

Definitions

Food and Fiber System: The set of producers of goods and services required to assemble, process, and distribute raw farm products to U.S. and foreign consumers.

Input-output model: An economic model that represents the economy as a set of sales and purchases between sectors, final demands, and payments to labor, capital, profits, and indirect business taxes.

Metro areas: Metropolitan Statistical Areas (MSA's), as defined by the Office of Management and Budget, include core counties containing a city of 50,000 or more people and a total area population of at least 100,000. Additional contiguous counties are included in the MSA if they are economically and socially integrated with the core county. Metro areas are divided into central cities and areas outside central cities (suburbs). Throughout this publication, "urban" and "metro" have been used interchangeably to refer to people and places within MSA's.

Nonmetro areas: Counties outside metro area boundaries. Throughout this publication, "rural" and "nonmetro" are used interchangeably to refer to people and places outside of MSA's.

Regions:

Bureau of Economic Analysis regions

New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Mideast—Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania.

Great Lakes—Illinois, Indiana, Michigan, Ohio, and Wisconsin.

Plains—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

Southeast—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

Southwest—Arizona, New Mexico, Oklahoma, and Texas.

Rocky Mountain—Colorado, Idaho, Montana, Utah, and Wyoming.

Far West—Alaska, California, Hawaii, Nevada, Oregon, and Washington.

Census regions and divisions

Northeast region:

New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Middle Atlantic—New Jersey, New York, and Pennsylvania.

Midwest region:

East North Central—Illinois, Indiana, Michigan, Ohio, and Wisconsin.

West North Central—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

South region:

South Atlantic—Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia.

East South Central—Alabama, Kentucky, Mississippi, and Tennessee.

West South Central—Arkansas, Louisiana, Oklahoma, and Texas.

West region:

Mountain—Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

Pacific—Alaska, California, Hawaii, Oregon, and Washington.

Value-Added Manufacturing

We defined most farm- and forest-related value-added manufacturing on the basis of the proportion of intermediates (goods used in the production process, excluding labor and capital) obtained directly from farms and forestry or logging operations or indirectly from closely related operations. In most cases, an industry had to obtain at least 20 percent of

its intermediates from farm or forest inputs. The Bureau of Economic Analysis' Input-Output (I-O) Tables were used in calculating those percentages. A few additional industries were defined as value-added on the basis of their four-digit standard industrial code (SIC), which indicated that they made products from cotton, wool, leather, or wood. These industries could not be identified as value-added using the I-O table because they were combined with other four-digit industries in the I-O classification scheme. The fabric and apparel industries are probably underrepresented in our analysis because they are mostly classified by the type of product made, such as broad- or narrow- loomed fabric, men's wear, or mittens, not by the content of the product. Some of the fabric and apparel industries we excluded undoubtedly use cotton, other cellulose fiber from plants and trees, or wool to make their products, but we could not reliably identify them.

Appendix table 1—Value-added industry definition using four-digit SIC code

SIC code	Description
2011	Meat packing plants
2013	Sausages and other prepared meat products
2015	Poultry slaughtering and processing
2021	Creamery butter
2022	Natural, processed, and imitation cheese
2023	Dry, condensed, and evaporated dairy products
2024	Ice cream and frozen deserts
2026	Fluid milk
2032	Canned specialities
2033	Canned fruits, vegetables, preserves, jams, and jellies
2034	Dried and dehydrated fruits, vegetables, and soup mixes
2035	Pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings
2037	Frozen fruits, fruit juices, and vegetables
2038	Frozen specialities, not elsewhere classified
2041	Flour and other grain mill products
2043	Cereal breakfast foods
2044	Rice milling
2045	Prepared flour mixes and doughs
2046	Wet corn milling
2047	Dog and cat food
2048	Prepared feeds and feed ingredients for animals and fowls, except dogs and cats
2051	Bread and other bakery products, except cookies and crackers
2052	Cookies and crackers
2053	Frozen bakery products, except bread
2061	Cane sugar, except refining
2062	Cane sugar, refining
2063	Beet sugar
2064	Candy and other confectionery products
2066	Chocolate and cocoa products
2067	Chewing gum
2068	Salted and roasted nuts and seeds
2074	Cottonseed oil mills
2075	Soybean oil mills
2076	Vegetable oil mills, except corn, cottonseed, and soybean
2077	Animal and marine fats and oils
2079	Shortening, table oils, margarine, and other edible fats and oils, not elsewhere classified
2082	Malt beverages
2083	Malt
2084	Wines, brandy, and brandy spirits
2085	Distilled and blended liquors
2086	Bottled and canned soft drinks and carbonated waters
2087	Flavoring extracts and flavoring syrups, not elsewhere classified
Selected industries from miscellaneous food preparations and kindred products (SIC 209)	
2096	Potato chips, corn chips, and similar snacks
2098	Macaroni, spaghetti, vermicelli, and noodles
2099	Miscellaneous preparations, not elsewhere classified

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**Appendix table 1—Value-added industry definition using four-digit SIC code—
Continued**

SIC code	Description
2111	Cigarettes
2121	Cigars
2131	Chewing and smoking tobacco and snuff
2141	Tobacco stemming and redrying
Selected industries from textile mill products (SIC 22):	
2211	Broadwoven fabric mills, cotton
2231	Broadwoven fabric mills, wool (including dyeing and finishing)
2261	Finishers of broadwoven fabrics of cotton
2281	Yarn spinning mills
2282	Yarn texturizing, throwing, twisting, and winding mills
Selected industry from apparel (SIC 23):	
2386	Leather and sheep-lined clothing
2411	Logging
2421	Sawmills and planing mills
2426	Hardwood dimension and flooring mills
2429	Special product sawmills, not elsewhere classified
2431	Millwork
2434	Wood kitchen cabinets
2435	Hardwood veneer and plywood
2436	Softwood veneer and plywood
2439	Structural wood members, not elsewhere classified
2441	Nailed and lock corner wood boxes and shook
2448	Wood pallets and skids
2449	Wood containers, not elsewhere classified
2451	Mobile homes
2452	Prefabricated wood buildings and components
2491	Wood preserving
2493	Reconstituted wood products
2499	Wood products, not elsewhere classified
Selected industries from furniture and fixtures (SIC 25):	
2511	Wood household furniture, except upholstered
2512	Wood household furniture, upholstered
2517	Wood television, radio, phonograph, and sewing machine cabinets
2521	Wood office furniture
2541	Wood office and store fixtures, partitions, shelving, and lockers
2611	Pulp mills
2621	Paper mills
2631	Paperboard mills
2652	Setup paperboard boxes
2653	Corrugated and solid fiber boxes
2655	Fiber cans, tubes, drums, and similar products
2656	Sanitary food containers, except folding
2657	Folding paperboard boxes, including sanitary
2671	Packaging paper and plastics film, coated and laminated
2672	Coated and laminated paper, not elsewhere classified
2673	Plastics, foil, and coated paper bags
2674	Uncoated paper and multiwall bags
2675	Die-cut paper and paperboard and cardboard
2676	Sanitary paper products

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Appendix table 1—Value-added industry definition using four-digit SIC code—Continued

SIC code	Description
2677	Envelopes
2678	Stationery, tablets, and related products
2679	Converted paper and paperboard products, not elsewhere classified
Selected industries from printing, publishing, and allied industries (SIC 27):	
2732	Book printing
2750	Commercial printing
2760	Manifold business forms
2782	Blankbooks, looseleaf binders and devices
Selected industries from chemicals and allied products (SIC 28):	
2823	Cellulosic manmade products
2861	Gum and wood chemicals
3111	Leather tanning and finishing
3131	Boot and shoe cut stock and findings
3142	House slippers
3143	Men's footwear, except athletic
3144	Women's footwear, except athletic
3149	Footwear, except rubber, not elsewhere classified
3151	Leather gloves and mittens
3171	Women's handbags and purses
3172	Personal leather goods, except women's handbags and purses
3199	Leather goods, not elsewhere classified

Appendix table 2—Value-added industry definition using two-digit SIC code

SIC code	Description
20	Food and kindred products
21	Tobacco products
24	Lumber and wood products, except furniture
26	Paper and allied products
31	Leather and leather products

Appendix table 3—Farm-related value-added manufacturing by sector and detailed industry

Sectors and industries	Establishments ¹		Employees ¹		Counties with at least one establishment in the industry ²	
	1994	Change, 1989-94	1994	Change, 1989-94	1994	Change, 1989-94
	Number	Percent	Number	Percent	Number	Percent
Meat products	3,136	2.9	420,218	17.0	1,324	5.9
Red meat packing	1,312	1.7	127,015	5.4	872	2.8
Sausages and other processed meat products	1,200	0	85,021	8.2	570	5.2
Poultry slaughter and processing	567	23.3	207,799	31.2	357	21.0
Dairy products	1,941	-12.1	134,702	-4.6	762	-8.1
Creamery butter	29	-38.3	1,507	-10.4	28	-39.1
Natural, processed, and imitation cheese	548	-7.6	35,780	11.7	282	-5.7
Dry, condensed, and evaporated dairy products	214	19.6	15,234	2.4	182	20.5
Ice cream and frozen deserts	443	-12.3	20,474	-4.0	254	-10.2
Fluid milk	692	-18.6	61,656	-13.3	439	-15.1
Canned, frozen, and preserved fruits and vegetables ³	2,003	6.3	187,624	.7	703	8.3
Canned specialties	209	-.9	20,677	-8.6	151	3.4
Canned fruits, vegetables, preserves, jams, and jellies	657	8.6	47,394	-.6	363	11.0
Dried and dehydrated fruits, vegetables, and soup mixes	161	15.0	13,067	21.1	95	11.8
Pickled fruits and vegetables ⁴	369	-.5	18,799	-3.2	229	6.0
Frozen fruits, fruit juices, and vegetables	253	3.3	43,073	-7.3	150	7.1
Frozen specialties, not elsewhere classified	333	16.8	44,720	14.8	191	7.3
Grain mill products	2,650	5.3	107,936	5.2	1,215	4.8
Flour and other grain mill products	364	3.1	13,456	2.0	279	-.4
Cereal breakfast foods	64	16.4	15,717	-1.6	55	34.1
Rice milling	59	0	4,164	-12.3	33	0
Prepared flour mixes and doughs	214	46.6	16,838	42.6	150	37.6
Wet corn milling	58	5.5	8,450	1.5	50	6.4
Dog and cat food	161	-10.1	14,199	3.2	137	-6.2
Prepared feeds and feed ingredients ⁵	1,702	4.6	35,051	1.6	961	5.4
Bakery products	3,346	13.0	219,559	1.2	755	8.5
Bread and other bakery products	2,331	9.1	154,833	-2.2	615	5.9
Cookies and crackers	436	15.3	50,482	9.4	219	17.1
Frozen bakery products, except bread	166	19.4	12,505	17.7	120	16.5
Sugar and confectionery products	1,141	3.5	88,904	-2.7	497	5.3
Cane sugar, except refining	43	0	6,645	-16.2	23	15.0
Cane sugar refining	19	5.6	4,721	-4.8	17	0
Beet sugar	40	0	6,749	2.3	35	2.9
Candy and other confectionery products	752	18.2	47,721	6.1	371	16.7
Chocolate and cocoa products	157	-19.9	10,440	-6.0	112	-18.2
Chewing gum	11	-15.4	3,940	-31.6	10	-16.7
Salted and roasted nuts and seeds	98	10.1	8,653	-8.4	72	1.4
Fats and oils	511	-9.1	25,940	-11.1	349	-5.2
Soybean oil mills	96	-11.9	6,859	.4	85	-10.5
Vegetable oil mills, excluding corn, cottonseed, and soybean	27	12.5	763	-16.7	25	4.2
Other fats and oils, not elsewhere classified	98	4.3	7,801	-17.3	71	9.2
Cottonseed oil mills	36	-21.7	2,022	-21.9	32	-17.9
Animal and marine fats and oils	253	-12.2	8,470	-6.2	211	-8.3
Beverages	2,084	.1	139,273	-9.1	704	-4.9
Malt beverages	277	84.7	33,499	4.9	183	56.4
Malt	29	0	1,217	-13.9	23	9.5
Distilled and blended liquors	58	-7.9	6,175	-13.6	43	0
Wines, brandy, and brandy spirits	565	11.9	15,266	5.4	175	-1.1
Bottled and canned soft drinks and carbonated waters	840	-18.2	72,681	-18.4	473	-16.3
Flavoring extracts and syrups, not elsewhere classified	285	8.0	10,359	12.1	157	18.0
Selected miscellaneous food preparations	2,306	16.4	103,031	1.4	716	13.8
Potato chips, corn chips, and similar snacks	382	11.4	33,933	4.7	237	10.7
Macaroni, spaghetti, vermicelli, and noodles	199	-6.6	6,550	-2.2	108	.9
Miscellaneous preparations, not elsewhere classified	1,725	21.1	62,548	.1	610	17.3

See notes at end of table.

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Appendix 2

Appendix table 3—Farm-related value-added manufacturing by sector and detailed industry—Continued

Sectors and industries	Establishments ¹		Employees ¹		Counties with at least one establishment in the industry ²	
	1994	Change, 1989-94	1994	Change, 1989-94	1994	Change, 1989-94
	Number	Percent	Number	Percent	Number	Percent
Tobacco products	117	-16.4	34695	-23.9	74	-12.9
Cigarettes	16	23.1	22800	-29.1	14	40.0
Cigars	28	40.0	2570	10.8	18	28.6
Chewing and smoking tobacco and snuff	27	-6.9	3150	.8	25	-3.8
Tobacco stemming and redrying	44	-33.3	6015	-23.5	31	-26.2
Selected cotton or wool fabric or yarn manufacturing	1,310	13.2	174720	-14.1	502	18.4
Broadwoven fabric mills, cotton	354	24.6	54311	-20.3	217	21.9
Broadwoven fabric mills, wool ⁶	100	-13.0	15296	9.9	70	-11.4
Finishers of broadwoven fabrics of cotton	320	56.1	19061	20.4	214	48.6
Yarn spinning mills	395	-6.2	67378	-23.6	185	-6.6
Yarn texturizing, throwing, twisting, and winding mills	141	6.8	18674	7.4	89	7.2
Leather products and leather and sheep-lined clothing ⁷	1,812	-6.8	91,610	-21.7	633	5.1
Leather tanning and finishing	354	6.6	16,200	4.8	191	26.5
Boot and shoe cut stock and findings	84	-22.2	3,843	-23.0	55	-5.2
House slippers	30	-16.7	2,789	-34.7	28	-9.7
Men's footwear, except athletic	144	2.1	24,330	-20.3	98	-9.3
Women's footwear, except athletic	111	-19.0	14,786	-39.9	74	-17.8
Footwear, except rubber, not elsewhere classified	90	-17.4	6,067	-27.4	71	-9.0
Leather gloves and mittens	70	-6.7	3,053	6.2	53	-3.6
Women's handbags and purses	178	-31.8	4,479	-48.3	83	-11.7
Other personal leather goods	175	-4.4	5,340	-20.1	115	13.9
Leather goods, not elsewhere classified	403	15.5	8,446	14.6	236	9.3
Leather and sheep-lined clothing	110	-14.7	2,277	-9.5	49	-18.3

¹Some establishments (and their employees) classified at the sector level could not be classified into the more detailed industries, so the subindustries do not always add to the total sector numbers.

²Some counties have more than one type of industry within a sector, so the numbers of counties in the industries often sum to much more than the total number at the sector level.

³Also includes canned, frozen, and preserved food specialties, such as canned spaghetti and frozen pizza.

⁴Also includes vegetable sauces, seasonings, and dressings.

⁵For animals, other than cats and dogs, and fowls.

⁶Also includes the dyeing and finishing of broadwoven wool fabrics.

⁷Leather products are classified under the two-digit standard industrial code 31—Leather and Leather Products. Leather and sheep-lined clothing is classified as industrial code 2386 under the two-digit standard industrial code 23—Apparel and Other Finished Products Made from Fabric and Similar Material.

Source: Calculated by ERS using data from 1989 and 1994 County Business Patterns files enhanced by Claritas, Inc.

Appendix table 4—Nonmetro share of farm-related value-added manufacturing by sector and industry, 1994

Sectors and industries	Establishments	Employees
	Percent	
Meat products	39.7	52.3
Red meat packing	50.0	51.9
Sausages and other processed meat products	23.0	23.0
Poultry slaughter and processing	52.2	64.6
Dairy products	33.5	27.8
Creamery butter	44.8	39.3
Natural, processed, and imitation cheese	55.5	49.1
Dry, condensed, and evaporated dairy products	22.7	27.3
Ice cream and frozen deserts	16.3	21.0
Fluid milk	25.0	15.9
Canned, frozen, and preserved fruits and vegetables ¹	25.8	32.8
Canned specialties	19.1	45.5
Canned fruits, vegetables, preserves, jams, and jellies	31.4	29.6
Dried and dehydrated fruits, vegetables, and soup mixes	28.6	31.0
Pickled fruits and vegetables ²	20.6	21.8
Frozen fruits, fruit juices, and vegetables	36.0	45.2
Frozen specialties, not elsewhere classified	14.7	23.2
Grain mill products	46.6	34.5
Flour and other grain mill products	37.4	27.5
Cereal breakfast foods	25.0	7.8
Rice milling	47.5	60.0
Prepared flour mixes and doughs	16.8	25.4
Wet corn milling	44.8	39.5
Dog and cat food	36.0	31.0
Prepared feeds and feed ingredients ³	54.6	50.8
Bakery products	10.2	12.8
Bread and other bakery products	9.7	10.8
Cookies and crackers	11.0	17.7
Frozen bakery products, except bread	7.8	17.2
Sugar and confectionery products	20.9	21.1
Cane sugar, except refining	53.5	42.3
Cane sugar refining	21.1	4.4
Beet sugar	60.0	57.4
Candy and other confectionery products	18.2	18.5
Chocolate and cocoa products	10.8	3.3
Chewing gum	9.1	14.1
Salted and roasted nuts and seeds	30.6	25.6
Fats and oils	36.4	33.5
Soybean oil mills	45.8	44.0
Vegetable oil mills, excluding corn, cottonseed, and soybean	22.2	38.1
Other fats and oils, not elsewhere classified	15.3	13.1
Cottonseed oil mills	47.2	39.7
Animal and marine fats and oils	41.1	42.0
Beverages	20.5	11.8
Malt beverages	21.7	5.9
Malt	37.9	43.3
Distilled and blended liquors	29.3	30.1
Wines, brandy, and brandy spirits	18.6	10.5
Bottled and canned soft drinks and carbonated waters	24.4	13.2
Flavoring extracts and syrups, not elsewhere classified	7.7	8.6
Selected miscellaneous food preparations	16.5	13.1
Potato chips, corn chips, and similar snacks	20.7	14.4
Macaroni, spaghetti, vermicelli, and noodles	10.1	9.3
Miscellaneous preparations, not elsewhere classified	16.3	12.7

See notes at end of table.

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Appendix table 4—Nonmetro share of farm-related value-added manufacturing by sector and industry, 1994—Continued

Sectors and industries	Establishments	Employees
	Percent	
Tobacco products	18.8	12.8
Cigarettes	18.8	5.6
Cigars	21.4	35.1
Chewing and smoking tobacco and snuff	11.1	4.5
Tobacco stemming and redrying	22.7	35.3
Selected cotton or wool fabric or yarn manufacturing	33.3	51.9
Broadwoven fabric mills, cotton	29.1	50.7
Broadwoven fabric mills, wool ⁴	37.0	75.7
Finishers of broadwoven fabrics of cotton	20.3	32.8
Yarn spinning mills	45.6	53.3
Yarn texturizing, throwing, twisting, and winding mills	36.2	50.6
Leather products and leather and sheep-lined clothing ⁵	26.9	39.7
Leather tanning and finishing	31.4	35.4
Boot and shoe cut stock and findings	27.4	57.7
House slippers	33.3	40.4
Men's footwear, except athletic	34.7	42.8
Women's footwear, except athletic	29.7	53.2
Footwear, except rubber, not elsewhere classified	32.2	57.8
Leather gloves and mittens	65.7	69.9
Women's handbags and purses	14.0	16.2
Personal leather goods, except women's handbags and purses	17.7	14.3
Leather goods, not elsewhere classified	26.6	21.3
Leather and sheep-lined clothing	7.3	10.2

¹Also includes canned, frozen, and preserved food specialties, such as canned spaghetti and frozen pizza.

²Also includes vegetable sauces, seasonings, and dressings.

³For animals, other than cats and dogs, and fowls.

⁴Also includes the dyeing and finishing of broadwoven wool fabrics.

⁵Leather products are classified under the two-digit standard industrial code 31—Leather and Leather Products. Leather and sheep-lined clothing is classified as industrial code 2386 under the two-digit standard industrial code 23—Apparel and Other Finished Products Made from Fabric and Similar Material.

Source: Calculated by ERS using data from 1989 and 1994 County Business Patterns files enhanced by Claritas, Inc.

Appendix table 5—Forest-related value-added manufacturing by sector and industry

Sectors and industries	Establishments ¹		Employees ¹		Counties with at least one establishment in the industry ²	
	1994	Change, 1989-94	1994	Change, 1989-94	1994	Change, 1989-94
	Number	Percent	Number	Percent	Number	Percent
Lumber and wood products, except furniture	37,389	13.3	694,473	-2.7	2,577	3.6
Logging	13,962	17.2	84,634	-2.1	1,719	8.9
Sawmills and planing mills	5,744	5.9	145,178	-3.2	1,756	3.6
Hardwood dimension and flooring mills	808	16.4	31,079	3.7	423	11.0
Special product sawmills, not elsewhere classified	177	-14.1	1,734	-30.2	96	-4.0
Millwork	3,286	24.7	89,019	-4.6	1,011	18.1
Wood kitchen cabinets	4,475	41.3	66,181	.5	1,147	28.0
Hardwood veneer and plywood	312	3.7	21,001	-2.6	209	6.6
Softwood veneer and plywood	186	-13.9	30,237	-11.6	128	-4.5
Structural wood members, not elsewhere classified	940	17.5	28,753	18.9	612	19.8
Nailed and lock corner wood boxes and shook	299	5.7	5,163	-11.1	200	.0
Wood pallets and skids	2,009	22.9	31,944	10.1	1,028	11.3
Wood containers, not elsewhere classified	234	20.6	4,945	-12.5	185	18.6
Mobile homes	300	-12.0	46,164	13.1	165	-12.2
Prefabricated wood buildings and components	632	-2.0	18,970	-19.1	434	-1.4
Wood preserving	474	-6.1	11,259	-11.7	375	-5.3
Reconstituted wood products	300	11.9	24,081	11.0	230	10.6
Wood products, not elsewhere classified	2,758	4.0	52,775	-11.6	1,117	5.8
Paper and allied products	6,467	2.8	622,410	-1.5	1,146	3.2
Pulp mills	52	13.0	13,737	-4.2	45	7.1
Paper mills	316	.0	123,333	-7.2	204	2.5
Paperboard mills	218	-1.4	52,483	2.2	173	1.8
Setup paperboard boxes	153	-16.4	6,109	-23.4	99	-13.9
Corrugated and solid fiber boxes	1,617	1.4	114,450	3.8	571	4.4
Fiber cans, tubes, drums, and similar products	301	6.0	12,814	-1.3	204	7.4
Sanitary food containers, except folding	89	4.7	15,417	3.2	76	4.1
Folding paperboard boxes, including sanitary	580	.5	52,378	.8	265	6.0
Packaging paper and plastics film, coated and laminated	211	50.7	17,685	8.6	143	49.0
Coated and laminated paper, not elsewhere classified	458	11.2	32,909	2.1	236	17.4
Plastics, foil, and coated paper bags	516	10.5	39,730	2.4	251	10.6
Uncoated paper and multiwall bags	144	5.9	18,494	.1	116	11.5
Die-cut paper and paperboard and cardboard	394	5.9	16,877	-7.7	187	-5.6
Sanitary paper products	155	15.7	39,655	1.9	113	18.9
Envelopes	266	-4.7	24,034	-14.7	133	4.7
Stationery, tablets, and related products	163	-7.9	9,232	-21.0	105	-7.9
Converted paper and paperboard products, not elsewhere classified	732	5.6	32,092	4.4	372	9.1
Selected wood furniture manufacturing	6,502	8.3	277,008	-5.1	1,262	8.2
Wood household furniture, except upholstered	2,770	7.2	125,879	-5.8	902	5.9
Wood household furniture, upholstered	1,151	10.6	83,232	2.4	342	2.4
Wood television, radio, phonograph, and sewing machine cabinets	105	41.9	4,440	-12.8	84	42.4
Wood office furniture	599	-5.8	23,620	-24.6	291	7.8
Wood office and store fixtures, partitions, shelving, and lockers	1,877	12.3	39,837	-1.7	630	23.0

See notes at end of table.

—Continued

Appendix 2

Appendix table 5—Forest-related value-added manufacturing by sector and industry—Continued

Sectors and industries	Establishments ¹		Employees ¹		Counties with at least one establishment in the industry ²	
	1994	Change, 1989-94	1994	Change, 1989-94	1994	Change, 1989-94
	Number	Percent	Number	Percent	Number	Percent
Selected printing, publishing, and allied industries	37,919	10.0	698,895	-1.6	2,205	4.9
Book printing	615	21.3	48,218	3.5	310	21.6
Commercial printing	35,924	10.1	568,356	-.4	2,171	4.6
Manifold business forms	855	3.3	45,642	-13.5	396	2.9
Blankbooks, looseleaf binders and devices	525	8.5	36,679	-9.4	210	6.1
Selected chemicals and allied products	92	9.5	9,356	-29.1	72	1.4
Cellulosic manmade products	13	44.4	6,458	-38.1	11	37.5
Gum and wood chemicals	79	5.3	2,898	4.5	64	.0

¹Some establishments (and their employees) classified at the sector level could not be classified into the more detailed industries, so the industries do not add to the total sector numbers.

²Some counties have more than one type of detailed industry within a sector, so the numbers of counties in the industries often sum to much more than the total number at the sector level.

Source: Calculated by ERS using data from 1989 and 1994 County Business Patterns files enhanced by Claritas, Inc.

Appendix table 6—Nonmetro share of forest-related value-added manufacturing by sector and industry, 1994

Sectors and industries	Establishments	Employees
	Percent	
Lumber and wood products, except furniture	55.5	55.7
Logging	78.5	80.3
Sawmills and planing mills	69.6	73.6
Hardwood dimension and flooring mills	47.6	60.1
Special product sawmills, not elsewhere classified	80.2	73.1
Millwork	22.9	40.2
Wood kitchen cabinets	19.7	24.5
Hardwood veneer and plywood	37.8	50.2
Softwood veneer and plywood	59.7	75.3
Structural wood members, not elsewhere classified	36.1	29.2
Nailed and lock corner wood boxes and shook	19.4	24.1
Wood pallets and skids	44.7	44.9
Wood containers, not elsewhere classified	32.1	58.2
Mobile homes	49.7	54.9
Prefabricated wood buildings and components	42.4	45.2
Wood preserving	48.7	49.7
Reconstituted wood products	44.0	64.1
Wood products, not elsewhere classified	36.5	47.0
Paper and allied products	16.3	27.8
Pulp mills	55.8	80.7
Paper mills	35.1	48.6
Paperboard mills	31.2	46.4
Setup paperboard boxes	14.4	16.8
Corrugated and solid fiber boxes	14.9	14.9
Fiber cans, tubes, drums, and similar products	18.9	23.0
Sanitary food containers, except folding	13.5	19.9
Folding paperboard boxes, including sanitary	10.7	13.8
Packaging paper and plastics film, coated and laminated	16.1	13.3
Coated and laminated paper, not elsewhere classified	8.7	17.2
Plastics, foil, and coated paper bags	13.2	18.7
Uncoated paper and multiwall bags	25.0	28.2
Die-cut paper and paperboard and cardboard	12.9	19.9
Sanitary paper products	26.5	27.4
Envelopes	7.9	10.3
Stationery, tablets, and related products	14.7	17.8
Converted paper and paperboard products, not elsewhere classified	16.1	22.9
Selected wood furniture manufacturing	22.3	38.0
Wood household furniture, except upholstered	28.4	39.3
Wood household furniture, upholstered	27.0	47.6
Wood television, radio, phonograph, and sewing machine cabinets	20.0	56.1
Wood office furniture	17.2	32.1
Wood office and store fixtures, partitions, shelving, and lockers	12.1	15.3
Selected printing, publishing, and allied industries	12.3	14.8
Book printing	13.0	25.4
Commercial printing	12.2	13.5
Manifold business forms	16.8	25.5
Blankbooks, looseleaf binders and devices	9.3	8.4
Selected chemicals and allied products	53.3	45.1
Cellulosic manmade products	30.8	41.0
Gum and wood chemicals	57.0	54.2

Source: Calculated by ERS using data from the 1994 County Business Patterns file enhanced by Claritas, Inc.