



The Chicago Mobile Makerspace

Chicago, IL

Architecture

Completed June 30, 2020

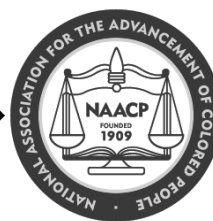
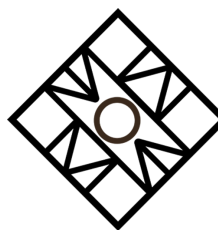
<https://www.chicagomobilemakers.org>

Project Contact

Maya Bird-Murphy

Chicago Mobile Makers

maya@chicagomobilemakers.org



NOMA-NAACP-SEED Awards

Based on common foundations and a shared vision, NOMA, NAACP, and the SEED Network announced the [2020 Awards for Justice, Equity, Diversity and Inclusion](#) (JEDI) in design, architecture, and land development. Seven projects were selected through a competitive process and by a distinguished jury. This case study profiles one of the winning projects.

About the National Organization of Minority Architects

The National Organization of Minority Architects (NOMA) mission is to champion diversity within the design professions by promoting the excellence, community engagement, and professional development of its members. NOMA is committed to creating a pipeline to the architecture profession to a more diverse spectrum of students and cultivate a more inclusive profession that reflects the communities served by design: all communities. As architects, we acknowledge that our professional duty is to protect the health, safety and welfare of the public and as NOMA members, we seek to fulfill this duty by ensuring that we help to facilitate diverse teams that can optimally address the needs of increasingly more diverse communities. Our signature annual event is our national conference that attracts students and professionals from nearly every corner of the building industry to converge, exchange ideas, network and support one another professionally to create a better build environment for everyone.

About the National Association for the Advancement of Colored People

The mission of the National Association for the Advancement of Colored People (NAACP) is to secure the political, educational, social, and economic equality of rights in order to eliminate race-based discrimination and ensure the health and well-being of all persons. Environmental injustice, including the proliferation of climate change, has a disproportionate impact on communities of color and low-income communities. The NAACP Environmental and Climate Justice Program supports community leadership in addressing this human and civil rights issue. With the launch of the Centering Equity in the Sustainable Building Sector (CESBS) Initiative, the NAACP seeks to universalize access to safe, affordable, healthy, energy-efficient, regenerative, and resilient buildings for all people.

About the SEED Network

Established in 2005, the Social Economic Environmental Design (SEED) Network provides a common standard to guide, evaluate and measure the social, economic, and environmental impact of design. SEED is premised on the belief that design can play a vital role in the most critical issues that face communities and individuals, in crisis and in everyday challenges. To accomplish this, the SEED process guides professionals to work alongside locals who know their community and its needs. This practice of “trusting the local” is increasingly recognized as a

highly effective way to sustain the health and longevity of a place or a community as it develops.

Award Jury

Carl Anthony, Architect, author and urban / suburban / regional design strategist

Kim Dowdell AIA, NOMA, NCARB, LEED AP BD+C, 2019-2020 National President of NOMA

Maya Henderson, Sustainability Professional

Christopher Lee, AIA, Architect, Mark Cavagneo Associates

Tiffany Mayhew, NOMA

Marquis Miller, Chief Diversity Officer, City of Chicago, Office of the Mayor

Jacqui Patterson, Senior Director of Environmental and Climate Justice at the NAACP

Paloma Pavel, President of Earth House Center

Laura Shipman, Director of Community Development and Planning, One Treasure Island

Jimmie Tucker FAIA NOMA LEED AP, Managing Principal, Self + Tucker Architects

Barbara Brown Wilson, Associate Professor, Author, University of Virginia

How would you know if a project supports JEDI?

Justice: “The community is in a position of power and leadership. There is a transparent process that is inclusive and reciprocal - not extractive.”

Equity: “It shows accessibility to all individuals starting from the design process.”

Diversity: “If the project team is led by architects of color and women. In addition, the project exhibits a cultural expression appropriate for the neighborhood/community members that are using it. Not just color, ornamentation, but cultural forms and building patterns.”

Inclusion: “If diversity allows a particular type of person to be in space, inclusion allows them to deeply engage it.”

To view even more reflections on the definitions of JEDI, visit [the summary](#) of survey responses from NOMA, NAACP, and SEED Network members.

Executive Summary

Chicago Mobile Makers is a nonprofit organization that offers free and low-cost youth workshops encompassing design, architecture, digital fabrication, basic construction, and place-making in Chicago. We create programming that encourages youth to become advocates and change-makers in their own communities through design-focused skill-building workshops.

Our objectives are threefold:

1. Engage and empower youth through making and skill-building
2. Train and support future public interest architects, designers, and makers
3. Advocate for social, economic, gender, and racial diversity in the architecture and broader design fields.

In June of 2020, we completed the Chicago Mobile Makerspace, a retired United States Postal Service delivery van that has been converted into a classroom, tool shop, design studio, gallery, and community gathering space. It provides storage for power tools, hand tools, drawing and modeling materials, laptops, and larger machinery like a laser cutter and 3D printer. The Mobile Makerspace is able to power any tool needed through its boosted electrical system, which includes four solar panels on the roof.

Although the Mobile Makerspace is small, the space feels roomy and comfortable. The interior features birch plywood custom cabinetry, a custom pegboard and message board, magnetic whiteboards, soft seating, large windows, and a desk. The color scheme is warm and inviting while complementing the main brand color.

The design of the Mobile Makerspace allows students to spill outside and activate unused space. Design, digital fabrication, and building workshops are able to be held anywhere - from an empty lot to a parking lot to a summer street festival. Youth will be able to design and build change in their own neighborhoods with their own hands. This studio on wheels feels state-of-the-art and will give youth an unparalleled educational experience.

Who are the communities involved in and impacted by the project?

Although we host workshops all over Chicago, our target areas are the South and West Sides, which are predominantly black and brown. A large percentage of our students are low-income as well.

America holds countless examples of space that segregates, degrades, and encourages inequality. Because of racist policy-making, our cities have been carved up into defined sections. In Chicago, the North Side is predominantly white and the South and West Sides are predominantly black and brown. These neighborhoods are victim to lack of investment, lack of jobs, blight, lack of healthy food, higher levels of pollution and hazardous waste, and lack of opportunity. The built environment heavily contributes to these issues.

When MLK was assassinated in 1968, civil unrest rocked the streets of Chicago. Buildings burned leaving holes in the urban fabric. 50+ years later, we're fighting the same battle against discrimination and the streets of the West and South sides are largely unchanged. It's rare to see a crane or construction crew building up these neighborhoods, and some areas don't even have a reliable grocery store.



Project Stakeholders

Youth

Parents

Teachers and School Administrators

Donors and Grantors

Chicago Mobile Makers Employees

Chicago Mobile Makers Board of Directors

Project Team

Maya Bird-Murphy, Associate AIA, LEED

Green Associate, SEED, Chicago Mobile

Makers - Lead Designer

Andres Lemus-Spont, Building Brown

Workshop - Woodwork

Pawel Rogowski, Midwest Start - Mechanical

and Electrical

Michal Kwapniewski, M Fabrication - Metal

Work

Lorin Jackson, NOMA, NCIDQ - Interior

Design Consultant

Formed Space - Contractor

Tom Harris - Photography

Prime 312 - Videography

How were each of these communities involved in the process and project?

Each of these groups were involved in the creation of the Mobile Makerspace informally. We're opening a permanent location in the Humboldt Park neighborhood of Chicago and we plan to have more formal touchpoints with stakeholders as we design and build-out our space. This space is going to be a safe place for young people to be their authentic selves so it's essential to talk to all groups during design.



"This program impacted me to change my way of viewing the city when walking through it and it also helped me stretch my skill and ability when designing and thinking of ways to improve my community."

-Asharee
Austin Neighborhood
11th Grade



How does the project support...?

Justice

Chicago Mobile Makers is a grassroots organization advocating for justice in the built environment. Social, environmental, and economic injustice have plagued our communities for decades. Communities on the South and West Sides continue to wait for investment - investment that will rebuild torn down greystones, fill empty lots, and build safe and affordable housing. We must not continue to wait. We must begin rebuilding our own communities block by block.

Our programs are a form of activism teaching students that they have the power and agency to envision physical justice in their communities. The Chicago Mobile Makerspace allows students to bring their vision of justice into the real world, whether that manifests as a community space, garden, or outdoor stage.

Equity

The Chicago Mobile Makers brings unique S.T.E.A.M. programming, technology, and tools to youth that may not have had access to otherwise. Chicago is home to many elite private and magnet schools that have makerspaces inside their buildings and required design-thinking classes. There are also many for-profit makerspaces and S.T.E.A.M. programs that cost hundreds of dollars to participate. The Chicago Mobile Makerspace levels the playing field.

We believe some of the youth we support throughout the years will become civically-minded public interest architects, designers, makers, artists, and doers.



The Mobile Makerspace feels roomy at only 108 square feet

Diversity

According to the 2020 NCARB By the Numbers Report, 83% of new architecture certificate holders are white, and 65% are men. Although the numbers have improved slightly, not much has changed. Black women still account for .03% of licensed architects.

To diversify the architecture field we must make architecture accessible to black, brown, and low-income people. There must be a clearer path for underrepresented groups to make their way through the design fields. The Chicago Mobile Makerspace makes design education more accessible to these communities. Making the architecture field accessible not only creates a more diverse workplace, but it also allows positive and more equitable decision-making, design, and building in our world.

Inclusion

The Chicago Mobile Makerspace breaks down barriers that a student or family may face while seeking to learn more about design. Our curriculum, tools, technology, and support

are brought to the student. Young people don't need to worry about coming to us at a brick-and-mortar location which means they don't need to worry about traveling across the city or affording public transit fares. Our programs are free to the student and family, which means they don't need to worry about receiving quality extra-curricular education. Our staff and board members are mostly people of color which means our students can see themselves reflected in us. The Chicago Mobile Makerspace will help us build an inclusive and safe community.



A warm color palette brings comfort and encourages productivity

"Our programs are a form of activism. We're addressing built injustice, lack of diversity and equity in the design fields, and we're creating safe and inclusive spaces in our communities."

Maya Bird-Murphy, Lead Designer

Double-click & watch their story!



Project Journey

How did the project evolve in response to intentional JEDI strategies?

JEDI has been entwined throughout this project since Day 1. The Mobile Makerspace hasn't changed much since it was built. What will continue to evolve is how we're serving youth. We believe that it's our job to provide the most up to date, relevant, and meaningful programming to kids and we'll need to continue to tweak our curriculum to meet their needs.

What are the critical measurements of the success or failure of the project?

We consider this project a huge success. This is expressed mostly qualitatively, although it has led to more donations and grants, more press, and more partnerships. Stumbling upon the Mobile Makerspace is a novel experience. When you step inside it welcomes you to be curious, playful, and creative. Seeing the smiles it brings to young people is amazing.

The biggest negative impact of the Mobile Makerspace is that it's a diesel vehicle. If we were able to afford it, we would have purchased an electric vehicle. We will take this into consideration as we build more trucks.

We've received a great deal of support since this project was completed, including requests to expand to other cities. We plan to "deploy" trucks and programming to locations outside of Chicago beginning in 2022.



"This is an invitation to do something and provides the support to make that invitation real. Outstanding project that should be adopted as a model for design-interested youth in communities across the country."

NOMA-NAACP-SEED Jury Member