Kansas Forest Service 2610 Claflin Road Manhattan, KS 66502 785-532-3300



October 6, 2022 Penn Almoney City of Mission

Dear Penn,

I am reaching out today to share data on the amount of tree cover in Mission. As our project brief on the next page explains, canopy cover can be a vital way to assess the health and vitality of your community.

Keep in mind this is a broad perspective of tree canopy cover and other land cover classes. This does not include tree species, condition (health) and age of the overall canopy. These could be determined by a street tree inventory. It is important to have species and age diversity for a healthy, sustainable and climate resilient tree canopy.

Unfortunately, most Kansas communities lack tree species diversity, and some cases exist that two or three species alone comprise 45-50% of the overall canopy. Those same communities may also have more mature to over mature trees than they have young trees. Both of these situations can make your canopy more prone to current and impending pest issues and less resistant to storm damage.

As one of the first community forestry programs in the country, the Kansas Forest Service Community Foresters are committed to supporting municipalities and volunteer efforts to plant, protect, maintain, and manage trees on public properties for the benefit of all who spend time in the community.

In addition to the attached information, we will also host three informational meetings this fall in the Northeast District to help answer questions about the data and provide further information about ways communities can increase canopy cover and community tree health. With our local partners, we are hosting these trainings from 8:30 am to 1 pm:

November 10: Crestview Community Center, 4801 SW Shunga Drive, Topeka, KS 66614 November 15: Thompson Barn, 11184 Lackman Road, Lenexa KS 66219 November 17: Pottorf Hall at CiCo Park, 1710 Avery Avenue, Manhattan, KS 66503

To register and find more information about the workshops, please visit https://www.kansasforests.org/events/communitytreecanopytraining.html.

I sincerely hope you find this information helpful as you plan community programs impacting water quality, community health and revitalization or improvement projects. Trees are a critical aspect of healthy and sustainable communities, and we look forward to working with you on your forestry efforts.

Thank you,

KÍM.

Kim Bomberger NE District Community Forester <u>kbomberg@ksu.edu</u> 785-532-3315

## Kansas Community Tree Canopy Assessment Project

### Project

This project sought to collect baseline data for future decision-making and is intended to guide tree planting and canopy enhancement in your community. Tree cover is not equally spread throughout a community so identifying where shade and canopy protection is not present can be a starting point to developing short and long-term canopy goals for your community.

Using 2015 high resolution land cover data, natural features and impervious surfaces were analyzed for 669 communities in Kansas by the Kansas Forest Service from funding provided by the USDA Forest Service. Land cover in each community was digitally represented from 1-meter aerial imagery from the National Agriculture Imagery Program.

#### Why it Matters

Trees cover impacts individuals and communities in substantial ways. Tree cover reduces energy use for home and businesses and help to cool sidewalks, parking lots and other heat islands. Air pollutants are intercepted by trees reducing health conditions ranging from asthma to chronic health conditions. Trees can help to make business districts more desirable for shoppers and increase home and property value when part of a managed landscape. Trees impact water quality, soil quality and support wildlife.

## How to Use This Information

Canopy data can help cities achieve goals in related project such as stormwater management, air quality, community health programs, sustainability efforts and overall community improvement. Specifically, data can be used to:

- Create short and long-term budget projections to increase canopy coverage throughout the community
- Plant and maintain (establish) trees along streets and in parks to fill canopy voids
- Target tree establishment programs in neighborhoods where structures require shade or energy conservation
- Educate residents about the benefits of canopy coverage to encourage tree protection and new tree establishment on private property

By protecting, planting, maintaining, and managing community trees, you make the Great Plains environment more livable and enjoyable for the people in your city. As might be expected, canopy coverage estimates for northeast and southeast Kansas is between 24% and 28% while southwest and northwest Kansas are below 16%. Even in the toughest of conditions, 25% to 35% canopy coverage is possible in any Kansas community. *Will your city join us in protecting and enhancing canopy coverage in your community*? We hope your city will join us in this effort and attend one of our fall workshops to further explain this data and its potential uses in your community.

#### Land Cover Classes

Each city's features were categorized into the following land cover classes: Tree Cover, Bare Ground, Grass, Hard Surface, and Water. Land cover classes with bare ground and grass likely contain some areas suitable for tree planting while the hard surface class may offer a few locations suitable for planting with modifications. The following printed community map identifies the percentage of canopy cover in your community. See the attached map to view your community's tree canopy cover.

To view your city's map online, visit the Kansas Forest Service website: https://www.kansasforests.org/community\_forestry/communitytreecanopy.html

# Mission 2015 Community Land Use

