

CASE STUDY UCF as a Platform for Green Infrastructure in the East Canfield Neighborhood Detroit, MI

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.

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