



**Ronald A. Jones**  
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May 4, 2011

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Subject: Duke Energy Carolinas, LLC  
William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019  
AP1000 Combined License Application for the  
William States Lee III Nuclear Station Units 1 and 2  
Supplemental Response to Request for Additional Information  
(ER RAI 23)  
Ltr# WLG2011.05-01

References: Letter from J.M. Muir (NRC) to B.J. Dolan (Duke Energy), Request for  
Additional Information Regarding the Environmental Review of the  
Combined License Application for William States Lee Nuclear Station  
Units 1 and 2, dated August 21, 2008 (ML082200509).

Letter from B.J. Dolan (Duke Energy) to U.S. Nuclear Regulatory  
Commission, Response to Request for Additional Information for William  
States Lee III Nuclear Station Units 1 and 2, dated November 20, 2008  
(ML083310541).

This letter provides supplemental information for Duke Energy's response to the  
Nuclear Regulatory Commission's request for additional information (RAI) included in  
the referenced letters.

RAI 23, Supplement, Socioeconomics

The response to the NRC information request described in the referenced letter is  
addressed in a separate enclosure, which also identifies associated changes to the  
Combined License Application for the Lee Nuclear Station, when appropriate.

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If you have any questions or need any additional information, please contact Peter S. Hastings, Nuclear Plant Development Licensing Manager, at 980-373-7820.

Sincerely,

A handwritten signature in black ink, appearing to read 'RJ', is positioned above the printed name.

Ronald A. Jones  
Sr. Vice President  
Nuclear Development

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Enclosure:

- 1) Response to ER RAI 23 Supplement, Socioeconomics

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xc (w/o enclosure):

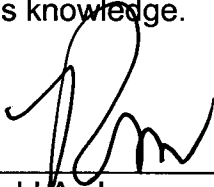
Loren Plisco, Deputy Regional Administrator, Region II  
Allen Fetter, Acting Branch Chief of Reactor Projects Branch 3

xc (w/ enclosure):

Sarah Lopas, Senior Project Manager, DSER  
Terri Miley, PNNL

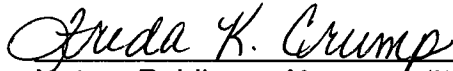
AFFIDAVIT OF RONALD A. JONES

Ronald A. Jones, being duly sworn, states that he is Senior Vice President, Nuclear Development, Duke Energy Carolinas, LLC, that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this supplement to the combined license application for the William States Lee III Nuclear Station and that all the matter and facts set forth herein are true and correct to the best of his knowledge.

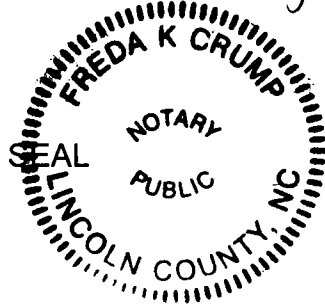


Ronald A. Jones

Subscribed and sworn to me on May 4, 2011



Notary Public my commission expires August 17, 2011



**Lee Nuclear Station Response to Request for Additional Information (RAI)**

**RAI Letter Dated:** August 21, 2008

**Reference NRC RAI Number:** ER RAI 23 Supplement, Socioeconomics

**NRC RAI:**

ER RAI 23: Provide information on unemployment and the correlation between unemployment and population growth.

Subsequent to Duke Energy's response to RAI 23, the NRC staff requested Duke Energy to discuss the request made to the Bureau of Economic Analysis (BEA) for the set of RIMS II multipliers for a specific set of counties that were used in the evaluation of unemployment and population statistics provided in the ER, and to provide the response from BEA (the RIMS II multipliers), confirming the values and the area for which it applies.

**Duke Energy Response:**

The RIMS II multipliers for the Duke Region were ordered online through the Bureau of Economic Analysis (BEA) Regional Economic Accounts website and obtained from the BEA in April 2007 (<https://www.bea.gov/regional/rimss/rimssii/>). When ordering the data, the following selections were made: Step 1 – Benchmark Series; Step 2 – Type I; Step 3 – Region. The multipliers were part of the Benchmark Series, which was based on BEA's 1997 national benchmark input-output (I-O) accounts and BEA's 2004 regional economic accounts. The Type I selection indicates that the data estimates the impact of industries purchasing from industries. The selected region consisted of the following counties: Burke, Cabarrus, Catawba, Cleveland, Gaston, Henderson, Iredell, Lincoln, McDowell, Mecklenburg, Polk, Rutherford, Union Counties in North Carolina and Cherokee, Chester, Fairfield, Greenville, Lancaster, Laurens, Newberry, Spartanburg, Union, and York Counties in South Carolina. The multipliers obtained from the BEA are enclosed, along with the receipt of the order and website's order page showing the date the information was retrieved.

**Associated Revisions to the Lee Nuclear Station Combined License Application:**

None

**Attachment:**

Attachment ER RAI 23S-01 William States Lee III Nuclear Station Units 1 and 2, Environmental Report, April 2007 RIMS II Data, Order Receipt and Website Order Page

**Attachment ER RAI 23S-01**

**William States Lee III Nuclear Station Units 1 and 2, Environmental Report, April 2007  
RIMS II Data, Order Receipt and Website Order Page**

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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
1111A0 Oilseed farming	1.4994	0.2010	6.3806	2.0739	1.8741
1111B0 Grain farming	1.4672	0.1933	6.7071	2.0462	1.7363
111200 Vegetable and melon farming	1.3822	0.2499	11.8973	1.5422	1.2827
1113A0 Fruit farming	1.4997	0.3255	18.5142	1.5323	1.2194
111335 Tree nut farming	1.3922	0.3227	14.6192	1.4036	1.2433
111400 Greenhouse and nursery production	1.2515	0.3298	12.1395	1.2322	1.1811
111910 Tobacco farming	1.4117	0.2360	11.4309	1.6552	1.3034
111920 Cotton farming	1.5671	0.2566	10.1860	2.0216	1.6344
1119A0 Sugarcane and sugar beet farming	1.0000	0.0000	0.0000	0.0000	0.0000
1119B0 All other crop farming	1.4905	0.2037	7.8469	2.0439	1.6100
112100 Cattle ranching and farming	1.7304	0.2276	8.0358	2.4094	2.0426
112300 Poultry and egg production	1.8787	0.2528	6.5235	2.6627	2.5425
112A00 Animal production, except cattle and poultry and eggs	1.7878	0.2391	7.1898	2.5311	2.3127
113A00 Forest nurseries, forest products, and timber tracts	1.3823	0.2029	7.1270	2.1619	2.3509
113300 Logging	1.4873	0.2580	7.4535	1.6117	1.6055
114100 Fishing	1.0000	0.0000	0.0000	0.0000	0.0000
114200 Hunting and trapping	1.4494	0.2046	11.5192	2.0045	1.6010
115000 Agriculture and forestry support activities	1.4421	0.4678	20.1012	1.3269	1.1893
211000 Oil and gas extraction	1.0000	0.0000	0.0000	0.0000	0.0000
212100 Coal mining	1.0000	0.0000	0.0000	0.0000	0.0000
212210 Iron ore mining	1.0000	0.0000	0.0000	0.0000	0.0000
212230 Copper, nickel, lead, and zinc mining	1.0000	0.0000	0.0000	0.0000	0.0000
2122A0 Gold, silver, and other metal ore mining	1.4207	0.3467	7.6711	1.5203	1.5542
212310 Stone mining and quarrying	1.4415	0.3653	7.0766	1.5334	1.6991
212320 Sand, gravel, clay, and refractory mining	1.3651	0.3577	8.4775	1.4026	1.3958
212390 Other nonmetallic mineral mining	1.4367	0.3090	6.5929	1.6413	1.7697
213111 Drilling oil and gas wells	1.5549	0.3453	9.5909	2.1134	1.6595
213112 Support activities for oil and gas operations	1.5665	0.4473	9.9939	1.8025	1.6512
21311A Support activities for other mining	1.6066	0.4190	12.9112	2.0025	2.0261
2211A0 Power generation and supply	1.2232	0.2425	3.9688	1.3761	1.9549
221200 Natural gas distribution	1.1403	0.1602	2.9882	1.3265	1.5931
221300 Water, sewage and other systems	1.4258	0.3568	8.8855	1.5611	1.7279
230000 Construction	1.6493	0.5279	16.1880	1.5038	1.4545
311111 Dog and cat food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311119 Other animal food manufacturing	1.8967	0.2688	6.6654	2.8814	2.7599
311211 Flour milling	1.5825	0.2391	6.3873	2.5623	2.3688
311212 Rice milling	1.0000	0.0000	0.0000	0.0000	0.0000
311213 Malt manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311221 Wet corn milling	1.5560	0.2277	4.8650	2.4408	3.4628
311222 Soybean processing	1.6641	0.2189	5.1381	2.3459	2.9357
311223 Other oilseed processing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*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 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 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.
5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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



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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
311225 Fats and oils refining and blending	1.0000	0.0000	0.0000	0.0000	0.0000
311230 Breakfast cereal manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311310 Sugar manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311320 Confectionery manufacturing from cacao beans	1.4458	0.2245	6.6580	2.1152	1.9875
311330 Confectionery manufacturing from purchased chocolate	1.4505	0.2344	6.9452	2.1278	1.7615
311340 Nonchocolate confectionery manufacturing	1.4883	0.2744	6.8836	1.9371	1.7918
311410 Frozen food manufacturing	1.6755	0.2847	7.2618	2.4776	2.4795
311420 Fruit and vegetable canning and drying	1.6447	0.2648	6.9611	2.6001	2.5495
311511 Fluid milk manufacturing	1.6631	0.2247	5.9848	2.3817	2.4989
311512 Creamery butter manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311513 Cheese manufacturing	1.5996	0.2150	6.7558	2.3042	2.0097
311514 Dry, condensed, and evaporated dairy products	1.4717	0.2002	4.8786	2.1455	2.3671
311520 Ice cream and frozen dessert manufacturing	1.5664	0.2523	6.3198	2.2618	2.1643
311611 Animal, except poultry, slaughtering	1.6645	0.2075	6.8254	2.2243	2.0053
311612 Meat processed from carcasses	1.7205	0.2555	6.8797	2.4912	2.3596
311613 Rendering and meat byproduct processing	1.6309	0.2437	6.0592	2.2462	2.2205
311615 Poultry processing	2.4569	0.3849	11.1752	3.0618	2.3025
311700 Seafood product preparation and packaging	1.0000	0.0000	0.0000	0.0000	0.0000
31181A Bread and bakery product, except frozen, manufacturing	1.4873	0.3586	10.8116	1.5022	1.3703
311813 Frozen cakes and other pastries manufacturing	1.7049	0.3400	9.2017	2.1518	1.8591
311821 Cookie and cracker manufacturing	1.5266	0.2875	6.8732	1.9536	1.9089
311822 Mixes and dough made from purchased flour	1.6464	0.2446	6.2442	2.4348	2.2679
311823 Dry pasta manufacturing	1.7163	0.2630	6.2023	2.6587	2.7575
311830 Tortilla manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311911 Roasted nuts and peanut butter manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311919 Other snack food manufacturing	1.5967	0.2674	6.2477	2.2996	2.4025
311920 Coffee and tea manufacturing	1.8819	0.3193	9.3907	3.4229	4.0974
311930 Flavoring syrup and concentrate manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311941 Mayonnaise, dressing, and sauce manufacturing	1.6570	0.2478	6.1980	2.6563	2.4903
311942 Spice and extract manufacturing	1.5706	0.2678	6.5078	2.3331	2.6455
311990 All other food manufacturing	1.7371	0.3052	8.7036	2.2927	2.0911
312110 Soft drink and ice manufacturing	1.5507	0.2137	4.5781	2.6036	3.0872
312120 Breweries	1.4186	0.1860	3.4682	2.2882	3.5257
312130 Wineries	1.0000	0.0000	0.0000	0.0000	0.0000
312140 Distilleries	1.0000	0.0000	0.0000	0.0000	0.0000
312210 Tobacco stemming and redrying	1.0000	0.0000	0.0000	0.0000	0.0000
312221 Cigarette manufacturing	1.3542	0.1975	3.1548	2.4293	4.1499
312229 Other tobacco product manufacturing	1.2949	0.1723	3.7422	2.1193	2.1100
313100 Fiber, yarn, and thread mills	1.9417	0.3481	9.3005	2.4672	2.1230
313210 Broadwoven fabric mills	1.9656	0.3950	10.2292	2.1926	2.0793
313220 Narrow fabric mills and schiffli embroidery	1.7978	0.4516	12.9019	1.7277	1.5368

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*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 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 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.

5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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

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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
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	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
313230 Nonwoven fabric mills	1.8923	0.3413	7.6017	2.2750	2.4299
313240 Knit fabric mills	2.0639	0.4015	10.7378	2.3081	2.1247
313310 Textile and fabric finishing mills	2.1775	0.4112	11.2842	2.7139	2.4063
313320 Fabric coating mills	1.8329	0.3531	8.9158	2.1414	2.0844
314110 Carpet and rug mills	2.0760	0.3387	8.9184	2.9808	2.6056
314120 Curtain and linen mills	1.9617	0.3726	11.1550	2.3268	1.9564
314910 Textile bag and canvas mills	1.8496	0.4614	14.8880	1.7499	1.5098
314992 Tire cord and tire fabric mills	1.9833	0.3478	7.6338	2.4921	2.5729
31499A Other miscellaneous textile product mills	1.7977	0.4053	12.0658	1.8469	1.6305
315111 Sheer hosiery mills	2.0345	0.4355	9.6160	2.1349	2.3644
315119 Other hosiery and sock mills	2.0499	0.4509	13.2190	2.1341	1.8142
315190 Other apparel knitting mills	2.1389	0.4337	12.8961	2.2455	1.9661
315200 Cut and sew apparel manufacturing	2.0020	0.4003	12.3546	2.3544	2.0241
315900 Accessories and other apparel manufacturing	1.7952	0.4060	13.9934	1.8810	1.5605
316100 Leather and hide tanning and finishing	1.5812	0.2354	6.3939	2.0185	1.9350
316200 Footwear manufacturing	1.7211	0.3774	11.8443	1.9668	1.5973
316900 Other leather product manufacturing	1.5084	0.3137	9.9658	1.6827	1.4330
321113 Sawmills	1.8987	0.3075	8.8599	2.4606	2.3750
321114 Wood preservation	1.9396	0.2930	8.2064	3.1647	2.8944
32121A Veneer and plywood manufacturing	1.9875	0.3669	10.5086	2.2683	2.1342
32121B Engineered wood member and truss manufacturing	1.6827	0.3435	10.2919	1.8256	1.6756
321219 Reconstituted wood product manufacturing	1.7982	0.3115	7.5788	2.1397	2.2207
321911 Wood windows and door manufacturing	1.8075	0.3772	10.8996	1.9568	1.8186
321912 Cut stock, resawing lumber, and planing	1.7995	0.3202	10.0934	2.1867	1.8733
321918 Other millwork, including flooring	1.8100	0.3671	10.7148	1.9872	1.8323
321920 Wood container and pallet manufacturing	1.7078	0.3655	12.5434	1.7700	1.5230
321991 Manufactured home, mobile home, manufacturing	1.7554	0.3404	9.5651	2.0095	1.8327
321992 Prefabricated wood building manufacturing	1.8264	0.3779	10.5788	2.0348	1.9279
321999 Miscellaneous wood product manufacturing	1.6934	0.3913	11.9084	1.7264	1.5671
322110 Pulp mills	1.8142	0.3463	6.6060	2.1755	3.6943
3221A0 Paper and paperboard mills	1.6566	0.2867	5.7226	2.1923	2.9524
322210 Paperboard container manufacturing	1.5753	0.3114	6.5390	1.8262	1.9066
32222A Coated and laminated paper and packaging materials	1.7041	0.2951	6.1516	2.3220	2.7054
32222B Coated and uncoated paper bag manufacturing	1.6983	0.3410	7.8991	2.0602	1.9774
322225 Flexible packaging foil manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322226 Surface-coated paperboard manufacturing	1.8162	0.3006	6.2650	2.8303	3.4803
322231 Die-cut paper office supplies manufacturing	1.6987	0.3381	7.8333	2.1376	2.0490
322232 Envelope manufacturing	1.7145	0.4028	9.3301	1.8479	1.7865
322233 Stationery and related product manufacturing	1.6390	0.2844	6.3253	2.2981	2.3434
322291 Sanitary paper product manufacturing	1.7933	0.2779	5.7308	2.8455	3.7552
322299 All other converted paper product manufacturing	1.5909	0.3336	7.4804	1.8863	1.8828

(Continued)

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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 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 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.

5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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

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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
32311A Commercial printing	1.6008	0.4222	10.3634	1.5798	1.5390
323116 Manifold business forms printing	1.5507	0.3131	7.5746	1.7393	1.7298
323117 Books printing	1.4934	0.4017	10.0634	1.4704	1.4262
323118 Blankbook and looseleaf binder manufacturing	1.6655	0.3696	11.3963	1.8005	1.5569
323121 Tradebinding and related work	1.4487	0.5069	18.5420	1.3215	1.1929
323122 Prepress services	1.3977	0.5247	10.1392	1.3051	1.3958
324110 Petroleum refineries	1.0000	0.0000	0.0000	0.0000	0.0000
324121 Asphalt paving mixture and block manufacturing	1.5113	0.2817	5.2943	2.1758	2.9215
324122 Asphalt shingle and coating materials manufacturing	1.5614	0.4130	6.6916	1.5890	2.1479
324191 Petroleum lubricating oil and grease manufacturing	1.5260	0.3334	6.2508	1.7948	2.1506
324199 All other petroleum and coal products manufacturing	1.2807	0.3171	5.7247	1.3763	1.5567
325110 Petrochemical manufacturing	1.5109	0.2362	4.2539	2.5169	4.4796
325120 Industrial gas manufacturing	1.4681	0.2599	4.6864	2.1140	2.6372
325130 Synthetic dye and pigment manufacturing	1.5768	0.3006	5.2929	2.1696	2.8792
325180 Other basic inorganic chemical manufacturing	1.5770	0.3012	5.3203	2.1891	3.0446
325190 Other basic organic chemical manufacturing	1.6189	0.2651	5.0709	2.6303	3.7939
325211 Plastics material and resin manufacturing	1.5799	0.2366	4.5413	2.5215	3.3743
325212 Synthetic rubber manufacturing	1.5030	0.2503	5.7242	2.1711	2.0811
325221 Cellulosic organic fiber manufacturing	1.5870	0.3372	6.2324	1.9173	2.2973
325222 Noncellulosic organic fiber manufacturing	1.6772	0.3135	5.9191	2.3463	2.8610
325311 Nitrogenous fertilizer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325312 Phosphatic fertilizer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325314 Fertilizer, mixing only, manufacturing	1.5257	0.2332	5.6511	2.4849	2.2659
325320 Pesticide and other agricultural chemical manufacturing	1.4598	0.2154	3.9144	2.2958	3.5169
325400 Pharmaceutical and medicine manufacturing	1.5573	0.2737	4.5242	2.1878	3.2068
325510 Paint and coating manufacturing	1.6930	0.2887	5.5598	2.3117	2.7536
325520 Adhesive manufacturing	1.6469	0.2913	5.9688	2.2395	2.5202
325611 Soap and other detergent manufacturing	1.6383	0.2562	4.9043	2.7303	3.7945
325612 Polish and other sanitation good manufacturing	1.5581	0.2524	5.1825	2.4044	2.7860
325613 Surface active agent manufacturing	1.7414	0.2858	5.3750	2.5863	3.3931
325620 Toilet preparation manufacturing	1.5144	0.2345	5.3383	2.3642	2.4349
325910 Printing ink manufacturing	1.7582	0.3195	6.2342	2.3378	2.6336
325920 Explosives manufacturing	1.3318	0.3596	7.1996	1.3315	1.4504
325991 Custom compounding of purchased resins	1.8583	0.3223	7.1507	2.3023	2.3043
325992 Photographic film and chemical manufacturing	1.4954	0.2878	5.4712	1.8070	2.2378
325998 Other miscellaneous chemical product manufacturing	1.6599	0.3024	5.4874	2.3117	3.2833
326110 Plastics packaging materials, film and sheet	1.8285	0.3174	6.6845	2.2600	2.4599
326120 Plastics pipe, fittings, and profile shapes	1.8618	0.3284	7.6135	2.2714	2.1679
326130 Laminated plastics plate, sheet, and shapes	1.7408	0.3442	7.4623	2.0587	2.1705
3261A0 Foam product manufacturing	1.7470	0.3092	7.9837	2.1330	1.9199
326160 Plastics bottle manufacturing	1.8228	0.3130	7.2685	2.1983	2.1899

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*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 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 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.

5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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

**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

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INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
326192 Resilient floor covering manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32619A Plastics plumbing fixtures and all other plastics products	1.7207	0.3643	9.2351	1.7918	1.6699
326210 Tire manufacturing	1.7101	0.3398	6.9773	1.9235	2.2144
326220 Rubber and plastics hose and belting manufacturing	1.6667	0.3369	8.4550	1.9025	1.8244
326290 Other rubber product manufacturing	1.6515	0.3551	8.8540	1.7913	1.7341
327111 Vitreous china plumbing fixture manufacturing	1.4657	0.3971	9.2806	1.4730	1.4720
327112 Vitreous china and earthenware articles manufacturing	1.4982	0.4579	13.1050	1.4585	1.3402
327113 Porcelain electrical supply manufacturing	1.5965	0.4466	10.3705	1.6023	1.6615
327121 Brick and structural clay tile manufacturing	1.5069	0.4069	9.3359	1.5198	1.5567
327122 Ceramic wall and floor tile manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32712A Clay refractory and other structural clay products	1.6443	0.3664	8.0029	1.8716	2.1389
327125 Nonclay refractory manufacturing	1.5314	0.3481	8.1035	1.6910	1.7613
327213 Glass container manufacturing	1.5980	0.3579	7.1626	1.7348	2.0107
32721A Glass and glass products, except glass containers	1.5952	0.3526	7.9269	1.7599	1.8218
327310 Cement manufacturing	1.4464	0.2345	4.5223	1.9931	2.5756
327320 Ready-mix concrete manufacturing	1.5238	0.3209	7.5841	1.7888	1.8509
327331 Concrete block and brick manufacturing	1.5354	0.3765	8.4555	1.6476	1.7640
327332 Concrete pipe manufacturing	1.5591	0.3779	9.3924	1.6460	1.6427
327390 Other concrete product manufacturing	1.5564	0.4138	9.8860	1.5728	1.5772
327410 Lime manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327420 Gypsum product manufacturing	1.5517	0.2568	5.3604	2.1597	2.6430
327910 Abrasive product manufacturing	1.5020	0.3026	8.0821	1.7436	1.6648
327991 Cut stone and stone product manufacturing	1.6297	0.4659	13.2511	1.6042	1.4661
327992 Ground or treated minerals and earths manufacturing	1.3070	0.2402	5.9231	1.5394	1.5540
327993 Mineral wool manufacturing	1.5218	0.3200	6.8074	1.6758	1.8386
327999 Miscellaneous nonmetallic mineral products	1.4808	0.3159	7.8751	1.6556	1.6251
331111 Iron and steel mills	1.5533	0.2705	5.2010	2.1423	3.0299
331112 Ferroalloy and related product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331210 Iron, steel pipe and tube from purchased steel	1.5370	0.2571	6.3152	1.9659	1.8467
331221 Rolled steel shape manufacturing	1.7065	0.2606	5.8570	2.6894	2.8450
331222 Steel wire drawing	1.5851	0.2855	6.7488	1.9492	1.9006
331311 Alumina refining	1.0000	0.0000	0.0000	0.0000	0.0000
331312 Primary aluminum production	1.0000	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
331315 Aluminum sheet, plate, and foil manufacturing	1.3370	0.1858	3.8671	2.0796	2.6794
331316 Aluminum extruded product manufacturing	1.2946	0.2346	5.6261	1.5837	1.5925
331319 Other aluminum rolling and drawing	1.2459	0.1570	3.6054	1.7567	1.8499
331411 Primary smelting and refining of copper	1.0000	0.0000	0.0000	0.0000	0.0000
331419 Primary nonferrous metal, except copper and aluminum	1.4082	0.2241	4.5176	1.9747	2.4099
331421 Copper rolling, drawing, and extruding	1.3443	0.1946	4.7960	1.9223	1.9245
331422 Copper wire, except mechanical, drawing	1.7027	0.2891	6.0497	2.3239	2.7939

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*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 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 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.

5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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

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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
331423 Secondary processing of copper	1.0000	0.0000	0.0000	0.0000	0.0000
331491 Nonferrous metal, except copper and aluminum, shaping	1.4721	0.2531	5.1498	1.9077	2.2778
331492 Secondary processing of other nonferrous	1.0000	0.0000	0.0000	0.0000	0.0000
331510 Ferrous metal foundries	1.4636	0.3954	7.9581	1.5084	1.6585
33152A Aluminum foundries	1.4619	0.3743	9.0639	1.5401	1.5285
33152B Nonferrous foundries, except aluminum	1.5275	0.3912	9.4036	1.5762	1.5700
332111 Iron and steel forging	1.5535	0.3409	7.4623	1.6597	1.7375
332112 Nonferrous forging	1.3600	0.2844	6.1853	1.4720	1.5375
332114 Custom roll forming	1.0000	0.0000	0.0000	0.0000	0.0000
33211A All other forging and stamping	1.5605	0.3880	9.2278	1.5646	1.5596
332211 Cutlery and flatware, except precious, manufacturing	1.4692	0.2839	6.6044	1.7700	1.7999
332212 Hand and edge tool manufacturing	1.5149	0.3950	9.1386	1.5290	1.5454
332213 Saw blade and handsaw manufacturing	1.4867	0.3530	9.5300	1.5499	1.4662
332214 Kitchen utensil, pot, and pan manufacturing	1.5700	0.3253	7.3032	1.8843	2.0758
332311 Prefabricated metal buildings and components	1.7039	0.3571	7.8050	1.8829	2.0152
332312 Fabricated structural metal manufacturing	1.5805	0.3292	7.8049	1.7374	1.7460
332313 Plate work manufacturing	1.4874	0.4014	9.1731	1.4428	1.4627
332321 Metal window and door manufacturing	1.4819	0.3157	8.8473	1.6261	1.4872
332322 Sheet metal work manufacturing	1.4599	0.3713	9.7559	1.4555	1.3924
332323 Ornamental and architectural metal work manufacturing	1.5203	0.3716	10.0008	1.5334	1.4379
332410 Power boiler and heat exchanger manufacturing	1.4687	0.3653	8.9804	1.4851	1.4638
332420 Metal tank, heavy gauge, manufacturing	1.5500	0.3748	9.2202	1.5773	1.5487
332430 Metal can, box, and other container manufacturing	1.5579	0.2427	5.2031	2.1319	2.4333
33299A Ammunition manufacturing	1.5161	0.3857	10.5948	1.5654	1.4709
332994 Small arms manufacturing	1.4058	0.3508	7.6677	1.4881	1.5577
332995 Other ordnance and accessories manufacturing	1.2966	0.3865	12.1348	1.2771	1.1814
332500 Hardware manufacturing	1.5416	0.3491	9.1899	1.6458	1.5535
332600 Spring and wire product manufacturing	1.5669	0.3678	8.8467	1.5923	1.5863
332710 Machine shops	1.5265	0.5096	12.8217	1.4590	1.4047
332720 Turned product and screw, nut, and bolt manufacturing	1.4847	0.4081	9.4307	1.4625	1.5045
332811 Metal heat treating	1.4656	0.3507	7.8657	1.5515	1.5840
332812 Metal coating and nonprecious engraving	1.5839	0.3239	8.1460	1.7052	1.6141
332813 Electroplating, anodizing, and coloring metal	1.4901	0.4741	12.8979	1.3786	1.3184
332910 Metal valve manufacturing	1.4967	0.3304	8.0214	1.6488	1.6369
332991 Ball and roller bearing manufacturing	1.5736	0.3878	8.5602	1.7398	1.7770
332996 Fabricated pipe and pipe fitting manufacturing	1.5308	0.3431	8.4918	1.6195	1.5789
332997 Industrial pattern manufacturing	1.3962	0.5509	16.3675	1.2992	1.2153
332998 Enameled iron and metal sanitary ware manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332999 Miscellaneous fabricated metal product manufacturing	1.5289	0.3592	9.1217	1.6058	1.5576
333111 Farm machinery and equipment manufacturing	1.6243	0.3105	6.7131	2.1189	2.2717
333112 Lawn and garden equipment manufacturing	1.6717	0.2722	6.5167	2.6590	2.5169

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*Includes Government enterprises.

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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 2004 data, the output delivered to final demand should be in 2004 dollars.

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5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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

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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
333120 Construction machinery manufacturing	1.7266	0.3276	6.8233	2.3279	2.6783
333131 Mining machinery and equipment manufacturing	1.6206	0.3448	7.4909	1.9125	1.9956
333132 Oil and gas field machinery and equipment	1.0000	0.0000	0.0000	0.0000	0.0000
333210 Sawmill and woodworking machinery	1.6187	0.4098	9.4196	1.7154	1.7220
333220 Plastics and rubber industry machinery	1.5318	0.3546	8.0817	1.7026	1.7151
333291 Paper industry machinery manufacturing	1.6603	0.4100	7.7808	1.7972	2.0841
333292 Textile machinery manufacturing	1.5861	0.4180	9.1212	1.6350	1.6956
333293 Printing machinery and equipment manufacturing	1.5642	0.4062	8.0208	1.6560	1.8592
333294 Food product machinery manufacturing	1.5662	0.4028	8.0625	1.6414	1.8225
333295 Semiconductor machinery manufacturing	1.6234	0.3252	6.1682	2.1675	2.9492
333298 All other industrial machinery manufacturing	1.6400	0.4111	8.3146	1.7204	1.9234
33331A Automatic vending, commercial laundry and drycleaning machinery	1.7102	0.3611	8.9381	1.9896	1.8481
333313 Office machinery manufacturing	1.6227	0.3103	7.1634	2.1192	2.1227
333314 Optical instrument and lens manufacturing	1.5725	0.4122	8.9557	1.6126	1.6775
333315 Photographic and photocopying equipment manufacturing	1.6384	0.3056	7.6894	2.2003	2.0490
333318 Other commercial and service industry machinery manufacturing	1.7355	0.4010	8.5718	1.8736	1.9803
333411 Air purification equipment manufacturing	1.5766	0.3701	9.3807	1.7034	1.5926
333412 Industrial and commercial fan and blower manufacturing	1.5917	0.3817	8.6256	1.6901	1.7003
333414 Heating equipment, except warm air furnaces	1.4586	0.3209	7.8924	1.5957	1.5563
333415 AC, refrigeration, and forced air heating	1.7658	0.3576	8.2622	2.2107	2.2534
333511 Industrial mold manufacturing	1.4868	0.5411	11.4883	1.3577	1.4061
333512 Metal cutting machine tool manufacturing	1.6172	0.4209	8.4318	1.7370	1.9130
333513 Metal forming machine tool manufacturing	1.5131	0.4158	9.3631	1.5526	1.5518
333514 Special tool, die, jig, and fixture manufacturing	1.4962	0.5304	11.8911	1.3985	1.4007
333515 Cutting tool and machine tool accessory manufacturing	1.4875	0.4503	9.6285	1.4778	1.5191
33351A Rolling mill and other metalworking machinery	1.5330	0.3982	8.8707	1.6185	1.6317
333611 Turbine and turbine generator set units manufacturing	1.5860	0.3154	5.4732	1.9626	2.8359
33361A Speed changers and mechanical power transmission equipment	1.5554	0.3920	7.7535	1.6327	1.7849
333618 Other engine equipment manufacturing	1.7446	0.3174	6.3618	2.5355	3.1681
333911 Pump and pumping equipment manufacturing	1.6518	0.3832	7.2535	1.8297	2.2289
333912 Air and gas compressor manufacturing	1.6283	0.3428	6.2952	1.9538	2.5591
333913 Measuring and dispensing pump manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333921 Elevator and moving stairway manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333922 Conveyor and conveying equipment manufacturing	1.5981	0.4075	8.8886	1.6443	1.6918
333923 Overhead cranes, hoists, and monorail systems	1.6504	0.3472	7.2619	1.9523	2.1470
333924 Industrial truck, trailer, and stacker manufacturing	1.7848	0.3717	7.8991	2.2400	2.4419
333991 Power-driven handtool manufacturing	1.5693	0.3034	6.9745	2.0205	2.1298
333992 Welding and soldering equipment manufacturing	1.5836	0.3532	7.3098	1.7394	1.8776
333993 Packaging machinery manufacturing	1.5474	0.4170	7.7182	1.5844	1.7858
333994 Industrial process furnace and oven manufacturing	1.4584	0.3585	7.6354	1.5683	1.6253
333995 Fluid power cylinder and actuator manufacturing	1.5075	0.3944	9.0408	1.5705	1.5823

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

8/12

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
333996 Fluid power pump and motor manufacturing	1.6132	0.4029	7.8501	1.7755	2.0159
33399A Scales, balances, and miscellaneous general purpose machinery	1.5641	0.3967	8.0268	1.6396	1.8038
334111 Electronic computer manufacturing	1.5089	0.2409	4.3471	2.5548	4.2015
334112 Computer storage device manufacturing	1.3627	0.2517	5.3552	1.7776	1.8599
334113 Computer terminal manufacturing	1.6134	0.3423	5.5463	1.9435	3.1191
334119 Other computer peripheral equipment manufacturing	1.6481	0.3662	6.2036	1.9580	2.8042
334210 Telephone apparatus manufacturing	1.4089	0.2531	3.9048	1.7894	2.8656
334220 Broadcast and wireless communications equipment	1.3964	0.2972	4.9791	1.5926	1.9891
334290 Other communications equipment manufacturing	1.5022	0.3690	8.3380	1.6414	1.6657
334300 Audio and video equipment manufacturing	1.8471	0.3327	7.4254	2.8190	2.9656
334411 Electron tube manufacturing	1.6703	0.3739	7.5672	1.9268	2.2130
334413 Semiconductors and related device manufacturing	1.3118	0.2265	3.7445	1.7245	2.4718
33441A All other electronic component manufacturing	1.5000	0.3465	7.3423	1.6751	1.7774
334510 Electromedical apparatus manufacturing	1.5258	0.3836	8.3025	1.6133	1.6822
334511 Search, detection, and navigation instruments	1.0000	0.0000	0.0000	0.0000	0.0000
334512 Automatic environmental control manufacturing	1.5084	0.3825	9.0545	1.6186	1.5786
334513 Industrial process variable instruments	1.4978	0.4121	7.5131	1.5617	2.0001
334514 Totalizing fluid meters and counting devices	1.7110	0.3634	8.0811	1.9712	2.0109
334515 Electricity and signal testing instruments	1.3480	0.3252	5.8469	1.4676	1.7039
334516 Analytical laboratory instrument manufacturing	1.5916	0.4381	8.7085	1.6514	2.2503
334517 Irradiation apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33451A Watch, clock, and other measuring and controlling device manufacturing	1.5155	0.4165	8.8270	1.5528	1.6110
334611 Software reproducing	1.3433	0.3322	4.1994	1.3174	1.9024
334612 Audio and video media reproduction	1.4899	0.3265	7.4351	1.6167	1.6687
334613 Magnetic and optical recording media manufacturing	1.8114	0.3886	10.6428	2.1879	2.2489
335110 Electric lamp bulb and part manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335120 Lighting fixture manufacturing	1.6405	0.3505	7.7899	2.0078	2.1210
335211 Electric housewares and household fan manufacturing	1.7330	0.3169	7.5765	2.4474	2.3525
335212 Household vacuum cleaner manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335221 Household cooking appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335222 Household refrigerator and home freezer manufacturing	1.8801	0.3752	9.2162	2.3347	2.1885
335224 Household laundry equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335228 Other major household appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335311 Electric power and specialty transformer manufacturing	1.6415	0.3415	6.4545	2.0053	2.5784
335312 Motor and generator manufacturing	1.6182	0.3436	7.6793	1.9203	1.9542
335313 Switchgear and switchboard apparatus manufacturing	1.5103	0.3310	6.7340	1.7392	1.8920
335314 Relay and industrial control manufacturing	1.7015	0.4033	7.7668	1.8836	2.1989
335911 Storage battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335912 Primary battery manufacturing	1.6197	0.2753	5.9205	2.3731	2.6997
335921 Fiber optic cable manufacturing	1.7749	0.3142	6.4199	2.4420	3.1632

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*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 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 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.

5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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

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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
335929 Other communication and energy wire manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335930 Wiring device manufacturing	1.5186	0.3401	7.1970	1.7223	1.8203
335991 Carbon and graphite product manufacturing	1.4095	0.2889	5.9593	1.6509	1.8315
335999 Miscellaneous electrical equipment manufacturing	1.6220	0.3834	8.5221	1.8082	1.8351
336110 Automobile and light truck manufacturing	2.0591	0.3337	6.8973	3.7498	6.3829
336120 Heavy duty truck manufacturing	1.8649	0.2894	5.6775	3.2525	4.6474
336211 Motor vehicle body manufacturing	1.9655	0.3705	8.0412	2.6866	3.1024
336212 Truck trailer manufacturing	1.8345	0.3486	7.6379	2.3023	2.5044
336213 Motor home manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336214 Travel trailer and camper manufacturing	1.7884	0.3612	7.8903	2.0545	2.2374
336300 Motor vehicle parts manufacturing	1.7448	0.3624	7.3889	2.1000	2.4629
336411 Aircraft manufacturing	1.5294	0.3264	6.0076	1.7620	2.1373
336412 Aircraft engine and engine parts manufacturing	1.4502	0.3039	4.9753	1.6792	2.2248
336413 Other aircraft parts and equipment	1.5348	0.4237	7.3943	1.5715	1.9315
336414 Guided missile and space vehicle manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33641A Propulsion units and parts for space vehicles and guided missiles	1.0000	0.0000	0.0000	0.0000	0.0000
336500 Railroad rolling stock manufacturing	1.7895	0.3496	7.0304	2.3108	2.6823
336611 Ship building and repairing	1.5954	0.4536	9.7104	1.4987	1.5721
336612 Boat building	1.5286	0.3076	7.2303	1.7124	1.7481
336991 Motorcycle, bicycle, and parts manufacturing	1.6843	0.3525	9.7480	2.0878	1.7560
336992 Military armored vehicles and tank parts manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336999 All other transportation equipment manufacturing	1.6082	0.2626	5.6049	2.4153	2.7154
337110 Wood kitchen cabinet and countertop manufacturing	1.6965	0.3888	11.8774	1.7055	1.5478
337121 Upholstered household furniture manufacturing	2.0256	0.4509	13.0805	2.0875	1.8911
337122 Nonupholstered wood household furniture manufacturing	1.7273	0.3957	12.2551	1.7843	1.5702
337124 Metal household furniture manufacturing	1.6148	0.3453	10.6645	1.7758	1.5371
337127 Institutional furniture manufacturing	1.5787	0.3528	11.1876	1.6852	1.4733
33712A Other household and institutional furniture	1.7701	0.3753	10.1557	1.8501	1.6934
337211 Wood office furniture manufacturing	1.7152	0.3981	10.4824	1.7605	1.7161
337212 Custom architectural woodwork and millwork	1.5220	0.4279	11.9282	1.4281	1.3690
337214 Office furniture, except wood, manufacturing	1.6444	0.3352	9.5496	1.8652	1.6914
337215 Showcases, partitions, shelving, and lockers	1.5881	0.3804	11.6288	1.5869	1.4271
337910 Mattress manufacturing	1.9189	0.3560	8.9631	2.5260	2.5654
337920 Blind and shade manufacturing	1.6570	0.3313	8.7256	1.9157	1.8160
339111 Laboratory apparatus and furniture manufacturing	1.6687	0.4790	9.0186	1.6214	1.9013
339112 Surgical and medical instrument manufacturing	1.5085	0.3738	6.8116	1.6064	1.9511
339113 Surgical appliance and supplies manufacturing	1.5360	0.3489	7.1459	1.6890	1.8589
339114 Dental equipment and supplies manufacturing	1.4707	0.3797	7.3679	1.5633	1.7086
339115 Ophthalmic goods manufacturing	1.5193	0.3864	10.2028	1.6142	1.5127
339116 Dental laboratories	1.4723	0.4746	10.4852	1.3762	1.4004
339910 Jewelry and silverware manufacturing	1.4496	0.3157	7.6353	1.6965	1.7198

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*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 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 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.
5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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



**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

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INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
339920 Sporting and athletic goods manufacturing	1.7662	0.3775	9.4258	2.0808	2.0946
339930 Doll, toy, and game manufacturing	1.6422	0.3393	10.1620	1.8412	1.5944
339940 Office supplies, except paper, manufacturing	1.5384	0.3209	7.0881	1.7235	1.8120
339950 Sign manufacturing	1.7621	0.4851	11.1581	1.6075	1.6649
339991 Gasket, packing, and sealing device manufacturing	1.5384	0.3857	7.9737	1.5075	1.6244
339992 Musical instrument manufacturing	1.6073	0.4418	10.7397	1.6062	1.6057
339994 Broom, brush, and mop manufacturing	1.6976	0.3862	8.3606	1.7600	1.9330
339995 Burial casket manufacturing	1.4142	0.2702	6.2879	1.6137	1.6662
33999A Buttons, pins, and all other miscellaneous manufacturing	1.6831	0.3941	8.8671	1.7361	1.8357
420000 Wholesale trade	1.4035	0.4266	9.7815	1.4086	1.5601
4A0000 Retail trade	1.4736	0.4648	18.8182	1.4518	1.2549
481000 Air transportation	1.5152	0.4026	10.3562	1.6826	2.1506
482000 Rail transportation	1.4915	0.3764	7.2056	1.5826	2.0130
483000 Water transportation	1.7264	0.3767	8.2307	2.6221	3.7311
484000 Truck transportation	1.6312	0.4148	11.5734	1.7520	1.7031
485A00 Transit and ground passenger transportation	1.5112	0.5345	28.7483	1.3844	1.1580
486000 Pipeline transportation	1.5634	0.3507	7.8103	2.0598	3.3374
48A000 Scenic and sightseeing transportation and support activities for transportation	1.5512	0.5272	12.8743	1.4918	1.5689
492000 Couriers and messengers	1.3530	0.4595	16.8662	1.2850	1.2280
493000 Warehousing and storage	1.3249	0.5167	16.4103	1.1911	1.1931
511110 Newspaper publishers	1.3539	0.4602	11.7763	1.2928	1.2636
511120 Periodical publishers	1.4513	0.3717	7.9251	1.5016	1.6094
511130 Book publishers	1.3358	0.2949	6.4609	1.4853	1.6085
5111A0 Database, directory, and other publishers	1.3842	0.3100	6.7991	1.5103	1.6079
511200 Software publishers	1.3186	0.4491	7.1826	1.2852	1.8426
512100 Motion picture and video industries	1.3821	0.3643	7.8274	1.4089	1.5871
512200 Sound recording industries	1.3808	0.2498	6.9544	1.7402	1.7886
513100 Radio and television broadcasting	1.5902	0.4596	8.9996	1.6540	2.1701
513200 Cable networks and program distribution	1.5082	0.3406	7.1931	1.6036	1.7895
513300 Telecommunications	1.4396	0.3302	6.9003	1.5778	1.8574
514100 Information services	1.4049	0.6448	16.6816	1.2260	1.2851
514200 Data processing services	1.3335	0.5683	10.0208	1.2269	1.4991
52A000 Monetary authorities and depository credit intermediation	1.3033	0.3129	7.2292	1.4437	1.6559
522A00 Nondepository credit intermediation and related activities	1.3629	0.3349	7.5961	1.5369	1.8761
523000 Securities, commodity contracts, investments	1.4481	0.6349	13.6396	1.3417	1.4465
524100 Insurance carriers	1.6414	0.4349	9.7556	1.8092	1.9471
524200 Insurance agencies, brokerages, and related	1.2578	0.3974	9.7718	1.2490	1.2867
525000 Funds, trusts, and other financial vehicles	1.9878	0.5210	11.2907	4.5187	4.5827
531000 Real estate	1.3444	0.1948	8.1300	1.9625	1.6965
S00800 Owner-occupied dwellings	1.2218	0.0565	1.6567	0.0000	0.0000

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

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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 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 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.

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NOTE.—Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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

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**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
532100 Automotive equipment rental and leasing	1.3563	0.2515	7.7839	1.7055	1.7056
532A00 General and consumer goods rental except video tapes and discs	1.3382	0.3835	12.2853	1.3598	1.3605
532230 Video tape and disc rental	1.3985	0.2971	19.3175	1.4573	1.1521
532400 Machinery and equipment rental and leasing	1.2876	0.2625	6.5664	1.4813	1.7144
533000 Lessors of nonfinancial intangible assets	1.0238	0.1009	1.0523	1.0789	1.2642
541100 Legal services	1.2894	0.6221	11.9364	1.1694	1.3137
541200 Accounting and bookkeeping services	1.2901	0.6129	23.0648	1.1719	1.1418
541300 Architectural and engineering services	1.3184	0.5364	13.8948	1.2545	1.3529
541400 Specialized design services	1.3779	0.5009	25.0274	1.3121	1.1841
541511 Custom computer programming services	1.2665	0.6193	11.7134	1.1648	1.3536
541512 Computer systems design services	1.3071	0.6357	13.0697	1.1957	1.3914
54151A Other computer related services, including facilities management	1.3882	0.3996	9.7941	1.4571	1.7314
541610 Management consulting services	1.3196	0.6094	17.4016	1.1982	1.2679
5416A0 Environmental and other technical consulting services	1.2890	0.5037	15.1376	1.2277	1.2794
541700 Scientific research and development services	1.3767	0.5620	11.0711	1.2466	1.4576
541800 Advertising and related services	1.3392	0.4573	12.4841	1.2959	1.3779
541920 Photographic services	1.3828	0.4746	12.1815	1.2965	1.3984
541940 Veterinary services	1.5173	0.5419	13.3701	1.3533	1.4475
5419A0 All other miscellaneous professional and technical services	1.2463	0.2509	4.8636	1.4727	2.2123
550000 Management of companies and enterprises	1.3229	0.5715	8.9355	1.1912	1.3563
561300 Employment services	1.1131	0.5540	31.2953	1.0789	1.0356
561500 Travel arrangement and reservation services	1.5074	0.5266	18.0632	1.4553	1.3324
561100 Office administrative services	1.3308	0.5511	13.6905	1.2623	1.4093
561200 Facilities support services	1.2414	0.5210	20.3543	1.1863	1.1590
561400 Business support services	1.3249	0.4320	18.5784	1.3100	1.2176
561600 Investigation and security services	1.2163	0.5851	29.8983	1.1393	1.0789
561700 Services to buildings and dwellings	1.4715	0.4909	27.6327	1.4045	1.2052
561900 Other support services	1.3495	0.3852	14.9041	1.3698	1.2773
562000 Waste management and remediation services	1.4747	0.4133	10.5917	1.4807	1.5779
611100 Elementary and secondary schools	1.4881	0.5791	29.6953	1.2670	1.1608
611A00 Colleges, universities, and junior colleges	1.4635	0.5746	20.8910	1.2429	1.2258
611B00 Other educational services	1.4225	0.4127	19.6048	1.4490	1.2724
621A00 Offices of physicians, dentists, and other health practitioners	1.2880	0.6020	11.4860	1.1733	1.3137
621600 Home health care services	1.3318	0.6210	29.0664	1.1984	1.1242
621B00 Other ambulatory health care services	1.4888	0.5514	15.0909	1.3628	1.4377
622000 Hospitals	1.4687	0.5528	14.7006	1.3238	1.3984
623000 Nursing and residential care facilities	1.4039	0.6092	28.7892	1.2266	1.1786
624400 Child day care services	1.4406	0.4616	33.4947	1.3334	1.1223
624A00 Social assistance, except child day care services	1.5012	0.5713	30.8846	1.3208	1.1559
711100 Performing arts companies	1.3533	0.4905	32.1198	1.2726	1.1299
711200 Spectator sports	1.3811	0.6400	24.6163	1.2705	1.2657

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

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

**RIMS II Multipliers (1997/2004)**  
**Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry**  
**Duke Region (EXOGENOUS)**

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INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
711A00 Promoters of performing arts and sports and agents for public figures	1.3320	0.4313	35.0190	1.3126	1.1437
711500 Independent artists, writers, and performers	1.5449	0.4970	17.5117	1.4901	1.8755
712000 Museums, historical sites, zoos, and parks	1.5838	0.5287	16.7242	1.4475	1.5078
713940 Fitness and recreational sports centers	1.4934	0.5247	35.5449	1.3220	1.1175
713950 Bowling centers	1.4210	0.4879	31.9135	1.3036	1.1086
713A00 Other amusement, gambling, and recreation industries	1.3656	0.4898	24.4653	1.2578	1.1355
7211A0 Hotels and motels, including casino hotels	1.3285	0.4439	21.2897	1.2622	1.1403
721A00 Other accommodations	1.4390	0.3447	15.3089	1.5255	1.2986
722000 Food services and drinking places	1.4876	0.4908	34.4272	1.2958	1.1059
8111A0 Automotive repair and maintenance, except car washes	1.6218	0.4400	17.1924	1.5607	1.3321
811192 Car washes	1.3261	0.4015	33.1753	1.3159	1.0908
811200 Electronic equipment repair and maintenance	1.3197	0.4925	15.8632	1.2185	1.1928
811300 Commercial machinery repair and maintenance	1.3355	0.4476	15.9055	1.2542	1.1905
811400 Household goods repair and maintenance	1.3161	0.3485	16.6918	1.3475	1.1966
812100 Personal care services	1.3606	0.4590	26.8164	1.2793	1.1406
812200 Death care services	1.3708	0.4113	16.2941	1.3427	1.2360
812300 Drycleaning and laundry services	1.3849	0.4728	24.9870	1.2863	1.1447
812900 Other personal services	1.4605	0.2611	11.1533	1.8689	1.4877
813100 Religious organizations	1.2735	0.5855	27.4994	1.1171	1.0816
813A00 Grantmaking and giving and social advocacy organizations	1.6061	0.5331	20.4578	1.5796	1.4828
813B00 Civic, social, professional and similar organizations	1.5938	0.5409	25.5152	1.4391	1.2454
491000 Postal service	1.2220	0.5666	10.8699	1.1214	1.2067
S00A00 Other government enterprises	1.5518	0.3812	10.8505	1.6891	1.6577
H00000 Households	0.0000	0.0000	0.0000	0.0000	0.0000

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

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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 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 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.

5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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

RIMS II Multipliers (1997/2004)

Table 2.4 Total Multipliers for Output, Earnings, and Employment by Industry Aggregation  
Duke Region (EXOGENOUS)

1/2

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
1. Crop and animal production	1.5889	0.2618	8.7088	1.8015	1.5409
2. Forestry, fishing, and related activities	1.4795	0.2826	10.6541	1.5681	1.4536
3. Oil and gas extraction	1.0000	0.0000	0.0000	0.0000	0.0000
4. Mining, except oil and gas	1.4277	0.3603	7.2868	1.5063	1.6070
5. Support activities for mining	1.5763	0.4063	11.3142	1.9295	1.7128
6. Utilities*	1.2171	0.2338	3.9065	1.3711	1.8782
7. Construction	1.6516	0.5278	16.0485	1.5035	1.4420
8. Wood product manufacturing	1.8367	0.3518	10.5100	2.1561	2.0664
9. Nonmetallic mineral product manufacturing	1.5516	0.3476	7.9850	1.7047	1.7457
10. Primary metal manufacturing	1.5082	0.2817	5.8406	1.8727	2.1324
11. Fabricated metal product manufacturing	1.5475	0.3722	8.9310	1.6125	1.5830
12. Machinery manufacturing	1.6187	0.3663	7.6275	1.7762	1.9108
13. Computer and electronic product manufacturing	1.5814	0.3532	6.3139	1.8080	2.2854
14. Electrical equipment and appliance manufacturing	1.6508	0.3266	6.8404	2.0381	2.2610
15. Motor vehicle, body, trailer, and parts manufacturing	1.9462	0.3358	6.9465	2.6340	3.3158
16. Other transportation equipment manufacturing	1.6030	0.3337	6.8284	1.8695	2.0618
17. Furniture and related product manufacturing	1.8825	0.4232	12.2794	1.9467	1.7363
18. Miscellaneous manufacturing	1.6160	0.4012	8.3577	1.6338	1.7627
19. Food, beverage, and tobacco product manufacturing	1.5346	0.2437	5.7816	2.3775	2.3188
20. Textile and textile product mills	1.9944	0.3811	10.1473	2.3300	2.0976
21. Apparel, leather, and allied product manufacturing	1.9988	0.4226	11.6588	2.1934	2.0497
22. Paper manufacturing	1.6855	0.3194	6.7350	2.0962	2.5180
23. Printing and related support activities	1.5787	0.4092	9.8766	1.5549	1.5324
24. Petroleum and coal products manufacturing	1.5289	0.3343	5.7756	1.7975	2.3598
25. Chemical manufacturing	1.6402	0.2816	5.1198	2.3815	3.2213
26. Plastics and rubber products manufacturing	1.7641	0.3403	7.5591	2.0331	2.0678
27. Wholesale trade	1.4019	0.4245	9.6066	1.4017	1.5322
28. Retail trade	1.4716	0.4596	18.5322	1.4354	1.2358
29. Air transportation	1.4935	0.3989	10.6456	1.6669	2.2107
30. Rail transportation	1.4764	0.3725	7.1274	1.5661	1.9911
31. Water transportation	1.6878	0.3728	8.2095	2.5950	3.7215
32. Truck transportation	1.6263	0.4121	11.4657	1.7404	1.6872
33. Transit and ground passenger transportation*	1.5141	0.5320	28.5455	1.3779	1.1498
34. Pipeline transportation	1.5663	0.3541	7.6454	2.0795	3.2669
35. Other transportation and support activities*	1.3860	0.5196	12.8758	1.2797	1.3298
36. Warehousing and storage	1.3222	0.5107	16.1038	1.1773	1.1708
37. Publishing including software	1.3678	0.3951	8.0505	1.3681	1.4914
38. Motion picture and sound recording industries	1.3794	0.3321	7.1255	1.4428	1.5991
39. Broadcasting and telecommunications	1.4665	0.3455	7.0421	1.5895	1.8448
40. Information and data processing services	1.3377	0.5650	11.2399	1.2199	1.3965
41. Federal Reserve banks, credit intermediation and related services	1.3131	0.3135	6.9661	1.4453	1.6397
42. Securities, commodity contracts, investments	1.4448	0.6297	13.3202	1.3308	1.4126
43. Insurance carriers and related activities	1.5885	0.4276	9.6429	1.6130	1.6558

(Continued)

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*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 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 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.

5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix C identifies the industries corresponding to the entries.

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

**RIMS II Multipliers (1997/2004)**  
**Table 2.4 Total Multipliers for Output, Earnings, and Employment by Industry Aggregation**  
**Duke Region (EXOGENOUS)**

2/2

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
44. Funds, trusts, and other financial vehicles	1.9903	0.5161	11.0082	4.4763	4.4680
45. Real estate	1.2681	0.1098	4.1258	2.7049	2.1040
46. Rental and leasing services and lessors of intangible assets	1.2324	0.2141	7.0730	1.4367	1.3945
47. Professional, scientific, and technical services	1.3175	0.5565	13.5596	1.2139	1.3017
48. Management of companies and enterprises	1.3194	0.5660	8.7279	1.1796	1.3248
49. Administrative and support services	1.2832	0.5091	25.4672	1.2039	1.1169
50. Waste management and remediation services	1.4802	0.4127	10.7022	1.4786	1.5943
51. Educational services	1.4539	0.5280	21.6489	1.2658	1.1995
52. Ambulatory health care services	1.3196	0.5923	13.1839	1.1861	1.2711
53. Hospitals and nursing and residential care facilities	1.4522	0.5584	18.5032	1.2825	1.2681
54. Social assistance	1.4625	0.5071	31.2096	1.3124	1.1311
55. Performing arts, museums, and related activities	1.3809	0.6020	27.1112	1.2816	1.2280
56. Amusements, gambling, and recreation	1.3895	0.4924	27.3344	1.2614	1.1160
57. Accommodation	1.3334	0.4344	20.7372	1.2677	1.1415
58. Food services and drinking places	1.4653	0.4836	34.0210	1.2769	1.0928
59. Other services*	1.4570	0.4295	18.5216	1.3728	1.2174
60. Households	0.0000	0.0000	0.0000	0.0000	0.0000

Region Definition: Burke, NC; Cabarrus, NC; Catawba, NC; Cleveland, NC; Gaston, NC; Henderson, NC; Iredell, NC; Lincoln, NC; McDowell, NC; Mecklenburg, NC; Polk, NC; Rutherford, NC; Union, NC; Cherokee, SC; Chester, SC; Fairfield, SC; Greenville, SC; Lancaster, SC; Laurens, SC; Newberry, SC; Spartanburg, SC; Union, SC; York, SC

\*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 2004 data, the output delivered to final demand should be in 2004 dollars.
  4. Each entry in column 4 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.
  5. Each entry in column 5 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 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix C identifies the industries corresponding to the entries.
- SOURCE.—Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

**From:** Bess, Rebecca [<mailto:Rebecca.Bess@bea.gov>]  
**Sent:** Monday, April 18, 2011 2:39 PM  
**To:** [rturney@enercon.com](mailto:rturney@enercon.com)  
**Subject:** Payment Receipt for RIMS II Order #453 (Bellefonte and Duke Regions)

Ms. Turney –

Thank you for contacting the RIMS II staff.

Below, please find a receipt for your order #453 placed on 04/18/2007:

**Agency: BEA Application: RIMS II**

**Transaction Information**

Pay.gov Tracking ID: [REDACTED]  
Agency Tracking ID: 453  
Account Holder Name: [REDACTED]  
Transaction Date (ET): 04/18/2007 12:24 PM  
Transaction Amount: \$450.00  
Email Address:  
Address: [REDACTED]  
Event: Sale  
Credit Card Type: Visa  
Credit Card Number: [REDACTED]  
Expiration: [REDACTED]

**Agency Memo Information**

Collection Status:

Approval Code:

Batch Pay.gov Tracking ID:

Service:

Return Code:

Return Detail:

OrderKey 453 Time 12:24:21 PM Date Wednesday, April 18, 2007

If you have any questions, please contact me at 202-606-5343 or [RIMS@bea.gov](mailto:RIMS@bea.gov).

Sincerely,  
Rebecca Bess



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Multipliers based on 2004 national annual input-output data and 2004 regional data are available for any single or multi-county region.  
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