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STATE ENTREPRENEURSHIP INDEX

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Unemployment rates and job growth are popular measures for state economies. However, these trends may differ from the state's performance in core measures of underlying economic strength such as entrepreneurship, net migration and capital formation. Given this, the University of Nebraska - Lincoln Bureau of Business Research seeks to track these core economic measures in Nebraska and in all U.S. states.

The State Entrepreneurship Index is one effort to track these core trends. Specifically, the index is used to track entrepreneurship in all 50 states. The index was initially developed by Eric C. Thompson and William B. Walstad in *Entrepreneurship in Nebraska: Conditions, Attitudes, and Actions* (Gallup Press, 2008). In the current study, we use that methodological approach to calculate the value of the state entrepreneurship index for 2012 and 2013.

The index is composed of 5 components that reflect the income of entrepreneurs, business formation rates, technological innovation, and growth in the number of entrepreneurs.

The five components of the State Entrepreneurship Index are:

- Percent growth in employer establishments
- Percent growth in employer establishments per person

- Business formation rate (*i.e., establishment births per person*)
- Patents per thousand persons
- Average income per non-farm proprietor

A separate index value is calculated for each of the 5 components. Each component index reflects how much each state's performance deviates from the median state. The state at the median gets a value of 1.0. A state with a value one standard deviation above the median gets a value of 2.0, while a state one standard deviation below the median gets a value of 0.0. The overall entrepreneurship index is calculated by taking a simple average of the five component index values for each state.

The data utilized to calculate values for each of the 5 index components are presented in Table A.1 through A.5 in the appendix. Data are presented from 2005 through 2013. Appendix A.6 provides a history of State Entrepreneurship Index values. Analysis in the main text focuses on the two most recent years, 2012 and 2013.

Data on the number of employer establishments comes from the establishment counts in the Quarterly Census of Employment and Wages developed by the U.S. Bureau of Labor Statistics within the U.S. Department of Labor. The counts include establishments that participate in their state unemployment insurance program. Data on the population of states, which is used in all per

person measures, is from the U.S. Census based on estimated population on July 1, 2013. Data on firm births is from the Business Employment Dynamics database, also developed by the U.S. Bureau of Labor Statistics. Data on patents is collected by the U.S. Patent and Trademark Office. Data on non-farm proprietor income and proprietor counts for each U.S. state is from the Regional Economic Information System of the Bureau of Economic Analysis, which is part of the United States Department of Commerce.

Note that historic values for the State Entrepreneurship Index may differ from values reported in earlier years due to periodic revisions in the underlying data by the U.S. Department of Labor, the U.S. Department of Commerce, and the U.S. Patent and Trademark Office. Values also may differ because beginning with the current edition of the index we now exclude private household and social assistance establishments from our estimate of employer establishments. State's treatment of home health aides and other home service providers differs widely in the employer data. Removing establishments classified in these industries improve the consistency of employer establishment data both across states and across years within individual states.

Table 1 illustrates component index values for all 50 states for the year 2013. The Table also shows the overall index value. Among the components, employer establishment growth is generally volatile from year-to-year while the business formation, patents, and average income are relatively stable.

The highest ranked states in the 2013 State Entrepreneurship Index are spread throughout the country. The five highest ranked states are North Dakota, California, New York, Kentucky, and New Hampshire. Connecticut, Texas, Oregon, Utah and Colorado also are among the Top 10.

North Dakota is the highest ranked state due to entrepreneurial activity related to the energy boom in the state, in particular a high business formation rate and rapid growth in employer

establishments. Other high ranked states tend to rank above the median state (index value greater than 1.0) for all or nearly all of the 5 index components. California, the second ranked state, was above median for 4 of 5 components and highly ranked in patents per thousand residents. Third ranked New York and 5th ranked New Hampshire were above the median for all 5 components. Sixth ranked Connecticut was above median for 4 of 5 components and especially strong in patents per thousand residents and average proprietor income. Eighth ranked Utah, 9th ranked Oregon and 10th ranked Colorado also were above median for 4 of 5 components. Kentucky was the 4th ranked state because of a very rapid establishment growth rate. Texas was the 7th ranked state in large part because of very high average proprietor income, a by-product of the state's strong energy sector.

The lowest ranked states were spread throughout the country. Michigan was the lowest ranked state again in the 2013 State Entrepreneurship Index. Michigan was well below the median value for 4 of 5 components, and especially weak in establishment growth and income per proprietor. Indiana was the 47th ranked state due to poor establishment growth and business births. The remaining low ranked states were North Carolina at 49th, New Mexico at 48th and Alabama at 46th. These states had low establishment growth or business births, as well as low average proprietor income. .

States near the middle of the ranking often had mixed results, reflecting the unique strengths and weaknesses of each state. Tennessee was the 26th ranked state and was well below the median-value for business births and patents per capita. But, Tennessee had very high income per proprietor. Vermont was the 27th ranked state. Vermont was well above the median value in patents per thousand residents, but well below median in establishment growth. Nebraska was ranked 18th, reflecting strength in establishment growth, business births, and income per non-farm proprietor but the state was well below-the median state in terms of patents per thousand residents.

Table 1
2013 State Entrepreneurship Index Rank and Index Values for Each Subcomponent Index

State	Growth in Establishments	Growth in Establishments Per Capita	Business Formation Rate	Patents Per Thousand Residents	Average Proprietor Income	Average Index Value	Rank
Alabama	0.318	0.484	0.019	0.159	0.701	0.336	46
Alaska	0.436	0.365	0.982	-0.014	2.193	0.792	36
Arizona	0.240	-0.244	0.713	1.119	0.258	0.417	45
Arkansas	0.962	1.240	0.848	0.001	0.153	0.641	39
California	1.934	1.925	1.096	3.654	0.928	1.907	2
Colorado	1.256	0.637	2.604	2.035	1.206	1.548	10
Connecticut	1.118	1.584	0.463	2.258	2.723	1.629	6
Delaware	0.282	-0.037	2.341	1.692	2.038	1.263	24
Florida	2.096	1.852	2.804	0.644	-0.584	1.363	19
Georgia	1.581	1.600	1.127	0.810	-0.059	1.012	29
Hawaii	1.068	0.825	0.369	0.104	0.374	0.548	41
Idaho	0.283	-0.105	2.583	2.172	0.278	1.042	28
Illinois	1.619	2.176	0.131	1.311	0.952	1.238	25
Indiana	-0.158	-0.202	-0.063	0.978	0.959	0.303	47
Iowa	1.638	1.883	1.035	0.949	2.093	1.519	11
Kansas	-0.167	-0.049	1.092	1.157	1.850	0.777	37
Kentucky	3.328	3.959	0.637	0.252	0.721	1.779	4
Louisiana	1.263	1.443	0.340	0.069	1.940	1.011	30
Maine	0.062	0.463	1.407	0.409	0.131	0.494	44
Maryland	1.771	1.839	1.028	0.935	1.433	1.401	14
Massachusetts	-0.845	-1.158	0.909	3.615	2.095	0.923	32
Michigan	-0.741	-0.587	0.129	1.908	-0.003	0.141	50
Minnesota	1.460	1.473	0.428	3.122	0.825	1.461	13
Mississippi	1.607	2.120	-0.238	-0.068	0.758	0.836	34
Missouri	0.916	1.185	0.523	0.535	0.894	0.810	35
Montana	1.731	1.623	3.011	0.185	0.224	1.355	20
Nebraska	1.590	1.660	1.194	0.408	1.987	1.368	18
Nevada	1.830	1.469	1.896	1.093	0.028	1.263	23
New Hampshire	1.138	1.592	2.130	2.319	1.386	1.713	5
New Jersey	0.385	0.546	1.789	1.988	2.286	1.399	15
New Mexico	-0.046	0.260	0.422	0.576	0.120	0.266	48
New York	1.392	1.691	1.585	1.546	2.735	1.790	3
North Carolina	-0.222	-0.676	0.705	1.058	0.205	0.214	49
North Dakota	4.276	2.798	4.779	0.402	1.369	2.725	1
Ohio	0.044	0.309	-0.130	1.139	1.188	0.510	42
Oklahoma	1.038	0.863	0.640	0.308	3.583	1.286	21
Oregon	1.688	1.720	1.725	2.324	0.282	1.548	9
Pennsylvania	-0.420	-0.167	0.685	1.022	2.302	0.684	38
Rhode Island	0.674	1.071	2.607	1.211	1.379	1.388	16
South Carolina	3.040	3.028	0.429	0.488	-0.074	1.382	17
South Dakota	0.905	0.407	1.494	0.324	1.734	0.973	31
Tennessee	1.439	1.544	0.057	0.363	2.666	1.214	26
Texas	1.502	0.945	0.834	1.139	3.706	1.625	7
Utah	1.975	1.389	2.888	1.588	0.037	1.575	8
Vermont	0.187	0.512	1.487	3.106	0.172	1.093	27
Virginia	0.125	-0.181	0.852	0.651	1.041	0.498	43
Washington	0.918	0.575	1.191	3.349	1.295	1.466	12
West Virginia	0.458	1.013	-0.202	0.021	1.571	0.572	40
Wisconsin	0.739	0.987	0.636	1.388	0.751	0.900	33
Wyoming	0.437	0.065	3.181	0.592	2.111	1.277	22

Sources: U.S. Department of Labor and U.S. Department of Commerce and U.S. Patent and Trademark Office

STATE RANKS 2012 AND 2013

As seen in Table 2, there was substantial stability in the State Entrepreneurship Index between 2012 and 2013. The correlation between state ranks in 2012 and 2013 was 0.55.

Many of the top ranked states remained the same or reflected modest changes in rank. North Dakota is the highest ranked state in 2013 and is also highest in the revised 2012 ranking. North Dakota also was highest ranked when the original 2012 ranking was released in last year's State Entrepreneurship Index report. Modest revisions to underlying data used to calculate the components of the Index, which occur every year, did not change North Dakota's ranking.

New York and New Hampshire were in the Top 5 in 2012 and remain in the Top 5 in 2013. Connecticut and Texas were in the Top 10 in both 2012 and 2013. California was 11th in 2012 and 2nd in 2013. Among Western states, Colorado moved up from 13th to 10th, Oregon from 15th to 9th, and Utah from 20th to 8th. Kentucky rose rapidly, from 49th in 2012 to 4th in 2013. This occurred entirely due to improved net establishment growth which lagged for many years in Kentucky but recovered in 2013.

There also was stability at the bottom of the State Entrepreneurship Index ranking. Michigan was 50th in both 2012 and 2013, as its economy continues to struggle. Alabama was 47th in 2012 and is 46th in 2013. Hawaii was ranked 46th in 2012 and 41st in 2013. Several Southern states improved in particular Mississippi and South Carolina. States from around the country entered the Bottom 10 including Arizona, New Mexico, Indiana and Ohio, as well as the West Virginia, Virginia and North Carolina. Thus the South, Southwest and Industrial Midwest were well represented among the Bottom 10 states.

Other Midwest states performed better. Iowa and Minnesota ranked 11th and 13th, respectively in 2013, and held similar ranks in 2012. Nebraska fell two spots from 16th in 2012 to 18th in 2013. Both values, however, are an improvement for Nebraska over rankings in earlier years.

State	2012 Rank	Index Value	2013 Rank	Index Value
Alabama	47	0.35	46	0.34
Alaska	14	1.40	36	0.79
Arizona	27	1.03	45	0.42
Arkansas	41	0.67	39	0.64
California	11	1.43	2	1.91
Colorado	13	1.41	10	1.55
Connecticut	9	1.48	6	1.63
Delaware	43	0.65	24	1.26
Florida	17	1.33	19	1.36
Georgia	34	0.80	29	1.01
Hawaii	46	0.36	41	0.55
Idaho	42	0.67	28	1.04
Illinois	19	1.30	25	1.24
Indiana	33	0.82	47	0.30
Iowa	10	1.45	11	1.52
Kansas	45	0.37	37	0.78
Kentucky	49	0.24	4	1.78
Louisiana	37	0.74	30	1.01
Maine	35	0.79	44	0.49
Maryland	31	0.93	14	1.40
Massachusetts	21	1.24	32	0.92
Michigan	50	0.07	50	0.14
Minnesota	12	1.43	13	1.46
Mississippi	48	0.30	34	0.84
Missouri	39	0.72	35	0.81
Montana	26	1.09	20	1.35
Nebraska	16	1.36	18	1.37
Nevada	29	0.97	23	1.26
New Hampshire	2	1.87	5	1.71
New Jersey	40	0.70	15	1.40
New Mexico	38	0.72	48	0.27
New York	3	1.75	3	1.79
North Carolina	28	1.02	49	0.21
North Dakota	1	3.44	1	2.72
Ohio	36	0.76	42	0.51
Oklahoma	6	1.57	21	1.29
Oregon	15	1.39	9	1.55
Pennsylvania	7	1.51	38	0.68
Rhode Island	18	1.33	16	1.39
South Carolina	44	0.45	17	1.38
South Dakota	25	1.10	31	0.97
Tennessee	23	1.11	26	1.21
Texas	4	1.72	7	1.62
Utah	20	1.28	8	1.58
Vermont	5	1.57	27	1.09
Virginia	22	1.15	43	0.50
Washington	24	1.11	12	1.47
West Virginia	30	0.94	40	0.57
Wisconsin	32	0.84	33	0.90
Wyoming	8	1.50	22	1.28

Sources: U.S. Departments of Labor, Commerce and Patent Office

ESTABLISHMENT GROWTH

This section examines changes in establishment growth between 2012 and 2013. As seen in Table 3, North Dakota remained the top state for establishment growth, given the strength of its energy sector. Florida also remained in the Top 10 in both 2012 and 2013. Otherwise, there was significant volatility in ranking between 2012 and 2013. The correlation between state ranks for net establishment growth in 2012 and 2013 was just 0.33. As previously noted, Kentucky moved from a very low rank in 2012 to the 2nd rank in 2013. The state had performed poorly in net establishment growth for a number of years, finally bouncing back in 2013. California, Maryland, and South Carolina also improved substantially and were in the Top 10 in 2013. Four Western states, Montana, Nevada, Oregon and Utah, also moved into the Top 10 in 2013. The Midwest was the only region without a state in the Top 10, although Iowa was 11th, Illinois 12th and Nebraska 14th.

The Midwest was well represented in the Bottom 10 with Michigan at 49th, Kansas at 46th, Indiana at 45th, and Ohio at 43rd. There were also three Northeastern states in the Bottom 10 including Massachusetts, Pennsylvania, and Maine.

Overall the Northeast and Midwest were poorly represented in the Top 10 and prominent in the Bottom 10. Net establishment growth was challenging in these regions during 2013. By contrast, net establishment growth was strong in most states in the Western United States.

Among states in the middle of the distribution, Arizona dropped from the 5th highest net establishment growth rate in 2012 to 39th in 2013. Vermont dropped from 24th in 2012 to 40th in 2013 while Virginia dropped from 17th to 41st. Nearby West Virginia also dropped in rank. Texas and Oklahoma fell out of the Top 10 for net establishment growth during 2013, as the recent energy boom began to mature. States with a significant improvement in rank included Washington, Connecticut, Louisiana, New Jersey and Mississippi.

State	2012 Rank	Index Value	2013 Rank	Index Value
Alabama	42	0.28	36	0.32
Alaska	4	1.81	34	0.44
Arizona	5	1.67	39	0.24
Arkansas	28	0.89	26	0.96
California	30	0.89	6	1.93
Colorado	26	0.98	21	1.26
Connecticut	37	0.61	23	1.12
Delaware	48	-0.95	38	0.28
Florida	2	1.98	4	2.10
Georgia	22	1.20	15	1.58
Hawaii	40	0.52	24	1.07
Idaho	46	-0.49	37	0.28
Illinois	8	1.55	12	1.62
Indiana	29	0.89	45	-0.16
Iowa	10	1.49	11	1.64
Kansas	49	-1.01	46	-0.17
Kentucky	44	-0.01	2	3.33
Louisiana	38	0.56	20	1.26
Maine	32	0.73	42	0.06
Maryland	35	0.67	8	1.77
Massachusetts	45	-0.07	50	-0.85
Michigan	47	-0.80	49	-0.74
Minnesota	21	1.21	17	1.46
Mississippi	41	0.42	13	1.61
Missouri	33	0.73	28	0.92
Montana	25	1.02	9	1.73
Nebraska	6	1.62	14	1.59
Nevada	16	1.30	7	1.83
New Hampshire	11	1.48	22	1.14
New Jersey	50	-1.07	35	0.39
New Mexico	27	0.91	44	-0.05
New York	13	1.34	19	1.39
North Carolina	9	1.53	47	-0.22
North Dakota	1	5.57	1	4.28
Ohio	39	0.52	43	0.04
Oklahoma	7	1.62	25	1.04
Oregon	14	1.34	10	1.69
Pennsylvania	15	1.32	48	-0.42
Rhode Island	34	0.68	31	0.67
South Carolina	31	0.88	3	3.04
South Dakota	18	1.24	29	0.90
Tennessee	23	1.20	18	1.44
Texas	3	1.93	16	1.50
Utah	12	1.48	5	1.97
Vermont	24	1.12	40	0.19
Virginia	17	1.26	41	0.13
Washington	43	0.24	27	0.92
West Virginia	19	1.22	32	0.46
Wisconsin	36	0.66	30	0.74
Wyoming	20	1.21	33	0.44

Source: U.S. Department of Labor

GROWTH IN ESTABLISHMENTS PER PERSON

Establishment growth may reflect growth in the population of a state rather than a change in the share of the population involved in entrepreneurship. As a result, some states with a large percentage increase (or decrease) in establishments may not experience a large change in the share of the population involved in entrepreneurship. Further, ranks for growth in establishments per person are even more volatile, with a correlation of just. 0.24.

States with rapid population growth such as Florida and Arizona tend have a lower rank for the growth in establishments per person than for the growth in the number of establishments. In 2013, Florida was ranked 4th in the establishment growth (see Table 3) and 8th in growth in establishments per person (see Table 4). Arizona was ranked 39th in establishment growth and 47th in growth in establishments per person. Utah had a similar decline from 5th in establishment growth to near the middle, at 21th, in growth in establishments per person. Texas was ranked 16th in establishment growth but ranked 27st in growth in establishments per person.

States with slower population growth or population loss tend to rank higher in growth in establishments per person. This was common among states in the Northeast and Midwest, where population growth is slower. For example, in 2013 New York was ranked 19th in establishment growth but 11th in growth in establishments per person. Illinois was ranked 12th in establishment growth and 4th in growth in establishments per person. Vermont goes from a rank of 40th in establishment growth to a rank of 33rd in growth in establishments per person. The states of Maine and Rhode Island show a similar improvement. Missouri and Iowa are Midwestern states with a higher rank using growth in establishments per person.

Some Southern states also improved under the establishment per person measure. Mississippi was ranked 13th in 2013 in establishment growth and 5th in establishment growth per person. West Virginia goes from a rank of 32nd in establishment growth to 25th in establishment growth per person.

State	2012 Rank	Index Value	2013 Rank	Index Value
Alabama	40	0.42	34	0.48
Alaska	8	1.69	37	0.36
Arizona	15	1.29	47	-0.24
Arkansas	22	1.08	22	1.24
California	34	0.69	6	1.92
Colorado	41	0.41	30	0.64
Connecticut	26	1.00	16	1.58
Delaware	50	-1.50	41	-0.04
Florida	9	1.67	8	1.85
Georgia	30	0.90	14	1.60
Hawaii	42	0.21	29	0.82
Idaho	47	-0.78	43	-0.10
Illinois	2	2.08	4	2.18
Indiana	21	1.12	46	-0.20
Iowa	4	1.80	7	1.88
Kansas	49	-1.25	42	-0.05
Kentucky	43	0.11	1	3.96
Louisiana	37	0.54	20	1.44
Maine	19	1.16	35	0.46
Maryland	38	0.54	9	1.84
Massachusetts	44	-0.19	50	-1.16
Michigan	46	-0.64	48	-0.59
Minnesota	16	1.27	18	1.47
Mississippi	35	0.61	5	2.12
Missouri	25	1.00	23	1.18
Montana	29	0.91	13	1.62
Nebraska	10	1.65	12	1.66
Nevada	33	0.81	19	1.47
New Hampshire	3	1.85	15	1.59
New Jersey	48	-1.16	32	0.55
New Mexico	18	1.19	39	0.26
New York	11	1.61	11	1.69
North Carolina	13	1.34	49	-0.68
North Dakota	1	4.84	3	2.80
Ohio	28	0.93	38	0.31
Oklahoma	12	1.60	28	0.86
Oregon	17	1.26	10	1.72
Pennsylvania	5	1.73	44	-0.17
Rhode Island	20	1.14	24	1.07
South Carolina	36	0.54	2	3.03
South Dakota	32	0.82	36	0.41
Tennessee	23	1.05	17	1.54
Texas	14	1.30	27	0.94
Utah	27	0.95	21	1.39
Vermont	7	1.70	33	0.51
Virginia	24	1.03	45	-0.18
Washington	45	-0.21	31	0.57
West Virginia	6	1.70	25	1.01
Wisconsin	31	0.89	26	0.99
Wyoming	39	0.48	40	0.06

Sources: U.S. Departments of Labor and Commerce

THE BUSINESS FORMATION RATE

State business formation rates were generally stable between 2012 and 2013. The correlation of ranks in the two years was 0.93.

However, selected states showed significant improvement. Kentucky moved from the 47th rank in 2012 up to a rank of 34th in 2013. Texas moved from 39th in 2012 to the rank of 29th in 2013. Other states saw a significant decline. Pennsylvania moved from 21st in 2012 to the rank of 32nd in 2013 while Virginia dropped from 10th to 27th. While no other state experienced such a large decline in its rank, several states did see a noteworthy decline. Minnesota dropped from 33rd in business formation rate in 2012 to 39th in 2013.

Beyond changes in the business formation rate, it is interesting to note the strength (or weakness) in business formation in selected states. North Dakota has the highest business formation rate in 2013. There is also substantial strength in many Mountain states. Utah and Colorado, which are the largest Mountain states, are ranked 4th and 7th, respectively. Wyoming is ranked 2nd, Montana is ranked 3rd and Idaho is ranked 8th. Florida is the 5th ranked state. Many Northeastern states have high ranks for the business formation rate. Rhode Island is the 6th ranked state while Delaware is ranked 9th and New Hampshire is ranked 10th. Perhaps surprisingly, Connecticut, a highly ranked state in the overall entrepreneurship index, is a below-median state in terms of the business formation rate. Readers who believe that the business formation rate is the most important indicator of a state's entrepreneurial strength should note this difference.

The lowest ranked states in terms of business formation are concentrated in the Industrial Midwest and in the South. Ohio is the 48th ranked state, Indiana is 47th Michigan is 44th, and Illinois is 43nd. In the South, Mississippi is the lowest ranked state. West Virginia is ranked 49th, Tennessee is ranked 45th, Alabama is ranked 46th, Louisiana is ranked 42nd.

State	2012 Rank	Index Value	2013 Rank	Index Value
Alabama	43	0.21	46	0.02
Alaska	18	1.40	25	0.98
Arizona	35	0.70	30	0.71
Arkansas	22	1.17	28	0.85
California	25	1.07	21	1.10
Colorado	5	2.53	7	2.60
Connecticut	34	0.75	37	0.46
Delaware	12	1.75	9	2.34
Florida	4	2.91	5	2.80
Georgia	20	1.20	20	1.13
Hawaii	36	0.63	41	0.37
Idaho	9	2.07	8	2.58
Illinois	38	0.56	43	0.13
Indiana	45	0.14	47	-0.06
Iowa	27	0.90	23	1.04
Kansas	28	0.88	22	1.09
Kentucky	47	0.11	34	0.64
Louisiana	37	0.57	42	0.34
Maine	16	1.54	17	1.41
Maryland	23	1.10	24	1.03
Massachusetts	30	0.84	26	0.91
Michigan	48	-0.04	44	0.13
Minnesota	33	0.77	39	0.43
Mississippi	50	-0.11	50	-0.24
Missouri	41	0.46	36	0.52
Montana	2	3.05	3	3.01
Nebraska	24	1.09	18	1.19
Nevada	13	1.71	11	1.90
New Hampshire	6	2.46	10	2.13
New Jersey	15	1.56	12	1.79
New Mexico	32	0.78	40	0.42
New York	17	1.51	14	1.59
North Carolina	26	0.93	31	0.71
North Dakota	1	5.21	1	4.78
Ohio	49	-0.05	48	-0.13
Oklahoma	31	0.78	33	0.64
Oregon	14	1.70	13	1.72
Pennsylvania	21	1.19	32	0.68
Rhode Island	8	2.09	6	2.61
South Carolina	42	0.31	38	0.43
South Dakota	19	1.37	15	1.49
Tennessee	44	0.19	45	0.06
Texas	39	0.52	29	0.83
Utah	7	2.29	4	2.89
Vermont	11	1.77	16	1.49
Virginia	10	1.81	27	0.85
Washington	29	0.87	19	1.19
West Virginia	46	0.11	49	-0.20
Wisconsin	40	0.52	35	0.64
Wyoming	3	3.03	2	3.18

Sources: U.S. Departments of Labor and Commerce

PATENTS PER THOUSAND PERSONS

The index component of patents per thousand persons also was largely stable in states between 2012 and 2013. The correlation between state ranks for patents per thousand persons in 2012 and 2013 was 0.997. This is because most state ranks were unchanged or nearly unchanged between the two years.

There were, however, occasional modest changes in rank. North Dakota improved from 41st in 2012 to 38th in 2013. Delaware fell from the 10th rank in 2012 to 13th in 2013.

But, consistency is the defining feature of the patent ranking. The Top 5 states were the same in 2012 and 2013: California and Washington in the West, Minnesota in the Midwest and Massachusetts and Vermont in the Northeast. California, Washington and Massachusetts are well known technology centers, but the strength of Minnesota and Vermont is interesting. Western and Northeastern states also round out the Top 10. Other states in the Top 10 include Oregon, Idaho, Colorado, New Hampshire and Connecticut. There are also hints of activity within the Midwest, given the strength of Minnesota. Michigan, Kansas and Wisconsin are all Midwest states with an above-average ranking for patents per thousand persons. But, while invention occurs throughout the United States, it is clearly concentrated in the West Coast and the Northeast.

Among the lowest ranked states, Alaska ranks 49th in patents per thousand persons while Hawaii ranks 45th. But, generally speaking, the lowest ranked states are concentrated in the South. Mississippi is the 50th ranked state in terms of patents per thousand persons in 2013. West Virginia is the 47th ranked state while Arkansas is ranked 48th. Louisiana is the 46th ranked state while Alabama is 44th. Surprisingly, even southern states with large technology sectors such as Texas, North Carolina, and Virginia were near the median state in patents per thousand residents.

State	2012 Rank	Index Value	2013 Rank	Index Value
Alabama	44	0.14	44	0.16
Alaska	49	-0.02	49	-0.01
Arizona	20	1.25	22	1.12
Arkansas	47	0.06	48	0.00
California	2	3.59	1	3.65
Colorado	11	1.96	10	2.04
Connecticut	6	2.43	8	2.26
Delaware	10	1.96	13	1.69
Florida	30	0.69	31	0.64
Georgia	29	0.79	29	0.81
Hawaii	46	0.12	45	0.10
Idaho	8	2.32	9	2.17
Illinois	18	1.39	17	1.31
Indiana	26	0.99	26	0.98
Iowa	27	0.98	27	0.95
Kansas	19	1.33	19	1.16
Kentucky	40	0.32	42	0.25
Louisiana	45	0.13	46	0.07
Maine	37	0.42	36	0.41
Maryland	28	0.95	28	0.93
Massachusetts	1	3.62	2	3.61
Michigan	13	1.86	12	1.91
Minnesota	5	3.09	4	3.12
Mississippi	50	-0.06	50	-0.07
Missouri	35	0.54	34	0.53
Montana	43	0.28	43	0.19
Nebraska	36	0.48	37	0.41
Nevada	24	1.07	23	1.09
New Hampshire	9	2.26	7	2.32
New Jersey	12	1.94	11	1.99
New Mexico	33	0.62	33	0.58
New York	15	1.57	15	1.55
North Carolina	23	1.13	24	1.06
North Dakota	41	0.31	38	0.40
Ohio	21	1.23	20	1.14
Oklahoma	42	0.29	41	0.31
Oregon	7	2.40	6	2.32
Pennsylvania	25	1.01	25	1.02
Rhode Island	17	1.39	18	1.21
South Carolina	34	0.59	35	0.49
South Dakota	39	0.37	40	0.32
Tennessee	38	0.42	39	0.36
Texas	22	1.17	21	1.14
Utah	14	1.69	14	1.59
Vermont	4	3.15	5	3.11
Virginia	31	0.66	30	0.65
Washington	3	3.40	3	3.35
West Virginia	48	0.04	47	0.02
Wisconsin	16	1.41	16	1.39
Wyoming	32	0.64	32	0.59

Source: U.S. Patent and Trademark Office

INCOME PER NON-FARM PROPRIETOR

Income per non-farm proprietor is another index component that was stable between 2012 and 2013. The correlation between state ranks for in 2012 and 2013 was 0.994. The measure has been recently revised, with more emphasis placed on income earned by proprietors in the energy industry, which is part of the reason for high ranks among energy states such as Texas and Oklahoma in both 2012 and 2013.

More broadly, there is a regional pattern in state ranks for income per non-farm proprietor. Densely populated Northeast states with ties to financial services tend to have high ranks. New York is 3rd, Connecticut is 4th, Pennsylvania is 6th, New Jersey is 7th, and Massachusetts is 10th. As noted, most states with a large energy industry rank high including Texas, Oklahoma and Alaska.

Several Midwest states also achieved a high rank. Kansas was ranked 15th in both 2012 and 2013 while Nebraska was ranked 12th in 2012 and 13th in 2013. South Dakota was ranked 16th in both years while Iowa achieved a rank of 11th in 2013. Strong farm incomes appeared to be correlated with strong non-farm proprietor income, given the many industries which service agricultural production and process agricultural goods.

Many Southern states had lower levels of income per non-farm proprietor including Florida, which was ranked 50th, South Carolina which was 49th, Georgia which was ranked 48th, Arkansas ranked 42nd, and North Carolina ranked 40th. Other lower ranked states were from throughout the country including Michigan, Maine, Nevada, and Utah. Vermont was ranked 41st in earnings per non-farm proprietor, demonstrating that patent activity (see Table 6) is not necessarily associated with higher proprietor income.

One technical matter to note is that 2013 values of income per proprietor are estimates. Data on the number of non-farm proprietors by state has not yet been estimated by the U.S. Department of Commerce. Income per non-farm proprietor in 2013 was estimated by multiplying 2012 values by the 2013 growth in non-farm proprietor income.

State	2012 Rank	Index Value	2013 Rank	Index Value
Alabama	31	0.69	34	0.70
Alaska	10	2.10	8	2.19
Arizona	39	0.23	38	0.26
Arkansas	40	0.17	42	0.15
California	25	0.90	28	0.93
Colorado	21	1.16	23	1.21
Connecticut	4	2.64	4	2.72
Delaware	7	1.98	12	2.04
Florida	50	-0.61	50	-0.58
Georgia	49	-0.10	48	-0.06
Hawaii	35	0.33	35	0.37
Idaho	36	0.22	37	0.28
Illinois	26	0.93	27	0.95
Indiana	28	0.99	26	0.96
Iowa	13	2.10	11	2.09
Kansas	15	1.88	15	1.85
Kentucky	32	0.70	33	0.72
Louisiana	14	1.90	14	1.94
Maine	44	0.09	43	0.13
Maryland	18	1.39	18	1.43
Massachusetts	11	2.01	10	2.10
Michigan	46	-0.02	47	0.00
Minnesota	30	0.79	30	0.82
Mississippi	34	0.65	31	0.76
Missouri	29	0.88	29	0.89
Montana	41	0.18	39	0.22
Nebraska	12	1.96	13	1.99
Nevada	45	-0.03	46	0.03
New Hampshire	20	1.30	19	1.39
New Jersey	8	2.24	7	2.29
New Mexico	42	0.11	44	0.12
New York	3	2.70	3	2.73
North Carolina	38	0.17	40	0.20
North Dakota	23	1.27	21	1.37
Ohio	24	1.17	24	1.19
Oklahoma	2	3.54	2	3.58
Oregon	37	0.24	36	0.28
Pennsylvania	6	2.30	6	2.30
Rhode Island	19	1.34	20	1.38
South Carolina	48	-0.11	49	-0.07
South Dakota	16	1.71	16	1.73
Tennessee	5	2.69	5	2.67
Texas	1	3.67	1	3.71
Utah	47	0.00	45	0.04
Vermont	43	0.12	41	0.17
Virginia	27	1.01	25	1.04
Washington	22	1.23	22	1.30
West Virginia	17	1.62	17	1.57
Wisconsin	33	0.70	32	0.75
Wyoming	9	2.12	9	2.11

Sources: U.S. Department of Labor

Table A.1

Non-Farm Establishments and Growth Rate 2005-2013

Non-Farm Establishments											Growth Rate								
State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	102,090	105,189	105,719	108,556	110,206	107,647	105,973	105,765	105,450	105,712	3.03%	0.50%	2.68%	1.52%	-2.32%	-1.55%	-0.20%	-0.30%	0.25%
Alaska	17,738	17,993	18,213	18,405	18,658	18,516	18,578	18,683	19,052	19,132	1.44%	1.22%	1.06%	1.37%	-0.76%	0.33%	0.56%	1.98%	0.42%
Arizona	122,950	128,969	140,324	149,860	152,861	144,524	137,485	136,449	138,864	139,050	4.90%	8.80%	6.80%	2.00%	-5.45%	-4.87%	-0.75%	1.77%	0.13%
Arkansas	67,952	69,701	71,024	72,061	73,208	73,094	71,920	72,152	72,592	73,460	2.57%	1.90%	1.46%	1.59%	-0.16%	-1.61%	0.32%	0.61%	1.20%
California	830,725	838,891	856,698	870,574	878,936	870,452	858,001	855,844	861,023	883,627	0.98%	2.12%	1.62%	0.96%	-0.97%	-1.43%	-0.25%	0.61%	2.63%
Colorado	154,782	160,767	165,879	170,233	170,734	168,204	163,752	161,549	162,759	165,409	3.87%	3.18%	2.62%	0.29%	-1.48%	-2.65%	-1.35%	0.75%	1.63%
Connecticut	98,467	99,344	100,181	101,025	101,661	100,924	99,560	98,680	98,873	100,282	0.89%	0.84%	0.84%	0.63%	-0.72%	-1.35%	-0.88%	0.20%	1.43%
Delaware	27,363	28,818	28,803	29,338	29,189	27,929	27,226	26,662	26,096	26,147	5.32%	-0.05%	1.86%	-0.51%	-4.32%	-2.51%	-2.07%	-2.12%	0.20%
Florida	493,642	526,147	554,392	573,730	592,906	574,950	567,974	564,845	577,486	594,025	6.58%	5.37%	3.49%	3.34%	-3.03%	-1.21%	-0.55%	2.24%	2.86%
Georgia	228,280	235,023	241,879	250,829	256,783	253,491	249,335	247,531	250,181	255,451	2.95%	2.92%	3.70%	2.37%	-1.28%	-1.64%	-0.72%	1.07%	2.11%
Hawaii	33,119	33,348	34,006	35,131	35,775	36,028	35,565	35,062	35,082	35,556	0.69%	1.97%	3.31%	1.83%	0.71%	-1.28%	-1.41%	0.06%	1.35%
Idaho	44,660	47,096	49,795	51,960	52,515	51,842	50,472	49,485	48,774	48,870	5.45%	5.73%	4.35%	1.07%	-1.28%	-2.64%	-1.96%	-1.44%	0.20%
Illinois	308,770	317,003	327,653	337,038	342,840	347,934	350,958	356,242	361,936	369,764	2.67%	3.36%	2.86%	1.72%	1.49%	0.87%	1.51%	1.60%	2.16%
Indiana	143,531	144,451	146,094	148,501	150,435	149,748	147,948	148,739	149,642	148,965	0.64%	1.14%	1.65%	1.30%	-0.46%	-1.20%	0.53%	0.61%	-0.45%
Iowa	83,139	83,362	84,220	84,889	85,080	85,049	84,459	83,385	84,639	86,493	0.27%	1.03%	0.79%	0.22%	-0.04%	-0.69%	-1.27%	1.50%	2.19%
Kansas	73,274	74,180	75,237	75,274	76,319	77,401	77,463	78,532	76,785	76,428	1.24%	1.42%	0.05%	1.39%	1.42%	0.08%	1.38%	-2.22%	-0.47%
Kentucky	95,617	96,387	99,706	103,434	102,854	97,097	97,567	96,263	95,556	100,024	0.81%	3.44%	3.74%	-0.56%	-5.60%	0.48%	-1.34%	-0.73%	4.68%
Louisiana	104,175	107,400	109,833	110,010	111,935	113,874	117,720	114,646	114,777	116,657	3.10%	2.27%	0.16%	1.75%	1.73%	3.38%	-2.61%	0.11%	1.64%
Maine	43,164	43,607	43,724	44,631	45,254	44,958	43,617	43,917	44,080	44,023	1.03%	0.27%	2.07%	1.40%	-0.66%	-2.98%	0.69%	0.37%	-0.13%
Maryland	141,430	145,798	148,158	152,145	152,854	150,370	148,816	150,545	150,977	154,579	3.09%	1.62%	2.69%	0.47%	-1.63%	-1.03%	1.16%	0.29%	2.39%
Massachusetts	183,791	189,030	180,283	181,310	182,094	180,358	181,885	187,022	185,483	182,770	2.85%	-4.63%	0.57%	0.43%	-0.95%	0.85%	2.82%	-0.82%	-1.46%
Michigan	240,847	242,396	243,412	245,154	244,766	240,600	234,111	227,904	223,573	220,645	0.64%	0.42%	0.72%	-0.16%	-1.70%	-2.70%	-2.65%	-1.90%	-1.31%
Minnesota	144,284	148,347	154,186	153,289	154,940	152,137	149,694	149,822	151,440	154,361	2.82%	3.94%	-0.58%	1.08%	-1.81%	-1.61%	0.09%	1.08%	1.93%
Mississippi	59,130	60,516	61,515	62,720	63,713	63,688	62,553	62,120	62,065	63,395	2.34%	1.65%	1.96%	1.58%	-0.04%	-1.78%	-0.69%	-0.09%	2.14%
Missouri	146,779	148,257	150,034	152,060	152,589	149,823	147,755	146,085	146,619	148,272	1.01%	1.20%	1.35%	0.35%	-1.81%	-1.38%	-1.13%	0.37%	1.13%

Table A.1 (Continued)

Non-Farm Establishments and Growth Rate 2005-2013

State	Non-Farm Establishments										Growth Rate								
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Montana	37,978	36,507	37,350	38,575	39,381	39,168	38,583	38,385	38,691	39,592	-3.87%	2.31%	3.28%	2.09%	-0.54%	-1.49%	-0.51%	0.80%	2.33%
Nebraska	49,787	50,922	52,174	52,993	53,813	54,114	54,044	54,311	55,232	56,403	2.28%	2.46%	1.57%	1.55%	0.56%	-0.13%	0.49%	1.70%	2.12%
Nevada	60,253	63,654	67,783	71,745	73,981	73,327	70,021	68,531	69,366	71,082	5.65%	6.49%	5.84%	3.12%	-0.88%	-4.51%	-2.13%	1.22%	2.47%
New Hampshire	43,336	43,629	44,531	45,028	45,305	44,898	44,155	43,925	44,576	45,225	0.68%	2.07%	1.12%	0.61%	-0.90%	-1.66%	-0.52%	1.48%	1.45%
New Jersey	250,368	256,469	258,625	257,449	257,762	251,043	251,320	250,129	244,376	245,225	2.44%	0.84%	-0.45%	0.12%	-2.61%	0.11%	-0.47%	-2.30%	0.35%
New Mexico	44,847	45,266	46,743	47,938	48,430	47,847	47,880	48,448	48,754	48,614	0.93%	3.26%	2.56%	1.03%	-1.20%	0.07%	1.19%	0.63%	-0.29%
New York	512,204	519,453	527,420	533,466	539,393	541,135	543,057	550,381	557,462	567,653	1.42%	1.53%	1.15%	1.11%	0.32%	0.36%	1.35%	1.29%	1.83%
North Carolina	211,629	215,883	224,145	233,645	240,168	237,218	233,332	235,177	238,862	237,557	2.01%	3.83%	4.24%	2.79%	-1.23%	-1.64%	0.79%	1.57%	-0.55%
North Dakota	21,767	22,286	22,615	22,294	22,768	22,973	23,234	24,193	26,025	27,605	2.38%	1.48%	-1.42%	2.13%	0.90%	1.14%	4.13%	7.57%	6.07%
Ohio	264,848	266,582	267,345	268,782	270,990	267,330	262,323	263,904	264,075	263,664	0.65%	0.29%	0.54%	0.82%	-1.35%	-1.87%	0.60%	0.06%	-0.16%
Oklahoma	83,593	85,692	87,648	90,073	92,103	92,272	93,259	93,667	95,253	96,499	2.51%	2.28%	2.77%	2.25%	0.18%	1.07%	0.44%	1.69%	1.31%
Oregon	107,747	110,632	115,525	118,974	117,669	115,013	114,008	114,603	116,077	118,705	2.68%	4.42%	2.99%	-1.10%	-2.26%	-0.87%	0.52%	1.29%	2.26%
Pennsylvania	298,449	300,585	297,986	302,436	303,337	300,491	296,757	298,547	302,259	299,728	0.72%	-0.86%	1.49%	0.30%	-0.94%	-1.24%	0.60%	1.24%	-0.84%
Rhode Island	33,238	33,869	34,109	34,227	33,869	33,360	32,832	32,613	32,710	32,962	1.90%	0.71%	0.35%	-1.05%	-1.50%	-1.58%	-0.67%	0.30%	0.77%
South Carolina	102,520	108,697	115,957	112,211	109,328	105,847	101,879	101,196	101,803	106,131	6.02%	6.68%	-3.23%	-2.57%	-3.18%	-3.75%	-0.67%	0.60%	4.25%
South Dakota	25,430	26,045	26,577	26,999	27,305	27,581	27,648	27,801	28,117	28,429	2.42%	2.04%	1.59%	1.13%	1.01%	0.24%	0.55%	1.14%	1.11%
Tennessee	120,170	122,313	126,116	130,626	133,516	131,860	129,536	128,494	129,863	132,327	1.78%	3.11%	3.58%	2.21%	-1.24%	-1.76%	-0.80%	1.07%	1.90%
Texas	469,555	479,411	490,644	516,168	520,062	519,402	521,419	528,864	540,245	550,993	2.10%	2.34%	5.20%	0.75%	-0.13%	0.39%	1.43%	2.15%	1.99%
Utah	69,470	74,343	78,737	80,566	81,055	79,352	76,876	76,875	78,014	80,109	7.01%	5.91%	2.32%	0.61%	-2.10%	-3.12%	0.00%	1.48%	2.69%
Vermont	21,490	21,794	22,000	22,246	22,374	22,128	21,669	21,590	21,797	21,809	1.42%	0.94%	1.12%	0.57%	-1.10%	-2.08%	-0.36%	0.96%	0.06%
Virginia	185,799	192,046	196,337	203,994	204,254	202,999	200,123	200,397	202,720	202,648	3.36%	2.23%	3.90%	0.13%	-0.61%	-1.42%	0.14%	1.16%	-0.04%
Washington	157,843	161,237	165,917	170,509	172,948	172,666	169,000	168,310	167,709	169,607	2.15%	2.90%	2.77%	1.43%	-0.16%	-2.12%	-0.41%	-0.36%	1.13%
West Virginia	42,432	42,779	42,897	43,132	43,054	42,502	42,173	42,093	42,556	42,749	0.82%	0.28%	0.55%	-0.18%	-1.28%	-0.77%	-0.19%	1.10%	0.45%
Wisconsin	142,511	145,123	146,800	143,457	144,988	140,969	138,613	139,062	139,424	140,634	1.83%	1.16%	-2.28%	1.07%	-2.77%	-1.67%	0.32%	0.26%	0.87%
Wyoming	20,149	20,773	21,547	22,068	22,633	22,803	22,642	22,634	22,880	22,976	3.10%	3.73%	2.42%	2.56%	0.75%	-0.71%	-0.04%	1.09%	0.42%

Sources: U.S. Departments of Labor and Commerce

Note: Average value of quarterly establishments Q4 of previous year through Q3 of current year

Table A.2

Growth Rate of Non-Farm Establishments Per Person 2005-2013

State	Population Estimates (July 1 of Year)										Growth Rate in Non-Farm Establishments Per Capita								
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	4,512,190	4,545,049	4,597,688	4,637,904	4,677,464	4,708,708	4,785,570	4,801,627	4,817,528	4,833,722	2.3%	-0.6%	1.8%	0.7%	-3.0%	-2.0%	-0.5%	-0.6%	-0.1%
Alaska	661,569	669,488	677,325	682,297	688,125	698,473	713,868	723,375	730,307	735,132	0.2%	0.0%	0.3%	0.5%	-2.2%	-1.1%	-0.8%	1.0%	-0.2%
Arizona	5,759,425	5,974,834	6,192,100	6,362,241	6,499,377	6,595,778	6,408,790	6,468,796	6,551,149	6,626,624	1.1%	5.0%	3.9%	-0.1%	-6.8%	-6.0%	-1.7%	0.5%	-1.0%
Arkansas	2,746,161	2,776,221	2,815,097	2,842,194	2,867,764	2,889,450	2,922,280	2,938,506	2,949,828	2,959,373	1.5%	0.5%	0.5%	0.7%	-0.9%	-2.3%	-0.2%	0.2%	0.9%
California	35,558,419	35,795,255	35,979,208	36,226,122	36,580,371	36,961,664	37,333,601	37,668,681	37,999,878	38,332,521	0.3%	1.6%	0.9%	0.0%	-2.0%	-2.2%	-1.1%	-0.3%	1.7%
Colorado	4,599,681	4,660,780	4,753,044	4,842,259	4,935,213	5,024,748	5,048,196	5,118,400	5,189,458	5,268,367	2.5%	1.2%	0.7%	-1.6%	-3.2%	-4.0%	-2.7%	-0.6%	0.1%
Connecticut	3,474,610	3,477,416	3,485,162	3,488,633	3,502,932	3,518,288	3,579,210	3,588,948	3,591,765	3,596,080	0.8%	0.6%	0.7%	0.2%	-1.2%	-1.6%	-1.2%	0.1%	1.3%
Delaware	826,639	839,906	853,022	864,896	876,211	885,122	899,711	907,985	917,053	925,749	3.7%	-1.6%	0.5%	-1.8%	-5.3%	-3.2%	-3.0%	-3.1%	-0.7%
Florida	17,375,259	17,783,868	18,088,505	18,277,888	18,423,878	18,537,969	18,846,054	19,083,482	19,320,749	19,552,860	4.1%	3.6%	2.4%	2.5%	-3.6%	-2.0%	-1.8%	1.0%	1.6%
Georgia	8,913,676	9,097,428	9,330,086	9,533,761	9,697,838	9,829,211	9,713,248	9,810,181	9,915,646	9,992,167	0.9%	0.4%	1.5%	0.6%	-2.6%	-2.4%	-1.7%	0.0%	1.3%
Hawaii	1,252,782	1,266,117	1,275,599	1,276,832	1,287,481	1,295,178	1,363,731	1,376,897	1,390,090	1,404,054	-0.4%	1.2%	3.2%	1.0%	0.1%	-1.7%	-2.4%	-0.9%	0.3%
Idaho	1,391,718	1,425,862	1,464,413	1,499,245	1,527,506	1,545,801	1,570,718	1,583,930	1,595,590	1,612,136	2.9%	2.9%	1.9%	-0.8%	-2.5%	-3.5%	-2.8%	-2.2%	-0.8%
Illinois	12,645,295	12,674,452	12,718,011	12,779,417	12,842,954	12,910,409	12,839,695	12,855,970	12,868,192	12,882,135	2.4%	3.0%	2.4%	1.2%	1.0%	0.6%	1.4%	1.5%	2.1%
Indiana	6,214,454	6,253,120	6,301,700	6,346,113	6,388,309	6,423,113	6,489,965	6,516,336	6,537,782	6,570,902	0.0%	0.4%	0.9%	0.6%	-1.0%	-1.5%	0.1%	0.3%	-1.0%
Iowa	2,941,358	2,949,450	2,964,391	2,978,719	2,993,987	3,007,856	3,050,314	3,064,102	3,075,039	3,090,416	0.0%	0.5%	0.3%	-0.3%	-0.5%	-1.2%	-1.7%	1.1%	1.7%
Kansas	2,730,765	2,741,771	2,755,700	2,775,586	2,797,375	2,818,747	2,858,910	2,869,548	2,885,398	2,893,957	0.8%	0.9%	-0.7%	0.6%	0.6%	-0.7%	1.0%	-2.8%	-0.8%
Kentucky	4,147,970	4,182,293	4,219,374	4,256,278	4,287,931	4,314,113	4,347,698	4,366,869	4,379,730	4,395,295	0.0%	2.5%	2.8%	-1.3%	-6.2%	-0.1%	-1.8%	-1.0%	4.3%
Louisiana	4,489,327	4,497,691	4,240,327	4,376,122	4,451,513	4,492,076	4,545,392	4,575,197	4,602,134	4,625,470	2.9%	8.5%	-2.9%	0.0%	0.8%	2.5%	-3.2%	-0.5%	1.1%
Maine	1,308,253	1,311,631	1,314,963	1,317,308	1,319,691	1,318,301	1,327,366	1,327,844	1,328,501	1,328,302	0.8%	0.0%	1.9%	1.2%	-0.6%	-2.6%	0.7%	0.3%	-0.1%
Maryland	5,542,659	5,582,520	5,612,196	5,634,242	5,658,655	5,699,478	5,787,193	5,840,241	5,884,868	5,928,814	2.4%	1.1%	2.3%	0.0%	-2.3%	-1.7%	0.2%	-0.5%	1.6%
Massachusetts	6,451,279	6,453,031	6,466,399	6,499,275	6,543,595	6,593,587	6,563,263	6,606,285	6,645,303	6,692,824	2.8%	-4.8%	0.1%	-0.2%	-1.7%	0.3%	2.2%	-1.4%	-2.2%
Michigan	10,089,305	10,090,554	10,082,438	10,050,847	10,002,486	9,969,727	9,876,149	9,874,589	9,882,519	9,895,622	0.6%	0.5%	1.0%	0.3%	-1.4%	-2.3%	-2.6%	-2.0%	-1.4%
Minnesota	5,079,344	5,106,560	5,148,346	5,191,206	5,230,567	5,266,214	5,310,337	5,347,108	5,379,646	5,420,380	2.3%	3.1%	-1.4%	0.3%	-2.5%	-2.1%	-0.6%	0.5%	1.2%
Mississippi	2,886,006	2,900,116	2,897,150	2,921,723	2,940,212	2,951,996	2,970,047	2,977,886	2,986,450	2,991,207	1.8%	1.8%	1.1%	0.9%	-0.4%	-2.1%	-1.0%	-0.4%	2.0%
Missouri	5,758,444	5,806,639	5,861,572	5,909,824	5,956,335	5,987,580	5,996,063	6,010,065	6,024,522	6,044,171	0.2%	0.3%	0.5%	-0.4%	-2.3%	-1.8%	-1.4%	0.1%	0.8%

Table A.2 (Continued)

Growth Rate of Non-Farm Establishments Per Person 2005-2013

Population Estimates (July 1 of Year)											Growth Rate in Non-Farm Establishments Per Capita								
State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Montana	925,887	934,801	946,230	957,225	968,035	974,989	990,527	997,600	1,005,494	1,015,165	-4.8%	1.1%	2.1%	0.9%	-1.2%	-2.0%	-1.2%	0.0%	1.4%
Nebraska	1,742,184	1,751,721	1,760,435	1,769,912	1,781,949	1,796,619	1,829,838	1,841,749	1,855,350	1,868,516	1.7%	2.0%	1.0%	0.9%	-0.3%	-0.9%	-0.2%	1.0%	1.4%
Nevada	2,328,703	2,408,804	2,493,405	2,567,752	2,615,772	2,643,085	2,703,230	2,717,951	2,754,354	2,790,136	2.1%	2.9%	2.8%	1.2%	-1.9%	-4.9%	-2.7%	-0.1%	1.2%
New Hampshire	1,292,766	1,301,415	1,311,894	1,317,343	1,321,872	1,324,575	1,316,614	1,318,075	1,321,617	1,323,459	0.0%	1.3%	0.7%	0.3%	-1.1%	-1.6%	-0.6%	1.2%	1.3%
New Jersey	8,611,530	8,621,837	8,623,721	8,636,043	8,663,398	8,707,739	8,802,707	8,836,639	8,867,749	8,899,339	2.3%	0.8%	-0.6%	-0.2%	-3.1%	-0.2%	-0.9%	-2.6%	0.0%
New Mexico	1,891,829	1,916,538	1,942,608	1,968,731	1,986,763	2,009,671	2,064,982	2,077,919	2,083,540	2,085,287	-0.4%	1.9%	1.2%	0.1%	-2.3%	-1.1%	0.6%	0.4%	-0.4%
New York	19,297,933	19,330,891	19,356,564	19,422,777	19,467,789	19,541,453	19,398,228	19,502,728	19,576,125	19,651,127	1.2%	1.4%	0.8%	0.9%	-0.1%	0.2%	0.8%	0.9%	1.4%
North Carolina	8,531,283	8,669,452	8,866,977	9,064,074	9,247,134	9,380,884	9,559,533	9,651,377	9,748,364	9,848,060	0.4%	1.5%	2.0%	0.8%	-2.6%	-2.4%	-0.2%	0.6%	-1.6%
North Dakota	636,303	635,365	636,771	638,202	641,421	646,844	674,344	684,867	701,345	723,393	2.5%	1.3%	-1.6%	1.6%	0.1%	0.1%	2.5%	5.0%	2.8%
Ohio	11,464,593	11,475,262	11,492,495	11,520,815	11,528,072	11,542,645	11,545,435	11,549,772	11,553,031	11,570,808	0.6%	0.1%	0.3%	0.8%	-1.5%	-1.8%	0.6%	0.0%	-0.3%
Oklahoma	3,514,449	3,532,769	3,574,334	3,612,186	3,644,025	3,687,050	3,759,263	3,785,534	3,815,780	3,850,568	2.0%	1.1%	1.7%	1.4%	-1.0%	0.1%	-0.3%	0.9%	0.4%
Oregon	3,573,505	3,617,869	3,677,545	3,732,957	3,782,991	3,825,657	3,837,208	3,867,937	3,899,801	3,930,065	1.4%	2.7%	1.5%	-2.4%	-3.3%	-1.6%	-0.3%	0.5%	1.5%
Pennsylvania	12,388,368	12,418,161	12,471,142	12,522,531	12,566,368	12,604,767	12,710,472	12,741,310	12,764,475	12,773,801	0.5%	-1.3%	1.1%	-0.1%	-1.2%	-1.5%	0.4%	1.1%	-0.9%
Rhode Island	1,071,414	1,064,989	1,060,196	1,055,009	1,053,502	1,053,209	1,052,669	1,050,350	1,050,304	1,051,511	2.5%	1.2%	0.8%	-0.9%	-1.5%	-1.9%	-0.4%	0.3%	0.7%
South Carolina	4,201,306	4,256,199	4,339,399	4,424,232	4,503,280	4,561,242	4,636,361	4,673,509	4,723,417	4,774,839	4.7%	4.6%	-5.1%	-4.3%	-4.4%	-4.5%	-1.5%	-0.5%	3.1%
South Dakota	774,283	780,084	788,519	797,035	804,532	812,383	816,211	823,772	834,047	844,877	1.7%	1.0%	0.5%	0.2%	0.0%	-0.7%	-0.4%	-0.1%	-0.2%
Tennessee	5,916,762	5,995,748	6,089,453	6,172,862	6,240,456	6,296,254	6,356,683	6,398,361	6,454,914	6,495,978	0.4%	1.5%	2.2%	1.1%	-2.1%	-2.4%	-1.4%	0.2%	1.3%
Texas	22,418,319	22,801,920	23,369,024	23,837,701	24,304,290	24,782,302	25,245,178	25,640,909	26,060,796	26,448,193	0.4%	-0.1%	3.1%	-1.2%	-2.1%	-1.3%	-0.1%	0.5%	0.5%
Utah	2,438,915	2,499,637	2,583,724	2,663,796	2,727,343	2,784,572	2,774,424	2,814,784	2,854,871	2,900,872	4.4%	2.5%	-0.8%	-1.7%	-4.1%	-4.7%	-1.4%	0.1%	1.1%
Vermont	618,145	618,814	619,985	620,460	621,049	621,760	625,793	626,320	625,953	626,630	1.3%	0.8%	1.0%	0.5%	-1.2%	-2.2%	-0.4%	1.0%	-0.1%
Virginia	7,468,914	7,563,887	7,646,996	7,719,749	7,795,424	7,882,590	8,024,417	8,105,850	8,186,628	8,260,405	2.1%	1.1%	2.9%	-0.8%	-1.7%	-2.3%	-0.9%	0.2%	-0.9%
Washington	6,184,289	6,261,282	6,372,243	6,464,979	6,566,073	6,664,195	6,742,256	6,821,481	6,895,318	6,971,406	0.9%	1.1%	1.3%	-0.1%	-1.6%	-3.3%	-1.6%	-1.4%	0.0%
West Virginia	1,803,302	1,803,920	1,807,237	1,811,198	1,814,873	1,819,777	1,854,146	1,855,184	1,856,680	1,854,304	0.8%	0.1%	0.3%	-0.4%	-1.5%	-1.1%	-0.2%	1.0%	0.6%
Wisconsin	5,511,385	5,541,443	5,571,680	5,601,571	5,627,610	5,654,774	5,689,060	5,708,785	5,724,554	5,742,713	1.3%	0.6%	-2.8%	0.6%	-3.2%	-1.9%	0.0%	0.0%	0.5%
Wyoming	502,988	506,242	512,841	523,414	532,981	544,270	564,222	567,329	576,626	582,658	2.4%	2.4%	0.3%	0.7%	-1.3%	-1.3%	-0.6%	-0.5%	-0.6%

Sources: U.S. Departments of Labor and Commerce

Table A.3

Establishments Births and Establishment Births Per Person 2005-2013

State	Establishment Births									Establishment Births Per Person								
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	10,640	10,579	10,926	10,110	8,133	8,766	9,119	9,571	8,997	0.00234	0.00230	0.00236	0.00216	0.00173	0.00183	0.00190	0.00199	0.00186
Alaska	2,072	1,967	1,957	1,999	1,876	1,863	1,891	2,022	1,835	0.00309	0.00290	0.00287	0.00290	0.00269	0.00261	0.00261	0.00277	0.00250
Arizona	18,921	21,060	18,645	16,978	15,804	14,865	15,005	15,144	15,366	0.00317	0.00340	0.00293	0.00261	0.00240	0.00232	0.00232	0.00231	0.00232
Arkansas	7,649	9,592	7,802	8,658	6,946	7,520	7,655	7,723	7,127	0.00276	0.00341	0.00275	0.00302	0.00240	0.00257	0.00261	0.00262	0.00241
California	103,200	103,037	100,593	95,999	81,095	87,347	91,869	97,146	98,571	0.00288	0.00286	0.00278	0.00262	0.00219	0.00234	0.00244	0.00256	0.00257
Colorado	21,132	21,118	21,283	20,443	17,087	16,740	17,649	18,254	18,784	0.00453	0.00444	0.00440	0.00414	0.00340	0.00332	0.00345	0.00352	0.00357
Connecticut	8,453	8,907	8,734	8,295	6,918	7,296	7,881	8,406	7,747	0.00243	0.00256	0.00250	0.00237	0.00197	0.00204	0.00220	0.00234	0.00215
Delaware	2,930	3,383	2,955	2,986	2,370	2,690	2,776	2,754	3,140	0.00349	0.00397	0.00342	0.00341	0.00268	0.00299	0.00306	0.00300	0.00339
Florida	84,374	84,380	80,907	73,480	65,036	66,736	70,267	72,842	72,296	0.00474	0.00466	0.00443	0.00399	0.00351	0.00354	0.00368	0.00377	0.00370
Georgia	30,719	29,882	30,017	28,920	23,850	25,199	25,561	26,185	25,897	0.00338	0.00320	0.00315	0.00298	0.00243	0.00259	0.00261	0.00264	0.00259
Hawaii	3,276	3,303	3,283	3,158	2,623	2,899	3,019	3,146	2,938	0.00259	0.00259	0.00257	0.00245	0.00203	0.00213	0.00219	0.00226	0.00209
Idaho	6,577	7,121	6,440	5,709	4,624	4,822	4,945	5,131	5,725	0.00461	0.00486	0.00430	0.00374	0.00299	0.00307	0.00312	0.00322	0.00355
Illinois	32,120	32,041	29,171	30,053	26,981	27,724	30,217	28,543	24,928	0.00253	0.00252	0.00228	0.00234	0.00209	0.00216	0.00235	0.00222	0.00194
Indiana	14,127	13,266	13,551	13,248	10,660	11,284	13,819	12,674	11,877	0.00226	0.00211	0.00214	0.00207	0.00166	0.00174	0.00212	0.00194	0.00181
Iowa	7,116	7,109	6,973	6,688	5,903	4,723	6,249	7,501	7,823	0.00241	0.00240	0.00234	0.00223	0.00196	0.00155	0.00204	0.00244	0.00253
Kansas	7,223	7,322	7,138	7,363	6,759	6,015	7,121	7,018	7,434	0.00263	0.00266	0.00257	0.00263	0.00240	0.00210	0.00248	0.00243	0.00257
Kentucky	9,304	8,334	9,522	8,845	7,344	7,599	7,984	8,417	9,973	0.00222	0.00198	0.00224	0.00206	0.00170	0.00175	0.00183	0.00192	0.00227
Louisiana	10,132	11,495	11,894	10,676	9,489	9,482	10,156	10,252	9,588	0.00225	0.00271	0.00272	0.00240	0.00211	0.00209	0.00222	0.00223	0.00207
Maine	4,322	4,445	4,240	4,132	3,784	3,788	3,914	3,803	3,688	0.00330	0.00338	0.00322	0.00313	0.00287	0.00285	0.00295	0.00286	0.00278
Maryland	17,056	16,344	15,196	15,403	13,783	13,912	14,467	15,129	14,980	0.00306	0.00291	0.00270	0.00272	0.00242	0.00240	0.00248	0.00257	0.00253
Massachusetts	17,938	16,493	16,414	15,334	13,257	14,020	16,348	15,951	16,383	0.00278	0.00255	0.00253	0.00234	0.00201	0.00214	0.00247	0.00240	0.00245
Michigan	23,751	21,513	20,974	20,327	19,425	17,871	19,391	18,017	19,141	0.00235	0.00213	0.00209	0.00203	0.00195	0.00181	0.00196	0.00182	0.00193
Minnesota	11,549	14,222	16,520	12,505	12,058	10,391	15,105	12,682	11,552	0.00226	0.00276	0.00318	0.00239	0.00229	0.00196	0.00282	0.00236	0.00213
Mississippi	5,956	6,902	6,685	5,914	4,944	5,281	5,428	5,306	5,061	0.00205	0.00238	0.00229	0.00201	0.00167	0.00178	0.00182	0.00178	0.00169
Missouri	14,796	15,200	14,545	12,222	12,832	11,729	12,488	12,980	13,258	0.00255	0.00259	0.00246	0.00205	0.00214	0.00196	0.00208	0.00215	0.00219

Table A.3 (Continued)

Establishments Births and Establishment Births Per Person 2005-2013

State	Establishment Births									Establishment Births Per Person								
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Montana	4,283	4,316	4,246	3,789	3,373	3,232	3,599	3,882	3,892	0.00458	0.00456	0.00444	0.00391	0.00346	0.00326	0.00361	0.00386	0.00383
Nebraska	4,870	4,758	4,709	4,818	4,237	4,317	4,634	4,765	4,926	0.00278	0.00270	0.00266	0.00270	0.00236	0.00236	0.00252	0.00257	0.00264
Nevada	9,849	9,787	9,699	9,089	7,497	7,640	7,921	8,200	8,646	0.00409	0.00393	0.00378	0.00347	0.00284	0.00283	0.00291	0.00298	0.00310
New Hampshire	4,846	5,017	4,660	4,696	3,888	4,246	4,404	4,587	4,305	0.00372	0.00382	0.00354	0.00355	0.00294	0.00322	0.00334	0.00347	0.00325
New Jersey	31,145	30,378	28,961	27,534	24,080	23,965	25,998	25,511	26,950	0.00361	0.00352	0.00335	0.00318	0.00277	0.00272	0.00294	0.00288	0.00303
New Mexico	5,593	5,970	5,889	5,657	4,767	4,770	4,844	4,923	4,436	0.00292	0.00307	0.00299	0.00285	0.00237	0.00231	0.00233	0.00236	0.00213
New York	54,961	55,655	55,176	53,341	49,145	52,559	57,120	55,679	56,870	0.00284	0.00288	0.00284	0.00274	0.00251	0.00271	0.00293	0.00284	0.00289
North Carolina	21,536	24,600	32,851	24,823	20,370	21,765	24,208	23,979	22,786	0.00248	0.00277	0.00362	0.00268	0.00217	0.00228	0.00251	0.00246	0.00231
North Dakota	1,903	2,065	2,043	2,027	1,747	2,079	2,906	3,703	3,616	0.00300	0.00324	0.00320	0.00316	0.00270	0.00308	0.00424	0.00528	0.00500
Ohio	23,264	22,121	23,091	21,062	17,638	18,366	21,365	21,000	20,407	0.00203	0.00192	0.00200	0.00183	0.00153	0.00159	0.00185	0.00182	0.00176
Oklahoma	9,025	10,215	9,594	9,011	8,411	8,955	8,760	9,026	8,744	0.00255	0.00286	0.00266	0.00247	0.00228	0.00238	0.00231	0.00237	0.00227
Oregon	12,810	13,240	13,005	12,176	10,489	11,549	11,699	11,575	11,734	0.00354	0.00360	0.00348	0.00322	0.00274	0.00301	0.00302	0.00297	0.00299
Pennsylvania	32,141	33,079	28,332	28,956	26,281	27,174	26,357	33,574	29,385	0.00259	0.00265	0.00226	0.00230	0.00209	0.00214	0.00207	0.00263	0.00230
Rhode Island	3,674	3,410	3,361	3,184	2,768	3,031	3,201	3,386	3,751	0.00345	0.00322	0.00319	0.00302	0.00263	0.00288	0.00305	0.00322	0.00357
South Carolina	10,972	12,607	12,156	11,068	9,087	9,178	10,109	9,714	10,179	0.00258	0.00291	0.00275	0.00246	0.00199	0.00198	0.00216	0.00206	0.00213
South Dakota	2,442	2,451	2,234	2,328	2,126	2,213	2,319	2,294	2,394	0.00313	0.00311	0.00280	0.00289	0.00262	0.00271	0.00282	0.00275	0.00283
Tennessee	13,946	14,086	14,101	13,507	10,984	11,770	12,143	12,747	12,256	0.00233	0.00231	0.00228	0.00216	0.00174	0.00185	0.00190	0.00197	0.00189
Texas	54,747	57,856	56,419	57,223	50,346	51,660	55,782	57,168	63,440	0.00240	0.00248	0.00237	0.00235	0.00203	0.00205	0.00218	0.00219	0.00240
Utah	11,163	11,947	11,776	10,151	8,663	8,599	9,359	9,595	10,885	0.00447	0.00462	0.00442	0.00372	0.00311	0.00310	0.00332	0.00336	0.00375
Vermont	1,769	1,895	1,927	1,903	1,689	1,714	1,829	1,888	1,773	0.00286	0.00306	0.00311	0.00306	0.00272	0.00274	0.00292	0.00302	0.00283
Virginia	22,357	22,123	25,410	23,788	22,011	22,218	23,350	24,883	19,911	0.00296	0.00289	0.00329	0.00305	0.00279	0.00277	0.00288	0.00304	0.00241
Washington	18,183	18,632	18,421	18,377	15,080	15,162	16,340	16,712	18,365	0.00290	0.00292	0.00285	0.00280	0.00226	0.00225	0.00240	0.00242	0.00263
West Virginia	4,036	4,007	3,724	3,535	3,202	3,276	3,604	3,571	3,182	0.00224	0.00222	0.00206	0.00195	0.00176	0.00177	0.00194	0.00192	0.00172
Wisconsin	11,706	12,321	10,992	10,986	9,056	9,678	10,874	12,542	13,024	0.00211	0.00221	0.00196	0.00195	0.00160	0.00170	0.00190	0.00219	0.00227
Wyoming	2,406	2,617	2,591	2,521	2,055	2,231	2,212	2,219	2,299	0.00475	0.00510	0.00495	0.00473	0.00378	0.00395	0.00390	0.00385	0.00395

Sources: U.S. Departments of Labor and Commerce

Table A.4
 Patents and Patents Per Thousand Persons 2005-2013

State	Patents									Patents Per Thousand Persons								
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Alabama	359	429	358	354	377	538	416	478	572	0.0790	0.0933	0.0772	0.0757	0.0801	0.1124	0.0866	0.0992	0.1183
Alaska	36	45	24	28	55	33	32	46	54	0.0538	0.0664	0.0352	0.0407	0.0787	0.0462	0.0442	0.0630	0.0735
Arizona	1,598	1,893	1,826	1,892	1,759	2,169	2,248	2,370	2,427	0.2675	0.3057	0.2870	0.2911	0.2667	0.3384	0.3475	0.3618	0.3662
Arkansas	153	185	169	152	154	216	188	238	229	0.0551	0.0657	0.0595	0.0530	0.0533	0.0739	0.0640	0.0807	0.0774
California	19,656	25,039	22,594	22,200	23,354	30,076	30,748	34,659	39,139	0.5491	0.6959	0.6237	0.6069	0.6318	0.8056	0.8163	0.9121	1.0210
Colorado	1,972	2,349	1,983	1,868	1,968	2,435	2,397	2,744	3,176	0.4231	0.4942	0.4095	0.3785	0.3917	0.4824	0.4683	0.5288	0.6028
Connecticut	1,677	1,857	1,611	1,595	1,661	2,111	2,121	2,297	2,375	0.4823	0.5328	0.4618	0.4553	0.4721	0.5898	0.5910	0.6395	0.6604
Delaware	341	396	359	353	342	391	457	485	476	0.4060	0.4642	0.4151	0.4029	0.3864	0.4346	0.5033	0.5289	0.5142
Florida	2,707	3,261	3,092	2,808	2,899	3,723	3,841	4,453	4,761	0.1522	0.1803	0.1692	0.1524	0.1564	0.1975	0.2013	0.2305	0.2435
Georgia	1,358	1,719	1,580	1,585	1,666	2,194	2,206	2,501	2,861	0.1493	0.1842	0.1657	0.1634	0.1695	0.2259	0.2249	0.2522	0.2863
Hawaii	58	101	82	101	96	144	128	131	146	0.0458	0.0792	0.0642	0.0784	0.0741	0.1056	0.0930	0.0942	0.1040
Idaho	1,549	1,717	1,388	1,207	985	1,162	1,089	979	1,029	1.0864	1.1725	0.9258	0.7902	0.6372	0.7398	0.6875	0.6136	0.6383
Illinois	3,297	4,053	3,711	3,580	3,615	4,374	4,594	5,078	5,357	0.2601	0.3187	0.2904	0.2788	0.2800	0.3407	0.3573	0.3946	0.4158
Indiana	1,246	1,499	1,381	1,195	1,246	1,697	1,633	1,963	2,167	0.1993	0.2379	0.2176	0.1871	0.1940	0.2615	0.2506	0.3003	0.3298
Iowa	629	732	664	644	730	809	856	914	996	0.2133	0.2469	0.2229	0.2151	0.2427	0.2652	0.2794	0.2972	0.3223
Kansas	455	581	523	543	509	728	805	1,100	1,088	0.1660	0.2108	0.1884	0.1941	0.1806	0.2546	0.2805	0.3812	0.3760
Kentucky	377	471	505	469	457	601	551	620	625	0.0901	0.1116	0.1186	0.1094	0.1059	0.1382	0.1262	0.1416	0.1422
Louisiana	298	365	294	322	315	355	368	445	439	0.0663	0.0861	0.0672	0.0723	0.0701	0.0781	0.0804	0.0967	0.0949
Maine	159	156	126	136	130	220	202	222	243	0.1212	0.1186	0.0956	0.1031	0.0986	0.1657	0.1521	0.1671	0.1829
Maryland	1,283	1,556	1,408	1,427	1,445	1,731	1,638	1,715	1,889	0.2298	0.2773	0.2499	0.2522	0.2535	0.2991	0.2805	0.2914	0.3186
Massachusetts	3,301	4,368	3,835	3,896	4,038	5,260	5,526	6,119	6,765	0.5115	0.6755	0.5901	0.5954	0.6124	0.8014	0.8365	0.9208	1.0108
Michigan	3,664	4,178	3,695	3,583	3,516	4,277	4,397	4,997	5,640	0.3631	0.4144	0.3676	0.3582	0.3527	0.4331	0.4453	0.5056	0.5699
Minnesota	2,582	3,268	2,920	2,869	2,972	4,005	4,227	4,278	4,789	0.5056	0.6348	0.5625	0.5485	0.5644	0.7542	0.7905	0.7952	0.8835
Mississippi	127	152	184	142	144	172	172	161	178	0.0438	0.0525	0.0630	0.0483	0.0488	0.0579	0.0578	0.0539	0.0595
Missouri	732	863	861	786	877	1,140	1,003	1,165	1,301	0.1261	0.1472	0.1457	0.1320	0.1465	0.1901	0.1669	0.1934	0.2152

Table A.4 (Continued)

Patents and Patents Per Thousand Persons 2005-2013

State	Patents									Patents Per Thousand Persons								
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Montana	119	136	131	115	91	118	114	133	127	0.1273	0.1437	0.1369	0.1188	0.0933	0.1191	0.1143	0.1323	0.1251
Nebraska	205	239	254	214	226	253	247	336	341	0.1170	0.1358	0.1435	0.1201	0.1258	0.1383	0.1341	0.1811	0.1825
Nevada	443	472	468	464	426	639	674	882	1,003	0.1839	0.1893	0.1823	0.1774	0.1612	0.2364	0.2480	0.3202	0.3595
New Hampshire	538	657	618	526	608	802	805	791	895	0.4134	0.5008	0.4691	0.3979	0.4590	0.6091	0.6107	0.5985	0.6763
New Jersey	2,868	3,627	3,152	3,247	3,259	4,345	4,277	4,656	5,257	0.3326	0.4206	0.3650	0.3748	0.3743	0.4936	0.4840	0.5250	0.5907
New Mexico	272	354	304	295	329	455	412	444	471	0.1419	0.1822	0.1544	0.1485	0.1637	0.2203	0.1983	0.2131	0.2259
New York	5,306	6,406	6,025	5,905	6,127	8,095	7,842	8,557	9,363	0.2745	0.3309	0.3102	0.3033	0.3135	0.4173	0.4021	0.4371	0.4765
North Carolina	1,839	2,232	2,007	2,157	2,298	2,922	2,884	3,252	3,451	0.2121	0.2517	0.2214	0.2333	0.2450	0.3057	0.2988	0.3336	0.3504
North Dakota	81	77	92	72	92	112	95	98	131	0.1275	0.1209	0.1442	0.1123	0.1422	0.1661	0.1387	0.1397	0.1811
Ohio	2,727	3,291	3,058	3,153	3,023	3,983	3,903	4,110	4,298	0.2376	0.2864	0.2654	0.2735	0.2619	0.3450	0.3379	0.3558	0.3715
Oklahoma	429	584	526	474	446	582	529	521	604	0.1214	0.1634	0.1456	0.1301	0.1210	0.1548	0.1397	0.1365	0.1569
Oregon	1,849	2,536	2,282	2,173	2,014	2,340	2,371	2,462	2,662	0.5111	0.6896	0.6113	0.5744	0.5264	0.6098	0.6130	0.6313	0.6773
Pennsylvania	2,546	3,186	2,986	2,850	3,066	3,887	3,652	3,894	4,358	0.2050	0.2555	0.2385	0.2268	0.2432	0.3058	0.2866	0.3051	0.3412
Rhode Island	312	354	380	303	305	354	351	415	410	0.2930	0.3339	0.3602	0.2876	0.2896	0.3363	0.3342	0.3951	0.3899
South Carolina	539	691	542	524	579	651	793	978	971	0.1266	0.1592	0.1225	0.1164	0.1269	0.1404	0.1697	0.2071	0.2034
South Dakota	68	79	66	60	56	82	106	129	136	0.0872	0.1002	0.0828	0.0746	0.0689	0.1005	0.1287	0.1547	0.1610
Tennessee	712	817	793	798	785	1,037	1,080	1,065	1,110	0.1188	0.1342	0.1285	0.1279	0.1247	0.1631	0.1688	0.1650	0.1709
Texas	5,524	6,716	6,228	6,184	6,436	8,026	8,044	8,929	9,820	0.2423	0.2874	0.2613	0.2544	0.2597	0.3179	0.3137	0.3426	0.3713
Utah	644	800	766	727	855	1,145	1,215	1,327	1,414	0.2576	0.3096	0.2876	0.2666	0.3070	0.4127	0.4316	0.4648	0.4874
Vermont	411	486	546	514	500	668	536	506	551	0.6642	0.7839	0.8800	0.8276	0.8042	1.0674	0.8558	0.8084	0.8793
Virginia	1,027	1,231	1,162	1,180	1,209	1,724	1,737	1,813	2,026	0.1358	0.1610	0.1505	0.1514	0.1534	0.2148	0.2143	0.2215	0.2453
Washington	2,482	3,620	3,894	4,158	4,856	5,809	5,266	5,985	6,569	0.3964	0.5681	0.6023	0.6333	0.7287	0.8616	0.7720	0.8680	0.9423
West Virginia	98	111	116	91	102	134	109	142	153	0.0543	0.0614	0.0640	0.0501	0.0561	0.0723	0.0588	0.0765	0.0825
Wisconsin	1,756	2,150	1,927	1,921	1,887	2,232	2,154	2,289	2,502	0.3169	0.3859	0.3440	0.3414	0.3337	0.3923	0.3773	0.3999	0.4357
Wyoming	55	56	62	41	64	89	74	125	134	0.1086	0.1092	0.1185	0.0769	0.1176	0.1577	0.1304	0.2168	0.2300

Source: U.S. Patent and Trademark Office

Table A.5

Income Per Non-Farm Proprietor

State	2005	2006	2007	2008	2009	2010	2011	2012	2013*
Alabama	\$26,003	\$27,775	\$24,105	\$23,210	\$22,264	\$23,503	\$24,852	\$25,794	\$27,310
Alaska	\$26,470	\$28,261	\$25,419	\$26,844	\$28,204	\$31,631	\$33,637	\$35,265	\$37,822
Arizona	\$26,113	\$28,791	\$24,315	\$22,309	\$20,179	\$20,717	\$21,679	\$22,726	\$24,195
Arkansas	\$23,605	\$24,880	\$21,989	\$21,959	\$19,874	\$20,759	\$21,587	\$22,365	\$23,455
California	\$32,696	\$33,012	\$27,901	\$27,424	\$25,853	\$25,997	\$26,636	\$27,230	\$28,910
Colorado	\$29,370	\$31,165	\$26,044	\$28,947	\$25,542	\$26,815	\$28,158	\$28,953	\$30,868
Connecticut	\$38,446	\$40,676	\$35,131	\$33,365	\$36,008	\$37,857	\$37,880	\$38,832	\$41,557
Delaware	\$35,446	\$36,148	\$30,216	\$32,914	\$35,050	\$35,682	\$34,903	\$34,430	\$36,735
Florida	\$22,477	\$23,904	\$19,762	\$17,806	\$16,269	\$16,566	\$16,541	\$17,139	\$18,262
Georgia	\$27,023	\$27,780	\$24,577	\$24,837	\$21,448	\$19,791	\$19,737	\$20,564	\$21,955
Hawaii	\$22,218	\$23,387	\$19,681	\$19,956	\$20,915	\$21,798	\$22,564	\$23,442	\$25,010
Idaho	\$25,037	\$26,037	\$22,037	\$18,964	\$22,021	\$22,996	\$21,960	\$22,661	\$24,331
Illinois	\$29,724	\$31,024	\$26,900	\$27,415	\$25,446	\$26,074	\$26,634	\$27,397	\$29,085
Indiana	\$26,089	\$27,330	\$23,763	\$23,793	\$22,677	\$23,859	\$26,322	\$27,804	\$29,128
Iowa	\$26,012	\$28,415	\$27,913	\$32,815	\$30,330	\$30,591	\$33,347	\$35,216	\$37,120
Kansas	\$26,887	\$29,771	\$25,337	\$28,714	\$25,777	\$27,024	\$32,037	\$33,748	\$35,408
Kentucky	\$26,059	\$26,812	\$23,279	\$24,312	\$22,167	\$23,237	\$24,646	\$25,910	\$27,451
Louisiana	\$30,005	\$31,340	\$28,967	\$33,591	\$28,142	\$29,792	\$32,917	\$33,899	\$36,039
Maine	\$19,620	\$20,496	\$18,188	\$17,576	\$19,178	\$19,952	\$20,632	\$21,782	\$23,298
Maryland	\$27,602	\$29,341	\$25,982	\$28,019	\$27,661	\$28,903	\$30,095	\$30,528	\$32,470
Massachusetts	\$32,743	\$33,733	\$29,291	\$28,316	\$31,175	\$33,427	\$33,620	\$34,646	\$37,137
Michigan	\$23,651	\$24,311	\$21,096	\$20,427	\$19,030	\$20,390	\$20,314	\$21,081	\$22,351
Minnesota	\$23,905	\$25,239	\$22,701	\$22,717	\$21,998	\$23,507	\$25,415	\$26,470	\$28,183
Mississippi	\$24,772	\$26,766	\$22,793	\$23,640	\$22,261	\$23,248	\$24,436	\$25,579	\$27,718
Missouri	\$25,385	\$26,912	\$24,281	\$24,887	\$25,193	\$25,770	\$26,235	\$27,058	\$28,673

Table A.5 (Continued)

Income Per Non-Farm Proprietor

State	2005	2006	2007	2008	2009	2010	2011	2012	2013*
Montana	\$20,925	\$22,348	\$19,491	\$20,055	\$18,993	\$19,629	\$21,188	\$22,402	\$23,951
Nebraska	\$25,643	\$27,611	\$24,570	\$26,391	\$26,257	\$29,390	\$33,374	\$34,288	\$36,374
Nevada	\$31,190	\$33,199	\$30,301	\$24,516	\$20,389	\$22,146	\$20,383	\$21,016	\$22,569
New Hampshire	\$28,389	\$30,182	\$26,110	\$24,989	\$25,783	\$27,884	\$28,610	\$29,891	\$32,136
New Jersey	\$34,459	\$36,750	\$32,952	\$33,463	\$33,608	\$34,589	\$34,771	\$36,153	\$38,483
New Mexico	\$22,105	\$23,211	\$19,436	\$20,671	\$17,998	\$18,995	\$20,916	\$21,972	\$23,222
New York	\$35,897	\$37,497	\$34,452	\$33,372	\$37,567	\$40,024	\$38,769	\$39,265	\$41,641
North Carolina	\$22,609	\$24,080	\$20,475	\$20,910	\$22,090	\$24,709	\$21,780	\$22,359	\$23,815
North Dakota	\$23,169	\$26,212	\$22,915	\$23,413	\$22,258	\$24,693	\$27,954	\$29,698	\$32,016
Ohio	\$24,642	\$25,814	\$22,802	\$23,295	\$23,131	\$24,909	\$27,551	\$29,023	\$30,744
Oklahoma	\$40,607	\$43,266	\$35,265	\$46,411	\$30,575	\$34,762	\$43,837	\$44,892	\$47,614
Oregon	\$24,235	\$25,603	\$22,451	\$22,007	\$21,072	\$21,458	\$21,922	\$22,814	\$24,359
Pennsylvania	\$36,396	\$37,430	\$32,787	\$34,726	\$33,460	\$34,526	\$36,156	\$36,586	\$38,592
Rhode Island	\$29,584	\$30,473	\$26,696	\$25,654	\$26,505	\$29,153	\$29,766	\$30,181	\$32,088
South Carolina	\$21,174	\$22,137	\$19,363	\$20,026	\$21,986	\$22,119	\$19,813	\$20,489	\$21,850
South Dakota	\$28,655	\$28,874	\$25,408	\$26,441	\$27,555	\$31,463	\$30,888	\$32,614	\$34,588
Tennessee	\$36,083	\$37,242	\$32,380	\$32,601	\$34,622	\$35,374	\$37,075	\$39,163	\$41,153
Texas	\$40,566	\$43,883	\$37,522	\$44,904	\$33,668	\$37,281	\$44,073	\$45,767	\$48,483
Utah	\$21,793	\$25,061	\$22,631	\$21,578	\$19,711	\$20,644	\$20,230	\$21,225	\$22,632
Vermont	\$20,166	\$21,029	\$17,915	\$17,272	\$17,917	\$19,476	\$20,800	\$21,994	\$23,588
Virginia	\$26,648	\$27,798	\$24,192	\$23,662	\$21,767	\$24,091	\$26,352	\$27,976	\$29,711
Washington	\$30,969	\$31,870	\$27,688	\$26,809	\$24,837	\$26,381	\$28,053	\$29,399	\$31,500
West Virginia	\$27,715	\$29,481	\$24,981	\$27,462	\$24,335	\$25,949	\$30,742	\$32,054	\$33,441
Wisconsin	\$24,912	\$26,390	\$23,594	\$24,337	\$25,345	\$24,578	\$24,506	\$25,907	\$27,666
Wyoming	\$26,126	\$28,536	\$23,684	\$29,596	\$26,293	\$29,364	\$34,112	\$35,391	\$37,249

Source: U.S. Bureau of Economic Analysis

*Note: 2013 is an estimate based on growth in proprietor income; a 2013 proprietor count not available

Table A.6

State Entrepreneurship Index Rank 2005-2013

State	2005 Rank	2006 Rank	2007 Rank	2008 Rank	2009 Rank	2010 Rank	2011 Rank	2012 Rank	2013 Rank
Alabama	32	49	31	41	47	45	41	47	46
Alaska	37	41	40	27	24	15	24	14	36
Arizona	15	2	4	26	49	50	40	27	45
Arkansas	35	36	43	31	33	42	34	41	39
California	17	10	12	11	14	16	16	11	2
Colorado	5	6	5	18	16	26	30	13	10
Connecticut	14	17	13	15	3	11	17	9	6
Delaware	2	21	9	28	34	17	32	43	24
Florida	4	7	8	3	45	29	37	17	19
Georgia	27	28	22	16	40	39	42	34	29
Hawaii	49	43	30	35	28	41	48	46	41
Idaho	1	1	1	5	12	24	35	42	28
Illinois	21	20	23	17	4	10	7	19	25
Indiana	45	44	38	37	35	38	29	33	47
Iowa	44	39	35	36	15	28	39	10	11
Kansas	36	33	44	21	6	21	5	45	37
Kentucky	48	34	29	49	50	27	47	49	4
Louisiana	26	9	47	25	8	3	49	37	30
Maine	41	46	34	30	25	44	22	35	44
Maryland	16	26	21	32	29	22	14	31	14
Massachusetts	7	50	25	22	10	2	2	21	32
Michigan	38	45	41	45	38	46	50	50	50
Minnesota	22	11	37	23	26	25	9	12	13
Mississippi	39	40	42	40	37	47	44	48	34
Missouri	42	42	39	47	41	36	43	39	35
Montana	50	23	14	9	23	32	33	26	20
Nebraska	33	30	33	24	17	20	19	16	18
Nevada	6	3	2	4	32	48	46	29	23
New Hampshire	24	12	19	12	7	8	8	2	5
New Jersey	8	16	26	14	21	4	10	40	15
New Mexico	47	29	32	39	43	30	26	38	48
New York	18	19	18	7	1	1	3	3	3
North Carolina	40	27	17	20	39	34	27	28	49
North Dakota	30	35	48	10	13	7	1	1	1
Ohio	46	48	45	42	42	40	23	36	42
Oklahoma	10	15	10	2	18	5	12	6	21
Oregon	13	5	6	46	31	13	11	15	9
Pennsylvania	29	37	27	29	20	18	15	7	38
Rhode Island	12	24	28	44	22	19	18	18	16
South Carolina	11	13	50	50	48	49	45	44	17
South Dakota	28	31	36	33	11	12	20	25	31
Tennessee	31	22	16	13	30	33	38	23	26
Texas	19	18	3	19	19	9	4	4	7
Utah	3	4	24	38	36	43	25	20	8
Vermont	25	25	20	8	9	14	13	5	27
Virginia	23	32	11	43	27	31	28	22	43
Washington	20	14	7	6	5	23	21	24	12
West Virginia	43	47	46	48	44	35	36	30	40
Wisconsin	34	38	49	34	46	37	31	32	33
Wyoming	9	8	15	1	2	6	6	8	22

Sources: U.S. Departments of Labor, Commerce and Patent Office

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