

CRT Farms and Natural Lands: Research Overview

The ten-county region surrounding Nashville has an incredible economic and environmental treasure worth billions of dollars, but until now we haven't realized its true worth and all too often have taken it for granted.

What is it? Farms and Natural Lands are defined as farms, forests, parks, greenways, trails, wetlands and wildlife preserves as well as large residential lots.

Taken together, these Farms and Natural Lands bring in over \$5.2 Billion in salaries every year from 177,900 jobs. \$16.4 billion from agriculture and forestry. Plus \$15 Billion in increased property values.

But there's even more to it. Our Farms and Natural Lands bring us more than \$3 Billion in the increasingly important eco-systems services by cleaning our air and water and performing other vital tasks including keeping us safer from flooding.

They also dramatically lower our health care costs by more than \$400 Million per year.

This powerful economic impact also includes a literally untold amount of eco-tourism that our region does not have reliable statistics on but soon will.

Our ten-county region has more than 3 Million acres of Farms and Natural Lands. 1/3 of it is farmland, and 2/3 is forests, wetlands, parks and large-lot residential areas. Only 15% of it is protected from development. 85% of it is in private hands. And we are losing it—fast. At a rate of more than 26,000 acres per year.

CRT is releasing this groundbreaking study, which goes into great detail about the economic impact and other values of our farms and natural lands, to lay the groundwork for action to make sure we don't lose what we have without knowing its worth. It looks at every category in every one of our ten counties. And the results are breathtaking.

We already know how beautiful it is. We know how much it defines us culturally. We know how our green vistas inspire us. Until now, we didn't know just how valuable it is. And we still don't know how to protect it and expand it. But CRT will continue our research to find out.

CRT has created a "dream team" of environmental groups, farmers, developers, business people and academic experts to guide our region in developing innovative new approaches to understanding our beautiful lands and making sure we protect as much of it as we can even while our population is exploding.

Now that we know how valuable this land is, we need to talk together as leaders to answer the following questions:

What are the best practices around the country for protecting and expanding farms and natural areas?

What new and innovative opportunities exist to leverage our unique combination of regional assets?

What are the best funding streams from private, public and philanthropic sources?

What food security, health security and economic advantages can we give the next generation that stem from our farms and natural areas?

How much of our rural heritage and culture can we preserve—and showcase—as our eco-tourism industry evolves?

How can this region become a world class competitor in the farms and natural lands economic category?

These questions urgently need our attention.

Our region is drop dead beautiful. We don't want to be the last ones to enjoy it. We want to give our children all that we were given—and then some—our homegrown legacy and all its potential.

CRT is uniquely able to bring together all the key players to discuss our regional vision for farms and natural lands and to work together to find the best strategies and policies to move us forward.

Can you picture our region without its amazing green vistas, farms and forests? Without clean water and air? No way. And with this study and your help, we won't have to. Go to www.cumberlandregiontomorrow.org and join us by volunteering, donating or spreading the word.

Study Overview:

The study was sponsored by CRT and funded by the Atticus Trust and the MSB Cockayne Fund. The research team was led by respected academic expert Dr. Charles Sims <http://bakercenter.utk.edu/charles-sims/> assisted by a team of top researchers from the Howard H. Baker Jr. Center for Public Policy at the University of Tennessee.

The study by design is heavy on data and includes over 30 detailed tables and figures that present numerical values for everything from flood prevention to employment to agricultural sales and wildlife habitat. This research is unprecedented in scope and no doubt will be useful to businesses, environmentalists, state agencies and private citizens for years to come. For further questions, contact Carol Hudler at 615-881-9348 or carol@cumberlandregiontomorrow.com.

CRT SUMMARY OF FINDINGS FROM FARMS AND NATURAL LANDS RESEARCH

Note: The research intentionally does not include “one” overall number representing the economic impact of farms and natural areas as each impact offers a “multiplier” effect and there is extensive overlap between them. Instead, the research defines several categories of impacts and offers numerical data on economic impact within each category.

RECREATION AND HEALTH FINDINGS

Over \$1.3 billion in benefits accrue annually to residents who participate in recreational activities on public open space in the Cumberland Region. This estimate is equivalent to \$1,913 in recreational-use benefits per household per year. This value represents the additional amount of money that residents would be willing to spend in the private market to participate in recreational activities they currently enjoy on public open space.

The direct and indirect medical cost savings due to physical activity on open space is estimated to be \$213.7 million per year for the study area. Direct medical costs refer to the costs of actually treating the illnesses or medical conditions caused or exacerbated by physical inactivity, which include cardiovascular diseases, diabetes, depression, and certain cancers as well as obesity. These costs include preventive, diagnostic, and treatment services incurred at hospitals and other medical facilities.

The total reduction in workers’ compensation costs, including both direct and indirect costs, is estimated at \$4.5 million per year for the study area. Individuals can be eligible to collect workers’ compensation payments when injuries occur in the workplace. Research has shown that physical inactivity can increase the risk of suffering strains and sprains and the duration of the recovery period (Chenoworth and Bortz 2005).

It is estimated that businesses in the study area avoid \$247.7 million per year lost productivity costs because of the exercise their employees in engage in on open space in the region. There are two ways an employee’s physical inactivity can lead to lost productivity. The first is not being present or attending to duty or work (i.e., absenteeism). The second is being at work when they should be at home, either because they are ill or because they are too tired to be effective (i.e., presenteeism).

ECO SYSTEM SERVICES FINDINGS

The 3 million acres (4,838 square miles) of open space in ten-county study area contribute an estimated \$3.2 billion in annual cost savings and economic benefits through the provision of seven ecosystem services: water supply, water quality, flood mitigation, wildlife habitat, pollination, air pollution removal, and carbon sequestration. The allocation of ecosystem service benefits across the study area depends on the amount and type of open space in each county.

Trees on open space in the ten-county study area annually provide \$325 million in air pollution removal benefits. If all the forested open space in the ten-county region were developed, residents would experience an additional \$325 million in pollution-related impacts annually. The economic benefit of the pollution removal depends on how harmful each of these pollutants is to human health and ecosystem function and the amount of forested open space in each county.

DIRECT ECONOMIC ACTIVITY FINDINGS (Agriculture and Forestry.)

It is estimated that over \$16 billion in annual spending occurs on and because of agriculture and forestry in the ten-county study region. Examples of these expenditures include spending for the purchase of agricultural commodities produced on farmland, and spending to purchase timber products produced on forests.

Open space in the ten-county study region contributes up to 178,000 jobs to the regional economy. Examples of these jobs include farmers, distributors, and suppliers working on farmland; and loggers and mill operators that handle timber produced from forests.

Salaries paid to individuals working jobs on or related to open space in the ten-county study region total up to \$5.2 billion per year. The economic activity that takes place on and because of open space in the ten-county study region generates up to \$272 million in tax revenues via income and property taxes.

PROPERTY VALUES FINDINGS

All forests, wetlands, agricultural lands, shrub-scrub, and developed open space in the ten-county region increases the total value of the housing stock in the ten counties in Middle Tennessee by \$15 billion. This represents an average property value increase of \$30,535 due to the presence of the current stock of open space. The current open space in the ten-county region adds sixteen percent to the average home value. How much open space adds to home values depends on the type of open space (for example forest, agricultural land) in the vicinity of the house.

\$118 million in property tax revenues in the ten-county study area is due to the current stock of open space in the region. Increased home values attributable to open space would directly increase the property tax that residents pay to county and municipal governments and school districts.