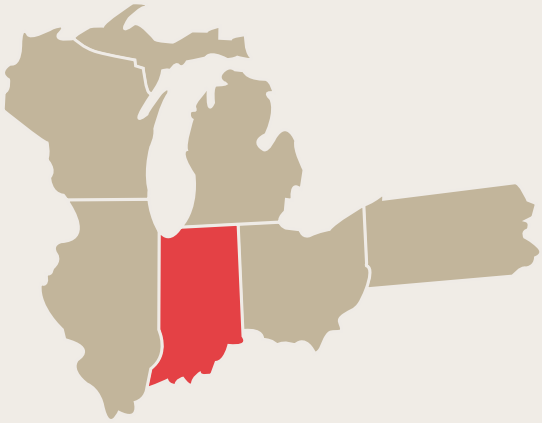
CONEXUS INDIANA

2009 REPORT CARD

Manufacturing and Logistics Indiana



2009 REPORT CARD:

Indiana and Other Great Lakes States

Subject	IL	IN	MI	OH	PA	WI
Manufacturing	C	A	A	A	C	B+
Logistics	C	B-	D+	B+	C	C
Human Capital	B	D+	C-	D	C	C+
Benefit Costs	C	C	D	C	D	C
Global Position	A	A	A	A	B	B
Productivity and Innovation	C	C	D	D	B	D-
Tax Climate	D	A	C-	D-	D+	D

Methodology:

The variables were chosen to represent those state level items most likely to be considered by site selection experts for manufacturing and logistics firms, and by the prevailing economic research on growth. Each category was ranked ordinally, by state and assigned a rank. In each case the lower the rank is better. Within each category, the lowest total score assigned provided overall ranking. Grades were assigned using an approximate logistic distribution of grades, A through F. Plus and minus scores were not assigned to A or F grades.

BALL STATE UNIVERSITY
CENTER FOR BUSINESS AND ECONOMIC RESEARCH

Center Business and Economic Research
Miller College of Business, Ball State University
Whitinger Business Building, room 149 • Muncie, IN 47306
Phone: 765-285-5926 • www.bsu.edu/cber

Indiana:

2008 was a difficult time for many manufacturers in Indiana. Despite continued high levels of productivity and a relatively good business climate in Indiana, high energy costs and the credit crisis of early fall took a toll on many firms. Indiana firms that produced automobile and related goods were especially hard hit, and the second half of 2008 saw deep layoffs in some regions. The recession will continue to take a toll on the industry through 2009. A longer term view of the industry is far more optimistic.

Indiana continues to do well in the overall manufacturing ranking, receiving an A grade. Likewise, in the areas of global reach and tax climate the state receives an A grade. These data do not yet capture the effect of recent changes in sales and property taxes. The future of unemployment insurance will likely affect these rankings in coming years. The logistics industry received a B- grade, largely based on past infrastructure spending that has shown increased activity in recent years, which have not yet been captured by these data.

The state performs less well in the areas of benefit costs and innovation. Both of these areas have direct policy implications that should be at the forefront of legislative consideration if improvement in these areas is to be realized.

An otherwise good report card is marred by Indiana's human capital ranking. Indiana, to a higher degree than many states, has an aging manufacturing and logistics workforce. A vibrant future in these industries relies on replacing these workers as they retire. If the region cannot offer firms a reliable source of educated workers, we will see a dwindling presence of manufacturing as business seek workers with the right set of skills and education.

Relying upon the 2009 Indiana Econometric Model, we predict manufacturing employment to remain more volatile than in recent years, but to recover to early 2008 levels by mid to late 2010.

About the Report Card:

The 2009 Manufacturing and Logistics Report Card grades states in six areas of the economy which underlie the success of manufacturing and logistics in each state. These include specific measures of manufacturing and logistics health, human capital, the cost of benefits, the global position of the industries, state level productivity and innovation and the tax climate.

A more complete explanation of these data and scores for all fifty states are contained in the 2009 National Manufacturing and Logistics Report Card.

MANUFACTURING AND LOGISTICS
Across the Nation

Use the scale to the right to identify the grade for each state. A complete list of grades for each state and the methodology for determining the grades is listed at the end of this report.

A B C D F

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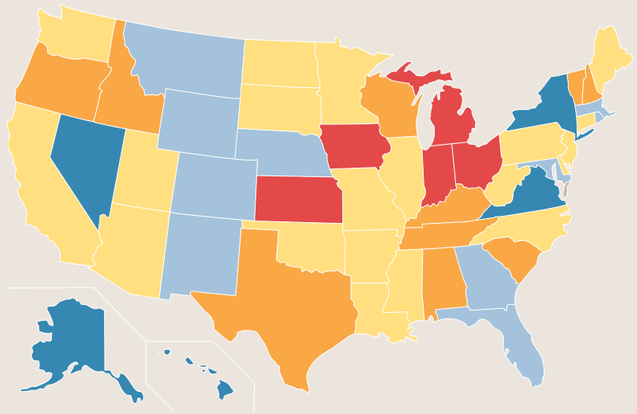
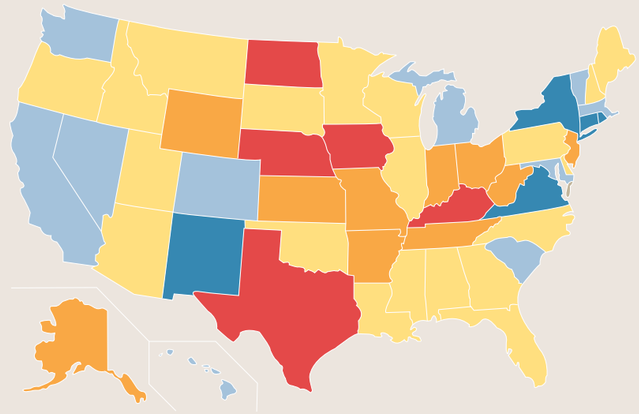


Manufacturing:

The production of goods holds a particular place of interest in the U.S. economy. Manufacturing firms are not necessarily reliant on local demand for goods and are therefore footloose. Their location then depends more on local factors such as the quality and availability of the labor force, transportation infrastructure, non-wage labor costs, access to innovative technologies and the cost of doing business. Manufacturing is the production of both consumer durable goods such as automobiles, electronics and home appliances, and consumer non-durable goods such as clothing, processed foods, and other goods that are consumed after use.

To measure manufacturing we include three variables, the share of total income earned by manufacturing employees in each state, the wage premium paid to manufacturing workers relative to the other state's employees and the share of manufacturing employment per capita. These data are collected from the U.S. Department of the Census, and the Bureau of Economic Analysis, Regional Economic Information System.



Logistics:

The movement of goods is of central importance to the production of goods. Without a robust logistics industry, manufacturing and commodity production will not occur. Logistics comprises not merely the capacity to move goods, but to store inventory and manage the distribution and processing of manufactured goods. Logistics firms depend upon many of the same factors as manufacturing firm sin their location decision, but there is a more complex interplay between local conditions and the existing or planned transportation networks of roads, rail, waterborne traffic and air.

To measure the logistics industry we include the share of total logistics industry income as a share of total state income, and the employment per capita. We also include commodity flows data by both rail and road. To this we measure infrastructure spending as the per capita expenditure on highway construction. These data are collected from the U.S. Department of the Census, the Bureau of Economic Analysis, Regional Economic Information System and the Center for Transportation Statistics, U.S. Department of Transportation.

HUMAN CAPITAL

Top Five:
Minnesota
New York
Utah
Washington
Wyoming

No factor matters more to businesses than the quality and availability of labor. Workers represent the largest single cost of doing business, but more importantly are the source of most innovation and process improvements that distinguish successful firms from those that are not successful. Specific human capital concerns matter to manufacturing and logistics firms. Because produced goods have a high degree of value dependent on each individual worker in a production line or transportation leg or hub, uniform high quality of workers. These workers must possess the ability to understand increasingly complex production processes which are today almost uniformly managed by computers with specialized software. The factors, rail yards, distribution facilities and machine shops of today are complex, highly technical and almost uniformly dependent on workers who can work successfully in this environment. Human capital, which in the United States is almost entirely the quality of educational background is the most important factor in firm location decisions.

Our human capital measurements include rankings of educational attainment at the high school and collegiate level, the first year retention rate of adults in community and technical colleges, the number of associates degrees awarded annually on a per capita basis and the share of adults (25 years and older) enrolled in adult basic education. These data are from the National Center for Educational Statistics.

PRODUCTIVITY AND INNOVATION

Top Five:
Colorado
Delaware
Hawaii
Minnesota
Oregon

The value of manufactured goods per worker – productivity – as well as firm access to inventions and innovations is critical to the long term performance of a firm and the industry as a whole. Though innovations and inventions are aggressively sought from across the globe, the presence of local talent in these areas through access to university laboratories and non-profit research activities plays an important role in location decisions by manufacturers.

To measure productivity and innovation we use manufacturing productivity growth, industry Research and Development expenditures on a per capita basis, the per capita number of patents issued annually and the expenditures by venture capital firms in each state adjusted to a per capita basis. These data are collected from the Census of Manufacturers, the National Science Foundation, the Patent Office and a study by PricewaterhouseCoopers/National for the Venture Capital Association.

TAX CLIMATE

Top Five:
Colorado
Florida
Indiana
Missouri
Montana

Few factors garner as much policy interest as do state and local taxes. For firms which may operate virtually anywhere, tax rates – along with the quality of local public goods – matter a great deal in location decisions. Taxes on the business, individual income taxes (both on workers and small business), sales unemployment insurance and property taxes all play a role in assessing regions for a potential employer location.

To measure the tax climate we use data on corporate taxes, income and sales and use taxes, property and unemployment insurance tax data collected by the Tax Foundation.

BENEFIT COSTS

Top Five:
Alabama
Arizona
Idaho
South Dakota
Utah

Non-wage labor costs represent and increasingly important part of total business costs. These are affected by local and state public policy as well as worker demographics, health, and industry and firm performance. Benefits range from a variety of health care issues, to liability and casualty insurance, workers compensation and other costs such as retirement and other fringe benefits.

To measure benefits costs, we include data on health care premiums and long term health care costs, workers' compensation costs per worker and fringe benefits of all kinds as a share of worker costs. These data are collected from the American Association of Retired Persons, Bureau of Economic Analysis, Regional Economic Information System and author's calculations from data produced from the national input-output model.

GLOBAL POSITION

Top Five:
Illinois
Indiana
Kentucky
Michigan
Ohio

The level of international trade – both in exports and imports – is a robust measure of the region's competitiveness in the production, movement and distribution of consumer durable and non-durable goods. Both firms and regional governments focus considerable effort at improving ties with foreign firms, but for different reasons. Governments seek foreign investment in plant and equipment, while firms care about supplier relationships on both commodities and finished goods. Of course manufacturers want to make goods with a global market appeal. How well this is done is an important predictor of the health of manufacturing and logistics sectors into the future.

To measure global reach we include the export related measures of per capita exported manufacturing goods and the growth of manufacturing exports and the foreign direct investment measures of the amount of manufacturing income received annually from foreign owned firms in a state as well as the reach of foreign direct investment – which is simply the variance or spread of foreign direct investments from different regions of the world. These data re collected from the Department of Commerce's International Trade Administration.

Methodology:
These variables were chosen to represent those state level items most likely to be considered by site selection experts for manufacturing and logistics firms, and by the prevailing economic research on growth. Each category was ranked ordinally, by state and assigned a rank. In each case the lower the rank is better. Within each category, the lowest total score assigned provided overall ranking. Grades were assigned using an approximate logistic distribution of grades, A through F. Plus and minus scores were not assigned to A or F grades.

Glossary:

AA: Associate's degree.

Adult Basic Education: Education in basic reading and writing, offered through either community and technical colleges or state workforce development agencies.

BA: Bachelor's degree.

Commodity Flows: The value of shipments through a region.

CTC: Community and technical colleges.

Exports: Products or commodities sold to foreign individuals and firms.

Foreign Direct Investment: Expenditures by foreign owned firms on plant and equipment in a region.

Human Capital: A measure of educational and skills attainment, and in some settings health of residents and workers within a region.

Imports: Products or commodities purchased from foreign firms.

Income: All direct compensation to workers.

Infrastructure: Road rail, bridge and other transportation related public goods.

Logistics: Transportation and warehousing industry groups.

Manufacturing: The production of consumer durable and nondurable goods.

Productivity: The value of goods sold by a firm adjusted to a per worker basis.

R&D: Research and development, both in primary and applied science, usually measure in dollars.

Unemployment Insurance: A federal program dating to 1933 which requires firms to participate in state regulated insurance plans to compensate workers who are laid off or discharged from work.

Value-Added: Firm or industry measure of the value of the product sold, minus all input costs.

Workers Compensation: A federal program dating to 1913 which requires firms to provide disability and death insurance through state administered or regulated insurance plans.

2009 REPORT CARD:
Grades by State and Industry

State	Manufacturing Industry	Logistics Industry	Human Capital	Benefit Costs	Global Position	Productivity and Innovation	Tax Climate
Alabama	B	C	F	A	B	B+	B
Alaska	F	B	C	F	F	C	C+
Arizona	C	C	D	A	D	F	C
Arkansas	C	B	D	B	C	D+	C
California	C	D	B	D	C	C	D
Colorado	D	D	C-	C+	D-	A	A
Connecticut	C+	F	B-	F	B+	C+	C
Delaware	C-	C	C	F	B	A	B
Florida	D	C	B+	C	D+	C	A
Georgia	D	C	C-	B	C	D	C+
Hawaii	F	D-	B+	C	D-	A	B
Idaho	B-	C-	D	A	D	D+	C
Illinois	C	C	B	C	A	C	D
Indiana	**A**	**B-**	**D+**	**C**	**A**	**C**	**A**
Iowa	A	A	C	B	C	C	F
Kansas	A	B	C+	B+	B	D	C
Kentucky	B+	A	D-	D+	A	D-	C-
Louisiana	C+	C+	F	B-	C	C	C
Maine	C	C-	B	F	D	D	D-
Maryland	D-	D	C+	C	C-	C	C
Massachusetts	D+	D-	C	C	C	C+	D
Michigan	A	D+	C-	D	A	D	C-
Minnesota	C	C	A	C	C+	A	F
Mississippi	C	C	D+	B	C-	F	B-
Missouri	C	B	C	C+	B-	B+	A
Montana	D	C+	C	C+	F	C-	A
Nebraska	D+	A	B	B	C	C	D
Nevada	F	D	F	B+	D	C	B-
New Hampshire	B	C	B-	D	C+	C	C
New Jersey	C	B	C	D-	C	C	F
New Mexico	D	F	C	C	F	B	C
New York	F	F	A	C-	C	C-	F
North Carolina	C	C	C	B-	C+	B	C-
North Dakota	C-	A	C	B	C	F	C
Ohio	A	B+	D	C	A	D	D-
Oklahoma	C	C-	D-	C-	C	F	B
Oregon	B-	C	C	C	C-	A	C+
Pennsylvania	C	C	C	D	B	B	D+
Rhode Island	D	F	B	D	F	C+	F
South Carolina	B	D	D	C	B	D	C
South Dakota	C-	C	B	A	D	C	B
Tennessee	B	B+	D	C-	B+	C	C
Texas	B	A	F	C	B-	B	C
Utah	C	C+	A	A	C	B	B
Vermont	B	D	C	F	C	C-	D
Virginia	F	F	C	D+	D+	B-	B+
Washington	C+	D+	A	D-	C	B-	C
West Virginia	C	B-	F	D	D	F	D+
Wisconsin	B+	C	C+	C	B	D-	D
Wyoming	D-	B	A	C	F	B	B+