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# The University of Georgia

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**Center for Agribusiness and Economic Development**

**College of Agricultural and Environmental Sciences**

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## **Economic Importance of Food and Fiber in the Georgia Economy, 2008**

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## **Economic Importance of Food and Fiber in the Georgia Economy, 2008**

### **Executive Summary**

Economic activity that begins with production of food and fiber products forms an integrated system that impacts the state economy. The system includes production inputs, direct processing, further processing, distribution, and retail consumption. The food and fiber system is composed of industries involved in agricultural and forestry production, including support services; food and fiber processing and manufacturing; production inputs; food retail and wholesale trade; and food services. Employment in the total food and fiber sector of 733,668 employees is more than any other sector in the economy. Sales of \$112.6 billion rank the total food and fiber sector first among all Georgia economic sectors. The food and drink manufacturing sector has more employment and output value than any other Georgia manufacturing sector. Overall, food and fiber accounts for 13.6% of employment, 15.0% of output, and 10.5% of value added in the Georgia economy for 2008.

## **Economic Importance of Food and Fiber in the Georgia Economy, 2008<sup>1</sup>**

Food and fiber products are necessities for Georgia consumers. Economic activity that begins with production of food and fiber products forms an integrated system that impacts the state economy. The system includes production inputs, direct processing, further processing, distribution, and retail consumption. This report has two sections: 1) definition of components included in the food and fiber system, and 2) quantification of contributions to the state economy in terms of employment, output, and value added.

### **Economic Sectors of the Georgia Food and Fiber System**

Sector data applied in this analysis are from the Minnesota IMPLAN Group, Inc. (MIG 1997) for 2008. Previous studies serve as a guide in defining sectors included in the Georgia food and fiber system. Farm and farm-related employment are defined by USDA, ERS as industries having 50% or more of their work force employed in providing goods and services necessary to satisfy the final demand for agricultural products. Indirect agribusinesses have between 32% and 50% of employment providing goods and services related to agricultural products. Industries are aggregated into groups related to farm production; agricultural services, forestry, and fishing; agricultural input industries; agricultural processing and marketing industries; wholesale and retail trade of agricultural products; and indirect agribusiness (USDA, ERS 2005). Previous analysis of the Georgia food and fiber economy by Kriesel and Jones (1998) is patterned from a study by Sporleder, Hushak, and Pai (1990). Kriesel and Jones determined that the food and fiber system composed 16% of total employment in the 1995 Georgia economy. Food and fiber made up 16% of output in terms of sales value and 12% of value added.

This report follows elements of previous studies (USDA, ERS 2005, Kriesel and Jones 1998) while proposing a revised listing of sectors to include in the food and fiber system. Categories of the food and fiber system are: 1) agricultural and forestry production, including support services, 2) food and fiber processing and manufacturing, 3) production inputs, 4) food retail and wholesale trade, and 5) food services. Food and fiber employment, output (sales), and value added are derived from the IMPLAN sectoring scheme. Food commodities are regarded as food throughout the system, from production to final consumption. In contrast, fiber commodities are considered as fiber only up to a point in processing and manufacturing. Beyond this point, fiber commodities are viewed as a finished product beyond the stage of a fiber commodity. For example, from the broad sector of textiles, only fabrics and leather are included as fiber commodities. Included in fiber manufacturing are yarn and thread mills, as well as fabric mills. Manufacturing processes beyond fabric manufacturing are excluded. Leather tanning and product manufacturing are included, but footwear manufacturing is excluded. Wood products are excluded as fiber for the manufacturing sectors of manufactured or mobile homes, prefabricated wood buildings, and furniture. Paper products exclude paper office supplies, envelopes, stationery, and other converted paper manufacturing. Wholesale and retail trade, as well as warehousing and storage of fiber products, is not included as part of the food and fiber system. A listing of IMPLAN sectors included in the food and fiber system is presented in Table 1.

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<sup>1</sup> Based on earlier Center for Agribusiness and Economic Development Report, Economic Importance of Food and Fiber, by Archie Flanders, Sharon P. Kane, and John McKissick, May 2008, CR-08-07. Report from that publication is based on 2006 IMPLAN data and is available online at <http://www.caed.uga.edu/publications/2008/pdf/CR-08-07.pdf>.

Appendix 1 is the complete IMPLAN sectoring scheme. The IMPLAN sector 326 for gasoline stations includes gasoline stations with convenience stores (U.S. Census Bureau, NAICS 2007).

Table 1. IMPLAN Sectors Included in the Food and Fiber System

IMPLAN		IMPLAN	
Code	Sector	Code	Sector
1	Oilseed Farming	64	Tortilla Manuf.
2	Grain Farming	65	Snack Food Manuf.
3	Vegetable & Melon Farming	66	Coffee & Tea Manuf.
4	Tree Nut Farming	67	Flavoring Syrup & Concentrate Manuf.
5	Fruit Farming	68	Seasoning & Dressing Manuf.
6	Greenhouse, Nursery, & Floriculture	69	All Other Food Manuf.
7	Tobacco Farming	70	Soft Drink & Ice Manuf.
8	Cotton Farming	71	Breweries
9	Sugarcane & Sugar Beet Farming	72	Wineries
10	All Other Crop Farming	73	Distilleries
11	Cattle Ranching & Farming	74	Tobacco Product Manuf.
12	Dairy Cattle & Milk Production	75	Fiber, Yarn, & Thread Mills
13	Poultry & Egg Production	76	Broadwoven Fabric Mills
14	Animal Production, Exc. Cattle & Poultry	77	Narrow Fabric Mills & Schiffli Embroidery
15	Forest Nurseries, Forest Products, & Timber	92	Leather & Hide Tanning
16	Commercial Logging	94	Other Leather & Allied Product Manuf.
17	Commercial Fishing	95	Sawmills & Wood Preservation
18	Commercial Hunting & Trapping	96	Veneer & Plywood Manuf.
19	Support Activities for Agriculture & Forest	97	Engin. Wood Member & Truss Manuf.
41	Dog & Cat Food Manuf.	98	Reconstituted Wood Product Manuf.
42	Other Animal Food Manuf.	99	Wood Windows & Door Manuf.
43	Flour Milling	100	Wood Container & Pallet Manuf.
45	Soybean & Other Oilseed Processing	103	Miscellaneous Wood Product Manuf.
46	Fats & Oils Refining & Blending	104	Pulp Mills
47	Breakfast Cereal Manuf.	105	Paper Mills
48	Sugar Manuf.	106	Paperboard Mills
50	Confectionery Manuf. from Cocoa Beans	107	Paperboard Container Manuf.
51	Confectionery Manuf. from Purchased Chocolate	108	Coated & Laminated Paper & Packaging
52	Nonchocolate Confectionery Manuf.	109	Other Paper Bag, Coated & Treated Paper
53	Frozen Food Manuf.	130	Fertilizer Manuf.
54	Fruit & Vegetable Manuf.	131	Pesticide & Other Ag. Chemical Manuf.
55	Fluid Milk & Butter Manuf.	203	Farm Machinery & Equipment Manuf.
56	Cheese Manuf.	204	Lawn & Garden Equipment Manuf.
57	Dry, Condensed, & Evaporated Dairy Products	207	Other Industrial Machinery Manuf.
58	Ice Cream & Frozen Dessert Manuf.	319	Wholesale Trade*
59	Animal, Except Poultry Slaughtering	324	Food & Beverage Stores*
60	Poultry Processing	326	Gasoline Stations*
61	Seafood Product Preparation & Packaging	329	General Merchandise Stores*
62	Bread & Bakery Product, Except Frozen, Manuf.	340	Warehousing and storage*
63	Cookie & Cracker Manuf.	388	Landscape Services*
64	Tortilla Manuf.	413	Food Service & Drinking Places
65	Snack Food Manuf.		

\* IMPLAN sectors 319, 324, 326, 329, 340, and 388 are adjusted to derive the food portion by applying data from the 2007 Economic Census (US Census Bureau 2009).

Table 2 presents employment, output, and value added of the Georgia food and fiber system. Food warehousing and storage is aggregated with retail and wholesale trade. Value added is defined as final sales less the cost of materials purchased to produce output (Shaffer, Deller, and Marcouiller 2004). Value added is also referred to as gross state product. Employment, output, and value added for industries outside of the food and fiber system are included in Table 2. Employment in the total food and fiber sector of 733,668 employees is more than any other sector in the economy. Sales of \$112.6 billion rank the total food and fiber sector first among all Georgia economic sectors. Total value added of \$41.5 billion is the third greatest sector after 1) the aggregate sector of financial, real estate, and rental services and 2) wholesale and retail trade for other than food. Food and fiber accounts for 13.6% of employment, 15.0% of output, and 10.5% of value added in the Georgia economy. Food and drink manufacturing has more employment and output than any other Georgia manufacturing sector. Food and drink manufacturing employment of 70,535 jobs is 35% greater than textile manufacturing with 52,110 jobs, the next highest manufacturing sector. Output value is \$44.4 billion for food and drink manufacturing, with the next closest category (for manufacturing) of textile manufacturing at \$15.7 billion. Within the food and fiber system, the food services component has the most employment with 336,141 jobs. Food and drink manufacturing has the greatest output and value added within the food and fiber sector.

### **Summary**

The food and fiber system is composed of industries involved in agricultural and forestry production, including support services; food and fiber processing and manufacturing; production inputs; food retail and wholesale trade; and food services. Employment in the total food and fiber sector of 733,668 employees is more than any other sector in the economy. Sales of \$112.6 billion rank the total food and fiber sector first among all Georgia economic sectors. The food and drink manufacturing sector has more employment and output value than any other Georgia manufacturing sector. Overall, food and fiber accounts for 13.6% of employment, 15.0% of output, and 10.5% of value added in the Georgia economy for 2008.

**Table 2. Georgia Employment, Output, and Value Added by Industrial Sector, 2008**

Sector	Employment #	Output	Value Added - \$ Million -
Agricultural & Forestry Products	118,857	13,075	4,479
Food & Drink Manufacturing	70,535	44,400	13,117
Fabric & Leather Manufacturing	21,207	4,632	1,044
Wood & Paper Manufacturing	38,327	13,500	3,337
Production Inputs	7,203	3,920	784
Food Retail & Wholesale Trade	141,398	14,502	9,455
Food Services	336,141	18,525	9,296
<b>Total Food &amp; Fiber</b>	<b>733,668</b>	<b>112,553</b>	<b>41,512</b>
<b>Food &amp; Fiber Percent of Economy</b>	<b>13.6%</b>	<b>15.0%</b>	<b>10.5%</b>
Mining	7,252	2,058	1,019
Utilities	20,499	17,096	12,230
Construction	368,833	45,338	16,805
Textiles Manufacturing	52,110	15,706	3,896
Printing	24,288	5,245	2,069
Petroleum & Chemicals Manufacturing	20,691	21,246	5,071
Nonmetals Manufacturing	44,121	12,248	4,035
Metals Manufacturing	34,434	11,956	3,131
Machinery & Equipment Manufacturing	17,101	6,793	1,598
Electronics Manufacturing	27,732	12,550	3,637
Automotive Manufacturing	18,255	7,504	1,587
Aircraft Manufacturing	15,406	14,399	2,605
Other Transportation Manufacturing	4,613	2,349	415
Miscellaneous Manufacturing	30,209	6,082	2,683
Wholesale & Retail Trade	651,760	68,474	45,824
Transportation & Warehousing	207,792	29,245	14,962
Information Services	124,687	58,894	25,639
Financial, Real Estate, & Rental Services	471,358	89,333	56,921
Professional Services	352,396	47,891	29,309
Health & Social Services	524,860	44,142	27,162
Other Support Services	492,553	39,168	24,662
Other Personal Services	340,375	19,147	9,380
State Government	592,904	36,435	32,737
Federal Government	217,494	25,364	24,666
<b>Total Non-Food &amp; Fiber</b>	<b>4,661,723</b>	<b>638,663</b>	<b>352,044</b>
<b>Total Georgia Economy</b>	<b>5,395,391</b>	<b>751,216</b>	<b>393,556</b>

Source: Original data: Minnesota IMPLAN Group, Inc.(MIG), IMPLAN System (2008 data and software), 1725 Tower Drive west, Suite 140, Stillwater, MN 55082, www.implan.com, 1997. Calculations by authors.

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
1	Oilseed farming
2	Grain farming
3	Vegetable and melon farming
4	Fruit farming
5	Tree nut farming
6	Greenhouse, nursery, and floriculture production
7	Tobacco farming
8	Cotton farming
9	Sugarcane and sugar beet farming
10	All other crop farming
11	Cattle ranching and farming
12	Dairy cattle and milk production
13	Poultry and egg production
14	Animal production, except cattle and poultry and eggs
15	Forestry, forest products, and timber tract production
16	Commercial logging
17	Commercial Fishing
18	Commercial hunting and trapping
19	Support activities for agriculture and forestry
20	Extraction of oil and natural gas
21	Mining coal
22	Mining iron ore
23	Mining copper, nickel, lead, and zinc
24	Mining gold, silver, and other metal ore
25	Mining and quarrying stone
26	Mining and quarrying sand, gravel, clay, and ceramic and refractory minerals
27	Mining and quarrying other nonmetallic minerals
28	Drilling oil and gas wells
29	Support activities for oil and gas operations
30	Support activities for other mining
31	Electric power generation, transmission, and distribution
32	Natural gas distribution
33	Water, sewage and other treatment and delivery systems
34	Construction of new nonresidential commercial and health care structures
35	Construction of new nonresidential manufacturing structures
36	Construction of other new nonresidential structures
37	Construction of new residential permanent site single- and multi-family structures
38	Construction of other new residential structures
39	Maintenance and repair construction of nonresidential structures
40	Maintenance and repair construction of residential structures
41	Dog and cat food manufacturing
42	Other animal food manufacturing
43	Flour milling and malt manufacturing
44	Wet corn milling
45	Soybean and other oilseed processing
46	Fats and oils refining and blending

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
47	Breakfast cereal manufacturing
48	Sugar cane mills and refining
49	Beet sugar manufacturing
50	Chocolate and confectionery manufacturing from cacao beans
51	Confectionery manufacturing from purchased chocolate
52	Nonchocolate confectionery manufacturing
53	Frozen food manufacturing
54	Fruit and vegetable canning, pickling, and drying
55	Fluid milk and butter manufacturing
56	Cheese manufacturing
57	Dry, condensed, and evaporated dairy product manufacturing
58	Ice cream and frozen dessert manufacturing
59	Animal (except poultry) slaughtering, rendering, and processing
60	Poultry processing
61	Seafood product preparation and packaging
62	Bread and bakery product manufacturing
63	Cookie, cracker, and pasta manufacturing
64	Tortilla manufacturing
65	Snack food manufacturing
66	Coffee and tea manufacturing
67	Flavoring syrup and concentrate manufacturing
68	Seasoning and dressing manufacturing
69	All other food manufacturing
70	Soft drink and ice manufacturing
71	Breweries
72	Wineries
73	Distilleries
74	Tobacco product manufacturing
75	Fiber, yarn, and thread mills
76	Broadwoven fabric mills
77	Narrow fabric mills and schiffli machine embroidery
78	Nonwoven fabric mills
79	Knit fabric mills
80	Textile and fabric finishing mills
81	Fabric coating mills
82	Carpet and rug mills
83	Curtain and linen mills
84	Textile bag and canvas mills
85	All other textile product mills
86	Apparel knitting mills
87	Cut and sew apparel contractors
88	Mens and boys cut and sew apparel manufacturing
89	Womens and girls cut and sew apparel manufacturing
90	Other cut and sew apparel manufacturing
91	Apparel accessories and other apparel manufacturing
92	Leather and hide tanning and finishing

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
93	Footwear manufacturing
94	Other leather and allied product manufacturing
95	Sawmills and wood preservation
96	Veneer and plywood manufacturing
97	Engineered wood member and truss manufacturing
98	Reconstituted wood product manufacturing
99	Wood windows and doors and millwork manufacturing
100	Wood container and pallet manufacturing
101	Manufactured home (mobile home) manufacturing
102	Prefabricated wood building manufacturing
103	All other miscellaneous wood product manufacturing
104	Pulp mills
105	Paper mills
106	Paperboard Mills
107	Paperboard container manufacturing
108	Coated and laminated paper, packaging paper and plastics film manufacturing
109	All other paper bag and coated and treated paper manufacturing
110	Stationery product manufacturing
111	Sanitary paper product manufacturing
112	All other converted paper product manufacturing
113	Printing
114	Support activities for printing
115	Petroleum refineries
116	Asphalt paving mixture and block manufacturing
117	Asphalt shingle and coating materials manufacturing
118	Petroleum lubricating oil and grease manufacturing
119	All other petroleum and coal products manufacturing
120	Petrochemical manufacturing
121	Industrial gas manufacturing
122	Synthetic dye and pigment manufacturing
123	Alkalies and chlorine manufacturing
124	Carbon black manufacturing
125	All other basic inorganic chemical manufacturing
126	Other basic organic chemical manufacturing
127	Plastics material and resin manufacturing
128	Synthetic rubber manufacturing
129	Artificial and synthetic fibers and filaments manufacturing
130	Fertilizer manufacturing
131	Pesticide and other agricultural chemical manufacturing
132	Medicinal and botanical manufacturing
133	Pharmaceutical preparation manufacturing
134	In-vitro diagnostic substance manufacturing
135	Biological product (except diagnostic) manufacturing
136	Paint and coating manufacturing
137	Adhesive manufacturing
138	Soap and cleaning compound manufacturing

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
139	Toilet preparation manufacturing
140	Printing ink manufacturing
141	All other chemical product and preparation manufacturing
142	Plastics packaging materials and unlaminated film and sheet manufacturing
143	Unlaminated plastics profile shape manufacturing
144	Plastics pipe and pipe fitting manufacturing
145	Laminated plastics plate, sheet (except packaging), and shape manufacturing
146	Polystyrene foam product manufacturing
147	Urethane and other foam product (except polystyrene) manufacturing
148	Plastics bottle manufacturing
149	Other plastics product manufacturing
150	Tire manufacturing
151	Rubber and plastics hoses and belting manufacturing
152	Other rubber product manufacturing
153	Pottery, ceramics, and plumbing fixture manufacturing
154	Brick, tile, and other structural clay product manufacturing
155	Clay and nonclay refractory manufacturing
156	Flat glass manufacturing
157	Other pressed and blown glass and glassware manufacturing
158	Glass container manufacturing
159	Glass product manufacturing made of purchased glass
160	Cement manufacturing
161	Ready-mix concrete manufacturing
162	Concrete pipe, brick, and block manufacturing
163	Other concrete product manufacturing
164	Lime and gypsum product manufacturing
165	Abrasive product manufacturing
166	Cut stone and stone product manufacturing
167	Ground or treated mineral and earth manufacturing
168	Mineral wool manufacturing
169	Miscellaneous nonmetallic mineral product manufacturing
170	Iron and steel mills and ferroalloy manufacturing
171	Steel product manufacturing from purchased steel
172	Alumina refining and primary aluminum production
173	Secondary smelting and alloying of aluminum
174	Aluminum product manufacturing from purchased aluminum
175	Primary smelting and refining of copper
176	Primary smelting and refining of nonferrous metal (except copper and aluminum)
177	Copper rolling, drawing, extruding and alloying
178	Nonferrous metal (exc. copper/aluminum) rolling, drawing, extruding and alloying
179	Ferrous metal foundries
180	Nonferrous metal foundries
181	All other forging, stamping, and sintering
182	Custom roll forming
183	Crown and closure manufacturing and metal stamping
184	Cutlery, utensil, pot, and pan manufacturing

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
185	Handtool manufacturing
186	Plate work and fabricated structural product manufacturing
187	Ornamental and architectural metal products manufacturing
188	Power boiler and heat exchanger manufacturing
189	Metal tank (heavy gauge) manufacturing
190	Metal can, box, and other metal container (light gauge) manufacturing
191	Ammunition manufacturing
192	Arms, ordnance, and accessories manufacturing
193	Hardware manufacturing
194	Spring and wire product manufacturing
195	Machine shops
196	Turned product and screw, nut, and bolt manufacturing
197	Coating, engraving, heat treating and allied activities
198	Valve and fittings other than plumbing manufacturing
199	Plumbing fixture fitting and trim manufacturing
200	Ball and roller bearing manufacturing
201	Fabricated pipe and pipe fitting manufacturing
202	Other fabricated metal manufacturing
203	Farm machinery and equipment manufacturing
204	Lawn and garden equipment manufacturing
205	Construction machinery manufacturing
206	Mining and oil and gas field machinery manufacturing
207	Other industrial machinery manufacturing
208	Plastics and rubber industry machinery manufacturing
209	Semiconductor machinery manufacturing
210	Vending, commercial, industrial, and office machinery manufacturing
211	Optical instrument and lens manufacturing
212	Photographic and photocopying equipment manufacturing
213	Other commercial and service industry machinery manufacturing
214	Air purification and ventilation equipment manufacturing
215	Heating equipment (except warm air furnaces) manufacturing
216	Air conditioning, refrigeration, and warm air heating equipment manufacturing
217	Industrial mold manufacturing
218	Metal cutting and forming machine tool manufacturing
219	Special tool, die, jig, and fixture manufacturing
220	Cutting tool and machine tool accessory manufacturing
221	Rolling mill and other metalworking machinery manufacturing
222	Turbine and turbine generator set units manufacturing
223	Speed changer, industrial high-speed drive, and gear manufacturing
224	Mechanical power transmission equipment manufacturing
225	Other engine equipment manufacturing
226	Pump and pumping equipment manufacturing
227	Air and gas compressor manufacturing
228	Material handling equipment manufacturing
229	Power-driven handtool manufacturing
230	Other general purpose machinery manufacturing

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
231	Packaging machinery manufacturing
232	Industrial process furnace and oven manufacturing
233	Fluid power process machinery manufacturing
234	Electronic computer manufacturing
235	Computer storage device manufacturing
236	Computer terminals and other computer peripheral equipment manufacturing
237	Telephone apparatus manufacturing
238	Broadcast and wireless communications equipment manufacturing
239	Other communications equipment manufacturing
240	Audio and video equipment manufacturing
241	Electron tube manufacturing
242	Bare printed circuit board manufacturing
243	Semiconductor and related device manufacturing
244	Electronic capacitor, resistor, coil, transformer, and other inductor manufacturing
245	Electronic connector manufacturing
246	Printed circuit assembly (electronic assembly) manufacturing
247	Other electronic component manufacturing
248	Electromedical and electrotherapeutic apparatus manufacturing
249	Search, detection, and navigation instruments manufacturing
250	Automatic environmental control manufacturing
251	Industrial process variable instruments manufacturing
252	Totalizing fluid meters and counting devices manufacturing
253	Electricity and signal testing instruments manufacturing
254	Analytical laboratory instrument manufacturing
255	Irradiation apparatus manufacturing
256	Watch, clock, and other measuring and controlling device manufacturing
257	Software, audio, and video media for reproduction
258	Magnetic and optical recording media manufacturing
259	Electric lamp bulb and part manufacturing
260	Lighting fixture manufacturing
261	Small electrical appliance manufacturing
262	Household cooking appliance manufacturing
263	Household refrigerator and home freezer manufacturing
264	Household laundry equipment manufacturing
265	Other major household appliance manufacturing
266	Power, distribution, and specialty transformer manufacturing
267	Motor and generator manufacturing
268	Switchgear and switchboard apparatus manufacturing
269	Relay and industrial control manufacturing
270	Storage battery manufacturing
271	Primary battery manufacturing
272	Communication and energy wire and cable manufacturing
273	Wiring device manufacturing
274	Carbon and graphite product manufacturing
275	All other miscellaneous electrical equipment and component manufacturing
276	Automobile manufacturing

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
277	Light truck and utility vehicle manufacturing
278	Heavy duty truck manufacturing
279	Motor vehicle body manufacturing
280	Truck trailer manufacturing
281	Motor home manufacturing
282	Travel trailer and camper manufacturing
283	Motor vehicle parts manufacturing
284	Aircraft manufacturing
285	Aircraft engine and engine parts manufacturing
286	Other aircraft parts and auxiliary equipment manufacturing
287	Guided missile and space vehicle manufacturing
288	Propulsion units and parts for space vehicles and guided missiles manufacturing
289	Railroad rolling stock manufacturing
290	Ship building and repairing
291	Boat building
292	Motorcycle, bicycle, and parts manufacturing
293	Military armored vehicle, tank, and tank component manufacturing
294	All other transportation equipment manufacturing
295	Wood kitchen cabinet and countertop manufacturing
296	Upholstered household furniture manufacturing
297	Nonupholstered wood household furniture manufacturing
298	Metal and other household furniture manufacturing
299	Institutional furniture manufacturing
300	Office Furniture
301	Custom architectural woodwork and millwork manufacturing
302	Showcase, partition, shelving, and locker manufacturing
303	Mattress manufacturing
304	Blind and shade manufacturing
305	Surgical and medical instrument, laboratory and medical instrument manufacturing
306	Surgical appliance and supplies manufacturing
307	Dental equipment and supplies manufacturing
308	Ophthalmic goods manufacturing
309	Dental laboratories manufacturing
310	Jewelry and silverware manufacturing
311	Sporting and athletic goods manufacturing
312	Doll, toy, and game manufacturing
313	Office supplies (except paper) manufacturing
314	Sign manufacturing
315	Gasket, packing, and sealing device manufacturing
316	Musical instrument manufacturing
317	All other miscellaneous manufacturing
318	Broom, brush, and mop manufacturing
319	Wholesale trade businesses
320	Retail Stores - Motor vehicle and parts
321	Retail Stores - Furniture and home furnishings
322	Retail Stores - Electronics and appliances

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
323	Retail Stores - Building material and garden supply
324	Retail Stores - Food and beverage
325	Retail Stores - Health and personal care
326	Retail Stores - Gasoline stations
327	Retail Stores - Clothing and clothing accessories
328	Retail Stores - Sporting goods, hobby, book and music
329	Retail Stores - General merchandise
330	Retail Stores - Miscellaneous
331	Retail Nonstores - Direct and electronic sales
332	Transport by air
333	Transport by rail
334	Transport by water
335	Transport by truck
336	Transit and ground passenger transportation
337	Transport by pipeline
338	Scenic and sightseeing transportation and support activities for transportation
339	Couriers and messengers
340	Warehousing and storage
341	Newspaper publishers
342	Periodical publishers
343	Book publishers
344	Directory, mailing list, and other publishers
345	Software publishers
346	Motion picture and video industries
347	Sound recording industries
348	Radio and television broadcasting
349	Cable and other subscription programming
350	Internet publishing and broadcasting
351	Telecommunications
352	Data processing, hosting, ISP, web search portals and related services
353	Other information services
354	Monetary authorities and depository credit intermediation activities
355	Nondepository credit intermediation and related activities
356	Securities, commodity contracts, investments, and related activities
357	Insurance carriers
358	Insurance agencies, brokerages, and related activities
359	Funds, trusts, and other financial vehicles
360	Real estate establishments
361	Imputed rental activity for owner-occupied dwellings
362	Automotive equipment rental and leasing
363	General and consumer goods rental except video tapes and discs
364	Video tape and disc rental
365	Commercial and industrial machinery and equipment rental and leasing
366	Lessors of nonfinancial intangible assets
367	Legal services
368	Accounting, tax preparation, bookkeeping, and payroll services

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
369	Architectural, engineering, and related services
370	Specialized design services
371	Custom computer programming services
372	Computer systems design services
373	Other computer related services, including facilities management
374	Management, scientific, and technical consulting services
375	Environmental and other technical consulting services
376	Scientific research and development services
377	Advertising and related services
378	Photographic services
379	Veterinary services
380	All other miscellaneous professional, scientific, and technical services
381	Management of companies and enterprises
382	Employment services
383	Travel arrangement and reservation services
384	Office administrative services
385	Facilities support services
386	Business support services
387	Investigation and security services
388	Services to buildings and dwellings
389	Other support services
390	Waste management and remediation services
391	Private elementary and secondary schools
392	Private junior colleges, colleges, universities, and professional schools
393	Other private educational services
394	Offices of physicians, dentists, and other health practitioners
395	Home health care services
396	Medical and diagnostic labs and outpatient and other ambulatory care services
397	Private hospitals
398	Nursing and residential care facilities
399	Child day care services
400	Individual and family services
401	Community food, housing, and other relief services, incl. rehabilitation services
402	Performing arts companies
403	Spectator sports companies
404	Promoters of performing arts and sports and agents for public figures
405	Independent artists, writers, and performers
406	Museums, historical sites, zoos, and parks
407	Fitness and recreational sports centers
408	Bowling centers
409	Amusement parks, arcades, and gambling industries
410	Other amusement and recreation industries
411	Hotels and motels, including casino hotels
412	Other accommodations
413	Food services and drinking places
414	Automotive repair and maintenance, except car washes

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**Appendix 1. IMPLAN Sectoring Scheme**

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Industry Code	Description
415	Car washes
416	Electronic and precision equipment repair and maintenance
417	Commercial and industrial machinery and equipment repair and maintenance
418	Personal and household goods repair and maintenance
419	Personal care services
420	Death care services
421	Dry-cleaning and laundry services
422	Other personal services
423	Religious organizations
424	Grantmaking, giving, and social advocacy organizations
425	Civic, social, professional, and similar organizations
426	Private household operations
427	US Postal Service
428	Federal electric utilities
429	Other Federal Government enterprises
430	State and local government passenger transit
431	State and local government electric utilities
432	Other state and local government enterprises
433	* Not an industry (Used and secondhand goods)
434	* Not an industry (Scrap)
435	* Not an industry (Rest of the world adjustment)
436	* Not an industry (Noncomparable foreign imports)
437	* Employment and payroll only (state & local govt, non-education)
438	* Employment and payroll only (state & local govt, education)
439	* Employment and payroll only (federal govt, non-military)
440	* Employment and payroll only (federal govt, military)

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# **The Center for Agribusiness & Economic Development**



The Center for Agribusiness and Economic Development is a unit of the College of Agricultural and Environmental Sciences of the University of Georgia, combining the missions of research and extension. The Center has among its objectives:

To provide feasibility and other short term studies for current or potential Georgia agribusiness firms and/or emerging food and fiber industries.

To provide agricultural, natural resource, and demographic data for private and public decision makers.

To find out more, visit our Web site at: <http://www.caed.uga.edu>

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**J. Scott Angle, Dean and Director**