



**Delaware County
Regional Planning
Commission**

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Purpose

The benefits of street trees are many and diverse. However, in communities that lack the resources or authority to develop and maintain the network on their own, street trees can present a number of challenges. This has been the experience of some townships in fast-growing Delaware County. This fact sheet is intended to serve as a guide for communities that wish to explore a street tree policy.

The Benefits of Street Trees

Healthy “urban forests” can help communities achieve goals of environmental, social, and economic sustainability while reducing the impacts of pollution.

The community landscape can be understood as an overall ecosystem, with each part affecting the whole. A system of street trees functions in this system by mitigating environmental issues, such as air and water pollution. It also functions as a location for recreation and escape from the stresses of life.

By sheltering the street and parked cars, trees reduce the heat island effect, thereby reducing cooling costs. In developed areas, our health and welfare can benefit from exposure to natural settings. The benefits of trees are many:

Property values:

Values can be as much as 15% higher when properly landscaped. Properties adjacent to parks have values 8% to 20% higher than comparable properties. A single front-yard tree can increase home sale price.

Deferred street maintenance:

Paved surfaces that are shaded by trees have a longer life span. The oil binder in asphalt volatilizes in heat, leaving stone aggregate unprotected.

Reduction of traffic speeds:

Tall and closely-spaced trees give the driver a perception of speed in a narrower space. They also forewarn drivers of approaching curves.

Improving the pedestrian environment

Trees lining the sidewalk serve as a protective barrier between vehicles and pedestrians.

Environment impact

The environmental benefits of trees go beyond production of oxygen. Trees dissipate rainfall with their canopies. Rainfall that is captured and evaporated doesn't make it into the stormwater system. This reduces treatment and flood control costs. Treelawns can also be designed to intercept water piped from residential roofs and can pretreat stormwater before it heads toward the catch basin.

Choosing the right tree

Choosing the correct type of tree is vital for any street tree policy. The following are considerations for making that choice:

- Plant the right species for the location.
- Choose large shade trees over small trees.
- Plant native species.
- Plant low-maintenance trees.
- Plant drought-resistant species.

The other side of this bulletin includes a list of appropriate street trees.



Concerns

Despite the many benefits, street trees raise several valid concerns. Issues such as root infiltration and stormwater blockage are often cited as problems for local governments. Overhanging branches can damage utility and emergency equipment. Thick branches can shade the road during the winter, hampering snow removal. Proper setback from street intersections must be maintained so that drivers can see regulatory signs, particularly STOP signs. Finally, the public is typically unaware of their responsibilities, particular for maintenance of trees within the right-of-way. The other side of this fact sheet addresses these concerns with some basic policy considerations.



The correct street tree species grows without overhanging branches. To optimize the chance of survival, trees should have a 3-inch caliper at planting.

The list of street trees which grow well in Central Ohio is immense. This is a small sample:

- American Hornbeam*
- Freeman Maple*
- Ginkgo (male)*
- Hybrid Elm*
- Lavalle Hawthorn*
- Littleleaf Linden*
- London Planetree*
- Northern Red Oak*
- Red Maple*
- Schwedler Norway Maple*
- American Sweetgum*
- White Ash*

REFERENCES:

Roadside Trees in Your Township, Ohio Township News, July/August 2010.

Ohio Division of Forestry, Street Tree Evaluation Project.

Urban Forestry Toolkit for Local Governments

Note: This paper focuses on street trees, but environmental and psychological benefits apply to trees planted in yards, open space, and other places.

Successful Strategies for Homeowners

The average homeowner may be unaware of their maintenance responsibility for the trees on their property and within the right-of-way in front of their lot:

* Small trees should be pruned every eight years, medium trees every seven years, and large trees every twelve years.

* Prune early. Pruning soon after the establishment of a tree will train young trees to have strong branching structures that require less frequent trimming and shaping in the future.

* Young trees should be pruned every other year for the first five years after planting.

* Pruning costs increase as the tree matures, so get it done when it's the cheapest.

Survey trees for pest infestation and disease. By catching pests and diseases early, widespread outbreaks can potentially be evaded.

Policy Considerations	Problems addressed	Implementation
Limit trees to only those from a list of appropriate street tree species.	Overhanging branches, excessive shade, trees that drop material onto the street and sidewalk, roots that damage pipes and sidewalks.	Jurisdiction adopts a street tree list.
Require street trees be a certain distance from the curb (based on the type of tree), rather than behind the sidewalk.	Positions trees in a more appropriate location, may encourage larger tree lawns (5-foot wide minimum), while allowing for trees behind the sidewalk when the "tree lawn" needs to be narrow.	Jurisdiction adopts a policy of street tree location.
Create a street tree inventory and database.	Future management prescriptions can be better planned with an database of where healthy and non-healthy trees are.	Performed by either Maintenance Dept., Homeowners Association, or professional arborist.
Increase public involvement and environmental stewardship	Maintenance responsibility is often not known by the homeowner. Average person does not know how to trim/prune.	Develop a resource for homeowners or associations. (The RPC can help.)
Create a tree planting program where barren areas are targeted for planting.	Based on scale, local nurseries may offer bulk trees and planting services at reduced prices.	Jurisdiction level or subdivision/association level.

Residents will benefit from a list of resources, including local nurseries, arborists, landscape architects, and consultants, that homeowners can draw on to plant, maintain, and dispose of trees. These contacts could be provided with the adopted list of species acceptable for street planting. Accessible resources will help to make sure that urban forests on private and civic land are properly maintained.

