









Paul Draus, Jacob Napieralski, and Christopher Pannier, the University of Michigan-Dearborn; Ben Gaydos, the University of Michigan-Flint

Korey Batey, DAVIS (Detroit Ain't Violent It's Safe)

Kim and Rhonda Theus (Canfield Consortium)

Charles Rivers (The Neighborhood Association)

Patricia Billette and Daniel Goldfarb (Wildlife Habitat Council)

Student research assistants: Jacques Jones, Peyton Lynch, Amina Mikula, Andrew Buendia

Presented at Michigan's Premier Public Health Conference, Grand Rapids, MI June 17th, 2022 **QUESTION:** How can local green space development address health disparities in communities defined by historical trauma?



Detroit's population drops drastically

The city's population has been shrinking since the 1950s, from nearly 2 million people to less than half that number in 2005.



0 3 km



DETROIT STRATEGIC FRAMEWORK PLAN



Opportunities for Redefining as American City









Map I illustrates vacant properties as gray

Map 2 illustrates vacant properties as green

DETROIT'S FUTURE : REDEVELOPMENT FOR WHOM?



Detroit Future City map of future land use types overlaid with vacancy map. It illustrates the potential of green spaces to either link or divide the city, as the riverfront and downtown/midtown continue to gentrify. Will these planned green spaces include and enable or displace and erase longterm residents?



What do you think of, when you think of alleys?



The small (but growing) Green Alley Literature

- Seymour et al (2009) examined Los Angeles residents' perceptions about the "greening" of urban alleys, emphasized utilization of alleys for environmental sustainability purposes required intense collaboration from an early stage to ensure that green alley designs would be embraced by local communities.
- Newell et al. (2012) examined green alley programs in both Chicago and Los Angeles, considering whether these programs incorporated all "three primary goals of sustainable development: environmental protection, economic development, and social equity (often referred to as the "Three Es")" (p. 145).

Green Alley Literature (cont.)

- "Chicago's Green Alley Program facilitates the infiltration of stormwater, improve groundwater recharge, and relieve pressure on the city's aging sewer system" (Jay Landers, Civil Engineering 2008)
- "Residents reporting high levels of greenspace attachment in their neighborhood tend to experience improved sense of wellbeing and decreased loneliness" (Weber and Schneider, "Blooming Alleys for Better Health: Exploring Impacts of Small-Scale Greenspaces on Neighborhood Wellbeing." Urban Forestry & Urban Greening, 2021)
- "Public participation leads to empowerment of citizens; more trust between municipal officers and citizens, social cohesion, capacity of citizens to organize, and enhanced quality/value of greenspaces are a few benefits associated with greening initiatives" Brazeau-Béliveau, Noémie, and Geneviève Cloutier. "Citizen Participation at the Micro-Community Level: The Case of the Green Alley Projects in Quebec City." Cities, 2021)

Alleys as Social Ecological Infrastructure

- According to Sendra and Sennett (2020), re-inventing the city as an open system rather than a closed system means "providing different elements with functional capacities rather than fixed functions, where the activities and interactions of the public realm depend on the different associations that take place" (p. 103).
- The long-term purpose of this project is to ideate and explore the functional capacities of alleys, utilizing the physical connectivity of alley infrastructure, combined with the social connectivity of neighborhoods, and employing practical social, environmental, and technological solutions to linked ecological, economic and informational challenges.

Alleys in Detroit

- Alley Activation refers to the process of clearing alleyways that have clogged with vegetation and various kinds of debris and converting them from dormant or forbidding to inviting and productive spaces.
- At one time, alleys were actively maintained by the City and used by residents for vehicle storage and solid waste pickup as well as social purposes: children playing, communicating with neighbors, and walking block to block.
- Due to lack of resources and declining population, many of the city's alleys have devolved into untended spaces associated by many residents with blight and disorder.
- The City is now investing in the large-scale clearance of alleys, asking neighborhood block clubs to create their own maintenance plans, opening opportunities for economic, environmental and social innovation

Enter the Cable Guy



Korey Batey, Founder and President of DAVIS (Detroit Ain't Violent It's Safe)

Motivation for Alley Activation







Korey Alley Walk Facebook Live

The Alley Activation Project



Current Condition

Conceptual rendering only. Final design/look/vibe/feel/standards to be determined by the invested community.



We are looking to build the framework to activate alleys within the impact area and connect residents with resources from around Detroit.

The Alley Activation Project (AAP) envisions a capillary network of green passages that will enhance the neighborhood's safety and visual appeal while also increasing its internal connectivity and creating a viable platform for local entrepreneurial activity.

ALLEY CLEARING



The Process of Activating Alleys

- Engagement
 - Learning from and with community residents, understanding the history of neighborhoods and what residents want (and don't want) to see happen
- Research
 - Surveying literature and meeting with city officials and agencies to understand best practices, current policy, and potential opportunities
- Visualization
 - Using small pilot projects as well as 3D and Virtual Reality and geospatial modeling to show possibilities of different alley design configurations
- Implementation
 - Demonstrate how alleys can be activated in different community contexts

Goals of Activated Alleys

- Economics
 - places for small business, neighborhood-based micro-economies
- Education
 - places to educate people about urban ecology as well as a city systems such as energy and sewage
- Ecology
 - may contain a wide range of plant and animal species and foster their own particular micro-biomes
- Recreation and Rejuvenation
 - places to exercise, experience nature, and be social
- Sustainability
 - may serve as a model or template for neighborhood-based redevelopment, a "solution that's right up your alley"

Student Project, FALL 2020: The R.E.A.D. Alley Design













Community-Driven Placemaking

- Every neighborhood has a rich set of potentials waiting to be unlocked, and that alleys can become the internal power strips that these potentials can plug into.
- These places, created for and by the community, will demonstrate sustainability practices while providing outdoor respite and recreation needed in urban areas postpandemic, "ensuring that the existing infrastructure is repaired, strengthened and improved to serve all residents, especially the socially vulnerable" (Anguelovski 2020).



Students...



Professors...



...and Residents engage in "Cleanup and Conversation"

Rain Barrel Workshop





Green Energy in the Alleys











Ecology of Alleys



Alley on Northwest Side: light, water, and soil dynamics are complex







Edible Alleys







East Side Alley, with field garlic and Japanese knotweed

Edible Alleys





West Side Alley with Common Mallow and Horseradish



Alley Hydrology





ALLEY ACTIVATION means C0-CREATION







Use of 3-D Virtual Reality and (VR) imaging for community engagement in design process.

Community residents have been working with university students and city planners to develop models for alley activation incorporating different design features and elements.
3D Alley Visualizations









Urban Acupuncture

- "I have always nurtured the dream and hope that with the prick of a needle, diseases may be cured. The notion of restoring the vital signs of an ailing spot with a simple healing touch has everything to do with revitalizing not only that specific place but also the entire area that surrounds it."
- Jaime Lerner, <u>Urban Acupuncture: Celebrating Pinpricks of Change</u> <u>that Enrich City Life</u> (2014)

Urban Acupuncture



Figure 2. Urban Acupuncture Principles.

Nassar, U. A. (2021). Urban Acupuncture in Large Cities: Filtering Framework to Select Sensitive Urban Spots in Riyadh for Effective Urban

Renewal. Journal of Contemporary Urban Affairs, 5(1), 1-18. <u>https://doi.org/10.25034/ijcua.2021.v5n1-</u>

Alley Activation as Urban Acupuncture



Alley Activation as a Community **Resilience Strategy** for Post-Industrial Cities: An Urban Acupuncture **Proof-of-Concept** Approach



Urban Acupuncture Interventions



Top Left: Market Logistics Alley (Tharmond Ligon, Jr. and Zenaida Flores) Top Right: Rescue MI Nature Now Permaculture Garden

ALLEY ACTIVATION means RECONCILIATION

Repairing bonds and connections that have been severed due to historical trauma, disinvestment and exclusion related to ruptures in:

- Ecological Environment
- Built Environment
- Social Environment

Building a legacy through home ownership



Continuing a legacy through community development



Legacy Resident Homes in East Canfield Village



Bridging the Equity Gap One Project at a Time

Canfield Community Flower Garden Before & After



Pavilion and Art Park Before & After





Canfield Consortium's Projects

EXISTING SITES

FUTURE SITES

 East Canfield Community Flower Garden
Activated Alley - Montclair & French Road
Canfield Community Mural
The East Canfield-Lemay Community Flower Garden
The East Canfield Pavilion and Art Park
The Nature Nook

Canfield Clubhouse The Canfield Strip Brewer Park Canfield Connect Entrance Canfield Connect Route





Canfield Consortium's mission is to restore the East Canfield Village community to a contemporary, healthy, thriving and inspiring urban community.



CONNECTING PATCHES THROUGH HYPER-LOCAL "PINPRICK"INTERVENTIONS





Ecological interventions and management of alleys to allow for a range of native woodlands, oak savanna,

Ecological interventions to reclaim alleys for stormwater runoff retention and mitigation away from homes and streets

and prairies.

Prairie patches & Pollinator gardens



Native woodlands

Stormwater runoff retention basins

Rain gardens





Alley Activation; Neighborhood Based

Sustainability Strategy

"Alleys, Lots and Hubs" Workshop Series

- This program foregrounds work of local grassroots leaders as sources of social, environmental, and economic innovation, by focusing on:
 - Alleys and Lots as a source of sustainability solutions, open-air learning laboratories and demonstration sites.
 - Community Hubs as tools for re-creating cohesion while providing education and resources for those in its vicinity, further building grassroots power.
- This series of locally hosted, participatory problem-solving workshops will bring grassroots community leaders together with UM faculty and students engaged in projects related to alley activation; repurposing of once-vacant lots; and connecting community hubs with self-determination in mind.
- Participants will experience walking-talking tours of case study sites in each host community, as well as structured table discussions of critical questions, research opportunities and development strategies.

What else can you do in an alley?

Thank you for your attention!





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