appendix g: economic impact multipliers

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			M	ultiplier		
INDUSTRY		Fii	nal Demand		Dire	ct Effect
INDUSTRI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
1111C0 Oilseed and grain farming	1.5964	0.0840	3.5492	0.6789	2.5826	2.2293
111200 Vegetable and melon farming	1.4416	0.0874	3.9215	0.7691	1.8265	1.4927
1113B0 Fruit and tree nut farming	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
111400 Greenhouse, nursery, and floriculture production	1.3091	0.1031	5.1042	0.8093	1.3791	1.1896
111910 Tobacco farming	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
111920 Cotton farming	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1119C0 All other crop farming, including sugarcane and sugar beet farming	1.5840	0.0904	3.8006	0.6834	2.3474	1.7853
1121A0 Cattle ranching and farming	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
112120 Dairy cattle and milk production	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
112A00 Animal production, except cattle and poultry and eggs	1.2719	0.0607	2.5136	0.6715	1.6849	1.4193
112300 Poultry and egg production	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
113A00 Forest nurseries, forest products, and timber tracts	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
113300 Logging	1.2895	0.1645	7.1094	0.5211	1.2131	1.1206
114100 Fishing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
114200 Hunting and trapping	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
115000 Support activities for agriculture and forestry	1.3941	0.1728	7.9044	0.8058	1.3248	1.1501
211000 Oil and gas extraction	1.6571	0.1189	2.1378	0.9268	2.0613	2.5495
212100 Coal mining	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
212210 Iron ore mining	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2122A0 Gold, silver, and other metal ore mining	1.5721	0.1421	2.1907	0.8843	1.6578	2.0708
212230 Copper, nickel, lead, and zinc mining	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
212310 Stone mining and quarrying	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
212320 Sand, gravel, clay, and ceramic and refractory minerals mining and quarrying	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
212390 Other nonmetallic mineral mining and quarrying	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
213111 Drilling oil and gas wells	1.5231	0.1286	2.2864	0.7854	1.7989	2.1589
213112 Support activities for oil and gas operations	1.7356	0.1731	3.3816	0.8780	1.9305	2.4348
21311A Support activities for other mining	1.9077	0.1766	3.2329	0.8525	2.2855	2.9321
2211A0 Electric power generation, transmission, and distribution	1.3893	0.0954	1.5695	0.9058	1.7268	2.7247
221200 Natural gas distribution	1.9387	0.1024	1.8303	0.8383	3.7098	7.2442
221300 Water, sewage and other systems	1.5020	0.1249	2.9322	0.9666	1.8357	1.9276
230000 Construction	1.5876	0.1783	4.1717	0.8400	1.5206	1.5896
311111 Dog and cat food manufacturing	1.4934	0.0711	1.4482	0.5619	2.6283	2.8635
311119 Other animal food manufacturing	1.5288	0.0728	1.5584	0.4183	2.6929	2.8003
311210 Flour milling and malt manufacturing	1.6632	0.0891	1.7238	0.5451	3.2939	4.3428
311221 Wet corn milling	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31122A Soybean and other oilseed processing	1.3372	0.0576	1.4157	0.2405	2.1303	1.8849

(Continued)

- 1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.
- 4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

 5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

 6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to
- NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the
- SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

^{*}Includes Government enterprises.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

	İ		M	ultiplier		
INDUSTRY		Fi	nal Demand	-	Dire	ct Effect
INDUSTRI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
311225 Fats and oils refining and blending	1.4722	0.0660	1.5823	0.3589	2.4417	2.1698
311230 Breakfast cereal manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31131A Sugar cane mills and refining	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
311313 Beet sugar manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
311320 Chocolate and confectionery manufacturing from cacao beans	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
311330 Confectionery manufacturing from purchased chocolate	1.5718	0.0837	2.1447	0.6658	2.7339	1.9634
311340 Nonchocolate confectionery manufacturing	1.6039	0.0955	2.6022	0.6349	2.7214	1.8726
311410 Frozen food manufacturing	1.6847	0.0916	2.2441	0.5859	3.0611	2.2410
311420 Fruit and vegetable canning, pickling, and drying	1.5341	0.0785	1.9250	0.5548	2.9032	2.2308
31151A Fluid milk and butter manufacturing	1.5077	0.0720	1.4829	0.4534	2.6641	2.9051
311513 Cheese manufacturing	1.7055	0.0765	1.5736	0.3897	2.8273	3.0150
311514 Dry, condensed, and evaporated dairy product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
311520 Ice cream and frozen dessert manufacturing	1.7778	0.0931	2.0088	0.6302	3.4432	3.2238
31161A Animal (except poultry) slaughtering, rendering, and processing	1.5540	0.0721	1.8115	0.3682	2.6647	2.3264
311615 Poultry processing	1.4716	0.0870	2.0649	0.4549	2.4434	2.0107
311700 Seafood product preparation and packaging	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
311810 Bread and bakery product manufacturing	1.7892	0.1511	3.9185	0.8064	2.5036	2.1694
311820 Cookie, cracker, and pasta manufacturing	1.6761	0.0994	2.0684	0.6774	3.1026	3.0246
311830 Tortilla manufacturing	1.7601	0.1348	3.3645	0.7609	2.4773	2.1207
311910 Snack food manufacturing	1.5093	0.0753	1.6017	0.6139	2.7858	2.6395
311920 Coffee and tea manufacturing	1.5532	0.0844	1.7951	0.5394	3.1219	3.0402
311930 Flavoring syrup and concentrate manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
311940 Seasoning and dressing manufacturing	1.6635	0.0914	1.8388	0.5379	3.2388	3.5794
311990 All other food manufacturing	1.6442	0.1017	2.3518	0.6374	2.7849	2.6162
312110 Soft drink and ice manufacturing	1.5457	0.0830	1.7769	0.4339	2.4456	2.3977
312120 Breweries	1.3723	0.0713	1.2277	0.6335	2.1001	2.6608
312130 Wineries	1.5213	0.0950	3.3342	0.5696	2.3961	1.5200
312140 Distilleries	1.2873	0.0611	1.5280	0.8411	1.7993	1.6012
3122A0 Tobacco product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
313100 Fiber, yarn, and thread mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
313210 Broadwoven fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
313220 Narrow fabric mills and schiffli machine embroidery	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
313230 Nonwoven fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
313240 Knit fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
313310 Textile and fabric finishing mills	1.4242	0.0909	2.1965	0.5701	1.9690	1.8535
313320 Fabric coating mills (Continued)	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			M	ultiplier		
INDUSTRY		Fii	nal Demand		Direct Effect	
indoonni	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
314110 Carpet and rug mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
314120 Curtain and linen mills	1.3375	0.1143	3.1386	0.5984	1.4185	1.3733
314910 Textile bag and canvas mills	1.4948	0.1901	5.6279	0.7278	1.3862	1.3237
314990 All other textile product mills	1.4589	0.1509	4.7266	0.6410	1.4707	1.3528
315100 Apparel knitting mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
315210 Cut and sew apparel contractors	1.6056	0.2014	6.7177	0.9421	1.5309	1.3262
315220 Men's and boys' cut and sew apparel manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
315230 Women's and girls' cut and sew apparel manufacturing	1.5605	0.1107	2.7355	0.6904	2.5714	2.8673
315290 Other cut and sew apparel manufacturing	1.5513	0.1476	7.0935	0.7572	1.7709	1.2918
315900 Apparel accessories and other apparel manufacturing	1.6295	0.1476	4.1005	0.7141	1.8372	1.6389
316100 Leather and hide tanning and finishing	1.9378	0.0952	3.1305	0.5429	3.0848	2.0817
316200 Footwear manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
316900 Other leather and allied product manufacturing	1.5199	0.1137	4.5879	0.7564	1.9553	1.4040
321100 Sawmills and wood preservation	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
32121A Veneer and plywood manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
32121B Engineered wood member and truss manufacturing	1.4589	0.1114	2.8994	0.6249	1.7507	1.6268
321219 Reconstituted wood product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
321910 Wood windows and doors and millwork	1.5224	0.1090	2.8195	0.6124	1.9156	1.7654
321920 Wood container and pallet manufacturing	1.4840	0.1137	3.5149	0.6503	1.7554	1.4938
321991 Manufactured home (mobile home) manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
321992 Prefabricated wood building manufacturing	1.5523	0.1184	3.4381	0.6561	1.9495	1.6796
321999 All other miscellaneous wood product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
322110 Pulp mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
322120 Paper mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
322130 Paperboard mills	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
322210 Paperboard container manufacturing	1.4258	0.0769	1.5580	0.5251	2.3122	2.6969
32222A Coated and laminated paper, packaging paper and plastics film manufacturing	1.3705	0.0648	1.3250	0.6029	2.2962	2.5222
32222B All other paper bag and coated and treated paper manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
322230 Stationery product manufacturing	1.4767	0.0825	1.8246	0.5993	2.3765	2.4859
322291 Sanitary paper product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
322299 All other converted paper product manufacturing	1.4555	0.0824	1.9300	0.6335	2.3209	2.2271
323110 Printing	1.5596	0.1475	3.9037	0.7949	1.7009	1.6713
323120 Support activities for printing	1.5826	0.1961	5.6099	0.9657	1.5227	1.4607
324110 Petroleum refineries	1.6813	0.0891	1.4177	0.4648	2.7007	5.0731
324121 Asphalt paving mixture and block manufacturing	1.5575	0.1107	1.8635	0.5897	1.9379	2.5274
324122 Asphalt shingle and coating materials manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

the entry.

NOTE:--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the

industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			М	ultiplier		
INDUSTRY		Fir	nal Demand		Dire	ct Effect
mboom:	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
324191 Petroleum lubricating oil and grease manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
324199 All other petroleum and coal products manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325110 Petrochemical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325120 Industrial gas manufacturing	1.6010	0.1001	1.7532	0.7793	2.4878	2.8011
325130 Synthetic dye and pigment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325181 Alkalies and chlorine manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325182 Carbon black manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325188 All other basic inorganic chemical manufacturing	1.6482	0.1391	2.6328	0.7054	1.8402	2.2574
325190 Other basic organic chemical manufacturing	1.5287	0.0915	1.5906	0.4675	2.3509	3.2935
325211 Plastics material and resin manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325212 Synthetic rubber manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325220 Artificial and synthetic fibers and filaments manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325310 Fertilizer manufacturing	1.7248	0.1028	2.1858	0.5634	2.7554	2.8307
325320 Pesticide and other agricultural chemical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325411 Medicinal and botanical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325412 Pharmaceutical preparation manufacturing	1.4474	0.0896	1.3879	0.7694	2.5553	3.7823
325413 In-vitro diagnostic substance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325414 Biological product (except diagnostic) manufacturing	1.6892	0.1422	2.3074	0.8308	2.2868	2.9526
325510 Paint and coating manufacturing	1.5063	0.0972	1.7504	0.5647	2.3445	2.6514
325520 Adhesive manufacturing	1.6218	0.1191	2.3503	0.6185	2.3486	2.4527
325610 Soap and cleaning compound manufacturing	1.4911	0.0833	1.6562	0.7167	2.4140	2.4234
325620 Toilet preparation manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
325910 Printing ink manufacturing	1.6469	0.1190	2.0533	0.5700	2.3551	2.8664
3259A0 All other chemical product and preparation manufacturing	1.5884	0.1230	2.2089	0.6405	2.1714	2.3824
326110 Plastics packaging materials and unlaminated film and sheet manufacturing	1.3975	0.0845	1.8954	0.5878	1.8988	1.9682
326121 Unlaminated plastics profile shape manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
326122 Plastics pipe and pipe fitting manufacturing	1.3119	0.0687	1.4376	0.5051	1.8451	2.0138
326130 Laminated plastics plate, sheet (except packaging), and shape manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
326140 Polystyrene foam product manufacturing	1.4067	0.0871	2.2528	0.6355	1.8830	1.8453
326150 Urethane and other foam product (except polystyrene) manufacturing	1.4206	0.0860	1.9065	0.5804	1.9465	2.0003
326160 Plastics bottle manufacturing	1.3614	0.0748	1.6125	0.5849	1.8249	1.9595
32619A Other plastics product manufacturing	1.4950	0.1123	2.4725	0.6849	1.8719	2.0009
326210 Tire manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
326220 Rubber and plastics hoses and belting manufacturing	1.3682	0.0969	1.7602	0.6276	1.6909	2.0578
326290 Other rubber product manufacturing	1.4438	0.1097	2.2586	0.6506	1.7695	1.9364

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

the entry.

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			М	ultiplier		
INDUSTRY		Fii	nal Demand		Dire	ct Effect
INDOSINI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
32711A Pottery, ceramics, and plumbing fixture manufacturing	1.5499	0.1273	2.6655	0.8156	1.8041	1.9001
32712A Brick, tile, and other structural clay product manufacturing	1.4740	0.1033	2.4926	0.8612	1.8447	1.7100
32712B Clay and nonclay refractory manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
327211 Flat glass manufacturing	1.5524	0.0956	2.1994	0.8064	2.2545	2.1394
327212 Other pressed and blown glass and glassware manufacturing	1.5650	0.1127	2.1472	0.8112	1.9957	2.4067
327213 Glass container manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
327215 Glass product manufacturing made of purchased glass	1.5753	0.1043	2.6497	0.7310	2.1807	1.9416
327310 Cement manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
327320 Ready-mix concrete manufacturing	1.4577	0.0890	1.9566	0.6092	2.1438	2.3165
327330 Concrete pipe, brick, and block manufacturing	1.5023	0.1035	2.2697	0.7492	2.0371	2.1504
327390 Other concrete product manufacturing	1.5436	0.1173	2.7409	0.7775	1.9737	1.9648
3274A0 Lime and gypsum product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
327910 Abrasive product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
327991 Cut stone and stone product manufacturing	1.6049	0.1409	3.5999	0.8319	1.9414	1.8304
327992 Ground or treated mineral and earth manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
327993 Mineral wool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
327999 Miscellaneous nonmetallic mineral products	1.5191	0.0940	2.4331	0.6883	2.2646	1.9752
331110 Iron and steel mills and ferroalloy manufacturing	1.5782	0.0876	1.9573	0.6087	2.7925	2.9315
331200 Steel product manufacturing from purchased steel	1.5385	0.0878	2.1892	0.5535	2.5980	2.4109
33131A Alumina refining and primary aluminum production	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
331314 Secondary smelting and alloying of aluminum	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33131B Aluminum product manufacturing from purchased aluminum	1.3409	0.0612	1.5220	0.4561	2.3065	2.0890
331411 Primary smelting and refining of copper	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
331419 Primary smelting and refining of nonferrous metal (except copper and aluminum)	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
331420 Copper rolling, drawing, extruding and alloying	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
331490 Nonferrous metal (except copper and aluminum) rolling, drawing, extruding and alloying	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
331510 Ferrous metal foundries	1.5254	0.1232	3.2941	0.8002	1.8834	1.7001
331520 Nonferrous metal foundries	1.5130	0.1170	3.3620	0.6909	1.9972	1.7242
33211A All other forging, stamping, and sintering	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
332114 Custom roll forming	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33211B Crown and closure manufacturing and metal stamping	1.5578	0.1519	3.5351	0.6951	1.5986	1.7217
33221A Cutlery, utensil, pot, and pan manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33221B Handtool manufacturing	1.5112	0.1475	3.3436	0.7939	1.5907	1.6644

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			М	ultiplier			
INDUSTRY		Fi	nal Demand		Direct Effect		
INDUSTRI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)	
332310 Plate work and fabricated structural product manufacturing	1.5875	0.1462	3.2554	0.7236	1.8215	2.1047	
332320 Ornamental and architectural metal products manufacturing	1.6030	0.1505	3.5567	0.7283	1.7271	1.7974	
332410 Power boiler and heat exchanger manufacturing	1.5070	0.1455	3.2054	0.7281	1.6100	1.7676	
332420 Metal tank (heavy gauge) manufacturing	1.5623	0.1527	3.3498	0.7371	1.6580	1.8293	
332430 Metal can, box, and other metal container (light gauge) manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
33299A Ammunition manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
33299B Arms, ordnance, and accessories manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
332500 Hardware manufacturing	1.4653	0.1261	2.6688	0.7324	1.6742	1.9094	
332600 Spring and wire product manufacturing	1.5152	0.1405	3.2452	0.7585	1.6238	1.7080	
332710 Machine shops	1.6031	0.1923	4.2965	0.8563	1.5478	1.6928	
332720 Turned product and screw, nut, and bolt manufacturing	1.5058	0.1580	3.7510	0.7855	1.5162	1.5564	
332800 Coating, engraving, heat treating and allied activities	1.5751	0.1473	3.8026	0.7623	1.6497	1.6027	
33291A Valve and fittings other than plumbing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
332913 Plumbing fixture fitting and trim manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
332991 Ball and roller bearing manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
332996 Fabricated pipe and pipe fitting manufacturing	1.4849	0.1373	2.7240	0.7081	1.5951	1.8635	
33299C Other fabricated metal manufacturing	1.4835	0.1334	2.9577	0.7326	1.5823	1.6883	
333111 Farm machinery and equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
333112 Lawn and garden equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
333120 Construction machinery manufacturing	1.4222	0.0744	1.5582	0.5600	2.4900	2.5455	
333130 Mining and oil and gas field machinery manufacturing	1.5110	0.1048	1.9921	0.6362	2.1679	3.0324	
33329A Other industrial machinery manufacturing	1.5151	0.1144	2.2250	0.6984	2.0117	2.4043	
333220 Plastics and rubber industry machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
333295 Semiconductor machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
33331A Vending, commercial, industrial, and office machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
333314 Optical instrument and lens manufacturing	1.6016	0.1286	2.5851	0.7584	2.1027	2.5993	
333315 Photographic and photocopying equipment manufacturing	1.3615	0.0792	1.2014	0.7246	1.8302	2.7187	
333319 Other commercial and service industry machinery manufacturing	1.4709	0.0918	1.7403	0.6850	2.2444	2.8908	
33341A Air purification and ventilation equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
333414 Heating equipment (except warm air furnaces) manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
333415 Air conditioning, refrigeration, and warm air heating equipment manufacturing	1.4600	0.0790	1.4773	0.6534	2.3285	3.0871	
333511 Industrial mold manufacturing	1.5231	0.1352	2.9275	0.8232	1.7307	1.8760	

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

the entry.

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

	İ		M	ultiplier		
INDUSTRY		Fii	nal Demand	-	Dire	ct Effect
INDUSTRI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
33351A Metal cutting and forming machine tool manufacturing	1.5696	0.1277	2.3196	0.7590	1.9962	2.5869
333514 Special tool, die, jig, and fixture manufacturing	1.5314	0.1350	2.6216	0.8172	1.7509	2.0993
333515 Cutting tool and machine tool accessory manufacturing	1.4836	0.1214	2.2265	0.8200	1.8124	2.2211
33351B Rolling mill and other metalworking machinery manufacturing	1.5416	0.1202	2.5784	0.7378	1.9989	2.0788
333611 Turbine and turbine generator set units manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
333612 Speed changer, industrial high-speed drive, and gear manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
333613 Mechanical power transmission equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
333618 Other engine equipment manufacturing	1.4071	0.0664	1.2713	0.5049	2.6976	3.8232
333911 Pump and pumping equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
333912 Air and gas compressor manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
333920 Material handling equipment manufacturing	1.5218	0.1011	1.8642	0.6287	2.1580	2.7727
333991 Power-driven handtool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33399A Other general purpose machinery manufacturing	1.5050	0.1079	2.0100	0.7038	2.0664	2.6730
333993 Packaging machinery manufacturing	1.5549	0.1203	2.2930	0.7186	2.0864	2.6261
333994 Industrial process furnace and oven manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33399B Fluid power process machinery	1.4838	0.1060	1.8615	0.7156	2.0290	2.7749
334111 Electronic computer manufacturing	1.4736	0.0755	1.1524	0.5861	3.4186	6.3820
334112 Computer storage device manufacturing	1.6762	0.1172	1.8269	0.7336	2.9661	5.4046
33411A Computer terminals and other computer peripheral equipment manufacturing	1.6504	0.1186	2.0295	0.7081	2.6323	3.6192
334210 Telephone apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
334220 Broadcast and wireless communications equipment	1.6112	0.1096	2.0868	0.6209	3.0471	4.0575
334290 Other communications equipment manufacturing	1.7230	0.1308	2.3523	0.7968	2.8751	3.4692
334300 Audio and video equipment manufacturing	1.4832	0.0791	1.5546	0.5364	3.1819	3.3102
334411 Electron tube manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
334412 Bare printed circuit board manufacturing	1.5655	0.1136	2.3316	0.6919	2.1353	2.4518
334413 Semiconductor and related device manufacturing	1.4974	0.0925	1.6631	0.7921	2.7108	3.7065
33441A Electronic capacitor, resistor, coil, transformer, and other inductor manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
334417 Electronic connector manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
334418 Printed circuit assembly (electronic assembly) manufacturing	1.4169	0.0774	1.4820	0.5112	2.4235	2.5888
334419 Other electronic component manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
334510 Electromedical and electrotherapeutic apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
334511 Search, detection, and navigation instruments manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			M	ultiplier		
INDUSTRY		Fii	nal Demand		Dire	ct Effect
INDUSTRI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
334512 Automatic environmental control manufacturing	1.5710	0.1148	2.4778	0.7628	2.4599	2.2463
334513 Industrial process variable instruments manufacturing	1.6610	0.1311	2.4247	0.7650	2.3343	3.0504
334514 Totalizing fluid meters and counting devices manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
334515 Electricity and signal testing instruments manufacturing	1.4981	0.1263	2.0289	0.7771	1.7197	2.6691
334516 Analytical laboratory instrument manufacturing	1.7563	0.1413	2.5342	0.8084	2.7318	3.4350
334517 Irradiation apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33451A Watch, clock, and other measuring and controlling device manufacturing	1.7230	0.1423	2.6423	0.8116	2.4784	3.0420
33461A Software, audio, and video media reproducing	1.6523	0.1177	2.1105	0.7473	2.6342	3.6659
334613 Magnetic and optical recording media manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335110 Electric lamp bulb and part manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335120 Lighting fixture manufacturing	1.5587	0.1500	3.3850	0.7601	1.6486	1.6728
335210 Small electrical appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335221 Household cooking appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335222 Household refrigerator and home freezer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335224 Household laundry equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335228 Other major household appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335311 Power, distribution, and specialty transformer manufacturing	1.5021	0.1524	3.1410	0.7085	1.5305	1.6058
335312 Motor and generator manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335313 Switchgear and switchboard apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335314 Relay and industrial control manufacturing	1.5096	0.1662	2.9347	0.7815	1.4899	1.6706
335911 Storage battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335912 Primary battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335920 Communication and energy wire and cable manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335930 Wiring device manufacturing	1.4499	0.1455	2.7541	0.7846	1.5095	1.7095
335991 Carbon and graphite product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
335999 All other miscellaneous electrical equipment and component manufacturing	1.6122	0.1874	3.7326	0.7866	1.6104	1.8130
336111 Automobile manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336112 Light truck and utility vehicle manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336120 Heavy duty truck manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336211 Motor vehicle body manufacturing	1.4889	0.1019	2.7629	0.6699	2.0334	1.6636
336212 Truck trailer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336213 Motor home manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336214 Travel trailer and camper manufacturing (Continued)	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

the entry.

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

	1		M	ultiplier		
INDUSTRY		Fii	nal Demand		Dire	ct Effect
INDUSTRI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
336300 Motor vehicle parts manufacturing	1.4900	0.1039	2.7419	0.5848	2.0219	1.7224
336411 Aircraft manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336412 Aircraft engine and engine parts manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336413 Other aircraft parts and auxiliary equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336414 Guided missile and space vehicle manufacturing	1.6647	0.1606	3.0548	0.7945	2.2554	4.0796
33641A Propulsion units and parts for space vehicles and guided missiles	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336500 Railroad rolling stock manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336611 Ship building and repairing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336612 Boat building	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336991 Motorcycle, bicycle, and parts manufacturing	1.5044	0.0993	2.4188	0.6366	2.2693	2.0023
336992 Military armored vehicle, tank, and tank component manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
336999 All other transportation equipment manufacturing	1.4079	0.0734	2.1916	0.5443	2.3760	1.7851
337110 Wood kitchen cabinet and countertop manufacturing	1.7063	0.1928	4.5052	0.7418	1.6968	1.8151
337121 Upholstered household furniture manufacturing	1.5254	0.1591	4.9862	0.6856	1.4714	1.3355
337122 Nonupholstered wood household furniture manufacturing	1.4955	0.1654	4.1674	0.7847	1.4467	1.4403
33712A Metal and other household furniture (except wood) manufacturing	1.5236	0.1471	3.7789	0.6736	1.5923	1.5792
337127 Institutional furniture manufacturing	1.5994	0.1756	3.9615	0.7818	1.5746	1.7005
33721A Wood television, radio, and sewing machine cabinet manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
337212 Office furniture and custom architectural woodwork and millwork manufacturing	1.4944	0.1609	3.5191	0.7798	1.4760	1.5978
337215 Showcase, partition, shelving, and locker manufacturing	1.5963	0.1836	4.1757	0.7346	1.5018	1.5838
337910 Mattress manufacturing	1.7077	0.1395	3.0486	0.7498	1.9842	2.2278
337920 Blind and shade manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33911A Laboratory apparatus and surgical appliance and supplies manufacturing	1.4707	0.1437	3.1339	0.8251	1.5676	1.7027
339112 Surgical and medical instrument manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
339114 Dental equipment and supplies manufacturing	1.5140	0.1591	3.8087	0.8220	1.5618	1.5745
339115 Ophthalmic goods manufacturing	1.3824	0.1339	3.8704	0.8103	1.4416	1.3585
339116 Dental laboratories	1.6334	0.2469	6.6525	1.0188	1.4048	1.3648
339910 Jewelry and silverware manufacturing	1.5280	0.1379	2.8715	0.6539	1.7005	1.9477
339920 Sporting and athletic goods manufacturing	1.6187	0.1482	3.8382	0.7770	1.7952	1.7304
339930 Doll, toy, and game manufacturing	1.4346	0.1154	3.0853	0.7324	1.6041	1.5314
339940 Office supplies (except paper) manufacturing	1.4025	0.1311	3.6471	0.7766	1.4629	1.3918
339950 Sign manufacturing	1.6464	0.1705	4.4363	0.7637	1.6693	1.6205
339991 Gasket, packing, and sealing device manufacturing	1.4838	0.1681	3.6963	0.7483	1.4476	1.5292

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			M	ultiplier		
INDUSTRY		Fii	nal Demand		Dire	ct Effect
INDUSTRI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
339992 Musical instrument manufacturing	1.5206	0.1742	5.3877	0.8276	1.4859	1.3482
33999A All other miscellaneous manufacturing	1.4987	0.1567	4.0551	0.7695	1.5039	1.4740
339994 Broom, brush, and mop manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
420000 Wholesale trade	1.4821	0.1345	2.5460	0.9750	1.6947	2.2753
4A0000 Retail trade	1.5439	0.1829	6.4463	0.9948	1.4645	1.3613
481000 Air transportation	1.6180	0.1661	3.8618	0.7969	1.6231	1.8468
482000 Rail transportation	1.6717	0.1302	2.5420	0.8833	2.3110	3.7016
483000 Water transportation	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
484000 Truck transportation	1.6514	0.1465	3.7487	0.8574	2.1175	2.3435
485A00 Transit and ground passenger transportation	1.7522	0.2045	5.6040	0.7675	1.6862	1.5809
486000 Pipeline transportation	1.7927	0.1277	2.8121	0.7318	3.7619	9.2849
48A000 Scenic and sightseeing transportation and support activities for transportation	1.6251	0.1646	3.7473	0.9353	1.8697	2.3351
492000 Couriers and messengers	1.5565	0.1615	4.9492	0.9223	1.6816	1.5678
493000 Warehousing and storage	1.6044	0.1798	5.2854	0.9981	1.5705	1.6186
511110 Newspaper publishers	1.6074	0.1883	5.0144	0.9399	1.6008	1.5455
511120 Periodical publishers	1.8467	0.1768	4.1426	0.9456	2.1498	2.4589
511130 Book publishers	1.6959	0.1522	3.5123	0.9615	2.1556	2.4731
5111A0 Directory, mailing list, and other publishers	1.7442	0.1446	3.2413	0.9355	2.4353	3.2213
511200 Software publishers	1.6374	0.2062	3.5639	1.0321	1.6280	2.7683
512100 Motion picture and video industries	1.5132	0.1906	7.2557	0.9635	1.4548	1.3364
512200 Sound recording industries	1.8440	0.2203	5.4975	0.8480	1.8309	2.0115
515100 Radio and television broadcasting	1.8034	0.2735	4.6025	0.9156	1.7299	2.5437
515200 Cable and other subscription programming	1.6434	0.2361	3.8596	0.8440	1.5426	2.4378
51A000 Internet and other information services	1.6321	0.2100	3.8133	1.0182	1.5049	2.0645
517000 Telecommunications	1.6045	0.1059	2.1459	0.9140	2.2929	3.4412
52A000 Monetary authorities and depository credit intermediation	1.5465	0.1420	3.3282	1.0294	1.8747	2.2764
522A00 Nondepository credit intermediation and related activities	1.6391	0.1457	2.9541	1.0200	1.9726	2.8331
523000 Securities, commodity contracts, investments, and related activities	1.8091	0.2799	8.7266	1.0622	1.5270	1.4629
524100 Insurance carriers	1.8164	0.1700	3.6792	1.0130	2.1217	2.7286
524200 Insurance agencies, brokerages, and related activities	1.7674	0.1860	4.6979	1.0511	1.9205	2.3640
525000 Funds, trusts, and other financial vehicles	2.4718	0.2619	10.1866	1.0690	4.9147	2.6488
531000 Real estate	1.3504	0.0994	6.4434	1.0128	1.5831	1.2291
S00800 Owner-occupied dwellings	1.3952	0.0388	1.0822	0.9507	0.0000	0.0000
532100 Automotive equipment rental and leasing	1.6238	0.1118	2.3320	0.9604	2.6925	3.9139
532A00 General and consumer goods rental except video tapes and discs	1.7405	0.1577	3.0696	0.9911	2.1609	2.8169

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

the entry.

NOTE:--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the

industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			М	ultiplier		
INDUSTRY		Fii	nal Demand		Dire	ct Effect
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
532230 Video tape and disc rental	1.7968	0.1437	4.0282	1.0833	2.3613	1.9290
532400 Commercial and industrial machinery and equipment rental and leasing	1.7139	0.1287	2.4195	0.9659	2.7445	5.4766
533000 Lessors of nonfinancial intangible assets	1.2634	0.0515	1.1139	0.9808	2.2713	4.1985
541100 Legal services	1.5879	0.2912	4.6735	1.1088	1.2850	1.7464
541200 Accounting, tax preparation, bookkeeping, and payroll services	1.4777	0.1749	4.5781	1.0473	1.4674	1.5496
541300 Architectural, engineering, and related services	1.6515	0.2088	3.9749	1.0290	1.6386	2.3704
541400 Specialized design services	1.5862	0.2632	7.9723	1.0659	1.3435	1.3482
541511 Custom computer programming services	1.5894	0.2485	4.3156	1.0691	1.4269	2.1421
541512 Computer systems design services	1.7148	0.2389	4.2614	1.0191	1.5803	2.4106
54151A Other computer related services, including facilities management	1.5118	0.2042	3.7615	1.0225	1.4115	1.8968
541610 Management, scientific, and technical consulting services	1.6320	0.2481	6.1766	1.0695	1.4310	1.5477
5416A0 Environmental and other technical consulting services	1.5939	0.2282	7.0900	1.0554	1.4530	1.4157
541700 Scientific research and development services	1.7575	0.3197	4.9869	1.0402	1.3927	2.0664
541800 Advertising and related services	1.6172	0.2438	5.0150	1.0320	1.4107	1.7427
5419A0 All other miscellaneous professional, scientific, and technical services	1.6013	0.3230	5.9540	1.1085	1.2730	1.5397
541920 Photographic services	1.7321	0.2904	12.7182	1.0572	1.3822	1.2388
541940 Veterinary services	1.6528	0.2473	7.9624	0.9171	1.3779	1.3259
550000 Management of companies and enterprises	1.6823	0.2339	3.5261	1.0443	1.5132	2.4603
561300 Employment services	1.5237	0.3190	12.7772	1.1412	1.2406	1.1648
561500 Travel arrangement and reservation services	1.7267	0.2302	6.4058	1.0325	1.5644	1.5850
561100 Office administrative services	1.7531	0.2950	6.0590	1.0947	1.4536	1.8272
561200 Facilities support services	1.7001	0.2473	6.8409	1.0377	1.5697	1.6333
561400 Business support services	1.6480	0.2279	8.1915	1.0366	1.5219	1.3934
561600 Investigation and security services	1.6243	0.2908	11.8192	1.0860	1.3210	1.2000
561700 Services to buildings and dwellings	1.6448	0.2244	10.5786	0.9380	1.4766	1.2408
561900 Other support services	1.6187	0.1863	5.4057	1.0107	1.6342	1.6773
562000 Waste management and remediation services	1.6110	0.2222	4.3244	0.9289	1.4717	1.7746
611100 Elementary and secondary schools	1.7291	0.2865	13.6263	1.0479	1.3418	1.2476
611A00 Junior colleges, colleges, universities, and professional schools	1.7657	0.2828	8.8728	1.0224	1.3503	1.3535
611B00 Other educational services	1.6902	0.2151	8.2575	1.0227	1.5690	1.3848
621A00 Offices of physicians, dentists, and other health practitioners	1.5931	0.2528	4.9700	1.0219	1.3693	1.6710
621B00 Medical and diagnostic labs and outpatient and other ambulatory care services	1.6752	0.2451	5.3035	1.0170	1.5010	1.7768
621600 Home health care services	1.5533	0.2723	9.4745	1.0570	1.3105	1.2574

(Continued)

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Table 1.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Stapleton (Type II)

			М	ultiplier		
INDUSTRY		Fii	nal Demand		Dire	ct Effect
INDOCTITI	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
622000 Hospitals	1.6587	0.2210	5.0100	0.9816	1.4817	1.8219
623000 Nursing and residential care facilities	1.6255	0.2789	8.9983	1.0475	1.3194	1.3038
624A00 Individual and family services	1.7125	0.2616	11.3457	1.0247	1.4315	1.2741
624200 Community food, housing, and other relief services, including rehabilitation services	1.7376	0.2420	8.7887	1.0090	1.5125	1.4530
624400 Child day care services	1.6711	0.2135	10.1006	1.0065	1.5588	1.3231
711100 Performing arts companies	1.7499	0.3016	27.5512	1.0404	1.4358	1.1280
711200 Spectator sports	1.8311	0.3974	8.6442	1.1397	1.3909	1.5230
711A00 Promoters of performing arts and sports and agents for public figures	1.9186	0.2661	18.8798	1.0173	1.7056	1.2514
711500 Independent artists, writers, and performers	1.5721	0.2433	13.6236	1.0514	1.4591	1.2467
712000 Museums, historical sites, zoos, and parks	1.7675	0.3113	10.4182	1.0944	1.3448	1.3444
713A00 Amusement parks, arcades, and gambling industries	1.5553	0.2206	7.4355	1.0354	1.4096	1.3065
713B00 Other amusement and recreation industries	1.6206	0.2087	8.2208	1.0038	1.4765	1.3414
713940 Fitness and recreational sports centers	1.7338	0.2153	12.0868	1.0232	1.5624	1.2382
713950 Bowling centers	1.6169	0.1933	10.2100	0.9959	1.4861	1.2066
7211A0 Hotels and motels, including casino hotels	1.5976	0.2018	6.5906	1.0114	1.5214	1.3950
721A00 Other accommodations	1.6676	0.1704	6.1244	0.9812	1.8004	1.5396
722000 Food services and drinking places	1.7214	0.2498	11.3721	0.9447	1.4107	1.2165
8111A0 Automotive repair and maintenance, except car washes	1.5058	0.1403	3.6815	0.8635	1.6397	1.7566
811192 Car washes	1.5767	0.1521	6.8707	0.9447	1.6979	1.3367
811200 Electronic and precision equipment repair and maintenance	1.5052	0.2140	4.4244	0.9894	1.3957	1.6455
811300 Commercial and industrial machinery and equipment repair and maintenance	1.4059	0.1034	2.3492	0.9455	1.7847	2.0815
811400 Personal and household goods repair and maintenance	1.5148	0.1429	4.2807	0.9115	1.6777	1.6265
812100 Personal care services	1.6223	0.2551	7.1156	1.0393	1.3652	1.4122
812200 Death care services	1.6139	0.1468	3.2366	0.8578	1.8259	2.2994
812300 Dry-cleaning and laundry services	1.4202	0.1987	4.6089	1.0290	1.2977	1.3477
812900 Other personal services	1.6067	0.1335	3.7901	0.9567	2.2273	2.6764
813100 Religious organizations	2.0130	0.3047	9.0811	1.0668	1.6634	1.7114
813A00 Grantmaking, giving, and social advocacy organizations	1.9998	0.2584	6.8774	1.0276	1.8695	2.1443
813B00 Civic, social, professional, and similar organizations	1.9800	0.2454	6.9696	1.0040	1.7653	1.8844
491000 Postal service	1.4260	0.2286	4.2331	1.0461	1.2564	1.4760
S00A00 Other government enterprises	1.7944	0.2027	4.1696	0.8945	1.7033	2.1714
H00000 Households	0.9731	0.1009	3.0689	0.5899	0.0000	0.0000

^{*}Includes Government enterprises.

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2010 data, the output delivered to final demand should be in 2010 dollars.

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to

the entry.

NOTE.--Multipliers are based on the 2002 Benchmark Input-Output Table for the Nation and 2010 regional data. Industry List A identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.