

Equitable innovation Economies

# Making, Scaling, and Inclusion

**What will it take to bring an equitable innovation economy to scale?**

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**PolicyLink**







Image credit: Boston Fab Lab

## Donalyn Stephenson first entered a Fab Lab in 2005, looking for affordable activities for her four young children.

Located in the basement of a mixed-income housing complex in the South End of Boston, the lab – a workplace full of sophisticated computer equipment built for design and production – was free, but not well utilized by local residents. What made the difference for Stephenson was a young PhD student at MIT named Amon Milner, a mentor at the lab who kept inviting Stephenson and her family back to the space, and helped them feel comfortable amid all the technology. “There is a difference between inclusion and access,” said Stephenson, and at Fab Lab, “[w]e felt included.”

Stephenson and her family started using the lab to design youth-oriented programs so that more young people could use the space to develop new skills and gain experience creating things. Two of her children are now pursuing degrees and careers in engineering, design, and making. And today, Stephenson is President and CEO of FABLabs for America, Inc., helping to bring Fab Labs to low-income communities and communities of color across the country.

Her story captures a broader shift that has the potential to redefine the role of makers, manufacturers and innovators in cities. Shedding its image as a dirty or dying industry, urban manufacturing is emerging as an innovative strategy to revitalize urban economies and advance equitable and inclusive economic growth in the 21st century.



## FROM PROTOTYPE TO SCALE

From small-scale makers to artisanal food manufacturers to innovative robotics and next-generation mobility companies, businesses that create and build are making a comeback in U.S. cities. Since 2010, manufacturing has stabilized and even experienced slight growth nationally, with nearly 12 million workers in 2014, and a contribution of \$2.1 trillion to national GDP.

Yet there is also [a growing bifurcation in the industry](#), similar to trends in tech and the innovation economy at large. High-paying jobs increasingly require advanced degrees, and [real wages for low and middle-income earners are declining over time](#), disproportionately impacting communities of color, low-income communities and other groups facing institutional barriers to entry.

In 2015, three organizations – Pratt Center for Community Development, PolicyLink, and the Urban Manufacturing Alliance – launched the [Equitable Innovation Economies Initiative](#) with the intention of bringing equity to the forefront of government-led strategies focused on urban manufacturing and innovation. Last year, we published a report, [Prototyping Equity](#), which documents the initiative's efforts in four pilot cities – New York City, Indianapolis, San Jose, and Portland, OR – and provides a framework for addressing these issues more broadly.





What we found is an economic development field that is hungry for strategies that remove employment barriers, such as a lack of a four-year college degree, and build upon the talent of low-income and economically disadvantaged communities to drive economic growth in their cities. The four participating cities in EIE piloted new programs to connect disconnected youth to careers in manufacturing; created new pools of venture capital to invest in women and people of color to launch innovative new businesses; and redesigned existing programs to better connect with low-income communities of color and measure their impact. Over the last several years, it has been inspiring to see these pilot programs launched, tested, revised, and achieve results, and ultimately catalyze new efforts in other UMA cities.

While these pilots have seen significant success, they also face challenges that limit their ability to replicate and reach scale. Equity and inclusion are often unfamiliar issues for government agencies and explicit commitments from local institutions – via stated equity goals or updated mission statements – are imperative given political and leadership transitions. Several agencies in the EIE pilot struggled with the lack of a mandate or policy directive that would formalize equity and inclusion as key pillars of their organization. Data on the economic impact of the shifting manufacturing sector, and the equity outcomes for specific populations at the local level, is often sparse and difficult to track. Each city in the pilot also recognized the importance of having community representatives involved in decision-making processes, to ensure all voices are present and to communicate to decision-makers the impact of manufacturing jobs, yet building these relationships requires significant time. Cities around the country have echoed many of these challenges, which will need to be addressed head-on in order to bring these equity strategies from prototype to scale.



## MOVING TOWARDS SCALE

Early analysis from the UMA's State of Urban Manufacturing study reveals that manufacturing continues to pay a living wage in the majority of the study's 14 focus cities, and employs a workforce with lower educational attainment when compared to other well-paying sectors. It also reveals that metropolitan areas are benefitting from manufacturing's growth nationwide; 11 of 14 Metropolitan Statistical Areas (MSAs) studied, manufacturing employment has stabilized post-recession, with diverse cities such as San Jose, Philadelphia, Houston, Detroit, Chicago and Buffalo showing positive growth in employment and number of establishments.

For these cities, the face of manufacturing is also changing. These are primarily small, versatile businesses creating value-added products in sectors such as food, fabricated metals, computer and electronics, and apparel. Local branding campaigns, makerspaces, and community-based advocacy groups are cropping up across the country, employing new strategies to support this growth.

Recently, there has been a growing number of promising opportunities to leverage manufacturing growth, as well as a stronger ecosystem of stakeholders to address the inequality that characterizes the manufacturing skills gap. But equity – defined here as the just and fair inclusion in society so that all can participate, prosper and reach their full potential – will require an intentional focus by employers, policy-makers, and community groups.

**Achieving equity at scale means redefining urban manufacturing from its longstanding image as merely an industry sector into a key component of local strategies for achieving economic justice in urban areas.** It means ensuring community-rooted makers of all sizes are thriving. It means residents of color and people from low-income communities have the resources and supports to start and grow a business, or find a good job with a local manufacturer, without fearing being displaced from their community or suffering negative environmental or health issues.

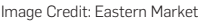
First and foremost, we need to name our equity goals in urban manufacturing, whether these are increased employment opportunities for people with less than a college degree or a criminal record, or supporting a diverse maker community, or reversing the decline in wages in some manufacturing jobs. Once there are clear goals, we need good data – disaggregated by race, gender, and/or neighborhood – to understand what types of economic conditions different communities face, and the barriers that are holding them back from achieving a middle-class income. Data that is tied to target communities can help refocus program strategies around the equity goals already identified, and can demonstrate innovative, and comparable, outcomes across approaches or geographies.

LISC Indianapolis has created an online tool that compiles data around specific equity outcomes across its FOCUS program sites, yielding valuable insights on how neighborhood-based investments are impacting outcomes such as local hiring and wages for low-income workers.

A woman with dark hair, wearing a red t-shirt and a yellow knitted beanie, is leaning over a large stainless steel pot on a stove. She is holding a white plastic spoon and stirring the contents of the pot. The pot has two handles and is sitting on a dark surface. The background is slightly blurred, showing a kitchen setting.

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Getting to scale will require reaching into communities that have previously been disconnected from urban manufacturing opportunities. We need to ask “who is at the table”, and “who is missing” in all our work. By expanding our networks, we will grow our movement into communities that are the future majority of our country, and support the growth of new talent and creativity within these communities.

**FOR EXAMPLE**

In Baltimore, the city's Made in Baltimore program is revising its outreach and recruitment to reach more makers of color, and is working with Associated Black Charities to identify manufacturers interested in collaborating on a racial equity framework for employers.

In Philadelphia, Next Fab is hiring bilingual staff to better connect with the majority Latino community where they're located.

In Detroit, the Eastern Market Corporation's food entrepreneur incubator program, called Kitchen Connect (pictured above), finds its entrepreneurs by partnering with, and conducting outreach through, churches and local community organizations such as FoodLab Detroit with deep ties to disinvested neighborhoods in the city.



**FOR EXAMPLE**



Image Credit: Boston Ujima Project

develop the Northeastern Impact Lending initiative. The initiative offers loans ranging between \$1,000 and \$1 million with a focus on minority- and women-owned businesses in the Boston area.





**FOR EXAMPLE**

Image Credit: Hacker Lab/Sierra College



**FOR EXAMPLE**

refused to denounce white supremacists who caused violence in Charlottesville, Virginia, seven business leaders in the president's manufacturing council resigned in protest.

## CONCLUSION

This list may seem daunting, but programs from Baltimore to Portland are showing that equity and inclusion approaches can grow and strengthen the manufacturing sector. For Donalyn Stephenson, increasing the participation of people of color and low-income residents in urban manufacturing is an economic imperative. "There needs to be more people of color doing this work," said Stephenson. "If we were to get the infrastructure and support to train people into this economy, we could create whole new industries."

Urban manufacturing is both a sector and a strategy to advance equitable economic growth in cities. Now is the time to bring these strategies to scale.

## ACKNOWLEDGEMENTS

*Making, Scaling, and Inclusion* was co-authored by UMA's Equity Community of Practice Co-Chairs Tanu Kumar (Senior Planner for Economic Development, Pratt Center) and Chris Schildt (Senior Associate, PolicyLink), with additional writing from Johnny Magdaelno (Communications Manager, UMA), Katy Stanton (Program Director, UMA) and Lee Wellington (Executive Director, UMA). This report was designed by Ben Dodd (Communications Specialist, Pratt Center).

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The Pratt Center for Community Development works for a more just, equitable, and sustainable city for all New Yorkers by empowering communities to plan for and realize their futures. As part of Pratt Institute, Pratt Center leverages professional skills in planning, architecture, design and public policy to support community-based organizations in their efforts to improve neighborhood quality of life, attack the causes of poverty and inequality, and advance sustainable development.



PolicyLink is a national research and action institute advancing economic and social equity by Lifting Up What Works. PolicyLink works with local and national partners to catalyze a new conversation about equity as an economic driver and advance policies and strategies to build an equitable economy.



The Urban Manufacturing Alliance (UMA) is a national coalition of organizations and individuals that are building manufacturing economies fit for the 21st century. UMA's collective goal is to create pathways to middle-class jobs, spark homegrown innovation and ensure that cities and towns continue to be the places where we make things. Through our Communities of Practice, in-person Gatherings and original policy research, UMA showcases current practices, programs and people that are uplifting manufacturing and creating more equitable communities.