**Economic Benefits**

***A selection of facts and resources supported by research***

**2024**

**Overview**

Trees, green spaces, and nature provide significant economic benefits to communities, including reduced healthcare expenses, increased economic opportunity, and reduced energy expenses.

**Health Costs**

* Tree planting is associated with the **reduction of cardiovascular deaths**. This reduction was even greater as trees aged and grew (Donovan et al., 2022).
* **Physical activity in parks** impacts health care savings - between $4 and $69.4 million per year (Trust for Public Land 2022).
* Access to natural elements (even passive views) impacts **faster surgical recovery**, patient healing and higher pain thresholds (Wolf et al., 2015).
* **Elderly** patients participating in nature therapy programs report pain reduction, improvement in attention, reduced stress, lowered need for medications, and reduction of falls ([Detweiler et al. 2012](https://ehp.niehs.nih.gov/doi/10.1289/ehp.1408216#core-r29)).

**Work Life Balance and Job Retention**

* Nature views and indoor plants improve employee **morale/satisfaction**, decrease absenteeism, and increase efficiency (Wolf et al., 2015).
* Green spaces help employees **handle stress and recharge** (Wolf et al., 2015).

**Tourism**

* Urban forests and parks may play a significant role in **attracting tourism** and associated revenue ([Deng et al., 2010](https://ehp.niehs.nih.gov/doi/10.1289/ehp.1408216#core-r28)).

**Job Creation**

* Tree planting initiatives provide employment opportunities, from the **initial planting to ongoing maintenance.** The [Detroit Tree Equity Partnership](https://www.greeningofdetroit.com/green-your-life/2022/11/9/rooting-impact-in-detroit) is creating 300 jobs through its program to plant 75,000 trees (Greening of Detroit, 2022).
* The 2007-2015 MillionTrees NYC Campaign offered **training, wraparound social services, and assistance with job placement** in urban forestry for young adults who were previously disconnected from the workforce (Campbell, 2022).
* The Nature Conservancy and American Forests have national programs focused on educating and growing the **green workforce** (Campbell, 2022).

**Energy Savings**

* Trees offer **shade, improve air quality, and provide natural cooling**, reducing the need for air conditioning and lowering energy consumption (Wolf et al., 2015).
* **Parks can be up to 2°F cooler** than the surrounding urban area in the day, large numbers of trees and expansive green spaces across a city can reduce local air temperatures by up to 9°F (Wolf et al., 2015).
* Evergreens that block winter winds can save 3% on **heating** (The Mortan Arboretum, n.d.).

**Market and Non-market Values**

* Trees **produce products** (market value) like wood furniture, paper, and lumber (Cavendar-Barres et.al, 2022).
* Trees produce **non-market value** from services such as **carbon storage** and **air pollution** filtration—far exceeding their commercial value (Cavendar-Barres et.al, 2022).
* Experts have determined that every dollar invested in tree planting and management brings **returns of up to 500%.** (The Morton Arboretum, n.d.).
* A **single tree** can provide **$20,000 worth of benefits** over its lifetime (*The Social Benefits of Trees: How Trees Provide Value for Our Economy, Health, and Environment*, n.d.).

**Property Values**

* Nearby trees, particularly large ones, can **boost the price of a home** from 2% to 15%. Local governments capture those price effects in sales or property taxes across neighborhoods. (Goodwin, 2014).
* Trees and shrubs can significantly **reduce noise** and have a positive impact on property values ([Nowak et al. 2010](https://ehp.niehs.nih.gov/doi/10.1289/ehp.1408216#core-r96)).

**Storm Water Run Off**

* Trees and soil improve **water quality** by removing harmful substances washed off roads, parking lots, and roofs during rain or snow events (Wolf et al, 2015).
* Vegetation can **reduce the need for costly stormwater treatment** by retaining or slowing the flow of precipitation reaching the ground (Wolf et al, 2015).

**Shopping Districts**

* Shoppers respond to the overall aesthetics of their shopping experience, will **travel farther** to shop in tree-lined business districts and **spend more time and money** once they are there. They report more frequent shopping and willingness to spend 12% more on goods (Goodwin, 2014).

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