Dane County Tree Canopy Working Group Strategy
2021

Vision

Access to trees is a human right. Everyone deserves the cool shade, clean air, better runoff management, and public health benefits that trees provide.

Trees confer both tangible and quantifiable as well as intangible benefits to Dane County's residents and the natural environment. Trees are nature-based solutions to pressing issues::

- *Environmental:* Trees provide flood protection, prevent erosion, and are a source of food and habitat to birds and small mammals while also providing opportunities for pollination.
- *Climate Resilience:* Trees protect people and property from the risks of climate change, such as by reducing impacts of floods and increased heat. Trees combat climate change by capturing greenhouse gases.
- *Public health:* Trees lower air temperature by providing shade and reducing the effects of a heat island in paved areas, which can mitigate effects of heat exhaustion, especially for vulnerable populations. Trees also improve local air quality and reduce air pollution, which directly impacts respiratory health, with the greatest benefits to our youngest and oldest residents. Trees also boost the mental health of residents by providing mental respite in a developed environment.
- *Economic value:* Trees increase property value while providing valuable economic services like reducing stormwater runoff and reducing erosion. Tree shade also reduces energy consumption and lowers utility bills.
- *Carbon sequestration:* Trees remove carbon dioxide and sequester it in their trunks and roots, helping to reduce the effects of carbon emissions across the county.

Given the vital role trees play, growing the tree canopy across Dane County is a critical strategy in a climate changing world, requiring a cross-disciplinary group of organizations interested in tackling this challenge. The aim of the Tree Canopy Working Group is to collectively maintain, protect, and expand public and private tree canopy across Dane County where ecologically appropriate. Within this aim, a particular focus is on ensuring equitable access to trees and their associated benefits for all residents.

Working Group Purpose
In order to achieve this vision, the Working Group is committed to generating collective impact by:

- Catalyzing a diverse group of leaders to build relationships with and across sectors;
- Working directly with local stakeholders to receive input, share information, and collaborate on location-specific goals and best practices;
- Leveraging efforts and resources;
- Collaborating to achieve common goals;

- Focusing on science-based decision making with an emphasis on setting realistic near-term actions based on political opportunities and constraints;
- Continually reevaluating the group's vision, goals, and anticipated outcomes in response to new information and transparently communicating goals and findings externally; and
- Avoiding duplication of efforts.

Partnership is fundamental to achieving success. Increasing tree canopy across the county is a multifaceted challenge, requiring diverse expertise and action by both the private and public sector. Consequently, the Tree Canopy Working Group can only be successful by collaboratively working with local stakeholders, including private citizens, nonprofits, and government. This includes working directly with local individuals and groups to share resources, best practices, and encourage increased attention toward tree maintenance, preservation, and tree planting. The Working Group will work collectively to co-develop goals with local experts, recognizing neighborhood opportunities, needs, and constraints.

Working Group Member Roles and Convening
Participation in the Working Group is rooted in a shared commitment to further the Working Group goals outlined below. Because this is a cross-jurisdictional challenge, members span private, public, and nonprofit sectors.

Members are committed to affirming and advancing the Working Group's strategic vision, and sharing responsibility for transparently enacting the identified annual goals. Members will convene every 6-8 weeks to ensure ongoing progress against the near-term actions and alignment with strategic outcomes. Group members will use each other as a resource to collaborate while internally championing the group's goals within their respective departments.

As the Working Group's structure becomes more defined, members will develop governance to determine specific responsibilities around meetings, agendas, work plan implementation, etc. This will likely include permanent and ad-hoc committees to advance various priorities.

Working Group Outcomes:

- *Outcome 1:* Changes in tree canopy are tracked and measured: maintain a database of tree canopy and heat island effect changes using 2010 data as a benchmark to track progress. 2010 data are prior to the discovery of Emerald Ash Borer in Dane County. Analyze change over time analyses, with a focus on county-wide shifts in developed areas, equitable distribution across BIPOC, low, and moderate-income communities, as well as shifts in number of trees, average diameter at breast height (dbh), and species diversity. To track change over time, utilize available tools such as Dane County LiDAR data, Urban Forestry Inventory and Analysis, iTree, and Wisconsin Community Tree Map.

- *Outcome 2:* Tree loss from disease, improper maintenance, and intentional removal is minimized in developed areas across the county. Average dbh for trees is maintained or increases.

- *Outcome 3:* Average tree canopy increases over time across the county, with a focus on equitable distribution of tree canopy within BIPOC, low, and moderate income communities that have proportionality lower tree canopy cover than the county average. When considering reforestation, the following should be prioritized:
  - Tree species and planting locations should be sensitive to the local ecology, with an emphasis on tree species that will survive the local environment in which it is planted, and take landscapes established native landscapes (oak woodland, maple-basswood, oak-savanna, grassland) into account;
  - Newly planted trees should have sufficient tree diversity to prevent significant tree canopy loss due to threats such as Asian Long-horned Beetle, Spotted Lanternfly, Bur Oak Blight; and
  - New tree planting should be prioritized in publically-accessible spaces and in areas with less-than-average tree canopy within BIPOC, low, and moderate income communities.
  - New planting sites should consider below and above ground growing constraints as well as soil volume to support sustainable tree growth and health. Right tree, right place should guide best management practices.

- *Outcome 4:* Policies and programs exist that ensure preserving tree canopy in developed areas is a priority within the county. Policies and programs to preserve and increase tree canopy are evaluated and are pursued based on their feasibility to implement as well as their political and financial constraints and opportunities. Policies will prioritize a) facilitating technical assistance and financial incentives for landowners to maintain their trees and plant more, and b) guiding city development practices, such as street guidelines, utility policies, tree preservation ordinances, as well as institutionalizing guidelines that encourage the creation of a diverse, resilient ecosystem of trees. Plantings will emphasizes native species that are resistant to future infestations or blights and are tolerant of urban and suburban stressors.

- *Outcome 5:* A well-resourced and well-informed network of public citizens and private entities exists that understands the importance of maintaining and enhancing tree canopy, particularly for underserved communities. Resources exist for individual landowners, residents, and organizations in order to a) understand the importance of tree canopy coverage on their own property and throughout the county b) motivate and empower public citizens and private entities to take individual action to support the effort, and c) become part of an active community that supports policies that promote this work.

- *Outcome 6:* Within government, internal champions exist who are empowered and motivated to advance policies that promotes the benefits of tree canopy within and outside of government operations. Elected officials and internal governmental workers

can publicly promote the value of tree canopy while working internally to reduce barriers to implementation, such as by facilitating redesign of utility corridors. Government is ready and able to take advantage of funding while understanding their own constraints (e.g., staffing, expert oversight, political or policy considerations), and are able to flexibly respond to opportunities to advance tree canopy goals in ways that are responsive to local needs and these constraints.

● *Outcome 7:* Understand funding needs and advance funding inside government and for partner groups, including additional resources to maintain existing trees; adequately respond to disease threats and prevent emerging threats to tree health; and for reforestation. Funding sources could include private or government, including philanthropic; federal, state, or local grants; or governmental budget allocations.

● *Outcome 8:* Quantify human and environmental benefits of preserving and increasing tree canopy that are realistic to measure. Acknowledging that climate change will make the baseline shift with respect to overall spending or overall resident well-being, track how tree canopy impacts the economy and county residents, such as spending to compensate for tree loss (e.g., cooling centers), or efficacy of stormwater management over time. Capitalize on opportunities to leverage existing research to quantify environmental benefits of tree canopy and support pilot projects to understand local impacts.