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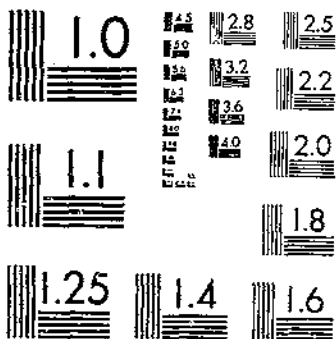
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THE FORMULA FEED INDUSTRY, 1969, A STATISTICAL SUMMARY

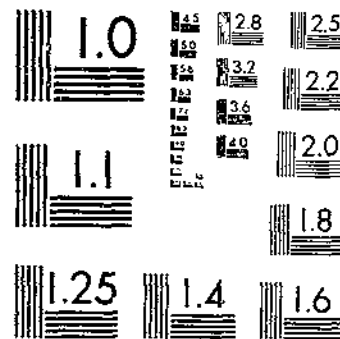
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MICROCOPY RESOLUTION TEST CHART
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THE DO IT YOURSELF FORMULA FEED INDUSTRY, 1969 A Statistical Summary

ECONOMIC RESEARCH SERVICE / U.S. DEPARTMENT OF AGRICULTURE



ABSTRACT

Data on the number of formula feed establishments, physical output, methods of disposition, rated weekly capacity, and quantities of various ingredients used to manufacture livestock and poultry feeds in the United States in 1969 are presented. Production is shown for primary and secondary feed manufacturing. Production of formula feed from primary manufacturing is further divided into complete, supplement, and premix classes. Average distances are given for shipments of feed ingredients from principal suppliers to feed mills, and for shipments of formula feeds from the feed mills to the users, as well as the modes of transportation used.

Keywords: Formula feed, feed manufacturing, feed mill capacities, marketing channels, transportation, feed ingredients.

Washington, D. C. 20250

May 1972

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THE FORMULA FEED INDUSTRY, 1969

A Statistical Summary

by

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This statistical summary presents selected data from a mail survey of all known U.S. feed manufacturing establishments that produced 1,000 tons or more of formula feed in 1969, whether they mill feed for sale, for use in their own feeding operations, or for custom grinding and mixing.^{1/} The data were obtained for civil defense purposes, and for descriptive and economic analysis of the industry.

The survey was made jointly by the Economic Research Service and the Agricultural Stabilization and Conservation Service (ASCS), which has departmental responsibility for emergency and disaster preparedness under provisions of the Defense Production Act of 1950, as amended. The Economic Research Service prepared this statistical summary. The mailing list was developed from a register of mills kept by the Food and Drug Administration (FDA). ASCS updated and expanded the FDA list, working through State and county ASCS offices. ASCS also helped get replies from individual firms that delayed mailing their responses.

The Market Research Committee of the American Feed Manufacturers Association reviewed the questionnaire and helped to word the questions to conform with operating records generally kept for feed mill operations.

The purpose of this summary is to make the basic data available because of their permanent value to the industry. These data present a picture of the entire formula feed industry in 1969. They also serve as a benchmark by which census and other surveys of any part of the industry can be related to the total industry. This is the first time the entire formula feed industry has been surveyed. The relationships portrayed may continue to reflect the industry for several years. The data were adjusted and expanded where necessary to represent 100 percent of the industry. Data in this summary therefore supersede corresponding data contained in the Preliminary Report.^{2/} The preliminary data, although nearly complete, had not been adjusted for incomplete reporting on some questions.

^{1/} Robert W. Schoeff, Kansas State University, was instrumental in identifying the need for a survey of all establishments producing formula feed in the United States.

^{2/} Hodges, Earl F., Allen, George C., and Davis, Gary A. The Formula Feed Industry in 1969, A Preliminary Report. U.S. Dept. Agr., Econ. Res. Serv., ERS-494, Nov. 1971.

The following definitions and descriptions are used:

1. A feed-milling establishment usually consists of a stationary mill operating at a single location together with any mobile mills based at that location. It may also consist of one or more mobile mills not associated with a stationary mill but based at one location. An establishment is not necessarily the same as a business firm, which may include a number of establishments. The feed-milling activities of establishments are classified as (1) primary feed manufacturing and (2) secondary feed manufacturing.

2. Primary feed manufacturing is processing and mixing individual feed ingredients, sometimes with the addition of a premix (described below) at a rate of less than 100 pounds per ton of finished feed. Examples of specific feed ingredients are feed grains, mill byproducts, oilseed meals, and animal proteins.

3. Secondary feed manufacturing is processing and mixing one or more ingredients with formula feed supplements. Supplements are usually used at a rate of 300 pounds or more per ton of finished feed, depending on protein content of the supplement and percentage of protein desired in the finished feed.

4. Formula feeds contain two or more ingredients that are processed or mixed according to specifications. Total volume of formula feeds in this survey includes customer-owned grains that have been processed and mixed.

In this report, feeds from primary manufacturing are also grouped into complete feeds, supplements, and premixes.

5. Complete feeds contain all nutrients needed in the nonroughage portion of the diet by the kind of livestock and poultry for which the feed is designed. Some complete feeds may contain processed roughages.

6. Supplements are formula feeds used with other feed ingredients to improve the nutritive balance of the diet. They are intended to be fed separately in controlled amounts, or offered free-choice as a dietary supplement to other feeds, or mixed with other ingredients to formulate a complete feed. Supplements used in secondary manufacturing are first counted in primary manufacturing and are double-counted when they are included with the tonnage of all manufactured feed.

7. Premixes are formulations of one or more microingredients--such as vitamins, trace minerals, or drugs--mixed with a carrier. A premix is used to distribute microingredients evenly throughout a formula feed. Premix is usually added at a rate of less than 100 pounds per ton of finished feed. It represents a very small percentage (less than 1 percent) of the total quantity of formula feeds. Premix tonnage may be counted twice in formula feed tonnage: first in primary manufacturing, and second if used in complete or supplement feeds by a feed manufacturer.

8. Feeding own animals includes formula feed produced for livestock owned by the feed mill owner. It also includes feed fed to a feed manufacturer's livestock or poultry under contract arrangements on farms of contracting growers.

9. Custom feeding is the business of feeding livestock belonging to others, usually in a large-scale feedlot. The owner of the livestock pays for the feed, plus a fee for caring for the animals.

10. Custom grinding and mixing is grinding customer-owned feed ingredients. It usually includes mixing supplements with them. This is mainly a service provided to farmers feeding their own animals. However, toll milling (milling performed for other feed manufacturers) was included in this category.

TABLE 1.--FORMULA FEED: NUMBER OF FEED MANUFACTURING ESTABLISHMENTS, BY METHOD OF DISPOSITION, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	WHOLESALE	RETAIL	CUSTOM FEEDING	FEEDING OWN ANIMALS	CUSTOM GRINDING AND MIXING	TOTAL 1/
NUMBER						
MAINE-----	2/	8	2/	8	2/	13
NEW HAMPSHIRE-----	3	5	2/		2/	6
VERMONT-----	6	11			4	12
MASSACHUSETTS-----	6	9	2/	3	2/	14
CONNECTICUT-----	2/	4	2/	2/		5
NEW YORK-----	40	163	62	28	184	259
NEW JERSEY-----	6	17	5	5	14	25
PENNSYLVANIA-----	64	184	73	72	241	288
DELAWARE-----	7	5	2/	2/	8	20
MARYLAND-----	16	35	15	27	47	65
NORTHEAST-----	152	441	162	152	503	707
MICHIGAN-----	64	145	93	76	204	237
WISCONSIN-----	108	288	163	94	443	510
MINNESOTA-----	86	198	97	86	331	402
LAKE STATES-----	258	631	353	256	978	1,149
OHIO-----	76	178	113	91	412	459
INDIANA-----	102	248	129	192	429	493
ILLINOIS-----	86	183	77	115	383	475
IOWA-----	127	361	166	130	533	730
MISSOURI-----	72	165	65	98	227	302
CORN BELT-----	493	1,135	560	626	1,984	2,459
NORTH DAKOTA-----	23	24	11	12	71	80
SOUTH DAKOTA-----	40	56	46	38	131	159
NEBRASKA-----	79	132	61	119	219	343
KANSAS-----	76	195	122	109	280	396
NORTHERN PLAINS-----	218	407	240	278	701	978
VIRGINIA-----	33	58	29	35	87	115
WEST VIRGINIA-----	6	9	3	8	15	19
NORTH CAROLINA-----	61	117	77	128	255	233
KENTUCKY-----	24	50	20	33	114	128
TENNESSEE-----	35	57	19	48	73	113
APPALACHIAN-----	159	291	148	252	444	608
SOUTH CAROLINA-----	17	34	8	30	41	61
GEORGIA-----	76	109	56	118	101	197
FLORIDA-----	24	46	15	58	27	97
ALABAMA-----	27	67	26	71	60	114
SOUTHEAST-----	144	256	105	277	229	469
MISSISSIPPI-----	26	47	22	49	55	98
ARKANSAS-----	28	43	19	67	25	93
LOUISIANA-----	21	29	11	22	22	48
DELTA STATES-----	75	119	52	138	102	239
OKLAHOMA-----	40	70	49	42	89	145
TEXAS-----	111	239	160	226	210	438
SOUTHERN PLAINS-----	151	309	209	268	299	583
MONTANA-----	32	42	27	25	47	73
IDAHO-----	27	49	28	53	51	98
WYOMING-----	2/	2/	8	8	13	19
COLORADO-----	29	47	25	49	52	98
NEW MEXICO-----	24	32	29	32	25	51
ARIZONA-----	14	12	16	18	5	32
UTAH-----	13	28	15	16	26	44
NEVADA-----	2/	2/	3	4	3	8
MOUNTAIN-----	151	222	153	208	222	423
WASHINGTON-----	25	46	13	17	31	56
OREGON-----	22	38	18	19	36	55
CALIFORNIA-----	79	115	66	95	51	191
PACIFIC-----	126	199	97	131	118	302
47 STATES-----	1,927	4,010	2,079	2,586	5,580	7,917

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE METHOD OF DISPOSITION.

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 2.—FORMULA FEED: PRODUCTION, BY METHOD OF DISPOSITION, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	WHOLESALE	RETAIL	CUSTOM FEEDING	FEEDING OWN ANIMALS	CUSTOM GRINDING AND MIXING	TOTAL
TONS						
MAINE	1/	173,458	1/			
NEW HAMPSHIRE	64,804	87,896	1/	319,410	1/	502,668
VERMONT	389,845	394,295	1/		1/	165,162
MASSACHUSETTS	61,522	146,523	1/		10,760	794,900
CONNECTICUT	1/	182,914	1/	19,655	1/	233,574
NEW YORK	1,288,325	932,959	1/	1/		257,264
NEW JERSEY	151,896	170,730	94,452	93,361	577,063	2,936,160
PENNSYLVANIA	927,708	606,732	3,248	5,590	44,418	375,877
DELAWARE	158,263	11,040	113,565	239,141	851,963	2,739,110
MARYLAND	186,015	124,036	15,415	1/	17,200	690,766
NORTHEAST	3,300,798	2,830,584	241,879	1,996,236	1,687,885	10,057,382
MICHIGAN	216,898	203,160	125,305	108,548	940,174	1,594,085
WISCONSIN	580,859	358,519	227,070	196,626	3,173,192	3,506,266
MINNESOTA	876,883	364,562	143,745	242,071	1,882,587	3,509,648
LAKE STATES	1,674,640	926,241	506,120	507,245	5,995,953	9,610,199
OHIO	785,529	374,454	125,696	185,605	1,850,155	3,331,439
INDIANA	700,431	644,450	281,507	292,341	2,148,952	4,067,681
ILLINOIS	1,431,880	1,220,466	89,646	183,484	1,539,430	4,464,906
IOWA	2,246,020	1,401,442	374,843	193,684	2,500,951	6,716,940
MISSOURI	1,654,174	634,676	90,746	239,700	746,213	3,365,509
CORN BELT	6,818,034	4,275,488	972,438	1,094,814	8,785,701	21,946,475
NORTH DAKOTA	139,147	57,093	23,978	23,860	168,179	412,257
SOUTH DAKOTA	265,310	172,112	128,907	229,660	509,959	1,315,948
NEBRASKA	1,015,624	696,403	377,408	720,574	773,666	3,564,675
KANSAS	645,207	515,916	1,448,972	658,462	812,977	4,281,534
NORTHERN PLAINS	2,065,288	1,441,524	1,679,265	1,862,556	2,264,781	9,594,414
VIRGINIA	230,701	355,919	127,180	223,309	229,688	1,166,797
WEST VIRGINIA	5,313	13,907	15,443	27,025	23,904	85,592
NORTH CAROLINA	889,697	354,367	206,325	1,413,267	395,309	3,238,965
KENTUCKY	399,882	97,446	20,605	57,365	380,513	915,811
TENNESSEE	1,063,170	408,176	27,350	650,050	400,604	2,549,350
APPALACHIAN	2,528,763	1,229,815	396,903	2,371,016	1,430,018	7,956,515
SOUTH CAROLINA	88,650	194,921	14,132	180,385	64,407	542,497
GEORGIA	1,147,837	698,604	91,377	2,204,194	147,589	4,289,601
FLORIDA	342,734	515,091	53,159	567,564	37,266	1,515,814
ALABAMA	704,125	265,862	278,528	1,327,336	277,181	2,853,182
SOUTHEAST	2,283,496	1,674,478	437,196	4,279,479	526,445	9,201,094
MISSISSIPPI	531,451	104,711	19,156	1,701,223	217,125	1,973,666
ARKANSAS	450,396	377,564	110,361	2,236,046	68,041	3,342,408
LOUISIANA	411,332	103,558	7,979	248,941	32,525	804,335
DELTA STATES	1,393,179	585,835	137,496	3,686,210	317,691	6,120,409
OKLAHOMA	625,368	312,969	353,408	282,880	195,487	1,770,112
TEXAS	1,625,887	1,696,783	3,141,929	2,080,715	502,768	9,048,082
SOUTHERN PLAINS	2,251,255	2,009,752	3,495,337	2,363,595	698,255	10,818,194
MONTANA	85,313	153,656	148,672	113,819	82,026	583,486
IDAHO	64,501	208,929	146,709	516,200	129,029	1,065,368
WYOMING	1/	1/	85,051	34,542	27,166	171,522
COLORADO	202,817	385,640	546,400	985,986	301,390	2,422,233
NEW MEXICO	58,636	203,074	226,824	399,651	31,645	925,830
ARIZONA	117,976	162,046	787,874	187,190	19,966	1,275,052
UTAH	121,957	162,571	29,110	61,338	38,162	413,138
NEVADA	1/	1/	50,318	48,500	4,291	120,740
MOUNTAIN	660,031	1,314,479	2,020,958	2,347,226	634,675	6,977,369
WASHINGTON	282,975	488,784	52,796	131,443	43,662	1,000,640
OREGON	114,787	381,935	57,584	105,545	105,315	765,166
CALIFORNIA	921,413	3,125,804	1,315,474	1,452,080	151,526	6,966,297
PACIFIC	1,320,175	3,996,523	1,425,854	1,689,068	300,483	8,732,103
47 STATES	24,296,659	20,284,717	11,613,446	22,177,445	22,641,887	101,014,154

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 3.—FORMULA FEED: NUMBER OF FEED MANUFACTURING ESTABLISHMENTS WITH ONLY PRIMARY, ONLY SECONDARY, AND BOTH PRIMARY AND SECONDARY MANUFACTURING, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	ONLY PRIMARY MANUFACTURING	ONLY SECONDARY MANUFACTURING	BOTH PRIMARY AND SECONDARY MANUFACTURING	TOTAL
NUMBER				
MAINE	12	2/		2/
NEW HAMPSHIRE	6			6
VERMONT	10		2/	2/
MASSACHUSETTS	9	2/	2/	14
CONNECTICUT	5			5
NEW YORK	127	62	70	259
NEW JERSEY	16	6	3	25
PENNSYLVANIA	100	85	103	288
DELAWARE	12	5	3	20
MARYLAND	23	23	19	65
NORTHEAST	320	184	203	707
MICHIGAN	41	108	88	237
WISCONSIN	102	159	249	510
MINNESOTA	112	154	136	402
LAKE STATES	255	421	473	1,149
OHIO	58	266	135	459
INDIANA	87	235	171	493
ILLINOIS	102	279	94	475
IONA	216	296	218	730
MISSOURI	88	135	79	302
CORN BELT	551	1,211	697	2,459
NORTH DAKOTA	22	42	16	80
SOUTH DAKOTA	32	76	51	159
NEBRASKA	91	171	81	343
KANSAS	109	158	129	396
NORTHERN PLAINS	254	447	277	978
VIRGINIA	35	46	34	115
WEST VIRGINIA	3	10	6	19
NORTH CAROLINA	90	93	50	233
KENTUCKY	24	69	35	128
TENNESSEE	39	42	32	113
APPALACHIAN	191	260	157	608
SOUTH CAROLINA	22	27	12	61
GEORGIA	88	58	51	197
FLORIDA	55	24	18	97
ALABAMA	53	35	26	114
SOUTHEAST	218	144	107	469
MISSISSIPPI	47	30	21	98
ARKANSAS	61	21	11	93
LOUISIANA	29	10	9	48
DELTA STATES	137	61	41	239
OKLAHOMA	50	55	40	145
TEXAS	201	134	103	438
SOUTHERN PLAINS	251	189	143	583
MONTANA	28	24	21	73
IDAHO	43	27	28	98
WYOMING	17	7	2/	19
COLORADO	36	41	22	98
NEW MEXICO	26	7	18	51
ARIZONA	24	2/	2/	32
UTAH	23	11	10	44
NEVADA	17	2/		8
MOUNTAIN	191	125	107	423
WASHINGTON	32	4	18	56
OREGON	33	9	13	55
CALIFORNIA	123	27	41	191
PACIFIC	188	42	72	302
47 STATES	2,556	3,084	2,277	7,917

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 4.--FORMULA FEED: PRODUCTION FROM ESTABLISHMENTS WITH ONLY PRIMARY, ONLY SECONDARY, AND BOTH PRIMARY AND SECONDARY MANUFACTURING, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	ONLY PRIMARY MANUFACTURING	ONLY SECONDARY MANUFACTURING	BOTH PRIMARY AND SECONDARY MANUFACTURING		TOTAL
			PRIMARY	SECONDARY	
-----TONS-----					
MAINE-----	487,666	1/			1/
NEW HAMPSHIRE-----	165,162				165,162
VERMONT-----	787,900				1/
MASSACHUSETTS-----	197,627				1/
CONNECTICUT-----	257,264	1/	1/	1/	233,574
NEW YORK-----	2,176,513				257,264
NEW JERSEY-----	350,888	224,141	344,157	191,349	2,936,160
PENNSYLVANIA-----	1,486,340	10,189	12,341	2,459	375,877
DELAWARE-----	670,701	452,522	499,981	302,219	2,739,062
MARYLAND-----	970,744	9,800	5,516	4,769	690,786
NORTHEAST-----	7,548,807	136,888	212,999	41,250	1,361,881
MICHIGAN-----		864,437	1,092,922	590,168	10,057,334
WISCONSIN-----	352,834	521,252	293,877	426,111	1,594,074
MINNESOTA-----	963,832	1,196,586	766,562	1,577,237	4,506,217
LAKE STATES-----	1,346,828	1,098,803	400,460	661,751	3,509,842
	2,665,494	2,816,641	1,462,899	2,665,099	9,610,133
OHIO-----	995,272				
INDIANA-----	1,006,721	1,457,805	425,670	442,700	3,331,447
ILLINOIS-----	2,565,981	1,834,262	581,265	643,447	4,067,693
IOWA-----	3,402,556	1,295,921	295,963	307,008	4,464,873
MISSOURI-----	2,323,534	1,706,642	634,040	966,715	6,716,953
CORN BELT-----	10,296,064	971,379	247,729	222,680	3,365,522
		6,866,009	2,199,665	2,584,750	21,946,488
NORTH DAKOTA-----	164,567	113,994	92,675	41,152	412,288
SOUTH DAKOTA-----	377,655	342,600	300,181	295,665	1,316,161
NEBRASKA-----	1,591,401	1,139,455	422,391	431,786	3,585,093
KANSAS-----	1,767,163	1,609,791	407,221	497,521	4,281,696
NORTHERN PLAINS-----	3,900,846	3,205,840	1,222,368	1,266,124	9,895,178
VIRGINIA-----	781,831	138,247	122,133	124,589	1,366,800
WEST VIRGINIA-----	191,402	40,877	6,280	19,033	85,592
NORTH CAROLINA-----	2,481,101	430,981	205,696	120,990	3,238,968
KENTUCKY-----	366,062	268,783	178,766	100,201	915,814
TENNESSEE-----	1,739,370	394,099	311,817	104,071	2,549,357
APPALACHIAN-----	5,389,766	1,272,987	824,894	468,884	7,956,331
SOUTH CAROLINA-----	350,636	119,706	47,296	24,860	542,498
GEORGIA-----	3,311,045	407,646	425,366	125,557	4,289,614
FLORIDA-----	1,003,697	198,578	241,825	71,717	3,215,817
ALABAMA-----	1,921,605	283,258	363,512	264,812	2,853,187
SOUTHEAST-----	6,586,983	1,009,188	1,107,999	496,946	9,201,336
MISSISSIPPI-----	1,231,612	260,271	354,289	127,495	1,973,667
ARKANSAS-----	2,915,998	195,591	179,590	51,226	3,342,405
LOUISIANA-----	840,861	71,088	68,728	23,653	804,332
DELTA STATES-----	4,788,471	526,950	602,607	202,376	6,320,404
OKLAHOMA-----	973,143	438,894	221,667	136,411	1,770,115
TEXAS-----	5,172,003	2,395,606	910,501	569,183	9,047,293
SOUTHERN PLAINS-----	6,145,146	2,834,500	1,132,168	705,594	10,817,408
MONTANA-----	253,417	109,474	126,922	92,674	583,487
IDAHOO-----	481,454	246,444	208,434	131,070	1,065,402
WYOMING-----	1/	89,405	1/	1/	171,522
COLORADO-----	1,071,098	914,103	322,676	114,157	2,422,234
NEW MEXICO-----	577,464	107,555	164,693	76,118	925,830
ARIZONA-----	885,096	1/	1/	1/	1,275,052
UTAH-----	307,110	49,270	29,613	27,145	413,338
NEVADA-----	1/	1/			120,740
MOUNTAIN-----	3,711,014	1,676,016	913,369	475,004	6,977,405
WASHINGTON-----	750,764	44,817	147,252	57,809	1,000,642
OREGON-----	521,254	38,751	150,476	54,687	765,168
CALIFORNIA-----	4,896,728	1,106,445	769,901	191,233	6,966,307
PACIFIC-----	6,168,746	1,192,013	1,067,629	303,729	8,732,117
47 STATES-----	57,201,339	22,466,581	11,627,520	9,716,674	101,014,314

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 5.—FORMULA FEED FROM PRIMARY MANUFACTURING: NUMBER OF FEED MANUFACTURING ESTABLISHMENTS, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	STARTER- GROWER, LAYER- BREEDER	BROILER	TURKEY	DAIRY	BEEF AND SHEEP	HOG	ALL OTHER	TOTAL ^{1/}
NUMBER								
MAINE-----	11	5	2/	3	2/	2/	2/	12
NEW HAMPSHIRE-----	5	3	2/	6	2/	5	5	6
VERMONT-----	7	4	6	12	3	7	7	12
MASSACHUSETTS-----	12	7	8	10	6	8	8	12
CONNECTICUT-----	5	3	2/	3		2/	2/	5
NEW YORK-----	129	69	72	188	84	113	100	197
NEW JERSEY-----	17	8	7	15	10	10	12	19
PENNSYLVANIA-----	166	88	97	192	126	167	136	203
DELAWARE-----	13	12	9	9	6	12	8	15
MARYLAND-----	31	27	20	33	26	32	25	42
NORTHEAST-----	396	226	224	471	265	356	304	523
MICHIGAN-----	117	72	77	117	98	117	92	129
WISCONSIN-----	315	168	165	326	221	311	207	351
MINNESOTA-----	209	104	132	220	104	224	154	246
LAKE STATES-----	641	344	374	663	503	652	453	728
OHIO-----	173	106	111	177	161	176	142	193
INDIANA-----	225	147	153	215	209	245	193	258
ILLINOIS-----	164	92	91	160	166	185	125	196
IOWA-----	367	176	197	334	370	423	242	434
MISSOURI-----	112	71	70	135	130	147	96	167
CORN BELT-----	1,042	592	612	1,021	1,036	1,176	796	1,246
NORTH DAKOTA-----	25	9	13	35	35	33	24	38
SOUTH DAKOTA-----	34	22	48	69	74	76	56	83
NEBRASKA-----	122	52	86	126	166	142	110	172
KANSAS-----	165	56	91	181	219	205	125	238
NORTHERN PLAINS	386	139	238	413	494	456	317	531
VIRGINIA-----	58	37	37	56	55	67	45	69
WEST VIRGINIA-----	6	5	4	6	6	7	7	9
NORTH CAROLINA-----	113	71	62	101	76	122	90	140
KENTUCKY-----	39	22	24	56	47	54	37	59
TENNESSEE-----	54	37	33	58	49	60	49	71
APPALACHIAN-----	270	172	160	277	233	310	228	348
SOUTH CAROLINA-----	27	11	12	24	19	31	17	34
GEORGIA-----	110	74	62	91	69	101	81	139
FLORIDA-----	42	19	22	48	48	41	34	73
ALABAMA-----	52	36	20	48	50	56	40	79
SOUTHEAST-----	231	140	116	211	206	229	172	325
MISSISSIPPI-----	42	23	15	46	47	50	38	68
ARKANSAS-----	57	41	33	36	43	39	33	72
LOUISIANA-----	19	11	9	30	28	22	21	38
DELTA STATES-----	116	75	57	114	116	111	92	178
OKLAHOMA-----	53	38	37	77	64	79	61	90
TEXAS-----	169	134	119	208	280	222	158	304
SOUTHERN PLAINS	222	172	156	285	364	301	219	394
MONTANA-----	34	14	16	27	43	40	31	68
IDAHO-----	42	27	26	49	66	46	41	71
WYOMING-----	2/	2/	2/	2/	12	2/	7	12
COLORADO-----	33	14	25	38	54	42	34	57
NEW MEXICO-----	26	12	19	31	35	32	27	44
ARIZONA-----	12	4	5	11	25	9	12	26
UTAH-----	23	12	19	23	23	21	16	32
NEVADA-----	2/	2/	2/	2/	5	2/	3	6
MOUNTAIN-----	181	89	119	188	267	201	173	298
WASHINGTON-----	38	21	13	42	41	36	27	56
OREGON-----	31	22	20	35	37	34	30	46
CALIFORNIA-----	100	70	67	98	105	77	81	164
PACIFIC-----	169	113	100	175	183	149	138	260
47 STATES-----	3,656	2,062	2,156	3,818	3,669	3,941	2,894	4,833

^{1/} SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS MANUFACTURE MORE THAN ONE TYPE OF FEED.

^{2/} DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE A.—FORMULA FEED FROM PRIMARY MANUFACTURING: PRODUCTION, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED¹

STATE AND REGION	STARTER-	BROILER	TURKEY	DAIRY	BEEF AND SHEEP	HOG	ALL OTHER	TOTAL
	GROWER-LAYER BREEDER							
TONS								
MAINE	247,227	224,460	1/	14,380	1/	1/	1/	487,067
NEW HAMPSHIRE	56,407	1,210	1/	74,800	1/	1/	1/	165,162
VERMONT	90,166	101,724	3,303	529,492	134	4,596	25,765	793,791
MASSACHUSETTS	176,444	14,443	5,496	84,537	2,161	2,103	19,143	211,074
CONNECTICUT	426,475	142,383	23,632	60,142	1/	1/	1/	257,264
NEW YORK	186,822	20,699	2,895	1,510,240	241,357	29,455	146,163	2,519,725
NEW JERSEY	532,972	263,250	63,647	107,879	4,901	10,587	27,424	363,197
PENNSYLVANIA	72,659	521,385	7,252	806,261	66,234	108,354	143,054	1,963,572
DELAWARE	142,709	767,912	3,811	35,232	4,366	19,717	15,264	676,215
MARYLAND				176,384	13,658	25,777	47,244	1,177,495
NORTHEAST	2,009,816	2,081,167	115,450	3,409,347	335,787	202,480	481,115	8,625,162
MICHIGAN	186,514	12,336	47,729	201,514	46,529	117,764	32,314	646,704
WISCONSIN	234,511	95,463	170,506	724,820	94,317	317,105	84,937	1,731,659
MINNESOTA	271,365	53,114	249,822	447,633	153,443	478,985	94,365	1,748,527
LAKE STATES	694,294	160,913	467,857	1,383,967	294,289	913,854	211,616	4,126,890
OHIO	221,963	43,179	49,200	335,934	159,640	420,128	137,858	1,430,902
INDIANA	307,817	25,402	89,858	173,464	220,472	660,188	113,016	1,590,250
ILLINOIS	302,789	10,619	41,928	264,031	467,327	1,574,773	700,907	2,862,374
MISSOURI	253,176	17,239	129,826	281,443	966,915	1,571,709	387,908	4,040,216
MISSOURI	216,353	31,321	214,716	569,911	495,265	886,356	155,516	2,571,438
CORN BELT	1,402,098	127,760	525,556	1,607,783	2,311,620	5,515,154	995,207	12,495,180
NORTH DAKOTA	35,414	107	897	12,854	109,710	74,358	23,800	257,140
SOUTH DAKOTA	62,691	289	12,848	36,254	320,563	204,566	36,276	677,687
NEBRASKA	130,506	3,452	25,747	77,023	1,068,862	645,816	62,142	2,013,548
KANSAS	96,456	1,232	16,811	99,869	1,542,189	321,770	94,742	2,173,069
NORTHERN PLAINS	325,067	5,080	60,303	226,000	3,041,324	1,246,510	216,960	5,121,244
VIRGINIA	149,151	293,946	134,467	149,504	26,790	115,603	34,255	903,716
WEST VIRGINIA	1,416	15,017	57	4,410	602	2,977	1,202	25,681
NORTH CAROLINA	653,170	1,136,677	229,141	221,629	38,218	310,497	95,775	2,685,107
KENTUCKY	90,445	78,027	21,656	193,000	23,522	113,780	26,399	546,629
TENNESSEE	478,112	599,354	25,908	487,142	99,882	325,491	75,555	2,051,444
APPALACHIAN	1,372,294	2,083,021	411,229	1,055,685	189,014	868,348	233,186	6,212,777
SOUTH CAROLINA	155,345	92,014	32,944	56,175	12,667	40,766	5,017	367,928
GEORGIA	1,214,050	1,695,800	47,744	273,734	125,784	295,543	66,711	3,746,366
FLORIDA	505,291	235,625	8,319	262,029	134,840	43,101	52,235	1,245,510
ALABAMA	516,938	1,232,165	54,902	133,518	87,075	178,105	98,198	2,305,901
SOUTHEAST	2,394,624	3,263,664	148,909	725,466	360,366	557,515	245,161	7,495,705
MISSISSIPPI	466,728	621,401	11,706	219,095	93,170	109,984	63,807	1,585,894
ARKANSAS	254,901	1,602,540	192,836	163,718	152,528	47,075	81,982	3,095,580
LOUISIANA	108,691	231,737	3,818	203,697	81,212	23,887	56,561	709,603
DELTA STATES	1,430,320	2,453,678	208,360	586,513	326,910	180,946	202,250	5,251,077
OKLAHOMA	102,150	65,045	37,374	167,537	565,703	122,041	133,966	1,194,816
TEXAS	523,295	691,596	245,780	972,993	2,885,496	432,867	318,685	6,080,672
SOUTHERN PLAINS	636,445	756,641	283,154	1,140,490	3,451,199	554,908	452,651	7,275,488
MONTANA	30,672	2,860	4,204	26,988	253,789	29,250	32,069	379,632
IDAHO	32,824	19,025	11,690	82,174	459,430	19,849	62,940	687,932
WYOMING	1/	1/	1/	1/	50,867	1/	1/	62,532
COLORADO	46,800	1,640	29,072	78,471	1,161,238	42,408	2,229	1,400,052
NEW MEXICO	34,870	1,098	5,166	63,612	584,702	23,929	27,780	741,157
ARIZONA	65,889	2,100	1,452	83,596	705,305	22,263	27,930	908,585
UTAH	43,890	7,481	112,897	65,269	72,546	11,261	22,975	336,719
NEVADA	1/	1/	1/	1/	61,359	1/	28,680	108,740
MOUNTAIN	257,815	34,459	165,919	411,598	3,349,636	151,046	255,026	4,625,499
WASHINGTON	227,731	82,004	28,272	344,780	154,296	21,439	39,431	897,953
OREGON	140,309	86,764	56,352	169,668	139,300	20,337	56,787	669,517
CALIFORNIA	1,722,168	434,619	399,719	1,795,640	1,086,728	41,842	164,542	5,665,258
PACIFIC	2,090,208	603,387	484,343	2,310,088	1,380,324	63,618	280,760	7,232,728
47 STATES	12,613,081	11,571,770	2,881,082	12,856,937	15,040,469	10,274,379	3,574,032	68,811,750

¹ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 7.—COMPLETE FEED FROM PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	STARTER-GROWER-LAYER-BREEDER	SOILER	TURKEY	DAIRY	BEEF AND SHEEP	HOG	ALL OTHER	TOTAL
NUMBER								
MAINE	11	5	2/	3	2/	2/	2/	12
NEW HAMPSHIRE	5	3	2/	6	2/	5	5	6
VERMONT	7	4	5	12	3	7	7	12
MASSACHUSETTS	12	7	8	10	6	8	8	12
CONNECTICUT	5	3	2/	3		2/	2/	5
NEW YORK	128	69	72	184	87	110	99	193
NEW JERSEY	17	8	7	14	10	9	12	19
PENNSYLVANIA	161	86	96	189	108	165	134	200
DELAWARE	13	12	9	9	8	12	8	15
MARYLAND	31	26	19	32	26	31	25	41
NORTHEAST	390	223	222	462	245	349	301	515
MICHIGAN	112	72	77	112	94	110	91	123
WISCONSIN	302	163	164	303	206	288	200	339
MINNESOTA	192	100	126	192	155	199	140	228
LAKE STATES	606	335	367	607	455	597	431	690
OHIO	169	105	109	165	148	166	140	187
INDIANA	216	145	151	200	186	228	183	244
ILLINOIS	153	87	87	141	146	173	111	185
LOUISIANA	332	167	181	263	300	375	213	392
MISSOURI	109	69	70	129	117	136	94	157
CORN BELT	979	573	598	898	897	1,078	741	1,165
NORTH DAKOTA	25	9	13	35	35	33	23	38
SOUTH DAKOTA	71	22	47	63	70	73	55	80
NEBRASKA	116	51	64	119	143	137	103	162
KANSAS	161	55	91	171	198	185	122	224
NORTHERN PLAINS	375	137	235	388	446	428	303	504
VIRGINIA	57	26	37	55	51	65	44	67
WEST VIRGINIA	6	3	4	6	5	7	7	9
NORTH CAROLINA	110	51	61	99	69	118	89	136
KENTUCKY	39	14	24	33	40	50	36	57
TENNESSEE	52	25	33	56	46	58	48	69
APPALACHIAN	264	119	159	269	211	298	223	338
SOUTH CAROLINA	27	11	12	24	19	31	17	34
GEORGIA	106	72	60	89	86	100	79	135
FLORIDA	41	19	22	48	48	41	34	72
ALABAMA	51	36	20	48	50	55	40	79
SOUTHEAST	225	138	114	209	203	227	170	320
MISSISSIPPI	42	23	15	48	46	49	37	68
ARKANSAS	57	41	33	36	43	38	33	72
LOUISIANA	19	11	9	30	28	22	21	38
DELTA STATES	118	75	57	114	117	109	91	178
OKLAHOMA	51	35	37	73	79	75	59	86
TEXAS	167	133	119	206	273	217	155	298
SOUTHERN PLAINS	218	168	156	279	352	292	214	384
MONTANA	32	13	16	74	39	38	28	47
IDAHOO	41	27	28	44	61	43	39	67
WYOMING	2/	2/	2/	2/	12	2/	7	17
COLORADO	33	16	25	37	51	41	34	57
NEW MEXICO	26	12	19	30	39	32	27	44
ARIZONA	11	4	5	11	24	9	12	25
UTAH	23	12	19	23	23	21	18	33
NEVADA	2/	2/	2/	2/	5	2/	3	6
MOUNTAIN	177	88	119	176	254	195	168	291
WASHINGTON	38	21	13	42	41	38	27	50
OREGON	31	22	20	34	37	33	30	46
CALIFORNIA	97	69	66	95	102	74	77	138
PACIFIC	166	112	99	171	180	145	134	254
47 STATES	3,517	1,968	2,126	3,575	3,360	3,718	2,776	4,639

2/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS MANUFACTURE MORE THAN ONE TYPE OF FEED.

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE B.—COMPLETE FEED FROM PRIMARY MANUFACTURING: PRODUCTION, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	STARTER-GROWER-LAYER-BREEDER	BROILER	TURKEY	DAIRY	BEFF AND SHEEP	HOG	ALL OTHER	TOTAL
TONS								
MAINE	247,122	224,444	1/	14,007	1/	1/	1/	486,995
NEW HAMPSHIRE	58,341	1,210	1/	74,470	1/	1,624	25,765	184,786
VERMONT	90,106	101,726	3,303	537,853	119	4,593	45,133	782,633
MASSACHUSETTS	73,414	23,623	5,445	82,555	1,891	1,703	18,996	201,621
CONNECTICUT	176,444	14,443	1/	59,958	1/	1/	1/	257,080
NEW YORK	417,098	141,774	23,148	1,426,887	237,657	21,547	139,957	2,408,068
NEW JERSEY	165,781	20,622	2,641	97,383	4,421	7,084	27,320	345,252
PENNSYLVANIA	477,998	255,103	56,864	640,744	33,659	70,811	137,591	1,672,770
DELAWARE	71,948	518,829	6,980	26,778	4,155	15,336	15,424	899,450
MARYLAND	135,956	767,576	3,588	155,279	9,619	18,543	46,751	1,177,262
NORTHEAST	1,934,208	2,069,350	107,492	3,115,714	294,441	141,420	459,276	8,121,903
MICHIGAN	139,287	10,304	39,289	106,740	17,036	65,732	26,109	404,497
WISCONSIN	161,819	87,202	151,879	456,421	33,785	169,473	54,456	1,115,035
MINNESOTA	180,637	49,735	214,130	233,494	38,944	246,013	57,087	1,020,040
LAKE STATES	481,743	147,241	405,298	796,655	89,765	481,218	137,652	2,539,972
OHIO	208,624	42,181	40,310	228,922	61,745	201,991	131,101	614,874
INDIANA	197,233	21,465	71,342	106,390	92,990	350,241	91,596	931,357
ILLINOIS	182,051	6,366	23,047	124,696	114,896	684,538	163,238	1,296,832
IOWA	165,371	12,777	90,072	117,334	352,858	916,932	311,650	1,965,002
MISSOURI	193,455	30,361	208,506	521,436	341,931	626,573	146,049	2,072,311
CORN BELT	944,834	113,150	423,277	1,098,778	964,420	2,782,275	845,642	7,162,376
NORTH DAKOTA	31,658	101	642	9,994	80,313	57,402	17,995	196,105
SOUTH DAKOTA	40,089	241	5,104	20,075	188,796	95,461	21,099	373,885
NEBRASKA	88,118	3,092	21,885	46,952	515,810	246,401	39,474	963,736
KANSAS	76,940	1,186	11,877	84,111	2,096,477	204,413	51,355	1,526,359
NORTHERN PLAINS	236,805	4,640	42,512	161,132	1,881,396	605,677	129,923	3,062,265
VIRGINIA	131,050	288,927	132,681	128,760	18,890	70,275	33,768	804,351
WEST VIRGINIA	1,315	15,003	57	3,761	418	2,425	1,194	24,776
NORTH CAROLINA	600,520	1,133,553	202,134	196,840	30,561	194,031	94,535	2,452,174
KENTUCKY	82,639	76,924	14,801	170,243	12,164	66,037	25,501	448,309
TENNESSEE	396,787	499,361	22,188	454,571	68,422	227,430	73,257	1,742,036
APPALACHIAN	1,212,311	2,013,768	371,861	954,175	130,456	560,218	228,257	5,471,046
SOUTH CAROLINA	134,193	80,151	30,669	53,779	11,589	32,687	4,998	348,066
GEORGIA	1,070,445	1,674,865	43,245	261,416	103,225	186,905	89,066	3,429,167
FLORIDA	477,085	237,769	7,965	259,302	118,570	36,797	51,588	1,189,076
ALABAMA	494,948	1,220,620	59,580	130,473	85,014	161,749	97,945	2,260,329
SOUTHEAST	2,176,671	3,223,405	141,459	704,970	318,398	416,138	243,597	7,226,638
MISSISSIPPI	454,053	615,634	17,666	217,053	89,713	100,275	59,330	1,547,724
KANSAS	843,548	1,569,997	192,188	163,226	151,540	45,068	81,835	3,047,402
LOUISIANA	104,074	224,842	3,806	202,826	79,375	22,644	56,386	693,953
DELTA STATES	1,401,675	2,410,473	207,660	583,105	320,628	167,987	197,551	5,289,079
OKLAHOMA	94,971	63,341	36,547	161,135	511,405	110,333	133,113	1,110,845
TEXAS	457,526	644,946	209,887	925,141	2,654,503	371,116	290,832	5,563,951
SOUTHERN PLAINS	552,497	708,287	246,434	1,096,276	3,165,908	481,449	423,945	6,674,796
MONTANA	25,314	2,310	4,148	20,259	209,959	20,002	23,963	305,955
IDaho	30,662	18,983	11,487	74,722	415,233	25,226	58,370	624,683
WYOMING	1/	1/	1/	1/	48,565	1/	2,074	59,351
COLORADO	43,222	1,614	28,880	71,096	1,062,310	32,911	37,988	1,278,021
NEW MEXICO	34,272	1,076	5,152	61,199	559,362	21,966	27,128	770,157
ARIZONA	62,261	2,096	1,448	69,970	658,772	18,682	27,543	840,872
UTAH	43,063	7,474	112,893	63,480	60,322	10,617	22,555	320,404
NEVADA	1/	1/	1/	1/	59,859	1/	38,680	107,233
MOUNTAIN	241,611	33,805	165,443	371,897	3,074,382	121,237	238,301	4,246,676
WASHINGTON	225,999	81,621	25,504	341,219	140,756	16,864	38,307	870,270
OREGON	139,553	86,282	55,895	166,554	123,358	18,613	59,997	646,252
CALIFORNIA	1,713,623	421,592	386,181	1,713,048	1,046,055	36,978	146,291	5,469,768
PACIFIC	2,081,175	569,495	467,580	2,222,821	1,310,169	72,455	242,595	6,986,290
47 STATES	11,263,530	11,313,614	2,589,016	11,105,523	11,549,963	5,832,074	3,146,741	56,800,461

DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 5.--SUPPLEMENT FEED FROM PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED¹

STATE AND REGION	STARTER-	BROILER	TURKEY	DAIRY	BEEF	HOG	ALL	TOTAL
	GROWER, LAYER- BREEDER				AND SHEEP		OTHER	
	NUMBER							
MAINE-----	2/		2/	2/	2/	2/	2/	2/
NEW HAMPSHIRE-----		2/		2/				2/
VERMONT-----	2/			2/	2/	2/		2/
MASSACHUSETTS-----	6	2/	2/	5	5	5	4	6
CONNECTICUT-----				2/				2/
NEW YORK-----	70	28	26	91	65	69	37	92
NEW JERSEY-----	7	2/	4	9	6	7	2/	10
PENNSYLVANIA-----	105	37	36	118	94	111	32	124
DELAWARE-----	5	2/	4	7	4	7	2/	7
MARYLAND-----	20	11	10	24	19	24	11	26
NORTHEAST-----	216	67	88	259	196	225	92	275
MICHIGAN-----	82	49	70	86	79	84	66	89
WISCONSIN-----	199	125	155	226	180	217	161	233
MINNESOTA-----	160	81	109	171	153	174	116	183
LAKE STATES-----	441	255	334	483	412	475	345	505
OHIO-----	126	35	94	134	129	138	97	140
INDIANA-----	167	42	127	166	170	182	138	186
ILLINOIS-----	119	30	82	121	130	137	96	140
IDAHO-----	289	62	161	276	298	333	195	341
MISSOURI-----	71	19	48	80	88	105	61	108
CORN BELT-----	772	188	512	777	815	895	587	915
NORTH DAKOTA-----	20	4	4	23	23	24	18	25
SOUTH DAKOTA-----	40	9	11	54	58	60	47	61
NEBRASKA-----	105	25	29	103	124	117	83	126
KANSAS-----	115	16	23	117	149	143	90	162
NORTHERN PLAINS-----	300	54	67	297	354	344	238	374
VIRGINIA-----	34	27	11	41	39	43	23	48
WEST VIRGINIA-----	5	4		5	5	5	3	5
NORTH CAROLINA-----	66	37	22	65	52	77	38	60
KENTUCKY-----	28	14	11	38	34	40	20	41
TENNESSEE-----	39	24	15	41	38	44	24	47
APPALACHIAN-----	172	106	59	190	168	209	108	221
SOUTH CAROLINA-----	12	4	4	12	11	14	5	15
GEORGIA-----	69	21	19	66	65	75	23	78
FLORIDA-----	25	9	6	25	27	23	14	33
ALABAMA-----	26	5	5	25	22	32	6	33
SOUTHEAST-----	132	39	36	128	125	144	50	159
MISSISSIPPI-----	7	6	5	16	17	18	6	20
ARKANSAS-----	16	8	7	12	18	14	6	21
LOUISIANA-----	6	4	3	7	9	7	3	10
DELTA STATES-----	29	18	15	35	44	39	15	51
OKLAHOMA-----	31	22	7	38	43	42	26	45
TEXAS-----	113	70	38	113	126	134	83	145
SOUTHERN PLAINS-----	144	92	45	151	169	176	109	190
MONTANA-----	24	8	5	22	29	28	17	32
IDAHO-----	32	15	11	38	38	35	29	46
WYOMING-----	6	2/	2/	6	6	6	6	6
COLORADO-----	24	7	8	25	31	28	20	31
NEW MEXICO-----	16	8	6	16	20	17	16	20
ARIZONA-----	5	2/	2/	5	2/	2/	4	9
UTAH-----	12	2/	2/	13	14	11	10	14
NEVADA-----					2/	2/		2/
MOUNTAIN-----	119	66	35	123	147	131	102	153
WASHINGTON-----	13	4	8	11	17	18	8	20
OREGON-----	7	3	7	8	16	15	4	18
CALIFORNIA-----	45	25	36	39	48	50	38	59
PACIFIC-----	65	32	51	58	81	83	50	97
47 STATES-----	2,390	917	1,242	2,501	2,511	2,721	1,696	2,940

¹/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS MANUFACTURE MORE THAN ONE TYPE OF FEED.

²/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 10.--SUPPLEMENT FEED FROM PRIMARY MANUFACTURING: PRODUCTION, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

REESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED

STATE AND REGION	STARTER-GROWER, LAYER & BREEDER	BROILER	TURKEY	DAIRY	BEEF AND SHEEP	HOG	ALL OTHER	TOTAL
TONS								
MAINE	1/	1/	1/	1/	1/	1/	1/	1/
NEW HAMPSHIRE	1/	1/	1/	1/	1/	1/	1/	1/
VERMONT	1/	1/	1/	1/	1/	1/	1/	1/
MASSACHUSETTS	467	1/	1/	1,929	264	1/	1/	1/
CONNECTICUT	1/	1/	1/	1/	1/	1/	1/	1/
NEW YORK	8,199	395	479	82,070	3,611	7,745	5,809	108,308
NEW JERSEY	2,903	1/	244	10,450	474	3,501	1/	17,641
PENNSYLVANIA	50,016	5,181	6,516	161,135	32,121	36,338	4,965	296,272
DELAWARE	369	1/	269	8,325	156	4,338	1/	13,588
MARYLAND	6,587	147	271	20,943	4,021	7,209	223	39,401
NORTHEAST	68,699	5,840	7,840	287,573	40,718	59,611	11,216	481,497
MICHIGAN	44,016	2,032	8,135	90,456	27,517	50,145	5,348	227,649
WISCONSIN	69,814	8,261	17,875	268,378	59,062	143,379	22,414	569,183
MINNESOTA	88,243	3,379	32,047	207,292	110,777	223,534	35,394	700,666
LAKE STATES	202,073	13,672	58,057	566,326	197,356	417,058	63,156	1,517,698
OHIO	72,478	848	8,767	106,085	96,305	213,289	5,166	502,938
INDIANA	106,869	3,394	17,391	85,006	123,623	299,455	11,837	627,575
ILLINOIS	110,808	1,711	17,646	129,096	332,281	822,752	26,057	1,442,351
IOWA	127,092	4,105	49,075	136,014	402,734	1,006,517	72,174	1,997,711
MISSOURI	22,467	708	6,033	47,823	150,324	256,493	6,050	489,908
CORN BELT	439,714	10,766	98,912	484,034	1,305,267	2,598,706	123,084	5,040,483
NORTH DAKOTA	3,735	6	259	2,778	28,984	16,565	5,134	57,457
SOUTH DAKOTA	27,506	28	8,743	15,868	130,088	106,708	15,039	296,980
NEBRASKA	41,739	358	3,848	26,740	540,481	382,962	22,308	1,018,436
KANSAS	18,790	44	4,905	14,139	436,415	108,772	42,427	627,492
NORTHERN PLAINS	86,770	436	17,751	59,525	1,137,968	615,007	84,908	2,002,365
VIRGINIA	18,006	4,740	1,786	20,072	7,862	45,128	336	97,930
WEST VIRGINIA	99	14	569	178	503	1/	5	1,388
NORTH CAROLINA	48,967	2,856	27,007	18,304	6,546	113,153	990	217,823
KENTUCKY	7,425	991	6,855	20,707	11,072	46,947	884	94,881
TENNESSEE	80,942	52,976	3,720	31,602	31,346	96,772	1,737	299,095
APPALACHIAN	155,439	61,577	39,368	91,274	57,004	302,503	3,952	711,117
SOUTH CAROLINA	23,859	11,846	2,200	2,207	1,074	7,981	18	49,185
GEORGIA	113,947	23,430	993	12,114	22,345	107,683	565	281,077
FLORIDA	26,176	1,786	135	2,562	16,103	6,226	930	53,520
ALABAMA	20,903	1,195	107	2,928	1,988	16,307	245	43,673
SOUTHEAST	184,687	36,257	3,435	19,811	41,510	138,197	1,358	421,455
MISSISSIPPI	7,591	4,924	39	2,018	3,436	9,703	4,471	32,182
KANSAS	9,272	31,666	624	468	955	1,998	144	45,127
LOUISIANA	4,046	6,143	12	433	1,420	1,135	79	13,266
DELTA STATES	20,909	42,733	675	2,919	5,811	12,836	4,694	90,577
OKLAHOMA	7,986	1,228	827	6,257	48,413	11,608	451	76,770
TEXAS	69,186	22,962	35,817	37,272	187,941	61,039	8,304	422,521
SOUTHERN PLAINS	77,172	24,190	36,644	43,529	236,354	72,647	6,755	499,291
MONTANA	4,814	550	56	6,477	42,382	8,540	8,023	70,842
WYOMING	2,062	42	203	6,806	43,592	4,439	4,121	61,265
NEW MEXICO	142	1/	1/	247	2,056	228	144	2,825
COLORADO	3,466	26	184	6,904	98,402	9,220	2,394	120,596
ARIZONA	547	20	14	2,085	24,670	1,901	631	25,866
UTAH	2,717	1/	1/	4,556	1/	1/	381	54,642
NEVADA	769	1/	1/	1,726	12,544	618	393	16,059
MOUNTAIN	14,517	653	467	26,801	265,255	27,819	16,087	357,999
WASHINGTON	1,336	308	2,528	3,087	12,420	4,472	191	24,342
OREGON	613	281	356	3,040	14,976	1,703	112	21,080
CALIFORNIA	3,415	12,860	9,832	77,603	20,158	4,776	5,218	133,862
PACIFIC	5,364	13,449	12,716	83,730	47,554	10,951	5,520	176,284
47 STATES	1,255,544	211,573	275,865	1,667,522	3,338,797	4,255,335	322,730	11,327,366

DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 12.--FEED PREMIX FROM PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED

STATE AND REGION	STARTER-GROWER-LAYER-BREEDER	BROILER	TURKEY	DAIRY	BEEF AND SHEEP	HOG	ALL OTHER	TOTAL
NUMBER								
MAINE	2/	2/		2/			2/	2/
NEW HAMPSHIRE	2/			2/			2/	2/
VERMONT	2/			2/			2/	2/
MASSACHUSETTS	5	2/	2/	5	2/	2/	2/	5
CONNECTICUT								
NEW YORK	64	11	2/	66	39	36	12	69
NEW JERSEY	7	2/		6	2/	2/	3	7
PENNSYLVANIA	64	12	5	65	41	37	14	70
DELAWARE	4	3	2/	4	2/	3	2/	5
MARYLAND	16	8	2/	16	10	6	2/	17
NORTHEAST	163	40	14	164	97	89	42	177
MICHIGAN	69		30	69	67	69	35	72
WISCONSIN	155		66	166	152	159	91	168
MINNESOTA	100		41	101	102	110	59	114
LAKE STATES	324		137	336	321	338	185	254
OHIO	47	30	33	93	90	93	62	96
INDIANA	65	53	59	126	126	136	119	139
ILLINOIS	43	36	37	84	87	90	77	91
IOWA	82	61	68	158	156	172	139	177
MISSOURI	24	19	23	54	54	56	46	56
CORN BELT	261	199	220	515	513	547	463	563
NORTH DAKOTA	4			11	17	14	2/	18
SOUTH DAKOTA	11		2/	25	46	45	2/	46
NEBRASKA	28	2/	2/	50	81	81	24	85
KANSAS	25	2/	2/	52	91	93	19	98
NORTHERN PLAINS	68	2/	2/	138	235	233	58	247
VIRGINIA	2/	6		22	14	20	2/	27
WEST VIRGINIA	2/			4	2/	4	2/	4
NORTH CAROLINA	17	6		42	28	39	15	48
KENTUCKY	10	3		22	16	21	5	26
TENNESSEE	10	8		27	15	22	10	32
APPALACHIAN	47	23		117	76	106	38	137
SOUTH CAROLINA	4	2/	5	9	2/	8	2/	11
GEORGIA	22	18	33	46	22	44	18	54
FLORIDA	10	9	8	17	12	16	9	18
ALABAMA	7	2/	10	18	9	16	2/	20
SOUTHEAST	43	36	56	90	46	84	36	103
MISSISSIPPI	6	6	2/	5	6	2/	2/	8
ARKANSAS	12	7	2/	7	12	2/	2/	15
LOUISIANA	4	4		4	8	2/	2/	8
DELTA STATES	22	17	2/	16	26	11	2/	31
OKLAHOMA	20	6		20	31	21	16	31
TEXAS	78	30	6	68	100	79	67	108
SOUTHERN PLAINS	98	36	6	88	131	100	83	135
MONTANA	6			4	17	13	11	20
IDAHO	10			10	29	21	19	30
WYOMING	2/			2/	7	5	2/	7
COLORADO	8		2/	8	22	17	14	22
NEW MEXICO	2/			6	17	12	9	17
ARIZONA	3			2/	2/	4	2/	7
UTAH	3	2/	2/	2/	11	7	9	12
NEVADA					2/			2/
MOUNTAIN	37	2/	2/	2/	109	79	69	116
WASHINGTON	10	8	8	7	14	10	9	16
OREGON	8	8	6	3	9	5	4	15
CALIFORNIA	35	31	33	26	50	29	36	58
PACIFIC	53	47	47	36	73	44	49	85
47 STATES	1,116	401	490	1,533	1,627	1,631	1,033	1,952

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS MANUFACTURE MORE THAN ONE TYPE OF FEED.

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 12.--FEED PREMIX FROM PRIMARY MANUFACTURING: PRODUCTION, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORKULA FEED)

STATE AND REGION	STARTER-GROWER, LAYER, BREEDER	BROILER	TURKEY	DAIRY	BEEF AND SHEEP	HOG	ALL OTHER	TOTAL
TONS								
MAINE	1/	1/		1/			1/	1/
NEW HAMPSHIRE	1/			1/			1/	1/
VERMONT	1/			1/			1/	1/
MASSACHUSETTS	54	1/	1/	53	1/	1/	1/	1/
CONNECTICUT								226
NEW YORK	1,178	214	2/	1,283	89	163	417	3,349
NEW JERSEY	138	1/		46	2/	1/	72	304
PENNSYLVANIA	4,958	2,966	67	4,382	454	1,205	499	14,530
DELAWARE	342	2,522	1/	129	1/	43	1/	3,177
MARYLAND	166	189	1/	162	18	25	1/	832
NORTHEAST	6,909	5,977	118	6,060	628	1,449	10,621	31,762
MICHIGAN	5,215		305	4,118	1,976	1,887	857	14,358
WISCONSIN	2,878		752	10,021	1,470	4,253	8,067	27,441
MINNESOTA	2,485		3,445	6,847	3,722	9,438	1,884	27,821
LAKE STATES	10,578		4,502	20,966	7,168	15,578	10,808	69,620
OHIO	861	150	123	3,927	1,590	4,848	1,591	13,090
INDIANA	3,615	343	1,155	2,068	3,860	10,292	9,785	31,318
ILLINOIS	9,930	2,542	1,235	10,239	20,150	67,483	9,812	121,191
LOUISIANA	2,713	357	679	8,095	13,323	48,260	4,076	77,503
MISSOURI	431	252	177	642	3,010	3,290	1,417	9,219
CORN BELT	17,950	3,844	3,369	24,971	41,933	134,173	26,481	252,321
NORTH DAKOTA	21			82	413	391	1/	1,578
SOUTH DAKOTA	96		1/	311	1,679	2,397	1/	4,622
NEBRASKA	649	1/	1/	3,331	12,571	14,453	360	31,376
KANSAS	726	1/	1/	1,619	7,297	8,585	960	19,218
NORTHERN PLAINS	1,492	1/	1/	5,343	21,960	25,826	2,129	56,794
VIRGINIA	1/			672	38	200	1/	1,435
WEST VIRGINIA	1/	279		60	2/	49	1/	117
NORTH CAROLINA	3,683	268		6,485	1,111	3,313	250	15,110
KENTUCKY	381	112		2,050	284	794	14	3,639
TENNESSEE	383	7,017		969	114	1,269	561	10,313
APPALACHIANS	4,544	7,676		10,236	1,554	5,627	977	30,614
SOUTH CAROLINA	293	1/	75	189	2/	98	1/	677
GEORGIA	29,658	1,505	3,506	204	214	955	80	36,122
FLORIDA	2,028	130	219	175	167	117	117	2,914
ALABAMA	1,087	1/	215	117	73	49	1/	1,899
SOUTHEAST	33,066	2,002	4,015	685	658	1,180	206	41,612
MISSISSIPPI	5,084	843	1/	27	21	1/	1/	5,986
ARKANSAS	2,081	877	1/	24	33	1/	1/	3,051
LOUISIANA	571	752		438	417	1/	1/	2,382
DELTA STATES	7,736	2,472	1/	489	471	123	1/	11,421
OKLAHOMA	193	476		145	5,885	100	402	7,201
TEXAS	6,582	23,688	76	540	43,052	712	19,549	94,200
SOUTHERN PLAINS	6,776	24,164	76	685	48,937	812	19,951	101,401
MONTANA	544			252	1,448	708	83	3,035
IDAHO	100			646	605	184	449	1,984
WYOMING	1/			1/	246	18	1/	356
COLORADO	112		1/	471	526	277	41	1,425
NEW MEXICO	1/			328	670	62	21	1,132
ARIZONA	811			1/	1/	715	1/	13,021
UTAH	78	1/	1/	1/	80	26	27	256
NEVADA					1/			1/
MOUNTAIN	1,687	1/	1/	1/	5,999	1,990	638	21,224
WASHINGTON	396	75	240	474	1,120	103	923	3,341
OREGON	143	201	101	74	966	21	679	2,185
CALIFORNIA	3,130	167	3,706	2,989	20,515	88	31,033	61,628
PACIFIC	3,669	443	4,047	3,537	22,601	212	32,645	67,154
47 STATES	94,007	46,583	16,201	83,892	151,709	106,970	104,561	683,923

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.
 2/ DATA NOT GIVEN WHERE 10 TONS OR LESS WERE MANUFACTURED WITHIN A STATE.

TABLE 13.—FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS THAT USED SPECIFIED FEED GRAINS,
BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	CORN	SORGHUM GRAIN	BARLEY	OATS	WHEAT	TOTAL 1/
NUMBER						
MAINE-----	11	2/		2/		2/
NEW HAMPSHIRE-----	8		2/	5	2/	6
VERMONT-----	12	2/	5	12	8	12
MASSACHUSETTS-----	12	2/	5	9	8	12
CONNECTICUT-----	5	2/	2/	2/	2/	5
NEW YORK-----	188	40	108	189	129	196
NEW JERSEY-----	19	2/	16	17	2/	19
PENNSYLVANIA-----	202	50	165	192	159	202
DELAWARE-----	15	3	12	9	8	15
MARYLAND-----	41	10	34	31	28	41
NORTHEAST-----	511	110	350	469	361	519
MICHIGAN-----	127	70	91	124	106	127
WISCONSIN-----	340	172	228	330	245	341
MINNESOTA-----	235	99	145	225	142	236
LAKE STATES-----	702	341	464	679	493	704
OHIO-----	191	134	139	181	158	191
INDIANA-----	252	178	177	237	196	252
ILLINOIS-----	189	121	122	168	128	189
IOWA-----	403	228	230	375	231	404
MISSOURI-----	161	133	93	142	110	162
CORN BELT-----	1,196	794	761	1,103	823	1,198
NORTH DAKOTA-----	36	24	37	37	28	38
SOUTH DAKOTA-----	82	69	69	78	63	82
NEBRASKA-----	162	141	109	135	113	163
KANSAS-----	221	225	166	202	182	230
NORTHERN PLAINS-----	501	459	381	452	386	513
VIRGINIA-----	69	41	55	58	53	69
WEST VIRGINIA-----	9	4	5	8	8	9
NORTH CAROLINA-----	139	80	89	113	102	140
KENTUCKY-----	57	39	42	52	43	58
TENNESSEE-----	71	40	42	51	49	71
APPALACHIAN-----	345	204	233	282	255	347
SOUTH CAROLINA-----	34	6	20	25	25	34
GEORGIA-----	138	28	66	103	82	138
FLORIDA-----	68	20	30	46	37	68
ALABAMA-----	79	18	38	50	41	79
SOUTHEAST-----	319	72	154	224	185	319
MISSISSIPPI-----	67	33	25	54	29	67
ARKANSAS-----	70	57	23	41	23	72
LOUISIANA-----	38	25	16	28	15	38
DELTA STATES-----	175	115	64	123	67	177
OKLAHOMA-----	82	87	83	81	74	90
TEXAS-----	262	301	179	238	157	302
SOUTHERN PLAINS-----	344	388	262	319	231	392
MONTANA-----	41	27	48	45	44	48
IDAHOO-----	55	42	67	53	60	69
WYOMING-----	2/	9	11	2/	10	12
COLORADO-----	53	53	49	49	48	54
NEW MEXICO-----	33	44	36	34	29	44
ARIZONA-----	15	25	22	13	13	26
UTAH-----	29	25	26	23	30	31
NEVADA-----	2/	3	5	2/	4	6
MOUNTAIN-----	240	228	264	230	238	290
WASHINGTON-----	47	27	48	44	42	50
OREGON-----	41	30	44	40	43	46
CALIFORNIA-----	146	144	139	104	110	162
PACIFIC-----	234	201	231	188	195	238
47 STATES-----	4,567	2,912	3,164	4,069	3,234	4,717

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE INGREDIENT
2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 14.—FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: QUANTITIES OF SPECIFIED FEED GRAINS USED, BY STATES AND REGIONS, 1969.
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	CORN	SORGHUM GRAIN	BARLEY	OATS	WHEAT	TOTAL
TONS						
MAINE	285,295					
NEW HAMPSHIRE	56,057	1/				
VERMONT	156,515	1/	11,083	5,675	1/	63,661
MASSACHUSETTS	80,661	1/	2,420	40,984	5,182	213,770
CONNECTICUT	119,571	1/		9,773	445	93,307
NEW YORK	644,853	2,655	41,175	144,306	15,835	848,824
NEW JERSEY	152,754	1/	19,037	14,484	1/	197,748
PENNSYLVANIA	670,640	1,491	47,922	91,421	14,393	825,867
DELAWARE	377,131	19	11,763	2,693	1,280	392,886
MARYLAND	611,524	102	19,199	15,922	4,054	650,801
NORTHEAST	3,154,999	4,230	156,253	331,589	53,464	3,700,635
MICHIGAN	212,706	94	2,223	32,204	3,134	250,361
WISCONSIN	540,385	214	5,325	101,937	8,338	656,199
MINNESOTA	500,693	105	12,050	89,994	10,239	613,021
LAKE STATES	1,253,724	413	19,598	224,135	21,711	1,519,581
OHIO	495,657	14,528	3,489	75,264	10,553	589,491
INDIANA	578,862	17,656	2,530	40,816	14,687	604,545
ILLINOIS	618,604	20,937	3,275	49,095	15,891	707,802
IOWA	1,003,251	54,287	6,584	128,308	39,372	1,231,802
MISSOURI	811,099	244,901	31,161	87,048	37,529	1,211,738
CORN BELT	3,457,473	352,308	47,039	380,531	118,032	4,355,378
NORTH DAKOTA	46,869	20,702	59,102	12,822	2,053	141,548
SOUTH DAKOTA	129,235	83,279	18,140	28,475	6,220	265,253
NEBRASKA	255,518	241,230	27,053	32,363	16,830	672,994
KANSAS	332,079	565,815	37,035	25,872	34,006	994,807
NORTHERN PLAINS	863,705	911,026	141,330	99,532	59,109	2,074,702
VIRGINIA	426,350	3,583	13,501	10,618	8,190	462,242
WEST VIRGINIA	13,666	91	131	977	232	15,097
NORTH CAROLINA	1,354,554	30,097	19,876	33,669	37,833	1,476,029
KENTUCKY	231,691	3,670	7,829	12,854	5,408	261,652
TENNESSEE	769,389	47,922	13,165	18,559	9,930	859,565
APPALACHIAN	2,795,650	85,563	55,102	76,677	61,593	3,074,585
SOUTH CAROLINA	194,107	398	2,266	5,900	2,836	205,507
GEORGIA	2,015,378	1,686	1,970	43,014	14,061	2,078,109
FLORIDA	611,755	1,486	1,751	31,688	5,209	652,089
ALABAMA	1,305,141	13,396	5,519	13,748	3,895	1,341,699
SOUTHEAST	4,126,381	16,966	11,506	94,550	26,001	4,275,404
MISSISSIPPI	736,845	109,991	796	30,878	3,604	882,114
ARKANSAS	1,241,255	605,298	10,547	35,564	2,985	1,895,751
LOUISIANA	202,129	145,754	3,233	23,216	312	374,644
DELTA STATES	2,180,329	861,043	14,578	89,658	6,901	3,152,509
OKLAHOMA	101,342	346,928	61,966	45,776	27,654	583,666
TEXAS	465,692	2,328,018	136,837	161,471	43,601	3,135,619
SOUTHERN PLAINS	567,034	2,674,946	198,803	207,247	71,255	3,719,285
MONTANA	21,547	44,909	98,189	10,163	13,102	187,910
IDAHO	40,784	67,612	164,494	9,078	35,312	317,240
WYOMING	1/	8,612	11,537	1/	3,034	32,642
COLORADO	241,728	297,275	235,777	23,529	44,702	863,011
NEW MEXICO	35,230	318,026	47,941	10,745	10,816	422,758
ARIZONA	25,509	345,769	153,906	6,376	26,747	562,307
UTAH	25,270	70,207	50,805	4,924	33,428	184,634
NEVADA	1/	13,052	31,282	1/	6,502	57,554
MOUNTAIN	406,107	1,165,462	793,891	68,953	173,643	2,608,056
WASHINGTON	161,366	110,031	132,287	26,812	38,010	468,506
OREGON	121,577	89,929	107,307	21,514	40,267	380,594
CALIFORNIA	648,298	1,316,492	783,592	75,949	148,991	3,003,322
PACIFIC	981,241	1,516,452	1,003,186	124,275	227,268	3,852,422
47 STATES	19,786,643	7,588,504	2,441,286	1,697,147	818,977	32,332,557

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 15.—FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: AVERAGE DISTANCE OF ESTABLISHMENTS FROM PRINCIPAL SUPPLIERS OF SPECIFIED FEED GRAINS, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	CORN	SORGHUM GRAIN	BARLEY	OATS	WHEAT	AVERAGE DISTANCE 1/
MILES						
MAINE	1,191			1,200		1,191
NEW HAMPSHIRE	580	475	411	653		582
VERMONT	914	1,376	586	551	433	821
MASSACHUSETTS	689	1,016	930	517	607	676
CONNECTICUT	785	813	718	864	363	787
NEW YORK	265	613	356	455	492	323
NEW JERSEY	449	1,228	127	435	110	397
PENNSYLVANIA	297	775	72	404	87	293
DELAWARE	22	1,130	31	467	39	30
MARYLAND	27	527	94	369	113	33
NORTHEAST	361	673	216	462	271	363
MICHIGAN	58	159	137	51	106	58
WISCONSIN	81	217	96	66	109	79
MINNESOTA	67	309	120	63	174	69
LAKE STATES	71	229	115	63	139	72
OHIO	54	204	120	162	83	72
INDIANA	39	118	238	156	77	51
ILLINOIS	31	126	182	172	58	45
IDAHO	40	108	233	152	254	62
MISSOURI	112	124	240	225	195	127
CORN BELT	57	124	226	174	159	77
NORTH DAKOTA	67	40	16	72	28	42
SOUTH DAKOTA	62	59	84	79	26	62
NEBRASKA	43	58	33	184	30	55
KANSAS	75	65	29	210	34	70
NORTHERN PLAINS	60	62	29	146	32	62
VIRGINIA	351	277	99	282	32	336
WEST VIRGINIA	429	187	45	336	60	413
NORTH CAROLINA	560	119	65	269	44	524
KENTUCKY	236	358	74	230	38	228
TENNESSEE	262	450	256	332	139	273
APPALACHIAN	419	322	122	280	57	400
SOUTH CAROLINA	464	236	115	683	119	461
GEORGIA	483	507	296	451	144	480
FLORIDA	376	437	836	731	320	394
ALABAMA	465	627	195	447	238	465
SOUTHEAST	461	589	294	559	201	461
MISSISSIPPI	348	466	295	168	177	355
ARKANSAS	382	451	206	413	42	403
LOUISIANA	397	627	412	343	189	483
DELTA STATES	372	483	257	310	119	399
OKLAHOMA	459	259	125	556	53	293
TEXAS	589	196	190	525	80	269
SOUTHERN PLAINS	566	204	170	532	70	273
MONTANA	470	303	124	123	85	204
IDAHO	282	304	154	177	36	190
WYOMING	263	300	149	196	37	207
COLORADO	385	280	138	323	56	260
NEW MEXICO	364	218	148	486	54	225
ARIZONA	604	369	180	557	67	318
UTAH	606	592	125	176	79	362
NEVADA	383	417	379	115	213	361
MOUNTAIN	405	313	157	301	66	263
WASHINGTON	1,582	1,168	293	262	197	933
OREGON	1,600	592	209	148	130	732
CALIFORNIA	1,496	1,010	354	740	151	908
PACIFIC	1,523	996	335	535	195	894
47 STATES	371	392	229	323	121	356

1/ WEIGHTED AVERAGE DISTANCE FOR SPECIFIED INGREDIENTS.

TABLE 16.— FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS THAT USED SPECIFIED OILSEED MEALS, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	SOYBEAN MEAL	COTTONSEED MEAL	OTHER OILSEED MEALS	TOTAL 1/
NUMBER				
MAINE	12		2/	2/
NEW HAMPSHIRE	6	3	4	6
VERMONT	12	4	6	12
MASSACHUSETTS	12	4	5	12
CONNECTICUT	5	2/	2/	2/
NEW YORK	189	88	128	191
NEW JERSEY	19	5	7	19
PENNSYLVANIA	199	144	151	199
DELAWARE	15	2/	2/	15
MARYLAND	40	27	28	40
NORTHEAST	309	281	338	511
MICHIGAN	125	100	101	125
WISCONSIN	342	226	313	342
MINNESOTA	244	142	183	244
LAKE STATES	711	468	597	711
OHIO	189	159	164	189
INDIANA	253	199	197	253
ILLINOIS	191	149	146	191
IOWA	429	289	311	429
MISSOURI	159	130	97	160
CORN BELT	1,221	926	915	1,222
NORTH DAKOTA	36	28	28	36
SOUTH DAKOTA	79	64	66	79
NEBRASKA	154	124	114	155
KANSAS	223	191	147	226
NORTHERN PLAINS	492	407	355	496
VIRGINIA	67	51	59	67
WEST VIRGINIA	7	6	6	7
NORTH CAROLINA	135	97	67	137
KENTUCKY	59	52	39	59
TENNESSEE	62	57	35	66
APPALACHIAN	330	263	200	336
SOUTH CAROLINA	32	25	19	32
GEORGIA	131	91	70	136
FLORIDA	60	53	37	68
ALABAMA	69	52	36	75
SOUTHEAST	292	221	162	311
MISSISSIPPI	62	53	26	68
ARKANSAS	67	37	19	70
LOUISIANA	32	34	14	37
DELTA STATES	161	124	59	175
OKLAHOMA	84	84	54	87
TEXAS	242	274	150	289
SOUTHERN PLAINS	326	358	204	376
MONTANA	46	35	32	46
IDAHO	58	55	45	58
WYOMING	11	10	7	11
COLORADO	48	49	39	51
NEW MEXICO	35	38	26	40
ARIZONA	15	20	10	20
UTAH	28	24	17	29
NEVADA				
MOUNTAIN	243	233	176	255
WASHINGTON	43	42	30	47
OREGON	41	38	27	42
CALIFORNIA	122	140	96	148
PACIFIC	206	220	153	237
47 STATES	4,489	3,499	3,359	4,630

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE INGREDIENT.

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 17.—FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: QUANTITIES OF SPECIFIED OILSEED MEALS USED^{1/}
BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	SOYBEAN MEAL	COTTONSEED MEAL	OTHER OILSEED MEALS	TOTAL
TONS				
MAINE	70,685		1/	1/
NEW HAMPSHIRE	16,704	97	909	17,710
VERMONT	60,792	72	1,742	62,606
MASSACHUSETTS	25,161	15	326	25,502
CONNECTICUT	26,377	1/	1/	26,377
NEW YORK	237,074	1,139	7,408	244,621
NEW JERSEY	39,531	23	391	39,955
PENNSYLVANIA	319,807	2,532	11,838	334,177
DELAWARE	126,019	1/	1/	126,210
MARYLAND	197,705	367	1,091	199,163
NORTHEAST	1,119,855	4,287	25,253	1,149,395
MICHIGAN	153,449	647	5,633	159,729
WISCONSIN	364,445	597	29,497	394,539
MINNESOTA	406,947	910	10,459	418,316
LAKE STATES	924,841	2,154	45,589	972,584
OHIO	313,282	6,801	6,032	326,115
INDIANA	422,576	7,887	5,784	436,247
ILLINOIS	943,663	34,447	18,664	996,774
IOWA	1,185,389	18,976	36,696	1,241,061
MISSOURI	341,939	39,271	12,055	393,265
CORN BELT	3,206,849	107,382	79,231	3,393,462
NORTH DAKOTA	27,358	2,223	953	30,534
SOUTH DAKOTA	113,246	9,392	794	123,432
NEBRASKA	384,361	37,615	2,933	424,909
KANSAS	250,056	67,276	1,756	319,088
NORTHERN PLAINS	775,021	116,506	6,436	897,963
VIRGINIA	179,356	5,905	3,173	188,434
WEST VIRGINIA	5,284	127	25	5,436
NORTH CAROLINA	579,767	16,263	769	596,799
KENTUCKY	112,471	5,720	650	118,841
TENNESSEE	418,805	47,486	738	467,029
APPALACHIAN	1,295,683	75,501	5,355	1,376,535
SOUTH CAROLINA	85,061	4,959	651	90,671
GEORGIA	754,975	28,721	10,286	793,982
FLORIDA	186,895	24,369	4,253	215,517
ALABAMA	439,919	11,482	1,025	452,426
SOUTHEAST	1,466,850	69,531	16,215	1,552,596
MISSISSIPPI	264,980	40,506	5,717	311,203
ARKANSAS	533,201	14,986	353	548,540
LOUISIANA	81,578	26,990	265	108,833
DELTA STATES	879,759	82,482	6,335	968,576
OKLAHOMA	74,102	89,222	1,663	164,987
TEXAS	440,245	533,548	11,152	964,945
SOUTHERN PLAINS	514,347	622,770	12,815	1,149,932
MONTANA	17,764	10,856	1,369	29,789
IDAHO	18,073	13,587	4,838	36,498
WYOMING	1,550	1,575	144	3,269
COLORADO	53,894	43,565	2,975	100,434
NEW MEXICO	25,131	39,462	1,283	65,876
ARIZONA	18,348	28,352	5,920	52,620
UTAH	20,912	8,758	602	30,272
NEVADA				
MOUNTAIN	363,472	145,955	17,131	526,558
WASHINGTON	52,739	27,799	4,368	84,906
OREGON	38,853	18,186	5,099	62,138
CALIFORNIA	247,443	223,953	102,232	573,628
PACIFIC	339,035	269,938	111,699	720,672
47 STATES	30,685,742	1,496,506	326,059	32,508,277

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 18.—FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: AVERAGE DISTANCE OF ESTABLISHMENTS FROM PRINCIPAL SUPPLIERS OF SPECIFIED OILSEED MEALS, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	SOYBEAN MEAL	COTTONSEED MEAL	OTHER OILSEED MEALS	AVERAGE DISTANCE 1/
MILES				
MAINE	1,127		1,500	1,130
NEW HAMPSHIRE	729	976	1,132	751
VERMONT	910	567	978	911
MASSACHUSETTS	890	422	1,018	832
CONNECTICUT	1,019	677	923	1,018
NEW YORK	668	536	529	663
NEW JERSEY	680	470	614	679
PENNSYLVANIA	564	506	557	563
DELAWARE	491	511	505	491
MARYLAND	368	349	370	368
NORTHEAST	621	519	609	620
MICHIGAN	162	827	144	164
WISCONSIN	168	794	136	167
MINNESOTA	88	962	113	90
LAKE STATES	132	877	134	133
OHIO	151	401	304	160
INDIANA	101	328	296	108
ILLINOIS	69	422	423	88
IOWA	68	408	278	79
MISSOURI	122	287	182	140
CORN BELT	87	362	301	100
NORTH DAKOTA	227	525	400	254
SOUTH DAKOTA	150	507	296	178
NEBRASKA	180	555	300	214
KANSAS	175	382	337	220
NORTHERN PLAINS	175	451	325	212
VIRGINIA	406	279	209	399
WEST VIRGINIA	442	233	261	436
NORTH CAROLINA	403	309	247	400
KENTUCKY	228	270	368	231
TENNESSEE	270	187	400	262
APPALACHIAN	346	227	261	339
SOUTH CAROLINA	218	420	272	230
GEORGIA	222	401	228	229
FLORIDA	367	603	357	394
ALABAMA	315	339	265	315
SOUTHEAST	268	463	266	277
MISSISSIPPI	173	145	97	168
ARKANSAS	245	136	97	242
LOUISIANA	269	217	95	256
DELTA STATES	226	167	97	220
OKLAHOMA	325	346	371	337
TEXAS	525	213	342	354
SOUTHERN PLAINS	496	232	346	351
MONTANA	870	801	408	824
IDAHO	1,021	821	647	823
WYOMING	776	614	623	682
COLORADO	595	636	351	605
NEW MEXICO	566	417	252	471
ARIZONA	797	182	74	384
UTAH	1,026	610	488	922
NEVADA	777	469	272	525
MOUNTAIN	768	497	340	624
WASHINGTON	1,804	842	233	1,408
OREGON	1,711	499	207	1,233
CALIFORNIA	1,766	247	123	880
PACIFIC	1,766	325	131	975
47 STATES	304	310	241	303

1/ WEIGHTED AVERAGE DISTANCE FOR SPECIFIED INGREDIENTS.

TABLE 19.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS THAT USED SPECIFIED GRAIN BYPRODUCTS, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	BREWERS' DRIED GRAINS	DISTILLERS' DRIED GRAINS	CORN GLUTEN FEED	CORN GLUTEN MEAL	MOHINY FEED	WHEAT MILLFEEDS	OTHER MILLFEEDS	TOTAL 1/
NUMBER								
MAINE-----	2/	5	8	4	3	5	2/	12
NEW HAMPSHIRE-----	2/	5	5	4	4	6	2/	6
VERMONT-----	10	9	10	7	12	11	5	12
MASSACHUSETTS-----	10	8	8	7	8	9	5	12
CONNECTICUT-----	2/	5	4	4	4	5	2/	5
NEW YORK-----	149	187	171	98	168	173	99	195
NEW JERSEY-----	14	14	12	11	8	15	7	19
PENNSYLVANIA-----	172	170	162	144	138	166	139	197
DELAWARE-----	8	8	7	15	6	9	7	15
MARYLAND-----	30	24	25	31	22	29	25	40
NORTHEAST-----	402	435	412	325	373	448	293	513
MICHIGAN-----	103	90	100	91	20	111	92	115
WISCONSIN-----	291	243	255	232	45	322	253	336
MINNESOTA-----	150	141	142	139	25	203	151	213
LAKE STATES-----	544	474	497	462	90	636	496	664
OHIO-----	149	142	145	135	133	172	140	178
INDIANA-----	186	190	191	184	180	221	185	230
ILLINOIS-----	124	125	141	125	123	164	154	172
IOWA-----	239	255	241	233	233	347	254	359
MISSOURI-----	87	90	100	90	90	147	103	149
CORN BELT-----	785	862	818	767	759	1,051	816	1,088
NORTH DAKOTA-----	24	26	26	20	20	29	26	32
SOUTH DAKOTA-----	58	62	62	46	47	69	63	73
NEBRASKA-----	101	101	101	87	84	125	109	138
KANSAS-----	125	127	126	102	102	199	135	204
NORTHERN PLAINS-----	308	316	315	255	253	432	333	447
VIRGINIA-----	46	52	47	18	43	55	48	62
WEST VIRGINIA-----	2/	5	4	2/	4	6	5	6
NORTH CAROLINA-----	66	76	71	47	64	102	76	113
KENTUCKY-----	42	48	42	18	42	49	41	58
TENNESSEE-----	2/	41	46	2/	45	56	48	61
APPALACHIAN-----	196	222	210	103	198	268	218	300
SOUTH CAROLINA-----	18	18	19	10	18	20	18	25
GEORGIA-----	68	78	80	50	68	93	84	116
FLORIDA-----	40	31	38	22	41	46	37	58
ALABAMA-----	36	39	37	28	38	47	42	55
SOUTHEAST-----	162	166	174	110	165	286	181	254
MISSISSIPPI-----	25	11	33	32	29	40	41	51
ARKANSAS-----	20	12	21	41	20	42	26	57
LOUISIANA-----	17	8	21	16	15	23	22	30
DELTA STATES-----	62	31	73	89	84	105	89	138
OKLAHOMA-----	51	13	23	33	52	75	59	76
TEXAS-----	139	42	69	114	138	222	183	253
SOUTHERN PLAINS-----	190	55	92	147	190	297	242	329
MONTANA-----	8	29	29	14	14	37	27	39
IDAHOO-----	14	40	41	22	22	51	41	54
WYOMING-----	2/	7	2/	2/	2/	2/	2/	9
COLORADO-----	16	34	33	16	16	45	36	48
NEW MEXICO-----	9	23	23	11	12	29	25	32
ARIZONA-----	5	2/	2/	2/	4	11	11	14
UTAH-----	7	19	15	10	9	24	14	25
NEVADA-----	2/	2/	2/	2/	2/	2/	2/	3
MOUNTAIN-----	59	160	156	81	82	208	162	224
WASHINGTON-----	24	22	15	8	20	41	25	44
OREGON-----	21	23	14	7	22	40	22	40
CALIFORNIA-----	73	59	43	39	86	111	79	136
PACIFIC-----	118	104	72	54	128	192	126	220
47 STATES-----	2,826	2,765	2,819	2,303	2,302	3,843	2,956	4,177

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE INGREDIENT.
2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 20.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: QUANTITIES OF SPECIFIED GRAIN BYPRODUCTS USED, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	BREWERS' DRIED GRAINS	DISTILLERS' DRIED GRAINS	CORN GLUTEN FEED	CORN GLUTEN MEAL	WHEAT FEED	WHEAT MILLFEEDS	OTHER MILLFEEDS	TOTAL
TONS								
MAINE	1/	4,801	8,851	12,600	6,301	8,558	1/	41,451
NEW HAMPSHIRE	1/	4,611	8,899	789	16,189	24,780	1/	58,421
VERMONT	27,316	26,885	46,079	7,462	73,389	224,974	6,285	414,390
MASSACHUSETTS	3,148	3,193	12,203	1,127	13,138	21,522	1,153	55,484
CONNECTICUT	1/	6,744	8,879	989	21,576	22,650	1/	65,767
NEW YORK	76,886	151,483	146,208	8,914	233,714	399,712	13,921	1,030,638
NEW JERSEY	8,137	5,575	10,587	1,805	10,275	21,025	4,563	61,967
PENNSYLVANIA	52,067	52,203	80,399	15,884	70,628	159,198	29,878	456,465
DELAWARE	4,164	3,925	4,235	26,171	1,823	8,539	1,895	49,952
MARYLAND	26,226	8,984	13,014	38,486	17,019	37,322	6,287	147,338
NORTHEAST	205,815	266,404	339,344	114,227	464,050	924,480	65,713	2,362,033
MICHIGAN	7,959	1,153	8,421	1,330	53	45,906	5,295	70,117
WISCONSIN	26,827	4,558	13,475	5,145	413	144,632	29,498	224,648
MINNESOTA	13,311	5,266	3,104	3,553	51	163,927	15,431	204,543
LAKE STATES	46,097	10,977	25,000	10,028	517	354,465	50,224	499,306
OHIO	8,663	14,429	42,280	2,061	15,306	86,195	17,500	188,614
INDIANA	12,581	7,313	29,066	2,117	3,900	84,762	17,265	157,006
ILLINOIS	17,529	16,566	56,915	3,528	6,926	134,528	25,525	263,535
IOWA	15,732	38,786	33,664	10,004	11,543	267,557	48,899	444,185
MISSOURI	3,073	4,409	26,521	2,919	18,770	230,686	52,736	339,114
CORN BELT	55,578	81,523	186,426	20,629	58,445	825,928	161,925	1,392,454
NORTH DAKOTA	30	112	85	44	448	12,776	7,526	21,021
SOUTH DAKOTA	82	2,571	228	111	3,152	69,781	11,751	87,676
NEBRASKA	643	1,456	1,118	906	16,244	199,056	36,416	257,839
KANSAS	332	4,984	930	393	19,177	197,087	19,350	242,253
NORTHERN PLAINS	1,087	9,123	2,361	1,454	39,021	478,700	77,043	608,789
VIRGINIA	4,176	8,455	6,805	8,772	6,088	35,440	4,464	74,220
WEST VIRGINIA	1/	164	53	1/	54	663	65	1,149
NORTH CAROLINA	7,252	8,824	14,710	42,064	6,538	73,853	16,915	170,156
KENTUCKY	1,234	10,707	14,486	2,737	10,278	28,707	4,356	72,485
TENNESSEE	1/	17,693	50,821	1/	52,441	155,316	45,914	349,223
APPALACHIAN	21,097	45,843	86,855	72,326	75,199	293,979	71,734	667,293
SOUTH CAROLINA	1,054	1,460	4,532	4,648	1,706	6,059	1,665	21,122
GEORGIA	17,539	9,339	24,923	48,081	6,264	85,267	19,656	209,099
FLORIDA	10,878	2,172	11,381	7,793	20,833	30,397	7,241	90,695
ALABAMA	4,494	2,862	3,690	34,297	6,334	32,089	5,548	89,314
SOUTHEAST	33,985	15,833	44,536	92,817	35,137	153,812	34,110	410,230
MISSISSIPPI	205	785	10,468	6,465	6,800	59,635	28,530	112,888
ARKANSAS	707	1,490	5,366	21,731	1,052	78,193	24,141	132,682
LOUISIANA	999	225	4,194	5,003	427	28,989	5,304	45,141
DELTA STATES	1,911	2,500	20,030	33,199	8,279	166,817	57,975	290,711
OKLAHOMA	707	722	511	1,120	6,219	122,324	13,134	144,757
TEXAS	5,462	5,277	9,418	20,871	28,935	252,516	111,731	414,210
SOUTHERN PLAINS	6,169	5,999	9,929	21,991	35,154	354,840	124,885	556,967
MONTANA	701	282	40	17	1,452	27,812	950	31,254
IDaho	1,185	379	127	177	1,695	21,719	7,378	32,660
WYOMING	1/	39	1/	1/	1/	1/	1/	1,783
COLORADO	16,548	2,515	53	47	1,113	51,317	5,590	71,253
NEW MEXICO	1,116	186	27	19	1,867	7,565	1,515	12,215
ARIZONA	1,431	1/	1/	1/	197	10,818	5,745	18,535
UTAH	1,819	850	22	42	7,375	20,888	442	30,938
NEVADA	1/	1/	1/	1/	1/	1/	1/	4,473
MOUNTAIN	22,692	4,473	282	506	15,478	143,797	21,983	209,211
WASHINGTON	823	262	65	784	3,891	148,698	5,299	159,822
OREGON	803	259	126	572	5,599	58,057	7,463	72,884
CALIFORNIA	18,438	4,988	900	13,610	124,864	293,599	80,352	536,749
PACIFIC	20,069	5,507	1,091	14,966	134,354	500,354	93,114	769,495
47 STATES	416,500	450,182	717,854	382,143	865,834	4,197,172	756,706	7,788,391

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 21.—FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: AVERAGE DISTANCE OF ESTABLISHMENTS FROM PRINCIPAL SUPPLIERS OF SPECIFIED GRAIN BYPRODUCTS, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	BREWERS' DRIED GRAINS	DISTILLERS' DRIED GRAINS	CORN GLUTEN FEED	CORN GLUTEN MEAL	SOYBEAN FEEB	WHEAT MILLFEEDS	OTHER MILLFEEDS	AVERAGE DISTANCE 1/
MILES								
MAINE-----	800	715	1,132	1,135	875	995	1,200	1,005
NEW HAMPSHIRE-----	424	443	1,173	813	953	867	466	854
VERMONT-----	440	653	967	917	986	754	999	799
MASSACHUSETTS-----	327	706	786	1,275	896	490	668	799
CONNECTICUT-----	920	483	891	1,074	1,015	617	377	675
NEW YORK-----	412	709	819	840	729	221	477	516
NEW JERSEY-----	281	580	816	864	773	395	396	524
PENNSYLVANIA-----	296	535	752	788	636	304	202	470
DELAWARE-----	821	464	898	994	727	606	511	853
MARYLAND-----	140	527	750	796	727	380	357	526
NORTHEAST-----	363	647	839	894	784	419	389	593
MICHIGAN-----	135	321	223	220	68	100	196	132
WISCONSIN-----	96	321	285	201	68	174	235	177
MINNESOTA-----	68	336	228	212	68	86	114	82
LAKE STATES-----	96	328	203	208	69	115	194	132
OHIO-----	255	200	344	267	200	167	158	216
INDIANA-----	229	172	126	161	179	146	166	156
ILLINOIS-----	126	180	97	114	163	199	217	171
IOWA-----	196	157	147	115	115	191	125	174
MISSOURI-----	86	109	167	766	121	120	183	139
CORN BELT-----	185	168	178	142	151	165	169	167
NORTH DAKOTA-----	301	346	233	222	304	109	70	101
SOUTH DAKOTA-----	253	356	221	226	304	195	155	199
NEBRASKA-----	249	353	267	233	258	176	108	173
KANSAS-----	239	351	170	212	358	149	167	171
NORTHERN PLAINS-----	249	353	223	227	310	166	126	173
VIRGINIA-----	380	454	598	814	489	466	420	511
WEST VIRGINIA-----	474	221	501	783	342	213	278	282
NORTH CAROLINA-----	538	435	679	841	363	237	355	464
KENTUCKY-----	280	60	414	643	234	246	300	269
TENNESSEE-----	334	250	458	623	383	264	374	345
APPALACHIAN-----	407	279	499	774	370	280	366	365
SOUTH CAROLINA-----	662	440	774	737	962	203	244	347
GEORGIA-----	680	420	721	743	735	297	462	512
FLORIDA-----	653	395	921	850	1,180	361	613	717
ALABAMA-----	628	574	679	666	393	154	260	440
SOUTHEAST-----	664	446	774	730	948	276	451	544
MISSISSIPPI-----	458	515	455	650	419	680	243	530
ARKANSAS-----	382	623	469	475	566	419	77	372
LOUISIANA-----	120	717	681	689	333	455	139	586
DELTA STATES-----	254	598	506	542	434	554	164	466
OKLAHOMA-----	107	399	163	344	432	403	289	391
TEXAS-----	88	476	163	344	442	230	310	271
SOUTHERN PLAINS-----	73	467	163	344	440	289	308	302
MONTANA-----	145	197	1,317	1,392	525	145	196	167
IDaho-----	146	204	1,490	1,402	537	162	79	188
WYOMING-----	145	241	1,577	1,576	506	122	212	175
COLORADO-----	80	105	1,369	1,407	368	90	234	105
NEW MEXICO-----	577	265	1,515	1,536	313	168	221	240
ARIZONA-----	260	943	1,319	1,578	256	233	363	294
UTAH-----	462	943	877	1,084	546	104	193	251
NEVADA-----	145	364	361	1,780	390	542	230	454
MOUNTAIN-----	144	298	1,406	1,450	482	139	217	182
WASHINGTON-----	284	185	1,679	1,925	1,291	225	164	259
OREGON-----	132	273	1,621	1,928	1,319	158	118	260
CALIFORNIA-----	129	174	1,728	1,925	1,315	427	226	678
PACIFIC-----	136	180	1,737	1,926	1,314	333	215	517
47 STATES-----	307	490	579	749	750	274	246	390

1/ WEIGHTED AVERAGE DISTANCE FOR SPECIFIED INGREDIENTS.

TABLE 22.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS THAT USED SPECIFIED ANIMAL PROTEIN INGREDIENTS BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	MEAT MEAL TANKAGE	MEAT AND BONE MEAL	FISH MEAL	POULTRY BYPRODUCT MEAL	FEATHER MEAL	DRIFT MILK PRODUCTS	TOTAL 1/
NUMBER							
MAINE	2/	7	8	4	2/	2/	11
NEW HAMPSHIRE	2/	5	4	2/	2/	3	5
VERMONT	4	8	8	5	2/	6	9
MASSACHUSETTS	6	10	9	2/	2/	7	12
CONNECTICUT	2/	4	4	2/	2/	2/	4
NEW YORK	93	130	108	88	15	104	138
NEW JERSEY	3/	16	15	5	2/	9	18
PENNSYLVANIA	126	173	153	121	21	142	184
DELAWARE	6	12	14	11	2/	2/	15
MARYLAND	24	29	31	28	11	23	38
NORTHEAST	267	394	354	269	55	304	432
MICHIGAN	101	110	101	14	23	98	116
WISCONSIN	267	305	243	50	45	262	326
MINNESOTA	182	218	185	34	27	185	235
LAKE STATES	550	633	529	103	95	543	677
MID-	145	173	148	16	173	164	178
INDIANA	207	233	217	26	161	213	246
ILLINOIS	140	166	154	22	115	156	182
IOWA	286	385	354	45	222	352	417
MISSOURI	111	137	122	11	79	118	151
CORN BELT	891	1,094	995	120	700	1,005	1,174
NORTH DAKOTA	28	36	26	17	22	29	37
SOUTH DAKOTA	65	75	67	36	48	69	79
NEBRASKA	116	137	128	52	82	127	146
KANSAS	151	185	155	74	97	152	206
NORTHERN PLAINS	360	443	378	179	249	377	466
VIRGINIA	43	60	57	49	2/	48	66
WEST VIRGINIA	4	6	5	4	2/	5	6
NORTH CAROLINA	73	103	119	80	31	85	131
KENTUCKY	50	50	42	38	17	44	55
TENNESSEE	41	47	49	35	19	49	60
APPALACHIAN	211	266	272	206	64	231	318
SOUTH CAROLINA	22	22	27	20	20	17	30
GEORGIA	80	93	106	83	77	67	124
FLORIDA	36	42	42	32	31	29	51
ALABAMA	39	52	58	47	40	38	67
SOUTHEAST	177	209	233	182	166	151	272
MISSISSIPPI	26	38	43	31	11	31	49
ARKANSAS	23	39	50	42	24	22	63
LOUISIANA	15	23	23	15	7	13	27
DELTA STATES	64	100	116	88	42	66	139
OKLAHOMA	60	74	61	51	13	59	77
TEXAS	154	212	179	143	44	162	235
SOUTHERN PLAINS	214	286	240	194	57	221	312
MONTANA	32	38	34	6	14	33	43
IDaho	45	52	52	13	21	51	57
WYOMING	2/	8	8	2/	2/	2/	8
COLORADO	36	47	40	11	15	38	49
NEW MEXICO	30	29	25	8	11	27	36
ARIZONA	7	15	12	4	4	9	15
UTAH	16	28	26	5	13	20	30
NEVADA	2/	3	2/	2/	2/	2/	3
MOUNTAIN	174	220	198	49	81	186	241
WASHINGTON	28	40	37	12	23	24	43
OREGON	2/	37	39	15	26	29	41
CALIFORNIA	60	112	109	44	57	93	126
PACIFIC	109	189	185	71	104	146	210
47 STATES	3,017	3,834	3,500	1,461	1,635	3,230	4,243

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE INGREDIENT.
2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 23.—FEEB INGREDIENTS USED IN PRIMARY MANUFACTURING: QUANTITIES OF SPECIFIED ANIMAL PROTEIN INGREDIENTS USED, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	MEAT MEAL TANKAGE	MEAT AND BONE MEAL	FISH MEAL	POULTRY BYPRODUCT MEAL	FEATHER MEAL	DRIED MILK PRODUCTS	TOTAL
TONS							
MAINE	1/	13,737	12,195	8,200	1/	1/	37,462
NEW HAMPSHIRE	1/	3,893	697	1/	1/	229	5,630
VERMONT	509	8,724	7,896	4,444	1/	448	22,021
MASSACHUSETTS	1,030	5,069	634	1/	1/	125	6,956
CONNECTICUT	1/	12,314	1,621	1/	1/	1/	14,165
NEW YORK	7,449	32,474	7,074	3,678	324	2,394	53,393
NEW JERSEY	1/	12,440	2,435	89	1/	226	15,231
PENNSYLVANIA	2,675	46,478	13,369	13,408	674	2,675	79,357
DELAWARE	1,082	19,127	12,732	11,808	1/	1/	45,657
MARYLAND	1,773	12,982	25,141	21,608	461	1,061	63,006
NORTHEAST	15,478	167,238	83,794	64,266	3,509	8,593	342,878
MICHIGAN	3,347	26,703	3,298	10	1,235	9,637	44,430
WISCONSIN	6,825	62,357	9,843	91	1,762	34,040	116,316
MINNESOTA	15,527	62,417	73,565	42	1,909	50,569	164,029
LAKE STATES	27,699	171,477	16,706	143	4,306	94,446	324,777
OHIO	4,085	51,144	6,353	531	2,262	5,902	70,277
INDIANA	10,341	71,568	6,756	59	2,110	6,681	94,515
ILLINOIS	19,781	145,893	23,966	192	2,549	30,689	223,070
IOWA	35,932	701,156	19,699	449	1,827	31,659	790,622
MISSOURI	20,858	46,361	9,714	128	1,876	11,252	84,209
CORN BELT	90,997	510,142	68,488	1,259	10,624	86,063	767,693
NORTH DAKOTA	1,612	6,401	375	19	271	326	9,004
SOUTH DAKOTA	2,065	24,523	666	20	1,316	1,611	30,401
NEBRASKA	10,754	51,997	3,398	135	1,510	4,472	72,266
KANSAS	5,147	44,393	2,773	59	547	4,245	57,264
NORTHERN PLAINS	19,578	127,314	7,412	233	3,644	10,754	168,935
VIRGINIA	1,283	21,125	14,602	15,839	1/	1,644	57,666
WEST VIRGINIA	40	152	73	40	1/	9	326
NORTH CAROLINA	4,219	62,153	66,366	32,931	7,958	2,901	176,120
KENTUCKY	3,082	16,776	4,251	1,736	1,524	497	21,876
TENNESSEE	14,575	48,073	23,936	11,677	7,518	3,051	109,632
APPALACHIAN	23,199	143,019	109,232	61,823	19,997	8,302	365,632
SOUTH CAROLINA	1,065	9,841	6,506	5,223	2,765	233	25,633
GEORGIA	5,431	49,915	53,593	35,079	21,433	5,501	190,946
FLORIDA	4,251	16,436	13,246	9,918	2,103	7,396	48,350
ALABAMA	4,078	52,806	46,532	31,318	7,855	4,659	147,248
SOUTHEAST	14,625	148,998	119,877	81,532	34,156	12,789	412,177
MISSISSIPPI	186	14,308	33,543	21,084	8,282	2,737	80,140
ARKANSAS	1,958	23,962	70,715	68,916	21,713	906	166,170
LOUISIANA	154	6,510	19,710	6,860	11,537	252	44,823
DELTA STATES	2,298	44,780	123,968	96,660	41,532	3,895	313,133
OKLAHOMA	1,655	10,009	3,307	1,645	309	595	17,516
TEXAS	16,765	80,739	36,321	23,989	2,181	2,774	162,769
SOUTHERN PLAINS	18,420	90,748	39,628	25,634	2,486	3,369	180,285
MONTANA	1,692	5,099	1,373	51	112	310	8,627
IDaho	2,429	7,830	5,526	91	157	596	16,429
WYOMING	1/	608	1/	1/	1/	1/	971
COLORADO	1,740	24,745	4,524	316	387	1,119	32,831
NEW MEXICO	1,488	11,587	845	62	88	359	14,429
ARIZONA	299	8,197	1,983	94	110	290	10,973
UTAH	308	10,824	5,300	1,022	1,525	740	19,719
NEVADA	1/	811	1/	1/	1/	1/	1,163
MOUNTAIN	8,326	69,701	19,780	1,662	2,415	3,468	105,352
WASHINGTON	6,841	13,589	9,304	196	864	338	31,132
OREGON	4,478	16,070	7,971	268	980	446	30,213
CALIFORNIA	19,350	148,208	43,336	4,863	2,036	7,394	245,187
PACIFIC	30,669	177,867	80,611	5,327	3,880	8,178	306,532
47 STATES	251,489	1,651,344	479,496	338,639	126,549	239,877	3,287,394

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 24.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: AVERAGE DISTANCE OF ESTABLISHMENTS FROM PRINCIPAL SUPPLIERS OF SPECIFIED ANIMAL PROTEIN INGREDIENTS, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	MEAT MEAL TANKAGE	MEAT AND BONE MEAL	FISH MEAL	POULTRY BYPRODUCT MEAL	FEATHER MEAL	DRIED MILK PRODUCTS	AVERAGE DISTANCE 1/
MILES							
MAINE-----	200	136	267	33	2	600	171
NEW HAMPSHIRE-----	79	67	310	97	76	147	104
VERMONT-----	78	136	553	447		199	347
MASSACHUSETTS-----	9	56	163	108	82	434	67
CONNECTICUT-----	80	53	467	111	75	481	102
NEW YORK-----	79	96	396	111	156	477	152
NEW JERSEY-----	77	92	125	108	82	433	102
PENNSYLVANIA-----	49	101	303	61	167	436	138
DELAWARE-----	36	119	699	115	30	363	276
MARYLAND-----	127	137	190	100	146	560	152
NORTHEAST-----	78	103	352	111	75	466	173
MICHIGAN-----	91	82	510	311	118	151	121
WISCONSIN-----	58	66	462	303	76	171	130
MINNESOTA-----	66	70	564	305	77	169	141
LAKE STATES-----	67	70	520	310	88	168	136
OHIO-----	53	64	640	34	72	216	128
INDIANA-----	78	79	654	271	209	216	143
ILLINOIS-----	74	93	862	285	301	240	197
IOWA-----	47	64	522	598	110	201	109
MISSOURI-----	50	112	567	59	132	441	196
CORN BELT-----	57	78	678	270	167	249	150
NORTH DAKOTA-----	253	73	382	339	105	328	129
SOUTH DAKOTA-----	136	108	670	337	130	268	136
NEBRASKA-----	115	82	927	345	223	245	140
KANSAS-----	106	78	667	289	178	265	124
NORTHERN PLAINS-----	126	85	772	334	174	259	133
VIRGINIA-----	49	143	183	63	183	766	151
WEST VIRGINIA-----	61	126	241	64	188	388	144
NORTH CAROLINA-----	51	201	234	62	186	576	189
KENTUCKY-----	49	77	353	65	113	335	134
TENNESSEE-----	25	99	335	84	202	504	157
APPALACHIAN-----	34	146	254	66	186	577	170
SOUTH CAROLINA-----	43	187	251	127	109	676	181
GEORGIA-----	47	116	328	44	81	854	178
FLORIDA-----	29	148	321	101	124	1,169	225
ALABAMA-----	63	167	315	122	86	831	218
SOUTHEAST-----	46	142	318	86	87	902	198
MISSISSIPPI-----	17	189	303	36	43	861	204
ARKANSAS-----	40	176	624	42	30	526	354
LOUISIANA-----	42	53	302	41	75	818	171
DELTA STATES-----	39	162	600	41	45	761	289
DALAMOMA-----	59	79	575	80	339	923	204
TEXAS-----	93	87	337	35	237	996	153
SOUTHERN PLAINS-----	90	86	357	38	250	986	158
MONTANA-----	15	86	964	3	170	768	232
IDAHO-----	23	62	949	30	147	836	373
WYOMING-----	34	76	926	3	118	739	243
COLORADO-----	49	58	1,071	3	36	947	227
NEW MEXICO-----	36	44	945	3	74	587	109
ARIZONA-----	27	41	796	3	23	703	194
UTAH-----	38	194	942	1	87	557	388
NEVADA-----	24	57	677	3	23	853	206
MOUNTAIN-----	30	77	957	3	83	770	260
WASHINGTON-----	19	56	524	45	94	209	190
OREGON-----	17	54	318	45	49	184	120
CALIFORNIA-----	51	85	179	52	106	249	111
PACIFIC-----	39	80	232	51	89	244	120
47 STATES-----	61	95	423	71	103	297	173

1/ WEIGHTED AVERAGE DISTANCE FOR SPECIFIED INGREDIENTS.

TABLE 25.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS THAT USED SPECIFIED INGREDIENTS BY STATES AND REGIONS, 1969--CONTINUED

ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEEDS

STATE AND REGION	VITAMINS	MINERALS	TRACE MINERALS	PREMIXES	ANIMAL DRUGS
MAINE-----	6	12	5	6	7
NEW HAMPSHIRE-----	4	6	6	3	4
VERMONT-----	4	11	7	7	8
MASSACHUSETTS-----	9	11	7	6	7
CONNECTICUT-----	5	4	3	4	5
NEW YORK-----	113	175	118	122	102
NEW JERSEY-----	12	19	15	15	17
PENNSYLVANIA-----	164	191	147	151	148
DELAWARE-----	10	15	10	11	12
MARYLAND-----	26	37	27	31	27
NORTHEAST-----	357	481	345	356	332
MICHIGAN-----	101	118	96	107	96
WISCONSIN-----	273	325	255	286	256
MINNESOTA-----	197	222	181	207	194
LAKE STATES-----	571	665	532	595	548
OHIO-----	155	175	152	161	160
INDIANA-----	210	240	201	217	225
ILLINOIS-----	157	181	154	161	168
IOWA-----	376	394	322	350	350
MISSOURI-----	129	152	113	131	129
CORN BELT-----	979	1,142	942	1,020	1,032
NORTH DAKOTA-----	32	25	34	33	34
SOUTH DAKOTA-----	74	78	69	79	76
NEBRASKA-----	140	157	137	140	150
KANSAS-----	177	210	165	191	175
NORTHERN PLAINS:	423	480	405	443	435
VIRGINIA-----	52	61	52	58	54
WEST VIRGINIA-----	5	6	5	6	5
NORTH CAROLINA-----	97	126	85	109	95
KENTUCKY-----	49	54	43	46	47
TENNESSEE-----	52	64	49	54	51
APPALACHIAN-----	255	311	234	264	257
SOUTH CAROLINA-----	22	30	24	28	26
GEORGIA-----	97	128	99	108	108
FLORIDA-----	48	58	42	49	48
ALABAMA-----	56	68	53	65	60
SOUTHEAST-----	223	284	218	250	247
MISSISSIPPI-----	35	59	41	45	42
ARKANSAS-----	47	63	38	53	51
LOUISIANA-----	21	25	18	25	21
DELTA STATES-----	103	147	97	123	114
OKLAHOMA-----	66	81	59	67	67
TEXAS-----	219	257	183	210	208
SOUTHERN PLAINS:	285	336	242	277	275
MONTANA-----	38	46	38	42	40
IDAHO-----	54	60	53	61	57
WYOMING-----	27	10	27	10	10
COLORADO-----	44	53	41	43	46
NEW MEXICO-----	32	40	28	36	32
ARIZONA-----	13	16	14	17	15
UTAH-----	24	31	24	27	26
NEVADA-----	27	3	27	6	3
MOUNTAIN-----	217	259	209	242	224
WASHINGTON-----	36	44	27	36	34
OREGON-----	31	41	31	41	38
CALIFORNIA-----	96	136	90	119	109
PACIFIC-----	163	221	148	196	181
47 STATES-----	3,576	4,328	3,372	3,766	3,633

FOOTNOTES AT END OF TABLE.

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TABLE 25.—FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS THAT USED SPECIFIED INGREDIENTS, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	FATS	MELASSES	SUGAR	ALFALFA	
				DEHYDRATED	SUN-CURED
NUMBER					
MAINE-----	5	2/		8	2/
NEW HAMPSHIRE-----	3	6		5	2/
VERMONT-----	7	12	2/	9	3
MASSACHUSETTS-----	9	8	2/	9	2/
CONNECTICUT-----	4	2/	2/	5	2/
NEW YORK-----	106	184	89	134	65
NEW JERSEY-----	12	18	6	17	5
PENNSYLVANIA-----	155	195	117	179	92
DELAWARE-----	14	9	5	12	5
MARYLAND-----	30	33	20	34	20
NORTHEAST-----	345	471	247	412	196
MICHIGAN-----	97	121	95	115	90
WISCONSIN-----	244	327	224	304	232
MINNESOTA-----	162	214	161	228	148
LAKE STATES-----	503	662	490	647	470
OHIO-----	146	176	141	180	132
INDIANA-----	201	234	191	240	182
ILLINOIS-----	151	175	154	174	120
IOWA-----	267	373	318	416	236
MISSOURI-----	110	151	109	147	96
CORN BELT-----	895	1,109	913	1,157	766
NORTH DAKOTA-----	28	33	29	35	32
SOUTH DAKOTA-----	68	77	67	76	65
NEBRASKA-----	126	158	121	152	119
KANSAS-----	153	214	148	205	164
NORTHERN PLAINS-----	375	482	365	468	380
VIRGINIA-----	53	61	44	59	42
WEST VIRGINIA-----	7	6	4	6	4
NORTH CAROLINA-----	100	107	71	116	52
KENTUCKY-----	43	57	41	50	30
TENNESSEE-----	52	60	45	62	30
APPALACHIAN-----	259	291	205	295	158
SOUTH CAROLINA-----	23	26	16	26	17
GEORGIA-----	106	99	62	113	69
FLORIDA-----	36	61	23	49	35
ALABAMA-----	54	55	36	64	36
SOUTHEAST-----	221	241	137	252	157
MISSISSIPPI-----	41	53	8	51	27
ARKANSAS-----	50	40	11	63	23
LOUISIANA-----	19	32	6	28	18
DELTA STATES-----	110	125	25	142	68
OKLAHOMA-----	64	84	28	75	61
TEXAS-----	196	265	79	260	164
SOUTHERN PLAINS-----	260	349	107	335	225
MONTANA-----	38	45	19	42	43
IDaho-----	49	59	23	54	56
WYOMING-----	7	11	2/	2/	10
COLORADO-----	42	51	21	55	41
NEW MEXICO-----	32	42	11	32	38
ARIZONA-----	19	23	5	15	23
UTAH-----	24	23	10	22	23
NEVADA-----	4	5	2/	2/	6
MOUNTAIN-----	215	259	92	232	242
WASHINGTON-----	27	45	22	37	35
OREGON-----	26	42	23	41	38
CALIFORNIA-----	125	150	59	122	111
PACIFIC-----	178	237	104	200	184
47 STATES-----	3,361	4,226	2,685	4,140	2,946

FOOTNOTES AT END OF TABLE.

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TABLE 25.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS THAT USED SPECIFIED INGREDIENTS, BY STATES AND REGIONS, 1969--CONTINUED

ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED^{1/}

STATE AND REGION	UREA	BEET PULP	CITRUS PULP	ALL OTHER INGREDIENTS	TOTAL 1/
NUMBER					
MAINE-----	2/	2/	2/	2/	12
NEW HAMPSHIRE-----	5	4	3	4	6
VERMONT-----	0	8	7	9	12
MASSACHUSETTS-----	6	7	5	6	12
CONNECTICUT-----	2/	2/	2/	2/	5
NEW YORK-----	147	149	110	112	196
NEW JERSEY-----	14	15	0	11	19
PENNSYLVANIA-----	161	157	126	138	202
DELAWARE-----	0	0	5	10	15
MARYLAND-----	26	30	22	27	42
NORTHEAST-----	380	379	269	322	521
MICHIGAN-----	106	96	48	103	128
WISCONSIN-----	294	296	129	263	350
MINNESOTA-----	195	169	72	174	245
LAKE STATES-----	595	561	249	540	723
OHIO-----	152	147	102	148	190
INDIANA-----	207	187	129	203	255
ILLINOIS-----	155	132	90	147	193
IOWA-----	244	251	147	295	427
MISSOURI-----	124	86	66	111	185
CORN BELT-----	982	803	554	904	1,230
NORTH DAKOTA-----	34	31		30	37
SOUTH DAKOTA-----	74	66		64	82
NEBRASKA-----	150	110		123	170
KANSAS-----	180	130		156	235
NORTHERN PLAINS-----	438	337		375	524
VIRGINIA-----	56	45	41	54	67
WEST VIRGINIA-----	5	6	4	6	7
NORTH CAROLINA-----	97	65	81	84	138
KENTUCKY-----	50	40	38	47	58
TENNESSEE-----	53	36	25	43	69
APPALACHIAN-----	261	192	199	234	339
SOUTH CAROLINA-----	21	18	23	21	34
GEORGIA-----	83	65	88	92	138
FLORIDA-----	48	35	57	46	72
ALABAMA-----	49	35	42	52	77
SOUTHEAST-----	201	193	210	211	321
MISSISSIPPI-----	38	27	23	47	66
ARKANSAS-----	32	19	17	42	72
LOUISIANA-----	23	17	13	22	37
DELTA STATES-----	93	63	53	111	175
OKLAHOMA-----	73	32	52	63	88
TEXAS-----	230	105	131	203	308
SOUTHERN PLAINS-----	303	137	183	266	388
MONTANA-----	42	40		34	49
IDaho-----	53	61		53	76
WYOMING-----	10	10		2/	12
COLORADO-----	46	41		38	57
NEW MEXICO-----	33	26		30	44
ARIZONA-----	17	10		13	26
UTAH-----	22	24		21	33
NEVADA-----	3	5		2/	6
MOUNTAIN-----	226	217		200	297
WASHINGTON-----	29	45	15	34	49
OREGON-----	30	38	12	34	45
CALIFORNIA-----	99	116	59	103	163
PACIFIC-----	158	199	86	171	257
47 STATES-----	3,637	3,041	1,823	3,334	4,775

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE INGREDIENT.
2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 26.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: QUANTITIES OF SPECIFIED INGREDIENTS USED, BY STATES AND REGIONS, 1969--CONTINUED

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	VITAMINS	MINERALS	TRACE MINERALS	PREMIXES	ANIMAL DRUGS 2/
TONS					
MAINE-----	151	19,052	595	633	141
NEW HAMPSHIRE-----	66	5,564	106	198	96
VERMONT-----	313	22,031	856	412	44
MASSACHUSETTS-----	26	7,491	69	248	29
CONNECTICUT-----	78	14,893	64	208	73
NEW YORK-----	528	99,062	1,217	7,525	463
NEW JERSEY-----	75	17,156	446	543	194
PENNSYLVANIA-----	1,203	70,749	1,958	7,560	1,201
DELAWARE-----	144	11,193	265	3,037	194
MARYLAND-----	3,034	18,172	440	10,315	1,907
NORTHEAST-----	5,618	285,383	6,016	30,679	4,542
MICHIGAN-----	932	38,401	832	4,602	1,023
WISCONSIN-----	4,557	99,295	2,743	11,368	3,225
MINNESOTA-----	2,571	109,549	3,592	11,391	3,125
LAKE STATES-----	8,060	247,345	7,167	27,361	7,373
OHIO-----	1,292	68,948	2,013	14,267	2,516
INDIANA-----	2,325	86,319	2,592	19,822	11,785
ILLINOIS-----	3,400	287,422	11,264	21,538	6,816
IOWA-----	8,190	286,381	13,565	42,748	13,501
MISSOURI-----	7,624	90,764	4,239	18,799	2,906
CORN BELT-----	27,832	821,834	33,673	117,174	37,526
NORTH DAKOTA-----	171	10,158	473	1,625	378
SOUTH DAKOTA-----	595	36,268	1,519	6,772	1,285
NEBRASKA-----	2,824	113,614	4,589	14,377	4,631
KANSAS-----	1,277	99,724	11,371	25,092	3,284
NORTHERN PLAINS	4,867	259,764	17,952	47,866	9,778
VIRGINIA-----	540	24,292	793	5,249	506
WEST VIRGINIA-----	3	203	5	83	3
NORTH CAROLINA-----	2,581	64,349	2,119	8,902	2,417
KENTUCKY-----	251	21,673	210	3,336	380
TENNESSEE-----	1,191	93,703	1,579	17,617	1,023
APPALACHIAN-----	4,566	724,220	4,706	35,167	4,329
SOUTH CAROLINA-----	184	14,883	467	2,608	339
GEORGIA-----	1,615	135,293	3,775	23,795	4,271
FLORIDA-----	427	48,856	564	11,021	1,097
ALABAMA-----	1,700	54,976	1,841	10,560	2,565
SOUTHEAST-----	3,926	254,008	6,647	47,984	8,272
MISSISSIPPI-----	953	64,146	549	10,876	829
ARKANSAS-----	2,280	78,615	810	32,141	2,906
LOUISIANA-----	161	18,016	219	35,476	501
DELTA STATES-----	3,414	160,777	1,578	78,495	4,236
OKLAHOMA-----	520	52,699	555	43,306	502
TEXAS-----	4,376	226,304	5,220	73,421	4,100
SOUTHERN PLAINS	4,896	279,003	5,775	116,727	4,602
MONTANA-----	411	15,119	347	4,965	576
IDAHO-----	398	18,085	366	10,791	436
WYOMING-----	2/	1,069	2/	656	59
COLORADO-----	769	42,220	794	11,740	1,785
NEW MEXICO-----	199	11,951	265	3,967	420
ARIZONA-----	139	26,909	983	11,779	271
UTAH-----	178	11,030	270	1,629	781
NEVADA-----	2/	1,163	2/	1,048	93
MOUNTAIN-----	2,227	127,546	3,187	46,775	3,425
WASHINGTON-----	1,634	20,033	375	2,890	2,221
OREGON-----	529	12,652	456	3,616	1,150
CALIFORNIA-----	8,405	141,095	6,872	29,739	4,155
PACIFIC-----	10,568	173,780	7,705	36,247	7,526
47 STATES-----	70,974	2,833,660	94,406	584,495	91,708

FOOTNOTES AT END OF TABLE.

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TABLE 26.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: QUANTITIES OF SPECIFIED INGREDIENTS USED, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	FATS	MOLASSES	SUGAR	ALFALFA	
				DEHYDRATED	SUN-DRIED
TONS					
MAINE-----	15,780	2/		5,636	2/
NEW HAMPSHIRE-----	947	6,457	2/	1,708	2/
VERMONT-----	7,127	47,226	2/	4,621	2,800
MASSACHUSETTS-----	1,176	4,015	2/	1,556	2/
CONNECTICUT-----	1,487	2/	2/	4,700	2/
NEW YORK-----	12,429	131,414	2/	16,476	2,880
NEW JERSEY-----	2,215	17,897	150	18	2,074
PENNSYLVANIA-----	20,610	86,176	180	24,777	1,074
DELAWARE-----	26,436	4,417	26	5,655	1,057
MARYLAND-----	45,257	17,498	14	10,508	734
NORTHEAST-----	133,564	314,023	391	85,208	12,764
MICHIGAN-----	3,814	15,234	1,259	14,471	4,114
WISCONSIN-----	11,165	46,366	5,826	27,761	9,016
MINNESOTA-----	8,027	43,666	6,965	36,741	20,176
LAKE STATES-----	23,006	107,266	17,143	85,993	34,144
OHIO-----	8,259	37,082	1,725	37,675	2,401
INDIANA-----	4,860	36,533	7,015	49,664	4,715
ILLINOIS-----	14,176	60,716	13,000	95,986	4,441
IOWA-----	29,015	83,707	17,140	129,117	11,496
MISSOURI-----	13,140	117,087	7,401	56,131	15,414
CORN BELT-----	73,552	255,121	37,331	410,793	36,744
NORTH DAKOTA-----	535	7,977	347	7,895	6,757
SOUTH DAKOTA-----	2,437	26,468	1,115	34,624	20,048
NEBRASKA-----	7,474	121,251	3,107	118,774	25,040
KANSAS-----	12,974	89,167	1,272	104,772	67,434
NORTHERN PLAINS-----	23,423	255,158	4,841	269,877	140,437
VIRGINIA-----	22,529	13,297	193	9,364	1,044
WEST VIRGINIA-----	905	534	1	91	7
NORTH CAROLINA-----	56,833	24,236	706	31,757	2,440
KENTUCKY-----	6,974	13,704	271	8,168	1,568
TENNESSEE-----	37,600	49,167	1,536	29,198	3,420
APPALACHIAN-----	119,841	101,233	2,710	68,574	6,747
SOUTH CAROLINA-----	6,634	6,227	176	5,314	124
GEORGIA-----	97,703	32,364	347	46,430	4,137
FLORIDA-----	17,065	27,114	73	15,109	4,040
ALABAMA-----	66,717	19,196	224	27,567	2,111
SOUTHEAST-----	186,114	64,914	860	89,442	10,014
MISSISSIPPI-----	34,706	28,489	203	24,493	1,979
ARKANSAS-----	90,595	26,775	20	61,794	2,714
LOUISIANA-----	17,867	38,692	36	18,445	2,827
DELTA STATES-----	143,168	73,916	259	109,732	7,524
OKLAHOMA-----	7,640	47,137	232	51,257	14,462
TEXAS-----	66,213	192,392	575	244,613	87,113
SOUTHERN PLAINS-----	73,853	239,524	807	295,870	101,575
MONTANA-----	2,846	17,251	49	6,746	27,113
IDAHOO-----	3,077	22,004	24	20,705	104,167
WYOMING-----	300	2,286	2/	2/	4,367
COLORADO-----	10,713	43,747	225	50,402	85,174
NEW MEXICO-----	8,252	43,999	13	35,215	73,067
ARIZONA-----	13,807	51,334	22	10,614	106,061
UTAH-----	3,296	8,312	8	6,470	13,061
NEVADA-----	1,461	5,027	2/	2/	23,595
MOUNTAIN-----	43,754	194,000	346	140,766	436,482
WASHINGTON-----	10,688	25,110	118	12,130	25,843
OREGON-----	7,955	21,047	156	8,573	28,947
CALIFORNIA-----	79,113	196,515	3,463	106,765	194,704
PACIFIC-----	97,756	242,672	3,737	127,468	249,496
47 STATES-----	920,031	1,947,861	64,435	1,703,723	1,056,382

FOOTNOTES AT END OF TABLE.

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TABLE 26.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: QUANTITIES OF SPECIFIED INGREDIENTS USED, BY STATES AND REGIONS, 1969--CONTINUED

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	UREA	BET PULP	CITRUS PULP	ALL OTHER INGREDIENTS	TOTAL
TONS					
MAINE-----	2/	2/	2/	2/	46,832
NEW HAMPSHIRE-----	588	397	492	3,215	19,929
VERMONT-----	2,261	1,451	2,474	8,979	100,896
MASSACHUSETTS-----	264	2/	466	4,257	20,493
CONNECTICUT-----	2/	46	2/	2/	28,475
NEW YORK-----	11,427	10,845	4,912	30,846	532,143
NEW JERSEY-----	1,267	1,444	815	5,985	47,550
PENNSYLVANIA-----	10,863	6,813	2,510	30,649	267,724
DELAWARE-----	696	208	85	6,946	61,124
MARYLAND-----	3,200	1,429	479	9,040	122,302
NORTHEAST-----	31,127	23,502	12,378	102,465	1,047,169
MICHIGAN-----	5,835	3,183	5	26,985	120,744
WISCONSIN-----	14,762	14,100	39	80,845	237,111
MINNESOTA-----	17,912	11,541	8	65,419	342,677
LAKE STATES-----	38,509	26,824	52	173,249	800,532
OHIO-----	9,532	1,701	373	51,604	239,962
INDIANA-----	10,529	1,560	658	29,993	279,744
ILLINOIS-----	21,314	2,245	561	120,941	674,364
IDAHO-----	43,660	4,893	1,152	115,110	829,821
MISSOURI-----	11,212	371	11,354	79,039	432,462
CORN BELT-----	106,747	10,770	14,098	406,687	2,466,392
NORTH DAKOTA-----	2,793	1,143		5,889	45,722
SOUTH DAKOTA-----	10,086	1,039		23,190	165,449
NEBRASKA-----	53,118	6,246		52,656	576,216
KANSAS-----	21,638	1,565		60,553	529,275
NORTHERN PLAINS-----	97,625	9,993		162,070	1,318,661
VIRGINIA-----	1,565	193	342	32,038	111,980
WEST VIRGINIA-----	29	11	19	1,625	3,521
NORTH CAROLINA-----	2,820	306	2,163	45,409	267,455
KENTUCKY-----	3,372	57	318	9,985	70,207
TENNESSEE-----	6,189	316	673	29,848	278,270
APPALACHIAN-----	13,995	865	3,515	118,905	731,433
SOUTH CAROLINA-----	838	92	6,389	10,723	54,991
GEORGIA-----	4,828	426	30,957	62,781	448,878
FLORIDA-----	3,237	2,054	65,160	32,441	226,272
ALABAMA-----	1,701	190	10,311	75,478	270,642
SOUTHEAST-----	10,604	2,762	112,811	181,423	1,002,789
MISSISSIPPI-----	2,408	1,562	194	27,153	203,567
ARKANSAS-----	4,187	124	22	35,776	338,769
LOUISIANA-----	2,376	395	119	23,621	136,941
DELTA STATES-----	8,971	2,101	335	86,750	681,266
OKLAHOMA-----	8,945	1,689	2,833	56,448	288,240
TEXAS-----	51,339	31,773	2,598	369,967	1,360,004
SOUTHERN PLAINS-----	60,284	33,462	5,431	426,435	1,648,244
MONTANA-----	3,948	12,405		24,324	119,102
IDaho-----	3,971	27,494		67,691	275,209
WYOMING-----	308	6,538		2/	21,554
COLORADO-----	15,083	35,886		52,619	350,497
NEW MEXICO-----	4,219	15,777		14,974	276,337
ARIZONA-----	7,235	15,383		21,744	268,221
UTAH-----	1,752	7,755		10,072	64,316
NEVADA-----	684	4,289		2/	42,147
MOUNTAIN-----	37,200	125,327		198,348	1,361,383
WASHINGTON-----	1,897	28,779	1,356	15,701	148,775
OREGON-----	1,357	21,561	1,850	16,408	126,259
CALIFORNIA-----	21,952	260,475	45,062	184,450	1,282,787
PACIFIC-----	25,206	310,815	48,268	216,557	1,557,801
47 STATES-----	429,778	548,441	196,888	2,072,889	12,615,671

1/ ACTIVE MICROINGREDIENTS WITH SUITABLE CARRIERS.

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 27.—FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: AVERAGE DISTANCE OF ESTABLISHMENTS FROM PRINCIPAL SUPPLIERS OF SPECIFIED INGREDIENTS, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	FATS	MOLASSES	SUGAR	ALFALFA	
				DEHYDRATED	SUN-CURED
MILES					
MAINE-----	102	191		1,133	22
NEW HAMPSHIRE-----	115	71	56	522	678
VERMONT-----	308	192	707	791	765
MASSACHUSETTS-----	49	61	1,001	651	640
CONNECTICUT-----	83	95	74	773	684
NEW YORK-----	124	124	1,097	778	545
NEW JERSEY-----	86	91	246	198	675
PENNSYLVANIA-----	89	105	272	386	526
DELAWARE-----	150	80	161	580	905
MARYLAND-----	97	72	122	871	632
NORTHEAST-----	120	121	561	664	667
MICHIGAN-----	134	160	877	142	160
WISCONSIN-----	135	231	885	239	128
MINNESOTA-----	116	95	939	141	198
LAKE STATES-----	128	168	915	179	173
OHIO-----	58	550	775	177	170
INDIANA-----	109	445	613	258	199
ILLINOIS-----	76	375	700	462	342
IOWA-----	68	346	826	196	309
MISSOURI-----	94	657	551	180	228
CORN BELT-----	78	493	745	262	260
NORTH DAKOTA-----	103	255	630	113	58
SOUTH DAKOTA-----	116	392	630	103	73
NEBRASKA-----	82	287	906	75	55
KANSAS-----	117	428	705	106	60
NORTHERN PLAINS-----	106	346	793	92	59
VIRGINIA-----	95	229	586	565	687
WEST VIRGINIA-----	193	357	935	375	416
NORTH CAROLINA-----	108	301	671	621	774
KENTUCKY-----	96	517	537	580	317
TENNESSEE-----	130	546	483	478	313
APPALACHIAN-----	111	440	545	548	494
SOUTH CAROLINA-----	210	246	219	686	710
GEORGIA-----	193	309	353	723	639
FLORIDA-----	350	177	210	798	879
ALABAMA-----	269	376	305	577	216
SOUTHEAST-----	242	277	301	696	629
MISSISSIPPI-----	230	218	266	447	773
ARKANSAS-----	189	371	257	445	484
LOUISIANA-----	450	249	317	657	959
DELTA STATES-----	231	281	283	481	739
OKLAHOMA-----	130	339	390	482	197
TEXAS-----	155	273	438	401	197
SOUTHERN PLAINS-----	153	286	428	415	197
MONTANA-----	134	427	969	257	98
IDAHO-----	191	304	1,031	74	38
WYOMING-----	185	412	1,313	235	84
COLORADO-----	142	446	1,272	177	51
NEW MEXICO-----	227	317	1,182	50	38
ARIZONA-----	185	372	1,042	142	43
UTAH-----	224	615	702	145	63
NEVADA-----	250	258	1,357	138	36
MOUNTAIN-----	185	381	1,203	128	46
WASHINGTON-----	81	113	223	141	81
OREGON-----	100	75	231	249	69
CALIFORNIA-----	109	80	251	99	83
PACIFIC-----	105	83	250	113	81
47 STATES-----	162	288	734	307	105

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TABLE 27.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: AVERAGE DISTANCE OF ESTABLISHMENTS FROM PRINCIPAL SUPPLIERS OF SPECIFIED INGREDIENTS, BY STATES AND REGIONS, 1969--CONTINUED

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	VITAMINS	MINERALS	TRACE MINERALS	PREMIXES	ANIMAL DRUGS
MILES					
MAINE-----	508	588	350	567	655
NEW HAMPSHIRE-----	130	206	373	307	395
VERMONT-----	403	966	893	727	503
MASSACHUSETTS-----	648	215	360	470	500
CONNECTICUT-----	380	237	273	163	643
NEW YORK-----	237	192	297	194	682
NEW JERSEY-----	173	216	191	125	214
PENNSYLVANIA-----	301	228	141	100	550
DELAWARE-----	142	269	134	36	327
MARYLAND-----	63	226	239	154	1,038
NORTHEAST-----	173	299	319	157	742
MICHIGAN-----	146	500	337	146	315
WISCONSIN-----	111	507	277	154	300
MINNESOTA-----	225	637	340	131	350
LAKE STATES-----	151	564	316	143	324
OHIO-----	246	517	364	107	279
INDIANA-----	262	363	343	122	406
ILLINOIS-----	313	572	651	130	456
IOWA-----	183	357	367	122	303
MISSOURI-----	178	534	702	129	187
CORN BELT-----	212	468	439	123	353
NORTH DAKOTA-----	529	671	310	216	527
SOUTH DAKOTA-----	501	431	141	228	500
NEBRASKA-----	600	407	147	201	629
KANSAS-----	553	468	113	150	553
NORTHERN PLAINS-----	574	444	129	179	583
VIRGINIA-----	362	419	310	419	397
WEST VIRGINIA-----	476	406	378	184	478
NORTH CAROLINA-----	455	579	405	258	591
KENTUCKY-----	359	492	392	168	367
TENNESSEE-----	382	505	376	164	427
APPALACHIAN-----	420	522	379	226	511
SOUTH CAROLINA-----	527	377	340	179	436
GEORGIA-----	453	410	217	145	506
FLORIDA-----	442	197	211	190	508
ALABAMA-----	596	415	295	191	480
SOUTHEAST-----	518	368	247	168	496
MISSISSIPPI-----	205	414	252	481	277
ARKANSAS-----	215	418	182	235	478
LOUISIANA-----	345	556	182	513	679
DELTA STATES-----	219	432	208	395	463
OKLAHOMA-----	273	299	441	95	335
TEXAS-----	278	265	647	157	350
SOUTHERN PLAINS-----	277	272	627	119	348
MONTANA-----	788	405	890	324	939
IDAHO-----	558	306	689	248	520
WYOMING-----	547	468	226	227	523
COLORADO-----	594	520	508	243	686
NEW MEXICO-----	607	466	662	251	699
ARIZONA-----	489	600	145	148	943
UTAH-----	423	527	169	462	483
NEVADA-----	293	552	305	241	440
MOUNTAIN-----	595	488	433	238	704
WASHINGTON-----	69	369	275	280	309
OREGON-----	66	208	215	204	208
CALIFORNIA-----	55	152	132	223	124
PACIFIC-----	58	181	144	226	191
47 STATES-----	251	414	330	191	419

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TABLE 27.--FEED INGREDIENTS USED IN PRIMARY MANUFACTURING: AVERAGE DISTANCE OF ESTABLISHMENTS FROM PRINCIPAL SUPPLIERS OF SPECIFIED INGREDIENTS, BY STATES AND REGIONS, 1969--CONTINUED
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	UREA	BEEF PULP	CITRUS PULP	ALL OTHER INGREDIENTS
MILES				
MAINE-----	300	1,200	1,200	495
NEW HAMPSHIRE-----	470	722	1,280	461
VERMONT-----	404	669	1,273	473
MASSACHUSETTS-----	461	602	1,014	334
CONNECTICUT-----	530	901	1,450	265
NEW YORK-----	183	757	1,334	269
NEW JERSEY-----	240	778	1,180	276
PENNSYLVANIA-----	244	648	1,146	236
DELAWARE-----	526	623	1,242	339
MARYLAND-----	203	729	1,039	444
NORTHEAST-----	246	722	1,246	310
MICHIGAN-----	356	290	174	172
WISCONSIN-----	412	363	152	173
MINNESOTA-----	282	246	157	167
LAKE STATES-----	343	308	161	170
OHIO-----	217	168	300	328
INDIANA-----	327	355	300	255
ILLINOIS-----	569	482	200	276
IOWA-----	306	254	300	361
MISSOURI-----	221	356	300	295
CORN BELT-----	368	306	300	308
NORTH DAKOTA-----	449	38		157
SOUTH DAKOTA-----	353	34		158
NEBRASKA-----	250	30		138
KANSAS-----	358	33		106
NORTHERN PLAINS-----	306	32		126
VIRGINIA-----	336	954	521	328
WEST VIRGINIA-----	359	423	525	112
NORTH CAROLINA-----	346	876	543	375
KENTUCKY-----	189	812	499	316
TENNESSEE-----	253	844	521	284
APPALACHIAN-----	266	877	533	331
SOUTH CAROLINA-----	415	766	192	294
GEORGIA-----	383	840	273	290
FLORIDA-----	537	668	87	527
ALABAMA-----	268	780	199	340
SOUTHEAST-----	414	706	154	354
MISSISSIPPI-----	136	401	798	286
ARKANSAS-----	241	535	776	272
LOUISIANA-----	299	600	739	393
DELTA STATES-----	228	484	788	310
OKLAHOMA-----	294	199	570	212
TEXAS-----	464	199	357	172
SOUTHERN PLAINS-----	439	199	468	177
MONTANA-----	626	91		115
IDAHO-----	606	74		69
WYOMING-----	621	40		66
COLORADO-----	638	76		91
NEW MEXICO-----	589	154		88
ARIZONA-----	649	86		91
UTAH-----	662	100		175
NEVADA-----	661	374		144
MOUNTAIN-----	631	98		91
WASHINGTON-----	205	193	70	182
OREGON-----	150	202	70	134
CALIFORNIA-----	126	201	70	141
PACIFIC-----	134	200	70	144
47 STATES-----	357	209	229	223

TABLE 28.--EMPLOYMENT IN FEED MANUFACTURING: NUMBER OF ESTABLISHMENTS THAT EMPLOYED WORKERS ON SPECIFIED DATES,
BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	TOTAL ESTABLISHMENTS	ESTABLISHMENTS WITH PRODUCTION EMPLOYEES			
		MARCH 15	JUNE 15	SEPT. 15	DEC. 15
		NUMBER			
MAINE-----	13	13	13	13	13
NEW HAMPSHIRE-----	6	6	6	6	6
VERMONT-----	12	12	12	12	12
MASSACHUSETTS-----	14	14	14	14	14
CONNECTICUT-----	5	5	5	5	5
NEW YORK-----	259	255	255	254	257
NEW JERSEY-----	25	25	25	25	25
PENNSYLVANIA-----	288	287	284	285	287
DELAWARE-----	20	19	20	20	20
MARYLAND-----	65	64	65	64	64
NORTHEAST-----	707	700	699	698	703
MICHIGAN-----	237	234	236	234	225
WISCONSIN-----	510	503	503	499	509
MINNESOTA-----	402	396	396	396	397
LAKE STATES-----	1,149	1,135	1,137	1,129	1,135
OHIO-----	459	455	446	454	455
INDIANA-----	453	488	488	467	490
ILLINOIS-----	475	459	446	462	467
IOWA-----	730	723	722	721	723
MISSOURI-----	302	297	296	296	301
CORN BELT-----	2,459	2,422	2,420	2,422	2,436
NORTH DAKOTA-----	80	79	79	78	78
SOUTH DAKOTA-----	159	154	154	154	154
NEBRASKA-----	343	336	340	341	341
KANSAS-----	396	391	393	392	394
NORTHERN PLAINS-----	978	960	966	966	969
VIRGINIA-----	115	114	115	114	114
WEST VIRGINIA-----	19	18	19	19	19
NORTH CAROLINA-----	233	232	232	232	232
KENTUCKY-----	128	128	126	127	128
TENNESSEE-----	113	112	112	112	111
APPALACHIAN-----	608	605	606	605	604
SOUTH CAROLINA-----	61	60	61	60	60
GEORGIA-----	197	194	196	195	196
FLORIDA-----	97	95	95	96	97
ALABAMA-----	114	113	113	112	114
SOUTHEAST-----	469	463	465	463	467
MISSISSIPPI-----	96	97	97	97	98
ARKANSAS-----	93	92	91	91	91
LOUISIANA-----	46	45	46	46	44
DELTA STATES-----	239	237	236	236	237
OKLAHOMA-----	145	144	144	144	144
TEXAS-----	438	431	431	425	436
SOUTHERN PLAINS-----	583	575	575	579	580
MONTANA-----	73	72	69	72	72
IDAHO-----	96	96	97	97	97
WYOMING-----	15	15	15	15	15
COLORADO-----	96	95	97	96	96
NEW MEXICO-----	51	51	41	51	51
ARIZONA-----	32	32	32	32	32
UTAH-----	44	43	43	44	43
NEVADA-----	6	8	7	8	6
MOUNTAIN-----	423	415	414	419	418
WASHINGTON-----	56	56	56	56	56
OREGON-----	55	54	55	55	55
CALIFORNIA-----	191	190	190	190	190
PACIFIC-----	302	300	301	301	301
47 STATES-----	7,917	7,812	7,829	7,826	7,850

TABLE 29.--EMPLOYMENT IN FEED MANUFACTURING: TOTAL EMPLOYEES AND PRODUCTION EMPLOYEES ON SPECIFIED DATES,
BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGIONS	TOTAL EMPLOYEES MARCH 15	PRODUCTION EMPLOYEES					AVERAGE
		MARCH 15	JUNE 15	SEPT. 15	DEC. 15		
NUMBER							
MAINE-----	157	98	97	98	98	97	
NEW HAMPSHIRE-----	115	71	69	70	65	69	
VERMONT-----	409	305	297	295	296	298	
MASSACHUSETTS-----	167	106	107	106	108	106	
CONNECTICUT-----	96	38	39	39	39	38	
NEW YORK-----	2,519	1,655	1,681	1,666	1,985	1,646	
NEW JERSEY-----	304	207	214	211	206	209	
PENNSYLVANIA-----	2,141	1,592	1,608	1,605	1,617	1,605	
DELAWARE-----	301	199	210	213	210	208	
MARYLAND-----	892	687	698	694	686	691	
NORTHEAST-----	7,103	4,957	5,020	4,997	4,916	4,972	
MICHIGAN-----	1,164	866	887	872	865	872	
WISCONSIN-----	2,946	2,355	2,390	2,316	2,375	2,359	
MINNESOTA-----	2,365	1,822	1,867	1,843	1,836	1,842	
LAKE STATES-----	6,475	5,043	5,144	5,031	5,076	5,073	
OHIO-----	2,771	1,943	1,973	1,956	1,971	1,960	
INDIANA-----	3,125	2,255	2,277	2,286	2,323	2,285	
ILLINOIS-----	4,312	2,781	2,892	2,865	2,966	2,876	
IOWA-----	5,145	3,852	3,895	3,866	3,955	3,890	
MISSOURI-----	2,569	1,946	1,994	1,958	2,012	1,927	
CORN BELT-----	17,922	12,777	12,931	12,825	13,227	12,940	
NORTH DAKOTA-----	300	250	237	229	249	241	
SOUTH DAKOTA-----	902	649	623	651	685	654	
NEBRASKA-----	2,023	1,569	1,607	1,622	1,654	1,613	
KANSAS-----	2,394	1,890	1,863	1,850	1,973	1,896	
NORTHERN PLAINS-----	5,629	4,256	4,340	4,362	4,561	4,405	
VIRGINIA-----	698	509	508	510	519	511	
WEST VIRGINIA-----	73	64	64	65	66	64	
NORTH CAROLINA-----	1,710	1,269	1,261	1,277	1,292	1,274	
KENTUCKY-----	771	634	630	631	648	635	
TENNESSEE-----	1,384	956	930	962	987	959	
APPALACHIAN-----	4,636	3,434	3,393	3,445	3,512	3,446	
SOUTH CAROLINA-----	418	279	274	275	278	276	
GEORGIA-----	1,615	1,295	1,399	1,397	1,461	1,413	
FLORIDA-----	1,064	762	735	698	800	748	
ALABAMA-----	1,383	1,085	1,056	1,077	1,131	1,087	
SOUTHEAST-----	4,660	3,521	3,464	3,447	3,670	3,525	
MISSISSIPPI-----	1,042	619	590	599	641	612	
ARKANSAS-----	1,272	839	800	815	848	825	
LOUISIANA-----	434	380	365	369	393	376	
DELTA STATES-----	2,748	1,838	1,755	1,783	1,882	1,814	
OKLAHOMA-----	1,368	1,006	856	882	1,068	953	
TEXAS-----	5,710	4,133	3,694	3,927	4,485	4,049	
SOUTHERN PLAINS-----	7,078	5,139	4,550	4,809	5,553	5,012	
MONTANA-----	448	367	328	367	420	370	
IDaho-----	662	529	517	519	546	527	
WYOMING-----	92	78	64	74	83	74	
COLORADO-----	1,301	953	893	932	981	939	
NEW MEXICO-----	612	510	420	450	404	448	
ARIZONA-----	623	339	331	331	346	336	
UTAH-----	290	218	229	235	227	226	
NEVADA-----	47	37	37	44	46	41	
MOUNTAIN-----	4,155	3,031	2,819	2,962	3,048	2,965	
WASHINGTON-----	579	423	417	430	439	427	
OREGON-----	516	349	344	350	348	347	
CALIFORNIA-----	2,898	1,632	1,730	1,766	1,742	1,718	
PACIFIC-----	3,993	2,404	2,491	2,548	2,529	2,493	
47 STATES-----	64,419	46,502	45,907	46,209	47,474	46,648	

TABLE 30.--SHIPMENTS OF FORMULA FEED INGREDIENTS: NUMBER OF ESTABLISHMENTS BY MODE OF TRANSPORTATION USED,
BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	TRUCK			RAIL	BARGE	TOTAL ^{1/}
	COMPANY	ALL OTHER	TOTAL ^{2/}			
NUMBER						
MAINE-----	3	11	12	13		13
NEW HAMPSHIRE-----	2/	5	5	6		6
VERMONT-----	2/	9	10	11		12
MASSACHUSETTS-----	8	10	12	14		14
CONNECTICUT-----	2/	5	5	5		5
NEW YORK-----	156	198	236	213	14	259
NEW JERSEY-----	16	23	25	22		25
PENNSYLVANIA-----	229	259	286	230	19	286
DELAWARE-----	10	18	20	13	2/	20
MARYLAND-----	50	58	64	52	2/	65
NORTHEAST-----	477	596	675	579	39	707
MICHIGAN-----	188	214	236	135		237
WISCONSIN-----	392	474	508	410		510
MINNESOTA-----	283	387	402	171		402
LAKE STATES-----	863	1,075	1,144	716		1,149
OHIO-----	407	411	458	180	9	459
INDIANA-----	415	432	493	154	14	493
ILLINOIS-----	347	406	470	223	10	475
INDIA-----	564	650	728	288	19	730
MISSOURI-----	253	259	302	163	10	302
CORN BELT-----	1,966	2,158	2,451	1,008	62	2,459
NORTH DAKOTA-----	57	70	80	35	8	80
SOUTH DAKOTA-----	103	145	159	63	28	159
NEBRASKA-----	243	302	341	161	38	343
KANSAS-----	282	369	396	203	39	396
NORTHERN PLAINS-----	685	886	976	464	113	978
VIRGINIA-----	75	96	111	82	2/	115
WEST VIRGINIA-----	12	16	18	14	2/	19
NORTH CAROLINA-----	187	199	232	132	27	233
KENTUCKY-----	97	100	123	65	16	128
TENNESSEE-----	85	94	109	70	16	113
APPALACHIAN-----	456	505	593	363	74	608
SOUTH CAROLINA-----	46	57	61	32	5	61
GEORGIA-----	113	176	189	139	31	197
FLORIDA-----	62	86	95	66	13	97
ALABAMA-----	70	103	111	65	19	114
SOUTHEAST-----	291	472	456	302	68	469
MISSISSIPPI-----	75	84	96	70	6	98
ARKANSAS-----	51	86	93	61	5	93
LOUISIANA-----	35	43	48	37	4	48
DELTA STATES-----	161	213	237	168	15	239
DALANOMA-----	93	139	144	95	4	145
TEXAS-----	324	404	456	259	19	438
SOUTHERN PLAINS-----	417	543	580	354	23	583
MONTANA-----	52	69	73	32	4	73
IDAHO-----	81	94	97	48	7	98
WYOMING-----	16	19	19	9	2/	19
COLORADO-----	66	91	98	61	2/	98
NEW MEXICO-----	36	50	51	32	2/	51
ARIZONA-----	18	30	31	22	2/	32
UTAH-----	30	41	43	23	2/	44
NEVADA-----	6	7	8	4		8
MOUNTAIN-----	305	401	420	231	21	423
WASHINGTON-----	32	55	56	47	2/	56
OREGON-----	62	54	55	44	2/	55
CALIFORNIA-----	128	188	191	140	19	191
PACIFIC-----	202	297	302	239	23	302
47 STATES-----	5,843	7,096	7,834	4,424	438	7,917

^{1/} SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE FORM OF TRANSPORTATION.

^{2/} DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 31.--INSHIPMENTS OF FORMULA FEED INGREDIENTS: QUANTITIES SHIPPED, BY MODE OF TRANSPORTATION, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	TRUCK			RAIL	BARGE
	COMPANY	ALL OTHER	TOTAL		
TONS					
MAINE-----	927	50,930	51,857	450,811	
NEW HAMPSHIRE-----	1/	13,040	17,300	147,862	
VERMONT-----	1/	58,021	59,805	735,095	
MASSACHUSETTS-----	7,159	19,076	26,237	207,327	
CONNECTICUT-----	1/	18,768	18,848	236,416	
NEW YORK-----	244,734	589,171	837,925	2,078,526	19,711
NEW JERSEY-----	26,463	97,240	126,703	249,175	
PENNSYLVANIA-----	391,454	665,959	1,057,013	1,678,757	3,343
DELAWARE-----	15,531	476,773	492,304	198,280	1/
MARYLAND-----	234,836	566,189	801,025	466,729	1/
NORTHEAST-----	934,258	2,554,759	3,489,017	6,452,982	173,383
MICHIGAN-----	443,917	687,036	1,130,953	463,092	
WISCONSIN-----	991,403	1,857,166	2,848,569	1,657,647	
MINNESOTA-----	785,991	1,810,917	2,596,908	912,911	
LAKE STATES-----	2,221,311	4,355,119	6,576,430	3,023,650	
OHIO-----	1,145,705	1,345,957	2,491,662	829,378	1,018
INDIANA-----	1,322,677	2,057,495	3,380,172	685,644	1,515
ILLINOIS-----	861,519	1,570,367	2,431,906	2,036,013	27,006
IOWA-----	1,754,129	2,990,537	4,744,666	1,963,566	28,759
MISSOURI-----	552,285	1,025,585	1,577,850	1,785,959	1,706
CORN BELT-----	5,655,715	6,935,941	14,595,656	7,290,556	60,408
NORTH DAKOTA-----	136,343	231,897	376,240	41,849	196
SOUTH DAKOTA-----	269,444	771,916	1,041,860	272,209	2,025
NEBRASKA-----	590,996	1,664,740	2,455,736	1,093,379	35,955
KANSAS-----	1,027,201	2,327,482	3,354,683	926,001	1,972
NORTHERN PLAINS-----	2,021,464	5,200,025	7,221,519	2,333,518	40,110
VIRGINIA-----	103,681	225,874	329,555	837,181	1/
WEST VIRGINIA-----	19,054	30,850	49,904	35,664	1/
NORTH CAROLINA-----	387,786	753,203	1,140,989	2,096,930	1,057
KENTUCKY-----	212,330	280,429	493,759	421,428	628
TENNESSEE-----	251,433	512,060	763,493	1,783,481	2,383
APPALACHIAN-----	975,784	1,802,416	2,777,700	5,174,704	4,136
SOUTH CAROLINA-----	81,988	127,197	209,185	332,034	1,277
GEORGIA-----	259,220	662,053	1,121,273	3,114,701	53,678
FLORIDA-----	151,565	346,518	498,083	986,409	29,324
ALABAMA-----	260,981	403,195	664,176	1,401,421	767,586
SOUTHEAST-----	773,754	1,738,963	2,512,717	5,826,565	851,617
MISSISSIPPI-----	204,868	317,623	527,691	1,446,610	2,363
ARKANSAS-----	318,435	589,890	906,325	2,433,940	134
LOUISIANA-----	76,092	156,132	232,225	572,022	84
DELTA STATES-----	599,396	1,063,845	1,663,241	4,454,572	2,581
OKLAHOMA-----	176,285	870,321	1,046,606	700,710	22,799
TEXAS-----	1,532,194	4,890,713	6,422,907	2,622,564	2,832
SOUTHERN PLAINS-----	1,706,479	5,761,034	7,469,513	3,323,274	25,432
MONTANA-----	89,539	394,419	483,958	93,259	6,266
IDaho-----	296,802	611,948	910,750	154,347	262
WYOMING-----	29,081	95,690	124,771	46,707	1/
COLORADO-----	272,915	1,285,866	1,541,783	880,346	1/
NEW MEXICO-----	700,717	471,219	1,171,936	253,714	176
ARIZONA-----	152,285	677,997	830,282	444,726	1/
UTAH-----	67,190	227,739	294,929	123,194	1/
NEVADA-----	32,769	77,226	109,997	10,743	
MOUNTAIN-----	1,138,296	3,825,106	4,963,406	2,007,036	6,966
WASHINGTON-----	61,680	255,779	315,459	685,077	1/
OREGON-----	97,190	243,386	340,576	424,485	1/
CALIFORNIA-----	774,689	3,197,328	3,972,017	2,965,780	6,991
PACIFIC-----	933,559	3,694,493	4,628,052	4,094,842	9,195
47 STATES-----	16,961,938	36,935,713	55,897,251	44,001,701	1,116,968

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 32.--OUTSHIPMENTS OF FORMULA FEED: NUMBER OF ESTABLISHMENTS BY MODE OF TRANSPORTATION USED, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	TRUCK				RAIL
	COMPANY-OWNED	CUSTOMER-OWNED	ALL OTHER	TOTAL ^{1/}	
	NUMBER				
MAINE-----	9	10	6	13	2/
NEW HAMPSHIRE-----	5	2/	2/	6	5
VERMONT-----	11	10	5	12	7
MASSACHUSETTS-----	14	10	3	14	2/
CONNECTICUT-----	5	2/	2/	5	
NEW YORK-----	221	214	65	235	41
NEW JERSEY-----	20	20	7	22	5
PENNSYLVANIA-----	244	230	82	251	49
DELAWARE-----	14	13	5	17	6
MARYLAND-----	61	50	18	61	17
NORTHEAST-----	604	565	196	636	136
MICHIGAN-----	210	207	87	223	72
WISCONSIN-----	471	479	147	495	106
MINNESOTA-----	329	332	110	359	81
LAKE STATES-----	1,010	1,018	344	1,077	259
OHIO-----	419	425	131	439	109
INDIANA-----	466	457	153	480	124
ILLINOIS-----	414	415	172	429	129
IOWA-----	642	607	225	668	166
MISSOURI-----	246	247	103	269	75
CORN BELT-----	2,187	2,151	764	2,295	613
NORTH DAKOTA-----	41	62	29	69	17
SOUTH DAKOTA-----	112	110	53	122	43
NEBRASKA-----	275	244	122	291	89
KANSAS-----	255	328	112	375	90
NORTHERN PLAINS-----	783	744	316	857	239
VIRGINIA-----	94	101	30	106	22
WEST VIRGINIA-----	16	15	8	16	6
NORTH CAROLINA-----	209	183	56	217	49
KENTUCKY-----	115	121	41	124	37
TENNESSEE-----	96	92	31	106	37
APPALACHIAN-----	530	512	166	571	151
SOUTH CAROLINA-----	52	51	10	57	11
GEORGIA-----	156	130	77	188	64
FLORIDA-----	89	65	43	95	29
ALABAMA-----	102	81	34	112	28
SOUTHEAST-----	401	327	164	452	142
MISSISSIPPI-----	90	72	26	96	21
ARKANSAS-----	83	52	26	93	23
LOUISIANA-----	43	33	17	46	13
DELTA STATES-----	216	157	69	237	57
OKLAHOMA-----	132	119	41	142	30
TEXAS-----	412	314	120	430	92
SOUTHERN PLAINS-----	544	433	161	572	122
MONTANA-----	60	56	38	70	25
IDAHO-----	85	69	41	92	34
WYOMING-----	15	15	9	18	2/
COLORADO-----	86	71	45	91	26
NEW MEXICO-----	50	39	29	51	18
ARIZONA-----	30	19	14	32	10
UTAH-----	39	36	20	49	15
NEVADA-----	8	5	6	8	2/
MOUNTAIN-----	373	312	202	405	136
WASHINGTON-----	52	43	22	56	19
OREGON-----	49	45	17	55	16
CALIFORNIA-----	181	115	70	190	44
PACIFIC-----	282	203	109	301	79
47 STATES-----	6,930	6,422	2,511	7,403	1,934

^{1/} SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE FORM OF TRANSPORTATION.

^{2/} DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 33.--DISSHIPMENTS OF FORMULA FEED: QUANTITIES SHIPPED, BY MODE OF TRANSPORTATION, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	TRUCK				RAIL
	COMPANY-OWNED	CUSTOMER-OWNED	ALL OTHER	TOTAL	
-----TONS-----					
MAINE-----	138,459	106,684	250,078	495,221	1/
NEW HAMPSHIRE-----	62,713	1/	1/	102,682	62,440
VERMONT-----	200,001	25,049	45,606	270,656	524,243
MASSACHUSETTS-----	190,888	25,094	3,812	219,594	1/
CONNECTICUT-----	245,457	1/	1/	257,264	1/
NEW YORK-----	1,373,176	581,846	261,730	2,216,752	580,030
NEW JERSEY-----	190,565	66,196	49,533	306,294	54,090
PENNSYLVANIA-----	1,335,053	653,647	134,307	2,143,007	320,529
DELANARE-----	449,035	179,919	34,917	663,871	16,216
MARYLAND-----	1,085,892	180,204	11,245	1,277,341	51,362
NORTHEAST-----	5,291,239	1,854,824	806,619	7,952,682	1,630,675
MICHIGAN-----	647,879	692,600	64,604	1,425,082	25,139
WISCONSIN-----	2,064,360	1,966,582	231,253	4,262,295	77,790
MINNESOTA-----	1,668,071	1,105,853	246,730	3,020,654	115,378
LAKE STATES-----	4,380,310	3,785,035	562,687	8,728,032	218,307
OHIO-----	1,538,731	1,744,341	176,992	2,910,064	298,179
INDIANA-----	2,025,382	1,611,777	155,080	3,792,239	212,065
ILLINOIS-----	1,727,329	1,216,872	406,208	3,550,409	750,641
IOHA-----	3,652,117	1,761,255	475,075	5,888,447	434,974
MISSOURI-----	895,339	1,209,274	230,876	2,335,489	891,407
CORN BELT-----	9,838,899	7,043,469	1,554,231	18,436,599	2,595,266
NORTH DAKOTA-----	196,722	117,653	52,444	366,819	3,747
SOUTH DAKOTA-----	523,671	311,744	57,412	917,827	29,620
NEBRASKA-----	1,678,629	870,619	314,749	2,863,997	369,028
KANSAS-----	2,547,305	895,512	341,864	3,784,681	307,232
NORTHERN PLAINS-----	4,976,327	2,195,528	767,469	7,939,324	729,627
VIRGINIA-----	532,698	396,991	92,095	1,021,784	61,840
WEST VIRGINIA-----	49,397	21,898	12,661	84,076	18
NORTH CAROLINA-----	2,016,404	547,461	174,293	2,688,158	441,851
KENTUCKY-----	304,657	407,639	62,915	775,211	117,969
TENNESSEE-----	816,663	705,165	254,610	1,776,438	749,777
APPALACHIAN-----	3,715,819	2,079,754	546,594	6,341,167	1,271,450
SOUTH CAROLINA-----	405,173	76,401	2,505	484,079	42,479
GEORGIA-----	2,085,271	715,928	842,227	3,643,426	608,626
FLORIDA-----	1,070,306	194,323	117,782	1,382,411	129,736
ALABAMA-----	1,973,221	469,712	56,161	2,499,094	353,157
SOUTHEAST-----	5,523,971	1,456,374	1,016,675	8,007,020	1,123,998
MISSISSIPPI-----	1,251,805	447,360	53,864	1,803,029	170,515
ARKANSAS-----	2,326,021	419,038	204,153	2,949,212	393,070
LOUISIANA-----	420,746	172,568	16,592	609,906	186,437
DELTA STATES-----	3,998,572	1,088,966	274,609	5,362,147	752,022
OKLAHOMA-----	1,024,314	433,156	54,949	1,512,419	200,544
TEXAS-----	6,095,328	1,292,296	437,367	7,822,991	1,189,647
SOUTHERN PLAINS-----	7,117,642	1,725,452	492,316	9,335,410	1,390,191
MONTANA-----	325,815	145,900	64,060	535,775	36,939
IDAH0-----	760,094	160,567	72,403	993,064	17,524
WYOMING-----	59,083	62,392	25,672	157,147	1/
COLORADO-----	1,472,009	320,980	571,622	2,364,611	20,159
NEW MEXICO-----	738,533	97,473	52,623	888,629	2,417
ARIZONA-----	1,145,651	104,291	17,015	1,266,957	7,289
UTAH-----	229,731	147,044	16,404	393,183	13,657
NEVADA-----	100,709	9,663	9,672	120,244	1/
MOUNTAIN-----	4,831,629	1,048,310	829,671	6,719,610	100,578
WASHINGTON-----	656,267	92,577	23,755	772,599	228,044
OREGON-----	565,408	116,341	15,695	697,444	67,724
CALIFORNIA-----	5,739,946	708,181	311,841	6,757,968	205,240
PACIFIC-----	6,981,621	915,099	351,291	8,228,011	501,008
47 STATES-----	56,650,029	23,192,811	7,247,162	87,090,002	10,423,122

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 34.--DISPATCHMENTS OF FORMULA FEED: AVERAGE DISTANCES SHIPPED FROM PLANT, BY MODE OF TRANSPORTATION, BY STATES AND REGIONS, 1969

STATE AND REGION	TRUCK				RAIL
	COMPANY-OWNED	CUSTOMER-OWNED	ALL OTHER	TOTAL	
	MILES				
MAINE-----	33	40	60	48	60
NEW HAMPSHIRE-----	28	44	72	36	171
VERMONT-----	41	37	62	44	193
MASSACHUSETTS-----	31	27	32	31	146
CONNECTICUT-----	36	25	79	37	
NEW YORK-----	22	44	85	35	200
NEW JERSEY-----	26	39	90	39	249
PENNSYLVANIA-----	27	32	63	31	256
DELAWARE-----	35	29	74	35	127
MARYLAND-----	27	29	58	27	158
NORTHEAST-----	28	36	71	34	206
MICHIGAN-----	27	17	95	26	160
WISCONSIN-----	23	14	125	24	158
MINNESOTA-----	31	20	133	35	168
LAKE STATES-----	27	16	124	28	164
MID-----	28	26	129	31	265
INDIANA-----	27	26	150	32	238
ILLINOIS-----	46	39	281	84	324
IOWA-----	31	43	148	44	412
MISSOURI-----	23	48	89	42	123
CORN BELT-----	32	36	189	47	256
NORTH DAKOTA-----	70	30	239	82	202
SOUTH DAKOTA-----	36	39	114	42	219
NEBRASKA-----	37	55	117	51	175
KANSAS-----	32	37	98	39	220
NORTHERN PLAINS-----	34	44	117	46	195
VIRGINIA-----	25	41	40	32	137
WEST VIRGINIA-----	22	14	11	18	225
NORTH CAROLINA-----	31	35	42	32	126
KENTUCKY-----	30	36	73	36	204
TENNESSEE-----	41	56	65	50	187
APPALACHIAN-----	32	43	55	38	167
SOUTH CAROLINA-----	38	39	70	38	193
GEORGIA-----	34	42	38	37	140
FLORIDA-----	43	35	97	47	131
ALABAMA-----	42	35	44	40	270
SOUTHEAST-----	39	39	45	40	182
MISSISSIPPI-----	26	37	49	30	125
ARKANSAS-----	32	36	39	33	173
LOUISIANA-----	35	37	108	37	149
DELTA STATES-----	31	37	45	33	156
OKLAHOMA-----	38	67	106	49	171
TEXAS-----	26	90	140	43	267
SOUTHERN PLAINS-----	26	84	136	44	253
MONTANA-----	32	39	151	48	222
IDAH0-----	24	50	149	38	240
WYOMING-----	26	25	215	68	304
COLORADO-----	30	41	148	60	235
NEW MEXICO-----	45	59	141	52	275
ARIZONA-----	18	48	134	22	238
UTAH-----	24	36	133	33	456
NEVADA-----	46	42	175	56	235
MOUNTAIN-----	29	43	150	46	264
WASHINGTON-----	26	17	102	27	156
OREGON-----	33	23	162	35	183
CALIFORNIA-----	25	23	64	27	150
PACIFIC-----	26	22	71	28	157
47 STATES-----	31	38	114	39	210

TABLE 25.---FORMULA FEED: RATED WEEKLY CAPACITY TO PRODUCE SPECIFIED FORMS OF FEED, BY STATES AND REGIONS, 1989 1/
 (ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	STATIONARY			MOBILE 2/	TOTAL CAPACITY 3/
	MEAL	PELLETS	BLOCKS		
TONS					
MAINE-----	10,830	3,800			10,830
NEW HAMPSHIRE-----	3,160	1,340			3,160
VERMONT-----	14,785	7,992			14,785
MASSACHUSETTS-----	5,164	1,683			5,164
CONNECTICUT-----	4,710	2,615			4,710
NEW YORK-----	66,212	14,473		4,294	71,206
NEW JERSEY-----	7,815	1,571		676	6,491
PENNSYLVANIA-----	65,273	15,507		7,978	76,251
DELAWARE-----	22,077	12,311		310	22,387
MARYLAND-----	25,677	10,383		795	26,672
NORTHEAST-----	229,603	71,875		14,053	243,656
MICHIGAN-----	53,437	4,457	76		57,600
WISCONSIN-----	153,825	12,733	251	4,163	157,780
MINNESOTA-----	109,659	14,567	597	11,947	121,606
LAKE STATES-----	316,922	31,777	924	20,064	326,986
OHIO-----	121,759	12,415	164	3,699	125,458
INDIANA-----	127,404	19,926	354	2,604	140,008
ILLINOIS-----	159,379	28,254	1,389	7,794	147,169
IOWA-----	220,792	43,161	574	21,373	242,165
MISSOURI-----	97,166	32,591	936	6,711	103,677
CORN BELT-----	716,496	136,347	3,419	42,183	758,677
NORTH DAKOTA-----	13,736	3,444	988	1,555	15,291
SOUTH DAKOTA-----	37,115	6,387	592	17,321	54,436
NEBRASKA-----	124,656	24,013	776	17,885	142,542
KANSAS-----	134,466	17,123	803	8,427	142,893
NORTHERN PLAINS:	309,975	50,969	3,159	45,188	355,163
VIRGINIA-----	32,426	11,717			34,491
WEST VIRGINIA-----	3,298	1,119	134	2,065	3,686
NORTH CAROLINA-----	77,189	30,357	74	3,306	80,495
KENTUCKY-----	34,356	7,063	41	666	35,027
TENNESSEE-----	54,428	22,500	1,133	1,698	56,126
APPALACHIAN-----	201,797	72,756	1,382	8,023	209,820
SOUTH CAROLINA-----	14,818	3,479	6	728	15,946
GEORGIA-----	90,537	27,456	436	2,725	93,267
FLORIDA-----	40,436	5,247	10	209	40,645
ALABAMA-----	69,243	21,265	64	324	69,567
SOUTHEAST-----	215,034	57,447	516	3,984	219,020
MISSISSIPPI-----	47,810	9,272		37	47,847
ARKANSAS-----	67,178	21,393		12	67,190
LOUISIANA-----	19,241	4,689		523	19,764
DELTA STATES-----	134,229	35,254		572	134,801
OKLAHOMA-----	55,073	14,422	715	136	55,209
TEXAS-----	232,425	50,626	3,034	1,869	234,294
SOUTHERN PLAINS:	287,498	65,048	3,749	2,005	289,503
MONTANA-----	18,748	6,805	1,261	302	19,050
IDAHO-----	31,351	5,856	290	1,767	33,118
WYOMING-----	4,516	962	51	687	5,203
COLORADO-----	55,474	8,573	415	1,121	56,595
NEW MEXICO-----	28,951	6,378	692	1,210	30,161
ARIZONA-----	24,408	2,487	15	28	24,436
UTAH-----	12,052	2,970	459	395	12,387
NEVADA-----	3,680	660			3,880
MOUNTAIN-----	179,380	34,891	3,143	5,450	184,830
WASHINGTON-----	22,237	8,672	11		22,237
OREGON-----	21,731	4,672	9		21,731
CALIFORNIA-----	164,728	29,708	308		164,728
PACIFIC-----	208,696	43,052	328		208,696
47 STATES-----	2,799,630	599,516	36,620	141,522	2,941,152

1/ RATED CAPACITY FOR A 40-HOUR WEEK.
 2/ MOBILE MILLS PRODUCE MEAL ONLY.
 3/ TOTAL CAPACITY FOR MEAL ONLY.

Table 3C.—Feed grains and prepared pre mixes: Average number of working days' inventory held by formula feed manufacturers, by major source of gross income, by region, 1969

Major source of gross income	Regions										United States	
	Northeast	Lake States	Corn Belt	Northern Plains	Appalachian	Southeast	Delta States	Southern Plains	Mountain	Pacific		
	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	
Feed manufacturing:												
Grain.....	26	20	30	30	37	24	13	20	43	32	28	
Premix.....	21	21	21	24	24	20	16	24	30	25	23	
Food:												
Grain.....	--	25	19	--	9	8	7	60	--	28	20	
Premix.....	--	30	32	--	--	30	30	14	--	--	29	
In storage:												
Grain.....	14	60	41	54	180	33	--	71	69	57	53	
Premix.....	12	27	20	21	--	6	--	28	45	30	23	
In merchandising:												
Grain.....	51	33	14	40	18	100	5	66	34	103	44	
Premix.....	23	23	22	22	16	36	--	26	26	56	23	
In processing:												
Grain.....	52	17	12	61	19	45	--	52	45	10	41	
Premix.....	24	18	24	23	26	30	--	22	36	--	25	
In feed processing:												
Grain.....	21	7	28	130	--	--	--	46	60	18	53	
Premix.....	35	--	10	30	--	--	--	30	60	7	25	
Farm supply:												
Grain.....	33	27	34	28	34	29	16	25	46	58	31	
Premix.....	20	24	20	19	21	20	25	23	35	44	22	
Bakery:												
Grain.....	--	2	23	6	91	15	6	10	--	--	30	
Premix.....	--	--	6	12	10	40	5	30	--	--	14	
Milk production:												
Grain.....	46	17	13	60	19	23	40	103	30	--	27	
Premix.....	24	21	22	15	14	12	--	14	30	--	19	
Cattle feeding:												
Grain.....	51	12	63	36	10	46	31	20	45	52	31	
Premix.....	16	28	27	22	27	32	17	12	15	14	17	
Hog production:												
Grain.....	--	54	41	26	63	62	7	14	5	--	43	
Premix.....	--	32	19	26	27	15	22	19	--	--	22	
Turkey production:												
Grain.....	30	57	10	57	15	6	12	--	64	18	27	
Premix.....	20	30	19	--	30	22	15	--	30	22	23	
Broiler production:												
Grain.....	82	--	--	--	6	14	5	4	--	--	12	
Premix.....	14	--	--	--	32	25	12	16	--	--	19	
Egg production:												
Grain.....	26	17	42	32	29	15	10	27	28	20	23	
Premix.....	13	13	14	12	25	20	18	14	31	21	19	
Other:												
Grain.....	56	38	30	61	26	29	7	30	82	30	35	
Premix.....	20	21	24	31	21	21	22	32	30	40	25	
Average days ^{1/} :												
Grain.....	31	26	36	41	37	20	12	25	43	27	33	
Premix.....	21	24	21	23	23	21	16	21	27	24	22	

^{1/} Weighted by number of establishments reporting.

Table 37.--Protein ingredients and Microingredient drugs: Average number of working days' inventory held by formula feed manufacturers, by major source of gross income, by region, 1969

Major source of gross income	Regions										United States
	Northeast	Lake States	Corn Belt	Northern Plains	Appalachian	Southeast	Delta States	Southern Plains	Mountain	Pacific	
	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days
Feed manufacturing:											
Proteins.....	17	14	12	12	15	12	12	14	20	17	14
Drugs.....	35	31	28	29	28	29	28	30	34	27	30
Pet food:											
Proteins.....	--	10	11	--	44	6	5	30	--	--	18
Drugs.....	--	30	45	--	--	60	--	--	--	--	45
Grain storage:											
Proteins.....	25	25	16	20	25	10	--	20	45	17	19
Drugs.....	30	25	27	28	20	30	--	20	60	40	28
Grain merchandising:											
Proteins.....	21	17	11	17	11	16	5	25	20	35	15
Drugs.....	34	28	28	29	28	34	--	30	28	60	29
Grain processing:											
Proteins.....	19	13	13	20	23	32	--	28	28	10	19
Drugs.....	28	33	24	24	30	30	--	37	33	--	29
Oil-seed processing:											
Proteins.....	8	30	7	10	--	15	--	32	--	18	15
Drugs.....	30	--	20	30	--	--	--	15	--	--	28
Farm supply:											
Proteins.....	19	17	11	16	15	14	22	16	32	40	15
Drugs.....	28	30	26	29	29	24	34	31	34	44	28
Butchery:											
Proteins.....	--	12	10	17	17	8	6	--	--	--	11
Drugs.....	--	30	23	10	30	15	18	30	--	--	22
Milk production:											
Proteins.....	13	15	16	8	35	18	20	16	30	--	18
Drugs.....	45	19	22	30	7	25	--	20	30	--	23
Cattle feeding:											
Proteins.....	21	21	20	14	12	25	5	12	14	15	15
Drugs.....	17	42	28	20	30	30	20	22	24	22	24
Hog production:											
Proteins.....	--	22	14	18	15	12	8	18	30	--	15
Drugs.....	--	30	27	28	27	17	32	19	--	--	27
Poultry production:											
Proteins.....	12	12	7	16	7	15	10	--	15	23	12
Drugs.....	28	22	22	25	18	26	22	--	18	13	23
Broiler production:											
Proteins.....	6	--	--	--	3	14	6	10	--	--	9
Drugs.....	18	--	--	--	30	23	21	27	--	--	23
Egg production:											
Proteins.....	17	19	11	12	7	11	11	16	13	18	12
Drugs.....	25	25	26	--	26	24	25	26	29	35	26
Other:											
Proteins.....	21	18	17	19	14	14	8	21	22	40	17
Drugs.....	30	32	30	25	25	27	30	44	30	48	30
Average days 1/											
Proteins.....	18	16	13	15	15	14	11	15	19	19	15
Drugs.....	32	30	27	28	28	28	27	28	31	28	28

1/ Weighted by number of establishments reporting.

Table 38.—bagged formula feed: Number of establishments and production, all establishments and establishments where feed manufacturing is the major gross income source, by State and region, 1969

State and region	(Establishments producing 1,000 tons or more of formula feed)			
	All establishments		Feed manufacturing major gross income source	
	Number	Production bagged Tons	Number	Production bagged Tons
Maine	1/	1/	1/	1/
New Hampshire	5	56,867	5	56,867
Vermont	10	355,404	9	195,115
Massachusetts	7	42,090	6	36,546
Connecticut	1/	1/	1/	1/
New York	194	725,413	135	628,994
New Jersey	17	73,149	14	74,137
Pennsylvania	196	826,046	106	647,500
Delaware	12	61,030	6	56,612
Maryland	45	164,304	25	102,023
Northeast	489	2,171,632	289	1,812,137
Michigan	176	466,997	45	132,226
Wisconsin	432	1,970,786	96	554,704
Minnesota	282	964,658	89	560,023
Lake States	890	3,244,441	230	1,246,955
Ohio	334	1,237,401	75	608,320
Indiana	382	2,104,506	104	552,502
Illinois	290	1,348,602	88	664,184
Iowa	523	2,375,316	176	1,527,908
Missouri	208	1,191,050	80	740,004
Great Belt	1,736	7,201,077	525	4,271,320
North Dakota	24	67,917	12	57,137
South Dakota	70	298,755	25	204,401
Nebraska	154	821,467	70	725,622
Kansas	231	543,431	71	405,272
Northern Plains	479	1,691,590	178	1,382,603
Virginia	88	311,700	45	232,646
West Virginia	21	17,421	5	7,426
North Carolina	156	550,528	87	397,705
Kentucky	95	345,792	27	201,599
Tennessee	78	758,971	39	661,875
Appalachian	428	1,584,111	205	1,301,251
South Carolina	45	120,665	22	64,905
Georgia	123	543,116	62	470,617
Florida	52	296,227	39	252,551
Alabama	74	475,473	45	346,714
Southeast	294	1,437,381	188	954,031
Mississippi	66	361,926	41	303,055
Arkansas	43	325,673	28	294,715
Louisiana	34	196,414	21	176,234
Delta States	143	884,343	90	774,004
Alabama	90	596,180	41	470,429
Texas	265	1,017,785	157	1,293,164
Southern Plains	353	2,213,965	198	1,763,593
Montana	36	110,161	23	87,697
Idaho	47	84,431	24	50,566
Wyoming	1/	1/	1/	1/
Colorado	17	181,771	25	124,870
New Mexico	29	174,631	17	92,861
Arizona	15	76,304	7	52,936
Utah	26	59,660	19	51,145
Nevada	1/	1/	1/	1/
Mountain	235	711,254	120	476,519
Washington	41	156,851	29	133,854
Oregon	25	142,637	29	129,874
California	97	460,325	79	405,078
Pacific	177	761,843	137	668,606
47 States	5,184	22,404,736	2,158	14,951,223

1/ Data not given to avoid disclosure of individual operations.

TABLE 39.--FORMULA FEED: NUMBER OF ESTABLISHMENTS WHERE FEED MANUFACTURING WAS THE MAJOR GROSS INCOME SOURCE, BY METHOD OF DISPOSITION, BY STATES AND REGIONS, 1969

STATE AND REGION	METHOD OF DISPOSITION					TOTAL 1/
	WHOLESALE	RETAIL	CUSTOM FEEDING	FEEDING ON FARM ANIMALS	CUSTOM GRINDING AND MIXING	
NUMBER						
MAINE-----	2/	8	2/	6	2/	11
NEW HAMPSHIRE-----	2/	4	2/	0	2/	5
VERMONT-----	6	10	0	0	3	11
MASSACHUSETTS-----	5	8	2/	2/	2/	12
CONNECTICUT-----	2/	4	2/	2/	0	5
NEW YORK-----	30	108	39	16	87	143
NEW JERSEY-----	5	13	3	3	8	18
PENNSYLVANIA-----	46	109	40	36	117	146
DELAWARE-----	6	4	2/	4	2/	9
MARYLAND-----	9	22	9	15	21	34
NORTHEAST-----	113	290	98	83	241	394
MICHIGAN-----	18	39	26	21	41	54
WISCONSIN-----	39	72	40	27	83	114
MINNESOTA-----	43	68	30	34	76	116
LAKE STATES-----	100	179	96	82	202	284
OHIO-----	34	57	34	29	71	95
INDIANA-----	38	85	45	64	103	133
ILLINOIS-----	45	73	27	26	74	123
IOWA-----	82	132	48	36	100	212
MISSOURI-----	42	70	26	34	50	103
CORN BELT-----	242	417	180	189	416	670
NORTH DAKOTA-----	14	13	3	4	12	18
SOUTH DAKOTA-----	17	22	12	7	18	32
NEBRASKA-----	48	59	18	19	44	91
KANSAS-----	36	55	24	13	61	86
NORTHERN PLAINS-----	115	149	57	43	135	227
VIRGINIA-----	26	35	18	17	33	55
WEST VIRGINIA-----	5	5	2/	4	6	9
NORTH CAROLINA-----	43	75	46	69	74	124
KENTUCKY-----	16	24	6	13	28	36
TENNESSEE-----	24	31	2/	20	28	53
APPALACHIAN-----	114	170	78	125	169	277
SOUTH CAROLINA-----	11	20	4	14	18	29
GEORGIA-----	60	75	38	68	56	125
FLORIDA-----	20	36	9	17	17	50
ALABAMA-----	16	43	15	33	33	57
SOUTHEAST-----	107	174	66	132	124	261
MISSISSIPPI-----	18	29	13	23	29	53
ARKANSAS-----	15	31	12	34	15	54
LOUISIANA-----	14	21	5	9	20	29
DELTA STATES-----	47	81	30	66	52	136
OKLAHOMA-----	23	35	19	14	30	56
TEXAS-----	75	148	65	92	103	206
SOUTHERN PLAINS-----	98	183	84	106	133	262
MONTANA-----	21	27	15	5	21	30
IDAHO-----	15	25	12	12	21	35
WYOMING-----	2/	2/	2/	2/	2/	2/
COLORADO-----	10	22	8	12	18	32
NEW MEXICO-----	14	19	12	8	12	20
ARIZONA-----	6	8	2/	6	2/	13
UTAH-----	10	18	9	8	16	24
NEVADA-----	2/	2/	0	2/	0	2/
MOUNTAIN-----	90	124	62	53	92	158
WASHINGTON-----	19	33	6	11	20	36
OREGON-----	20	30	13	10	25	37
CALIFORNIA-----	62	93	31	43	34	116
PACIFIC-----	101	156	50	62	77	189
47 STATES-----	1,126	1,923	801	939	1,641	2,858

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS USE MORE THAN ONE METHOD OF DISPOSITION.

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 40.--FORMULA FEED: PRODUCTION OF ESTABLISHMENTS WHERE FEED MANUFACTURING WAS THE MAJOR GROSS INCOME SOURCE, BY METHOD OF DISPOSITION, BY STATES AND REGIONS, 1969

STATE AND REGION	METHOD OF DISPOSITION					TOTAL 1/
	WHOLESALE	RETAIL	CUSTOM FEEDING	FEEDING OWN ANIMALS	CUSTOM GRINDING AND MIXING	
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)						
TONS						
MAINE-----	1/	173,458	1/	316,330	1/	498,994
NEW HAMPSHIRE-----	1/	89,496	1/	0	1/	163,962
VERMONT-----	389,846	391,775	0	0	10,755	792,376
MASSACHUSETTS-----	60,522	145,023	1/	1/	1/	226,824
CONNECTICUT-----	1/	187,914	1/	1/	0	257,264
NEW YORK-----	1,265,698	797,508	64,775	52,712	223,754	2,404,437
NEW JERSEY-----	151,671	164,147	3,071	3,953	27,956	350,798
PENNSYLVANIA-----	889,602	496,306	77,117	174,250	476,648	2,113,943
DELAWARE-----	157,711	9,030	1/	230,049	1/	400,890
MARYLAND-----	119,760	84,765	11,978	582,094	88,242	886,839
NORTHEAST-----	3,171,409	2,531,622	172,165	1,378,843	842,287	8,096,326
MICHIGAN-----	158,560	86,828	35,182	50,123	166,296	478,989
WISCONSIN-----	453,933	180,422	28,913	119,895	482,515	1,265,778
MINNESOTA-----	779,726	203,087	66,328	178,554	543,944	1,773,639
LAKE STATES-----	1,372,219	470,337	132,423	348,672	1,194,755	3,518,406
OHIO-----	714,822	217,053	35,201	98,790	288,038	1,353,894
INDIANA-----	577,214	366,224	136,618	133,716	561,685	1,777,457
ILLINOIS-----	1,252,904	1,029,178	25,564	30,931	246,202	2,588,779
IANA-----	1,714,792	910,675	136,819	59,468	618,413	3,440,167
MISSOURI-----	1,050,490	454,626	35,320	81,176	216,057	1,837,644
CORN BELT-----	5,315,222	2,979,756	369,522	404,071	1,930,370	10,998,941
NORTH DAKOTA-----	122,344	42,824	7,965	7,242	32,266	212,741
SOUTH DAKOTA-----	219,201	119,206	36,206	92,777	97,706	567,596
NEBRASKA-----	945,423	433,744	43,606	110,184	124,670	1,657,627
KANSAS-----	583,430	326,010	106,042	41,823	120,701	1,270,006
NORTHERN PLAINS-----	1,870,398	924,384	195,819	252,026	465,543	3,708,170
VIRGINIA-----	222,825	324,709	109,719	181,341	89,325	927,919
WEST VIRGINIA-----	3,813	11,748	1/	14,575	1/	57,198
NORTH CAROLINA-----	763,300	297,481	180,731	891,855	217,141	2,350,508
KENTUCKY-----	347,376	50,871	9,134	27,862	104,899	546,162
TENNESSEE-----	956,455	373,303	1/	496,033	1/	1,905,229
APPALACHIAN-----	2,293,769	1,058,112	321,895	1,611,686	495,554	5,781,016
SOUTH CAROLINA-----	77,676	116,273	4,535	114,773	22,191	335,448
GEORGIA-----	1,106,591	636,741	75,593	1,726,102	85,170	3,632,197
FLORIDA-----	320,761	447,041	15,080	285,893	24,909	1,093,684
ALABAMA-----	305,596	223,567	202,735	820,657	236,103	1,790,658
SOUTHEAST-----	1,812,624	1,423,622	297,943	2,947,423	370,373	6,851,987
MISSISSIPPI-----	496,116	82,342	12,618	711,004	141,975	1,444,055
ARKANSAS-----	374,876	330,526	101,879	1,338,800	34,868	2,180,949
LOUISIANA-----	384,803	81,921	2,897	156,210	11,553	639,384
DELTA STATES-----	1,255,795	494,789	117,394	2,206,014	188,396	4,264,388
OKLAHOMA-----	566,858	200,594	63,816	60,506	62,030	953,804
TEXAS-----	1,296,544	1,452,708	700,363	655,557	238,188	4,342,860
SOUTHERN PLAINS-----	1,863,402	1,652,802	764,179	716,063	300,218	5,296,664
MONTANA-----	61,566	116,072	49,534	25,345	25,882	278,399
IDAHO-----	45,147	132,377	84,989	48,581	34,845	345,939
WYOMING-----	1/	1/	1/	1/	1/	1/
COLORADO-----	186,393	207,631	21,324	114,489	26,344	556,181
NEW MEXICO-----	41,046	99,176	46,696	25,852	16,537	229,287
ARIZONA-----	47,574	154,223	1/	21,622	1/	553,369
UTAH-----	114,623	134,848	21,753	38,946	27,463	337,635
NEVADA-----	1/	1/	0	1/	0	1/
MOUNTAIN-----	501,818	872,475	543,074	283,574	150,875	2,351,814
WASHINGTON-----	274,385	434,530	27,467	92,178	28,834	857,394
OREGON-----	110,285	346,645	43,374	70,394	89,461	660,159
CALIFORNIA-----	831,886	2,929,131	360,048	459,182	51,866	4,622,113
PACIFIC-----	1,216,556	3,710,306	420,889	621,754	170,161	6,139,666
47 STATES-----	20,673,212	16,118,205	3,335,303	10,772,128	6,108,530	57,007,378

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 41.--FORMULA FEED: NUMBER OF ESTABLISHMENTS WHERE FEED MANUFACTURING WAS THE MAJOR GROSS INCOME SOURCE, WITH ONLY PRIMARY, ONLY SECONDARY, AND BOTH PRIMARY AND SECONDARY MANUFACTURING, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	ONLY PRIMARY MANUFACTURING	ONLY SECONDARY MANUFACTURING	BOTH PRIMARY AND SECONDARY MANUFACTURING	TOTAL ^{1/}
NUMBER				
MAINE-----	10	^{2/}	0	^{2/}
NEW HAMPSHIRE-----	5	0	0	5
VERMONT-----	9	0	^{2/}	^{2/}
MASSACHUSETTS-----	8	^{2/}	^{2/}	^{2/}
CONNECTICUT-----	5	0	0	5
NEW YORK-----	82	18	36	143
NEW JERSEY-----	13	^{2/}	^{2/}	18
PENNSYLVANIA-----	61	^{2/}	57	146
DELAWARE-----	7	^{2/}	^{2/}	9
MARYLAND-----	12	8	14	34
NORTHEAST-----	218	60	113	394
MICHIGAN-----	11	17	24	54
WISCONSIN-----	38	18	57	114
MINNESOTA-----	47	27	40	116
LAKE STATES-----	96	62	121	284
OHIO-----	30	33	35	99
INDIANA-----	41	44	47	133
ILLINOIS-----	56	43	74	123
IOWA-----	110	39	63	212
MISSOURI-----	53	24	25	103
CORN BELT-----	290	183	194	670
NORTH DAKOTA-----	10	3	5	18
SOUTH DAKOTA-----	16	5	10	32
NEBRASKA-----	51	14	25	91
KANSAS-----	38	17	30	86
NORTHERN PLAINS-----	115	39	70	227
VIRGINIA-----	26	15	14	55
WEST VIRGINIA-----	3	4	^{2/}	9
NORTH CAROLINA-----	63	33	27	124
KENTUCKY-----	11	10	14	36
TENNESSEE-----	25	13	^{2/}	53
APPALACHIAN-----	128	75	71	277
SOUTH CAROLINA-----	13	8	7	29
GEORGIA-----	67	29	28	125
FLORIDA-----	30	10	9	50
ALABAMA-----	23	14	18	57
SOUTHEAST-----	135	61	62	261
MISSISSIPPI-----	28	^{2/}	16	53
ARKANSAS-----	37	10	5	54
LOUISIANA-----	23	^{2/}	3	29
DELTA STATES-----	88	21	24	136
OKLAHOMA-----	24	13	18	56
TEXAS-----	125	34	46	206
SOUTHERN PLAINS-----	149	47	64	262
MONTANA-----	19	3	7	30
IDaho-----	15	8	11	35
WYOMING-----	^{2/}	^{2/}	^{2/}	^{2/}
COLORADO-----	19	3	8	31
NEW MEXICO-----	13	0	6	20
ARIZONA-----	10	^{2/}	^{2/}	13
UTAH-----	13	5	^{2/}	24
NEVADA-----	^{2/}	0	0	^{2/}
MOUNTAIN-----	92	22	38	156
WASHINGTON-----	26	^{2/}	9	36
OREGON-----	25	3	8	37
CALIFORNIA-----	83	^{2/}	29	116
PACIFIC-----	154	7	46	189
47 STATES-----	1,445	577	803	2,858

^{1/} SUMS OF NUMBERS OF ESTABLISHMENTS ARE LESS THAN SHOWN IN THE TOTALS, BECAUSE OF ROUNDING.

^{2/} DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 42.-FORMULA FEED PRODUCTION OF ESTABLISHMENTS WHERE FEED MANUFACTURING WAS THE MAJOR GROSS INCOME SOURCE, WITH ONLY PRIMARY, ONLY SECONDARY, AND BOTH PRIMARY AND SECONDARY MANUFACTURING, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	ONLY PRIMARY MANUFACTURING	ONLY SECONDARY MANUFACTURING	BOTH PRIMARY AND SECONDARY MANUFACTURING		TOTAL 1/
			PRIMARY	SECONDARY	
TONS					
MAINE-----	485,994	2/	0	0	2/
NEW HAMPSHIRE-----	163,962	0	0	0	163,962
VERMONT-----	785,555	0	2/	2/	2/
MASSACHUSETTS-----	193,427	2/	2/	2/	236,824
CONNECTICUT-----	257,264	0	0	0	257,264
NEW YORK-----	1,986,503	66,366	256,092	91,476	2,400,439
NEW JERSEY-----	329,736	2/	2/	2/	350,799
PENNSYLVANIA-----	1,290,873	740,860	390,655	191,516	2,113,905
DELAWARE-----	392,415	2/	2/	2/	400,890
MARYLAND-----	637,961	29,152	191,567	26,099	886,839
NORTHEAST-----	6,523,980	576,755	873,514	522,332	8,096,290
MICHIGAN-----	171,373	88,767	67,057	131,791	478,984
WISCONSIN-----	635,910	197,455	159,344	275,174	1,265,785
MINNESOTA-----	1,024,499	502,066	171,624	275,256	1,773,657
LAKE STATES-----	1,832,262	566,286	416,110	680,221	3,518,406
OHIO-----	667,864	231,405	132,465	141,164	1,355,898
INDIANA-----	746,633	453,763	265,071	309,898	2,775,465
ILLINOIS-----	2,763,382	291,431	116,276	105,845	2,585,784
IOWA-----	2,453,750	285,895	273,666	426,863	3,440,176
MISSOURI-----	1,455,924	160,065	117,036	104,652	1,837,657
CORN BELT-----	7,689,351	1,212,629	905,496	1,091,502	10,992,980
NORTH DAKOTA-----	131,349	12,939	49,564	16,922	212,755
SOUTH DAKOTA-----	315,432	39,650	118,353	94,323	567,656
NEBRASKA-----	1,211,370	152,795	117,305	105,413	1,657,885
KANSAS-----	916,621	82,635	121,646	147,162	1,270,067
NORTHERN PLAINS-----	2,646,770	290,289	406,670	363,620	3,706,363
VIRGINIA-----	727,316	63,154	65,393	77,060	927,924
WEST VIRGINIA-----	16,402	2/	2/	2/	57,198
NORTH CAROLINA-----	1,949,376	184,036	139,521	77,576	2,350,511
KENTUCKY-----	306,856	41,940	131,059	55,311	540,165
TENNESSEE-----	1,495,627	2/	2/	2/	1,905,236
APPALACHIAN-----	4,493,576	386,457	604,770	296,365	5,781,034
SOUTH CAROLINA-----	264,815	22,152	36,107	10,575	335,450
GEORGIA-----	2,977,161	246,156	326,091	60,796	3,632,206
FLORIDA-----	727,086	164,628	164,285	33,627	1,091,627
ALABAMA-----	1,130,291	65,133	343,870	251,421	1,790,664
SOUTHEAST-----	5,099,353	500,067	876,303	376,261	6,852,009
MISSISSIPPI-----	977,797	2/	2/	2/	1,444,057
ARKANSAS-----	1,865,991	143,688	134,357	36,911	2,180,946
LOUISIANA-----	576,531	2/	2/	2/	639,363
DELTA STATES-----	3,422,119	251,044	447,735	143,489	4,264,388
OKLAHOMA-----	666,606	89,869	124,435	70,895	953,806
TEXAS-----	3,047,141	265,330	629,676	405,914	4,342,061
SOUTHERN PLAINS-----	3,709,747	355,199	754,111	476,809	5,295,867
MONTANA-----	773,888	14,698	56,455	33,360	276,401
IDAHO-----	147,517	87,889	76,519	39,049	345,974
WYOMING-----	2/	2/	2/	2/	2/
COLORADO-----	446,326	24,132	58,248	27,477	556,183
NEW MEXICO-----	151,401	0	52,440	25,446	226,285
ARIZONA-----	529,326	2/	2/	2/	553,570
UTAH-----	259,592	31,390	2/	2/	337,617
NEVADA-----	2/	0	0	0	2/
MOUNTAIN-----	1,736,081	170,609	267,272	157,896	2,351,859
WASHINGTON-----	705,426	2/	2/	2/	857,396
OREGON-----	477,867	16,901	119,456	45,737	660,165
CALIFORNIA-----	3,637,474	2/	2/	2	4,622,127
PACIFIC-----	5,020,767	76,205	833,505	227,203	6,139,681
47 STATES-----	42,173,256	4,310,190	6,387,664	4,135,741	57,006,877

1/ SUMS OF TONS ARE LESS THAN SHOWN IN THE TOTALS, BECAUSE OF ROUNDING.
2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 43.--FORMULA FEED FROM PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS WHERE FEED MANUFACTURING WAS THE MAJOR GROSS INCOME SOURCE, BY TYPE OF FEED, BY STATES AND REGIONS, 1969
(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	STARTER-GROWER, LAYER-BREEDER	BROILER	TURKEY	DAIRY	BEEF AND SHEEP	HOG	ALL OTHER	TOTAL 1/
NUMBER								
MAINE-----	9	5	2/	3	2/	2/	2/	10
NEW HAMPSHIRE-----	5	3	2/	5	3	2/	5	5
VERMONT-----	6	3	5	11	2/	6	6	11
MASSACHUSETTS-----	10	6	7	9	5	7	7	20
CONNECTICUT-----	5	3	2/	3	0	2/	2/	5
NEW YORK-----	84	42	45	118	52	75	65	124
NEW JERSEY-----	13	7	6	11	7	6	11	15
PENNSYLVANIA-----	103	58	66	114	75	99	89	118
DELAWARE-----	8	7	5	5	2/	8	2/	8
MARYLAND-----	20	19	13	19	17	19	18	26
NORTHEAST-----	263	153	152	298	165	227	208	332
MICHIGAN-----	32	20	24	33	28	32	27	36
WISCONSIN-----	62	43	45	89	58	83	53	95
MINNESOTA-----	76	29	47	78	63	80	54	88
LAKE STATES-----	190	92	116	200	149	195	134	219
OHIO-----	61	40	42	62	54	60	50	65
INDIANA-----	79	55	57	76	74	85	65	88
ILLINOIS-----	67	33	33	66	69	77	54	80
IOWA-----	160	69	78	150	162	172	109	173
MISSOURI-----	56	32	32	67	63	68	49	78
CORN BELT-----	423	229	242	421	422	462	327	484
NORTH DAKOTA-----	14	4	4	15	15	15	9	15
SOUTH DAKOTA-----	24	7	12	22	25	25	18	26
NEBRASKA-----	57	22	35	62	73	68	51	76
KANSAS-----	56	25	29	54	67	63	41	69
NORTHERN PLAINS-----	151	58	80	153	180	171	119	186
VIRGINIA-----	38	21	21	35	32	40	26	40
WEST VIRGINIA-----	4	3	2/	4	4	4	4	5
NORTH CAROLINA-----	76	45	41	65	48	79	62	91
KENTUCKY-----	18	11	2/	24	19	25	18	26
TENNESSEE-----	32	22	18	34	29	34	30	40
APPALACHIAN-----	168	102	93	162	132	182	140	202
SOUTH CAROLINA-----	16	10	8	15	12	19	12	20
GEORGIA-----	79	48	39	63	62	73	59	95
FLORIDA-----	26	12	13	30	26	27	23	40
ALABAMA-----	31	22	11	28	26	32	22	43
SOUTHEAST-----	152	92	71	136	126	151	116	198
MISSISSIPPI-----	30	16	11	35	33	34	26	44
ARKANSAS-----	34	25	21	23	28	26	19	43
LOUISIANA-----	12	7	5	22	19	16	15	27
DELTA STATES-----	76	48	37	80	80	76	60	114
OKLAHOMA-----	29	19	19	37	40	40	31	42
TEXAS-----	96	75	64	129	157	131	93	172
SOUTHERN PLAINS-----	125	94	83	166	197	171	124	214
MONTANA-----	21	9	2/	15	25	24	18	26
IDaho-----	20	14	12	23	23	20	19	26
WYOMING-----	2/	0	2/	2/	2/	2/	2/	2/
COLORADO-----	19	8	12	22	27	24	20	28
NEW MEXICO-----	13	5	9	17	19	19	16	20
ARIZONA-----	2/	2/	2/	5	11	4	7	11
UTAH-----	15	10	15	14	13	14	14	19
NEVADA-----	2/	2/	2/	2/	2/	2/	2/	2/
MOUNTAIN-----	96	49	60	99	122	109	97	134
WASHINGTON-----	28	15	9	31	28	27	18	35
OREGON-----	26	19	16	27	27	26	26	33
CALIFORNIA-----	75	52	47	81	67	58	63	113
PACIFIC-----	129	86	72	139	122	111	107	181
47 STATES-----	1,773	1,001	1,006	1,854	1,695	1,855	1,432	2,264

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS MANUFACTURE MORE THAN ONE TYPE OF FEED.

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 44.--FORMULA FEED FROM PRIMARY MANUFACTURING: PRODUCTION OF ESTABLISHMENTS WHERE FEED MANUFACTURING WAS THE MAJOR GROSS INCOME SOURCE, BY TYPE OF FEED, BY STATES AND REGIONS, 1969

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	STARTER-GROWER, LAYER, BREEDER	BROILER	TURKEY	DAIRY	BEEF AND SHEEP	HOG	ALL OTHER	TOTAL
-----TONS-----								
MAINE-----	243,553	224,266	1/	14,380	1/	1/	1/	483,993
ME RHAMPSHIRE-----	58,407	1,210	1/	73,660	1/	1/	25,765	163,962
VERMONT-----	90,153	101,725	1/	537,306	1/	4,583	54,365	791,361
MASSACHUSETTS-----	69,597	23,691	5,470	83,666	2,126	2,030	19,045	205,645
CONNECTICUT-----	176,444	14,443	1/	60,142	0	1/	1/	257,264
NEW YORK-----	372,130	129,433	22,366	1,324,730	237,154	25,285	134,876	2,245,974
NEW JERSEY-----	186,009	20,697	2,886	90,001	4,334	10,518	27,405	341,844
PENNSYLVANIA-----	486,819	252,570	40,531	637,859	52,456	90,944	119,023	1,681,222
DELAWARE-----	54,784	272,017	6,463	26,418	1/	18,090	1/	395,871
MARYLAND-----	304,623	547,893	2,462	115,690	9,894	20,812	27,969	829,543
NORTHEAST-----	1,842,539	1,589,139	89,995	2,963,632	312,747	174,351	424,296	7,396,679
MICHIGAN-----	98,359	3,313	19,430	64,243	20,001	39,799	13,174	258,319
WISCONSIN-----	110,751	71,572	68,265	316,325	40,956	140,972	45,683	794,926
MINNESOTA-----	215,104	46,764	169,718	284,106	115,451	309,724	54,733	1,195,600
LAKE STATES-----	424,214	122,049	257,413	664,674	176,408	490,495	113,592	2,248,845
OHIO-----	224,084	39,955	34,828	250,370	93,269	258,820	98,995	1,001,321
INDIANA-----	196,635	19,369	72,454	116,996	140,307	402,184	65,842	1,013,787
ILLINOIS-----	228,933	6,213	31,907	211,519	388,437	1,348,486	62,649	2,279,944
IOWA-----	210,893	12,631	93,562	192,120	694,881	1,406,477	115,859	2,726,423
MISSOURI-----	151,705	25,210	93,957	327,061	345,842	561,120	67,884	1,572,819
CORN BELT-----	1,012,250	105,378	326,748	1,057,864	1,662,736	5,978,087	411,229	8,594,294
NORTH DAKOTA-----	32,597	77	326	6,348	76,339	58,875	6,351	180,913
SOUTH DAKOTA-----	44,202	114	11,682	20,613	201,919	129,074	25,633	433,437
NEBRASKA-----	101,867	3,063	12,580	53,554	668,505	518,502	40,371	1,396,382
KANSAS-----	63,189	698	14,095	50,637	676,147	163,681	70,259	1,038,706
NORTHERN PLAINS-----	241,855	3,892	38,683	131,352	1,622,910	870,132	142,614	3,051,438
VIRGINIA-----	127,624	252,715	128,482	131,250	21,254	57,851	28,283	787,459
WEST VIRGINIA-----	1,183	15,012	1/	3,782	1/	2,237	968	23,692
NORTH CAROLINA-----	552,075	817,541	181,866	163,515	31,100	257,013	84,018	2,087,148
KENTUCKY-----	78,192	67,763	1/	160,137	1/	79,794	19,368	439,909
TENNESSEE-----	375,235	461,090	21,735	448,582	88,898	295,248	67,016	1,757,804
APPALACHIAN-----	1,134,309	1,614,121	351,491	907,266	157,028	732,143	199,653	5,096,011
SOUTH CAROLINA-----	112,608	92,012	6,383	50,541	8,733	27,393	3,245	302,915
GEORGIA-----	1,047,347	1,510,396	34,914	250,997	95,221	275,436	84,907	3,305,218
FLORIDA-----	382,023	153,826	5,294	206,014	65,497	35,036	47,668	895,358
ALABAMA-----	361,493	649,535	57,032	54,912	31,793	96,724	23,606	1,475,095
SOUTHEAST-----	1,903,471	2,605,769	105,623	566,464	201,244	434,589	159,426	5,976,586
MISSISSIPPI-----	378,516	439,883	9,245	196,448	82,389	88,740	51,578	1,246,799
ARKANSAS-----	566,411	937,461	146,132	133,148	117,761	38,201	61,196	2,000,340
LOUISIANA-----	77,842	214,118	2,179	179,388	73,293	21,954	53,920	622,696
DELTA STATES-----	1,022,769	1,591,492	157,556	508,984	273,443	148,895	166,694	3,869,833
OKLAHOMA-----	75,024	9,121	32,900	120,634	341,123	98,761	115,476	793,039
TEXAS-----	382,725	355,502	185,706	749,678	1,455,687	320,007	219,643	3,668,958
SOUTHERN PLAINS-----	457,759	364,623	218,606	870,312	1,796,810	418,768	335,119	4,461,997
MONTANA-----	22,608	1/	1/	19,744	141,899	22,701	18,702	229,831
IDAHO-----	17,886	17,400	3,872	49,812	95,819	8,436	30,848	224,073
WYOMING-----	1/	1/	1/	1/	1/	1/	1/	1/
COLORADO-----	37,501	967	17,106	38,055	359,347	21,495	32,071	506,562
NEW MEXICO-----	5,145	440	1,826	25,751	140,905	12,789	15,983	202,839
ARIZONA-----	1/	1/	1/	72,961	382,524	20,315	24,504	536,702
UTAH-----	37,971	7,475	102,910	47,494	55,581	9,901	22,242	283,574
NEVADA-----	1/	1/	1/	1/	1/	1/	1/	1/
MOUNTAIN-----	156,510	30,562	128,453	262,245	1,195,696	96,625	150,059	2,020,154
WASHINGTON-----	209,137	69,353	25,759	330,575	120,545	17,374	34,064	807,307
OREGON-----	117,314	84,721	49,562	156,122	111,908	18,109	55,675	595,411
CALIFORNIA-----	1,548,672	334,773	234,573	1,729,302	374,477	36,395	150,753	4,428,947
PACIFIC-----	1,877,123	489,347	329,896	2,215,999	606,930	71,878	240,492	5,831,665
47 STATES-----	10,072,799	8,516,372	2,004,464	10,188,774	8,005,952	7,415,967	2,363,174	40,547,502

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

TABLE 45.--COMPLETE FEED FROM PRIMARY MANUFACTURING: NUMBER OF ESTABLISHMENTS WHERE FEED MANUFACTURING WAS THE MAJOR GROSS INCOME SOURCE, BY TYPE OF FEED, BY STATES AND REGIONS, 1969 (CONTINUED)

(ESTABLISHMENTS PRODUCING 1,000 TONS OR MORE OF FORMULA FEED)

STATE AND REGION	STARTER-GROWER, LAYER-BREEDER	BROILER	TURKEY	DAIRY	BEEF AND SHEEP	HOC	ALL OTHER	TOTAL 1/
-----NUMBER-----								
MAINE-----	9	5	2/	3	2/	2/	2/	10
NEW HAMPSHIRE-----	5	3	2/	5	3	2/	5	5
VERMONT-----	6	3	5	11	2/	6	6	11
MASSACHUSETTS-----	10	6	7	9	5	7	7	10
CONNECTICUT-----	5	3	2/	3	0	2/	2/	5
NEW YORK-----	84	42	45	117	50	73	64	123
NEW JERSEY-----	13	7	6	10	7	6	11	15
PENNSYLVANIA-----	100	56	65	112	60	98	88	116
DELAWARE-----	8	7	5	5	3	8	4	8
MARYLAND-----	20	19	13	19	17	18	18	26
NORTHEAST-----	260	151	151	294	146	223	206	329
MICHIGAN-----	32	20	24	33	26	31	27	36
WISCONSIN-----	79	40	44	86	53	80	50	93
MINNESOTA-----	71	28	43	69	52	75	49	85
LAKE STATES-----	182	88	111	188	131	186	126	214
OHIO-----	59	39	40	58	47	55	49	63
INDIANA-----	76	53	57	71	62	80	63	85
ILLINOIS-----	61	28	30	56	57	71	44	75
IOWA-----	139	62	72	107	118	152	86	153
MISSOURI-----	55	31	32	64	57	65	48	75
CORN BELT-----	390	213	231	356	341	423	290	451
NORTH DAKOTA-----	14	4	4	15	15	15	8	15
SOUTH DAKOTA-----	24	7	11	20	24	25	16	26
NEBRASKA-----	54	21	33	55	58	65	44	69
KANSAS-----	54	24	29	51	56	58	40	65
NORTHERN PLAINS-----	146	56	77	141	153	163	108	175
VIRGINIA-----	37	18	21	34	30	39	25	39
WEST VIRGINIA-----	4	2/	2/	4	3	4	4	5
NORTH CAROLINA-----	73	35	40	64	43	76	62	89
KENTUCKY-----	18	2/	2/	24	16	23	16	25
TENNESSEE-----	31	17	18	33	26	33	30	39
APPALACHIAN-----	163	79	92	159	118	175	137	197
SOUTH CAROLINA-----	16	10	8	15	12	19	12	20
GEORGIA-----	77	47	38	61	59	72	57	84
FLORIDA-----	25	12	13	30	26	27	23	39
ALABAMA-----	30	22	11	28	26	31	22	43
SOUTHEAST-----	148	91	70	134	123	149	114	196
MISSISSIPPI-----	30	16	11	35	33	33	25	44
ARKANSAS-----	34	25	21	23	28	26	19	43
LOUISIANA-----	12	7	5	22	19	16	15	27
DELTA STATES-----	76	46	37	80	80	75	59	114
OKLAHOMA-----	27	17	19	36	38	39	31	41
TEXAS-----	94	74	64	127	152	127	92	167
SOUTHERN PLAINS-----	121	91	83	163	190	166	123	208
MONTANA-----	19	8	2/	13	24	23	17	26
IDAHO-----	19	14	12	20	21	19	17	25
WYOMING-----	2/	0	2/	2/	2/	2/	2/	2/
COLORADO-----	19	8	12	21	24	23	20	28
NEW MEXICO-----	13	5	9	16	19	19	16	20
ARIZONA-----	4	2/	2/	5	10	4	7	11
UTAH-----	15	10	15	14	13	14	14	19
NEVADA-----	2/	2/	2/	2/	2/	2/	2/	2/
MOUNTAIN-----	93	48	60	92	115	106	94	133
WASHINGTON-----	28	15	9	31	28	27	18	35
OREGON-----	26	19	16	26	27	25	26	33
CALIFORNIA-----	72	51	46	78	64	55	60	108
PACIFIC-----	126	85	71	135	119	107	104	176
47 STATES-----	1,705	950	983	1,742	1,518	1,773	1,361	2,193

1/ SUMS OF NUMBERS OF ESTABLISHMENTS ARE GREATER THAN SHOWN IN THE TOTALS, BECAUSE MANY ESTABLISHMENTS MANUFACTURE MORE THAN ONE TYPE OF FEED.

2/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

Table 46.—Complete feed from primary manufacturing Production of establishments where feed manufacturing was the major gross income source, by type of feed, by States and regions, 1969

(Establishments producing 1,000 tons or more of formula feed)

State and region	Starter-grower, layer-breeder	Broiler	Turkey	Dairy	Beef and sheep	Hog	All other	Total
	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
Maine	243,448	274,444	1/	14,007	1/	1/	1/	463,321
New Hampshire	58,341	1,210	1/	73,270	2,471	1/	1/	163,566
Vermont	90,094	101,725	1/	535,273	1/	4,579	1/	780,211
Massachusetts	69,095	23,615	5,419	81,784	1,861	1,644	15,126	302,316
Connecticut	176,444	14,445	1/	59,958	0	1/	1/	257,080
New York	367,795	126,965	21,965	1,265,441	233,986	15,219	129,055	2,161,427
New Jersey	182,971	26,620	7,631	80,320	1,855	7,023	27,301	324,726
Pennsylvania	438,167	245,547	34,626	469,297	20,827	56,112	113,904	1,392,574
Delaware	54,230	269,495	6,112	16,674	3,569	14,630	13,423	380,533
Maryland	98,938	347,600	3,290	161,046	7,952	14,003	27,566	600,395
Northeast	1,274,526	1,577,667	82,314	2,717,070	275,065	117,213	403,377	4,947,249
Michigan	70,639	2,005	14,434	29,343	4,551	17,911	10,885	149,768
Wisconsin	73,430	65,655	58,356	176,259	10,654	64,310	25,329	477,033
Minnesota	136,857	44,771	137,365	175,192	15,054	122,407	29,047	667,691
Lake States	280,921	112,434	210,295	318,794	34,259	204,525	66,261	1,279,492
Ohio	162,864	39,257	25,076	160,965	25,342	105,005	96,774	623,526
Indiana	101,700	15,762	56,769	61,162	45,601	167,817	57,152	508,503
Illinois	121,762	4,193	15,150	90,285	76,472	550,457	33,589	896,908
Iowa	107,129	5,764	56,697	66,236	149,817	531,233	45,574	964,702
Missouri	156,787	74,436	88,667	306,329	273,276	424,614	62,518	1,730,846
Corn Belt	630,242	92,412	247,105	652,002	593,560	1,762,374	294,644	4,322,485
North Dakota	29,651	74	210	4,245	56,590	47,782	3,603	147,353
South Dakota	25,160	101	3,543	7,787	133,089	44,250	13,644	207,594
Nebraska	69,523	2,675	10,017	26,678	215,368	179,160	25,910	526,331
Kansas	50,444	666	9,771	41,501	216,052	86,745	30,862	538,043
Northern Plains	171,600	3,516	25,541	87,211	701,099	359,937	72,217	1,414,321
Virginia	111,675	249,161	127,200	112,915	16,247	57,843	27,855	702,837
West Virginia	1,109	1/	1/	3,320	5,8	1,820	963	21,481
North Carolina	505,476	615,761	155,635	145,653	25,480	152,011	82,852	1,862,926
Kentucky	71,651	1/	1/	143,766	7,518	48,815	19,057	370,282
Tennessee	133,758	429,923	15,774	421,627	60,965	201,236	64,904	1,537,745
Appalachian	1,013,672	1,576,830	315,400	627,151	110,358	466,723	185,639	4,515,773
South Carolina	84,628	80,149	6,115	46,153	7,721	16,393	3,233	253,392
Georgia	932,102	1,467,343	32,542	245,027	73,301	165,463	84,286	3,021,096
Florida	358,604	152,226	5,000	203,442	51,888	29,860	47,037	845,055
Alabama	151,570	848,616	56,847	13,672	30,930	89,754	23,576	1,456,962
Southeast	1,729,904	2,568,334	101,499	546,304	165,640	306,490	156,134	5,575,505
Mississippi	366,165	434,661	9,213	194,347	79,063	79,562	47,158	1,210,373
Arkansas	560,222	906,304	145,492	132,702	117,072	36,570	117,307	1,959,479
Louisiana	73,467	207,546	2,172	178,541	71,705	20,801	51,776	608,010
Delta States	999,868	1,548,511	156,877	505,790	267,840	136,933	162,043	3,777,662
Oklahoma	67,905	7,932	32,425	116,517	296,569	89,501	115,125	725,977
Texas	321,605	329,051	157,356	724,533	1,272,835	272,335	213,625	3,291,372
Southern Plains	389,510	337,013	189,786	841,050	1,569,404	361,836	328,750	4,017,349
Montana	18,525	1/	1/	13,691	113,277	15,562	13,423	178,068
Nebraska	16,466	17,390	3,690	45,585	74,346	5,982	27,081	190,540
Wyoming	1/	1/	1/	1/	1/	1/	1/	1/
Colorado	34,394	952	17,040	34,306	272,682	12,917	30,010	402,313
New Mexico	4,872	433	1,821	24,114	124,316	12,073	15,678	183,311
Arizona	32,507	1/	1/	59,515	159,418	16,877	24,178	474,754
Utah	37,190	7,466	162,906	46,065	44,277	9,313	21,851	269,070
Nevada	1/	1/	1/	1/	1/	1/	1/	1/
Mountain	145,125	29,978	128,143	231,621	985,796	73,644	137,866	1,732,235
Washington	207,571	69,519	23,065	327,479	108,038	13,011	33,160	761,643
Oregon	116,593	84,286	49,166	153,312	97,045	16,425	55,020	573,847
California	1,542,530	322,110	241,795	1,651,754	336,343	51,679	140,654	4,268,565
Pacific	1,866,694	475,915	314,026	2,132,045	543,426	61,315	228,834	5,674,255
47 States	9,014,322	6,322,607	1,768,982	8,886,038	5,244,669	3,872,943	2,049,965	39,159,526

1/ DATA NOT GIVEN TO AVOID DISCLOSURE OF INDIVIDUAL OPERATIONS.

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