

Don't *leaf* it to chance: Adopt or update your Tree Ordinance

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Roadway

# Purpose and scope of Indiana's tree ordinances

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## Benefits of the urban forest (all trees in city)

Trees are **urban green infrastructure** that appreciate and grow in capacity over time *if well-managed*.

- Biophysical infrastructure
- Socio-economic infrastructure
- Public health infrastructure
- Mitigation/adaptation tools for climate change



## Tree ordinances, a part of a well-managed UF

- Sets good and legally enforceable policy guiding urban forest governance and management on public land.
- Should establish authority: a tree board or forestry department—or both—and establishes their responsibility for planning an/or operationalizing public tree care.
- Provides clear guidance for planting, maintaining and/or removing trees from streets, parks and other public spaces; details activities that are required or prohibited.





Ordinances reflect the values of a community, the values its residents believe are worth protecting to maintain their quality of life and an environment that is both safe and pleasant. A community's trees, often called the "urban forest," are very much the kind of community asset that deserves to be protected and managed for the common good.

A tree ordinance encourages beautification, air cooling and purification, noise abatement, property value enhancement and the other attributes of trees within a city. It also enables citizens to prevent and control the spread of diseases, to preserve trees in the path of development, and to avoid unnecessary costs associated with sewer clogging, sidewalk replacement and tree-related accidents. An ordinance may also give force and direction to professional tree care within the municipality's work force and helps control unscrupulous or careless operators.

Ordinances vary in length and complexity, but the key to effectiveness is to write the ordinance simply, clearly and tailored to the needs of your community. In the end, a tree ordinance is just another tool for proper tree care. Like any tool, it needs to be of high quality, matched properly to the job, and used with skill and care.

#### Suggested Sections for a Tree Ordinance

Although no two tree ordinances will be exactly alike, there are some basic elements that will help assure that the document is workable and effective. These elements are called sections, and they are presented here with examples and principles that illustrate why each one is necessary. Here are the first 2 of the 16 recommended sections.

#### I. PURPOSE

PRINCIPLE: An opening statement that clearly sets forth the purpose of the ordinance will help avoid ambiguity in interpretation. This initial section is usually capitalized and in bold print.

Example: IT IS THE PURPOSE OF THIS ORDINANCE TO PROMOTE AND PROTECT THE PUBLIC HEALTH, SAFETY, AND GENERAL WELFARE BY PROVIDING FOR THE REGULATION OF THE PLANTING, MAINTENANCE, AND REMOVAL OF TREES, SHRUBS, AND OTHER PLANTS WITHIN THE CITY OF \_\_\_\_\_\_.



II. AUTHORITY AND POWER PRINCIPLE: Someone within city government must have the clearly designated authority to administer the provisions of the ordinance. This section defines, designates, or creates a department, board, commission, or person responsible for the planting, care and protection of the city's trees.



Source: <u>https://shop.arborday.org/9-how-to-write-a-municipal-tree-ordinance</u>

## Importance of ordinance now more than ever

- Trees are key adaptation and mitigation tool for climate change
- But trees are also negatively impacted by climate change
- So they <u>must</u> be monitored and cared for at all scales to ensure ecosystem services are sustained or grow over time.
- Just as we manage gray infrastructure to ensure it withstands pressures, functions optimally, we manage urban green infrastructure.



"Historical" is an average for the period 1915 to 2013. "2020s" represents the average 30-yea future period 2011 to 2040. "2050s" represents the average 30-year period 2041 to 2070. "2080s" represents the 30-year period 2071 to 2100.



Source: https://ag.purdue.edu/indianaclimate/urban-ecosystems-report/

## Two data sets give us insight into Indiana Tree Ordinances

- Indiana Municipal Urban Forest Management Data set
  - Collected by IU student, Stephanie Freeman-Day in 2018-2019
  - Index included on the Indiana Green City Mapper: www.indiana-green-city-mapperiu.hub.arcgis.com

- 2. Indiana's Tree Ordinance Data set
  - Collected by IU student, Mathias Benko in 2021
  - Supported by Indiana Nature and Indiana Climate Fellows Program at IU: www.sustain.iu.edu/isdp/index.html

## 1. IN Municipal Urban Forest Management Data Set

What are the urban forest management characteristics for Indiana cities?

- Sampled 76 municipalities with "active" urban forestry programs:
  - Tree City USA (TCUSA) community and/or
  - Recipient of Community Urban Forestry (CUF) funding or Indiana Department of National Resources (IDNR) funding

- Inventoried 8 governance components for each city through online text analysis:
  - ✓ Tree City USA
  - ✓ CUF/DNR funding
  - ✓ Tree Ordinance
  - ✓Arborist on staff
  - ✓ Dedicated urban forestry program
  - ✓ Recent inventory
  - ✓ Recent tree report/plan
  - ✓ Tree advocacy group



## Why start by sampling TCUSAs in Indiana?

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- TCUSA status requires several key urban forest management characteristics:
  - **1. Tree ordinance**
  - Annual urban forestry budget (\$2 per capita)
  - 3. Tree board or department
  - 4. Annual Arbor Day celebration
- So, in Indiana:
  - All TCUSAs have a tree ordinance, but not all cities that have tree ordinances are TCUSAs

### Municipalities that have tree ordinances and are TCUSAs





Context: Indiana has opportunity to expand number of cities with ordinances through TCUSA

#### TCUSAs by state (2020)



#### Percent of population living in a TCUSA (2020)

- Kentucky- 38%
- Michigan- 39%
- Indiana- 42%
- Ohio- 46%
- Illinois- 61%
- National average- 50%

## Regardless of TCUSA stats, tree ordinances are associated with funding

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- State CUF funding from U.S. Forest Service passed to cities
- Projects funded include
  - Tree inventories and tree canopy inventories
  - Management and response plans
  - Professional education and training
  - Tree plantings
  - Community outreach and education







## But ordinances aren't associated w/ tree data

 Inventories often are of street trees and park trees (public owned) or are canopy inventories

Municipalities with tree ordinances and recent inventories



 Consultant- based inventories can come with an Urban Forest Report analyzing data, offering management suggestions



Ordinances are not associated with tree management expertise

- Arborists may be employed by the city or serve as contractors
- Many smaller communities use regional arborists



- Urban forestry programs led by arborist or urban forest manager
- Often a component of a larger department (i.e., Parks)

Tree ordinances and dedicated programs



## Almost half of the cities with tree ordinances also have a tree advocacy group

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- Advocacy groups like nonprofits are a way to expand resources, including time, funding, and expertise
- Activities include tree plantings, tree care, and community education
- Some municipalities have nonprofits with leadership roles in urban forest management



🗖 Yes- 30 📕 No- 36

## 2. Indiana Tree Ordinance Data Set

Research question: What is included in Indiana cities' tree ordinances?

- Methods
  - Identified 108 municipalities representing all Indiana counties
  - Searched online for tree ordinance per muncipality
  - Once found, inventoried contents of ordinances through keyword search including whether the ordinance included:
    - Approved tree species planting lists
    - Requirements for "indigenous" or "native" species
    - Addressed "invasive" species
- <u>Ongoing research</u>, but preliminary results include...

- Most deal with public right-of-way trees and implicate adjacent property owner in maintenance.
- Most focus on maintenance, centered around pruning / trimming.
- Some incorporate concepts of sustainability.
- For those with approved tree species lists, some are written directly into code (versus related management plans). Problematic since code can only be changed by council vote.
- More analysis to come...



## Tree ordinance best practices

Carrie Tauscher, Indiana's Community and Urban Forestry Coordinator

## Ordinances need to be based off:

- Data
- Management plans with clear goals/goals
- A clear vision for the desired future state of the urban forest in your community

If you don't know what you have you cant plan to manage it much less set meaningful legal guidelines

## Intro pieces

### Purpose

 A Statement That clearly sets the purpose of the ordinance(Law) will help avoid ambiguity and interpretation.

### Applicability

• What property is covered by the ordinance?

### **Authority & Power**

- Someone within city government must have clearly designated authority to administer the provisions of the ordinance.
- This sections defines, designates, or creates a department, board, commission, or individual responsible for the planting, care, and protection of city trees.

# Duties of the Tree Board VS. Duties of the City Forester

### **City Forester**

- ISA Certified Arborist or equivalent certification and training.
  - Other credentials
    - Tree Care Industry Association
    - Society of Municipal Arborists
    - Society of American Foresters

- Enforcement?
- Permits?
- Plan Review?
- Applicable but not ordinance based
  - Tree Work Crew Management
  - Contract Management
  - Where are they "housed"

# Duties of the Tree Board VS. Duties of the City Forester

### Tree Board

- ADF Recommends 1 attorney, 2 green industry, 2 interested residents
- CUF Recommends Tree boards of a minimum of 5 makeup is less strict but those without credentialed professionals should receive a small budget for training
- What requirements work best for your community?
- Must they be in your community if there are no ISA certified arborists in town?
- Consider the value of diversity and representation.
- Consider liaisons to critical boards that impact trees Sustainability, Streets, Stormwater....

## Definitions

To avoid misunderstandings of terms that may be unfamiliar, to citizens and staff, should be defined.

• Best Place-Standards and Specifications appendix.



## **Tree Protection**

If we wish to maintain and grow tree healthy canopy cover in our communities, we must strongly consider the feasibility of such a goal without tree protection in our ordinances.

- Invasive forest pests, insects/diseases that will harm the urban forest
- Retention of healthy trees on development sites
  - Following BMP for tree protection during construction.
- "Heritage trees" species rarity, old age, association with a historical event or person, abnormality, scenic enhancement.
- Retention of canopy for ecosystem services provided such as stormwater mitigation

https://www.itreetools.org/

### Private Trees

Trees on private property often affect the safety and welfare of other trees and people other than the owner.

A provision to allow community action is needed.

This section provides authority to inspect private trees designate them as public nuisances and demand their removal or mitigation such as pruning when necessary.

\*\*Some communities have the flexibility to cover this in existing nuisance laws.



## Licensing

- Conditions for obtaining a license may very but can include Requirements for:
  - Credentialing or Certification
  - Education
  - Mandatory annual training locally attainable or provided by the municipality
  - Insurance

**Did you know?** All businesses who do professional tree work in the City of Muncie have to have a registered Arborist License with the Urban Forestry Office, according to the <u>Muncie Tree Ordinance Sec. 97.05.?</u>

 A solid way to protect trees & citizens from irresponsible companies or individuals who pose as arborist is to require practitioners to have licenses.



## Permits

Permits provide a way to make certain that anyone who plants, works on, or removes public trees (and sometimes private trees) is knowledgeable and capable of doing the job right.

- Permits also are a means to ensure compliance with standards and specifications
- Allow for follow-up inspections
- Generally serve as a tool for enabling a community to guide the future urban forest condition

## Tree Planting Maintenance and Removal

**Topping** - It shall be unlawful as a normal practice for any person, firm, or city department to top any street, park, or other tree on public property.

The International Society of Arboriculture defines topping as an inappropriate technique to reduce tree size that cuts through a stem more than two years old at an indiscriminate location.



## Landscaping/ Planning and Zoning

- This section can address the process of having new landscape plans reviewed by the city forester or tree board with issuance of building permits.
- Elements of this are likely in existing planning and zoning ordinances.
- Make sure to seek out any and all ordinance that deals with tree related issues to reduce conflicting ordinances /requirements

### Tree Planting Maintenance and Removal

The Material in this section is best included in a separate "Standards and Specifications" Appendix/Addendum.

- It is more easily edited/updated with current Best Management Practices(BMP's).
- Exception: prohibited practices
- Reference ANSI A300 and Z133 standards and associated ISA BMP's



### Tree **Planting** Maintenance and Removal

### • Tree Species

- Spacing
- Recommended list(s)
- Restricted species
- May also provide an option for residents to submit for review by the tree board species not listed.

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- These lists are best set using inventory data to promote diversity
- Out of the body of the ordinance!



Tree **Planting** Maintenance and Removal

### **Distance from Curb and Sidewalk**

- How do you deal with older neighborhoods who don't have the minimum space?
- Are they allowed to replace lost trees?
- What about new sidewalks?
- Tree Compatible/adaptable pavement systems?
- Provide diagrams



## Tree Planting Maintenance and Removal

## Utilities

- Always default to your local overhead utility for the planting distances and clearance requirements. "Right Tree Right Place"
- Be careful, you may not be able to plant in ROW
- Distance to utility requirements may need to reviewed/set for tree maintenance and removal work and certifications needed to complete that work.



## Enforcement

For an ordinance to be more than a piece of paper, authority must be given to the **city forester or other official** to enforce the provisions. This includes the right to issue notices of violation, notices to preform work, and the ability to stop work.

Details about the process of rule making, review, and approval by the governing body and enforcement need to be included.

If you Ordinance has no TEETH, you don't have an effective ordinance.



### Vibrant Cities Lab <a href="https://www.vibrantcitieslab.com/toolkit/">https://www.vibrantcitieslab.com/toolkit/</a>

VIBRANT CITIES LAB

IMPACTS, RESEARCH, CASE STUDIES URBAN FORESTRY TOOLKIT RESOURCES LOGIN

MAKE IT HAPPEN

Vibrant cities cultivate thriving urban forests that boost public health, safety, sustainability, and economic growth.

MAKE THE CASE

## **Online Ordinance Resources**

- International Society of Arboriculture (ISA)
  - <u>http://www.isa-arbor.com/Credentials/Types-of-Credentials/ISA-Certified-Arborist-Municipal-Specialist/Tree-Ordinance-Guidelines</u>
- American Society of Consulting Arborists (ASCA)
  - <u>https://www.asca-consultants.org/page/TreeOrdinances</u>
- American Public Works Association (APWA)
  - <u>https://www2.apwa.net/Documents/About/CoopAgreements/UrbanForestry</u>/<u>UrbanForestry-3.pdf</u>
- Chicago Regional Trees Initiative (CRTI) Templates
- <u>https://www.dropbox.com/sh/mka3odgr5zn63ug/AADoQN667qMOD</u> <u>4z1L5Km41\_Ca?dl=0</u>

## **Resources Continued**

- National Arbor Day Foundation- Major Content of this PPT
  - <u>https://www.arborday.org/programs/treecityusa/apply.cfm</u>
- Tree Ordinance Development Guidebook- Georgia
  - <u>http://www.gatrees.org/community-forests/planning-policy/tree-ordinances/2005TreeOrdinance-100.pdf</u>
- USFS Sustainable Urban Forest Guide
  - <u>https://www.dropbox.com/s/u3izu1cb30ocikn/Sustainable\_Urban\_Forest\_Gu</u> ide\_14Nov2016.pdf?dl=0

## Examples:

- Bloomington Urban Forestry Plan -<u>https://bloomington.in.gov/about/trees/urban-forestry-plan</u>
- Columbia City Inventory and Management Plan <u>http://columbiacity.net/government/tree-board/</u>
- Highland Management plan <u>https://www.highland.in.gov/media/HighlandUrbanForestManagementPlan</u> <u>11-6-17.pdf</u>
- Ordinance: <u>https://www.codepublishing.com/IN/Highland/#!/Highland08/Highland082</u> <u>5.html#8.25</u>
- Valparaiso Urban Forestry <u>https://www.ci.valparaiso.in.us/1124/Keeping-Our-Urban-Forest-Healthy-and-Gro</u>
- Goshen Urban Forestry <u>https://goshenindiana.org/forestry</u> & <u>https://forestadaptation.org/GoshenIN</u>


### **Don't Leaf it to Chance – Adopt or Update your Tree Ordinance**

# City of Columbus Street Tree Ordinance Update Experience



- Not a Tree City USA
- Arborist in Parks & Recreation Department 1992-2013
- Attempt to update Street Tree Ordinance in 2011 unsuccessful
- Tree Canopy Partners Citizen Group 2016
  - Work towards becoming a Tree City USA
    - 1. A Tree Board or Department
    - 2. A Tree Care Ordinance\*
    - 3. A Community Forestry Program with an annual budget of at least \$2 per capita
    - 4. An Arbor Day Observance & Proclamation







### Chapter 12.20 STREET TREES AND SHRUBS 12.20.010 Planting. 12.20.020 Trimming to be done by owner. 12.20.030 Trimming to be done at owner's expense 12.20.040 Cutting by lineman. 12.20.010 Planting. A. For the purposes and uses of shade, health, comfort or ornament, it shall be right, proper and lawful for any person interested as owner, occupant, agent or holding or owning any legal or equitable interest in any real estate abutting and contiguous to any part or portions of any street or sidewalk in the city to plant, set out, grow and to perpetually cultivate and maintain any living tree for any or all of such purposes in, upon and along any such street or sidewalk in the city whereon or in such shade trees are usually set out and grown; provided, that the free use of the public streets and alleys of the city for travel shall not be interfered with or impeded. B. It shall be likewise right, proper and lawful for such owner or agent to plant, place, grow and maintain groundcover, including grass and other vegetation, in the public right-of-way adjacent to the owners property and not otherwise improved. (Prior code § 31-1) 12.20.020 Trimming to be done by owner. A. All persons who are owners of shade trees, or who are intended as owner or occupant or agent of any real estate abutting or contiguous to any part of any street on, along or in front of or adjacent to which shade trees are planted or growing shall cause the same

contiguous to any part of any street on, along or in front of or adjacent to which shade trees are planted or growing shall cause the same to be carefully and properly trimmed to a point on the tree as high as twelve feet from the ground; provided, that all such shade trees shall be trimmed on the side next to the street so that the limbs or branches where so trimmed shall not extend more than twelve feet from the trunk of such shade trees; provided further, that all such shade trees shall be so trimmed that in no case shall such shade tree or trees he more than fifty feet high.

B. It shall be the responsibility of the property owner to maintain the unimproved right-of-way area and the landscaped medians existing on local streets adjacent to his property. Said areas must be maintained in accordance with Chapter 8.32 and in such manner that when mowed that the grass clippings are not thrown onto the streets. (Prior code § 31-3)

#### 12.20.030 Trimming to be done at owner's expense.

All trimming of shade trees shall be done to the satisfaction of the motor vehicle/highway division of the code enforcement department whose duty it shall be to enforce this chapter. Such department shall in all cases where the property owners shall neglect or refuse to trim their shade trees in accordance with Section 12.20.020 eause the same to be done after five days notice to such property owner or agent and charge the expense thereof to such property owner, and collect the same according to law. (Prior code § 31.4)

#### 12.20.040 Cutting by lineman.

The electric lineman shall have the right and privilege to cut off limbs or branches of shade trees when actually necessary to the proper and careful placing, fixing and adjusting of the wires and proper lighting of the city. (Prior code § 31-5)

### <u>Current Street Tree Ordinance</u> Adoption Date Unknown

- 1. Any person may plant a tree in the right-ofway. – No standards
- 2. Property owners are responsible for trimming of trees.
  - Trim up to 12 feet from the ground on the street side
  - Not extend more than 12 feet from the trunk
  - Trimmed so shade tree is no taller than 50 feet.



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A. All persons who are owners of shade trees, or who are intended as owner or occupant or agent of any real estate abutting or contiguous to any part of any street on, along or in front of or adjacent to which shade trees are planted or growing shall cause the same to be carefully and properly trimmat to a point on the tree is high as breelve feel from the ground; provided, that all accuse the same to be carefully and properly trimmat to a point on the tree is high as breelve feel from the ground; provided, that all accuse shall be trimmed on the side next to the street so that the limbs or branches where so trimmed shall not extend more than twelve feel from the trank of such shade trees; provided further, that all such shade trees shall be so trimmed that in no case shall such shade trees to trees he more than fifty feet high.

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### <u>Current Street Tree Ordinance</u> Adoption Date Unknown

- Trimming shall be done to the satisfaction of the motor vehicle/highway division of the code enforcement department. – Department does not exist.
- If owner refuses, the City can perform the work and charge the property owner. – City performs the work and does not charge the property owner.

## Approach





- Get data Street Tree Inventory (DRG), Urban and Community Forestry Grant
- Understand current operations

### What the City is doing -





Engineering is planting street trees on road improvement projects.

Railroad overpass Tree Planting – 658 Native Trees

## What the City is doing -





- Public Works is pruning and removing trees for public safety.
- Public Works operates a 50/50 cost share program on street tree removal.
- Planning Department is requiring street trees to be planted in new subdivisions and some commercial projects.
- Parks is managing all park trees and some of the new street tree plantings.

### What the City is not doing -





- Preventative/proactive maintenance of existing street trees
- No review process for new street tree plantings
- No street tree standards
- Follow-up with new plantings
- Missing out on tree funding opportunities
- No public education

### **Ordinance Development**



Columbus Tree Canopy Partners Published by Melissa Spiker Begley O - May 13 - O

You may have noticed recent construction activity at the new State Road 46 Overpass. Over 2,100 trees and shrubs are getting ready to be planted as part of the overpass project. Initially 200 trees were removed for the new bridge and road alignment, but 685 new trees will be planted in the interchange infield area in a grid pattern matching the trees currently on the south side of State Road 46 and 1,526 new trees are being planted for environmental mitigation to the north ... See More



- Understand the barriers develop strategies
  - Public hard to quantify
  - Elected Officials Individual conversation, tree inventory presentation
  - Internal staff, department heads

## **Ordinance Development**

- Engage stakeholders (City staff, citizens with an interest in trees)
- Engage an elected official
- Draft Ordinance (DRG), Landmark Foundations Grant
  - Not a boilerplate
  - Reflect what we are doing
  - Provide basic standards
    - Reference Tree Work Manual
  - Moving us forward baby steps







### **Draft Street Tree Ordinance**

- 1. Definitions
- 2. City Responsibility reflect what we are doing – shared responsibility
- 3. Property Owner Responsibility better defined
- 4. Financial Assistance 50/50 program
- 5. Street Tree Committee City staff
- City Arborist aspirational
- Standards for Tree Care Tree Work Manual
- \*We are intentionally not designating authority.