

Rankings Offer Quick Assessments

Benchmarks Provide Action Guides for Cities and States

Rankings are interesting, but many have limited value. The factors used to develop individual rankings must be interpreted carefully. Benchmarks offer a more practical and useful method to gauge progress.

“Best places to live,” “best places to retire,” “most competitive state”—these are examples of rankings. An assortment of rankings and indexes assess the business climate, demographics, and quality of life in cities, regions, and states. Rankings are popular because they are easy to understand. The public likes to know that their city, region, or state ranks high or low compared with other places. Rankings also receive media coverage and can stimulate discussion about what is good or bad about a location. They influence people’s perceptions about the attractiveness of particular places, and they may influence decisions about where to live or invest.

Recently, the state of Indiana and the Indianapolis Metropolitan Statistical Area (MSA)¹ both received middling rankings on an index constructed to measure the “new economy.” Indiana ranked 6th among the seven states we compared with this index, and the Indianapolis MSA ranked 5th among nine regions in those states. Organizations that examine business climate rank Indiana more favorably. For example, the Beacon Hill Institute ranks the state of Indiana 20th among the fifty states in economic competitiveness.

In other comparisons, an organization may use a single measure as an indicator, such as the FBI crime index and the percentage of adults who smoke (published by the Center for Disease Control). Indiana

has the lowest crime index of the seven states compared for 2002, and the Indianapolis MSA ranks second best of nine comparison regions on the same measure. Unfortunately, the Indianapolis MSA has the highest rate of adult smokers of all the comparison metropolitan areas (30.3 percent).

Rankings are more useful when comparisons are made with similar areas. They are most useful when evaluated with the same set of comparison regions over time and across multiple policy issues. Although we identified nearly 50 rankings and indicators in our research, we discuss only a few of them in this report. However, we believe benchmarks—quantified measures of progress toward desired goals—would be far more useful than rankings for improving Indiana.



The FBI crime index for Indiana and the Indianapolis region suggests that Indiana is a safe place to live.



Rankings are popular, but limited

Magazines and advocacy organizations compile most rankings using governmental statistics, which, in turn, are sometimes augmented by proprietary data. Two examples of this are the “new economy” rankings compiled by the Progressive Policy Institute and the “housing affordability” index published by the National Association of Home Builders. Only a few rankings are compiled by independent organizations with substantial analytical capacity, such as those prepared on technology and science by the Milken Institute.

Performance rankings based on constructed indexes have four important limitations:

1. **Few rankings are rigorously evaluated.** For example, “best places to retire” should attract more retirees in the future, but that is rarely demonstrated by the authors of rankings.
2. In similar fashion, **there is a circular logic to many rankings**, seen in measuring the best places to retire by an existing concentration of retirees. But this begs the question of how certain places initially gain a disproportionate concentration of whatever is being judged.
3. **Rankings that sound similar can differ significantly**, usually because they combine different measurements. Understanding exactly what is measured is important, but these details are often missed in reports or discussions of rankings. For example, the “new economy index” focuses on information technology and misses much of the innovation in the life sciences, an important issue for Indiana.
4. **Rankings are necessarily historical**, capturing past events and the current situation. They often provide little insight into how to enhance a positive rank or remedy a negative rank.

Moreover, there is little systematic evidence that rankings affect location and investment decisions by businesses, often a concern of those seeking to improve the region. For example, one analysis of moves by 40 high quality information age companies (O’Mara, 1999) concludes that seven quality of life rank-

ings bear little relation to location decisions. O’Mara’s work also suggests that businesses seek different results when making a location decision. The analysis identifies three types of business moves to a new geographic area, each with a different goal:

- pick up and go—firms seeking major strategic re-positioning;
- new horizons—firms looking for cost advantages; and
- consolidation of a beachhead—firms seeking to increase scale economies, flexibility, and control over dispersed activities.

O’Mara also identifies three reasons for moves within the same general area:

- green acres—with a goal of greater control over site and expansion potential;
- new urbanites—seeking to increase cosmopolitan exposure of workers; and
- recommitment—based on historical affinity to a community that has retained its quality of workforce and living standards.

Finally, O’Mara analyzes why companies are attracted to a particular location and identifies these five factors:

- access to a high quality labor force (especially a workforce with experience in the same industry);
- quality housing affordable to the company’s workforce;
- high quality education;
- ease of transportation (including an airport hub); and
- access to recreation.

It is noteworthy that the factors influencing location decisions of these firms rarely involved access to suppliers, customers, or natural resources. Nor did development incentives offered by governments play a large role.

The O’Mara analysis suggests that efforts to attract businesses to a state or region are unlikely to succeed or fail on any single dimension such as those that are likely to be captured by rankings—and that reasons for location choice are varied. Any single ranking will likely provide an imperfect guide in competition for economic success.

Government statistics provide comparison indicators across the nation

In contrast with constructed indexes that include several types of data, some comparisons focus on a single data series. These data series commonly come from a governmental source and, like rankings, are often reported in comparison with other states or regions. Two examples are the FBI crime index and the percentage of residents (25 years of age and older) who are college graduates. These data series often are available for many years, allowing comparisons over time and more effective analyses of factors that cause changes in the data. For example, the FBI crime index data are available for several decades.

A few measurements by government agencies have potential legal implications, including measures of educational performance and air quality. However, these legally relevant measurements usually are made against an absolute standard, such as parts per million of ozone. The fact that a city has the 20th best air quality is not relevant to satisfying air quality regulations, as these regulations relate to performance against the established standard.

Government statistics have the advantage of relative consistency over time and across places. However, the data alone provide little information about why a state or region has a high or low number. For example, Indiana has a relatively low crime index, but the number itself provides no insight into why the index is low, what might cause it to increase, or what should be done to sustain this success. Similarly, the knowledge that a comparatively low percentage of Indiana residents are college graduates provides no insight into why this is the case, nor does it suggest how this fraction can be increased.

Benchmarks guide action better than rankings and indicators

Rather than focusing on rankings and single indicators from government statistics, those who want to improve the quality of life in Indiana and make the state more attractive to residents and investors should consider developing benchmarks. Benchmarks are quantified measures of progress toward a desired goal. For example, a strategy to improve a state's human capital might be to set a goal that 40 percent of the state's high school graduates will be prepared to enter a college-level calculus course. In this example, the goal is to



Evidence suggests that the performance of state governments can positively affect the quality of life for their residents.

improve human capital. Advanced mathematical competencies are judged to contribute to that goal, and the measure is the percentage of high school graduates who are ready for a college calculus course. The target benchmark should be set at an achievable and meaningful level above the current performance level. If 20 percent of current high school graduates are ready for a college calculus course, reaching the 40 percent target would be a substantial achievement requiring many years of sustained effort.

These benchmarks are different from those used by single organizations, private or public, which commonly focus on measures of quality (e.g., defect ratios), efficiency (e.g., cost per service call), or customer satisfaction (e.g., responses to surveys). In contrast to organizational benchmarks, no single organization can achieve the successes sought here. To continue the example of improving human capital by increasing mathematical competence as measured by high school graduates readiness for



college calculus courses, success will depend on many schools, students, and their parents.

A well-known effort to use benchmarks is in Oregon, where the state set 90 benchmarks to achieve three broad goals: (1) quality jobs for all Oregonians, (2) engaged, caring, and safe communities, and (3) healthy, sustainable surroundings. These benchmarks were developed in a public process, unanimously adopted by the state legislature, and pursued through the administrations of four governors. The Oregon Progress Board, created by the state legislature in 1989 and chaired by the governor, manages the Oregon benchmarking effort. The benchmarks are integrated into state policymaking and the budget-request process that is followed by state agencies. Oregon uses some rankings in its benchmarks, but it selects among those available and collects its own measurements for other benchmarks (for more information, see www.econ.state.or.us/opb/).

Another step in the Oregon benchmarking process was that local governments, nonprofits, and business development organizations developed their own benchmarks to fit into or amplify those of the state. For example, the city of Portland and Multnomah County (Portland's home county) organized their joint benchmark effort through the Portland Multnomah



A successful public education program is considered key to a high quality of life. Although Indiana can boast a relatively high percentage of residents who are high school graduates, the percentage of residents who are college graduates is the lowest among the comparison regions.

Development of benchmarks requires five steps:

1. Choose a desired goal for the city, region, or state. (This choice must be widely viewed as legitimate—commonly the case when the choice is made by a government and also possible when made by a well-recognized coalition of civic, business, and government leaders.)
2. Select intermediate steps to support the goal.
3. Measure progress on those intermediate steps systematically and at regular intervals.
4. Commit resources and energy to the strategies that are found to be most effective in making progress on the intermediate steps.
5. Finally, adjust the intermediate steps as needed to continue progress toward the goal.

Progress Board. They developed benchmarks in six areas—economy, education, environment, governance and civic participation, health and families, and public safety and urban vitality (see www.p-m-benchmarks.org).

There is evidence that the performance of state governments can positively affect the quality of life for their residents. Analyzing data collected in the Syracuse University Government Performance Project, Cogburn and Schneider (2002) concluded that state management performance has significant positive impacts on the quality of life in states as measured by the Morgan-Quitno Press ranking of “Most Livable States” and State Policy Reports’ “Camelot Index.” This suggests that improvements in state government performance can enhance the quality of life for state residents. Indiana state government received the second lowest grade among the seven states compared here in both 1999 and 2001, though improving from a C+ grade in 1999 to a B- in 2001, tying with Tennessee that year. California received the lowest grades and Missouri the highest in both years.

Rankings and indicators can provide comparison snapshots

Given the weakness of rankings and indicators in diagnosis and guidance, and the advantages of benchmarks in guiding efforts to improve a state or region, we should approach rankings as partial snapshots of situations across the areas being compared.



State Comparisons

Rankings for Indiana as a state are shown in tables 1 through 3. These tables show that a snapshot of Indiana contrasted with the comparison states is mixed. In general, Indiana ranks middle or lower on economic performance, above the middle on business climate, and in the middle on measures of individual behaviors. One area where Indiana lags the nation substantially is the percentage of residents who are college graduates. These patterns are well known, but we include them here to illustrate the information that is available.

In Table 1, the first two columns report performance in the **new economy** and **technology and science** dimensions of the economy, with Indiana ranking sixth of the seven comparison states and followed by Tennessee on both indexes. California leads and Texas is second in both rankings, with the order of other states changing by one or two places.

The third column shows three business development grades for **performance, business vitality, and development capacity** that were assigned to states by the Corporation for Enterprise Development. Here, California again leads followed by Missouri, North Carolina, and Ohio. Indiana ties with Texas. Tennessee, again, is last.



Indiana would likely score high marks on any measure that considers innovation in the life sciences. However, this factor typically is missed by business and economic indexes.

Table 1: State Business and Economic Climate Comparison Data

	PPI State New Economy Index, 2002 ^a	Milken State Tech & Science Index, 2002 ^b	Development Report Card for the States, 2003 ^c (Performance/Business Vitality/Development Capacity)	Beacon Hill State Competitiveness Index, 2002 ^d	Site Selection's State Business Climate Rankings, 2003 ^e	Small Business Survival Index, 2003 ^f
Indiana	36	30	C/C/C	20	18	15
Texas	14	14	F/A/C	28	6	6
Ohio	30	27	D/B/B	36	4	39
Missouri	24	28	B/C/C	20	23	19
Tennessee	39	40	D/C/C	22	3	7
North Carolina	26	17	D/A/C	35	1	37
California	3	3	C/A/B	16	16	46

^a Progressive Policy Institute. See www.neweconomyindex.org/states/2002/index.html

^b Milken Institute. See www.milkeninstitute.org/index.taf

^c Corporation for Enterprise Development. See www/cfed.org/

^d Beacon Hill Institute for Public Policy Research. Metro Area and State Competitiveness Report, 2002. See www.beaconhill.org

^e Site Selection Magazine. (2003, November). 2003 Business Climate Report. See www.siteselection.com/

^f Small Business Survival Index compiled and published by the Small Business Survival Committee. See www.sbsc.org/

Note: Full citations are included in the economy rankings portion of the bibliography.



The last three columns report rankings of business climate. **The Beacon Hill competitiveness index** ranks Indiana 20th in the nation, tied with Missouri (2nd among these seven states), behind California (ranked 16th), and ahead of Tennessee (22nd), Texas (28th), North Carolina (35th), and Ohio (36th).

Business climate rankings as calculated by *Site Selection* magazine (column five), rank Indiana 18th (6th among these seven states), with North Carolina ranked 1st and Missouri 23rd (and last among the seven states).

The Small Business Survival Index (last column) ranks Indiana 15th (3rd among these seven states). However, this

index is compiled not on historical survival rates of small businesses, but rather on a compilation of taxes and other measures argued to affect small business survival. These business climate rankings illustrate the weaknesses of rankings. Indiana ranks above the midpoint nationally in all three, but none of these rankings provide evidence that their measures of business climate correspond to business startups, growth, profits, longevity, or any other measures of success. Again, as with the “new economy index” that includes only information technology and no actual small business survival data, it is important to understand what measurements are included in an index.

Some examples of data from the federal government that are based on constructed indexes and are used as indicators are shown in tables 2 and 3. These two tables include indicators that can show the success of states in developing human capital, a strategy that builds a foundation for success in many dimensions.

Table 2 shows two well-known and important education statistics. **High school completion rates** rank Indiana second among the seven comparison states. However, as previously stated, in Indiana, the **percentage of the population who are college graduates** is the lowest rate of the comparison

Table 2: Selected State Education Statistics, Percentage of Population Age 25 and older, 2000

State	High School Completion Rate	College Graduation Rate
Indiana	82%	19%
Texas	76%	23%
Ohio	83%	21%
Missouri	81%	22%
Tennessee	76%	20%
North Carolina	78%	23%
California	77%	27%

Source: U.S. Census Bureau.

Table 3: State Crime and Lifestyle/Behavior Comparisons

State	FBI Crime Index, 2002 ^a	Seatbelt Use, 2002 ^b	Traffic Fatalities Involving Alcohol, 2002 ^c	Estimates of Illicit Drug Use by Persons Age 12 or Older, 2001 ^d
Indiana	3,750	72%	34%	5.2%
Texas	5,190	81%	47%	5.3%
Ohio	4,107	70%	40%	5.9%
Missouri	4,602	69%	43%	5.7%
Tennessee	5,019	67%	40%	6.2%
North Carolina	4,721	84%	38%	7.9%
California	3,944	91%	40%	8.2%

^a U.S. Department of Justice, Federal Bureau of Investigation. Rates are per 100,000 inhabitants. These data are voluntarily self-reported by law enforcement agencies and the FBI cautions against making direct comparisons due to many factors that affect the amount of crime from place to place. The FBI states, “More valid use can be made of these figures in determining deviations from national averages and through comparisons with averages for cities in similar population groups” (Uniform Crime Reports). See www.fbi.gov/ucr/02cius.htm

^b National Center for Statistics and Analysis of the U.S. National Highway Traffic Safety Administration, U.S. Department of Transportation. See www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2003/809-587.pdf

^c National Center for Statistics and Analysis of the U.S. National Highway Traffic Safety Administration, U.S. Department of Transportation. These statistics represent traffic fatalities in which alcohol was involved. See www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSF2002/2002alcfacts.pdf

^d U.S. Substance Abuse and Mental Health Services Administration. See www.samhsa.gov/oas/nhsda/2k15State/vol1/cover.htm

Note: Full citations are included in the crime, health, and safety rankings portion of the bibliography.

**Table 4: Metropolitan Statistical Area Rankings Comparisons**

Metropolitan Statistical Area	Metropolitan New Economy Index Rank of Top 50 Metro Areas, 2001 ^a	Housing Opportunity Index, First Quarter, 2002 ^b	FBI Crime Index, 2001 ^c	Adults Who Smoke Cigarettes, 2000 ^d	USA Today Sprawl Index ^e
Indianapolis, IN	29	88.6	3,384	30.3% (±3.9%)	299
Austin, TX	2	67.9	4,861	23.1% (± 5.0%)	413
Cincinnati, OH	34	83.6	3,531	21.5% (± 4.8%)	292
Cleveland, OH	33	79.9	2,629	29.8% (± 5.8%)	151
Columbus, OH	36	78.2	6,141	29.8% (± 5.8%)	254
Kansas City, MO	24	86.4	5,122	24.7% (± 2.8%)	141
Nashville, TN	32	78.6	5,910	25.3% (± 4.0%)	478
Raleigh-Durham, NC	4	75.6	5,159	19.8% (± 4.4%)	271
Sacramento, CA	23	43.7	4,633	NR	199

^a Progressive Policy Institute. Index of top 50 metro areas. See <http://neweconomyindex.org/metro/index.html>

^b National Association of Home Builders. This index shows the share of homes affordable for people of median income.

^c Calculated indexes based on U.S. Department of Justice, Federal Bureau of Investigation.(2001).Crimes per 100,000 inhabitants.

^d Center for Disease Control and Prevention. (2001, December 14).

^e *USA Today*. (2001, February 22). The Sprawl Index is only for metro areas with populations less than one million. According to the authors, "The index analyzes how densely developed a metro area is and how that changed during the '90s."

Note: Full citations are included in the bibliography.

states by a substantial margin, falling eight percentage points behind California, the leader of these seven states.

Table 3 (column 1) shows **state crime rates** as calculated by the FBI. Indiana's 2002 index of 3,750 crimes per 100,000 inhabitants is the best (least crime) of these seven states. California and Ohio are the only other states of these seven that are better than the national average of 4,119 crimes per 100,000 inhabitants. Texas has the worst rate (highest number of crimes) followed by Tennessee. These crime data are voluntarily self-reported by law enforcement agencies and the FBI cautions against making direct comparisons.

Data on **seatbelt usage** from the U.S. National Highway Traffic Safety Administration (column 2 in Table 3) show that Indiana's rate of 72 percent is fourth among these seven states.

From the same source are statistics for the percentage of **traffic fatalities involving alcohol** (column 3)—Indiana's 34 percent is best among the seven states.

Column 4 reports data on **illicit drug use** by persons age 12 or older as compiled by the U.S. Substance Abuse and Mental Health Services Administration. Indiana's rate of 5.2 percent is best among the seven states. California has the worst (8.2 percent).

Regional Comparisons

Similar lifestyle and behavior rankings for the Indianapolis MSA are shown in Table 4, which shows comparisons of the Indianapolis MSA with other metropolitan areas. Again, these rankings are familiar to many who follow news about Indianapolis.

The Indianapolis area scores very well on housing affordability, less well on measures of "new economy," and poorly on the measure of the number of adults who smoke, which is high. Perhaps surprising, the Indianapolis MSA scores relatively high on a measure of sprawl.

The first column shows the **Metropolitan New Economy Index** (similar to the state New Economy Index that was shown in Table 1). Indianapolis is ranked fifth among these nine metropolitan regions (number 29 of the top 50 metropolitan areas). Austin is ranked first among this comparison set (second among the top 50). Indianapolis bests four of the comparison regions (Nashville, Cleveland, Cincinnati, and Columbus) but trails Kansas City, Raleigh-Durham (ranked fourth among the top 50), and Sacramento.

The second column of Table 4 scores **housing opportunity**, defined as the percentage of homes affordable by families



The Indianapolis region scores better on a housing opportunity index than any of the comparison regions studied by the Center. In the Indianapolis MSA, 88.6 percent of homes are affordable to the median income homebuyer.

of median income in the MSA, compiled by the National Association of Home Builders. The Indianapolis MSA is the highest ranked on this measure, with 88.6 percent of the homes affordable to the median income homebuyer. In sharp contrast, only 43.7 percent of the homes are affordable to the median income homebuyer in the Sacramento MSA, less than half the proportion in the Indianapolis MSA.

The **crime index** (third column in Table 4) is similar to the measure used in Table 1, but for metropolitan areas rather than the states. The Indianapolis MSA is second best of the nine regions with an index of 3,384, following Cleveland (2,629). The worst crime index of the nine regions was for Columbus, Ohio (6,141).

Column four reports an individual behavioral measure associated with health, the percent of **adults who smoke cigarettes**. These statistics were compiled from a survey undertaken for the Center for Disease Control and Prevention in 2000. The Indianapolis MSA has the highest percentage of adult smokers, 30.3 percent (confidence interval, +/- 3.9 percent), which is one-third higher than the national median of 22.7 percent smoking adults. The lowest value reported among the

eight reporting MSAs is 19.8 percent in Raleigh-Durham. No data are available for Sacramento.

A “**sprawl index**” reported in *USA Today* is shown in the last column of Table 4. For this index, a higher number indicates more sprawl. The Indianapolis MSA’s score of 299 suggests that it is the third most sprawling of these nine regions, with Nashville (478) and Austin (413) being more sprawling. By this measure, Kansas City is the least sprawling.

Conclusions: Sustained effort, significant contexts, and constant improvements are critical

As shown in this review, many regional performance indicators are available. In general, they suggest that Indiana and Indianapolis lag many competitors in the nation. Lamenting this situation will not mobilize energy to improve the state and region. Waiting for the release of the next rating is equally unlikely to improve the state and region. While the rankings and indicators themselves help identify areas of relative strength or weakness, they provide little guidance as to how to sustain those strengths or remedy weaknesses.



Instead, those who seek progress should consider developing benchmarks linked to goals. The Oregon process that used a statewide visioning effort to establish goals and benchmarks is a model for such efforts. Three of the most important attributes of the Oregon experience are (1) sustained effort, (2) consequential contexts, and (3) improvements over time.

Sustained effort matters: The Oregon effort has been ongoing since 1989. It is based in state statutes. And the Oregon Progress Board that oversees the benchmarking process is supported by a three-person staff.

Significant contexts matter: The benchmarks were adopted by the state legislature. The governor chairs the Oregon Progress Board. And progress on benchmarks has been used in state budget decisions for agencies and to inform decisions regarding funding nonprofits.

Improvements matter: The Oregon benchmarking effort spread beyond the state government to local governments and nonprofits. And state legislation refined the process to link state agency performance measures to broader benchmarks. (see www.econ.state.or.us/opb).

Similar effective efforts using visioning in setting goals and benchmarks are seen in analyses of efforts to protect watersheds in several areas including Lake Tahoe (which spans both California and Nevada), Tampa Bay, Florida, and Tillamook Bay, Oregon. In these cases, efforts to improve the watershed began, respectively, in the early 1960s, early 1970s, and late 1970s, and formal entities were established to advance the goals of improved watershed quality.

The consequential context of action in the Lake Tahoe context was restrictions on building activities. In Tampa Bay and Tillamook Bay, water quality had deteriorated to the point of endangering species. In each of these three cases, iterations of planning led to higher performance benchmarks. These higher benchmarks guided the actions of multiple stakeholders who then reinforced the desired goals of protecting and enhancing the watershed. (Imperial and Hennessey, 2000).

For Central Indiana and the state, benchmarking would be a long-term effort requiring considerable support from public officials and leaders. However, it is one process that could enhance cooperation and offer a better potential for future success.



Effective and committed leadership is essential for development of a successful benchmarking program in Indiana.

Endnote

¹ In June 2003, the U.S. Office of Management and Budget revised the definition for Metropolitan Statistical Areas. This revision affects the boundaries of many MSAs, including Indianapolis. As the indicators and rankings discussed here are earlier than 2003, the old MSA designations are used.



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Central Indiana's Future: Understanding the Region and Identifying Choices

Central Indiana's Future: Understanding the Region and Identifying Choices, funded by an award of general support from Lilly Endowment, Inc., is a research project that seeks to increase understanding of the region and to inform decision-makers about the array of options for improving quality of life for Central Indiana residents. Center for Urban Policy and the Environment faculty and staff, with other researchers from several universities, are working to understand how the broad range of investments made by households, governments, businesses, and nonprofit organizations within the Central Indiana region contribute to quality of life. The geographic scope of the project includes 44 counties in an integrated economic region identified by the U.S. Bureau of Economic Analysis.

This analysis is part of an ongoing Center study to compare Indianapolis with eight other regions. We present a number of rankings and indicators for Indiana and the Indianapolis MSA, and for the eight other regions and the six states in which these regions are located. We examine how rankings are created and explain why they sometimes receive too much attention. We discuss benchmarks and why they are more useful than rankings for improving Indiana.



Central Indiana Region

The Center for Urban Policy and the Environment is part of the School of Public and Environmental Affairs at Indiana University–Purdue University Indianapolis. For more information about the Central Indiana Project or the research reported here, contact the Center at 317-261-3000 or visit the Center's Web site at www.urbancenter.iupui.edu.

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