

# 1974 Census of Agriculture

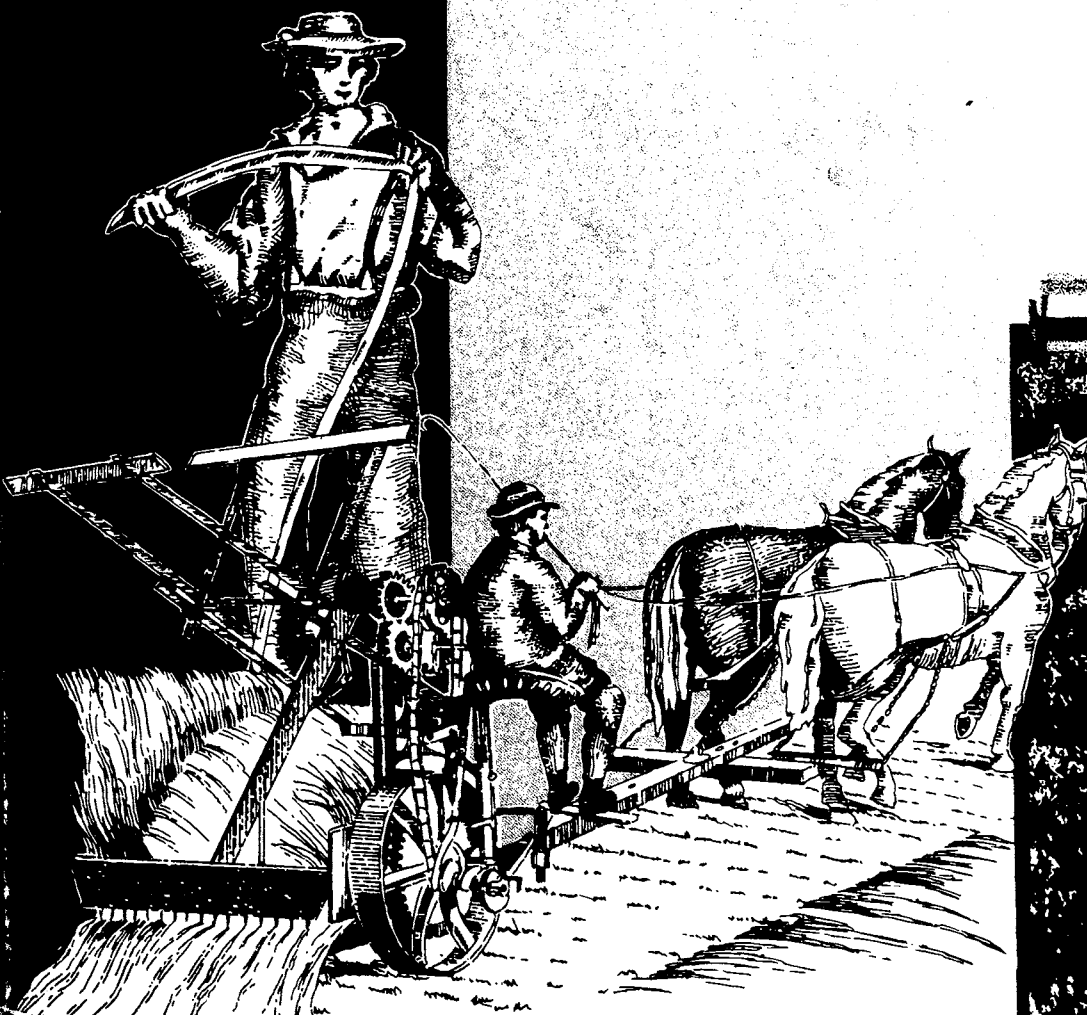
U.S. Department of Commerce  
BUREAU OF THE CENSUS

Volume IV  
Special Reports

Part 1

## Graphic Summary

CROPS  
AGRICULTURE DIVISION



1974  
Census  
of  
Agriculture

Volume IV  
**Special Reports**

Part 1

# Graphic Summary

Issued April 1978



**U.S. Department of Commerce**  
Juanita M. Kreps, Secretary  
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**BUREAU OF THE CENSUS**  
Manuel D. Plotkin, Director



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This report was prepared in the Agriculture Division under the general supervision of Orvin L. Wilhite, Chief, and Arnold L. Bollenbacher,

Assistant Division Chief. Joseph A. Horak, assisted by Mary K. Richter and William R. Adams, was directly responsible for development of the subject matter content, review of the data displayed on the maps, and preparation of the text. Douglas J. Miller assisted in the preparation of the charts. Dana E. Moore and Richard M. Bartel, under the direction of Stephen M. Schobel, Branch Chief, did the computer programming which extracted and formatted county level statistics necessary in the computer preparation of the maps. Janet W. Hall, Bernadette J. Beasley, and Evelyn M. Timmons provided editorial services and liaison in the publication area.

The maps were prepared by the Geography Division under the direction of Jacob Silver, Chief, and the supervision of Frederick R. Broome, Chief, Computer Graphics Staff. Map production was accomplished by Henry Tom of the division's Computer Graphics Staff. Roy Borgstede, Computer Graphics Staff, wrote the computer mapping programs required to produce the maps. Cartographic assistance was provided by the Cartographic Methods Branch under the supervision of Dan Jones.

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Members of various agencies of the U.S. Department of Agriculture provided advice and counsel during the planning, data collecting, and processing phases of the census and assisted farmers and ranchers who requested help in completing the report form.

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## REPORTS OF 1974 CENSUS OF AGRICULTURE

**Preliminary Reports.** Four pages of data published separately for each county having 10 farms or more, and for each State, the four geographic regions, and the United States. *The statistics printed in these reports are superseded by those in the final reports, Volumes I through IV.*

**Volume I. State and County Data.** One for each State, the United States, Puerto Rico, Guam, and the Virgin Islands, covering the area and its subdivisions. The reports for the States contain data for all farms and farms with sales of \$2,500 and over. *Chapter I* contains detailed data at the State level classified by size of farm, tenure and age of farm operator, type of organization, value of products sold, and major type of farm; *Chapter II*, county data summarized by subject; *Chapter III*, county data by subject for miscellaneous crop and livestock items found in relatively few counties; *Chapter IV*, county data by county.

**Volume II. Statistics by Subject.** Nine parts containing data for the United States, geographic regions and divisions, and States, for all farms and farms with sales of \$2,500 and over.

**Volume III. Agricultural Services.** Data by county for each State covering establishments whose primary activities are providing agricultural services. Data at the U.S., State, and county levels for all establishments are presented for selected four-digit standard industrial classification codes by size and type of organi-

zation. Data shown include dollar volume of business, gross receipts from products provided, gross receipts, labor and payroll by type of service performed, capital expenditures, and expenditures for electricity, gasoline, petroleum, and other fuels.

### Volume IV. Special Reports.

**Part 1. Graphic Summary.** Profiles the Nation's agricultural system in a series of U.S. maps, a number of which are printed in color. The characteristics of America's farms in 1974 are illustrated for crops, livestock, and many other characteristics.

**Part 2. Ranking Counties and States.** Reports on the top ranking 100 counties and 10 States in descending order of importance for 88 selected items for 1974 with comparative data for 1969.

**Part 3. Coverage Evaluation.** Shows the completeness of the agriculture census for States, geographic divisions, and the United States. Data also show the characteristics of farms missed by value of sales and by selected standard industrial (type-of-farm) classifications. Sampling reliability of the estimate of coverage is shown by value of sales classifications.

**Part 4. Procedural History.** A comprehensive summary of the procedures used in conducting the 1974 Census of Agriculture. In the 50 States, Puerto Rico, Guam, and the Virgin Islands. The history explains the procedures used from early planning and testing through tabulation and publication of the final reports.

**Part 5. Corporations in Agricultural Production.** Presents U.S. and selected State data on farm production characteristics and nonfarm business activities for corporations reporting agricultural operations, including the proportions of business receipts from farm, farm-related, and nonfarm-related business activities. Where appropriate, production characteristics are related to corporate characteristics.

**Part 6. Partnerships in Agricultural Production.** Reports in depth on characteristics of farm partnerships for 1976 for the United States, with selected data for States. The survey data are based on a sample of partnerships selected from the 1974 Census of Agriculture. Where appropriate, related characteristics reported in the 1974 census are shown. The report has been prepared in cooperation with Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture.

**Part 7. Agricultural Production and Marketing Contracts.** Presents detailed information on eight commodities produced and/or marketed under production and marketing contracts in 1977: Feeder and stocker cattle, fattened cattle, feeder pigs, slaughter hogs, broilers, layers, tomatoes, and potatoes. Data are presented for groups of States comprising areas of concentration, based on samples of farms reporting contracts in the 1974 Census of Agriculture. The report has been prepared in cooperation with the Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture.

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with sales  
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farms and over**

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with sales  
All of \$2,500  
farms and over**

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# INTRODUCTION

## Authority, Area Covered, and History

The 1974 Census of Agriculture was taken in accordance with the provisions of title 13, United States Code, reaffirmed by section 818 of the Agriculture and Consumer Protection Act of 1973 (Public Law 93-86). Sections 142(a) and 191 of title 13 provide for a census of agriculture every 5 years in each State, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands. The 1974 census is the 20th nationwide census of agriculture and the second conducted primarily by mail.

## Sources of Information

The data used in preparing the charts and maps shown in this graphic summary were obtained from the 1974 Census of Agriculture. Detailed statistics may be found in volumes I and II of the 1974 census reports.

## Farm Definition

**1969 definition**—All 1969 statistics in this report are in accordance with the farm definition used in 1969, which was also the definition used in the 1964 and 1959 Censuses of Agriculture. These farms are places on which agricultural operations larger than a specified minimum were conducted at any time during the census year under the control of an individual management. Places of less than 10 acres were counted as farms if the sales of the agricultural products amounted, or normally would amount, to at least \$250. Places of 10 acres or more were counted as farms if the sales of

agricultural products for the year amounted, or normally would amount, to at least \$50.

**1974 definition**—All 1974 statistics in this report are in accordance with the 1974 farm definition, which differs from the earlier definition in only two respects:

1. The criterion for number of "acres in place" has been deleted.
2. The criterion for minimum value of agricultural products sold has been changed to \$1,000.

For a more detailed explanation of the change in definition and measures of the effect of the change, see appendix A, of Volume I, State and County Data, or part 1 of Volume II, Statistics by Subject, of the published reports of the 1974 Census of Agriculture.

## Report Forms

Two basic census report forms were used for all States except Alaska and Hawaii. A regular form (A1) was used for farms with an expected value of sales of \$2,500 or more and a short version (A2) for farms with an expected value of sales of less than \$2,500. The short form covered only major items and omitted most of the detail found in the regular form.

In Alaska, the regular form was used for all farms. In Hawaii, a modified version of the regular form was used for all farms. The changes were principally in the crop sections to cover the specialized agriculture in the islands. For both States only the data items called for on the short form were tabulated for farms with \$1,000 to \$2,499 in sales.

## Census Coverage

Although a complete and fully accurate count of farms, farmland, and farm production is the aim of each nationwide census of agriculture, the complex structure of America's agriculture makes this aim difficult to achieve. Among the complexities are the many places to be enumerated, the variety of arrangements under which farms are operated, the continuing changes in the relationship of farm operators to the land operated, the expiration of leases and the initiation or renewal of leases, the problem of obtaining a complete listing of all agricultural operators, the difficulty of locating and identifying some farms, the operator's absence from his farm during mail efforts and followup procedures, and the operator's opinion that some or all of his agricultural operations should not be included in the census.

## Limitations of Data

Every census or survey has some errors. These can arise from such sources as incorrect or incomplete reporting, incorrect processing, and the inability to obtain a response from all farmers. Limited sampling was done in this census, so most of the error is of the nonsampling type.

Reported data may be incorrect due to misunderstanding of questions or the use of estimates in reporting. During processing, adjustments are made to data items which appear to be inconsistent with other items. Some respondents failed to provide all of the information requested. In some cases, the respondent may indicate the presence of an item but not the amount. Imputations were made for missing data

## INTRODUCTION Continued

on the quantities and sales values of crops and livestock, but not for such items as forest products sold, injuries and illnesses, and farm credit.

For a detailed description of coverage and data limitations, see volume IV, part 3, **Coverage Evaluation**, of the 1974 Census of Agriculture.

### Farm Coverage

The charts and maps in this report present data for all farms or farms with sales of \$2,500 and over. Some of the more detailed information was obtained only for farms with sales of \$2,500 and over, and most of the detailed tabulations were for those farms.

### Summary of Mapped Data

Except for those showing increase or decrease, the maps in this report show only data for 1974. The 1974 total for each data item mapped is shown on the following seven pages along with the comparable 1969 total, the numerical increase or decrease, and the percent change from 1969 to 1974.

Dramatic changes in rates of farm expenditure and unit prices of products sold between the 1969 and 1974 censuses affect the comparability of some data. During the period between the two censuses, prices paid by farmers greatly increased. Prices received by farmers also increased but with wide fluctuations among commodities at different times during the census year 1974.

### Number of Farms

**All farms**—All places on which agricultural operations were conducted at any time in the census year under the day-to-day control of an individual management and from which \$1,000 or more of agricultural products were sold or would normally have been sold in 1974.

**Farms with sales of \$2,500 and over**—Farms with sales of agricultural products amounting, or which normally would

amount, to at least \$2,500, excluding abnormal farms such as prison farms, hospital farms, church farms, school farms, experimental farms, Indian reservations, and grazing associations.

The total number of farms in the United States has declined steadily from a record high of 6,812,350 in 1935. Most of the decline has resulted from the consolidation of farms into fewer operating units and the diversion of farmland into nonfarm use.

There were 2,730,250 farms in 1969 by the definition then in use, as compared with 2,314,013 in 1974 by the revised definition adopted for publication of the final reports of the 1974 Census of Agriculture. However, only 152,110 of the 416,237 decline can be attributed to the change in farm definition.

### Value of Land and Buildings

The value of land and buildings reported for the census was intended to represent market value, i.e., the price for which the land and buildings would sell at the time the census was taken. If the value of land and buildings was not reported or was incompletely reported, an estimate was supplied during office processing by using the average value per acre of land and buildings for farms of approximately the same size having similar characteristics in the same area.

The total value of land and buildings for all farms in the United States was \$342 billion. The average value per farm was \$147,838 and the average value per acre was \$336.

For many groups of counties in the West, the maps exhibiting value of land and buildings per farm show reverse patterns as compared with maps showing value of land and buildings per acre; i.e., many counties in high value-per-farm categories appear in low value-per-acre categories. The reason for the reverse relationship between the two pattern maps is that while a large proportion of land in farms is comprised of low value-per-acre rangeland, the extremely large average acreage of the farms and ranches offsets the low average-per-acre value, resulting in high average-per-farm values.

### Size of Farms

Although the number of farms in the United States has dropped drastically in the last 40 years, the acreage of land in farms has changed only moderately; as a result, the average size of farm is now nearly three times what it was in 1935 (an increase from 155 acres to 440 acres).

The trend since 1935 until this census has been a decrease in number of farms for each of the size groups under 500 acres shown in this report and an increase in the number of farms in size groups over 500 acres. However, while this census still shows declining number of farms in size groups under 500 acres, the total number of farms over 500 acres has not changed significantly and for size group 500 to 999 acres the number has declined slightly.

Size of farm measured only by acres operated is often not a complete measure of the size of the farm business due to large variations in the productivity of land or in the intensity of activity. For example, average value of farm products sold per acre of farmland can vary from such extremes as \$1,231 per acre in Suffolk County, N.Y., to less than \$7 per acre in Nye County, Nev.

### Standard Industrial Classification of Farms

Maps by Standard Industrial Classification were made for the 1.7 million farms with sales of \$2,500 or more. In order for a farm to be classified within a particular industry, the value of sales in 1974 from a product or group of products had to represent 50 percent or more of the total value of sales of agricultural products sold. The 1972 Standard Industrial Classification is generally comparable for the major groupings to the type of farm classification used in 1969 and earlier censuses.

### Cash Grain Farms

**Cash grain farms (011)**—These farms receive 50 percent of their total sales from wheat, rice, corn, sorghums, soybeans, other small grains, cowpeas, dry field and seed beans and peas, popcorn, lentils, and mustard and safflower seed.

## INTRODUCTION Continued

## 1974 Summary of Mapped Data With 1969 Comparative Data

Map number		Farms with sales of \$2,500 and over	Title	Unit of measure	1969 to 1974				
					1974	1969	Increase	Decrease	Percent change
NUMBER OF FARMS									
74-M1			Number of farms.....	Number.	2,314,013	2,730,250		416,237	-15.2
M2			Farms--increase and decrease in number.....	Number.	2,314,013	2,730,250		416,237	-15.2
	74-M3		Farms with sales of \$2,500 and over.....	Number.	1,695,047	1,733,683		38,636	-2.2
	MP1		Farms with sales of \$2,500 and over as a percent of all farms.....	Percent	73.3	63.5	9.8		15.4
M4			Farms with sales under \$2,500.....	Number.	616,728	994,456		377,728	-38.0
MP2			Farms with sales under \$2,500 as a percent of all farms.....	Percent	26.7	36.4		9.7	-26.6
M5			Agricultural operations excluded by 1974 farm definition but not 1959 farm definition.....	Number.	152,110	(X)			
MP3			Agricultural operations excluded by 1974 farm definition as a percent of all farms.....	Number.	6.6	(X)			
VALUE OF LAND AND BUILDINGS									
MP4			Average value of land and buildings per farm.....	Dollars	147,838	75,714	72,124		95.3
MP5			Average value of land and buildings per acre of land in farms.....	Dollars	336	194	142		73.0
SIZE OF FARMS									
MP6			Average size of farm.....	Acres..	440	389	50		12.9
	MP7		Average size of farms with sales of \$2,500 and over.....	Acres..	534	529	5		.9
M6			Farms under 50 acres.....	Number.	507,797	635,576		127,779	-20.1
M7			Farms with 50 to 179 acres.....	Number.	827,884	1,001,706		173,822	-17.4
M8			Farms with 180 to 259 acres.....	Number.	253,232	306,942		53,710	-17.5
M9			Farms with 260 to 499 acres.....	Number.	362,866	419,421		56,555	-13.5
M10			Farms with 500 to 999 acres.....	Number.	207,297	215,659		8,362	-3.9
M11			Farms with 1,000 to 1,999 acres.....	Number.	92,712	91,039	1,673		1.8
M12			Farms with 2,000 acres and over.....	Number.	62,225	59,907	2,318		3.9
M13			Farms with 500 acres and over--increase and decrease in number.....	Number.	362,234	366,605		4,371	-1.2
NUMBER OF FARMS BY STANDARD INDUSTRIAL CLASSIFICATION									
	M14		Cash grain farms (industry group 011).....	Number.	580,254	369,312	210,942		57.1
	M15		Wheat farms (industry 0111).....	Number.	105,167	(NA)			
	M16		Rice farms (industry 0112).....	Number.	6,787	(NA)			
	M17		Corn farms (industry 0115).....	Number.	134,551	(NA)			
	M18		Soybean farms (industry 0116).....	Number.	122,454	(NA)			
	M19		Cotton farms (industry 0131).....	Number.	30,725	40,534		9,809	-24.2
	M20		Tobacco farms (industry 0132).....	Number.	95,493	89,903	5,590		6.2
	M21		Sugar crop, Irish potato, hay, peanut, and other field crop farms (industries 0133, 0134, 0139).....	Number.	81,415	(NA)			
	M22		Sugar crop farms (industry 0133).....	Number.	7,380	(NA)			
	M23		Irish potato farms (industry 0134).....	Number.	6,940	(NA)			
	M24		Vegetable and melon farms (industry group 016).....	Number.	19,548	19,660		112	-.6
	M25		Fruit and tree nut farms (industry group 017).....	Number.	51,270	53,754		2,484	-4.6
	M26		Horticultural specialty farms (industry group 018).....	Number.	19,678	(NA)			
	M27		General farms, primarily crop (industry group 019).....	Number.	44,659	(NA)			
	M28		Livestock farms, except dairy, poultry, and animal specialty (industry group 021).....	Number.	493,816	(NA)			
	M29		Beef cattle feedlots (industry 0211).....	Number.	53,321	(NA)			
	M30		Beef cattle farms, except feedlots (industry 0212).....	Number.	263,222	(NA)			
	M31		Hog farms (industry 0213).....	Number.	108,190	(NA)			
	M32		Sheep and goat farms (industry 0214).....	Number.	9,372	(NA)			
	M33		Dairy farms (industry group 024).....	Number.	196,057	260,956		64,899	-24.9
	M34		Poultry and egg farms (industry group 025).....	Number.	42,690	57,545		14,855	-25.8
	M35		Animal specialty farms (industry group 027).....	Number.	11,167	(NA)			
	M36		General farms, primarily livestock (industry group 029).....	Number.	14,995	(NA)			
	M37		Farms not classified by SIC.....	Number.	13,280	(NA)			
NUMBER OF FARMS BY VALUE OF SALES									
M38			Farms with sales of \$100,000 and over <sup>1</sup> .....	Number.	153,122	51,995	101,127		194.5
M39			Farms with sales of \$40,000 to \$99,999 <sup>1</sup> .....	Number.	324,708	169,695	155,013		91.3
M40			Farms with sales of \$20,000 to \$39,999 <sup>1</sup> .....	Number.	322,046	330,992		8,946	-2.7
M41			Farms with sales of \$10,000 to \$19,999 <sup>1</sup> .....	Number.	310,217	395,472		85,255	-21.6
M42			Farms with sales of \$5,000 to \$9,999 <sup>1</sup> .....	Number.	296,532	390,425		93,893	-24.0
M43			Farms with sales of \$2,500 to \$4,999 <sup>1</sup> .....	Number.	257,397	360,033		102,636	-28.5
M44			Farms with sales of \$1,000 to \$2,499.....	Number.	363,590	447,421		83,831	-18.7
M45			Farms with sales under \$1,000 but having potential for sales of \$1,000 and over.....	Number.	286,401				

<sup>1</sup>Includes abnormal farms; see text.

## INTRODUCTION Continued

## 1974 Summary of Mapped Data With 1969 Comparative Data—Continued

Map number	Title	Unit of measure	1969 to 1974			
			1974	1969	Percent change	
	Farms with sales of \$2,500 and over					
NUMBER OF FARMS BY VALUE OF SALES--Continued						
M46	Farms with gross sales of \$20,000 and over--	Number.	799,876	552,682	247,194	44.7
MP8	increase and decrease in number <sup>1</sup> .....					
	Farms with sales of \$20,000 and over as a percent	Percent	34.6	20.2	14.3	41.4
	of all farms <sup>1</sup> .....					
TENURE AND CHARACTERISTICS OF FARM OPERATORS						
M47	Farms operated by full owners.....	Number.	1,423,953	1,705,720	281,767	-16.5
MP9	Percent of farms operated by full owners.....	Percent	61.5	62.5	1.0	-1.5
M48	Farms operated by part owners.....	Number.	628,224	671,607	43,383	-6.5
MP10	Percent of farms operated by part owners.....	Percent	27.1	24.6	2.6	10.4
M49	Farms operated by tenants.....	Number.	261,836	352,923	91,087	-25.8
MP11	Percent of farms operated by tenants.....	Percent	11.3	12.9	1.6	-12.5
M50	Tenant operated farms--increase and decrease in	Number.	261,836	352,923	91,087	-25.8
	number.....					
M51	Farms operated by Black and other races <sup>2</sup> .....	Number.	59,371	103,847	44,476	-42.8
MP12	Average age of farm operators <sup>2</sup> .....	Years..	51.7	51.2	.5	1.0
M52	Farm operators 65 years old and over <sup>2</sup> .....	Number.	421,471	452,994	31,523	-7.0
MP13	Percent of farm operators 65 years old and over <sup>2</sup> ..	Percent	18.5	16.6	1.9	11.4
M53	Farm operators reporting any off-farm work <sup>2</sup> .....	Number.	1,011,476	1,482,292	470,816	-31.8
M54	Farm operators working off their farms 100 days	Number.	814,555	1,090,502	275,947	-25.3
	and over <sup>2</sup> .....					
MP14	Percent of farm operators working off their farms	Percent	35.7	39.9	4.2	-10.5
M55	100 days and over <sup>2</sup> .....					
	Farm operators working off their farms 100 days	Number.	814,555	1,090,502	275,947	-25.3
MP15	and over--increase and decrease in number <sup>2</sup> .....					
	Percent of farm operators not residing on farm	Percent	16.3	16.8	0.5	-3.0
	operated <sup>2</sup> .....					
OCCUPATION OF FARM OPERATOR						
M56	Farm operators reporting farming as principal	Number.	1,235,852	(NA)		
MP16	occupation <sup>2</sup> .....					
	Percent of farm operators reporting farming as	Percent	74.3	(NA)		
M57	principal occupation <sup>2</sup> .....					
	Farm operators reporting principal occupation	Number.	426,690	(NA)		
MP17	other than farming <sup>2</sup> .....					
	Percent of farm operators reporting principal	Percent	25.7	(NA)		
	occupation other than farming <sup>2</sup> .....					
TYPE OF FARM ORGANIZATION						
M58	Farms operated by individuals or families.....	Number.	1,517,573	1,480,565	37,008	2.5
MP18	Percent of land in farms operated by individuals	Percent	74.9	72.5	2.4	3.3
	or families.....					
M59	Farms operated by partnerships.....	Number.	144,969	221,535	76,566	-34.6
MP19	Percent of land in farms operated by	Percent	13.7	17.8	4.1	-22.8
	partnerships.....					
M60	Farms operated by corporations.....	Number.	28,656	21,513	7,143	33.2
MP20	Percent of land in farms operated by corporations.	Percent	10.7	8.8	1.9	21.5
LAND IN FARMS AND LAND USES						
M61	Land in farms.....	Acres..	1,017,030,357	1,062,892,501	45,862,144	-4.3
M62	Land in farms--increase and decrease in acreage..	Acres..	1,017,030,357	1,062,892,501	45,862,144	-4.3
MP21	Land in farms as a percent of land area.....	Percent	44.9	47.0	2.1	-4.4
M63	Cropland.....	Acres..	440,039,087	458,989,605	18,950,518	-4.1
M64	Cropland--increase and decrease in acreage.....	Acres..	440,039,087	458,989,605	18,950,518	-4.1
MP22	Cropland as a percent of land area.....	Percent	19.4	20.3	.8	-4.1
MP23	Cropland as a percent of land in farms.....	Percent	43.3	43.2	.1	-.2
M65	Harvested cropland.....	Acres..	303,001,943	273,016,000	29,985,943	11.0
M66	Harvested cropland--increase and decrease in	Acres..	303,001,943	273,016,000	29,985,943	11.0
	acreage.....					
MP24	Harvested cropland as a percent of land area.....	Percent	13.4	12.1	1.3	11.0
MP25	Harvested cropland as a percent of land in farms..	Percent	29.8	25.7	4.1	16.0
MP26	Pastureland as a percent of land in farms.....	Percent	54.0	54.5	.5	-.8
M67	Irrigated land.....	Acres..	41,243,023	39,121,693	2,121,330	5.4
M68	Irrigated land--increase and decrease in acreage..	Acres..	41,243,023	39,121,693	2,121,330	5.4
MP27	Irrigated land as a percent of land in farms.....	Percent	4.1	3.7	0.4	10.3
MP28	Irrigated harvested cropland as a percent of	Percent	12.1	12.5	.4	-3.2
	harvested cropland.....					
M69	Land irrigated by sprinklers.....	Acres..	9,935,256	7,195,572	2,739,684	38.1
M70	Drained land.....	Acres..	42,784,305	59,550,697	16,766,392	-28.2
MP29	Drained land as a percent of land in farms.....	Percent	4.7	6.5	1.8	-27.2

<sup>1</sup>Includes abnormal farms; see text.<sup>2</sup>1974 data apply only to individual or family operations (sole proprietorships) and partnerships.

## INTRODUCTION Continued

## 1974 Summary of Mapped Data With 1969 Comparative Data—Continued

Map number		Title	Unit of measure	1969 to 1974				
All farms	Farms with sales of \$2,500 and over			1974	1969	Increase	Decrease	Percent change
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD								
M71		Value of agricultural products sold.....	Dollars	81,531,026,000	45,563,891,000	35,967,135,000		78.9
MP30		Value of agricultural products sold by county....	Dollars	81,531,026,000	45,563,891,000	35,967,135,000		78.9
MP31		Average value per farm of agricultural products sold.....	Dollars	35,234	16,689	18,545		111.1
MP32		Average value of agricultural products sold per acre of land in farms.....	Dollars	80	43	37		87.0
MP33		Average net farm income per farm (value of agricultural products sold minus farm production expenses).....	Dollars	8,869	2,932	5,937		202.5
MP34		Net farm income as a percent of value of land and buildings.....	Percent	6.0	3.9	2.1		54.6
M72		Value of crops sold.....	Dollars	41,790,365,000	16,922,023,000	24,868,342,000		147.0
MP35		Value of crops sold as a percent of agricultural products sold.....	Percent	51.3	37.1	14.2		38.2
MP36		Average value of crops sold per acre of harvested cropland.....	Dollars	138	62	76		122.5
M73		Value of livestock, poultry, and their products sold.....	Dollars	39,508,750,000	28,480,921,000	11,027,829,000		38.7
	MP37	Value of poultry and poultry products sold as a percent of agricultural products sold.....	Percent	7.7	8.7		1.1	-12.0
	MP38	Value of dairy products sold as a percent of agricultural products sold.....	Percent	10.2	12.2		2.0	-16.5
	MP39	Value of cattle and calves sold as a percent of agricultural products sold.....	Percent	22.7	31.5		8.8	-27.8
	MP40	Value of hogs and pigs sold as a percent of agricultural products sold.....	Percent	6.7	(NA)			
	MP41	Value of sheep, lambs, and wool sold as a percent of agricultural products sold.....	Percent	.6	(NA)			
INCOME FROM SOURCES OTHER THAN AGRICULTURAL PRODUCTS SOLD								
M74		Income from customwork and other agricultural services.....	Dollars	628,023,000	509,613,000	118,410,000		23.2
M75		Income from recreational services.....	Dollars	43,917,000	49,623,000		5,706,000	-11.5
M76		Income from participation in government farm programs.....	Dollars	281,598,000	2,534,166,000		2,252,568,000	-88.9
	M77	Farm operator household income from cash wages, salaries, commissions, and tips.....	Dollars	5,324,859,000	(NA)			
	MP42	Farm operator household income from off-farm sources as a percent of total sales of agricultural products.....	Percent	11.0	(NA)			
FARM PRODUCTION EXPENSES								
M78		Farm production expenses.....	Dollars	61,007,649,000	37,559,615,000	23,448,034,000		62.4
MP43		Farm production expenses by county.....	Dollars	61,007,649,000	37,559,615,000	23,448,034,000		62.4
MP44		Farm production expenses as a percent of value of agricultural products sold.....	Percent	74.8	82.4		7.6	-9.2
M79		Expenditures for purchase of livestock and poultry.....	Dollars	9,954,580,000	8,077,779,000	1,876,801,000		23.2
MP45		Expenditures for purchase of livestock and poultry, by county.....	Dollars	9,954,580,000	8,077,779,000	1,876,801,000		23.2
M80		Expenditures for feed for livestock and poultry...	Dollars	13,651,116,000	7,082,274,000	6,568,842,000		92.8
MP46		Expenditures for feed for livestock and poultry, by county.....	Dollars	13,651,116,000	7,082,274,000	6,568,842,000		92.8
MP47		Expenditures for commercially mixed formula feeds as a percent of all feed purchased for livestock and poultry.....	Percent	61.8	63.0		1.2	-1.9
M81		Expenditures for seeds, bulbs, plants, and trees..	Dollars	1,798,643,000	871,471,000	927,172,000		106.4
MP48		Expenditures for seeds, bulbs, plants, and trees, by county.....	Dollars	1,798,643,000	871,471,000	927,172,000		106.4
M82		Expenditures for commercial fertilizer.....	Dollars	5,137,361,000	2,209,185,000	2,928,176,000		132.6
MP49		Expenditures for commercial fertilizer by county..	Dollars	5,137,361,000	2,209,185,000	2,928,176,000		132.6
	M83	Expenditures for lime.....	Dollars	104,475,000	92,500,000	11,975,000		12.9
M84		Expenditures for agricultural chemicals, excluding fertilizer.....	Dollars	1,757,779,000	908,036,000	849,743,000		93.6
MP50		Expenditures for agricultural chemicals, excluding fertilizer, by county.....	Dollars	1,757,779,000	908,036,000	849,743,000		93.6
MP51		Average expenditures per farm reporting for agricultural chemicals, excluding fertilizer....	Dollars	1,684	(NA)			
M85		Expenditures for gasoline and other petroleum fuel and oil for the farm business.....	Dollars	3,087,606,000	1,906,579,000	1,181,027,000		61.9
MP52		Expenditures for gasoline and other petroleum fuel and oil for the farm business, by county....	Dollars	3,087,606,000	1,906,579,000	1,181,027,000		61.9
M86		Expenditures for hired farm labor, excluding contract labor.....	Dollars	4,652,075,000	3,375,203,000	1,276,872,000		37.8

## INTRODUCTION Continued

## 1974 Summary of Mapped Data With 1969 Comparative Data—Continued

Map number			1969 to 1974				
Farms with sales of All \$2,500 and over farms	Title	Unit of measure	1974	1969	Increase	Decrease	Percent change
FARM PRODUCTION EXPENSES--Continued							
MP53	Expenditures for hired farm labor, excluding contract labor, by county.....	Dollars	4,652,075,000	3,375,203,000	1,276,872,000		37.8
M87	Expenditures for contract labor.....	Dollars	511,633,000	(NA)			
MP54	Expenditures for contract labor by county.....	Dollars	511,633,000	(NA)			
M88	Expenditures for machine hire and customwork.....	Dollars	1,342,702,000	(NA)			
MP55	Expenditures for machine hire and customwork, by county.....	Dollars	1,342,702,000	(NA)			
M89	Farms with expenditures of \$50,000 and over.....	Dollars	233,611	115,992	117,619		101.4
FARM CREDIT							
M90	Total farm operator real estate debt.....	Dollars	22,377,549,000	(NA)			
MP56	Average farm operator real estate debt per farm with real estate debt.....	Dollars	44,040	(NA)			
MP57	Percent of farm operators with real estate debt...	Percent	30.0	(NA)			
MP58	Total farm operator real estate debt for farms with real estate debt as a percent of value of land and buildings owned.....	Percent	28.2	(NA)			
M91	Total farm operator non-real-estate debt.....	Dollars	11,310,487,000	(NA)			
MP59	Average farm operator non-real-estate debt per farm with non-real-estate debt.....	Dollars	27,686	(NA)			
MP60	Percent of farm operators with non-real-estate debt.....	Percent	24.1	(NA)			
MP61	Total farm operator non-real-estate debt as a percent of sales of agricultural products for farms with non-real-estate debt.....	Percent	39.8	(NA)			
HIRED FARM LABOR							
M92	Hired farm workers working 150 days and over.....	Number.	712,715	654,370	58,345		8.9
M93	Hired farm workers working 25 to 149 days.....	Number.	1,145,171	(NA)			
M94	Hired farm workers working under 25 days.....	Number.	3,357,346	(NA)			
MP62	Ratio of hired farm workers working 150 days and over to farm operators.....	Number.	.42	.38	.04		10.5
MACHINERY AND EQUIPMENT ON PLACE							
M95	Estimated market value of all machinery and equipment on place.....	Dollars	48,402,624,000	25,343,077,000	23,059,547,000		91.0
MP63	Estimated market value of all machinery and equipment on place, by county.....	Dollars	48,402,624,000	25,343,077,000	23,059,547,000		91.0
MP64	Average estimated market value per farm reporting of all machinery and equipment on place.....	Dollars	22,303	9,770	12,533		128.3
M96	Farms with value of machinery and equipment of \$50,000 and over.....	Number.	224,979	63,009	161,970		257.1
M97	Motortrucks, including pickups.....	Number.	3,038,462	2,985,014	53,448		1.8
M98	Motortrucks, including pickups--increase and decrease in number.....	Number.	3,038,462	2,985,014	53,448		1.8
M99	Tractors, excluding garden tractors and motor tillers.....	Number.	4,467,378	4,618,672		151,294	-3.3
M100	Tractors, excluding garden tractors and motor tillers--increase and decrease in number.....	Number.	4,467,378	4,618,672		151,294	-3.3
M101	Grain and bean combines, self-propelled.....	Number.	524,095	467,226	56,869		12.2
M102	Grain and bean combines, self-propelled--increase and decrease in number.....	Number.	524,095	467,226	56,869		12.2
M103	Pickup balers.....	Number.	666,070	708,044		41,974	-5.9
M104	Cornpickers, corn heads, and picker-shellers.....	Number.	614,891	634,592		19,701	-3.1
AGRICULTURAL CHEMICALS USED							
M105	Acres on which commercial fertilizer was used....	Acres..	184,642,504	155,549,815	29,092,689		18.7
MP65	Acres of crops harvested on which commercial fertilizer was used as a percent of all harvested cropland.....	Percent	62.4	59.6	2.8		4.7
MP66	Average total pounds of fertilizer applied per acre fertilized.....	Pounds.	318	337		19	-5.6
M106	Acres on which lime was used.....	Acres..	8,239,896	10,099,463		1,859,567	-18.4
MP67	Average tons of lime applied per acre limed.....	Tons...	1.8	1.8			
M107	Acres of hay crops treated for insect control....	Acres..	3,919,886	2,180,223	1,739,663		79.8
M108	Acres of other crops treated for insect control (corn, other grains, cotton, tobacco, potatoes, trees, vines, etc.).....	Acres	52,721,755	39,881,566	12,840,189		32.2
MP68	Acres of crops treated for insect control as a percent of harvested cropland.....	Percent	19.1	16.1	3.0		18.6
MP69	Average cost per acre of chemicals used to treat crops for insect control.....	Dollars	10.52	7.27	3.25		44.7
M109	Acres of crops treated for nematodes.....	Acres..	1,754,282	1,267,101	487,181		38.5

## INTRODUCTION Continued

## 1974 Summary of Mapped Data With 1969 Comparative Data—Continued

Map number		Title	Unit of measure	1969 to 1974				
All farms	Farms with sales of \$2,500 and over			1974	1969	Increase	Decrease	Percent change
AGRICULTURAL CHEMICALS USED--Continued								
MP70		Average cost per acre of chemicals used to treat crops for nematodes.....	Dollars	16.50	13.68	2.82		20.6
M110		Acres of crops and orchards treated for disease control.....	Acres..	4,183,196	4,088,038	95,158		2.3
MP71		Average cost per acre of chemicals used to treat crops and orchards for disease control.....	Dollars	20.03	13.41	6.62		49.4
M111		Acres of crops treated for weed or grass control.	Acres..	110,792,607	84,913,547	25,879,060		30.5
MP72		Acres of crops treated for weed or grass control as a percent of harvested cropland.....	Percent	37.4	32.5	4.9		15.0
MP73		Average cost per acre of chemicals used to treat crops for weed or grass control.....	Dollars	7.08	4.07	3.01		74.0
M112		Acres of pastureland treated for weed or brush control.....	Acres..	4,002,709	4,967,459		964,750	-19.4
M113		Acres treated with chemicals for defoliation or for growth control of crops or thinning of fruit	Acres..	5,174,206	5,780,991		606,785	-10.5
MP74		Average cost per acre of chemicals used for growth control of crops or thinning of fruit....	Dollars	6.65	4.00	2.65		66.3
M114		Expenditures for insect control on livestock and poultry, including treatment of buildings.....	Dollars	18,770,017	26,428,158		7,658,141	-29.0
LIVESTOCK AND POULTRY								
M115		Cattle and calves--inventory.....	Number.	113,174,700	106,345,741	6,828,959		6.4
M116		Cattle and calves--inventory--increase and decrease in number.....	Number.	113,174,700	106,345,741	6,828,959		6.4
MP75		Cattle and calves--inventory by county.....	Number.	113,174,700	106,345,741	6,828,959		6.4
M117		Farms with 200 cattle and calves or more on hand.	Number.	98,195	80,719	17,476		21.7
M118		Cows and heifers that had calved--inventory.....	Number.	51,912,414	45,511,356	6,401,058		14.1
MP76		Cows and heifers that had calved--inventory as a percent of all cattle and calves.....	Percent	45.9	42.8	3.1		7.2
M119		Milk cows--inventory.....	Number.	10,654,516	11,174,036		519,520	-4.7
M120		Milk cows--inventory--increase and decrease in number.....	Number.	10,654,516	11,174,036		519,520	-4.7
MP77		Milk cows--inventory by county.....	Number.	10,654,516	11,174,036		519,520	-4.7
M121		Farms with 100 milk cows or more on hand.....	Number.	14,505	9,854	4,651		4.7
MP78		Milk cows as a percent of all cows and heifers that had calved.....	Percent	20.5	24.6		4.0	-16.4
M122		Beef cows--inventory.....	Number.	41,257,898	34,337,320	6,920,578		20.2
M123		Beef cows--inventory--increase and decrease in number.....	Number.	41,257,898	34,337,320	6,920,578		20.2
MP79		Heifers, heifer calves, steers, steer calves, bulls, and bull calves as a percent of all cattle and calves.....	Percent	54.5	57.3		2.8	-5.1
M124		Cattle and calves sold.....	Number.	70,019,180	74,535,441		4,516,261	-6.1
MP80		Fattened cattle sold as a percent of all cattle sold.....	Percent	52.3	55.9		3.6	-6.4
M125		Cattle fattened on grain concentrates and sold for slaughter.....	Number.	26,070,304	22,970,360	3,099,944		13.5
M126		Fattened cattle sold--increase and decrease in number.....	Number.	26,070,304	22,970,360	3,099,944		13.5
MP81		Fattened cattle sold by county.....	Number.	26,070,304	22,970,360	3,099,944		13.5
M127		Farms with 500 fattened cattle or more sold.....	Number.	4,789	4,862		73	-1.5
M128		Hogs and pigs--inventory.....	Number.	45,503,604	55,454,828		9,951,224	-17.9
M129		Hogs and pigs--inventory--increase and decrease in number.....	Number.	45,503,604	55,454,828		9,951,224	-17.9
M130		Farms with 200 hogs and pigs or more--inventory..	Number.	63,991	76,357		12,366	-16.2
M131		Hogs and pigs for breeding.....	Number.	6,136,546	8,153,267		2,016,721	-24.7
M132		Hogs and pigs for breeding--increase and decrease in number.....	Number.	6,136,546	8,153,267		2,016,721	-24.7
M133		Litters of pigs farrowed between December 1, 1973, and November 30, 1974.....	Number.	9,069,449	10,588,897		1,519,448	-14.4
M134		Hogs and pigs sold.....	Number.	79,897,397	89,313,449		9,416,052	-10.5
MP82		Hogs and pigs sold, by county.....	Number.	79,897,397	89,313,449		9,416,052	-10.5
M135		Feeder pigs sold.....	Number.	13,166,688	15,085,440		1,918,752	-12.7
MP83		Feeder pigs sold as a percent of all hogs and pigs sold.....	Percent	16.5	16.9		.4	-2.5
M136		Sheep and lambs--inventory.....	Number.	15,379,604	21,611,074		6,231,470	-28.8
M137		Sheep and lambs--inventory--increase and decrease in number.....	Number.	15,379,604	21,611,074		6,231,470	-28.8
M138		Ewes 1 year old or older.....	Number.	8,687,989	12,022,221		3,334,232	-27.7
M139		Sheep and lambs sold.....	Number.	13,433,679	18,308,083		4,874,404	-26.6
M140		Horses and ponies--inventory.....	Number.	1,595,640	2,237,981		642,341	-28.7
M141		Chickens 3 months old or older--inventory.....	Number.	335,740,245	371,008,459		35,268,214	-9.5

## INTRODUCTION Continued

## 1974 Summary of Mapped Data With 1969 Comparative Data—Continued

Map Number	Farms with sales of \$2,500 and over	Title	Unit of measure	1969 to 1974				
				1974	1969	Increase	Decrease	Percent change
LIVESTOCK AND POULTRY--Continued								
M142		Chickens 3 months old or older--inventory--increase and decrease in number.....	Number.	335,740,245	371,008,459		35,268,214	-9.5
MP84		Chickens 3 months old or older--inventory by county.....	Number.	335,740,245	371,008,459		35,268,214	-9.5
M143		Broilers and other meat-type chickens under 3 months old sold.....	Number.	2,518,513,032	2,381,373,426	137,139,606		5.8
M144		Broilers and other meat-type chickens sold--increase and decrease in number.....	Number.	2,518,513,032	2,381,373,426	137,139,606		5.8
MP85		Broilers and other meat-type chickens sold, by county.....	Number.	2,518,513,032	2,381,373,426	137,139,606		5.8
	M145	Turkeys sold.....	Number.	124,738,212	103,454,667	21,283,545		20.6
	M146	Turkeys sold--increase and decrease in number.....	Number.	124,738,212	103,454,667	21,283,545		20.6
FIELD CROPS HARVESTED								
M147		Corn harvested for all purposes.....	Acres..	72,330,443	60,402,153	11,928,290		19.8
M148		Corn harvested for all purposes--increase and decrease in acreage.....	Acres..	72,330,443	60,402,153	11,928,290		19.8
MP86		Corn harvested for all purposes by county.....	Acres..	72,330,443	60,402,153	11,928,290		19.8
MP87		Acres of corn harvested as a percent of harvested cropland.....	Percent	23.9	22.1	1.8		7.9
M149		Corn harvested for grain.....	Acres..	61,653,842	52,540,249	9,113,593		17.4
	M150	Corn cut for silage.....	Acres..	10,111,824	7,262,348	2,849,476		39.2
M151		Sorghums harvested for all purposes, except sirup.	Acres..	14,791,032	15,487,665		696,633	-4.5
M152		Sorghums harvested for all purposes--increase and decrease in acreage.....	Acres..	14,791,032	15,487,665		696,633	-4.5
MP88		Sorghums harvested for all purposes, except sirup, by county.....	Acres..	14,792,032	15,487,665		696,633	-4.5
MP89		Acres of sorghums harvested for all purposes except sirup as a percent of harvested cropland..	Percent	4.9	5.7	.8		-13.9
M153		Sorghums harvested for grain.....	Acres..	12,929,130	12,953,930		24,800	-.2
M154		Wheat harvested.....	Acres..	62,957,215	45,372,868	17,584,347		38.8
M155		Wheat harvested--increase and decrease in acreage.	Acres..	62,957,215	45,372,868	17,584,347		38.8
MP90		Wheat harvested by county.....	Acres..	62,957,215	45,372,868	17,584,347		38.8
MP91		Acres of wheat harvested as a percent of harvested cropland.....	Percent	20.8	16.6	4.1		25.0
	M156	Oats harvested.....	Acres..	11,142,686	16,354,035		5,211,349	-31.9
	M157	Oats harvested--increase and decrease in acreage..	Acres..	11,142,686	16,354,035		5,211,349	-31.9
	M158	Barley harvested.....	Acres..	7,286,041	8,924,758		1,638,717	-18.4
	M159	Barley harvested--increase and decrease in acreage.....	Acres..	7,286,041	8,924,758		1,638,717	-18.4
	M160	Rye harvested.....	Acres..	636,881	1,115,260		478,379	-42.9
	M161	Flaxseed harvested.....	Acres..	1,452,127	2,489,806		1,037,679	-41.7
	M162	Rice harvested.....	Acres..	2,547,262	2,130,770	416,492		19.6
M163		Soybeans harvested for beans.....	Acres..	48,118,849	38,549,663	9,569,186		24.8
M164		Soybeans harvested for beans--increase and decrease in acreage.....	Acres..	48,118,849	38,549,663	9,569,186		24.8
MP92		Soybeans harvested for beans by county.....	Acres..	48,118,849	38,549,663	9,569,186		24.8
M165		Peanuts harvested for nuts.....	Acres..	1,368,990	1,426,726		57,736	-4.1
	M166	Dry field and seed beans harvested for beans.....	Acres..	1,350,749	1,299,692	51,057		3.9
M167		Cotton harvested.....	Acres..	12,223,500	11,496,220	727,280		6.3
M168		Cotton harvested--increase and decrease in acreage.....	Acres..	12,223,500	11,496,220	727,280		6.3
MP93		Acres of cotton harvested as a percent of harvested cropland.....	Percent	4.0	4.2	.2		-4.2
	M169	Sugar beets harvested for sugar.....	Acres..	1,169,990	1,464,384		294,394	-20.1
	M170	Sugarcane harvested for sugar.....	Acres..	668,326	519,180	149,146		28.7
M171		Irish potatoes harvested.....	Acres..	1,345,121	(NA)			
	M172	Irish potatoes harvested--increase and decrease in acreage.....	Acres..	1,334,060	1,260,882	73,178		5.8
M173		Tobacco harvested.....	Acres..	877,113	876,927	186		(2)
M174		Tobacco harvested--increase and decrease in acreage.....	Acres..	877,113	876,927	186		(2)
M175		Land from which hay was cut, excluding sorghum hay.....	Acres..	56,236,381	53,203,606	3,032,775		5.7
M176		Land from which hay was cut--increase and decrease in acreage.....	Acres..	56,236,381	53,203,606	3,032,775		5.7
MP94		Land from which hay was cut by county.....	Acres..	56,236,381	53,203,606	3,032,775		5.7
MP95		Land from which hay was cut as a percent of harvested cropland.....	Percent	18.6	19.5	.9		-4.8
	M177	Alfalfa and alfalfa mixtures for hay or dehydrating.....	Acres..	23,246,694	22,139,038	1,107,656		5.0
	M178	Alfalfa and alfalfa mixtures for hay or dehydrating--increase and decrease in acreage....	Acres..	23,246,694	22,139,038	1,107,656		5.0

# INTRODUCTION Continued

## 1974 Summary of Mapped Data With 1969 Comparative Data—Continued

Map number		Title	Unit of measure	1969 to 1974				
All farms	Farms with sales of \$2,500 and over			1974	1969	Increase	Decrease	Percent change
FIELD CROPS HARVESTED--Continued								
M179		Clover, timothy, and mixtures of clover and grasses for hay.....	Acres..	11,186,102	10,525,103	660,999		6.3
M180		Clover, timothy, and mixtures of clover and grasses for hay--increase and decrease in acreage.....	Acres..	11,186,102	10,525,103	660,999		6.3
M181		Small grain hay.....	Acres..	1,589,968	2,249,185		659,217	-29.3
M182		Wild hay.....	Acres..	7,322,415	7,573,887		251,472	-3.3
M183		Grass silage.....	Acres..	2,697,143	1,364,316	1,332,827		97.7
M184		Alfalfa seed.....	Acres..	400,169	404,702		4,533	-1.1
M185		Red clover seed.....	Acres..	270,840	324,703		53,863	-16.6
VEGETABLES								
M186		Vegetables harvested for sale.....	Acres..	3,124,257	3,352,385		228,128	-6.8
MP96		Vegetables harvested for sale by county.....	Acres..	3,124,257	3,352,385		228,128	-6.8
M187		Tomatoes harvested for sale.....	Acres..	421,386	387,838	33,548		8.7
M188		Sweet corn harvested for sale.....	Acres..	640,740	631,067	9,673		1.5
M189		Cucumbers and pickles harvested for sale.....	Acres..	101,141	110,001		8,860	-8.1
M190		Watermelons harvested for sale.....	Acres..	135,876	203,165		67,289	-33.1
M191		Snap beans, bush and pole, harvested for sale.....	Acres..	320,158	268,667	51,491		19.2
M192		Lettuce and romaine harvested for sale.....	Acres..	235,404	228,618	6,786		3.0
M193		Asparagus harvested for sale.....	Acres..	108,542	116,392		7,850	-6.7
M194		Cantaloups, persians, and muskmelons harvested for sale.....	Acres..	70,621	119,107		48,486	-40.1
M195		Green peas harvested for sale.....	Acres..	398,817	392,432	6,385		1.6
BERRIES, FRUITS, AND NUTS								
M196		Berries harvested for sale.....	Acres..	121,127	138,635		17,508	-12.6
M197		Strawberries harvested for sale.....	Acres..	36,151	46,528		10,377	-22.3
M198		Land in orchards.....	Acres..	4,190,340	4,233,897		43,557	-1.0
MP97		Land in orchards by county.....	Acres..	4,190,340	4,233,897		43,557	-1.0
M199		Acres of apple trees.....	Acres..	507,348	525,849		18,501	-3.5
M200		Acres of peach trees.....	Acres..	249,819	300,618		50,799	-16.9
M201		Acres of pear trees.....	Acres..	94,122	111,628		17,506	-15.7
M202		Acres of cherry trees.....	Acres..	119,112	129,216		10,104	-7.8
M203		Acres of plum and prune trees.....	Acres..	132,663	161,023		28,360	-17.6
M204		Acres of grape vines.....	Acres..	712,804	542,630	170,174		31.4
M205		Acres of orange trees.....	Acres..	915,217	966,963		51,746	-5.4
M206		Acres of grapefruit trees.....	Acres..	226,373	183,568	42,805		23.3
M207		Acres of lemon trees.....	Acres..	79,635	62,376	17,259		27.7
M208		Acres of English walnut trees.....	Acres..	166,943	166,812	131		.1
M209		Acres of almond trees.....	Acres..	275,908	207,796	68,112		32.8
M210		Acres of pecan trees.....	Acres..	328,608	382,304		53,696	-14.1

Cash grain farms increased in number from 369 thousand in 1969 to 580 thousand in 1974. This increase in the number was due to the significantly higher prices received for cash-grain crops in relation to prices received for livestock and poultry products in 1974. Many farms sold their cash grain crops instead of feeding them to livestock or poultry. Cash grain farms in 1974 were the largest single 3-digit industry group in number, comprising 34.2 percent of farms with sales of \$2,500 and over. They average 485 acres in size and \$40,798 in value of products sold. The greatest concentration of cash grain farms is in the corn belt, where corn and soybeans are the principal crops sold.

*Wheat farms (0111)*—Wheat farms are cash grain farms which received 50 percent or more of the total sales of farm products from wheat; they account for 18.1 percent of the total cash grain farms. They average 974 acres in size and \$39,194 in value of farm products sold. The largest concentration of wheat farms are in the Dakotas, Nebraska, Kansas, Oklahoma, Montana, Washington, and Oregon.

*Rice farms (0112)*—Rice farms are cash grain farms which receive 50 percent or more of the total value of farm products sold from rice. They are primarily located in Arkansas, Mississippi, Louisiana, California, and on the gulf coast of Texas.

*Corn farms (0115)*—Corn farms, which receive 50 percent or more of their total sales from corn, account for the largest number of cash grain farms at the 4-digit level. Corn farms comprise 23.2 percent of the cash grain farms and 7.9 percent of farms with sales of \$2,500 and over. These farms are most concentrated in the East North Central States.

*Soybean farms (0116)*—Soybean farms are cash grain farms which receive 50 percent or more of their total farm sales from soybeans. They are primarily located in the North Central States, east of the Mississippi River, and along the Mississippi River in Missouri, Arkansas, Tennessee, Mississippi, and Louisiana.

## INTRODUCTION Continued

### Field Crops, Except Cash Grains (013)

**Cotton Farms (0131)**—Cotton farms are a part of the farms classified in the industry group field crops, except cash grains. About 1.8 percent of all farms with sales of \$2,500 or more were classified as cotton farms. Cotton farms average 579 acres in size and \$60,217 in value of farm products sold. They are located almost entirely in the South and in irrigated areas of the Southwest. About 57.8 percent of the bales of cotton harvested came from cotton farms.

**Tobacco farms (0132)**—Tobacco farms are a part of the farms classified as field crops, except cash grains. These farms comprise 5.6 percent of all farms with sales of \$2,500 or more in 1974. Tobacco farms are the smallest, both in terms of size of farm (129 acres) and value of sales from farm products sold. Nearly all tobacco farms are in six Southern States: North Carolina, South Carolina, Virginia, Kentucky, Tennessee, and Maryland. Nearly 75 percent of all tobacco harvested on farms with sales of \$2,500 and over comes from tobacco farms.

**Sugar crop (0133), Irish potato (0134), hay, peanut, and other field crop farms (0139)**—These farms comprise three separate 4-digit industry groups of farms, which have been combined into one map that are almost comparable to the 1969 type-of-farm map for "Other field crops."

**Sugar crop farms (0133)**—Sugar crop farms are those which receive 50 percent or more of the total sales of farm products from the sale of sugar beets or sugarcane. These farms are located in the irrigated areas of the Western States (sugar beets) and in Florida, Louisiana, and Hawaii (sugarcane).

**Irish potato farms (0134)**—These farms received 50 percent or more of their total sales from the sale of Irish potatoes. Most of them are located in Maine, Idaho, and North Dakota.

**Vegetable and melon farms (016)**—Farms were classified in this group if 50 percent of their total farm sales was from the sale of vegetables or melons. Vegetable and

melon farms are widely scattered, with significant concentrations in California, Michigan, Wisconsin, New Jersey, New York, Florida, and Texas. The production of vegetables and melons is concentrated on a relatively small number of large and highly specialized farms.

**Fruit and tree nut farms (017)**—Fruit and tree nut farms receive 50 percent or more of their total value of farm sales from berry crops, grapes, tree nuts, citrus fruits, deciduous tree fruits (apples, peaches, pears, etc.), and other fruits and nuts (pineapples, olives, dates, etc.). These farms are highly specialized in that they accounted for 92.6 percent of the value of fruits, nuts, and berries sold and over 82.6 percent of all land in orchards on farms with value of sales of \$2,500 and over.

**Horticultural specialty farms (018)**—For a farm to be classified as a horticultural specialty farm, it must receive 50 percent or more of its total sales from the sale of ornamental plants, nursery products, and food crops grown under cover. This type of farm tends to be located close to large urban areas.

**General farms, primarily crop (019)**—Any farm deriving 50 percent or more of its total value of sales of farm products from crops, but less than 50 percent from products of any other single crop group, is classified as a general farm, primarily crop.

**Livestock, except dairy, poultry, and animal specialty (021)**—These farms derive 50 percent or more of their total value of farm products from the sale of beef cattle, hogs, sheep, and goats.

**Beef cattle feedlots (0211)**—Beef cattle feedlots are farms which receive 50 percent or more of their total sale of farm products from the sale of beef cattle fattened for a period of at least 30 days. This group includes beef cattle which were fed on a contract or fee basis.

**Beef cattle farms, except feedlots (0212)**—Beef cattle farms, except feedlots which derive 50 percent or more of their total value of farm products sold from the sale

of nonfattened beef cattle. Feed lots are excluded from this group.

**Hog farms (0213)**—Hog farms derive 50 percent or more of their total value of farm products sold from the sale of hogs and pigs. These farms are most concentrated in the corn belt States.

**Sheep and goat farms (0214)**—Sheep and goat farms receive 50 percent or more of their total value of farm products sold from the sale of sheep, goats, goat's milk, wool, and mohair. These farms are primarily located in Texas, California, and other Western States.

**Dairy Farms (024)**—Dairy farms receive 50 percent or more of their total value of farm products sold from the sale of milk and cream. In addition, farms with 30 percent or more of total sales from milk and cream are classified as dairy farms provided:

1. Milk cows represented 50 percent or more of the total cows, and
2. The value of dairy products sold plus the value of cattle and calves sold amounted to 50 percent or more of the total value of all farm products sold.

**Poultry and egg farms (025)**—Poultry farms are those which receive 50 percent or more of their value of sales of farm products from chickens, chicken eggs, broilers, turkeys, turkey eggs, hatched chicks, and other poultry and their products. Poultry farms account for 97.0 percent of the value of sales of all poultry and poultry products, 98.7 percent of broilers sold and 97.0 percent of turkeys sold. Although poultry farms are found throughout the country, their greatest concentration is in the broiler producing areas of Georgia, Alabama, Mississippi, Arkansas, Delaware, and Maryland.

**Animal specialty farms (027)**—Animal specialty farms are those which derive 50 percent or more of their total value of farm sales from the sale of fur-bearing animals, rabbits, horses, mules, donkeys, ponies, honey, fish, worms, and other animal specialties.

## INTRODUCTION Continued

**General farms, primarily livestock (029)**—These are farms deriving 50 percent or more of their value of farm products sold from the sale of livestock and livestock products, including animal specialties, but less than 50 percent from any single livestock or livestock product group.

### Value of Sales Classification of Farms

The value of sales represents the gross market value before taxes and production expenditures of all agricultural products sold or removed from the place in 1974 regardless of who received the payment. It includes receipts by the operator as well as the value of any shares received by partners, landlords, contractors, and others associated with the place.

This report shows number of farms for the following value of sales classifications:

- \$100,000 and over
- \$40,000 to \$99,999
- \$20,000 to \$39,999
- \$10,000 to \$19,999
- \$5,000 to \$9,999
- \$2,500 to \$4,999
- \$1,000 to \$2,499
- Under \$1,000 of farm product sales

Places having less than the minimum \$1,000 sales in the census year were counted as farms if they could normally be expected to produce agricultural products in sufficient quantity to meet the requirements of the definition.

### Tenure and Characteristics of Farm Operators

Tenure classifications used in this census are:

- Full owners—Operators who operate only the land they own.
- Part owners—Operators who operate land they own and also land they rent from others.
- Tenants— Operators who operate only the land they rent from others (or work on shares) for others.

This report contains several maps on farm operator characteristics. Data users are reminded that, for 1974, data on farm operator characteristics such as residence, location, age, race, principal occupation, and days worked off the farm were not collected for abnormal farms, farms operated by corporations, or farms operated as cooperatives, estates, or trusts.

### Occupation of Farm Operator

The 1974 census is the first in which information was collected on the operator's principal occupation. Principal occupation information was collected from all farms operated by individuals or families and by partnerships. The inquiry on principal occupation did not apply to corporation-operated farms, abnormal farms, or other farms such as cooperatives and farms operated by estates or trusts.

Each farm operator to whom the inquiry applied was asked to classify his or her principal occupation as "Farming" or "Other" according to which occupation accounted for the majority (50 percent or more) of the operator's work time in 1974. For partnerships, the work time of all of the members of the partnership together was considered in determining principal occupation. Those farms classified as "Farming" for principal occupation of operator may be further described in the tabulations as "primary farms". Those farms with the principal occupation of operator "other than farming" are described as part-time farms. However, data users who use the "part-time" terminology should note that the classification is dependent only on the answer to the principal occupation inquiry and is no way related to the gross amount of farm sales. There are, in fact, farms of every magnitude of value of sales within the "other than farming" principal occupation classification.

### Type of Farm Organization

The 1974 census is the second in which farm operators were asked to indicate the

type of organization under which their farm was operated. This information was collected only for farms with sales of \$2,500 and over. The four classifications used for type of organization are:

1. Individual or family operation (sole proprietorship), excluding partnership and corporation.
2. Partnership operation, including family partnerships.
3. Corporation, including family corporations.
4. Other, including farms operated as cooperatives, estates and trusts, and abnormal farms such as institutional farms, Indian reservations, grazing associations, and experimental farms. Abnormal farms are not included in the tabulations for farms with sales of \$2,500 and over.

### Land in Farms and Land Uses

**Land in farms**—Each farm operator determined acres of land in farm by adding any acreage he owned to any acreage he rented from others then subtracting any acreage he rented to others. Land in farms consists primarily of agricultural land, i.e., land used for crops and pasture or grazing. It also includes areas of forest and wasteland and some cropland not actually under cultivation nor used for pasture or grazing. In general, all grazing lands were to be included as land in farms except lands used for grazing livestock under permit or special license on a per head or animal unit basis.

**Total cropland**—This includes the sum of acreage for cropland harvested, cropland used for pasture or grazing, cropland used for cover crops, cropland on which all crops failed, cropland in cultivated summer fallow, and idle cropland.

**Harvested cropland**—This includes all land from which crops were harvested, including hay cut, and all land in orchards, citrus groves, and nursery and greenhouse products.

## INTRODUCTION Continued

**Pastureland**—This is the sum of all types of pastureland. It includes cropland used only for pasture or grazing, woodland pastured and other pastureland and range-land.

**Irrigated land**—This consists of land in farms watered for agricultural purposes by artificial means.

**Drained land**—This consists of land in farms benefited to some extent by artificial drainage facilities including ditches, underground drains, grading or leveling for drainage, dikes, and pumping to remove water.

### Market Value of Agricultural Products Sold

Farm operators were asked to report market value of all agricultural products sold from the place in 1974. All sales of agricultural products during the year were to be reported regardless of when the crop was harvested or when livestock or their products were raised or produced.

Data for the sales of farm products represent total sales for the entire farm regardless of who shared the receipts. For tenant-operated farms, the landlord's share of the agricultural products was considered as sold provided the products were moved off the tenant farm. Contract producers were to report estimates of the market value of the commodities produced rather than the amount received from the contractor.

### Income From Sources Other Than Agricultural Products Sold

**Farm-related income**—Several categories of farm-related income reported by farm operators in 1974 are shown in this report. Instructions were to report gross amounts received before taxes and expenses. The categories are:

**Customwork and other agricultural services**—Includes any customwork such as plowing, planting, spraying, harvesting, preparing products for market, etc., for which the farm operator was paid.

**Recreational services**—Includes charges for the use of land or facilities for hunting, fishing, camping, lodging, picnicking, boating, swimming, horseback riding, skiing, hiking, or other recreational activities.

**Government payments**—Includes payments received by the farm operator for participation in Government farm programs.

**Family income from off-farm sources**—Data on family income from off-farm sources were collected only for farms with sales of \$2,500 and over classified as individual or family operations and partnership operations. The five categories of off-farm income reported were:

1. Operation of a nonfarm-related business or professional practice (report net after expenses).
2. Cash wages, salaries, commissions, and tips from all jobs (report amount before deducting taxes).
3. Interest, dividends, or royalties.
4. Federal Social Security, pensions, retirement pay, veteran's payments, annuities, unemployment insurance, workmen's compensation, and old age and other public assistance.
5. Rental income of nonfarm property (report net after deduction of expenses).

### Farm Production Expenses

Farm production expenses include expenses paid by anyone for the production on the farm of crops, poultry, livestock, and other agricultural products. Tenant farmers were instructed to report expenditures by landlords for agricultural operations on the farm as well as their own expenditures. Farm operators who rent part of their land to others were to report only those expenses applicable to the land they actually used. Contract producers who produced crops, poultry, or livestock for others under contract were to report the estimated cost of all items furnished by the contractor.

### Farm Credit

The debt reported was that owed on December 31, 1974, arising from the ownership or operation of the farm or ranch.

**Real estate debt**—Debts secured by real estate refer to the amount of debt that was secured by the acres and buildings owned and operated by the operator. Debt secured by land and buildings rented to others was to be excluded.

**Non-real-estate debt**—This type of debt refers to all amounts owed on December 31, 1974, for operating the farm or ranch for which real estate security was not required. Debts on nonagricultural property or for nonagricultural purposes were to be excluded as were government price support loans, landlord's share of any debt, and debts owed for less than 30 days.

### Hired Farm Labor

The number of hired farm workers includes all persons hired to do farm or ranch labor for cash payments. This labor may include everything from regular farm work to the keeping of records necessary to the agricultural operation. Members of the farm operators' families were included if they were paid cash. Workers working for contractors under contract to the farm operator, salaried corporation officers, unpaid family members, and persons employed by a labor contractor were excluded. Operators of hired machines were excluded if their pay was included in the cost of the customwork.

Considerable duplication exists in the number of hired workers reported working 25 to 149 days and less than 25 days. Many are seasonal workers in vegetable and fruit producing areas. In the census statistics the same workers may be counted several times as they move from farm to farm.

### Machinery and Equipment on Place

Farm operators were asked to estimate the market value of all machinery and equipment usually kept on the farm and

## INTRODUCTION Continued

used for the farm business. The reported value represents an estimate of how much the machinery and equipment would sell for in its present condition, not the replacement cost or the depreciated value.

For the inventory of selected items of farm equipment, the operator was to report only the equipment owned, leased, or rented or temporarily borrowed from others that was on any part of the farm on December 31, 1974, and that was used for the farm business in 1973 or 1974.

### Agricultural Chemicals Used

**Fertilizer**—Data on acreage fertilized and amounts of dry and liquid fertilizer applied were collected for each harvested crop, cropland pasture, and other pastureland for farms with sales of \$2,500 and over. When the same crop was fertilized two or more times, the acreage was to be reported only once, but the total tonnage of fertilizer applied was to be reported. If two different crops or two different plantings of the same crop were harvested in 1974 from the same acreage, the acreage of each crop or planting fertilized was to be reported.

**Lime**—Acreage limed and tonnage of lime and liming materials applied to the soil in 1974 were to be reported. Gypsum, land plaster, and lime used for spraying or sanitation purposes were not to be reported.

**Other agricultural chemicals**—The cost of insecticides, herbicides, fungicides, and other pesticides and chemicals used on the farm in 1974 was to include the cost of the materials only, not the cost of application.

When reporting number of acres on which chemicals were used, the farm operator was instructed to report only once the acres treated more than one time with the same chemical. However, the cost of all the materials applied was to be reported. When multipurpose chemicals were used, the acreage treated for each purpose was to be reported and the cost prorated between the reported purposes.

### Livestock and Poultry

Farm operators were instructed to report livestock and poultry inventories as of December 31, 1974, the reference date also used for the 1969 census. All animals kept on the place were to be reported regardless of ownership, including livestock or poultry being custom-fed or fed on contract for others.

Livestock and poultry sold include all animals sold or removed from the place during the year regardless of ownership. Those sold for a landlord or given to others in trade or in payment for goods and services as well as those custom fed for others were to be included. Animals bought and sold within a 30-day period were to be excluded.

The value of livestock and poultry sold represents the gross sales value before deducting any marketing or production costs. For livestock or poultry fed under contract for others, the farm operator was asked to estimate the market value at the time they were taken from the place.

### Crops

In 1974, sales of crops including nursery products and hay exceeded livestock and poultry sales for the first time in recent censuses. Sales of crops accounted for 51.3 percent of the value of all farm products sold in 1974.

**Crops harvested**—Nearly all of the acres reported for individual crops in 1974 represent area harvested except for a small part of the acreage of corn, sorghums, peanuts, soybeans, and cowpeas counted as harvested but hogged off or grazed when the crop was mature or almost mature. Since more than one crop may have been harvested from the same land during the same crop year, the sum of acres of all crops harvested exceeds the acreage of land from which crops were harvested.

Acreages of wheat and soybeans increased significantly between 1969 and 1974 due to high market prices during 1973 and 1974. This increased acreage is reflected in decreases in other crops, especially other small grains.

**Vegetables harvested for sale**—For farms with sales of \$2,500 and over the individual acres of each kind of vegetable harvested was reported as well as the acreage of land from which vegetables were harvested. For farms with sales of under \$2,500, only the total acreage of vegetables harvested was reported.

**Berries, fruits, and nuts**—In 1974, data for individual berries, fruits, and nuts were collected for farms with sales of \$2,500 and over. For farms with sales of under \$2,500, only the total acreage of berries harvested and the total land in bearing and nonbearing fruit orchards, citrus or other groves, vineyards, and nut trees was reported.

### How the Maps Were Made

Computer graphics techniques and technology were used in producing the maps in this report. The resultant mapping system was developed to meet an increasing demand for the rapid and economic production of maps of publication quality.

Both the multicolor choropleth maps and the dot maps are products of the automated statistical mapping system developed at the Bureau of the Census. This mapping system generates a computer tape of commands directing a plotting device to draw maps on 310mm film at publication size. The plotting device is an extremely fast Computer Output on Microfilm (COM) unit capable of plotting a map in just a few minutes. The production of maps on film at publication size reduces much effort and costs.

After the maps have been plotted by the COM unit, the film is sent for final cartographic and photographic work to the Geographic Branch, Data Preparation Division, Jeffersonville, Ind. During this stage of operation, lettering is applied to the maps as needed. The final step is to prepare the film negatives for each page.

### Choropleth Maps

The choropleth maps showing county classifications were prepared by a

## INTRODUCTION Continued

computer mapping program which automatically creates color separation map images on film. The frames of map imagery correspond to the counties of the United States. Each frame shows one of the class intervals designated for the map, except for the frame for the State boundary outline. Thus a map showing data in five classes will have six frames of map imagery. This procedure is directly analogous to manual procedures employed by cartographers when preparing color choropleth maps. The maps produced by this system have the quality of hand-crafted choropleth maps at the low cost and rapid production time typical of automated cartography.

The choropleth map subsystem requires two input computer files. One file contains the agricultural data processed into classes by county; it is provided by the Bureau's Agriculture Division. This file contains a State and county identification code for each of the preclassified data items. The second input file is the Bureau's DIMECO file containing the latitude-longitude and Alber's Equal-area (in inches) coordinates describing the boundaries for all counties in the United States. This boundary file is used to produce a third file containing a set of contiguous horizontal lines corresponding to lines which the COM unit must plot to cover completely a county's area on the final map. These lines are known as "scan" lines and make up this intermediate file called the SCAN file. The sets of scan lines for the counties are also

associated with their particular State and county identification codes.

The boundary-coordinate file and the SCAN file are processed in conjunction with the agricultural data file. By matching the State and county identification codes in the files, the class intervals for data are associated correctly with the appropriate set of scan lines for a county. Then all the counties for each class interval are outputted to a plot tape which is used to direct the movements of the COM's electron beam in the Census Bureau's COM unit. The COM unit then outputs the class separations on 310mm film at publication size.

The class separations are lettered, screened, and composited into the final films. The printer is given the three final publication negatives for each map corresponding to the red, yellow, and black ink which are used in the printing of the maps.

### Dot Maps

The dot maps in this report were prepared directly on film by a COM unit from the output of the Bureau's new dot mapping program. The program controls the placement of dots within the counties in the United States as determined by a 15-level land-use filter. The computer program is based upon a totally new approach to dot placement. The new program takes advantage of the scan-line technique developed by the Bureau for

color choropleth maps.

The Census dot mapping program utilizes two features of a previous dot mapping program developed for the Bureau by the Cartographic Laboratory at the University of Wisconsin in Madison: A land-use filter and the distribution of dots by a weighting factor. The land-use filter is a file of approximately one-half million cells covering the entire United States. To this file, the Bureau has added land use for Alaska and Hawaii. The land-use file was prepared from the land-use map which appeared in the 1970 National Atlas on pages 158 and 159. Each of the land-use categories shown in the land-use map was converted into numeric values by digitizing. The placement of dots within specific land-use categories in a county was controlled by probabilities based on a weighting algorithm using the data as input.

The Bureau's new dot mapping program converted the land-use filter into a scan-line land-use file by county. The program used for dot placement rapidly computes the number of dots to be placed in a county, selects the land use, the probability for dots in each land use, and then places the dots. The algorithms insure that all the dots fall within the county. The output of the program is a plot tape which directs the COM unit in plotting dot maps on 310mm film and at publication size. These dot maps require minimal cartographic touch up. Lettering is applied and a negative is prepared for the printer.