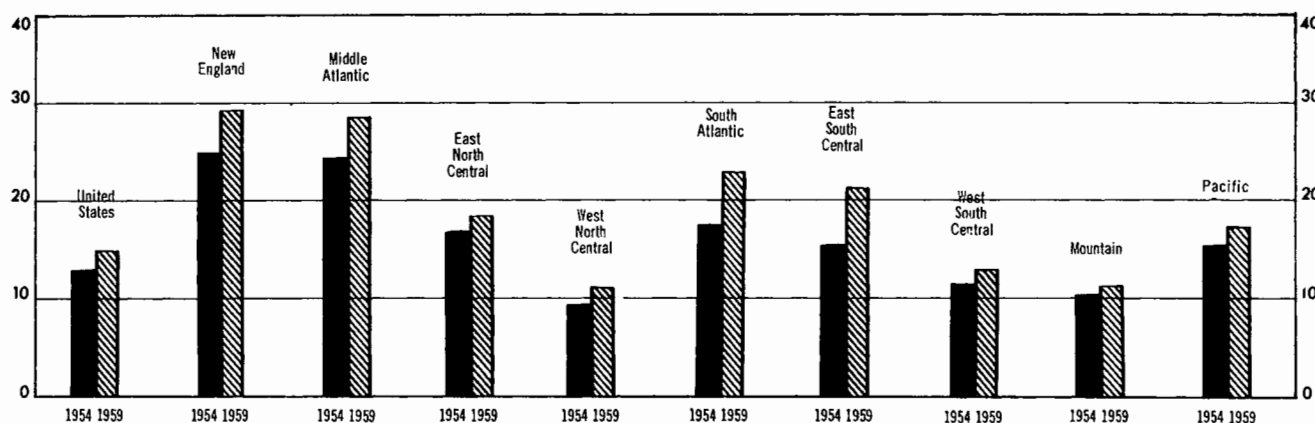
The increase in the number of tractors used per 1,000 acres of cropland harvested is another indication of the growth of farm mechanization. In 1920, less than one tractor was available for

each 1,000 acres of cropland harvested in the United States. By 1959 there were 15 tractors for each 1,000 acres of cropland harvested.

NUMBER OF TRACTORS PER 1,000 ACRES CROPLAND HARVESTED, FOR THE UNITED STATES AND GEOGRAPHIC DIVISIONS: 1954 AND 1959

Number of tractors per 1,000
acres of cropland harvested

Number of tractors per 1,000
acres of cropland harvested



Data for Alaska and Hawaii not included.

Table 9.—NUMBER OF TRACTORS PER 1,000 ACRES OF CROPLAND HARVESTED, BY REGIONS AND GEOGRAPHIC DIVISIONS: 1920 TO 1959

[Data for conterminous United States for 1959, 1954, and 1950 are based on reports for only a sample of farms. See text.]

Geographic area	1959 ¹	1954 ¹	1950 ¹	1945	1940	1930	1925	1920
United States.....	14.9	NA	9.8	NA	NA	NA	NA	NA
Conterminous United States.....	14.9	13.0	9.8	6.9	4.9	2.6	1.5	0.7
The North.....	14.3	12.6	10.2	7.8	6.1	3.1	1.7	0.8
The South.....	17.4	14.0	9.1	4.9	2.6	1.3	0.8	0.3
The West.....	13.7	NA	9.9	NA	NA	NA	NA	NA
Conterminous area.....	13.6	12.5	9.9	6.8	5.3	3.0	1.9	1.3
New England.....	29.3	25.0	18.8	13.5	8.4	3.9	1.8	0.6
Middle Atlantic.....	28.5	24.6	19.7	14.2	9.4	5.7	3.0	0.8
East North Central.....	18.4	17.0	13.7	10.5	7.9	4.4	2.5	0.9
West North Central.....	10.9	9.4	7.5	5.7	4.7	2.3	1.2	0.8
South Atlantic.....	22.8	17.7	10.5	4.9	2.2	1.7	1.1	0.4
East South Central.....	21.3	15.7	9.2	3.6	1.6	1.0	0.6	0.2
West South Central.....	12.9	11.4	8.3	5.4	3.4	1.3	0.7	0.4
Mountain.....	11.2	10.4	7.7	5.2	4.1	2.1	1.0	1.1
Pacific.....	17.2	NA	13.3	NA	NA	NA	NA	NA
Conterminous area.....	17.2	15.5	13.3	9.3	7.0	4.8	3.5	1.6

NA Not available.

¹Tractors other than garden.

With continued growth in farm mechanization and use of tractors, motortrucks, and automobiles for farm power and transportation, the number of horses and mules on farms declined from 4,141,000 on the 1,800,000 farms with horses or mules in 1954 to 2,948,000 on 1,138,000 farms reporting this type of livestock in 1959 in the conterminous United States. The farm operator's dependence on tractors for draft power becomes even more apparent when it is realized that many of the horses reported on farms in 1959 were used not as work or draft animals but as saddle horses mainly for exhibition, recreation, or other purposes.