

Urban/Regional Economics

UMD Bureau of Business and Economic Research

The BBER is a Research Bureau of the UMD School of Business and Economics.



Industrial Efficiencies in Northeast Minnesota:

Employee Productivity as a Measure of "Best Practice" Part 2: County Rankings

Chris McIntosh
BBER Intern

Background: Data are supplied and all the analyses are accomplished by the IMPLAN system. IMPLAN allows the user to build economic models to estimate the impacts of economic changes in communities. The IMPLAN database contains county, state, and federal economic statistics.

Measures: Industry Output is in millions of dollars. This represents the value of an industry's total production. Employment is listed as a single number of jobs for each industry, including both full-time and part-time employees.

This article deals with best practice at the county level. The seven county NE Minnesota region was examined. The table contains the top five (except

Cook) industries in efficiency for each individual county. It was mentioned in the first best practice article that there are several measures used for efficiency; output per employment was used in this part. Since employment is the denominator in this formula, having a small number of employees can naturally give you a higher output per employment. To deal with this problem a minimum industry sector employment of 250 was set.

This number is not significant in any way, just a cut-off point. Cook County only had three sectors with 250 employees, therefore only the top three are shown. Ranking first, in various counties, were: state and local government, paper mills (except building paper), amusement and recreation services (not elsewhere classified), electric services, and iron ores.

The table also contains total county output/employment. All sectors were added in this computation (including industries with less than 250 employees). This gives an idea of overall county efficiency. It might seem that the smaller counties in employment would be the most

efficient. This was not necessarily the case. The three smallest counties in employment ranked seventh (last), second, and fifth (respectively) in efficiency.

The graph summarizes the most represented sectors from the table. For example, paper mills (except building paper) and state and local government (non-education) appear in four of the seven county's top five sectors. In the four counties where paper mills made the top five, this sector placed either first or second. Iron ores and hotels (and lodging) are part of three counties' top five. Four industries were part of two counties' and the other 11 sectors were unique to a county's top five ranking.

Output/Employment Ranked by County

Source: IMPLAN 1997

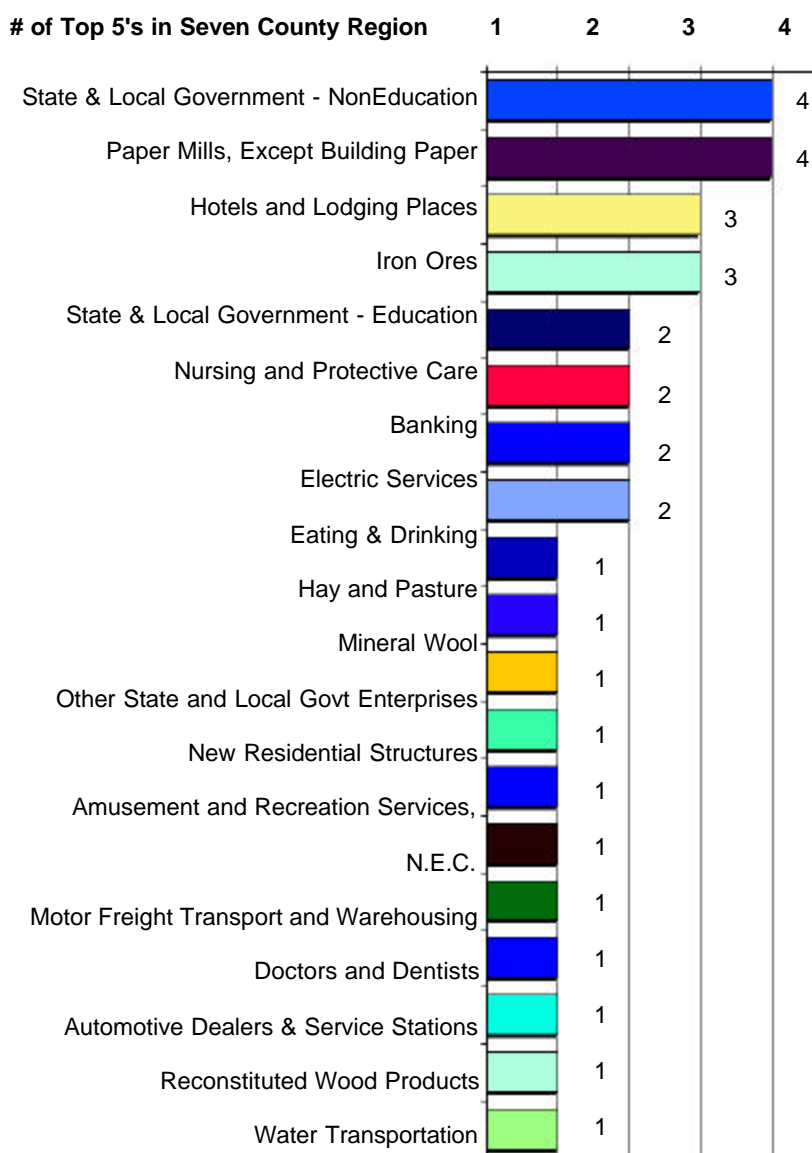
Rank by

County	Industry	Output*	Employment	Output /Employment
Aitkin				
Totals		374.79	6,488.51	0.0578
1	522 State & Local Government - Education	10.56	284.92	0.0371
2	491 Nursing and Protective Care	8.48	257.50	0.0329
3	454 Eating & Drinking	10.67	362.00	0.0295
4	523 State & Local Government - Non-Education	12.68	447.14	0.0284
5	13 Hay and Pasture	8.72	354.40	0.0246
Carlton				
Totals		1,164.96	15,874.58	0.0734
1	162 Paper Mills, Except Building Paper	207.57	832.08	0.2495
2	251 Mineral Wool	102.97	619.68	0.1662
3	512 Other State and Local Govt Enterprises	34.41	261.70	0.1315
4	456 Banking	33.59	288.50	0.1164
5	48 New Residential Structures	32.29	337.90	0.0956
Cook				
Totals		233.97	4,128.41	0.0567
1	488 Amusement and Recreation Services, N.E.C.	20.07	473.90	0.0423
2	463 Hotels and Lodging Places	30.83	741.10	0.0416
3	523 State & Local Government - Non-Education	11.27	312.30	0.0361
Itasca				
Totals		1,514.25	20,733.96	0.0730
1	443 Electric Services	90.59	333.18	0.2719
2	162 Paper Mills, Except Building Paper	249.17	1,035.87	0.2405
3	28 Iron Ores	156.22	700.36	0.2231
4	456 Banking	39.81	287.20	0.1386
5	435 Motor Freight Transport and Warehousing	50.90	520.00	0.0979
Koochiching				
Totals		709.08	8,151.29	0.0870
1	162 Paper Mills, Except Building Paper	286.06	1,190.47	0.2403
2	490 Doctors and Dentists	50.92	576.20	0.0884
3	523 State & Local Government - Non-Education	16.48	405.97	0.0406
4	463 Hotels and Lodging Places	9.31	267.60	0.0348
5	491 Nursing and Protective Care	8.83	281.40	0.0314
Lake				
Totals		475.43	5,812.69	0.0818
1	28 Iron Ores	116.19	544.95	0.2132
2	451 Automotive Dealers & Service Stations	15.52	264.60	0.0587
3	522 State & Local Government - Education	11.30	311.85	0.0362
4	523 State & Local Government - Non-Education	16.58	460.13	0.0360
5	463 Hotels and Lodging Places	10.85	321.00	0.0338
St. Louis				
Totals		8,419.83	116,389.56	0.0723
1	443 Electric Services	268.99	906.94	0.2966
2	162 Paper Mills, Except Building Paper	85.65	335.99	0.2549
3	146 Reconstituted Wood Products	242.10	972.20	0.2490
4	436 Water Transportation	94.20	408.95	0.2303
5	28 Iron Ores	1,091.61	5,067.26	0.2154

*Industry output is in millions of dollars

Most Represented Sectors

Source: IMPLAN 1997



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