

RESIDENTIAL

Trees accumulate particulate matter within their leaf surfaces, twigs, branches, and trunks resulting in reduced air pollution.

Trees regulate temperatures of homes, which reduces energy consumption and emission pollutants.

326,788 street trees in Indiana sequester 122,560,801 lbs of carbon dioxide valued at \$588,049 per year at an average of 375 lbs per tree and \$1.80 per tree per year.



Trees absorb air pollutants such as ozone, nitrogen dioxide, sulfur dioxide and carbon dioxide

MUNICIPAL

Established, mature trees remove nearly 70 times more air pollution than young, immature trees.

Urban trees across the United States produce an estimated 67 million tons of oxygen, which provides oxygen for about two-thirds of the U.S. population.

326,788 street trees in Indiana remove 594,651 lbs of air pollutants providing a total benefit of \$1,686,015 at an average of \$5.16 per tree per year.



Mature trees remove more than 3 lbs of pollutants/yr and young trees remove less than 1/4 lbs of pollutants/yr.

COMMERCIAL

Mature, large-growing trees reduce ozone levels by shading cars, structures, and paved surfaces, lowering hydrocarbon emissions and ambient air temperature by 5° to 10°F thus reducing the formation of smog.

Cars parked in lots with a tree canopy cover of 50% emit at least 8% less evaporative pollution emissions than cars parked with only 8% canopy cover.



Trees help clean air of pollutants, which improves public health and reduces hospital visits.

CHALLENGES

Reconstruction projects and new developments do not allow planting space for larger tree species and do not replace trees removed due to these projects.

Higher asthma rates among children are not blamed on canopy loss - more like polluted air.

Urban woodlots are being "bull-dozed" almost on a daily basis in Indiana, removing precious trees and habitat.

There are not enough local advocacy groups in Indiana to provide energy and direction for tree planting in our communities.

SOLUTIONS

Determine your urban forest structure, function, and needs with a public tree inventory and determine management inputs for zones based on the inventory.

Conserve and protect existing street trees, urban woodlots, and tree canopy in all zone classes with conservation/landscape ordinances.

Parking lot designs should include large planting spaces for massing of large to medium sized tree species to absorb hydrocarbon emissions.

Public and private urban woodlots need to be identified and conservation measures implemented for their protection.



Clean air makes for healthy and viable communities. This fact sheet produced by the Indiana Urban Forest Council, Inc. (IUFC) in partnership with the Indiana Department of Natural Resources, Community & Urban Forestry Program, will encourage citizens and policy makers to care for their trees for a healthier environment.

The IUFC is a not for profit organization dedicated to the public awareness of protecting, expanding, and improving Indiana's urban forests. It promotes public understanding of the need for trees and other natural resources in and along parks, green space areas, streets, and urban woodlands. The IUFC assists Hoosier communities in protecting, expanding and improving their urban forests.

CONTACT US

Visit the Web site at <http://www.iufc.org>.
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RESOURCES

- Lower Midwest Community Tree Guide
http://www.fs.fed.us/psw/publications/documents/psw_gtr219/psw_gtr219.pdf

- Indiana Department of Natural Resources

- Community & Urban Forestry
<http://lhlh.illinois.edu/all.scientific.articles.htm>



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INDIANA URBAN

FOREST COUNCIL

Urban Trees: Natural Air Cleaners

