Cost of Doing Business

Marisa DiNatale, March 2005

Businesses continue to aggressively pursue cost savings in an effort to support their profitability. A popular cost saving approach for many businesses has been to locate and expand their operations in lower cost areas both overseas and here at home. Facilitating this effort has been the advent and rapid adoption of e-commerce, high-technology logistics systems, rapid transportation, and real-time inventory management techniques. These technologies have made it possible for firms to establish activities in low-cost areas that may very well be far from traditional centers of business.

This dynamic is evident when examining the relationship between differences in business costs and economic growth across the nation's states. An estimated one-fifth of the difference in employment growth across states since the late 1980s is explained by differences in business costs (see Chart 1). This article provides an update to Economy.com's cost of doing business state and metropolitan area indices.

Cost comparison. The Northeast retains its status as the highest-cost region in the country to do business (see Table 1 and Chart 2). Indeed, five of the ten costliest states in the nation are in the Northeast. For the second consecutive year, Massachusetts has the highest business cost index. The state ranks first in labor costs and fifth in energy costs. Within the Northeast, only New Hampshire and Rhode Island have a business cost index below 100, or the U.S. average.

Boston has surpassed New York City as the most costly metropolitan area in which to do business, with overall costs nearly 33% above the U.S. average. (See Table 2.) New York now ranks fifth overall. Boston and New York are the only metro areas among the ten most costly that are not located in California. San Diego, Los Angeles, and Sacramento rank second, third, and fourth to round out the top five between Boston and New York.

The West has the second-highest costs overall. California has the second-highest overall business costs among states, and each of its metropolitan areas has a cost index above the U.S. average. Hawaii is the third costliest state. Its only metro area, Honolulu, is the 29th costliest metro area in the nation.

There is great variation within the West, however, with high costs in the coastal areas and low costs in much of the Mountain regions. For example, New Mexico has the lowest cost index, and Wyoming ranks 49th out of the 51 states and the District of Columbia.

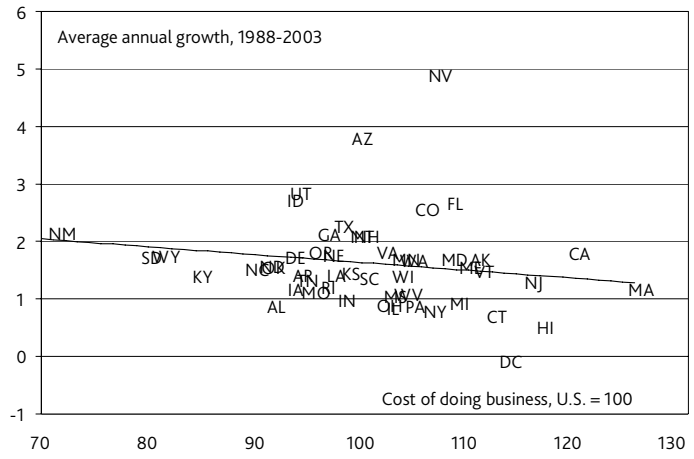
Similarly, the Midwest is characterized as being a relatively high cost area in the Great Lakes region, but a low cost area in the Plains states. Michigan, for example, ranks tenth in overall business costs due to its high labor costs. Other states with high rates of labor unionization in the Midwest such as Ohio, Illinois, Minnesota, and Wisconsin, also rank above the U.S. average in overall business costs. At the other end of the distribution, South Dakota is the second-least costly state in the U.S., and North Dakota ranks sixth from the bottom.

The least costly region of the U.S. is the South. Florida, which ranks 11th in overall business costs, is the highest-ranking state in the South. The majority of the states in the South, however, have costs that are below the U.S. average. Within the South Atlantic states, the Washington D.C. metropolitan area, Richmond, VA, and Salisbury, MD have above average business costs, but the only other southern metropolitan areas with business costs above the U.S. average are all located in Florida. No metro areas in the East South Central states have above-average costs except for Jackson, MS, which has an overall index of 101.0. Within the West South Central states, only one metro area—Laredo, TX—has above average costs, implying low labor productivity.

Revisions. The largest change to this year's cost of doing business index was the calculation of the indices based on the new OMB-defined metropolitan statistical areas. Since the labor cost and tax burden indices use county-level data in their calculations, historical estimates of those indices were calculated by summing the county data up to the new metro areas. The office rent and energy indices are calculated at the metro level only. The office index was created for the new metro areas by mapping the new areas to an old area for which previous data were available, based on location and office-using employment. The energy index was created for metro areas by mapping each area to a specific provider. No other methodological changes were introduced with the release of this year's index.

Data revisions, however, have caused some revisions to our cost indices. Shifts in the cost indices for 2001 were largely driven by revisions to previously-released gross state product data. Further, gross state product figures released for 2002 and 2003 replace our own estimates previously used for these two years. These revisions typically produce the greatest shifts in the business cost index, since they directly

Chart 1: Costs Drive Long-Run Growth



impact the unit labor cost component, which has the largest weight in the overall index. Unit labor costs are defined as total wage and salary payments per dollar of output. Thus, an upward revision in GSP will lower the estimated unit labor cost, thereby lowering the overall cost of doing business, all else remaining constant.

For example, Louisiana's GSP was revised up by nearly 11% from its previously-reported level. This had the effect of lowering the unit labor cost component for the state by 2.5 points, which in turn, lowered the overall business cost index. Conversely, Michigan's GSP was revised down by nearly 6% causing both the unit labor cost and overall indices to rise.

Over-the-year changes in the indices also occurred due to newly-released GSP data for 2003. For example, Alaska's overall cost index increased by nearly five points between 2002 and 2003 because of a large increase in the state's unit labor cost. The increase was caused by a 4% drop in industry-adjusted GSP over the year coupled with a smaller decline in wages.

Methodology. The metro area business cost index includes the costs of labor, energy, taxes and office rents. Unit labor costs are given a 65% weight in the overall index, energy costs a 15% weight, tax burdens a 10% weight and office rents a 10% weight. These weights are assigned based upon the importance of each cost component in explaining long-term regional employment growth. Due to a lack of office rent data for states, the state business cost index gives a 75% weight to unit labor costs, 15% to energy costs, and 10% to tax burdens.

While each cost component is estimated for each year, the business cost index uses a three-year moving average. This process ensures a more consistent and reliable estimate of business costs. The current relative business cost measure is thus the average of the period from 2001 to 2003.

Unit labor costs are defined as labor compensation per dollar of output. Since unit labor costs account for labor productivity, they are a more accurate measure of labor costs, and thus business location decisions, than labor compensation alone. Labor compensation is measured by total wages and salaries by place of work divided by total employment. Output is measured by gross product, which is available from the Bureau of Economic Analysis for states and is estimated by Economy.com for metro areas.

Unit labor costs are measured for each 3-digit NAICS industry. If a 3-digit NAICS industry within a metro area has fewer than 100 employees, then unit labor costs in the state are used and not the metro area measure of unit labor costs. A number of 3-digit NAICS industries in retail trade, construction, real estate, services and government are not included in the calculation. Businesses and institutions in these industries serve local demand, and growth in these industries is thus not influenced by the relative costs of doing business across regions. Moreover, businesses in those industries that do locate or expand their operations across regions based on differences in regional labor costs are not influenced by labor costs in these locally-oriented industries.

Total unit labor costs are constructed by creating a weighted average of unit labor costs in each 3-digit NAICS industry. The weights are equal to the national share of employment in each industry. This adjustment is necessary since unit labor costs vary across industries due to the occupational mix of the industry's employment and the capital structure of its operations. For example, productivity in the automotive industry is extremely high compared to other industries, whereas it is low in the textile industry. As a result of these industry differences, a region with a high proportion of automotive manufacturing will appear to have lower unit labor costs than a region with a large textile industry. However, this bias can be avoided by using the national share of employment in each industry to weight the unit labor costs for each region.

The energy cost index compares the average commercial and industrial electricity costs, in cents per kilowatt-hour, to the national average. The data come from the Energy Information Administration (EIA), a division of the Department of Energy. The EIA reports commercial and industrial prices of all major independent and publicly-owned utilities, as well as cooperatives. When available, the electricity price of the primary indepen-

Chart 2: Relative Cost of Doing Business by State

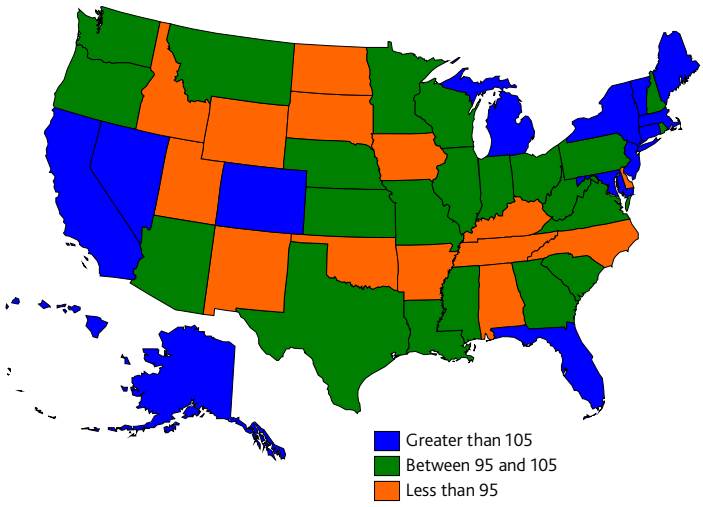


Table 1: State Cost of Doing Business Index

	Cost of Doing Business Index	Rank	Unit Labor Cost Index	Rank	Energy Index	Rank	State & Local Tax Index	Rank
Alabama	91.5	44	94.9	40	83.0	35	78.5	51
Alaska	110.4	8	107.8	14	140.2	7	85.2	48
Arizona	99.2	28	100.2	28	95.7	17	97.1	28
Arkansas	93.7	39	96.9	35	74.9	45	97.9	25
California	119.5	2	112.5	5	162.5	2	107.5	10
Colorado	105.2	15	110.8	8	87.8	27	89.1	44
Connecticut	111.9	6	109.4	9	135.5	9	95.3	33
Delaware	93.2	41	94.6	41	88.9	25	89.3	43
District Of Columbia	113.2	5	116.3	2	94.9	19	117.4	3
Florida	108.2	11	112.4	6	95.6	18	95.5	32
Georgia	96.2	35	100.0	29	81.4	38	90.7	41
Hawaii	116.3	3	98.8	31	206.4	1	112.1	5
Idaho	93.2	42	96.3	38	72.7	48	100.5	18
Illinois	102.3	22	104.0	22	98.1	16	96.1	29
Indiana	97.8	30	102.3	24	76.8	42	95.7	31
Iowa	93.2	43	94.3	42	82.5	37	100.7	17
Kansas	99.1	29	102.1	26	84.4	30	98.6	22
Kentucky	85.0	48	87.0	48	66.5	51	97.6	26
Louisiana	97.0	32	97.0	34	98.3	15	95.3	34
Maine	109.2	9	109.3	10	102.0	13	119.2	2
Maryland	108.0	12	113.6	4	89.2	23	94.1	36
Massachusetts	125.0	1	125.5	1	144.3	5	92.7	38
Michigan	108.3	10	112.4	7	92.4	22	101.1	16
Minnesota	102.9	20	106.8	15	79.8	40	108.1	8
Mississippi	102.7	21	106.0	16	89.0	24	98.0	24
Missouri	95.1	37	99.6	30	76.6	43	88.7	45
Montana	99.2	27	102.4	23	83.7	33	99.3	21
Nebraska	96.9	33	100.9	27	74.8	46	100.4	20
Nevada	106.4	13	104.3	21	122.4	11	98.2	23
New Hampshire	99.5	26	92.2	43	149.3	3	80.1	49
New Jersey	115.4	4	114.6	3	127.6	10	102.9	15
New Mexico	70.1	51	62.4	51	94.2	21	91.2	40
New York	106.0	14	95.9	39	143.0	6	126.6	1
North Carolina	89.5	47	89.6	46	86.1	28	94.2	35
North Dakota	90.8	46	91.1	45	76.2	44	110.2	6
Ohio	101.7	24	102.3	25	94.7	20	107.3	11
Oklahoma	91.1	45	91.9	44	85.5	29	93.0	37
Oregon	95.6	36	96.9	36	83.9	32	104.0	13
Pennsylvania	104.3	16	104.4	19	109.5	12	95.8	30
Rhode Island	96.9	34	87.4	47	139.8	8	104.0	14
South Carolina	99.8	25	104.3	20	82.7	36	91.4	39
South Dakota	79.8	50	78.1	50	84.2	31	86.3	47
Tennessee	94.2	38	98.4	32	83.2	34	78.9	50
Texas	97.6	31	98.1	33	100.9	14	89.4	42
Utah	93.7	40	96.5	37	71.7	49	105.3	12
Vermont	110.7	7	104.9	17	146.4	4	100.4	19
Virginia	101.7	23	108.6	11	77.0	41	86.9	46
Washington	103.9	17	108.1	13	79.9	39	107.8	9
West Virginia	103.3	18	108.6	12	73.5	47	108.3	7
Wisconsin	103.2	19	104.7	18	88.5	26	113.7	4
Wyoming	81.1	49	80.9	49	71.5	50	97.3	27

Table 2: U.S. Metropolitan Area Relative Business Costs

	Cost of Doing Business Index	Rank	Unit Labor Cost Index	Rank	Energy Index	Rank	State & Local Tax Index	Rank	Office Rent Index	Rank
New England										
Bangor ME	110.6	44	109.5	97	116.0	86	111.9	19	67.5	186
Barnstable MA	120.9	18	118.6	18	168.6	34	105.3	44	79.0	84
Boston MA	136.6	1	136.1	1	171.9	33	91.1	194	125.0	7
Bridgeport CT	116.9	30	117.8	22	142.2	48	91.5	188	87.2	43
Burlington VT	103.8	90	103.9	174	137.1	57	97.7	124	68.0	175
Hartford CT	108.7	47	108.8	105	137.9	55	97.8	121	84.5	55
Lewiston ME	107.2	55	106.4	132	116.0	87	115.4	15	46.6	306
Manchester NH	96.6	173	83.2	352	149.8	36	75.7	315	125.0	6
New HavenCT	98.7	145	88.2	345	142.2	49	97.8	120	87.2	42
Norwich CT	107.6	50	107.9	115	137.9	56	96.9	134	79.0	86
Pittsfield MA	114.0	37	123.1	3	136.9	58	93.4	173	46.6	307
Portland ME	111.5	39	107.2	123	116.0	85	116.8	11	79.0	85
Providence RI	101.1	117	94.3	313	146.6	43	99.1	102	81.3	71
Springfield MA	117.5	27	125.6	2	148.7	41	91.6	186	63.4	248
Worcester MA	115.2	34	111.4	84	148.7	42	88.5	221	125.0	5
Middle Atlantic										
Albany NY	105.1	71	94.8	306	194.4	29	116.0	12	78.9	87
Allentown PA	102.6	100	111.5	83	103.6	125	100.5	88	54.6	281
Altoona PA	100.7	122	107.8	116	121.5	67	88.5	220	46.6	305
Atlantic City NJ	117.2	28	114.7	45	141.6	50	117.4	9	100.0	26
Binghamton NY	102.1	109	92.7	321	144.8	46	119.6	7	69.8	146
Buffalo NY	111.0	41	105.6	143	194.4	28	115.3	16	78.8	89
Elmira NY	100.1	132	90.1	337	144.8	45	111.9	18	70.8	136
Erie PA	106.1	62	106.5	129	121.5	68	93.6	168	100.0	31
Glens Falls NY	102.9	96	94.5	310	194.4	31	125.9	3	46.6	309
Harrisburg PA	102.5	103	108.0	114	103.6	121	93.6	170	81.2	72
Ithaca NY	100.2	130	90.5	334	144.8	44	120.2	6	69.6	147
Johnstown PA	104.9	73	110.4	90	121.5	69	91.4	192	70.0	143
Kingston NY	100.5	126	92.6	322	114.1	88	137.8	1	100.0	30
Lancaster PA	99.5	135	103.5	182	103.6	122	93.9	163	79.3	82
Lebanon PA	99.2	140	102.7	193	103.6	123	93.1	176	81.2	73
New York NY	129.3	5	103.2	185	237.8	1	117.0	10	150.7	1
Ocean City NJ	116.4	32	111.7	81	141.6	52	136.7	2	100.0	24
Philadelphia PA	108.3	48	104.5	159	144.3	47	95.9	145	96.9	34
Pittsburgh PA	102.2	106	105.2	148	89.9	202	96.4	141	94.2	35
Poughkeepsie NY	102.1	108	96.4	285	114.1	89	122.7	4	100.0	27
Reading PA	104.0	87	106.6	128	103.6	124	99.6	96	100.0	28
Rochester NY	104.8	75	100.6	226	126.3	61	115.5	13	81.0	75
Scranton PA	100.9	120	105.8	139	103.6	120	93.2	175	77.3	94
State College PA	94.2	210	107.6	118	79.4	280	89.6	210	46.6	304
Syracuse NY	104.6	77	94.7	308	194.4	27	121.8	5	69.6	148
Trenton NJ	114.5	36	116.3	33	119.6	70	103.7	55	100.0	29
Utica NY	107.6	52	94.8	307	194.4	30	118.6	8	100.0	23
Vineland NJ	113.1	38	116.1	35	141.6	51	94.6	155	76.1	105
Williamsport PA	97.4	160	105.7	140	103.6	118	93.8	165	46.6	308
York PA	102.9	97	105.7	142	103.6	119	91.5	187	100.0	25
East North Central										
Akron OH	102.6	101	102.8	190	116.6	82	104.8	49	81.1	74
Anderson IN	93.4	223	103.8	176	68.6	337	88.7	217	74.6	111
Ann Arbor MI	107.0	57	115.7	38	98.0	154	107.4	35	68.5	162
Appleton WI	94.2	212	104.0	173	70.9	329	110.8	22	59.7	271
Battle Creek MI	102.2	107	109.0	102	97.8	159	103.0	61	66.1	201
Bay City MI	104.5	78	112.5	69	97.8	155	108.4	28	63.5	244
Bloomington IN	87.2	324	98.8	256	68.6	338	88.6	219	43.1	347
Bloomington IL	95.8	189	100.6	224	92.1	188	88.4	222	70.4	138
Canton OH	94.2	211	101.4	214	71.1	323	99.7	94	63.5	245
Champaign IL	97.0	164	103.7	177	92.1	189	87.6	228	63.7	241
Chicago IL	104.5	79	106.2	134	96.9	167	94.5	156	109.3	10
Cincinnati OH	99.2	138	107.3	122	86.6	236	102.8	64	74.2	114
Cleveland OH	110.8	43	111.6	82	125.3	63	106.7	41	84.7	54
Columbus IN	91.2	278	99.2	248	68.6	343	96.6	137	74.6	110
Columbus OH	104.4	81	111.7	80	84.4	252	105.2	45	87.2	44
Danville IL	91.6	263	99.0	253	92.1	186	83.1	261	43.1	352
Davenport IA	93.0	234	105.3	146	72.9	315	88.8	214	44.4	331

Table 2: U.S. Metropolitan Area Relative Business Costs (cont.)

	Cost of Doing Business Index	Rank	Unit Labor Cost Index	Rank	Energy Index	Rank	State & Local Tax Index	Rank	Office Rent Index	Rank
Dayton OH	97.0	165	105.2	147	74.4	309	102.8	62	68.4	171
Decatur IL	93.2	229	101.6	210	92.1	187	81.8	272	43.1	351
Detroit MI	104.4	83	110.1	92	98.0	152	102.5	67	82.5	68
Eau Claire WI	99.0	144	105.0	149	91.9	193	106.8	40	62.5	254
Elkhart IN	96.9	171	102.7	192	95.4	171	93.5	171	63.7	237
Evansville IN	94.1	214	100.3	231	95.4	172	94.2	159	56.6	276
Flint MI	104.9	74	114.3	51	97.8	164	100.5	89	64.3	233
Fond du Lac WI	92.7	241	99.2	249	101.0	137	109.6	24	43.1	350
Fort Wayne IN	96.9	168	108.8	107	73.1	313	94.7	154	65.4	215
Grand Rapids MI	103.9	89	111.3	85	97.8	161	100.3	91	66.8	197
Green Bay WI	94.6	205	104.5	158	70.9	330	107.9	33	70.1	142
Holland MI	107.4	54	117.5	23	97.8	160	101.4	80	66.8	198
Indianapolis IN	92.9	238	101.2	216	68.6	336	94.0	161	74.6	112
Jackson MI	101.3	114	109.1	101	97.8	156	96.5	139	62.5	257
Janesville WI	97.2	162	103.5	181	101.0	135	108.0	32	62.5	259
Kalamazoo MI	105.8	65	114.8	44	97.8	158	103.4	57	66.1	202
Kankakee IL	92.4	254	98.7	257	96.9	166	86.4	235	43.1	356
Kokomo IN	90.1	295	101.9	205	68.6	342	101.4	81	43.1	357
La Crosse WI	96.9	167	104.6	155	91.9	199	108.1	30	43.1	355
Lafayette IN	91.1	279	100.5	227	68.6	339	93.6	166	63.7	238
Lansing MI	107.6	51	116.3	32	97.8	163	102.8	63	73.1	122
Lima OH	93.8	220	101.1	217	71.1	322	99.6	97	62.5	255
Madison WI	100.0	133	106.0	136	90.2	201	115.4	14	79.2	83
Mansfield OH	92.5	248	98.3	267	71.1	325	103.3	58	63.7	240
Michigan City IN	89.9	299	97.6	274	68.6	341	101.0	84	63.7	239
Milwaukee WI	100.4	128	103.6	178	95.9	170	115.3	17	86.2	46
Monroe MI	106.2	61	112.0	76	98.0	153	107.7	34	82.5	69
Muncie IN	90.5	293	102.2	203	73.1	311	90.8	196	43.1	354
Muskegon MI	104.4	80	113.3	65	97.8	162	99.6	99	66.8	196
Niles MI	99.9	134	112.2	72	73.1	312	102.4	70	62.5	261
Oshkosh WI	97.2	163	104.4	162	101.0	134	108.1	31	59.7	272
Peoria IL	95.7	190	104.2	167	92.1	191	82.3	268	55.4	279
Racine WI	95.9	186	102.6	195	95.9	169	104.9	48	62.9	252
Rockford IL	98.0	152	103.9	175	96.9	168	90.9	195	63.0	249
Saginaw MI	103.2	94	112.3	70	97.8	157	95.4	149	63.5	243
Sandusky OH	99.2	141	97.2	277	116.6	84	109.4	25	71.3	133
Sheboygan WI	93.0	235	99.3	246	101.0	136	111.5	21	43.1	343
South BendMI	96.4	178	106.8	125	73.1	314	92.8	177	70.1	141
Springfield IL	96.1	184	103.0	187	92.1	190	83.9	253	63.6	242
Springfield OH	97.8	156	97.1	280	116.6	83	98.3	113	68.4	170
Terre Haute IN	91.1	280	100.6	225	68.6	340	96.5	138	62.5	256
Toledo OH	102.8	99	104.1	171	111.5	91	104.7	50	71.3	134
Wausau WI	92.5	250	104.5	157	70.9	328	109.9	23	43.1	342
Weirton WV	93.9	219	102.9	188	71.1	324	107.4	37	43.1	345
Youngstown OH	107.7	49	114.5	49	116.6	81	98.1	117	70.2	140
West North Central										
Ames IA	92.9	237	98.4	263	87.7	231	94.0	162	78.2	93
Bismarck ND	85.3	337	88.6	344	74.8	304	102.5	69	65.5	213
Cedar Rapids IA	86.6	331	90.9	333	87.7	227	96.8	135	62.5	253
Columbia MO	91.4	271	108.5	110	61.8	355	75.2	323	43.1	353
Des Moines IA	92.7	242	98.6	258	72.9	316	99.1	101	78.2	92
Dubuque IA	96.4	177	105.9	138	87.7	229	93.3	174	65.5	212
Duluth MNI	97.5	158	106.9	124	74.2	310	109.2	26	64.8	231
Fargo ND	90.5	291	94.2	314	91.9	194	102.4	71	54.6	282
Grand Forks ND	92.7	239	99.0	252	91.9	195	105.1	46	43.1	348
Iowa City IA	88.6	308	98.5	262	87.7	230	94.0	160	43.1	349
Jefferson City MO	88.4	311	104.1	170	61.8	356	75.7	314	43.1	346
Joplin MO	94.8	203	105.7	141	78.9	281	73.6	330	62.5	262
Kansas City MO	96.2	183	99.6	243	86.1	241	84.9	245	85.5	49
Lawrence KS	89.8	300	98.0	270	72.8	319	90.4	201	65.5	214
Lincoln NE	89.6	302	100.9	221	67.7	347	93.6	167	66.2	200
Minneapolis MN	111.0	42	115.1	41	91.9	197	107.3	38	105.0	15
Omaha NE	91.4	274	101.9	204	69.5	331	90.0	206	78.6	90
Rapid City SD	84.2	346	79.5	356	112.2	90	78.7	295	65.5	211

Table 2: U.S. Metropolitan Area Relative Business Costs (cont.)

	Cost of Doing Business Index	Rank	Unit Labor Cost Index	Rank	Energy Index	Rank	State & Local Tax Index	Rank	Office Rent Index	Rank
Rochester MN	96.3	180	104.2	168	91.9	192	104.4	52	43.1	344
Sioux City IA	89.3	305	98.9	254	87.7	228	93.9	164	43.1	341
Sioux Falls SD	79.4	358	77.6	359	91.9	198	77.7	301	70.4	139
Springfield MO	87.8	316	96.2	289	78.9	282	73.7	327	44.4	330
St. Cloud MN	100.3	129	106.1	135	91.9	196	107.1	39	62.5	260
St. Joseph MO	94.3	209	104.3	164	88.2	226	77.1	306	65.5	210
St. Louis MO	90.9	284	98.4	265	61.8	357	79.5	287	91.0	37
Topeka KS	88.5	309	97.3	275	72.8	317	92.0	184	62.5	258
Waterloo IA	91.3	276	101.8	206	87.7	232	95.5	148	43.1	340
Wichita KS	92.5	252	104.9	150	72.8	318	83.3	259	60.1	269
South Atlantic										
Albany GA	87.1	326	97.2	276	77.8	294	78.2	298	46.7	292
Anderson SC	95.1	197	103.6	180	80.5	271	85.6	240	74.0	117
Asheville NC	88.8	307	92.1	326	88.4	222	88.9	213	68.4	165
Athens GA	91.6	265	100.4	228	77.8	288	77.4	304	76.1	104
Atlanta GA	92.3	257	96.2	288	77.8	284	80.5	281	98.0	32
Augusta GA	96.8	172	108.2	112	77.8	285	79.2	290	76.5	96
Baltimore MD	105.7	67	119.3	13	101.6	130	92.6	179	85.5	50
Blacksburg VA	93.4	226	109.9	96	61.9	354	78.6	296	65.4	221
Brunswick GA	92.6	246	102.3	200	77.8	295	80.5	282	65.4	224
Burlington NC	86.9	329	88.7	342	80.5	267	84.7	247	79.9	78
Cape Coral FL	105.2	70	117.1	26	100.9	142	96.8	136	66.9	195
Charleston WV	96.9	169	108.8	104	61.9	353	109.0	27	65.4	222
Charleston SC	98.5	147	106.0	137	86.2	240	90.6	199	85.6	48
Charlotte NC	92.7	240	94.9	304	80.5	269	92.3	183	100.5	20
Charlottesville VA	99.4	136	112.9	68	85.9	245	80.0	285	67.6	179
Columbia SC	95.3	192	104.4	163	86.2	239	87.0	232	65.0	228
Columbus GA	91.3	275	101.5	212	77.8	289	76.0	310	65.4	218
Cumberland MD	98.0	153	113.9	57	76.6	298	95.3	150	46.7	297
Dalton GA	82.5	353	86.5	347	77.8	290	82.6	267	66.0	206
Danville VA	93.8	221	106.6	127	85.9	248	80.7	279	46.7	301
Deltona FL	104.3	84	114.5	48	100.9	139	91.5	189	76.5	97
Dover DE	87.1	325	95.9	293	93.0	184	86.4	234	46.7	300
Durham NC	90.4	294	91.8	329	80.5	273	94.9	153	87.3	41
Fayetteville NC	88.1	314	91.6	330	88.4	221	86.6	233	65.4	219
Florence SC	93.3	227	103.3	184	88.4	215	83.5	258	46.7	298
Fort Walton Beach FL	103.2	93	121.2	7	80.4	276	83.0	262	71.5	132
Gainesville FL	102.9	98	115.5	40	89.4	209	84.9	246	71.5	131
Gainesville GA	90.5	292	98.0	271	77.8	293	79.1	291	76.1	103
Goldsboro NC	83.1	351	86.2	350	88.4	217	83.5	257	46.7	295
Greensboro NC	90.7	286	94.7	309	80.5	272	91.4	191	79.9	80
Greenville NC	84.6	344	88.9	341	88.4	218	85.3	244	46.7	303
Greenville SC	95.0	200	102.4	199	80.5	275	86.1	237	74.0	118
Hagerstown MD	93.4	224	106.3	133	76.6	297	97.2	132	46.7	291
Harrisonburg VA	96.6	174	108.3	111	85.9	243	80.7	278	67.6	182
Hickory NC	84.1	347	86.0	351	80.5	274	85.4	243	69.4	151
Hinesville GA	95.2	193	107.4	120	77.8	291	75.5	320	65.4	223
Huntington WV	92.2	258	102.5	196	61.9	352	101.8	76	72.2	126
Jacksonville FL	107.1	56	119.3	12	100.9	140	83.5	255	76.6	95
Jacksonville NC	85.3	336	86.4	348	88.4	224	79.1	292	67.6	181
Lakeland FL	104.2	85	117.2	24	89.4	212	83.2	260	76.5	98
Lynchburg VA	93.1	232	108.7	108	61.9	351	79.0	293	68.4	167
Macon GA	89.9	298	98.1	269	77.8	287	79.4	288	69.4	152
Miami FL	111.2	40	120.2	9	100.9	138	90.4	203	109.1	11
Morgantown WV	91.0	281	100.7	222	71.1	326	106.2	43	46.7	296
Myrtle Beach SC	99.0	143	106.4	131	88.4	220	98.3	112	71.5	130
Naples FL	105.6	68	118.9	16	100.9	146	89.9	207	68.4	166
Ocala FL	102.5	102	116.3	31	89.4	213	82.0	270	68.4	168
Orlando FL	105.7	66	116.5	29	89.4	210	90.3	204	86.9	45
Palm Bay FL	106.7	58	119.6	11	100.9	147	84.2	251	76.5	99
Panama City FL	101.6	112	119.2	15	80.4	278	82.3	269	67.6	185
Parkersburg WV	97.4	161	107.4	121	71.1	327	105.1	47	67.6	184
Pensacola FL	100.7	123	116.7	27	80.4	277	79.5	286	72.5	123
Port St. Lucie FL	104.1	86	113.8	60	100.9	144	96.0	144	74.1	115

Table 2: U.S. Metropolitan Area Relative Business Costs (cont.)

	Cost of Doing Business Index	Rank	Unit Labor Cost Index	Rank	Energy Index	Rank	State & Local Tax Index	Rank	Office Rent Index	Rank
Punta Gorda FL	105.4	69	122.3	4	100.9	141	91.1	193	46.7	293
Raleigh NC	92.6	247	95.5	298	88.4	219	88.3	223	87.3	40
Richmond VA	100.2	131	112.2	71	85.9	246	80.2	283	78.9	88
Roanoke VA	97.9	155	111.1	86	85.9	249	79.2	289	65.4	220
Rocky Mount NC	86.8	330	88.6	343	88.4	223	87.0	231	67.6	183
Rome GA	94.8	204	101.8	207	77.8	286	77.9	299	98.0	33
Salisbury MD	104.8	76	116.0	36	93.0	183	92.5	180	85.5	51
Sarasota FL	106.6	59	118.4	21	100.9	143	85.4	242	76.5	100
Savannah GA	92.5	251	99.6	244	90.4	200	84.4	250	65.4	217
Spartanburg SC	98.6	146	108.1	113	80.5	270	91.7	185	74.0	119
Sumter SC	94.0	216	104.0	172	88.4	216	86.1	236	46.7	299
Tallahassee FL	101.3	116	114.6	47	89.4	211	82.6	266	65.4	216
Tampa FL	107.5	53	118.5	19	105.5	102	87.3	230	82.5	70
Valdosta GA	87.0	327	98.6	260	77.8	292	71.4	342	46.7	302
Vero Beach FL	100.6	125	110.6	89	100.9	145	89.4	211	74.1	116
Virginia Beach VA	98.3	150	110.1	93	85.9	244	81.4	274	71.0	135
Warner Robins GA	91.6	264	101.7	209	77.8	296	72.9	335	69.4	153
Washington DC	109.7	46	118.5	20	85.9	247	90.5	200	114.3	8
Wheeling WV	92.7	244	100.2	233	68.9	335	102.1	74	67.6	180
Wilmington NC	88.4	312	89.5	339	88.4	214	94.5	157	68.4	169
Winchester VA	93.2	230	108.5	109	76.6	299	84.0	252	46.7	294
Winston-Salem NC	93.4	225	98.6	259	80.5	268	100.3	90	79.9	79
East South Central										
Anniston AL	82.0	355	90.1	336	82.2	262	64.8	360	45.3	310
Auburn AL	84.5	345	92.2	324	82.2	258	66.8	356	55.1	280
Birmingham AL	91.4	273	99.1	250	82.2	264	71.3	343	78.5	91
Bowling Green KY	83.1	350	87.7	346	59.8	360	95.8	147	83.0	66
Chattanooga TN	93.9	218	102.7	194	94.9	173	74.6	325	64.9	230
Clarksville TN	85.3	338	92.0	327	88.3	225	75.5	322	63.4	247
Cleveland TN	90.7	288	97.1	279	86.4	238	66.1	359	64.9	229
Decatur AL	84.9	340	91.4	331	82.6	254	67.2	354	65.6	208
Dothan AL	87.6	319	98.4	264	82.2	261	66.6	357	45.3	315
Elizabethtown KY	84.6	343	90.4	335	68.5	345	92.7	178	70.0	145
Florence AL	85.5	335	91.1	332	97.5	165	73.6	329	45.3	318
Gadsden AL	85.6	333	95.2	301	82.2	259	66.1	358	45.3	313
Gulfport MS	99.2	142	107.5	119	75.6	303	102.6	65	83.1	61
Hattiesburg MS	90.6	289	100.6	223	75.6	301	98.2	115	45.3	316
Huntsville AL	87.4	321	92.5	323	84.0	253	67.5	352	83.1	64
Jackson MS	101.0	118	105.5	144	103.5	126	97.9	118	83.1	62
Jackson TN	92.3	256	97.9	272	109.8	92	72.5	338	45.3	319
Johnson City TN	90.9	285	98.4	266	93.9	179	71.2	344	69.3	154
Kingsport TN	91.2	277	104.3	166	64.0	350	75.6	316	69.3	156
Knoxville TN	90.7	287	99.7	241	85.9	242	72.8	336	67.2	191
Lexington KY	83.5	349	91.8	328	59.8	358	96.2	142	69.3	155
Louisville KY	85.8	332	92.1	325	68.5	344	96.2	143	70.0	144
Memphis TN	94.4	206	100.3	230	87.4	233	75.6	318	76.2	102
Mobile AL	87.3	322	95.6	296	82.2	260	68.9	348	60.0	270
Montgomery AL	87.3	323	94.9	303	82.2	257	64.3	361	67.4	187
Morristown TN	90.6	290	99.5	245	87.4	234	67.7	351	67.2	192
Nashville TN	90.9	283	97.0	281	86.4	237	72.6	337	83.0	65
Owensboro KY	77.8	360	82.5	353	59.8	359	95.8	146	68.8	160
Pascagoula MS	96.0	185	102.8	191	75.6	302	104.6	51	83.1	63
Tuscaloosa AL	88.2	313	96.2	290	82.2	263	67.5	353	65.6	207
West South Central										
Abilene TX	92.0	261	102.4	198	86.9	235	73.7	328	45.3	312
Alexandria LA	91.4	270	101.0	220	107.1	98	76.3	308	45.3	311
Amarillo TX	92.9	236	99.9	237	82.6	256	77.2	305	70.8	137
Austin TX	96.9	166	96.2	291	119.3	78	84.4	249	92.5	36
Baton Rouge LA	94.2	213	99.8	239	107.1	96	73.3	333	75.5	108
Beaumont TX	92.5	249	100.0	236	101.8	129	89.8	208	42.5	358
Brownsville TX	96.6	175	101.6	211	135.9	59	75.7	313	42.5	359
College Station TX	92.7	245	100.3	229	101.8	128	87.6	229	45.3	322
Corpus Christi TX	92.7	243	96.3	286	149.5	38	88.8	216	37.7	361
Dallas TX	95.0	202	96.2	287	119.3	80	80.8	277	85.8	47

Table 2: U.S. Metropolitan Area Relative Business Costs (cont.)

	Cost of Doing Business Index	Rank	Unit Labor Cost Index	Rank	Energy Index	Rank	State & Local Tax Index	Rank	Office Rent Index	Rank
El Paso TX	95.8	187	99.9	238	105.7	100	83.6	254	63.5	246
Fayetteville AR	90.0	296	99.0	251	69.5	333	87.9	225	73.9	120
Fort Smith AR	84.9	339	94.5	311	66.2	349	85.7	238	66.1	205
Hot Springs AR	89.2	306	95.8	295	74.7	307	87.9	226	68.5	164
Houma LA	96.6	176	106.5	130	107.1	94	72.0	340	66.1	204
Houston TX	89.5	303	89.1	340	101.1	132	83.5	256	68.0	174
Jonesboro AR	87.6	318	92.9	319	74.7	305	88.1	224	68.8	159
Killeen TX	95.0	201	100.2	232	119.3	73	69.3	346	72.0	127
Lafayette LA	91.8	262	104.3	165	107.1	97	66.9	355	42.5	360
Lake Charles LA	95.0	198	102.3	201	107.1	95	83.0	263	66.9	193
Laredo TX	100.6	124	104.5	160	149.5	40	88.8	215	66.1	203
Lawton OK	80.1	356	89.8	338	80.6	266	77.6	302	45.3	320
Little Rock AR	92.3	255	100.0	234	74.7	306	88.6	218	68.5	163
Longview TX	92.2	260	98.3	268	82.6	255	82.9	264	69.5	150
Lubbock TX	94.3	207	98.8	255	119.3	72	74.7	324	69.5	149
McAllen TX	98.3	149	101.0	219	149.5	37	81.7	273	69.2	157
Midland TX	97.9	154	104.7	153	119.3	74	74.4	326	68.1	173
Monroe LA	95.8	188	104.8	151	107.1	99	76.0	311	65.6	209
New Orleans LA	91.5	269	95.3	299	101.3	131	75.6	317	67.6	178
Odessa TX	98.1	151	103.3	183	119.3	71	85.5	241	68.1	172
Oklahoma City OK	84.7	341	98.6	261	66.2	348	81.9	271	56.4	277
Pine Bluff AR	87.6	317	92.8	320	74.7	308	89.2	212	68.8	158
San Angelo TX	95.7	191	102.4	197	123.1	66	75.5	319	45.3	323
San Antonio TX	92.4	253	99.6	242	94.5	178	78.4	297	73.1	121
Sherman TX	95.1	196	103.1	186	119.3	75	80.1	284	45.3	314
Shreveport LA	88.4	310	103.6	179	69.5	332	78.9	294	47.3	290
Texarkana TX	88.0	315	101.8	208	69.5	334	76.2	309	45.3	317
Tulsa OK	84.7	342	94.9	305	80.6	265	81.3	275	58.8	273
Tyler TX	97.4	159	104.1	169	119.3	76	73.3	332	66.9	194
Victoria TX	98.5	148	100.0	235	149.5	39	92.3	182	68.8	161
Waco TX	96.3	179	102.2	202	119.3	77	75.5	321	66.8	199
Wichita Falls TX	93.6	222	101.3	215	119.3	79	76.0	312	45.3	321
Mountain										
Albuquerque NM	75.9	361	68.7	361	94.7	177	82.7	265	71.9	128
Billings MT	89.7	301	99.8	240	93.1	180	94.4	158	44.3	337
Boise City ID	93.2	228	96.9	284	71.2	321	97.3	130	74.4	113
Boulder CO	91.0	282	99.3	247	89.6	208	77.5	303	62.9	250
Carson City NV	99.2	139	101.5	213	138.1	54	85.6	239	80.4	77
Casper WY	79.9	357	78.1	358	104.5	116	67.7	350	67.2	188
Cheyenne WY	79.2	359	76.3	360	109.6	93	72.0	339	67.2	190
Coeur d'Alene ID	96.3	181	101.0	218	84.7	250	104.3	53	62.3	268
Colorado Springs CO	96.9	170	111.9	78	79.5	279	69.4	345	50.1	289
Denver CO	101.8	110	116.3	30	89.6	203	73.1	334	76.0	106
Farmington NM	83.7	348	86.3	349	101.0	133	89.6	209	71.9	129
Flagstaff AZ	91.5	267	97.0	282	100.0	148	90.0	205	44.3	338
Fort Collins CO	96.2	182	109.2	100	89.6	206	76.5	307	62.9	251
Grand Junction CO	91.5	266	105.4	145	89.6	207	71.9	341	44.3	336
Great Falls MT	87.6	320	93.0	318	93.1	181	91.5	190	67.2	189
Greeley CO	94.3	208	104.6	156	89.6	204	81.2	276	64.1	236
Idaho Falls ID	104.4	82	115.8	37	103.5	127	98.1	116	62.5	265
Las Cruces NM	82.2	354	78.2	357	105.7	101	80.6	280	65.3	225
Las Vegas NV	109.9	45	112.0	77	128.7	60	90.4	202	106.6	14
Lewiston ID	101.8	111	110.7	87	92.6	185	104.1	54	62.5	264
Logan UT	93.9	217	96.1	292	104.5	112	90.8	197	62.5	263
Missoula MT	90.0	297	97.0	283	93.1	182	102.5	68	55.7	278
Ogden UT	95.1	195	94.2	315	104.5	113	92.4	181	83.2	60
Phoenix AZ	94.1	215	93.4	316	100.0	150	84.6	248	89.6	38
Pocatello ID	92.2	259	97.2	278	71.2	320	101.4	79	62.5	266
Prescott AZ	102.4	105	114.7	46	100.0	151	93.6	169	44.3	332
Provo-Orem UT	97.8	157	95.6	297	104.5	114	95.3	151	100.1	21
Pueblo CO	91.5	268	104.5	161	89.6	205	73.5	331	44.3	335
Reno NV	101.0	119	102.9	189	138.1	53	93.4	172	80.4	76
Salt Lake City UT	101.3	115	104.7	152	104.5	108	96.5	140	83.2	59
Santa Fe NM	105.9	64	118.7	17	94.7	176	77.8	300	72.2	125

Table 2: U.S. Metropolitan Area Relative Business Costs (cont.)

	Cost of Doing Business Index	Rank	Unit Labor Cost Index	Rank	Energy Index	Rank	State & Local Tax Index	Rank	Office Rent Index	Rank
St. George UT	91.4	272	94.4	312	104.5	111	97.8	122	44.3	333
Tucson AZ	105.0	72	106.7	126	125.7	62	90.7	198	75.6	107
Yuma AZ	102.4	104	115.0	42	100.0	149	87.7	227	44.3	334
Pacific										
Anchorage AK	99.4	137	107.8	117	124.5	65	69.2	347	45.2	325
Bakersfield CA	126.5	11	115.6	39	196.2	15	108.3	29	103.8	16
Bellingham WA	106.0	63	113.5	63	105.2	103	102.0	75	64.1	234
Bend OR	93.1	233	97.8	273	104.5	109	106.4	42	45.2	326
Bremerton WA	103.5	92	109.9	95	105.2	107	97.9	119	67.9	177
Chico CA	120.7	19	113.0	67	196.2	12	97.5	128	75.3	109
Corvallis OR	82.7	352	82.4	354	104.5	110	98.5	111	45.2	327
El Centro CA	115.0	35	116.6	28	157.1	35	102.3	72	43.3	339
Eugene OR	87.0	328	95.9	294	78.7	283	101.0	85	45.2	328
Fairbanks AK	100.4	127	109.4	98	124.7	64	68.6	349	45.2	329
Fresno CA	127.0	9	117.2	25	196.2	7	99.6	98	108.0	13
Hanford CA	116.8	31	110.3	91	196.2	13	97.3	131	51.8	286
Honolulu HI	117.0	29	104.7	154	183.6	32	107.4	36	129.0	4
Kennewick WA	95.2	194	108.8	106	68.2	346	97.5	127	64.5	232
Longview WA	100.8	121	112.1	73	76.1	300	101.2	82	83.5	57
Los Angeles CA	130.0	3	122.2	5	200.8	3	98.6	109	101.8	18
Madera CA	126.6	10	116.3	34	196.2	26	103.1	60	108.0	12
Medford OR	93.2	231	95.3	300	104.5	117	99.9	93	65.3	226
Merced CA	121.1	17	113.1	66	196.2	18	99.7	95	72.3	124
Modesto CA	119.0	25	114.0	54	196.2	21	97.0	133	51.3	288
Mount Vernon WA	103.0	95	108.9	103	105.2	106	100.9	86	64.1	235
Napa CA	118.9	26	112.1	74	196.2	24	103.2	59	58.7	274
Olympia WA	103.6	91	110.0	94	105.2	105	100.6	87	65.2	227
Oxnard CA	127.2	8	119.9	10	200.8	6	100.2	92	83.0	67
Portland OR	85.5	334	80.6	355	94.8	174	101.5	78	83.5	58
Redding CA	121.8	16	113.9	58	196.2	14	102.2	73	76.3	101
Riverside CA	129.1	6	120.4	8	200.8	5	102.6	66	100.1	22
Sacramento CA	130.0	4	121.2	6	196.2	17	98.3	114	111.2	9
Salem OR	89.3	304	95.1	302	94.8	175	98.8	107	45.2	324
Salinas CA	119.4	23	114.1	53	196.2	20	98.6	110	51.8	284
San Diego CA	133.5	2	119.2	14	218.6	2	97.7	125	102.7	17
San Francisco CA	127.7	7	112.0	75	196.2	16	98.9	105	139.3	2
San JoseCA	116.3	33	93.3	317	196.2	23	98.9	106	132.9	3
San Luis Obispo CA	123.7	13	114.9	43	196.2	22	111.8	20	79.3	81
Santa Barbara CA	119.4	22	114.0	55	196.2	25	101.7	77	51.3	287
Santa Cruz CA	119.4	24	114.3	52	196.2	9	97.6	126	52.8	283
Santa Rosa CA	124.3	12	113.9	56	196.2	8	99.0	104	101.7	19
Seattle WA	106.6	60	110.6	88	105.2	104	99.5	100	85.3	52
Spokane WA	101.4	113	113.7	62	84.7	251	97.8	123	62.3	267
Stockton CA	122.7	15	113.3	64	196.2	10	98.8	108	89.0	39
Vallejo CA	120.1	20	114.3	50	196.2	11	99.0	103	58.7	275
Visalia CA	119.8	21	113.8	59	200.8	4	97.4	129	51.8	285
Wenatchee WA	95.0	199	109.3	99	39.3	361	101.2	83	85.3	53
Yakima WA	104.0	88	111.9	79	104.5	115	95.2	152	67.9	176
Yuba City CA	122.8	14	113.8	61	196.2	19	103.5	56	84.3	56

Chart 3: Definition of Energy Cost Index

$$E^{st} = \{(P_i^{st} * I)+(P_c^{st} * C)\}/\{(P_i^{us} * I)+(P_c^{us} * C)\}$$

Where P = Price in cents per kilowatt hour
I = Industrial electricity sales as share of total U.S. electricity sales
C = Commercial electricity sales as share of total U.S. electricity sales
st = State
us = U.S. average
i = industrial
c = commercial

dently-owned utility is used for each metro area. Price data from the primary cooperative or publicly owned utility are used for those few areas not served by a privately owned utility.

To avoid compositional bias, the relative importance of commercial and industrial electricity costs is derived from their importance at the national level. This is necessary since industrial rates are lower than commercial rates, and a region with a disproportionate share of one or the other would be biased accordingly. For example, a region with a particularly large portion of industrial consumption, if unadjusted for this compositional mix, would appear to have particularly low rates. However, by first calculating the average industrial and commercial prices separately, then combining them into one price using their relative share of the national mix, a standardized value is created. The energy cost index for each year is calculated as the region's average compositionally-weighted cost divided by the national average. (See Chart 3.)

The effective tax rate index is measured as the total tax burden as a percent of total personal income in the area, indexed to the national effective tax rate. This is a top-down measure that uses government revenues, which are comprised of both taxes and charges, to represent the tax burden. This measure includes all taxes, including personal, property and corporate taxes, and charges, less severance taxes, corporate license taxes, education, hospital, and intergovernmental transfers. This measure of combined personal and business taxes is used because both the after-tax wage and the tax burden of upper management and owners are major influences on business location and expansion decisions. Business contributions to unemployment and workers' compensation programs also are included because they represent costs for hired labor. Also, charges are included since they are, effectively, the same as a tax in that they represent costs born by businesses.

Tax revenue is comprised of both state and local sources. Data for state tax revenue come from the Census Bureau and cover the 1979 to 2003 time period. The data used to create the effective local tax rate for states, also taken from the Census Bureau, are available for the 1979 to 2003 period as well. Revenue data for each metro area include the summation of revenues from all city and county revenues within the metro area. The aggregate local effective tax rate is equal to total relevant tax revenues divided by total personal income in each region. An effective tax rate index was created for each year by dividing each state and metropolitan area value by the national value.

The office rent index represents the relative rental rate for class "A" office space in a metropolitan area. Data from the National Real Estate Index are used, however, the NREI only reports rental rates for about 60 metro areas in the U.S., as defined by the previous 1990 OMB standards. Since no NREI data were available by the new metro area definitions, each was mapped to a single old metro area. For most areas, the component counties did not change substantially. For the 40 metro areas that did not exist previously, however, the mapping was done based on proximity to another area and by the level of office-using employment in the area.

The office rent index compares the average rent per square foot in the metro area to the average rent per square foot in the nation. Since both suburban and downtown rent data are available from the NREI, the two series are combined to produce a single rental price for each area. The suburban rent makes up two-thirds of the overall rent and the downtown rent, one-third for each metro area.