

TECHNOLOGY AND EQUITY IN CITIES

EMERGING CHALLENGES AND OPPORTUNITIES

Racial and economic inequities in the US are growing, and rapid technological change can either promote inclusion or widen these divides. City leaders can use technological innovations to manage infrastructure and improve services, communicate with constituents, and make better decisions. But they must also be aware of the challenges that come with the disruptive force of new technological advancements.

Based on a literature review and interviews with experts, we explore trends in four main areas of technological change and identify how those trends could exacerbate or mitigate inequalities in cities. We also suggest paths forward for local leaders committed to harnessing technological innovation to create more equitable cities.



Smart Infrastructure

Opportunity: Combining physical infrastructure and digital infrastructure can connect neighborhoods and residents to information and help cities deliver essential services more efficiently.

Challenge: Smart infrastructure projects can widen disparities in access to basic services or divert resources from equity-focused initiatives.



Shared Mobility

Opportunity: Services that allow residents to share the use of a car, bicycle, or other modes of transportation can reduce transportation costs for low-income riders and expand options in underserved neighborhoods.

Challenge: Shared-mobility platforms can perpetuate discrimination or lead to disinvestment in existing transit systems.



Civic Technology

Opportunity: Online and mobile platforms that enable greater participation in government or help residents access services can increase transparency and accountability and support civic engagement.

Challenge: Civic tech projects can exclude residents who lack access to technologies and information, and improvements may not be sustained over time.



Technology-Enhanced Data Analytics

Opportunity: New data science methods capable of processing vast quantities of data can help city leaders uncover equity challenges and design more effective and evidence-based interventions.

Challenge: These analytic tools can reinforce existing biases in the data or suggest short-term solutions to enduring challenges.



PATHS FORWARD

City leaders and service providers should use the following approaches to ensure technological advancements promote more equitable communities:

Combine technological innovation with structural solutions.

Identify ways to combine technological innovation with enabling environments, such as policy supports and investments that address structural issues.

Hardwire equity goals into project development and implementation.

Apply an equity lens when evaluating the costs and benefits of new technologies. Build equity goals into the project plan, scope, execution, and evaluation.

“Build with, not for,” traditionally excluded communities.

Create an inclusive process that goes beyond consultation and includes empowerment and codesign.

Leverage technology to track progress.

Commit to equity by measuring progress in achieving goals. Create open-data platforms to help community groups hold public agencies accountable.

“Using technology to advance equity requires putting people at the center of what you do. We’re interested in finding a humanistic approach to deploying technology in the public good, and that spans a wide range of things we do as a city. It relates to how constituents approach government with ideas but also to how we deliver services fairly and equitably.”

—Nigel Jacob, cochair, Boston Mayor’s Office of New Urban Mechanics

“Local governments can use technology to facilitate people who have historically been excluded to have a voice in shaping their community and their future. Creating these opportunities is a core challenge of government, but government and technology leaders must be intentional about making it happen.”

—ST Mayer, chief program officer, Code for America

This report was supported with a grant from the Mastercard Impact Fund, in collaboration with Mastercard Center for Inclusive Growth.

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