**The State of the Heartland: Indicators**

What goes into the factbook? How do we track how the Heartland region is doing?

“The State of the Heartland Factbook” for 2018 consists of two components: a group of measures tracking prosperity “Outcomes” in the region followed by an additional set of measures tracking the region’s standing on core “Drivers” of such prosperity.

Along these lines, the **“Outcomes”** section first assesses the topline prosperity of the Heartland region in relation to the rest of the nation. Following that, a longer “**Drivers”** section evaluates the Heartland’s stock of the assets and conditions needed to ensure optimal outcomes. This section at times implies priorities for future self-improvement. Taken together, the two sets of indicators provide a first-of-its-kind resource for helping Heartland citizens and their leaders better understand the opportunities and challenges facing the region.

Each set of measures has been designed with an eye to self-assessment and visioning on the part of leaders and citizens in the Heartland.

In each case, the factbook assesses how its featured indicators have changed since 2010—the trough of the recent financial crisis and recession. (Detailed information about the particular nature and source data for each set of metrics can be found in the Appendix on Methods and Measures).

**Outcomes**

The Outcomes section employs nine core indices to benchmark the region’s economic health relative to the rest of the nation. These indices address three dimensions of successful economic development: **growth**, **prosperity**, and **inclusion**.[[1]](#endnote-1)

What is economic development? Economic development is about putting the economy on a higher growth trajectory.[[2]](#endnote-2) As such, successful economic development boosts local fortunes by expanding the amount of growth present (*growth*); improving its quality through productivity gains and entrepreneurship that improve the standard of living *(prosperity*); and by doing that in ways that benefit all people (*inclusion*). To assess the Heartland’s economic standing and momentum, then, the following pages (and the parallel online interactive tool) display trend data within each of the three categories that track the Heartland’s progress in shaping an advanced, prosperous economy that works for everyone.

**Measuring Growth**

The factbook’s growth indicators measure changes in the size of the Heartland economy both in aggregate and locally, especially in states. Growth is not everything in economic development, or even the most important thing, but it matters and brings important benefits. Growth creates new opportunities for individuals and firms; places that are growing benefit from increased tax base. Along these lines, the Factbook measures the Heartland’s growth on the basis of straightforward measures of the size and growth of the Heartland’s labor market, economic output, and entrepreneurship:

* **Jobs.** Job numbers and their growth approximate the size of the economy and the level of labor demand by measuring the number of full- and part-time positions in a regional economy.
* **Output.** Real Gross Domestic Product (GDP) measures the total value of the goods and services produced in a region, including wages and profits—a standard of economic output.
* **Jobs at young firms.** Changes in the total number of full- and part-time wage and salaried jobs at young, private-sector firms age five years or less measures the impact of entrepreneurship in a regional economy.

**Measuring Prosperity**

Prosperity reflects changes in the wealth and income produced by an economy, which in turns shapes the potential living standards for workers and families. Prosperity grows in a place when increases in the productivity of its workers (whether through improved skills or the application of innovations) raises the value of workers’ labor—and so, in theory, their wages. As such, the factbook measures prosperity using three indicators designed to measure productivity, wages, and standard of living in the Heartland:

* **Productivity.** Output, as above, divided by the total number of local jobs, as above, yields the output per job, which is a basic measure of a place’s productivity.
* **Average wage.** Aggregate annual wages paid to workers divided by the total number of jobs yields the average annual wage per job in a location.
* **Standard of living.** Output, from above, divided by the total local population yields output per capita, which reflects place’s average standard of living.

**Measuring Inclusion** Inclusion indicators measure how the benefits of growth and prosperity in a region, state, town, or county are distributed among individuals. Inclusive growth enables more people to participate in the economy, increase and contribute their skills, and so raise aggregate demand while boosting prosperity and growth. In addition, ensuring that all people can contribute to and benefit from growth and prosperity also helps sustain social tranquility and widespread support for the policies on which growth and prosperity depend. In that sense, economic inclusion is the most effective way to ensure that economic growth is lasting. In this regard, the factbook measures labor market inclusion and inclusive financial wellbeing using three indicators:

* **Employment rate.** The employment-to-population ratio measures the share of individuals age 18 to 64 who are currently employed.
* **Median wage.** The median wage measures the annual wage earned by a person in the middle of an area’s income distribution (among people at least 16 years old).
* **Poverty rate**. The poverty rate measures the share of local individuals who received income less than the federal poverty threshold.

**Drivers**

To achieve solid and rising outcomes, though, states and regions must develop strong positionings on a set of key prosperity drivers. These factors matter because strong positioning on them will allow Heartland places to maximize prosperity and respond to the economic forces, such as globalization, technological change, demographic transition, and declining national investment in economic growth and opportunity.

To assess the region’s standing, then, the second Drivers section of the factbook (and the online interactive) discusses 19 additional measures focused on four crucial sources of prosperity: **tradeable industries**, **talent**, **innovation**, and **infrastructure and the built environment**.[[3]](#endnote-3) Measures arrayed across these categories undertake to evaluate the Heartland’s stock of the assets and conditions needed to ensure strong and improving outcomes on the preceding measures of inclusive growth. Here’s how the measures populate the categories:

**Tradeable industries**

“Tradeable,” export-oriented industries support regional competitiveness by driving productivity higher and bringing new wealth into a economy from outside the region. Such industries create a multiplier effect throughout the region and spur new economic growth and an improved standard of living. The Factbook looks at tradeable industries in the Heartland with four measures:

* **Advanced industries.** R&D- and STEM worker-intensive advanced industries—ranging from automotive manufacturing, to renewable energy, to digital services—anchor regional economies with their high-value, high-productivity, good-paying innovation and export activity.
* **Exports.** Exports generate financial inflows for states and communities, and also expand firms’ customer bases, increase firms’ competitiveness, and support good-paying jobs.
* **Agriculture.** Beyond generating much of the nation’s food supply the nation’s world-leading food exports counter a persistent deficit in non-agricultural merchandise trade.

**Energy.** Energy production is a significant source of prosperity, both as an export-oriented industry sector and as an input for nearly every other good and service in the economy.

**Talent**

Local workers’ skills and talents are critical to enhancing productivity, raising incomes, and driving economic growth. Cultivating a skilled and educated workforce, and connecting those workers to employment, are therefore critical for regional success. The region’s human capital is measured using eight indicators:

* **Population.** Population growth both bolsters labor supply and enhances consumer demand, and also serves a signal of local success, as individuals move to areas with stronger economic opportunity.
* **Young adult population.** Adults aged 18-to-34 are the largest segment of the U.S. workforce and an important consumer market, and as a result will be a major source of economic output for decades to come.
* **Bachelor’s degree attainment.** A bachelor’s degree leads to higher wages, better health, and greater job security, and regions with high bachelor’s attainment see stronger productivity, output, and consumption.
* **Size of the middle class.** A strong middle class, defined as the proportion of the population that is 50 percent to 150 percent of median household income, is linked to outcomes such as a better-educated population and stronger entrepreneurship.
* **Racial income gap.** Racial income gaps measure the variance in income across different racial groups, and are major barrier to inclusive economies; they exacerbate growing racial wealth divides, and reinforce structural disadvantages for certain racial groups.
* **Not-working rate (for prime aged men).** The not-working rate shows the proportion of the men 18-to-64 that are currently employed; not working worsens economic insecurity, reduces happiness and life satisfaction, and exacerbates health problems.
* **Opioid death rate.** Opioid overdoses, measured by the number of opioid overdose deaths per 100,000 people, are a growing public health pandemic that take a large toll on both an economic and human level.

**Innovation**

The innovation capacities of places are a key driver of long-term economic performance. Innovation not only allows economies to develop and deploy new commercial applications and start more new businesses. In addition, innovation can catalyze faster growth while also making a region more resilient in the face of disruptive change, in part by allowing local businesses to maintain industrial competitiveness. The factbook therefore measures innovation by assessing the assets required to both generate new technologies and translate them into new economic opportunities. Five indicators are employed:

* **Research and development spending.** R&D spending, measured by the percent of gross state product spent on R&D, generates new products and processes that boost productivity and support economic growth.
* **University technology transfer rankings.** These rankings measure which universities are most effective converting research into commercial intellectual property, an important source of product and industry innovations.
* **Venture capital spending.** Venture capital, measured in the amount of VC spending per state, enhances entrepreneurship by helping to create new firms, as well as improving the operations of startup firms.
* **Metropolitan area economic activity.** Cities and their surrounding areas generate the majority of U.S. output and exports, and are hubs for highly productive workers, so measuring the output produced by metropolitan areas is an important benchmark.
* **Digitalization score.** Digitalization scores measures the average level of digital skills in the state’s labor market; higher digitalization leads to greater returns from increased worker productivity, and higher wages for workers.

**Infrastructure and Built Environment**

Infrastructure, both physical and digital, connect people and businesses to the broader economy. The way that land is used has a major impact on both the growth of a region, and how inclusive it is for people of all means. The factbook measures infrastructure and the build environment using three indicators:

* **Growth by community type.** The distribution of growth across place—here reflected in population growth--is a critical determinant of growth, prosperity, and inclusion.
* **Housing values.** Housing is one of the largest consumer expenses, so lower housing values allow individuals a higher quality of life, and reflect broader regional purchasing power trends.
* **Broadband access.** Broadband is essential to work, study, and remain connected in the 21st century economy, so lack of access to affordable, high-speed broadband inhibits individuals’ wellbeing and regions’ economic growth.

1. The framework articulated here follows that developed for the “Metro Monitor”—an annual benchmarking of the performance of the 100 largest U.S. metropolitan areas developed by the Metropolitan Policy Program at Brookings. See Chad Shearer and others, “Metro Monitor: An Index of Inclusive Economic Growth in the 100 Largest U.S. Metropolitan Areas” (Washington: Brookings Institution, 2018). [↑](#endnote-ref-1)
2. This definition of economic development reflects discussion in Maryann Feldman and others, “Economic Development: A Definition and Model for Investment (Washington: Economic Development Administration, 2016). [↑](#endnote-ref-2)
3. These drivers are drawn from the factors identified for regional prosperity by the Brookings Metropolitan Policy Program in partnership with Valley Vision, Greater Sacramento Economic Council, Sacramento Metro Chamber, Sacramento Region Business Association, and Sacramento Area Council of Governments. See Joseph Parilla, Sifan Liu, and Marek Gootman, “Charting a course to the Sacramento region’s future economic prosperity” (Washington: Brookings Institution, 2018). [↑](#endnote-ref-3)