

# The Urban Forest Provides Measurable Economic Benefits for Hoosiers

## FACT SHEET

### INDIANA URBAN FOREST BENEFITS CAN BE MEASURED BY...

#### ...RESIDENTS WILLINGNESS TO PAY.

In one urban area, urban forests are worth millions of dollars to residents.

- The average resident was willing to pay between \$26 and \$52 annually to avoid small decline.
- Total value for entire area ranged between \$5.4 million and 10.8 million to avoid small decline.
- Some residents may be willing to pay as much as \$100 to \$500 annually to avoid large decline.

#### ...ECONOMIC ACTIVITY ASSOCIATED WITH THE HORTICULTURE INDUSTRY

Indiana Horticulture firms create jobs

- There were 25,725 horticulture jobs in 2004
- \$586.6 million in wages were disbursed by horticulture firms

Spending by horticulture firms and employees generates more jobs

- An estimate 6,606 additional non-horticulture jobs were generated
- An estimated \$285 million in additional non-horticulture wages were generated.

Billions of dollars are spent in Indiana through business to business and household to business transactions

- \$2.05 billion in total spending is associated with the Indiana horticulture Industry
- Several non-horticulture related industries receive millions of dollars in spending associated with horticulture industry

# WHAT, WHY HOW, AND IMPLICATIONS

**WHAT:** The Center for Urban Policy and the Environment estimated and described the intangible economic benefits of resources committed to the urban forests of Indiana in a recent report to the Indiana Department of Natural Resources. That report addressed the issue from two perspectives. First, the monetary value residents of one urban area are willing to pay for a denser, healthier urban forest was estimated. Second, the Center estimated the economic activity generated by the horticulture industry as it assists with the preservation and expansion of the state's forests.

**WHY:** Policy-makers often rely upon statistics such as jobs, wages, spending, and citizens' willingness to pay for program outcomes when evaluating and determining how to distribute scarce public resources to a wide range of initiatives. It is widely known and accepted that forests moderate temperature, improve air quality, control water runoff and flooding, and reduce noise levels. However, policy-makers may be unaware of the monetary and economic values associated with the preservation of the urban forests.

**HOW:** The Center used two modeling techniques to estimate the monetary and economic values of forests. The urban forest is an amenity. Monetary values were estimated by determining the housing price premium residents pay to live in denser, healthier forest areas. Due to the complexity of estimating monetary value, the calculation of resident willingness to pay was limited to Marion County/Indianapolis, Indiana. While this is only one urban area, it is a typical urbanized area with types of development that potentially compromise the preservation of the urban forest. It serves as an example of how urban residents value denser, healthier forest areas.

The economic activity generated from forests in Indiana was estimated for the entire state. That model combines actual jobs and wages in the horticulture industry with the indirect and induced economic activities that result. The economic activity estimates include jobs, wages, and spending by horticulture firms and employees.

**IMPLICATIONS:** Urban forests can be valued in monetary and economic terms as well as ecological terms. Consideration of these values is an important step in considering initiatives to preserve and expand the state's forests in urban areas and elsewhere. Residents willingly pay premiums to live in areas with denser and healthier urban forests. The aggregate premium of over 5.4 million dollars in Marion County can serve as an example for how urban residents value the urban forest as an amenity. Residents of Indiana also benefit through the thousands of jobs and millions of dollars in wages that are available within the industry. Businesses and employees in non-horticulture related industries benefit from the billions of dollars spent by employees and firms of that industry.

Research Conducted by the Indiana University:



Contact the Center for Urban Policy and the Environment to receive a copy of the full report,  
334 N Senate Ave  
Indianapolis, In 46204-1708  
[www.urbancenter.iupui.edu](http://www.urbancenter.iupui.edu)  
Phone: 317-261-3000

07-C40

Funding for this research was provided by:

United States  
Department of  
Agriculture



Indiana  
Department of  
Natural  
Resources



IUPUI  
Solution  
Center

