

Analyzing Economic Opportunities for New Enterprises in U.S. Metropolitan Areas

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Abstract

All areas are not created equal as locations for new business ventures. This paper presents a business opportunity index for 276 metropolitan areas in the United States. The index is comprised of twelve categories. Four are indicators of growth including population and private-sector employment. Four more are indicators of prosperity including income and wealth. Two are indicators of the relative burden of government, and two more reflect entrepreneurial activity and success. While the growth and income indicators are rather traditional, the authors believe that new ground has been broken in the methods used to measure wealth, governmental activity, and entrepreneurship.

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It has been said that the three most important factors in real estate are location, location and location. For many small enterprises, geographic location is also a critical element. While electronic commerce and other technological and social changes have diminished or eliminated the issue of geographic location for some enterprises, many others are dependent on the surrounding geographic area for their customer base. This paper presents the results of a continuing effort by the authors to develop a comparative index for metropolitan areas in the United States which indicates their relative standing as potential locations for a small enterprise that draws its customers from the surrounding region. The same basic data sources and methods could be used to compare other geographic areas including counties, combinations of counties and states.

The goal of the authors has been to develop an index which would be useful to entrepreneurs contemplating the establishment of new businesses and to others with an interest in comparing economic conditions around the United States. Some of the steps followed in bringing the index to its current state of development have been:

- Selection of sources for basic data
- Development of current estimates based on the basic source data
- Selection of appropriate index components
- Calculation of index components and the overall index
- Revision and refinement of the original index procedures

The resulting index has been titled the “Business Opportunity Index.” The index is tailored toward the typical consumer-oriented business that provides goods and/or services to customers in a particular geographic area. The index attempts to measure the business climate of each area. It is purely a business index. There are no “quality of life” indicators in the index

except for those which impact business conditions such as income and wealth. A number of other publications including the *Places Rated Almanac* focus on quality of life and aesthetic indicators.

Data source selection and estimation

The project has been undertaken and completed by two people with limited time and financial resources. While these constraints have imposed certain limitations on the project, they have also strengthened our resolve to “do more with less.” We believe that the result is a useful tool which can be used as is or which can be refined by other researchers to accomplish similar objectives or to examine other geographic areas.

In order to facilitate the creation and updating of the index, the basic data source needed to be comprehensive, authoritative, and convenient. The data source selected is the Regional Economic Information System (REIS) developed by the Bureau of Economic Analysis (BEA), a component of the U.S. Department of Commerce. This source provides a variety of information on local business and economic conditions. It is authoritative, reasonably up-to-date, and is revised on a regular, predictable schedule. It contains consistent, comparable data for a diverse set of geographic areas over an extended period of time. Finally, the cost is low and calculation and revision burdens are relatively minimal. While comparable BEA data has been available for a number of years in various formats, the usefulness of the data increased dramatically with the advent of CD-ROM publication during the past decade. The BEA has continuously improved both the detail and the ease of use of the product. The REIS CD-ROM is revised annually in mid year, and is made available at the modest cost of \$35.00. The most recent edition covers the years 1969-1998 and was released in June, 2000. The CD-ROM contains information for regions, states, metropolitan areas and counties on a consistent, comparable basis. Included are

data on population, personal income by source, and employment by industry. Excerpts from the various data files on the CD-ROM can readily and easily be exported for use with spreadsheet software programs such as Microsoft Excel.

Selection of index components

The business opportunity index consists of twelve components. Four of the twelve components are growth indicators. Four more are indicators of prosperity. The last four include two indicators of government activity and two indicators of entrepreneurial success. The twelve indicators are:

1. Population change--The absolute change in the resident population of the area between the years 1990 and 2000.
2. Population percent change--The percentage change in the resident population from 1990 to 2000.
3. Private employment change--The absolute change in the number of private-sector jobs in the area between the years 1990 and 2000.
4. Private employment percent change--The percentage change in the number of private-sector jobs from 1990 to 2000.
5. Per capita income--The per capita income of the resident population for the year 2000.
6. Per capita income trend--The relative change in the per capita income of area residents between 1990 and 2000.
7. Per capita wealth--The amount of wealth per person for the resident population for the year 2000.

8. Per capita wealth trend--The relative change in the amount of wealth per person between 1990 and 2000.

9. Government cost--The cost of government per person for the year 2000. Only state and local government entities are considered. Lower cost results in a more favorable ranking.

10. Government cost change--The change in the cost of state and local government for the area between 1990 and 2000. A smaller increase results in a more favorable ranking.

11. Proprietor percentage--The portion of nonfarm employment in an area comprised of people who own their own business for the year 2000.

12. Proprietor / employee earnings ratio--The relative income of business owners in relation to wage earners for the year 2000.

Several of the indicators are pretty conventional and the rationale behind their selection is rather obvious. For example, population trends are among the most basic economic indicators. A growing population indicates that the overall market for goods and services in an area is expanding, and probably that people are “voting with their feet” by choosing to live there. The use of two indicators, one based on absolute change and the other based on the rate of change, is an attempt to even out the bias in favor of very large or very small areas that either indicator might convey. Since the business opportunity index is focused on opportunities in the private sector, the change in private-sector employment was determined to be more appropriate than the change in total employment. Once again, both absolute change and the rate of change have been used in an effort to equalize large and small areas.

Some measure of income is used in almost every economic comparison. The business opportunity index includes two income indicators. The first is simply per capita income--the

total personal income of an area divided by its resident population. The second indicator is the rate of change in per capita income for the past decade. A high ranking indicates that an area is increasing the income of its residents at a relatively high rate, while a low ranking indicates that residents are falling behind residents of other areas.

The other six components of the business opportunity index are less conventional. These include the relative wealth of area residents, the rate of change in wealth, the level of state and local government activity, the rate of change in the level of state and local government activity, and two indicators of entrepreneurial spirit and success. The first is the portion of nonfarm employment in an area comprised of people who own their own businesses. The second is the relative income of business owners in comparison with employees in each area. Some of the issues raised by the selection and use of these indicators are discussed in greater detail below.

Calculation of the index

The data used for the development of the business opportunity index cover nine years from 1990 through 1998. The linear regression features included in Excel software have been used to project each individual variable for the two years 1999 and 2000. The data values used for each geographic area are (1) population, (2) total nonfarm private employment, (3) total personal income, (4) total personal income derived from property (dividends, interest and rent), (5) total personal income derived from state government earnings, (6) total personal income derived from local government earnings, (7) the total number of nonfarm proprietors, (8) the total earnings of nonfarm proprietors, (9) total nonfarm employment, and (10) total wage and salary earnings of nonfarm employees. After the most recent nine years of data (1990 through 1998) were exported to a master spreadsheet file and the linear regression projections were run to produce estimates for 1999 and 2000, the necessary index variable calculations were made.

Following the deletion of the primary metropolitan statistical areas which are components of one of the consolidated metropolitan statistical areas, the areas were ranked and the rankings recorded. Finally, the sum of each of the twelve category rankings was computed to form the basis for the overall business opportunity index rankings.

This procedure weights each of the twelve categories equally. No area can rank higher than first or lower than last in any category. Some other possible ranking schemes might allow an excessively high or low score for one or more categories to exert greater influence than a single category might otherwise have. The most favorable possible score would be 12 if an area ranked first in all twelve categories. The least favorable possible score with a group of 276 areas would be 3,312 if an unfortunate area ranked last in all categories. Of course, no area actually ranked first or last in all categories. The most favorable actual score was 440 for Naples, Florida. The least favorable actual score was 2,274 for Pine Bluff, Arkansas.

Refinements to earlier efforts

Two major changes have been made since the release of the first Business Opportunity Index calculations. The first is the use of more recent basic source data. The initial index calculations were made using BEA data for years 1990 through 1997 which had been released by mid-1999. Index calculations for 2000 using this data required making projections three years forward. The revised index calculations for 2000 have been made using BEA data for years through 1998 which requires projection for only two years, reducing the level of uncertainty. In addition, BEA has made several changes and improvements in its procedures. The authors believe that these changes make for more accurate results.

The second major change is the use of the consolidated metropolitan statistical areas (CMSAs) instead of the primary metropolitan statistical areas. Several reviewers of other

general-purpose and business climate research have noted that most of the larger consolidated areas function as a single economy and that it does not make sense to treat these adjacent metropolitan areas as separate entities. Arguments can be made for both sides in this matter, but the authors have decided to change to the larger metropolitan combinations. The earlier business opportunity index calculations were based on 316 metropolitan areas. Changing to the consolidated metropolitan areas eliminates 42 areas. Meanwhile, two areas have been added to the BEA source data (Auburn, Alabama, and Corvallis, Oregon), resulting in a total of 276 areas considered in this paper.

National averages and area rankings

A brief examination of national averages and trends may enhance understanding of the business opportunity index categories. During the period from 1990 to 2000, the U.S. population grew by almost 26.2 million, an increase of 10.49 percent above the 1990 level. The increase in the number of private-sector jobs during the same period was about 23.8 million, an increase of 20.66 percent. The national average per capita income in 2000 is \$28,378, which represents an increase of 44.90 percent since 1990. The amount of property income per person in 2000 is \$5,250 which is 32.83 percent above the 1990 level. The amount of state and local government payroll per person in 2000 is \$2,356 which is 23.42 percent above the 1990 amount. People who own their own businesses represent 18.25 percent of total nonfarm employment in 2000 and their average income is 77.48 percent of the average income of wage and salary employees.

Appendix 1 lists the 40 metropolitan areas with the highest overall rankings. Appendix 2 provides a complete alphabetical list of all 276 metropolitan areas with their overall rankings and their individual ranking for each of the twelve business opportunity index component categories.

Examination of wealth patterns

The subject of income is well documented and widely analyzed. Unfortunately, much less information is available concerning wealth. The authors believe that wealth is an important variable that should be considered in evaluating business opportunity. Some observations concerning wealth include the following:

- While much is heard about the inequality of income among geographic areas, wealth is even less equally distributed. Among U.S. metropolitan areas, the area with the highest income has about 3.5 times more income than the lowest income area. Meanwhile, the difference in wealth between the highest area and the lowest area is about 14.9 times.
- Wealth is associated with age. People tend to accumulate more wealth as they become older. Areas with high concentrations of children and young people tend to have relatively low levels of wealth. Areas which are popular retirement havens tend to have high levels of wealth.
- Although high levels of income should theoretically lead to high levels of wealth, the relationship does not always hold true for individuals or for geographic areas. Some people earn high incomes but do not accumulate wealth, while some areas with high average income levels have high costs of living which make wealth accumulation difficult.
- Wealth does not necessarily stay where it was earned or accumulated. For a variety of reasons including climate, tax law differences, and quality-of-life factors, people do not necessarily stay where they first made their money.

Because wealthy people have more money, they are often more free to choose where they wish to live than people with less money.

In developing the business opportunity index, the authors have taken the position that the level of wealth held by the residents of an area can be estimated based on the amount of income derived from that wealth. There is no comprehensive source of data on wealth levels for state and local areas, but information is available on the amount of property income, or income from dividends, interest and rent, that individuals receive. The authors believe that property income--the income derived from wealth--is an appropriate surrogate for wealth itself.

Among the available possibilities for examining wealth patterns were the per capita amount of property income for each area and the portion of total income derived from property income. Property income per capita was selected as the indicator of choice for this index. The authors believe that per capita property income is more likely to be understood by index users and that the change in the level of income over time is more meaningful than the change in the percentage of income from property would be.

The authors feel that the subject of geographic differences in wealth is worthy of further investigation. Particularly for sellers of upscale goods and services, the level of wealth may be even more significant than the level of income. In any case, the contrasts in the levels of property income are much greater than the contrasts in total income amounts.

Examination of local government patterns

The basic approach to government taken by the business opportunity index is that less is more. The assumptions are that higher levels of government expenditure will mean higher taxes, higher costs of doing business, and more regulations. A business person operating in an area with high local government expenditures is likely to pay more tax, encounter more regulatory

hurdles, and face such nuisance risks as being stopped for minor traffic violations while driving across town than a person operating in an area with less government.

Perhaps the best indicator of local government activity would be taxation information or total government expenditure information. While such information does exist, the data are not readily available from a single comprehensive source on a timely basis. The authors have selected state and local government payroll information as a reasonable surrogate for information on taxation or total government expenditure. Payroll costs represent a significant portion of total government spending and payroll data are readily available from the BEA Regional Economic Information System.

It should be noted that we are not concerned with federal government activity. The burden of support and compliance for the federal government is assumed to be the same for all areas within the jurisdiction of the United States. Dealing with the impact of state government activities on local areas presents some special problems. The process of comparing the relative activity levels of state and local government within a single state is simple. Information is available for each state and for each of the counties or county-equivalents inside that state. The process becomes more complicated when local areas in different states are being compared.

Two issues complicate the comparison of local areas. One is that the division of responsibility for various functions such as public safety and education between the state government and various local governments varies significantly from state to state. While the national average is that local governments account for about 71 percent of total state and local government payroll, the percentage is much lower in several states. Another complication is that in some local areas such as state capital cities or areas which include a large state university, the state government may be a significant portion of the local economic base.

The solution that the authors have chosen for these problems is to treat the cost of state government as being spread equally across each state. That is, the per capita amount for state government payroll has been calculated and applied to all metropolitan areas within each state. The per capita amount for local government payroll has been individually calculated for each metropolitan area and added to the state amount to get the total for each metropolitan area. For metropolitan areas which are located in more than one state, the state which includes the larger portion of the metropolitan area population and economic activity has been used for the entire metropolitan area. For example, the Missouri state average has been used for the entire Saint Louis metropolitan area. In most cases, the differences between the adjacent states is not that great and most multi-state metropolitan areas have one state that is clearly dominant.

A notable exception is the Washington, D.C., metropolitan area. Although Washington is the central city for the metropolitan area, it has no state government and the portion of the area population that actually resides in the District of Columbia is relatively small. For the Washington metropolitan area, a composite amount for state government expenditures has been developed based on the pro-rated population of the entire metropolitan area. This is not a perfect solution to the problem, but the authors feel that it avoids serious distortion.

Examination of proprietorship patterns

The last two components of the business opportunity index are admittedly rather experimental. These two indicators are intended to reflect the significance and success of business owners within each area. The first, called simply the proprietor percentage, shows the extent of nonfarm business owners in the local labor force. At the national level, business owners represent about 18 percent of total nonfarm employment. Among metropolitan areas, the percentage ranges from a low of less than 9 percent to a high of over 29 percent. The authors

believe that the indicator provides some insight into the entrepreneurial spirit of an area and may be indicative of a more favorable community attitude toward business ventures.

The second proprietorship indicator shows how well business owners are doing. Specifically, the indicator compares the average income of business owners in an area with the average income of wage and salary earners in the same area. Nationwide, the average business owner earns only about 77 percent as much as the average employee, although business owners enjoy various tax and other benefits of ownership. The subject seems to be worthy of further investigation. An interesting mixture of both large and small and rich and poor areas appear at both ends of this category ranking. In the meantime, the authors believe that areas in which other business owners are doing well would be more favorable for prospective new business owners than areas in which the typical business owner makes far less money than the average worker.

References

- Savageau, David, with Ralph D'Agostino. *Places Rated Almanac*. Foster City, CA: IDG Books Worldwide, Inc., 2000. The sixth edition of this pioneer reference work which first appeared in 1981. Contains ideas and data on a number of topics including cost of living, transportation, jobs, education, climate, crime, the arts, health care and recreation.
- U.S. Department of Commerce, Bureau of Economic Analysis. *Regional Economic Information System, 1969-98*. Washington, DC: Bureau of Economic Analysis, 2000. The latest edition of the annual CD-ROM contains data on states, metropolitan areas, regions and counties. Released June 2000 and available from BEA for the modest price of \$35.

Appendix 1
Top 40 Metropolitan Areas, Business Opportunity Index, 2000

Rank	Metropolitan area		Sum
1	Naples	FL	440
2	Denver	CO	645
3	Boise	ID	699
4	Fort Collins	CO	766
5	Nashville	TN	774
6	Atlanta	GA	805
7	Raleigh	NC	856
8	Medford	OR	866
9	Fort Walton Beach	FL	872
10	Las Vegas	NV	886
11	Sarasota	FL	901
12	Sioux Falls	SD	920
13	Corvallis	OR	936
14	Reno	NV	937
15	West Palm Beach	FL	948
16	Portland	OR	956
17	Wilmington	NC	983
18	Dallas	TX	985
19	Austin	TX	1,026
20	Eugene	OR	1,030
21	Springfield	MO	1,031
22	Clarksville	TN	1,039
23	Phoenix	AZ	1,049
24	Minneapolis	MN	1,086
25	Houston	TX	1,090
26	Lincoln	NE	1,097
27	Colorado Springs	CO	1,108
28	Missoula	MT	1,132
29	Omaha	NE	1,133
30	Jacksonville	FL	1,139
31	Columbia	MO	1,142
32	Jackson	MS	1,143
33	San Francisco	CA	1,159
34	Tucson	AZ	1,159
35	San Antonio	TX	1,169
36	Salt Lake City	UT	1,171
37	Myrtle Beach	SC	1,176
38	Fargo	ND	1,182
39	Tyler	TX	1,187
40	Seattle	WA	1,187

Appendix 2

Business Opportunity Index Category Rankings, Metropolitan Areas, 2000

Metropolitan area	Rank	Sum	1	2	3	4	5	6	7	8	9	10	11	12	
1 Abilene	TX	186	1,868	230	218	213	168	167	77	177	217	128	229	25	19
2 Albany	GA	118	1,597	213	186	187	68	197	24	235	47	122	2	276	40
3 Albany	NY	196	1,931	170	229	111	250	68	224	73	161	229	98	123	195
4 Albuquerque	NM	49	1,233	44	53	44	33	115	48	120	96	250	73	116	241
5 Alexandria	LA	193	1,915	265	273	207	111	180	18	206	77	172	239	156	11
6 Allentown	PA	176	1,811	131	207	159	255	61	182	86	210	105	212	147	56
7 Altoona	PA	218	2,025	238	239	238	212	192	41	230	170	32	233	190	10
8 Amarillo	TX	69	1,383	126	83	132	97	163	170	201	246	83	22	34	26
9 Anchorage	AK	61	1,334	106	73	140	165	14	268	37	27	275	1	26	202
10 Anniston	AL	256	2,322	236	235	244	184	250	191	211	39	144	217	121	250
11 Appleton	WI	103	1,520	103	121	81	106	77	47	74	48	165	232	270	196
12 Asheville	NC	42	1,197	123	84	120	103	106	62	33	52	102	64	83	265
13 Athens	GA	48	1,232	167	112	161	53	170	54	138	32	18	3	138	186
14 Atlanta	GA	6	805	2	11	2	29	19	81	109	136	137	18	213	48
15 Auburn	AL	228	2,066	172	65	237	107	264	225	237	84	208	250	104	113
16 Augusta	GA	190	1,891	84	109	184	248	203	257	194	33	43	126	142	268
17 Austin	TX	19	1,026	18	7	17	2	55	9	179	257	153	106	64	159
18 Bakersfield	CA	163	1,753	45	54	88	159	266	275	267	266	237	34	27	35
19 Bangor	ME	244	2,153	246	249	258	249	227	200	250	79	113	25	53	204
20 Barnstable	MA	80	1,414	130	87	157	139	13	185	6	155	254	175	3	110
21 Baton Rouge	LA	88	1,438	76	132	57	60	131	83	195	74	118	146	235	131
22 Beaumont	TX	247	2,175	150	197	158	228	194	163	220	237	93	134	146	255
23 Bellingham	WA	115	1,581	104	18	170	99	215	258	117	166	138	122	20	154
24 Benton Harbor	MI	150	1,694	244	243	216	213	123	15	108	21	160	74	161	116
25 Billings	MT	109	1,550	156	72	163	82	142	181	82	163	76	144	57	232
26 Biloxi	MS	113	1,564	91	74	70	16	219	8	233	60	189	253	221	130
27 Binghamton	NY	266	2,435	271	275	275	276	165	253	161	191	236	127	100	105
28 Birmingham	AL	78	1,413	53	144	51	138	75	90	112	169	127	157	247	50
29 Bismarck	ND	102	1,519	196	122	198	69	155	96	145	89	68	88	78	215
30 Bloomington	IL	95	1,475	161	96	150	71	58	38	99	45	63	256	192	246
31 Bloomington	IN	131	1,630	198	163	208	132	188	70	124	36	1	171	164	175
32 Boise	ID	3	699	40	4	50	6	83	45	87	62	37	189	66	30
33 Boston	MA	51	1,257	28	208	12	237	6	85	35	122	217	68	154	85
34 Brownsville	TX	132	1,633	56	12	109	41	275	193	274	268	125	60	74	146
35 Bryan	TX	119	1,599	175	115	178	36	255	29	232	25	81	266	80	127
36 Buffalo	NY	257	2,329	275	264	204	268	101	198	146	180	246	36	234	177
37 Burlington	VT	141	1,663	149	133	167	190	86	222	95	104	136	51	93	237
38 Canton	OH	188	1,873	189	216	123	215	129	158	128	133	80	120	179	203
39 Casper	WY	126	1,613	229	194	261	217	60	254	18	152	200	5	8	15
40 Cedar Rapids	IA	98	1,484	158	140	113	96	32	56	56	92	223	118	265	135
41 Champaign	IL	220	2,031	259	263	224	226	144	143	30	5	110	267	91	269
42 Charleston	SC	161	1,743	115	182	84	146	240	259	192	51	106	168	113	87
43 Charleston	WV	195	1,922	221	227	128	144	89	79	153	205	116	244	250	66
44 Charlotte	NC	56	1,291	22	37	28	102	36	61	119	109	234	204	248	91
45 Charlottesville	VA	50	1,257	141	71	197	162	41	157	12	99	131	109	63	74
46 Chattanooga	TN	97	1,481	117	172	80	137	116	101	189	201	85	31	177	75
47 Cheyenne	WY	166	1,763	205	130	246	124	109	235	44	178	259	26	15	192
48 Chicago	IL	52	1,263	6	162	3	211	12	80	23	65	227	208	239	27
49 Chico	CA	241	2,101	180	174	220	207	246	239	139	208	178	248	9	53
50 Cincinnati	OH	92	1,457	33	164	25	145	53	148	58	171	119	152	217	172

Appendix 2 (continued)
Business Opportunity Index Category Rankings, Metropolitan Areas, 2000

Metropolitan area	Rank	Sum	1	2	3	4	5	6	7	8	9	10	11	12	
51 Clarksville	TN	22	1,039	99	36	143	18	242	13	255	13	4	75	46	95
52 Cleveland	OH	162	1,749	60	220	24	222	37	194	59	188	222	192	241	90
53 Colorado Springs	CO	27	1,108	41	14	46	7	105	98	107	94	211	87	42	256
54 Columbia	MO	31	1,142	142	59	174	66	99	32	76	10	51	245	70	118
55 Columbia	SC	143	1,670	68	80	66	115	98	176	174	149	226	183	182	153
56 Columbus	GA	111	1,562	165	188	118	90	201	116	218	57	49	14	269	77
57 Columbus	OH	76	1,406	35	129	26	105	40	82	104	112	184	219	172	198
58 Corpus Christi	TX	110	1,552	92	90	93	112	235	130	258	251	142	29	87	33
59 Corvallis	OR	13	936	200	101	200	17	48	3	11	4	16	9	52	275
60 Cumberland	MD	268	2,480	245	255	272	270	259	216	244	172	115	117	96	219
61 Dallas	TX	18	985	3	40	1	74	21	76	184	243	103	100	111	29
62 Danville	VA	273	2,561	241	241	262	241	257	211	248	233	89	52	244	242
63 Davenport	IA	187	1,873	202	221	116	196	95	137	63	61	204	238	214	126
64 Dayton	OH	194	1,916	173	232	67	229	76	127	72	80	179	195	216	270
65 Daytona Beach	FL	82	1,415	55	47	98	117	226	248	24	248	6	4	245	97
66 Decatur	AL	232	2,078	182	145	218	171	182	151	240	98	148	186	90	267
67 Decatur	IL	212	1,999	254	266	265	252	94	91	77	42	70	156	205	227
68 Denver	CO	2	645	13	30	7	37	10	12	29	66	216	95	69	61
69 Des Moines	IA	145	1,675	82	91	65	119	30	164	93	247	210	166	224	184
70 Detroit	MI	71	1,392	16	178	11	218	22	99	75	128	176	40	253	176
71 Dothan	AL	271	2,515	223	211	222	188	220	189	215	130	252	254	198	213
72 Dover	DE	222	2,044	163	82	210	93	214	233	228	55	249	132	126	259
73 Dubuque	IA	152	1,709	233	217	229	182	126	46	50	71	65	130	258	102
74 Duluth	MN	117	1,590	256	250	155	152	122	21	89	17	267	69	150	42
75 Eau Claire	WI	149	1,692	208	193	145	46	164	36	131	37	196	187	212	137
76 El Paso	TX	170	1,774	39	39	73	122	273	249	273	274	145	143	128	16
77 Elkhart	IN	164	1,753	144	97	124	134	103	105	121	202	46	202	275	200
78 Elmira	NY	269	2,488	251	268	270	264	187	166	204	154	180	67	242	235
79 Enid	OK	223	2,052	240	238	264	193	190	242	133	184	64	57	24	223
80 Erie	PA	160	1,743	220	228	193	239	148	119	127	14	40	169	173	73
81 Eugene	OR	20	1,030	102	99	102	123	138	84	34	26	151	17	51	103
82 Evansville	IN	137	1,643	174	196	115	175	90	110	70	151	41	178	262	81
83 Fargo	ND	38	1,182	152	116	107	38	119	42	100	20	98	108	144	138
84 Fayetteville	AR	65	1,350	52	5	63	5	195	180	129	225	19	173	103	201
85 Fayetteville	NC	158	1,733	181	201	130	76	114	2	224	2	244	268	102	189
86 Flagstaff	AZ	53	1,276	132	26	176	25	261	132	140	34	167	23	28	132
87 Florence	AL	253	2,300	211	195	221	163	221	188	199	145	242	251	149	115
88 Florence	SC	259	2,340	183	124	206	157	208	103	262	195	271	231	233	167
89 Fort Collins	CO	4	766	78	16	69	4	69	10	62	38	154	6	12	248
90 Fort Myers	FL	89	1,439	65	48	87	95	65	236	5	222	213	264	45	94
91 Fort Pierce	FL	57	1,312	86	45	156	151	45	240	4	179	53	92	47	214
92 Fort Smith	AR	134	1,639	135	102	117	70	232	69	238	176	48	273	133	46
93 Fort Walton Beach	FL	9	872	116	35	112	8	141	112	36	9	17	33	62	191
94 Fort Wayne	IN	123	1,602	121	183	76	173	70	95	84	160	62	162	252	164
95 Fresno	CA	138	1,646	36	58	59	129	262	274	253	253	212	32	60	18
96 Gadsden	AL	250	2,196	219	199	243	154	245	134	260	234	38	145	132	193
97 Gainesville	FL	133	1,635	139	120	146	89	137	123	118	90	146	78	195	254
98 Glens Falls	NY	249	2,192	227	212	254	232	213	209	152	192	260	97	21	123
99 Goldsboro	NC	184	1,865	197	159	250	186	254	140	247	41	34	53	110	194
100 Grand Forks	ND	217	2,020	247	259	211	104	185	87	175	50	163	215	88	236

Appendix 2 (continued)
Business Opportunity Index Category Rankings, Metropolitan Areas, 2000

Metropolitan area	Rank	Sum	1	2	3	4	5	6	7	8	9	10	11	12	
101 Grand Junction	CO	81	1,414	133	23	173	30	207	88	97	73	133	216	13	228
102 Grand Rapids	MI	66	1,355	42	105	34	83	73	44	125	91	181	179	230	168
103 Great Falls	MT	124	1,602	232	209	241	125	160	201	68	86	36	37	41	166
104 Green Bay	WI	55	1,283	129	93	85	42	46	37	40	8	201	149	274	179
105 Greensboro	NC	63	1,339	37	95	41	177	63	154	69	167	87	47	215	187
106 Greenville	NC	189	1,879	138	49	186	61	177	146	196	97	276	223	160	170
107 Greenville	SC	140	1,650	49	111	48	141	151	117	205	140	191	133	243	121
108 Harrisburg	PA	147	1,686	105	185	71	189	57	202	88	162	58	151	196	222
109 Hartford	CT	254	2,302	272	254	276	275	9	246	49	262	264	58	127	210
110 Hattiesburg	MS	199	1,945	169	75	201	57	263	86	256	156	248	272	95	67
111 Hickory	NC	151	1,695	107	117	131	216	152	122	176	58	109	101	259	147
112 Honolulu	HI	221	2,037	90	191	259	271	39	272	61	168	262	230	49	145
113 Houma	LA	201	1,955	186	180	151	56	243	4	251	72	161	271	114	266
114 Houston	TX	25	1,090	5	42	6	120	28	68	208	236	132	138	106	1
115 Huntington	WV	272	2,521	228	234	196	234	256	214	246	127	100	255	167	264
116 Huntsville	AL	204	1,961	75	52	110	161	133	262	123	116	247	252	159	271
117 Indianapolis	IN	45	1,219	30	113	30	121	34	106	80	142	101	85	229	148
118 Iowa City	IA	44	1,215	204	167	180	32	47	14	48	6	69	259	72	117
119 Jackson	MI	180	1,822	212	202	212	167	178	118	167	75	135	111	134	111
120 Jackson	MS	32	1,143	96	142	68	77	117	6	168	63	29	107	201	69
121 Jackson	TN	210	1,992	187	100	168	34	143	16	264	272	274	262	236	36
122 Jacksonville	FL	30	1,139	34	64	35	79	72	159	111	143	54	30	170	188
123 Jacksonville	NC	172	1,780	268	274	217	48	153	1	252	1	71	275	11	209
124 Jamestown	NY	274	2,619	252	256	266	262	251	228	243	231	239	70	97	224
125 Janesville	WI	227	2,065	176	137	191	143	110	97	187	106	245	226	174	273
126 Johnson City	TN	155	1,716	118	176	96	178	230	153	234	119	8	89	153	162
127 Johnstown	PA	252	2,233	258	252	252	254	244	218	241	214	20	174	84	22
128 Jonesboro	AR	165	1,757	193	79	215	72	239	34	239	93	21	265	124	183
129 Joplin	MO	91	1,453	159	103	133	43	210	17	209	158	5	184	81	151
130 Kalamazoo	MI	192	1,909	147	203	91	170	111	124	143	113	206	198	197	206
131 Kansas City	MO	59	1,320	29	125	27	136	38	94	94	182	155	181	187	72
132 Killeen	TX	70	1,385	74	28	97	14	231	63	266	68	97	200	39	208
133 Knoxville	TN	43	1,200	46	60	54	81	132	177	172	148	33	123	86	88
134 Kokomo	IN	230	2,068	224	206	232	183	71	49	165	103	190	142	227	276
135 La Crosse	WI	245	2,157	214	192	166	86	128	168	115	232	224	257	232	143
136 Lafayette	IN	130	1,624	166	149	160	110	158	51	137	64	11	154	219	245
137 Lafayette	LA	106	1,535	100	134	82	65	225	11	236	114	112	191	169	96
138 Lake Charles	LA	198	1,937	168	160	154	88	189	55	221	121	188	241	251	101
139 Lakeland	FL	104	1,530	79	89	119	198	198	149	144	249	60	54	140	51
140 Lancaster	PA	100	1,496	97	150	105	223	93	232	92	189	13	176	68	58
141 Lansing	MI	144	1,670	136	198	89	156	121	142	154	53	225	24	109	263
142 Laredo	TX	90	1,452	67	2	144	11	274	60	276	196	166	65	185	6
143 Las Cruces	NM	200	1,947	95	15	203	64	272	256	263	183	265	199	33	99
144 Las Vegas	NV	10	886	11	1	15	1	64	145	52	23	183	121	231	39
145 Lawrence	KS	148	1,687	157	38	199	39	247	162	169	40	121	196	158	161
146 Lawton	OK	262	2,390	253	265	255	181	228	129	257	16	263	276	50	217
147 Lewiston	ME	264	2,431	260	269	268	258	179	172	254	223	111	81	207	149
148 Lexington	KY	54	1,281	83	104	60	67	80	107	105	82	92	193	226	82
149 Lima	OH	260	2,349	239	240	248	244	183	208	114	44	152	213	225	239
150 Lincoln	NE	26	1,097	124	108	100	92	56	20	42	12	199	71	129	144

Appendix 2 (continued)
Business Opportunity Index Category Rankings, Metropolitan Areas, 2000

Metropolitan area	Rank	Sum	1	2	3	4	5	6	7	8	9	10	11	12	
151 Little Rock	AR	74	1,397	87	147	58	87	84	30	151	70	104	270	202	107
152 Longview	TX	139	1,650	154	155	139	113	209	141	198	206	72	105	44	114
153 Los Angeles	CA	116	1,586	1	156	29	266	100	273	136	265	219	35	22	84
154 Louisville	KY	72	1,393	71	181	42	133	51	53	53	88	129	190	266	136
155 Lubbock	TX	121	1,602	192	204	127	126	159	92	207	115	123	170	38	49
156 Lynchburg	VA	240	2,098	160	161	195	221	206	238	183	216	35	50	208	225
157 Macon	GA	136	1,641	111	123	101	98	172	195	200	173	107	12	194	155
158 Madison	WI	41	1,187	61	46	64	73	24	126	19	28	198	180	163	205
159 Mansfield	OH	270	2,509	225	224	242	243	217	229	210	219	126	150	171	253
160 McAllen	TX	96	1,478	31	3	75	15	276	220	275	271	143	77	32	60
161 Medford	OR	8	866	112	33	125	35	173	175	21	46	47	21	10	68
162 Melbourne	FL	107	1,548	57	50	121	208	176	264	47	190	31	55	75	274
163 Memphis	TN	64	1,342	48	143	37	118	54	22	219	227	120	84	263	7
164 Merced	CA	237	2,092	143	126	239	199	271	276	272	269	233	10	37	17
165 Miami	FL	129	1,622	10	63	16	149	107	266	66	276	240	110	178	141
166 Milwaukee	WI	94	1,471	89	215	39	220	18	43	25	35	232	125	272	158
167 Minneapolis	MN	24	1,086	15	88	10	128	7	59	14	22	228	66	200	249
168 Missoula	MT	28	1,132	178	61	165	20	174	73	103	31	52	153	29	93
169 Mobile	AL	128	1,619	63	77	62	51	236	108	216	185	73	210	148	190
170 Modesto	CA	211	1,998	69	68	152	210	252	271	249	267	243	128	48	41
171 Monroe	LA	197	1,933	215	205	194	135	216	27	226	83	149	227	254	2
172 Montgomery	AL	122	1,602	101	106	95	91	139	178	164	224	50	160	186	108
173 Muncie	IN	234	2,087	248	258	234	192	150	89	188	175	14	96	246	197
174 Myrtle Beach	SC	37	1,176	113	32	86	9	171	39	83	78	139	224	193	9
175 Naples	FL	1	440	81	8	94	22	1	5	1	11	75	86	31	25
176 Nashville	TN	5	774	26	41	21	27	25	7	160	200	39	90	115	23
177 New London	CT	205	1,971	264	262	149	179	17	138	67	177	253	114	180	171
178 New Orleans	LA	159	1,735	110	219	55	225	104	58	173	137	215	258	168	13
179 New York	NY	68	1,377	8	214	8	265	4	165	17	241	272	16	136	31
180 Norfolk	VA	174	1,783	38	151	43	172	162	251	180	108	175	76	209	218
181 Ocala	FL	75	1,406	80	19	135	47	238	203	71	204	88	141	55	125
182 Odessa	TX	185	1,866	140	157	177	204	136	219	191	273	221	124	16	8
183 Oklahoma City	OK	86	1,429	50	141	40	108	166	227	202	228	56	28	77	106
184 Omaha	NE	29	1,133	70	148	52	116	27	25	60	54	192	112	257	20
185 Orlando	FL	62	1,335	17	24	19	28	125	212	163	255	77	61	268	86
186 Owensboro	KY	251	2,231	218	190	240	153	196	136	157	100	268	247	176	150
187 Panama City	FL	73	1,395	127	43	171	63	218	184	171	132	90	13	59	124
188 Parkersburg	WV	246	2,175	235	231	209	191	191	147	214	221	141	94	145	156
189 Pensacola	FL	83	1,417	66	55	83	50	229	234	193	157	10	15	99	226
190 Peoria	IL	135	1,640	203	222	108	176	78	67	43	19	66	209	220	229
191 Philadelphia	PA	105	1,534	43	226	31	257	16	183	54	211	159	93	218	43
192 Phoenix	AZ	23	1,049	4	6	4	12	97	192	106	254	57	19	189	109
193 Pine Bluff	AR	276	2,724	257	270	269	253	258	131	261	230	94	274	264	163
194 Pittsburgh	PA	154	1,716	276	253	45	247	44	115	81	209	99	140	175	32
195 Pittsfield	MA	243	2,118	266	272	271	272	62	199	38	134	203	214	58	129
196 Pocatello	ID	183	1,864	191	67	233	40	260	155	259	29	171	185	30	244
197 Portland	ME	173	1,782	185	200	136	209	26	187	20	124	185	139	137	234
198 Portland	OR	16	956	14	27	13	44	43	102	31	85	195	137	105	160
199 Providence	RI	239	2,096	270	251	228	269	49	152	78	198	182	167	181	71
200 Provo	UT	87	1,431	51	9	61	3	269	35	271	164	91	243	56	178

Appendix 2 (continued)
Business Opportunity Index Category Rankings, Metropolitan Areas, 2000

Metropolitan area	Rank	Sum	1	2	3	4	5	6	7	8	9	10	11	12	
201 Pueblo	CO	153	1,715	179	128	181	52	223	26	225	199	124	44	118	216
202 Punta Gorda	FL	112	1,562	122	25	205	58	169	255	7	263	2	188	7	261
203 Raleigh	NC	7	856	20	13	23	23	23	78	65	101	147	49	162	152
204 Rapid City	SD	93	1,468	210	158	190	54	145	120	27	3	86	242	94	139
205 Reading	PA	157	1,717	134	177	183	245	59	196	98	193	84	147	157	44
206 Redding	CA	203	1,961	148	98	236	219	222	263	182	258	209	99	6	21
207 Reno	NV	14	937	62	21	72	62	11	161	8	7	186	116	155	76
208 Richland	WA	181	1,830	93	17	175	114	184	223	223	129	273	48	79	272
209 Richmond	VA	156	1,716	47	118	56	195	42	247	79	250	170	38	267	207
210 Roanoke	VA	178	1,815	222	225	148	202	52	93	46	125	174	135	271	122
211 Rochester	MN	114	1,579	190	139	188	158	20	121	32	24	162	59	228	258
212 Rochester	NY	213	2,003	128	223	103	261	66	237	101	194	255	63	152	220
213 Rockford	IL	125	1,609	109	138	99	169	88	111	96	43	95	218	191	252
214 Rocky Mount	NC	258	2,332	164	119	263	256	202	109	242	153	231	163	256	174
215 Sacramento	CA	77	1,408	24	78	36	148	82	244	126	186	230	119	23	112
216 Saginaw	MI	214	2,004	231	237	122	206	102	75	110	107	187	161	206	260
217 Saint Cloud	MN	127	1,614	162	131	126	55	211	113	159	49	140	102	119	247
218 Saint Joseph	MO	238	2,094	242	244	267	251	186	57	162	139	24	261	141	120
219 Saint Louis	MO	108	1,549	54	210	33	230	29	114	22	87	114	234	249	173
220 Salinas	CA	168	1,773	249	246	162	227	35	167	15	111	270	249	14	28
221 Salt Lake City	UT	36	1,171	23	34	20	13	130	23	156	59	134	236	131	212
222 San Angelo	TX	208	1,979	216	189	225	130	204	144	142	207	79	260	18	165
223 San Antonio	TX	35	1,169	21	51	22	31	149	52	203	187	169	172	108	4
224 San Diego	CA	58	1,314	19	127	32	203	79	260	45	226	164	42	19	98
225 San Francisco	CA	33	1,159	9	154	5	205	3	133	13	165	257	39	43	133
226 San Luis Obispo	CA	84	1,420	153	165	153	131	135	190	16	147	156	113	2	59
227 Santa Barbara	CA	169	1,773	137	187	214	260	50	269	9	203	220	115	5	104
228 Santa Fe	NM	47	1,229	119	22	134	21	33	174	10	81	238	155	4	238
229 Sarasota	FL	11	901	73	110	47	24	5	179	3	244	27	20	89	80
230 Savannah	GA	99	1,493	108	92	142	174	112	125	116	102	108	136	240	38
231 Scranton	PA	233	2,083	273	267	179	263	147	156	141	174	30	222	184	47
232 Seattle	WA	40	1,187	12	62	14	147	15	100	41	123	256	207	82	128
233 Sharon	PA	248	2,180	237	236	257	235	237	205	213	213	9	158	117	63
234 Sheboygan	WI	182	1,851	206	171	202	140	85	72	55	67	207	220	183	243
235 Sherman	TX	261	2,352	207	166	253	224	205	169	222	240	78	206	120	262
236 Shreveport	LA	219	2,031	217	233	106	160	161	65	185	215	205	263	166	55
237 Sioux City	IA	235	2,090	209	179	219	200	134	66	178	220	173	182	238	92
238 Sioux Falls	SD	12	920	125	57	92	26	31	19	57	69	23	194	165	62
239 South Bend	IN	85	1,420	171	184	137	180	91	50	90	76	26	82	255	78
240 Spokane	WA	120	1,600	72	66	77	84	168	173	132	131	193	177	76	251
241 Springfield	IL	146	1,683	146	135	227	240	74	204	51	30	157	165	73	181
242 Springfield	MA	263	2,403	269	261	256	267	92	207	147	117	269	269	92	157
243 Springfield	MO	21	1,031	88	56	74	45	157	31	134	95	22	205	67	57
244 State College	PA	142	1,668	195	170	231	185	175	186	158	110	3	203	40	12
245 Steubenville	OH	275	2,708	267	271	273	274	253	252	231	260	45	201	199	182
246 Stockton	CA	177	1,813	58	70	129	214	249	270	245	259	194	27	61	37
247 Sumter	SC	236	2,091	177	81	226	94	270	245	270	197	25	56	210	240
248 Syracuse	NY	255	2,307	262	245	274	273	146	250	186	138	202	11	135	185
249 Tallahassee	FL	101	1,518	114	86	104	59	127	64	197	105	158	148	125	231
250 Tampa	FL	60	1,320	25	146	18	85	67	104	26	252	74	131	223	169

Appendix 2 (continued)
Business Opportunity Index Category Rankings, Metropolitan Areas, 2000

Metropolitan area	Rank	Sum	1	2	3	4	5	6	7	8	9	10	11	12	
251 Terre Haute	IN	216	2,016	234	230	223	201	234	160	170	144	15	62	203	140
252 Texarkana	TX	209	1,985	226	213	230	164	241	139	212	126	59	240	65	70
253 Toledo	OH	231	2,073	261	247	78	197	81	135	102	118	197	197	261	199
254 Topeka	KS	206	1,974	188	175	189	194	108	226	85	135	150	83	211	230
255 Tucson	AZ	34	1,159	32	29	49	49	193	171	64	212	44	41	54	221
256 Tulsa	OK	46	1,226	59	136	53	127	87	197	150	229	42	43	98	5
257 Tuscaloosa	AL	242	2,106	184	168	169	80	199	128	217	141	261	237	222	100
258 Tyler	TX	39	1,187	145	94	141	75	113	74	91	235	28	91	36	64
259 Utica	NY	265	2,433	274	276	245	259	200	206	181	159	235	79	139	180
260 Victoria	TX	226	2,062	201	114	235	109	154	213	155	275	258	225	71	52
261 Visalia	CA	191	1,900	85	69	147	150	267	267	269	270	266	72	35	3
262 Waco	TX	167	1,772	155	153	138	101	212	40	229	256	96	228	130	34
263 Washington	DC	67	1,376	7	152	9	233	8	230	28	150	218	8	122	211
264 Waterloo	IA	225	2,059	250	260	192	142	124	28	113	56	241	159	237	257
265 Wausau	WI	179	1,820	199	169	182	100	120	33	135	18	214	235	273	142
266 West Palm Beach	FL	15	948	27	31	38	78	2	241	2	242	117	45	101	24
267 Wheeling	WV	267	2,451	255	257	251	238	233	210	130	218	130	246	204	79
268 Wichita	KS	79	1,413	64	85	79	187	96	217	122	146	67	80	151	119
269 Wichita Falls	TX	202	1,957	194	173	247	231	181	215	149	239	55	211	17	45
270 Williamsport	PA	229	2,068	243	242	260	246	224	221	190	181	12	7	188	54
271 Wilmington	NC	17	983	77	10	90	19	140	71	39	15	251	103	85	83
272 Yakima	WA	207	1,979	98	44	185	155	248	243	227	261	168	104	112	134
273 York	PA	171	1,780	94	107	172	242	118	261	148	238	7	221	107	65
274 Youngstown	OH	224	2,054	263	248	114	236	156	150	166	120	61	164	143	233
275 Yuba City	CA	215	2,014	151	76	249	166	265	265	265	264	177	46	1	89
276 Yuma	AZ	175	1,811	120	20	164	10	268	231	268	245	82	129	260	14