



Why Trees???

Visitors to the East Row always remark about the wonderful tree canopy we have. Our tree lined streets contribute to the sense of 'neighborhood' that they feel. As a resident I am grateful to those who came before me and planted the trees that make the East Row such a desirable place to live.

I think we do not really appreciate how much benefit they provide - to our quality of life, our health, our energy costs, our property values, our businesses, and our sense of 'neighborhood'.

Trees help us save **energy costs**. The shade provided by trees in the summer can reduce our home cooling costs by up to 58%. In the winter, those same trees lose their leaves, allowing sun to reach and warm our homes while the evergreens block harsh winter winds and reduce our heating bills.

Trees enhance our **property values**. If I have a shade tree or my house is on a tree-lined street, my property is more valuable adding anywhere from 5-20%. Nationally the demand for greener neighborhoods continues to grow.

Trees improve **air quality**, a particular benefit to those with allergies or asthma, by trapping and holding a significant percentage of particulate matter, i.e. pollen, dust and smoke from the air. They also reduce levels ozone, nitrogen dioxide and sulfur dioxide pollution. The moment a tree is planted it starts removing CO₂ from the air. Over its lifetime, one tree can pull approximately 2,000 lbs. (one ton) of carbon dioxide from the atmosphere.

I enjoy walking our tree-lined streets. Do you wonder why it always feels cooler under our trees or out in the woods? It's not just due to shade. Leaves emit water vapor making the ambient temperature lower. When you walk along tree

canopied streets, one can feel the **cooler temperature** of differences of 5-15 degrees.

Trees enhance our **quality of life**. They have been shown to be beneficial for physical and mental health. Tracking patient recovery in hospitals, one study found that patients with trees outside their window (vs. parking lot or brick walls) recovered an average of one day faster and with fewer required pain killers. Trees can influence mental health as well reportedly having a calming and healing effect on ADHD adults and teens.



Our East Row trees support our **community**. What would the block party, the yard sale or the garden walk be like without trees? Would our streets seem as walkable if they weren't shaded? Tree lined streets entice neighbors outdoors on a regular basis. As we know, canopied tree settings support frequent, friendly interaction among neighbors--the foundation of neighborhood social ties. These ties are the heart of a neighborhood's strength, encouraging neighbors to help and protect each other. In a Chicago study, residents of buildings with more trees reported that they knew their neighbors better, socialized with them more often, had stronger feelings of community, and felt safer and better adjusted than did residents of more barren, but otherwise identical areas.

Trees are **good for businesses**. A recent study shows shaded business districts attract more shoppers and are responsible for longer shopping visits, as well as a sales increase of 11%. This study also reported that shoppers are willing to pay more for products found in business districts with an attractive tree canopy.

Where would you rather shop?



Our trees provide huge **benefits to our local waterways**. The sewer districts in Cincinnati (MSD) and Northern KY (SD1) alone dump *14 billion gallons* of combined sewage and runoff into the Ohio River every year. Why? As cities expand, water treatment plants are overwhelmed. More pavement means more rain runs directly into storm sewers mixing with sewage instead of naturally soaking into the ground. The old drainage systems that are in place now use the same pipes for this mixture of storm water and raw sewage. During or after heavy rains the huge amounts of this mixture can't be handled by the treatment plants and the toxic mixture overflows into the Ohio River. Our trees help stop storm water from reaching the sewer systems. A mature shade tree can hold back over 100 gallons of rainwater, and it's been shown that a forest cover can intercept up to 50% of a rainfall. To accomplish this feat with new pipes and treatment plants would be many times more expensive than planting more trees. A report done for the local organization Green Umbrella, claimed that a 10% reduction in the region's forest green space would cost at least \$10 million for equivalent storm sewer capacity.

So why do we want trees?

They save heating and cooling costs for the homeowner.

They increase property values.

They enhance air quality.

They provide a healthy environment

They enhance the sense of community in neighborhoods and support a positive social environment.

They moderate temperature.

They are good for small business.

They contribute to clean healthy waterways.

They enhance our quality of life.

Here are some interesting East Row tree facts 'by the numbers'

- *East Row street trees are responsible for over \$43,000 in annual energy savings for residents.*
- *East Row street trees can contribute from \$8-\$32 million to total property value.*
- *East Row street trees are responsible for removing 283 pounds of particulate matter and 2,424 pounds (over 2 tons) of chemical pollution from the air each year.*
- *East Row street trees are responsible for intercepting over 1.6 million gallons of storm water runoff each year – a services value of \$44,837.*



The information for this article was taken from a longer report entitled 2013 East Row Urban Forest Inventory and Analysis by Rachel Comte resident, certified arborist and environmental planning graduate student at the University of Cincinnati. The interested reader can find this report and its references at <http://eastrowgardenclub.org/trees/>.

TreeVitalize is a group of East Row residents who have started an independent program to assess, maintain and build our urban forest. This is the third in a series of articles to educate homeowners about their street trees. If you have a question about your tree that you would like to see covered in a future article or want to join the group, contact us at trees@eastrowgardenclub.org.

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