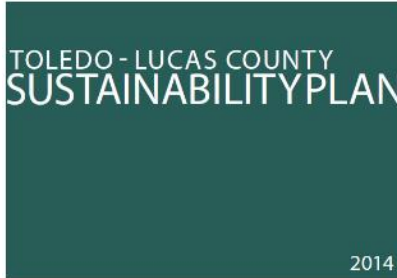


Toledo-Lucas County, Ohio "Going Beyond Green" Sustainability Index: Quantifying Quality of Life



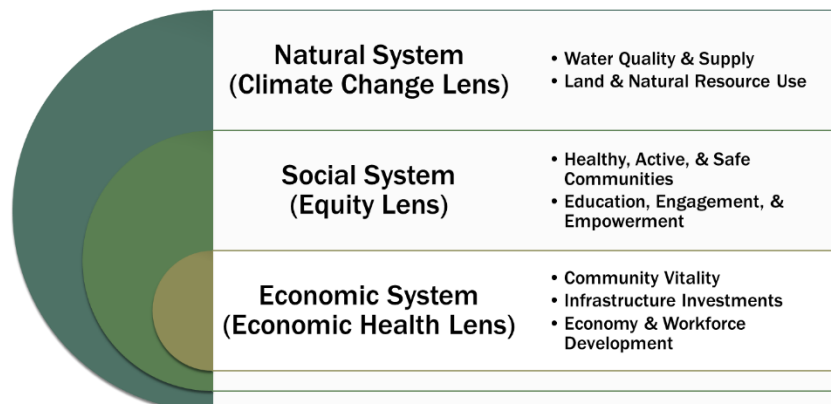
You've likely come across headlines promoting the "10 Happiest States in the U.S.," or the "50 Best Places to Live in 2014," but how do publishers come to these conclusions? Measuring the quality of life in a region is difficult to do, but increasingly, professionals are taking this task on and asking the question - what makes people happy, and how does this relate to sustainability?

Brendle Group recently worked with the Toledo-Lucas County Sustainability Commission to develop a regional sustainability plan – [Greater Toledo Going Beyond Green](#) – to guide the region's next steps towards sustainability and to strive to create a region with vibrant, sustainable communities and happy, healthy citizens. As part of this work, Brendle Group worked with the Commission to develop an approach to quantify the overall sustainability and quality of life of the Toledo-Lucas County region so that performance and outcomes can be measured moving forward.

Going Beyond Green is organized around the concept of the Triple Bottom Line with an aim to protect and restore natural systems, enhance social systems, and grow healthy economic systems in the Toledo-Lucas County region. Through coordination with community stakeholders, the Commission identified a defining issue for each of the three systems – these defining issues became "lenses" through which the entire plan was developed and will be evaluated. Within the Triple Bottom Line systems, Going Beyond Green also has seven focus areas around which action is taken and progress is made, from water quantity and supply to education to infrastructure investments (Figure 1).

To ensure the plan is having the desired effect, Toledo-Lucas County is taking a holistic view of planning for a sustainable future, translating complex information and a wide array of topics into one clear and common measurement – the Going Beyond Green Sustainability Index. Brendle Group worked with the Commission to create a comprehensive Index based on 10 key indicators, one for each

Figure 1. Going Beyond Green's System and Topic Areas



of the three Triple Bottom Line systems/lenses and one for each of the 7 focus areas. By comparing the performance of each indicator to an identified target and normalizing the indicators on a 1 to 100 scale, the Toledo-Lucas County region will be able to track the individual performance of each regional priority, but also integrate performance into one comprehensive Sustainability Index to help more concisely communicate results to elected officials and residents, and to inspire action.

Table 1 summarizes the 2012 baseline performance of the Toledo-Lucas County region with a Sustainability Index score of 41. The goal, embodied in Going Beyond Green, is to increase this score to 70 by 2030. A report card will be used to communicate progress not just toward the overall Index score, but also toward the 10 key indicators that comprise the index.

Table 1. 2012 Baseline Going Beyond Green Sustainability Index Results

Indicator	Description	Baseline	Goals	Report Card
Greenhouse Gas Emissions per Capita	A measure of pollution contributing to climate change.	37 MT CO ₂ e	22 MT CO ₂ e	
Phosphorus Loading ^[i]	A measure of how clean our streams and lakes are.	2,623 MT Total Annual 1,275 MT Total Spring 255 MT DRP Spring	1,600 MT Total Annual 800 MT Total Spring 150 MT DRP Spring	
% of Land Area as Open Space ^{1 [xii]}	A measure of how much land we've protected for plants and wildlife.	6% of land area	8% of land area	
Income Disparity (Gender, Race, Region) ^[v]	The difference in income among different groups in the County.	53%	27%	
County Health Ranking ^[iii]; Crime Rates (per 100,000 people) ^[iii]	Measures how healthy we are and how much crime is reported in the County.	72 out of 88 956 violent crimes 3,568 property crimes	36 out of 88 478 violent crimes 1,784 property crimes	
High School Graduation Rate (weighted average) ^[iv]	Percentage of high school students graduating.	83%	90%	
Median Household Income (% of US Average) ^[v]	The average income households in Lucas County earn each year.	79%	100%	
Household Expenditures for Housing and Transportation ^[vi]	Percentage of income households spend on housing and transportation.	53%	45%	
Infrastructure Grade ^{2[vii]}	Regional infrastructure performance (water, energy, transportation, etc.).	C-	B+/A-	
Unemployment Rate ^[v]	The number of people without jobs in Lucas County.	8%	4%	
GOING BEYOND GREEN SUSTAINABILITY INDEX				

¹ Only includes Swan Creek Watershed due to available data. Refinements to the indicator will occur during plan implementation

²American Society of Civil Engineers average grade for the state of Ohio. A regional grade will be developed during plan implementation.

MT = metric tons

CO₂e = carbon dioxide equivalents

DRP = dissolved reactive phosphorus

So how does GBG's Sustainability Index quantify social sustainability?

Of the three Triple Bottom Line Lenses, social sustainability is often the most difficult to track and measure. From the vantage point of the Going Beyond Green social lens, the Plan looks at two focus areas – Healthy, Active, and Safe Communities; and Education, Engagement, and Empowerment. To track progress within these two focus areas as well as the social system lens of equity, the Going Beyond Green Sustainability Index includes a County health ranking, crime rates, high school graduation rates, and income disparity within its list of key indicators. For each of these indicators, Brendle Group worked with the Commission to benchmark where the region is currently so that it can set goals, make changes, and track progress as it looks to improve quality of life within Toledo-Lucas County.

Connecting social sustainability with the other two triple bottom line systems.

The holistic and systems-thinking approach of Going Beyond Green also means that the Plan considers the impact of each Triple Bottom Line system on the others. The social system lens, for example, considers factors such as how citizens on the lower end of the socio-economic spectrum tend to be more vulnerable to the negative impacts of climate change - including severe weather, unstable agricultural supply chains, and volatile energy prices - or that crime, mortality, and high school graduation rates all rise and fall with overall socio-economic status. Going Beyond Green also looks to opportunities such as providing accessible transportation options, job skills training, and access to educational and cultural resources that will improve the quality of life for those with the least access to the environmental and cultural wealth of the region.

For additional information about Toledo-Lucas County's regional sustainability plan, visit the Toledo-Lucas County Sustainability Commission's www.lucascountygreen.com/.