There are no translations available.

Publication year: 2012

Source: Ecological Indicators, Volume 18, July 2012, Pages 330-341

Kenneth J. Bagstad, Md Rumi Shammin

Cities and regions are increasingly accounting for the diverse economic, social, and environmental contributions to sustainability and guality of life. However, most commonly used socioeconomic and environmental indicators are either difficult to use in policy or fail to comprehensively reflect social well-being and environmental sustainability. This paper articulates the limitations of urban and regional indicator sets and macroeconomic measures like the Gross Domestic Product (GDP), presents an alternative indicator, the Genuine Progress Indicator (GPI), and develops, improves and applies it for Northeast Ohio. We calculate the GPI for the State of Ohio, cities of Akron and Cleveland, and 17 Northeast Ohio counties for the years 1990–2005. We evaluate temporal and spatial GPI trends, including inter- (Ohio versus other comparable U.S. local GPI studies) and intra-regional (urban-suburban-rural) comparisons. From 1990 to 2005, we found that per capita GPI grew in 11 counties and the State of Ohio (growth ranging from 0.8% to 19.7%) but declined for six counties and the cities of Akron and Cleveland (declines ranging from 0.6% to 22%). Per capita GPI was greatest in suburban counties and lowest in urban areas, and was greater in Maryland and Vermont than Ohio. These trends are largely driven by gains in personal consumption versus other environmental, social, and economic costs. Important costs include income inequality, climate change, nonrenewable resource depletion, and consumer durables. The GPI is increasingly being estimated at local scales to complement existing urban indicators by providing a common monetary basis for measuring diverse costs and benefits. Finally, we report the effect of renewable portfolio standards and conversion of vacant lots for urban agriculture on the GPI through a series of scenario analyses at the county and city scales. These scenarios demonstrate how GPI can be used as a decision tool for local and regional development. In addition, local GPI measures offer opportunities to better engage the public and decision makers in discussions about economic, social, and environmental goals and policies. Read Full Article