

ACROSS FENCE LINES

Connecting Corporate America to Communities
through Urban and Community Forestry Programs



Funded by the U.S. Forest Service

CASE STUDY

CommuniTree Collective Impacts

Calumet Region (Northwestern Indiana and Northeastern Illinois)

Introduction

CommuniTree, a successful forestry collective based in northwest Indiana, has been sustained through diverse parties partnering according to the principals of the collective impact model, in which individuals and organizations from different sectors convene around a shared goal. The CommuniTree platform has accordingly served as an engagement mechanism, allowing businesses to initiate and participate in UCF efforts alongside municipalities, NGOs and nonprofits. In 2021, the platform facilitated extensive, WHC-led onboarding of new corporate industrial partners to leverage additional funding for urban forestry efforts. CommuniTree has already planted over 8,000 trees in communities in the region, along with over 2,000 trees on industrial lands, and new initiatives are underway to mitigate industrial impacts of pollution runoff, abate the urban heat island impact, alleviate air pollution, remediate soil contamination and conduct ecological restoration.

The Business Drivers

Business Driver 12 - Employee Engagement

Companies supporting CommuniTree activities identify employee engagement as a primary driver for ongoing participation.

Business Driver 14 - Lands Management

Businesses in the highly industrialized Calumet region often manage large-scale operations on sprawling campuses. While industrial stakeholders participate in efforts both on their own lands and in nearby communities, community efforts are often paired with planting on private, corporate owned lands.

Business Driver 15 - Nature-Based Solutions

Companies actively working to mitigate fugitive dust, alleviate heat island effects, promote resilience to floods or extreme climate events and reduce air pollution have engaged with CommuniTree to explore UCF's potential to address these challenges.

Alignment with Ten-Year Urban Forestry Action Plan Goals

Goal 3 - Increase Diversity, Equity, and Accessibility in Urban and Community Forestry

The Student Conservation Association is an active and founding member of CommuniTree. The organization trains youth from impacted areas in forest maintenance and prepares them for green jobs.

Goal 5 - Improve Urban and Community Forest Management, Maintenance, and Stewardship

CommuniTree members convene regularly to share knowledge and problem-solve collectively, building a body of knowledge and expertise readily accessible to partners in need of management, maintenance and stewardship guidance.

Goal 6 - Diversify, Leverage, and Increase Funding for Urban and Community Forestry

Overall, the CommuniTree has broadened the range of parties participating in UCF in the Calumet region. Engaging business partners as equal contributors to UCF efforts often results in increased investment in the efforts. Active engagement of employees also allows for leveraging of grant funds based on matching corporate contributions.

The Community

With a long history of urbanization and industrial activity, the Calumet region faces a wide range of environmental threats. According to the EPA EJSCREEN tool, the region is in the nation's 70-80th percentile for Particulate Matter 2.5, the 95-100th percentile for proximity to a superfund site, the 80-90th percentile for proximity to hazardous waste and the 95-100th percentile for wastewater discharge.

Demographically, Calumet is in the 80-90th percentile in the nation for population of people of color and the 80-90th percentile for low-income populations. Low-income communities concentrated in areas with high density of pavement, like most of the Calumet region, experience more extreme heat island effects. According to the Chicago Region Trees Initiative, Calumet City, IL experiences temperatures up to 30 degrees higher than surrounding areas due to the urban heat island effect.

While the Calumet region has a long history of industrial development, the area is surprisingly rich in biodiversity. Fragmented remnants of rare and highly productive ecosystems like hemi-marsh, dune and swale, and tallgrass prairie still host a wide variety of plant and animal species. With the resulting intense interest from the conservation community, longstanding advocacy by the environmental justice community, and the often-

competing priorities of industrial landowners, urban forestry projects carried out in this setting present a mutually beneficial tool for developing common ground.

Challenges

While CommuniTree has found success in seeking grants to fund plantings, tree giveaways and education efforts, there is instability inherent to any funding strategy dependent on grants. With political dynamics shifting rapidly and intensely between administrations, projects may be faced with sudden scarcity or conversely, be presented with unforeseen opportunities to rapidly scale up that are difficult to optimize on short notice. This uncertainty presents participants with challenges in planning for consistent and sustained action.

Opportunities

Expanding Regional Efforts — Given CommuniTree's successful history, new corporate and industrial partners now voluntarily engage with the collective, without the need for active recruitment. Corporations are driven to participate because of CommuniTree's previous projects, the range of organizations involved in the effort and increasing community support for UCF efforts. While the initiative has been focused on the Indiana portion of the greater Calumet region, including industrial facilities adjacent to the Indiana Dunes National Park and urban-industrial neighborhoods in East Chicago, Hammond and Gary, consistent project success has prompted expansion into Illinois through engagement with new partners.

Engagement with new corporate and industrial partners continues, with CommuniTree currently developing partnerships with the following organizations to employ location-appropriate nature-based solutions

- **PVS Chemical Solutions:** Forestry applications are being explored to reduce runoff from an adjacent, uncapped toxic waste landfill and control invasive plants in sediment ponds along the Calumet River shoreline.
- **The Invert Chicago:** This new, underground transportation, warehouse and distribution center is slated for construction in Chicago's southeast side in 2030. In anticipation of new environmental challenges, CommuniTree has formed a partnership with facility developers, which will result in a neighborhood-based effort to increase canopy and mitigate urban heat island effects, manage stormwater runoff and abate air pollution.
- **S.H. Bell Company:** Through work with CommuniTree, logistics company S.H. Bell is designing a project that will reduce fugitive dust and stormwater runoff and utilize

tree plantings in residential areas to remediate soils contaminated by manganese and lead.

- **Illinois International Port District (IIPD):** Tree planting is well underway at IIPD office headquarters and by the entrance to the North American Stevedoring Company (NASCO) facility, located in the port's Iroquois Landing terminal. A pre-restoration assessment of 7 acres of degraded woodland within the facility, along the Lake Michigan shoreline, is also in progress. Through this project, CommuniTree is advocating for reforestation and the management of existing woodland to address the increase in sediment runoff and fugitive dust expected to come with the construction of U.S. Army Corps of Engineers confinement unit within the Iroquois Landing area.¹

Building Bridges — CommuniTree formed a partnership with an educational planting initiative at George Washington High School and the grassroots Southeast Youth Alliance in early 2021. Engagement with these community stakeholders has produced rare opportunities for positive collaboration between high-impact industrial parties and highly impacted communities to conduct solution-oriented activities.

Assessing Broad Impacts — CommuniTree's sustained success has led to a gradual change in how regional business partners approach urban forestry and nature-based solutions. While this cultural shift has been difficult to measure, discussions around the sociocultural impacts of the initiative have led to the exploration of new technologies and platforms that could help quantify the effects of environmental activism and advocacy through a corporate lens.

Partners

- Alderwoman Susan Garza, 10th Ward, Chicago
 - Cleveland Cliffs Burns Harbor
 - City of Gary, Indiana
 - City of Hammond, Indiana
 - City of East Chicago, Indiana
 - City of Chicago Bureau of Forestry
 - DePaul University
 - Dunes Learning Center
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- Evolved Group
- Gaylord & Dorothy Donnelly Foundation
- Illinois International Port District
- Indiana Department of Natural Resources
- Northern Indiana Public Service Company (NIPSCO)
- Northwestern Indiana Regional Planning Commission
- PVS Chemicals
- Student Conservation Association
- S.H. Bell Company
- U.S. Forest Service
- Wildlife Habitat Council

Key Takeaways

- Convening for collective impact has sustained and gradually grown CommuniTree's efforts over time, and new partnerships continue to develop in an expanding geographic footprint. The collective uses UCF as the mechanism for a solution-oriented network of industrial and community stakeholders to convene.
- An established record of success with a diverse suite of partners across sectors and industries has created a self-sustaining feedback loop, with new project development stemming from CommuniTree's partner network.
- CommuniTree's network is expanding in scope, utilizing tree plantings alongside other forms of green infrastructure such as bioswales and soil remediation to promote nature-based solutions and pollution mitigation strategies in highly impacted communities.

Introduction

Stellantis (formerly Fiat Chrysler Automobiles) entered a Community Benefits Agreement (CBA) with the city of Detroit as a condition for the expansion of its Mack Avenue plant. Since then, urban and community forestry has served as a multifaceted platform and tool connecting the company to the surrounding community — the company has completed tree multiple plantings within East Canfield, Detroit, where the plant is located, and in spring 2022 will begin using these sites as the backdrop for STEM education activities. The company's internal commitments to education and sustainability align with efforts underway by leading nonprofit organizations employing UCF as a tool for activation of alleyways to address environmental concerns in East Canfield and across the city. Thus, UCF has provided an ideal opportunity for Stellantis to address community-identified environmental concerns while also satisfying internal CBA commitments.

The Business Drivers

Business Driver 16 – Government Relations - Through the CBA, Stellantis has committed to demolition and blight removal, targeted education programs for local students and beautification projects to mitigate the effects of the development on area residents.

Alignment with Ten-Year Urban Forestry Action Plan Goals

Goal 1 - Integrate Urban and Community Forestry Into all Scales of Planning –

Community leaders located in the neighborhood surrounding the Mack Avenue plant are, in partnership with Wildlife Habitat Council (WHC), exploring the role of alleys in hyperlocal neighborhood planning. The project, led by nonprofit community development group Canfield Consortium, utilizes urban forestry as a tool for activating vacated alleys and empty parcels near the plant. Ultimately, the collaboration will result in the development of a blueprint for project replication in neighborhoods across the city.

Goal 3 - Cultivate Diversity, Equity, and Leadership Within the Urban Forestry

Community – Using tree plantings to satisfy the beautification and blight remediation elements of the CBA has entailed appointing East Canfield residents to both formal and informal leadership roles. The inclusion and articulation of the values of tree plantings in the alley activation project also serve to increase engagement of underserved and minority communities across the city of Detroit.

Goal 7 - Increase Public Awareness and Environmental Education to Promote

Stewardship – The Stellantis CBA has involved a commitment to developing educational resources and conducting outreach to local students. By providing resources to educate and empower residents to select urban trees as the solution to hyperlocal issues in their alleyways, community members will be able to establish and practice stewardship over small-scale plantings in their neighborhood, with options for replicating planting efforts elsewhere in the city.

The Community

Community members are both highly impacted by the increase in industrial activity and actively organized in advocating for alleviation of those impacts. Plans to expand the Mack Avenue plant drew controversy over the environmental implications for nearby residents and associated equity concerns (98 percent of residents living within one mile of the plant are people of color). Since the expansion took place and the CBA was implemented, concerns about the plant have reemerged due to complicated air quality issues. Community complaints of overexposure to exhaust gas odors, and resulting air quality testing, have involved the Michigan Department of Environment, Great Lakes, and Energy and the EPA.

Challenges

Given local resistance to the expansion of the Mack Avenue plant, initiating employee engagement in community efforts is complex and challenging. Identifying neighborhood leaders and local nonprofits willing to collaborate with Stellantis on development and deployment of solutions has been key to successful CBA implementation.

Deployment of meaningful environmental interpretation and education was also challenged by the Covid-19 pandemic. As many learning centers pivoted to virtual activity, lack of access to technology and unstable internet connections complicated or completely prevented engagement with the underserved minority communities near the plant.

Opportunities

Providing Immersive Environmental Education - Stellantis utilized an existing partnership with WHC to optimize educational outreach as part of its CBA. In tandem with separate, formal efforts through Detroit Public Schools, Stellantis contracted WHC to develop a state science standard-aligned curriculum for informal, outdoor learning focused on biodiversity uplift and hydrology. The curriculum illustrates these concepts through hands-on activities offered at three nearby environmental interpretive sites that Stellantis has created or supported. One site, planted by Stellantis employees in 2018, allows students to measure and monitor the trees as they grow and to estimate their carbon capture through time. At another site, the newly constructed Beniteau Stormwater Park, students can observe and measure the value of native vegetation in stormwater management. Students at the nearby Barack Obama High School will soon employ citizen science techniques to monitor the wildlife value of trees planted at the third location, Canfield Consortium's activated alley site.

Empowering Employee Volunteers - Stellantis has a well-organized program for employee volunteer outreach, Motor Citizens, which provides an established platform for community engagement efforts such as tree plantings or alley cleanups. Other corporate conservation leaders, such as DTE and Waste Management, also provide volunteers to support planting efforts and green infrastructure installation. This history of volunteerism in the community means that many local tree plantings are well established, appropriately maintained and readily available for educational activation.

Ensuring Project Longevity - The community surrounding the plant is well organized, with clearly defined and articulated goals. With organizations like Canfield Consortium taking the lead on communicating with and engaging corporate partners, local UCF projects can be sustained beyond single instances or limited duration efforts.

Partners

- Canfield Consortium
- City of Detroit
- Barack Obama Leadership Academy
- Detroit Ain't Violent It's Safe
- DTE Energy
- Waste Management
- University of Michigan, Dearborn
- Wildlife Habitat Council

Key Takeaways

- UCF serves as a multifaceted solution connecting Stellantis education and neighborhood improvement goals to community-identified priorities surrounding air quality and health.
- The promotion of urban forestry through green infrastructure-oriented alley activations, and articulation of the benefits for both communities and business, have resulted in local support and the potential for efforts to be replicated in neighborhoods across the city.
- Engagement with the right partners has been key to CBA implementation. In a contentious setting, partnering with leading nonprofits such as Canfield Consortium and WHC has facilitated avenues for successful corporate community engagement.

The WHC Across Fences Lines Initiative is made possible through a grant from the USDA Forest Service as part of its [2020 Urban and Community Forestry Challenge Cost Share Grant Program](#)