

# Advancing Community Revitalization to Improve Health and Equity

**CITIES LEADING THROUGH INFRASTRUCTURE, LAND USE PLANNING, ZONING AND THE BUILT ENVIRONMENT**

Cities across the country are leading a diverse array of community revitalization initiatives to improve neighborhood conditions so that all city residents, particularly those historically and presently excluded, have fair and just access to opportunities for good health and wellbeing, and the resources to shape vibrant, inclusive communities. Such efforts cover an expansive set of policies, from housing and transit to broadband access and health, and often differ in nature, reach and scope.

City-led community revitalization efforts have become particularly salient, thanks to extraordinary federal funding from two recently passed laws: the American Rescue Plan Act (ARPA) and the Infrastructure Investment and Jobs Act (IIJA). These laws provide both direct federal funding and competitive grant opportunities for local governments. Cities and towns of all sizes have a unique opportunity to use these funds to invest in partnerships with multi-sector and community stakeholders to make long-term, sustainable improvements in identified areas of local need. This brief describes city initiatives and highlights best practices that support and foster equitable communities and neighborhood revitalization and address inequities that shape health disparities.

It does so by considering three core components of community revitalization efforts, including:

1. Enhancing **infrastructure** development to improve health and safety disparities, and to ensure equitable access to transportation, digital access and broadband;
2. Implementing and amending **land use planning and zoning** ordinances to foster equitable access to economic and community development initiatives;
3. Supporting the **built environment** with a focus on efforts and resources that mitigate inequitable effects of climate through improved greenspace and green stormwater improvements.

## Infrastructure

Policies and initiatives to improve infrastructure including transportation and broadband can address equity by improving access to health-related social needs, such as housing and employment, and creating connected communities that promote health and safety and contribute to the strength of the local economy.<sup>1</sup> Cities can use funding from both IIJA and ARPA to implement such efforts.

**Transportation:** IIJA, for example, authorized \$108 billion for public transportation over the next five years, to support improved safety, modernization, and enhanced equity in transportation services for communities with historically limited access.<sup>2</sup> To address transportation gaps, access cities can use ARPA and IIJA funds to implement Complete Streets (CS) policies to create safe, multi-use streets for pedestrians, bicyclists, transit, and vehicles.<sup>3</sup> These policies improve community health by prioritizing safety over speed in street designs, which prevents pedestrian fatalities and injury.<sup>4,5</sup> As of 2020, 1,520 jurisdictions have adopted CS policies.<sup>6</sup>

**Broadband Access:** Accessing reliable, high-speed internet is an equity issue that can impact how long we live and how well we live, given that broadband is used to access education and to apply for benefits and employment.<sup>7</sup> ARPA provides cities with funding to expand broadband access.<sup>8</sup> This money can be used to invest in projects for both households and businesses to connect to broadband and improve broadband speeds.<sup>9</sup> Additionally, IIJA provides \$65 billion over five years to connect people to broadband, and to lower the cost of internet access.<sup>10,11</sup>

#### CITY EXAMPLE

### Advancing Digital Equity in Sioux Falls, SD

**Sioux Falls** is working with the community to eliminate digital inequality by creating the Inclusive Digital Equity Alliance (IDEA). This Alliance will focus on three main barriers to digital equity which are: access to affordable broadband, accessibility to devices, and the digital literacy needed to access and use technology.<sup>12</sup> The city surveyed residents and found that 15% of households lack internet access at home, while an additional 10% of low-income residents limited availability to computers, laptops, smartphones and tablets.<sup>13</sup> The city developed a Digital Inclusion Framework, which is informing efforts to increase access and eliminate barriers.

**Community Enhancement:** Increasing investment in historically underinvested areas, which often are low-income communities or communities of color, can reduce both violent and non-violent crime rates.<sup>14</sup> Beautification efforts can also increase the sense of community ownership and pride, and decrease crime through fewer vacant buildings.<sup>15</sup> Cities can use ARPA and IIJA funds to implement programs improving streetscapes through façade, sign and lighting enhancements, planting of trees, and fencing and architectural treatments.

#### CITY EXAMPLE

### El Punto Neighborhood Revitalization in Salem, MA

The Point neighborhood in **Salem** embarked on a community development plan to increase greenspace and improve the wellbeing of its residents. The neighborhood's population is diverse – 63 percent of residents are non-white, primarily immigrants from the Dominican Republic, and newer arrivals from Haiti and African countries.<sup>16</sup> The project also focused on broader issue areas like increasing affordable housing and increasing private funding into the neighborhood. Some notable projects include the Punto Urban Art Museum (PUAM) launched in 2017 to break down socioeconomic barriers between this neighborhood and the rest of the city, and Espacio, a community space centrally located on the first floor of a Coalition affordable housing property.<sup>17</sup> The community and residents were at the heart of this project, with more than 300 residents involved in the creation of the Point Neighborhood Vision and Action Plan.<sup>18</sup>

# Land Use, Planning and Zoning

Planning and zoning policies\* can target both equitable community revitalization efforts and public health outcomes by improving housing and pedestrian-oriented transit options.

**Planning for Equity:** Land use or city plans provide a vision for how cities will grow and change over time.<sup>19</sup> They are valuable tools for cities looking to shape equitable communities. To achieve this, they must be rooted in public participation and resident input to ensure the resulting designs are responsive to the needs and priorities of a city's many and diverse communities. City plans should also consider the multiple factors that directly impact health and equity, including land use and zoning, housing, public infrastructure, transportation, economic development, and access to food.<sup>20,21</sup>

## CITY EXAMPLE

### Master Plan for Neighborhood Revitalization in Las Vegas, NV

**Las Vegas** created a Master Plan to stabilize neighborhoods with urgent infrastructure needs and address the needs of neighborhoods experiencing increases in traffic, noise, or crime. The plan was created in part by utilizing relationships with key stakeholders in the Historic West Side, engaging with the National League of Cities' [Cities of Opportunity](#) initiative, and authentic partnering with community leaders through a neighborhood-centric and co-design approach.<sup>22,23</sup> The Master Plan develops vacant land into mixed-use urban hubs and improves walkability to reduce traffic. The plan also implements policies to develop vacant or underutilized lots in existing residential neighborhoods and incentivizes neighborhoods to make improvements by relaxing certain building requirements, such as by increasing the permitted uses of historic buildings to ensure they are utilized and maintained.<sup>24</sup>

\* Planning and zoning policies are similar but differ in their approach to regulate land use and development. City planning efforts include collaboration with residents and elected officials to guide the development of the community. While planning utilizes a big picture lens to understand and address the health, safety, and economic well-being of residents, zoning is more granular. Zoning codes are the set of rules defining the acceptable use of different areas.

**Zoning for Equity:** Cities should consider how zoning policies benefit or burden different populations and can directly or indirectly lead to poor health outcomes that impact some communities more than others. There are multiple tools available to cities wishing to apply an equity lens to their planning and zoning efforts. One such tool is racial equity analysis, which includes estimating the costs and benefits of land use changes across racial and ethnic communities, the historical impacts of redlining, the risks of displacement, and how policies may relate to or influence current residential segregation patterns. These policies have been enacted in a variety of cities for both re-zoning and large-scale housing projects requiring city approval.<sup>25, 26, 27, 28</sup>

A critical step for all cities seeking to build health and racial equity into planning and zoning is centering community voice and participation. Some cities, like Syracuse NY, rely on local partners who already have established trust with the community.<sup>29</sup> In other cities, like Tempe AZ, the city takes the lead in developing city-wide structures for community directed decision-making.

#### CITY EXAMPLE

### Community Engagement and Racial Equity Commitment in Tempe, AZ

In 2018, **Tempe's** Offices of Sustainability, Neighborhood Services, and Strategic Management and Diversity began laying the groundwork for their Equity in Action initiative, a city-wide framework to advance equity.<sup>30</sup> At the core of the Equity in Action framework, is collaboration between city residents and city departments on key projects, including services planning, infrastructure, zoning, climate action planning, and implementation of the urban core master plan. This collaboration is fostered through direct involvement and feedback from community members, as well as the leadership of a ten-member coalition, who give voice to specific, targeted populations (e.g., non-English speaking residents, non-college graduates, youth, parents with children, low-income residents, et al.). This coalition works directly with the city Equity in Action Committee, building the capacity of city staff to understand the implications of race, culture, and socio-economic status and to design targeted solutions to increase equity within the city across planning, zoning, and other initiatives.

**Single-family Zoning:** Housing-related zoning policies often revolve around whether developers can build single-family homes or multi-unit dwellings. Single family zoning has shaped modern US cities comprising 75% of their residential land.<sup>31</sup> Replacing single family homes with multi-family dwellings can increase the density, supply, variety and affordability of housing. Changing zoning policies to allow the development of multi-family units near public transportation increases housing options, employment opportunities and access to healthy food options for communities of color who have been displaced into neighborhoods not well served by transit contributing to greater residential diversity and accessibility.<sup>32</sup>

#### CITY EXAMPLE

### Equity and Zoning in Louisville, KY

**Louisville** identified a number of housing policy solutions as part of a comprehensive equity review of the Louisville Metro area's zoning regulations. The review incorporated community feedback to identify barriers to equity in existing zoning policies, including policies with a disproportionate impact on low-income and communities of color.<sup>33</sup> This process revealed that roughly half of Louisville's renter population, disproportionately Black and Latinx, pay more than 30 percent of their income in rent and that rental prices were linked to limited housing availability. Furthermore, new construction was being permitted outside the areas that Black and Latinx populations lived, exacerbating equity issues related to housing in the Metro area. Through acknowledging the racial origins and impacts of zoning laws on shaping these inequities, Louisville has identified policies to increase housing availability and affordability for Black and Latinx residents. These include barriers to multifamily housing units, reforms to ease burdens on building accessory dwelling units and permitting duplexes on properties zoned for multifamily use.<sup>34,35</sup>

**Inclusionary Zoning** policies require private developers to offer a percentage of housing units for families below certain income thresholds. City governments offer tax breaks or deductions to incentivize developers to construct and offer inclusive housing opportunities.<sup>36</sup> Such policies are a tool for local governments to ensure developments and housing developers are meeting the real housing needs of all residents.<sup>37</sup> Inclusionary zoning, if permitted by state law and consistently enforced by local government, may lead to improvements in quality housing, financial equity, and access to healthier neighborhoods with more amenities.<sup>38,39,40</sup> Such policies can also improve the mobility of residents at greater risk for health disparities associated with living in areas near industrial waste and pollution and can improve racial health inequities related to unhealthy housing conditions.<sup>41,42</sup>

Cities can use ARPA or IIJA funding to maintain and improve existing affordable housing stock, to directly finance the construction of new affordable housing units or to improve housing access. For example, Dallas Texas provided \$100,000 in ARPA funds to property owners in three Qualified Census Tract areas to renovate homes so that low-income seniors can age in place.<sup>43</sup>

**Pedestrian-oriented zoning** policies can increase the number of pedestrian and bike-friendly streets, including the number of marked crosswalks, bike lanes and bike parking. Policies designed to support slower and safer speeds are especially beneficial for under resourced communities. Such communities often have less access to parks and open green space and are more likely to live in neighborhoods with major arterial roads built for higher speeds and higher traffic volume creating dangerous, often fatal, conditions for pedestrians.<sup>44</sup> Cities can enact policies to create areas more favorable to pedestrian movement and safety and increase physical activity contributing to increased health and life expectancy for low-income communities and communities of color.<sup>45</sup>



#### CITY EXAMPLE

### Pedestrian-oriented Policies in Denver, CO

**Denver** created and implemented a series of pedestrian-oriented policies, in conjunction with transit development from the downtown area to the suburbs. The effort aimed to improve walkability and reduce reliance on cars for transportation, ultimately reducing pollution and its negative impacts.<sup>46</sup> The policies acknowledge the importance of transit options to improve employment opportunities for low- and moderate-income people by including incentives for affordable housing options within a 10-minute walk of transit stations. These zoning changes encourage mixed land use of business and residential buildings so that city residents can shop in the same places they live. Denver also encourages outdoor public gathering spaces, distributed equitably throughout the city, to improve pedestrian use of land.<sup>47</sup> These policies help revitalize communities by improving public and pedestrian use of communal land and connecting communities through accessible pathways.

## The Built Environment

The built environment considers buildings, streets, neighborhoods and parks, and how their construction and design impacts health and racial equity.<sup>48</sup> IIJA allocated over \$50 billion for cities to improve the built and natural environment to protect residents against the impacts of climate change and extreme weather events and improve health and equity.<sup>49</sup> Cities can use both ARPA and IIJA funding to implement strategic, equity-centered investments in urban greenspace and green stormwater infrastructure (GSI) to improve health equity, rebuild urban ecosystems and improve community resilience.<sup>50</sup>

**Greenspace:** Mayors and cities are increasing access to greenspace as part of more holistic community revitalization efforts. Greenspace helps promote outdoor activity, lowering the risk of cardiovascular disease and obesity.<sup>51,52</sup> Greenspace also mitigates environmental problems in cities, towns and villages including air pollution, viral disease transmission, poor water quality and heat-island effects. Overall, greenspace promotes environmental quality, social-emotional wellbeing and city walkability.<sup>53,54</sup>



#### CITY EXAMPLE

### Pocket Parks in New York City's Lower East Side

The economic recession of the 1970's left **New York City's** Lower East Side with vacant lots, abandoned housing and excessive garbage. In response, Black and Latinx residents collaborated with the city to transform several vacant lots into miniature community parks, or "Pocket Parks." Now, under city oversight, pocket parks are designed and maintained by community members. They contain community gardens and open green space for residents to enjoy while commemorating local Black and Latinx culture.<sup>55</sup> The green space of the parks also reduces the neighborhood temperature and thus helps mitigate the heat-related impacts of climate change.<sup>56</sup>

**Stormwater Policies:** Another growing concern for cities is urban flooding, which disproportionately affects low-income and communities of color.<sup>57</sup> Stormwater infrastructure deterioration and population growth have been especially problematic for people with lower incomes who are more likely to live on floodplains while at the same time be unable to afford flood insurance.<sup>58</sup> Green stormwater infrastructure (GSI) mitigates the effects of urban flooding and includes an array of sustainable water management practices to decrease stormwater runoff and pollution. These practices include developing green roofs, green parking lots, rain gardens, parks in strategic areas and urban tree canopies.<sup>59</sup>

#### CITY EXAMPLE

### Green Stormwater in Houston, TX

Flooding in **Houston** disproportionately affects low-income residents and communities of color. To mitigate the effects of future severe weather events, in 2018, Harris County passed a \$2.5 billion flood bond. A year later, the County Commissioners Court passed a resolution to adopt an equitable prioritization framework for Bond spending to address drainage and flood protection in marginalized communities.<sup>60</sup> In 2021, Houston prioritized equity and capital investment when investing in green stormwater infrastructure to improve drainage systems as part of their participation in the National League of Cities' [Cities of Opportunity](#) effort.<sup>61</sup> They created a prototype of a framework to model risk-based and equitable decision-making processes designed to meet the needs of each city's neighborhoods.<sup>62</sup> This framework is a model for future capital improvement investments. In an analysis of three green infrastructure regeneration projects in Houston, researchers found a decrease in flood risk and a greater economic return on investment from utilizing GSI.<sup>63</sup>

## Future Considerations

Cities are using funds, including investments from ARPA and IIJA, to design and implement policies and initiatives focused on the future. In doing so, city leaders are integrating health equity into community development and infrastructure grants, land use plans, land use regulations and zoning policies. To make the most immediate impact, cities should use data to identify and prioritize communities at highest risk. To ensure lasting and meaningful impact, cities should seek and integrate robust community input and invite community co-design to implement long-lasting and equitable plans and policies that improve health outcomes and address racial disparities. Through these efforts, cities will improve understanding and better address the needs of the community.

## About this Project

With generous support from the Robert Wood Johnson Foundation, the National League of Cities Institute (NLCI) through the Health & Wellness team is exploring city-level approaches to transform and revitalize neighborhoods and communities to improve health and equity through infrastructure, planning, zoning and the built environment. The intention of the brief is to support city leaders in identifying effective strategies that can be adopted to ensure community revitalization at a time when unprecedented levels of federal funding is available. Special thanks to Paige Organick-Lee, MPH, Katie Horton, RN, MPH, JD, and Mekhi Washington, at the Milken Institute School of Public Health for their research, support and contributions to this brief.

# Endnotes

- <sup>1</sup> U.S. Department of Housing and Urban Development. (2014). Creating Connected Communities: A Guidebook for Improving Transportation Connections for Low and Moderate-Income Households in Small and Mid-Sized Cities. Center for Transit-Oriented Development. 2014  
[https://www.huduser.gov/publications/pdf/Creating\\_Cnnted\\_Comm.pdf](https://www.huduser.gov/publications/pdf/Creating_Cnnted_Comm.pdf)
- <sup>2</sup> President Biden's Bipartisan Infrastructure Law. The White House.  
<https://www.whitehouse.gov/bipartisan-infrastructure-law/>
- <sup>3</sup> Call to Action: Safer and Healthier Streets with ARPA funds. Wisconsin Bike Fed. Accessed August 4, 2022. <https://wisconsinbikefed.org/advocacy/local-advocacy/call-to-action-safer-and-healthier-streets-with-arpa-funds/>
- <sup>4</sup> Schneider RJ. "Complete Streets" Policies and Eliminating Pedestrian Fatalities. Am J Public Health. 2018;108(4):431-433. doi:10.2105/AJPH.2018.304317
- <sup>5</sup> Complete Streets in FHWA. US Department of Transportation Federal Highway Administration. Accessed August 2, 2022.  
<https://highways.dot.gov/complete-streets/complete-streets-fhwa>
- <sup>6</sup> Complete Streets. Smart Growth America. March 24, 2022.  
<https://smartgrowthamerica.org/what-are-complete-streets/>
- <sup>7</sup> Panettieri A, Geraghty L, Wagner S. Community Broadband: A Key Tool for Closing the Digital Divide. National League of Cities. Accessed July 21, 2022.  
<https://www.nlc.org/wp-content/uploads/2021/07/Community-Broadband-Brief-2.pdf>
- <sup>8</sup> Panettieri A. Treasury Expands Broadband Eligibility for ARPA in a Win for Cities. Accessed July 21, 2021. <https://www.nlc.org/article/2021/06/18/treasury-expands-broadband-eligibility-for-arpa-in-a-win-for-cities/>
- <sup>9</sup> 31 CFR Part 35 RIN 1505-AC77. Coronavirus State and Local Fiscal Recovery Funds  
<https://home.treasury.gov/system/files/136/SLFRF-Final-Rule.pdf>
- <sup>10</sup> President Biden's Bipartisan Infrastructure Law. The White House.  
<https://www.whitehouse.gov/bipartisan-infrastructure-law/>
- <sup>11</sup> Fact Sheet: Biden-Harris Administration's "Internet for All" Initiative: Bringing Affordable, Reliable High-Speed Internet to Everyone in America. US Department of Commerce. May 13, 2022. <https://www.commerce.gov/news/fact-sheets/2022/05/fact-sheet-biden-harris-administrations-internet-all-initiative-bringing>
- <sup>12</sup> Eliminating the Digital Divide, City of Sioux Falls. Accessed 8, 25.2022.  
<https://siouxfalls.org/digitalequity>.
- <sup>13</sup> Eliminating the Digital Divide, City of Sioux Falls. Accessed 8, 25.2022.  
<https://siouxfalls.org/digitalequity>.
- <sup>14</sup> South EC, MacDonald J, Reina V. Association Between Structural Housing Repairs for Low-Income Homeowners and Neighborhood Crime. JAMA Netw Open. 2021;4(7):e2117067. Published 2021 Jul 1. doi:10.1001/jamanetworkopen.2021.17067

- <sup>15</sup> CPTED in Brief. The International Crime Prevention Through Environmental Design Association. Accessed August 18, 2022. <https://www.cpted.net/Primer-in-CPTED>
- <sup>16</sup> Metro Boston Consortium for Sustainable Communities, Creating a Vision, Strengthening a Community: A Vision and Action Plan for the Point Neighborhood in Salem 2013 – 2020 (n.d.). Accessed August 25, 2022, from <https://www.salemma.gov/sites/g/files/vyhlif7986/f/uploads/pointvisionfinal.pdf>
- <sup>17</sup> “El Punto Neighborhood Revitalization.” Congress for the New Urbanism, Accessed August 25, 2022. <https://www.cnu.org/what-we-do/build-great-places/el-punto-neighborhood-revitalization>.
- <sup>18</sup> Metro Boston Consortium for Sustainable Communities, Creating a Vision, Strengthening a Community: A Vision and Action Plan for the Point Neighborhood in Salem 2013 – 2020 (n.d.). Accessed August 25, 2022, from <https://www.salemma.gov/sites/g/files/vyhlif7986/f/uploads/pointvisionfinal.pdf>
- <sup>19</sup> Bowen, C. (n.d.). What Is Planning? American Planning Association. Accessed August 25, 2022, from <https://www.planning.org/educators/whatisplanning/>
- <sup>20</sup> Iowa State University Extension and Outreach. (n.d.) Elements of a Comprehensive Plan. Community and Economic Development. Retrieved August 25, 2022, from <https://www.extension.iastate.edu/communities/elements-comprehensive-plan>
- <sup>21</sup> Shah, S., & Wong, B. (n.d.). Toolkit to Integrate Health and Equity Into Comprehensive Plans Using the Sustaining Places-Best Practices for Comprehensive Plans Framework. American Planning Association. [https://planning-org-uploaded-media.s3.amazonaws.com/publication/download\\_pdf/Toolkit-to-Integrate-Health-and-Equity-into-Comprehensive-Plans.pdf](https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/Toolkit-to-Integrate-Health-and-Equity-into-Comprehensive-Plans.pdf)
- <sup>22</sup> Cities of Opportunity: Turning Crisis into Pathways for Equity and Resilience. National League of Cities. 2021. <https://www.nlc.org/resource/cities-of-opportunity-turning-crisis-into-pathways-for-equity-and-resilience/>
- <sup>23</sup> Mehta N. Building Cities of Opportunity: Putting Residents at the Center of Cities Work. The National League of Cities. Accessed June 23, 2022. <https://www.nlc.org/article/2022/05/13/building-cities-of-opportunity-putting-residents-at-the-center-of-cities-work/>
- <sup>24</sup> Las Vegas Master Plan. 2020. <https://files.lasvegasnevada.gov/planning/Las-Vegas-Master-Plan-2020.pdf>
- <sup>25</sup> Requiring a citywide equitable development data tool and racial equity reports on housing and opportunity. New York City Council. July 18, 2021. <https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=3963886&GUID=D2C9A25B-0036-416E-87CD-C3AED208AE1B&Options=ID%7CText%7C&Search=1572>
- <sup>26</sup> Seattle 2035 Equity Analysis. Accessed August 4, 2022. <https://www.seattle.gov/Documents/Departments/OPCD/OngoingInitiatives/SeattlesComprehensivePlan/2035EquityAnalysisSummary.pdf>
- <sup>27</sup> Freeman L. Build Race Equity into Rezoning Decisions. How We Rise: Brookings. July 13, 2021. <https://www.brookings.edu/blog/how-we-rise/2021/07/13/build-race-equity-into-rezoning-decisions/>

- <sup>28</sup> Preliminary Racial Analysis of NW Streetcar Expansion and Related Land Use Changes. Accessed August 25, 2022. [https://www.portland.gov/sites/default/files/2019-11/racial-equity-analysis-report\\_streetcar\\_final.pdf](https://www.portland.gov/sites/default/files/2019-11/racial-equity-analysis-report_streetcar_final.pdf)
- <sup>29</sup> Upstate New York: Housing, Health and Safety. Center for Court Innovation. Accessed August 25, 2022. <https://www.courtinnovation.org/housing-health-safety>.
- <sup>30</sup> Equity in Action. City of Tempe. Accessed August 2, 2022. <https://www.tempe.gov/home/showpublisheddocument/90537/637603839075570000#:~:text=Equity%20in%20Action%20seeks%20to,that%20reflect%20diversity%20and%20inclusion>.
- <sup>31</sup> Badger, E., & Bui, Q. (2019, June 18). Cities Start to Question an American Ideal: A Housing With a Yard on Every Lot. The New York Times. <https://www.nytimes.com/interactive/2019/06/18/upshot/cities-across-america-question-single-familyzoning.html?mtrref=undefined&assetType=PAYWALL&mtrref=www.nytimes.com&gwh=35B2921731A590E3A1514B1ECB9ED15A&gwt=pay&assetType=PAYWALL>
- <sup>32</sup> Lens M. Low-Density Zoning, Health, And Health Equity. Health Affairs Health Policy Brief. September 30, 2021. DOI: 10.1377/hpb20210907.22134
- <sup>33</sup> Land Development Code Reform. Louisville, KY. Accessed June 23, 2022. <https://louisvilleky.gov/government/planning-design/land-development-code-reform>
- <sup>34</sup> Land Development Code Reform. Louisville, KY. Accessed June 23, 2022. <https://louisvilleky.gov/government/planning-design/land-development-code-reform>
- <sup>35</sup> Advancing Equity: Removing Barriers to Equitable Development in Louisville Metro. Develop Louisville. April 2019. <https://louisvilleky.gov/louisville-forward/document/pdsadvancingequity072220pdf>
- <sup>36</sup> Tuller D. Housing And Health: The Role Of Inclusionary Zoning. Health Affairs Health Policy Brief. June 7, 2018. DOI: 10.1377/hpb20180313.668759
- <sup>37</sup> Thaden E, Wang R. Inclusionary Housing in the United States. The Lincoln Institute of Land Policy. September 2017. <https://www.lincolninst.edu/publications/working-papers/inclusionary-housing-in-united-states>
- <sup>38</sup> Dawkins C, Jeon JS, Knaap G-J. Creating and preserving affordable homeownership opportunities: does inclusionary zoning make sense? J Plan Educ Res. 2017; 37:444456. DOI: 10.1177/0739456X16659763
- <sup>39</sup> Ramakrishnan K, Treskon M, Greene S. Inclusionary Zoning: What Does the Research Tell Us About the Effectiveness of Local Action? Urban Institute. January 16, 2019. <https://www.urban.org/research/publication/inclusionary-zoning-what-does-research-tell-us-about-effectiveness-local-action>
- <sup>40</sup> Iglesias T. Maximizing inclusionary zoning's contributions to both affordable housing and residential integration. Washburn Law J. 2014; 54:585611.

- <sup>41</sup> Jones A, Squires GD, Nixon C. Ecological Associations Between Inclusionary Zoning Policies and Cardiovascular Disease Risk Prevalence: An Observational Study. *Circ Cardiovasc Qual Outcomes*. 2021;14(9):e007807. DOI:10.1161/CIRCOUTCOMES.120.007807
- <sup>42</sup> Melton-Fant C. Relationship between state preemption of inclusionary zoning policies and health outcomes: is there disparate impact among people of color? *Hous Policy Debate*. 2020; 1056-1065. 10.1080/10511482.2020.1798488
- <sup>43</sup> Local Government ARPA Investment Tracker. National League of Cities. Accessed August 2, 2022. <https://www.nlc.org/resource/local-government-arpa-investment-tracker/>
- <sup>44</sup> Patrick Morency, Lise Gauvin, Céline Plante, Michel Fournier, and Catherine Morency, 2012: Neighborhood Social Inequalities in Road Traffic Injuries: The Influence of Traffic Volume and Road Design *American Journal of Public Health* 102, 1112\_1119, <https://doi.org/10.2105/AJPH.2011.300528>
- <sup>45</sup> Chriqui JF, Leider J, Thrun E, Nicholson LM, Slater SJ. Pedestrian-oriented zoning is associated with reduced income and poverty disparities in adult active travel to work, United States. *Prev Med*. 2017;95 Suppl(Suppl):S126-S133. DOI: 10.1016/j.ypmed.2016.10.003. [https://www.ajpmonline.org/article/S0749-3797\(22\)00155-6/fulltext](https://www.ajpmonline.org/article/S0749-3797(22)00155-6/fulltext)
- <sup>46</sup> Connecting Destinations through Pedestrian-Oriented Design. American Planning Association. Accessed July 7, 2022. <https://www.planning.org/blog/9227407/connecting-destinations-through-pedestrian-oriented-design//>
- <sup>47</sup> Downtown's Golden Triangle Neighborhood Receives New Zoning & Design Guidelines. July 20, 2021. <https://www.downtowndenver.com/newsroom/downtowns-golden-triangle-neighborhood-receives-new-zoning-design-guidelines/>
- <sup>48</sup> Fedorowicz M., Schilling J., et al. Leveraging the Built Environment for Health Equity. The Urban Institute. July 14, 2020. <https://www.urban.org/research/publication/leveraging-built-environment-health-equity>
- <sup>49</sup> President Biden's Bipartisan Infrastructure Law. The White House. <https://www.whitehouse.gov/bipartisan-infrastructure-law/>
- <sup>50</sup> President Biden's Bipartisan Infrastructure Law. The White House. <https://www.whitehouse.gov/bipartisan-infrastructure-law/>
- <sup>51</sup> Jennings V., Osborne-Jelks N., and James Dills. Parks and Health Equity: An Avenue to Support Health and Wellness for All. National Recreation and Park Association (NRPA). November 2, 2018. <https://www.nrpa.org/parks-recreation-magazine/2018/november/parks-and-health-equity-an-avenue-to-support-health-and-wellness-for-all/>
- <sup>52</sup> Rigolon, A., Browning, M., McAnirlin, O., & Yoon, H. V. (2021). Green Space and Health Equity: A Systematic Review on the Potential of Green Space to Reduce Health Disparities. *International journal of environmental research and public health*, 18(5), 2563. <https://doi.org/10.3390/ijerph18052563>

- <sup>53</sup> Bikomeye, J. C., Namin, S., Anyanwu, C., Rublee, C. S., Ferschinger, J., Leinbach, K., Lindquist, P., Hoppe, A., Hoffman, L., Hegarty, J., Sperber, D., & Beyer, K. (2021). Resilience and Equity in a Time of Crises: Investing in Public Urban Greenspace Is Now More Essential Than Ever in the US and Beyond. *International journal of environmental research and public health*, 18(16), 8420. <https://doi.org/10.3390/ijerph18168420>
- <sup>54</sup> Sinha P, Coville RC, Hirabayashi S, Lim B, Endreny TA, Nowak DJ. Variation in estimates of heat-related mortality reduction due to tree cover in U.S. cities. *J Environ Manage*. 2022 Jan 1;301:113751. DOI: 10.1016/j.jenvman.2021.113751. Epub 2021 Oct 7. PMID: 34628283.
- <sup>55</sup> Burrowes. Three City Parks that Encourage Inclusion in Their Communities. The Urban Institute. January 16, 2020. <https://www.urban.org/urban-wire/three-city-parks-encourage-inclusion-their-communities>
- <sup>56</sup> What Are Heat Islands? The Environmental Protection Agency. September 15, 2021. <https://www.epa.gov/heatislands/learn-about-heat-islands#:~:text=A%20review%20of%20research%20studies,2%E2%80%935%C2%B0F%20higher>.
- <sup>57</sup> University of Maryland, Center for Disaster Resilience, and Texas A&M University, Galveston Campus, Center for Texas Beaches and Shores. The Growing Threat of Urban Flooding: A National Challenge. 2018. College Park: A. James Clark School of Engineering. Accessed August 25, 2022 <https://www.tamug.edu/newsroom/2018articles/UrbanFloodingReport.pdf>
- <sup>58</sup> University of Maryland, Center for Disaster Resilience, and Texas A&M University, Galveston Campus, Center for Texas Beaches and Shores. The Growing Threat of Urban Flooding: A National Challenge. 2018. College Park: A. James Clark School of Engineering. Accessed August 25, 2022 <https://www.tamug.edu/newsroom/2018articles/UrbanFloodingReport.pdf>
- <sup>59</sup> What is Green Infrastructure? US Environmental Protection Agency. March 31, 2022. <https://www.epa.gov/green-infrastructure/what-green-infrastructure>
- <sup>60</sup> Harris Thrives Resolution. Harris County Commissioners Court. August 27, 2019. <https://files.constantcontact.com/81a41547001/98fd956e-4e6a-4f0e-bd37-flf8e2a12b72.pdf>
- <sup>61</sup> Cities of Opportunity: Turning Crisis into Pathways for Equity and Resilience. National League of Cities. 2021. <https://www.nlc.org/resource/cities-of-opportunity-turning-crisis-into-pathways-for-equity-and-resilience/>
- <sup>62</sup> Cities of Opportunities: Turning Crisis into Pathways for Equity and Resilience. National League of Cities. 2021. <https://www.nlc.org/wp-content/uploads/2022/03/Cities-of-Opportunities-Report.pdf>
- <sup>63</sup> Newman G, Dongying L, Rui Z, Dingding R. Resilience through Regeneration: The economics of repurposing vacant land with green infrastructure. *Landsc Archit Front*. 2019 Jan;6(6):10-23. DOI: 10.15302/J-LAF-20180602. PMID: 30761217; PMCID: PMC6370328