



MAKERSPACES IN ACTION

A COMMUNITY- BASED RESPONSE TO THE PANDEMIC

August 2020



**Urban
Manufacturing
Alliance**



Latasha Louis is finally making again.

To help meet a local surge in demand for personal protective equipment (PPE), the Augusta, Georgia-based designer dusted off her textile skills and joined the volunteers and paid staff overseeing a respiratory mask project at her local makerspace, [theClubhou.se](https://theclubhou.se).

“I’m grateful to tap back into that skillset because I haven’t used it in so long,” said Louis. “I transitioned out of doing it on a daily basis because the [textile] jobs just weren’t there.”

Some of the 25 people she’s working alongside are making for the first time in their lives, and that gives her hope. As the pandemic erodes neighborhood economies, Louis thinks the swift response by theClubhou.se and other manufacturing hubs across the country will inspire people to appreciate their local producers.

“I think we kind of got comfortable with the idea of importing a lot of things,” she said. “After we reach some kind of new normal where people are back out and working, I think people will remember how important those makerspaces and manufacturing facilities were that could do the work.”

Unemployment numbers have shot up across the U.S., and small businesses are closing in droves. Understandably, there’s a looming question among members of the [Urban Manufacturing Alliance](https://urbanmanufacturingalliance.org) (UMA) about what the making and manufacturing landscape will look like once the pandemic subsides.

But some makerspaces we spoke with had already pivoted to keep their work going in the first days of this new era.

Makerspaces are business incubators and manufacturing equipment hubs with connections to everything from big companies to high schools to economic development offices. That infrastructure

allowed them to quickly take advantage of demands by hospitals and first responders for masks and face shields.

Many have turned into mini factory floors for healthcare supplies. Others have kept their sights on their broader mission by deciding to focus their energy on training programs. Either path is a win for the places they call home because each one nourishes the community-based manufacturing ecosystems that they've helped put in place.

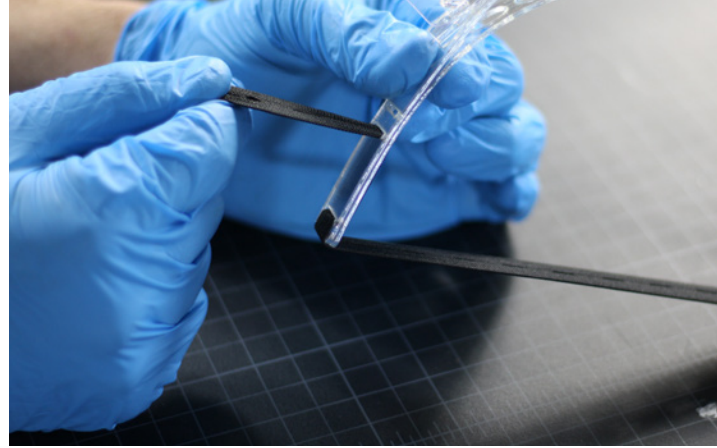
That's why makerspaces are so important now and in the future, said Dr. Ronald C. Williams, an Assistant Professor at Coppin State University's College of Business and UMA Board Director.

During the pandemic, getting things produced locally and quickly has literally become a life-or-death situation. Many makerspaces have been able to step up because "they're agile enough to respond to local production challenges," said Williams, who is also a Board Member of the popular Baltimore makerspace Open Works.

"To go from closing your doors to being able to retrofit overnight and start meeting the needs of healthcare—that alone is phenomenal because of the network that is required," he added.

Here are some examples of what that looks like in action, and other ways makerspaces are providing a lifeline to their communities:

MAKERSPACES IN ACTION



PROTOHAVEN

Protohaven in Pittsburgh is producing masks with help from seven at-home sewers who are immigrants, refugees, or makers that lost their jobs because of the pandemic. They rely on grants and funding from local organizations like Bridgeway Capital to pay sewers \$3 per mask.

“Someone could reasonably make \$30 an hour [making masks],” said Devin Montgomery, Founder and Executive Director of Protohaven. “The question now is how can



we continue to produce those types of jobs, or produce other programs that help support makers generally.”

OPEN WORKS

Open Works in Baltimore is wrapping up its PPE production after successfully making 26,000 face shields for local first responders and the U.S. Department of Agriculture. The makerspace relied on its network of 3D printer owners to print mask designs from home and fill massive orders in just weeks.

“They had a network of hundreds of volunteers printing parts almost over night,” said Williams.

A few months ago, Open Works also launched a YouTube series called **Making In Place**. The series is made up of instructional videos that give tips on everything from beer brewing to jewelry making in our current era of shelter-in-place.

THE FOUNDRY

The Foundry in Buffalo, New York is taking a different route. Instead of churning out PPE, they're doubling down on their original mission.

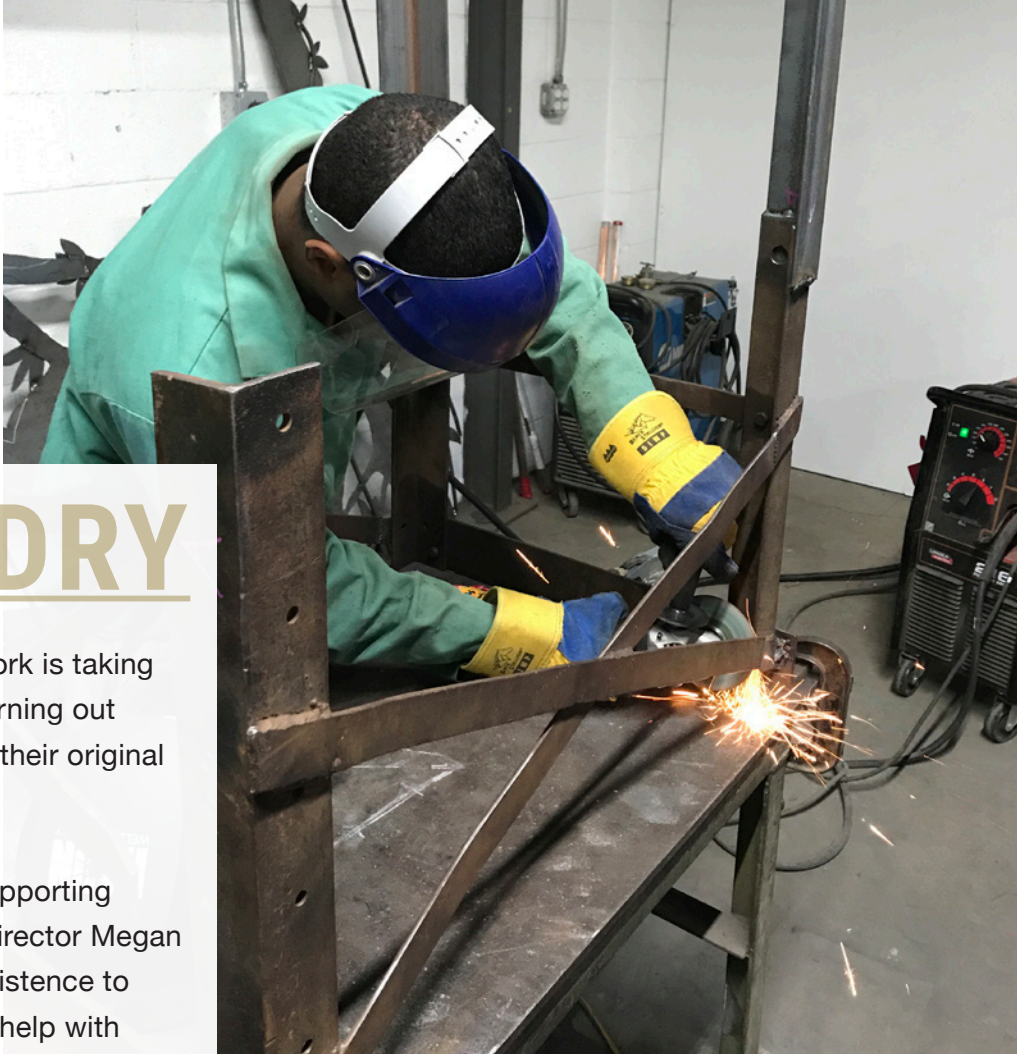
"We're more geared towards supporting future needs," said Executive Director Megan McNally. "We want to stay in existence to support the students that need help with placement and employment, and to achieve our longer term goal of setting lower-income populations on a plan for gaining higher income."

The Foundry is keeping their Certified Production Technician training up and running despite having to shut down their makerspace to the public. Students in the pilot program are learning how to design cut files, engrave files, and 3D printing files. They send those designs over to The Foundry's staff and watch over video calls as staff use machinery to make their designs, providing feedback along the way.

Despite the pandemic, four local manufacturing companies are waiting to

receive these students as interns. One, a medical device producer slammed with product demands, is asking if McNally can send them over early.

"All four of those companies were looking to hire multiple people this year and they're consistently struggling to find adequately trained people," said McNally.





THECLUBHOU.SE

Grace Belangia, [theClubhou.se](https://theclubhou.se)'s Executive Director, said the demand for PPE that they're experiencing has helped open up new conversations about partnerships with Georgia manufacturers.

"Some of them have idle equipment they're not using right now so they can actually repurpose their equipment to help us," said Belangia. "They might see this as another pillar in their business, so it really benefits them as well."

But it was their dedication to the Augusta area that attracted Louis to join theClubhou.se's mask project. It's that

dedication that will make her stay with theClubhou.se even after the pandemic ends.

"It made sense with my background and their involvement within the community," she said. "We're just trying to supply this huge demand of masks for our medical field as well as our police officers, our firefighters, all of those essential workers risking their lives every day."

Thank you to theClubhou.se, The Foundry, and Prothaven for providing photos of their communities for this work and for their time being interviewed. We're also grateful to Dr. Ron Williams for his time and expertise. This report was authored by Johnny Magdaleno.