

THE 2014 State New Economy Index

Benchmarking Economic Transformation in the States



EXECUTIVE SUMMARY



**“It is not the strongest of the species that survive,
nor the most intelligent,
but the ones most responsive to change.”**

— Charles Darwin

THE 2014 STATE NEW ECONOMY INDEX

EXECUTIVE SUMMARY

The conventional view of the U.S. economy, and of state economies, is as static entities which change principally in size (growing in normal times and contracting during recessions). But in fact, state economies are constantly evolving complex ecosystems. Indeed, U.S. state economies of 2014 are not just larger but different than the state economies of 2013. On any given day this year each state will on average be home to businesses that receive 12 patents, release nine new products and introduce nine new production processes, while about 32 firms will go out of business and another 32 will be launched. Firms in some industries will get bigger (the average number of workers in non-store retailers—e.g., the Amazon.coms of the world—grew 0.03 percent every day in 2013) while some will get smaller (the average size of data processing, hosting, and related services shrank 0.07 percent every day in 2013, despite the emergence of cloud computing). Understanding that we are dealing with evolving rather than static state economies has significant implications for state economic policy.

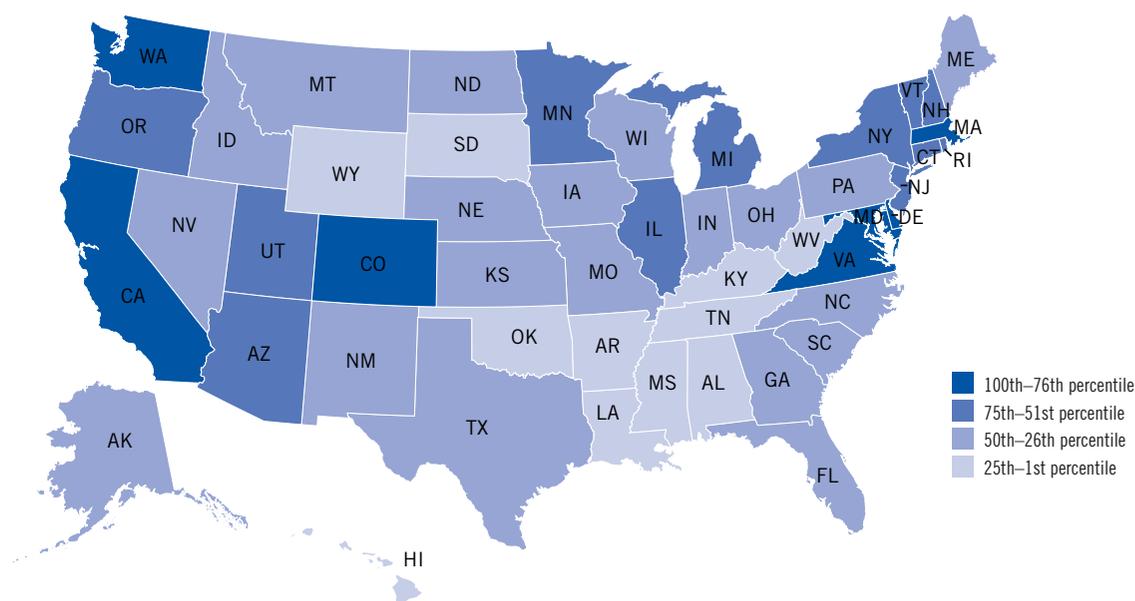
The challenge for state economic development is to encourage evolution. This means helping the states' traded sector companies to both win in advanced

technology sectors and to slow the loss of more mature industries to lower cost locations. But evolution also means that government should not only not erect barriers to natural evolutionary loss (e.g., the loss of output of some firms and industries coming from disruptive technological change), it should actively remove barriers to such disruption. This means reducing the regulation and other protections that incumbents (big or small) face vis-à-vis more entrepreneurial (big or small) innovators. And it means both encouraging innovation through smart state technology-based economic development strategies and programs while also ensuring a tax and regulatory environment that supports state competitive advantage. In short, to be well positioned to drive economic evolution, state economies need to be firmly grounded in what can be called “New Economy” success factors, which assess states' fundamental capacities to successfully navigate the shoals of economic evolution.

The 2014 State New Economy Index builds on six prior State New Economy Indexes published in 1999, 2002, 2007, 2008, 2010 and 2012. Overall, the report uses 25 indicators broken up into five key areas that best capture what is new about the New Economy:

Understanding that we are dealing with evolving rather than static state economies has significant implications for state economic policy.

Figure 1: Overall score percentile map



1. Knowledge Jobs
2. Globalization
3. Economic Dynamism
4. The Digital Economy
5. Innovation Capacity

The state that is farthest along on the path to the New Economy is Massachusetts, as it has been in all previous editions of the State New Economy Index. Boasting a concentration of software, hardware, and biotech firms supported by world-class universities such as MIT and Harvard, Massachusetts survived the early 2000s downturn and was less hard hit than the nation as a whole during the Great Recession in terms of job growth and per-capita income growth. As in the 2012 Index, Massachusetts shares the top quartile with Delaware, California, Washington, and Maryland. Second-place Delaware is perhaps the most globalized of states, with business-friendly corporate law that attracts both domestic and foreign companies and supports a high-wage traded service sector. The state has moved up four ranks since 2010, driven by top

rankings in high-wage traded services, foreign direct investment, and industry investment in R&D. Third-ranked California thrives on innovation capacity, due in no small part to Silicon Valley and high-tech clusters in Southern California. California still dominates in venture capital, receiving 55 percent of U.S. venture investments, and also scores extremely well across the board on R&D, patents, entrepreneurship and skilled workforce indicators. Washington State, in fourth place, ranks in the top five due not only to its strength in software and aviation, but also because of the entrepreneurial activity that has developed in the Puget Sound region and the widespread use of digital technologies by all sectors. Maryland and Virginia, ranked fifth and seventh respectfully, have realized high rankings primarily due to high concentrations of knowledge workers, many employed with the federal government or related contractors in the suburbs of Washington, D.C. Colorado, in sixth place, maintains a highly dynamic economy along with the second-most highly educated workforce in the country. The state has become a hotbed for high-tech innovation in the middle of the country and scores well on entrepreneurship and knowledge-employment indicators. Eighth-place

In the New Economy, innovative capacity (derived through universities, R&D investments, scientists and engineers, highly skilled workers, and entrepreneurial capabilities) is increasingly the driver of competitive success.

Connecticut excels in traded services, aided by a highly educated workforce, high levels of foreign direct investment, and excellent broadband infrastructure. The state also enjoys robust R&D investment and high scores in inventor patents and fast-growing firms. Ninth-place Utah ranks first in economic dynamism. Moreover, its high-tech manufacturing cluster centered on Salt Lake City and Provo supports its second-place ranking in manufacturing value added. New Jersey's strong pharmaceutical industry, coupled with a high-tech agglomeration around Princeton, an advanced services sector in Northern New Jersey, and high levels of foreign direct investment, helps put it in tenth place.

The two states whose economies have lagged the most in making the transition to the New Economy are

Mississippi and West Virginia. Oklahoma, Arkansas, Louisiana, Wyoming, Kentucky, Hawaii, South Dakota and Alabama round out the bottom 10. Historically, the economies of many of these states depended on natural resources, on tourism, or on mass-production manufacturing, and relied on low costs rather than innovative capacity to gain a competitive advantage. In the New Economy, however, innovative capacity (derived through universities, R&D investments, scientists and engineers, highly skilled workers, and entrepreneurial capabilities) is increasingly the driver of competitive success, while states only offering low costs are being undercut by cheaper producers abroad. Regionally, the New Economy has taken hold most strongly in the Northeast, the mid-Atlantic, the Mountain West, and the Pacific regions.

Table 1: State ranks and overall scores

1. Massachusetts	94.7	14. Vermont	69.5	27. Nevada	58.7	40. Tennessee	51.3
2. Delaware	85.1	15. Oregon	69.3	28. Maine	58.3	41. Alabama	50.4
3. California	83.7	16. Illinois	67.1	29. Ohio	58.3	42. South Dakota	49.0
4. Washington	82.5	17. Arizona	67.1	30. Wisconsin	57.8	43. Hawaii	48.4
5. Maryland	81.5	18. Michigan	67.0	31. Kansas	57.3	44. Kentucky	48.4
6. Colorado	81.4	19. Rhode Island	66.8	32. Alaska	56.8	45. Wyoming	48.1
7. Virginia	80.9	20. Texas	65.2	33. Missouri	56.8	46. Louisiana	47.0
8. Connecticut	77.6	21. Georgia	64.3	34. South Carolina	56.6	47. Arkansas	44.2
9. Utah	77.0	22. Pennsylvania	63.2	35. Nebraska	56.0	48. Oklahoma	44.1
10. New Jersey	75.4	23. North Carolina	63.1	36. North Dakota	55.8	49. West Virginia	39.8
11. New Hampshire	74.6	24. Idaho	62.3	37. Iowa	54.8	50. Mississippi	38.0
12. New York	73.0	25. Florida	61.6	38. Indiana	54.6		
13. Minnesota	71.7	26. New Mexico	58.7	39. Montana	54.4		

States that score highly on the State New Economy Index are best able to face the challenges brought on by the New Economy transformation, while lower-scoring states have significant ground to make up. While low-scoring states would perhaps benefit most from implementing comprehensive and cogent innovation strategies, even the high-scoring states have room for improvement. Indeed, all of the states, and perhaps most importantly, the federal government, need innovation strategies in order to compete in the New Economy. Successful strategies will incentivize, among other things: having a workforce and jobs based on higher skills; strong global connections; dynamic firms, including strong, high-growth startups, industries, and individuals embracing digital technologies; and strong capabilities in technological innovation.

Other nations and sub-national governments have shown increased interest in technology-based economic development (TBED). With the rise of the Internet, regions around the globe can now easily and quickly learn from each other and pick from best-in-class policies and programs to institute at home, often with appropriate customization to fit local conditions and policy frameworks. U.S. state and local economic development officials would be well advised to track what their competitors are doing abroad, for there are many interesting and effective models for spurring TBED that may be adopted within the United States, especially in four key areas: 1) economic development analysis and strategy; 2) financial incentives for innovation; 3) education reform; 4) and startup support. Adopting these policies would help reconfirm the United States' position as a global innovation leader in this period of intense evolutionary competition.

ABOUT THE AUTHORS

Dr. Robert Atkinson is the president of the Information Technology and Innovation Foundation. He is also the author of the books *Innovation Economics: The Race for Global Advantage* (Yale University Press, 2012) and *The Past and Future of America's Economy: Long Waves of Innovation that Power Cycles of Growth* (Edward Elgar, 2005). Dr. Atkinson received his Ph.D. in City and Regional Planning from the University of North Carolina at Chapel Hill in 1989.

Adams Nager is an economic research assistant at the Information Technology and Innovation Foundation. Areas of interest include macroeconomic growth, competitiveness, and tax theory. Prior to ITIF, Adams was a student at Washington University in St. Louis, where he earned an M.A. in Political Economy and Public Policy and a B.A. in Economics and Political Economy.

ACKNOWLEDGEMENTS

We would like to thank our colleagues Ben Miller, Kathryn Angstadt, Bethany Imondi, and Alex Key at the Information Technology and Innovation Foundation for their editorial support.

We would also like to thank those who provided data and background information for the index, including Stephanie Craig, Paul Taylor, Center for Digital Government, and Luke Stewart.



www.itif.org

Information Technology and Innovation Foundation
1101 K Street NW • Suite 610 • Washington, DC 20005

mail@itif.org • Phone: (202) 449-1351 • Fax: (202) 638-4922 • Twitter: @ITIFdc