

15-Minute Cities and American Inequality:

The Relationship Between Walkability
and Social Inclusivity

Tommie Thompson
January 2024

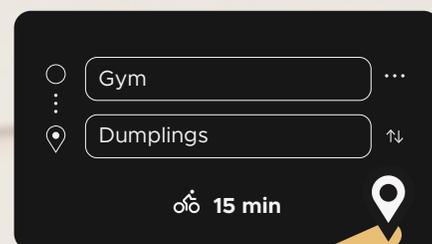


Table Of Contents

Introduction	4
1. Literature Review	6
2. Urbanist Critiques	8
2.1 Critique of Practicality	9
Criticism	9
Rebuttal	10
1.2 Critique of Inclusivity	11
Criticism	11
Rebuttal	13
1.3 Critique of Messaging	14
Criticism	14
Rebuttal	15
3. Case Studies	15
4. Conclusion	17

Acknowledgements

Many thanks to Jeff Mason, Eva Klaus, and Heba Elhanafy for invaluable comments on an earlier draft of this paper, and also to Gemma Adelman and Katie Estes for their work on the graphics.



The Future of Development

Empowering new cities with better governance to lift tens of millions of people out of poverty.



The Charter Cities Institute is a non-profit organization dedicated to building the ecosystem for charter cities by:

- Creating legal, regulatory, and planning frameworks;
- Advising and convening key stakeholders including governments, new city developers, and multilateral institutions;
- Influencing the global agenda through research, engagement, and partnerships.

Abstract

Over the past few years, the 15-minute city has emerged as a contentious urban planning paradigm. The concept, which proposes organizing cities into clusters of dense neighborhoods where all daily needs can be reached within a 15-minute walk or bike ride, is criticized as a segregationist and impractical approach to urbanism. Its detractors fear that it will worsen social inequality and reduce economic benefits. In this paper, we challenge these criticisms. We argue that 15-minute cities are an effective urban policy to improve social equality and spur economic development. We conceptually argue that 15-minute cities embody consensus policies among urban planners, and therefore, they should not be treated skeptically. We also discuss how 15-minute cities are beneficial to low-income residents. To illustrate our arguments, we qualitatively compare New York City and Washington, DC's impoverished neighborhoods. We show that the relatively more walkable neighborhoods of NYC are better for the poor than DC's relatively less walkable neighborhoods.

Introduction

Old Enough! is a Japanese TV series that follows young children run their first errand alone. In the first episode of season two, we watch as 5-year-old Ken travel to his neighborhood grocery store in Western Tokyo. His mission, handed down from his mother, was to buy yakisoba, bean sprouts, and curry bread. The series is a mild thrill for an audience rooting for the protagonist. Will young Ken remember what he needs to buy? Can he navigate the streets alone?

American commentators have been quick to point out that such a show could never work in the United States. Naomi Fry (2022) of *The New Yorker* writes that, for children in the US, “the world here is largely seen as something that should be watched out for rather than embraced,” and Heather Chen (2019) of *CNN* highlights the dangers of American

urban crime. The show's premise is not uniquely novel to Americans; even commentators in India are amused (e.g. Mishra, 2022). However, the reasons American (and Indian) children are not permitted to run their own errands goes beyond culture and crime. It is the consequence of a deliberate policy choice to build cities and towns too dangerous for children.

The policies needed to bring Japanese streets to America's cities are not a mystery. Improve public transit, build sidewalks, incentivize mixed-use zoning, remove parking, narrow roads,

increase housing density, and encourage walking. These principles reflect a long tradition of American urban activists fighting for safe, mixed-use, walkable neighborhoods. However, despite knowing what works, America's cities remain woefully dangerous and car-dependent. Compared to Japan, even the 'idyllic' streets of Western Europe appear dangerous. In 2021, Japan experienced just 2.2 traffic fatalities per 100,000 people compared to 4.5 in the European Union (America saw 12.7 deaths, nearly 6 times more than Japan) (Zipper, 2022; ETSC, 2022). Consequently, Japanese children are given much more freedom than their American counterparts, and it is common to see them traversing their cities alone. American children make less than 35% of their weekday trips alone, compared to more than 85% in Japan (Waygood, 2011).

The battle to rebuild the Great American Pedestrian City is as much a political one as a technical one. While we know what works, the components of an effective city are often stymied by reactionary lobbies. For instance, efforts in the United States to expand pedestrian infrastructure are often opposed by residents who favor seclusion and vehicular accommodations (e.g. Barnard, 2023; Lee, 2015). Likewise, well-intentioned municipal planners often apply good principles haphazardly and without context (e.g. Samuels, 2016).

Nonetheless, in a policy domain that feels stuck in a Sisyphean rut, a new buzzword has emerged: the 15-minute city. It was coined in a 2021 paper by Carlos Moreno, a professor and urban planner at the Sorbonne (Moreno et al, 2021). Moreno proposed that we design cities into clusters of dense neighborhoods or "cities," where residents can fulfill the daily needs of life – work, commerce, healthcare, education, and leisure – within a 15-minute walk or bike ride from their homes. However, as we discuss in this paper, versions of the term have existed long before Moreno. In fact, the 15-minute city is best described as a new slogan for old ideas. The ideas underpinning the 15-minute city concept borrow from the classic urbanist playbook, which advocates for walkability, density, and localism. Moreover, 15-minute cities have already existed for centuries in places that built

cities before the automobile. For the sake of consistency, we unite various "versions" of 15-minute cities into a single definition: an urban planning framework that conceptualizes cities as a collection of local, relatively self-contained, amenities-filled, residential neighborhoods enforced using top-down planning regulations.



Despite its familiarity, 15-minute cities have been the subject of intense debate among urban planners. Critics fear that the concept will lead to spatial segregation and undermine a cohesive urban fabric. Others contend that the "15-minute city" framing is ineffective branding for marketing urban planning policies to the public. In this paper, we dissect the ongoing 15-minute cities discourse by examining its history, contemporary framings, and social consequences in the American context. We further argue that contrary to the views of pessimists, 15-minute cities will help make American cities more inclusive and integrated than alternative urban planning frameworks. To illustrate this point, we qualitatively and conceptually compare the neighborhood structures and urban fabrics of contemporary New York City and Washington, DC. The comparison reveals that the relatively

more walkable neighborhoods and cohesive urban fabric of NYC (i.e. neighborhoods that better conform to Moreno’s 15-minute cities framework) yield better outcomes for low-income residents than the relatively less walkable neighborhoods and disjointed urban fabric of Washington, DC. Lastly, in response to criticisms that the “15-minute city” is a vacuous term that lacks novel substance, we argue that it is in fact a pragmatic policy framing (or reframing) of urban planning best practices.

The paper proceeds by (1) reviewing the extant literature and ongoing debates, (2) summarizing the dominant theoretical critiques against 15-minute cities and offering rebuttals, and (3) briefly comparing New York City and Washington, DC as qualitative case studies illustrating the benefits of the 15-minute city paradigm in the American context.

1. Literature Review

There is no such thing as a new idea. It is impossible.

– MARK TWAIN

One of the central concerns of urban planning for the past 120 years has been to find a balance between the “human scaled environ” and the modernizing “automobile city.” 15-minute cities are the latest attempt to develop a compromise. The motorized vehicle brought speed, industrial efficiency, reach, and freedom. However, early 20th century planners and activists also argued that it eroded community, public wellbeing, social vitality, and human flourishing. These fears developed at a time when growing vehicular adoption and road infrastructure were not matched by pedestrian safety interventions and an “automobile social consciousness.” In 1929, New York City saw 1,360 traffic fatalities in a city of about 6.9 million people (19.6 fatalities per 100,000), compared to just 200 in 2018 (2.4 per 100,000) (Fitzsimmons, 2019). Planners were likewise concerned about how an expanding road network may further fragment the urban fabric.

By the 1930s, a fledgling consensus among urban planners emerged to address the “automobile problem.” Clarence Perry, an urban planner for the New York Regional Plan and City Recreation Committee, published *The Neighborhood Unit* in 1929 (Perry, 1929). He envisioned New York City as a patchwork of repeated, purpose-built, and well-defined neighborhoods that served as “residential islands” amidst the “raging stream of traffic.” Perry specified precise characteristics for each neighborhood unit. They should be built as roughly half mile by half mile blocks centered on a school, which serves as the focus of family-oriented civic life. The interior of the blocks should have narrow, winding roads that disincentivize through traffic, and commercial amenities should be placed on the periphery. Neighborhood units are separated by large arterial roads that accommodate heavy traffic.

Although similar conceptions of “neighborhoods” were discussed prior to 1929, Perry formalized it into an established planning practice (Mehaffy et al, 2014). As a “design of compromise,” it segregated land uses into pedestrian and vehicular spaces. In theory, the pedestrian space (i.e. the neighborhood) would allow humans to replicate close-knit rural communities, complete with all the amenities needed for daily life in close walking proximity, within an urban setting. In the vehicular spaces (i.e. the arterials dividing neighborhoods), modern technological efficiency would



flourish. These same principles proliferated throughout modern planning, such as in the housing blocks of the Soviet Union, the radiant cities of La Corbusier, the new towns of mid-century Britain, the residential developments of South Korea, and the *superilles* of present-day Barcelona.

Historian Lewis Mumford, a vehement defender of Perry, argued that the sudden popularity of neighborhood units in the early 20th century was rooted in capitalism-induced inequality and the rise of the automobile (Mumford, 1954; Maheffy et al, 2014). He noted that Perry's neighborhood units were already the norm prior to the 20th century. For instance, the *quartiers* of Paris were essentially self-contained residential blocks replete with urban amenities. However, capitalism and automobiles interrupted what was a natural and universal human inclination to build dense neighborhoods and tight human scaled communities. The automobile would "inevitably" chop cities into unlivable islands surrounded by fast-moving traffic, and capitalism would segregate these islands into stratified income classes. Facing these modern dynamics, planners sought to artificially enforce what they saw as a more "natural" urban organization vis-à-vis segregated groupings of neighborhoods. These neighborhoods, via top-down planning regulations, would carve out protected space for pedestrians and, ideally, preserve social equality.

15-minute cities are the latest iteration of neighborhood units. Like Perry, Moreno theorizes that building neighborhoods that fulfill all daily needs within a 15-minute walk would help improve social wellbeing (Moreno et al, 2021). Moreno draws direct inspiration from various adjacent frameworks, including the "15-minute neighborhoods" of Wang et al (2019) and the "20-minute city" of Capasso Da Silva et al (2020). However, whether directly inspired or not, Moreno forms just one part of a long intellectual history that includes the compact city (Dantzig and Saaty, 1973), polycentric city (Clark, 2003), and urban village (Urban Villages Group, 1992). New Urbanism, which advocates for walkable neighborhood units, grew into one of the most influential urban planning movements of the 1990s (Congress for the New Urbanism, 1993). By Moreno's own admission, his 15-minute cities do not differ in substance from rival frameworks.

Rather, they merely emphasize different aspects of the neighborhood unit. For instance, Moreno believes that integrating modern information technology into neighborhood design (“digitalization”) can help improve accessibility, such as by using advanced sensors to improve the safety of cyclists.

If 15-minute cities are just old wine in new bottles, why have they become so prominent in the urbanist news cycle? Part of its appeal comes from the pandemic (Abdelfattah et al, 2022; Xie and Shao, 2022). As lockdowns forced people to restrict their movements, the deficiencies of modern neighborhoods became apparent. Those without a car found it difficult to reach daily amenities amidst social distancing mandates and reduced public transit service. To cope, municipal and civic leaders built “micro-infrastructures,” such as pop-up bike lanes, temporary pedestrianized roads, and “streeteries.” For instance, many cities saw a growth of outdoor “micro-groceries” operated by restaurants, which helped reduce crowds in indoor supermarkets. These changes helped people reimagine what their cities could be, and as the pandemic wound down, prompted a debate on whether there should be a return to “normal.” The mayor of Paris Anne Hidalgo, who is one of the most vocal advocates for 15-minute cities, declared in 2020, “It is out of the question that we let ourselves get invaded by cars and pollution” (Grabar, 2023).

Yet, despite being well-theorized grounds, the neighborhood unit agenda is still conceptually muddled. Seemingly similar frameworks elicit fierce debates and misinterpretations are commonplace. For instance, Jane Jacobs’ seminal *The Death and Life of Great American Cities* is often interpreted as harshly critical of planned neighborhood units (Mehaffy et al, 2014). Jacobs was particularly opposed to Le Corbusier and the 19th century Garden City Movement, but more broadly, she believed “utopian” neighborhoods couldn’t be built from the top-down. Rather, they need to emerge spontaneously. At the same time, she is credited for directly influencing both urban villages (Gratz, 2003) and 15-minute cities (Moreno et al, 2021), both unambiguously top-down projects created in the minds of utopian planners. Khavarian-

Garmsir et al (2023) further complicate the debate by directly tracing the historical linkage and theoretical similarities between contemporary 15-minute cities (a theory based on Jacobs’ ideas) and garden cities (a practice hated by Jacobs).

2. Urbanist Critiques

For the sake of this paper, we do not dwell on the nuanced differences between the many competing neighborhood frameworks. Although concepts like Moreno’s “15-minute cities” and Perry’s “neighborhood units” may have superficial distinctions, they all reflect the same core pursuit to organize cities as local, relatively self-contained, amenities-filled, residential communities by enforcing top-down planning guidelines. As such, we treat the debates around these related concepts as a singular discourse. It is also worth noting that much of the theoretical debates by planners and scholars have taken place in popular media, rather than academic publications.

The urbanist critique centers around urban access and equality. Critics see 15-minute cities as a policy to fragment cities into small villages where residents will access all their daily amenities and activities within a 15-minute walk. While this makes things more convenient for residents, it contradicts the economic and social rationale for urban agglomeration. Cities exist to bring people together

from across the city, so that they can interact and innovate. Urban scale allows society to pool resources that sustain public amenities.

Criticisms of 15-minute cities can be roughly separated into three themes. The first is a critique of practicality, which argues that 15-minute cities are not practical ways to organize cities. The second is a critique of inclusivity, which argues that 15-minute cities will degrade social cohesion and worsen inequality. The third is a critique of messaging, which argues that the “15-minute cities” framing will hinder good urban policymaking.

2.1 Critique of Practicality

Criticism

The cost advantages of achieving economies of scale are a key rationale for urban agglomeration. Cities gather people and resources to highly concentrated geographic areas, which in turn generates demand for infrastructure and services. To supply these demands, firms and public administrations raise revenue from urban residents, such as by increasing taxes or consumer prices. Large urban populations allow providers to distribute fixed costs across many customers, which further reduces consumer costs, increases public demand, and incentivizes providers to expand provisions. Conversely, a low population density would not provide sufficient demand to incentivize infrastructure and services growth. For instance, while a city of 10 million people may have enough market demand for hundreds of grocery stores, a town of just 100 people would likely only support (i.e. generate profit) one small store.

The dynamic balance between population density, consumer demand, and service provision costs underscores a common criticism of 15-minute cities. Critics believe 15-minute cities, as self-contained geographic units, could not meet the necessary population density to sustain all the daily needs of a family. For instance, early critics of Perry, like Reginald Isaac and Paul Murrain, argued that

families would inevitably need to leave their neighborhoods to reach less-commonly-used-but-still-necessary amenities (Mehaffy et al, 2014). In a more contemporary criticism, Yglesias (2023) says it would be impractical to give each 15-minute area its own university, multinational corporation, opera house, and specialized medical facility. These firms would also need to draw from a diverse labor pool that requires reaching beyond the immediate 15-minute area. Cities need to function as an integrated urban region, where different neighborhoods can settle into specialized functions and draw from the resources of the urban periphery.

These criticisms have some empirical support. The 1999 report *Towards an Urban Renaissance* (Urban Task Force 1999) showed a link between urban amenities and scale. Holcombe and Williams (2008) found that for cities under 500,000, infrastructure costs declined as population density increased. However, the relationship reversed for cities above 500,000. There is also a small literature in which scholars try to estimate optimal densities for fixed urban areas (Shatu and Kamruzzaman, 2021; Litman, 2015; Su et al, 2016; Yang, 2020). These efforts, however, have not yielded any consensus and the question of “optimal density and city size” remains contested.

Rebuttal

The practicality critique stems from a hyper-literalist reading of a well-

intentioned concept. 15-minute cities do not mean that people need to literally conduct all their activities within a 15-minute walk. Likewise, nothing restricts the framework to a literal 15-minute area, as opposed to 16-minutes or 17-minutes. In fact, Moreno (2021) introduced it as a “flexible framework” akin to Capasso Da Silva’s “20 Minute City Model.” In an interview, Moreno further clarifies, “we don’t want to oblige people to stay in the 15-minute district. We don’t want to recreate a village” (Whittle, 2020), and he writes (Moreno, 2021) that his framework aims to “allow those seeking alternative lifestyles, away from the automobile dependent cities, to access almost [all] urban services and amenities within walkable and biking distance.”

15-minute cities simply mean that people “could” live in a 15-minute area if they wanted. Under this expanded definition, the 15-minute city framework would allow people to travel further for work or specialized amenities, and it does not diminish the role of intra-urban public transportation. It would also let firms reach beyond their immediate surrounding to hire workers or service customers.

15-minute cities also form the basis for good urbanism (e.g. walkability, density, mixed-use), and it would

arguably be impractical to implement other urbanist agendas without conceptualizing them within a 15-minute framework. To illustrate this, consider the high-speed rail debate in the United States. Urbanists have long advocated for the federal government to fund the development of high-speed rail between populated cities. What the prescription misses is the last mile. If someone takes a train from Washington, DC to Nashville, they will be dropped off in a car-dependent city hostile to pedestrians. This would force them to incur additional transit costs to travel between the train station and their destination. Before high-speed rail can be a viable national transit mode in the United States, the country needs more 15-minute cities. The logic extends to almost every urbanist policy. Crime? Jacobs (1961) said that to reduce urban crime, “there must be eyes upon the street, eyes



belonging to those we might call the natural proprietors of the street.” By increasing walkability, 15-minute cities increase pedestrian visibility. Housing affordability? 15-minute cities include the restructuring of land use to achieve the resident density needed to sustain a 15-minute radius of daily amenities. Pedestrian safety? A key priority for 15-minute cities proponents is to reduce car dependency. Likewise, dense, walkable planning is the blunt policy tool needed to spur local economic development.

Rather than prescribing technical solutions to various urban problems, the pragmatism of the 15-minute cities slogan is its flexibility. All it demands is that a particular neighborhood becomes accessible to a 15-minute radius, and the details are left to local stakeholders that better understand the context. In turn, the assumption is that all the down-the-line urban goals – intra-city mobility, crime reduction, housing affordability, food access, etc. – will naturally arise after cities become an effective patchwork of 15-minute local markets. This approach embodies localism, grassroots planning, community involvement, participatory policymaking, and any other buzzword for building communities from the ground-up.

1.2 Critique of Inclusivity

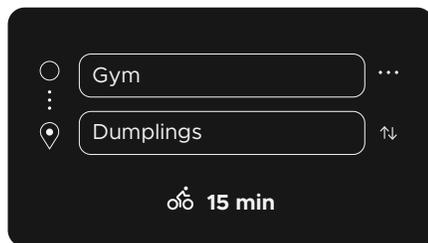
Criticism

Neighborhood units, 15-minute cities, and other related frameworks embody “functional segregation” (Mehaffy et al, 2014). That is, a planning model that organizes cities into a collection of connected but distinct local communities. Whereas some planners, like Perry and Le Corbusier, defined how these communities would be connected to the broader urban fabric, others like Moreno, kept it ambiguous. It is not clear for example, whether the boundaries of Moreno’s 15-minute cities or Capasso Da Silva’s 20-minute cities would be marked by large arterial roads (like Perry’s neighborhood units) or blend seamlessly together. However, critics of 15-minute cities and its antecedents are concerned about the inequality consequences of poorly integrated urban neighborhoods. They fear that if cities are conceptualized as a collection of self-contained

units, then planners may neglect the spaces in between neighborhoods. Consequentially, if these “in-between spaces” are hostile to civic life and pedestrian safety, then intra-urban mobility and economic efficiency would diminish.

Jacobs characterized impermeable boundaries between neighborhoods as “border vacuums,” which she believed would harm interactions between a diverse urban population (Jacobs, 1961; Maheffy et al, 2014). In *Order Without Design*, Bertaud (2018) raises similar concerns. Tackling “urban villages,” he argues that master planned efforts to spur urban vitality through zoning were more likely to disrupt markets with spatial segregation. McCartney (2023) argues that 15-minute cities will exacerbate inequality by further fragmenting labor markets. He writes that 15-minute cities will “lock-in prosperity for some,” most notably the high-earning creative class, and confine the poor to low-productivity urban bubbles with few economic opportunities. Harvard urban economist Glaeser (2021) calls the idea a “dead end which would stop cities from fulfilling their role as engines of economic growth,” and Bertaud (2022) warns that if the 15-minute city were taken seriously, “an initially laughable utopia could gradually turn into a petty tyranny.” In more extreme circles, 15-minute cities have also been characterized as an authoritarian conspiracy plot by “elites” to control the population’s freedom of movement (Stanford, 2023).

In a similar vein, critical urbanists also argue that while 15-minute cities may make sense in Europe, they cannot be transplanted to North America. Pitter fears that 15-minute cities will exacerbate existing racial segregation hardwired into the American urban fabric (O’Sullivan, 2021). Glaeser (2021) is concerned that 15-minute cities will limit the mobility of low-income children by confining them into segregated neighborhoods where they are not exposed to better opportunities: “I am very worried that a focus on enabling upper-middle-income people to walk around in their nice little 15-minute neighborhood precludes the far larger issue of how we make sure our cities once again become places of opportunity for everyone.” These concerns are reflected in the demographics of urban politics, where pro-walkability activists struggle to diversify their ranks with low-income people of color (Thompson, 2020).



A major benefit of cities is their role in agglomerating talent, capital, and opportunities. Bertaud (2018) famously called cities “labor markets,” which implies cities only function if people can easily access each other. For the rich, the benefits of urban mobility are obvious. It allows them to access firms and business opportunities. However, the same logic applies to the poor. After analyzing social network data from over 72 million people, Chetty et al (2022a; 2022b) found that connecting low-income residents to high-income social networks is the best predictor of upward economic mobility. In another study, Chetty, Hendren, and Katz (2016) reanalyzed data from Moving to Opportunity (MTO), a 1994 US Department of Housing and Urban Development program, MTO randomly assigned vouchers to low-income urban residents to incentivize them to move to low-poverty neighborhoods. Chetty et al found

that participants of MTO who moved to low-poverty neighborhoods before the age of 13 saw 31% higher incomes by their 20s than those who remained in poor neighborhoods.

Acknowledging the role social networks play in social equality and upward mobility, critics argue that 15-minute cities would “trap” the poor in low-productivity urban bubbles, since their neighborhoods may not have the prerequisite economic development needed to sustain high-quality amenities. Moreover, the poor will find it hard to access richer areas with high-quality social networks if the urban fabric is fragmented into disjointed neighborhoods. Supporting this, Abbasov et al (2022) use GPS data from 40 million mobile phones to show that residents of low-income neighborhoods in America are less likely to intersect with high-income social networks if their neighborhoods are more self-contained (i.e. allows greater 15-minute access to amenities). A second social critique is made against the gentrifying impact of walkability. Critics of 15-minute cities fear that improving neighborhood accessibility and amenities without supporting marginalized groups will widen social inequality. These newly revitalized 15-minute cities will become centers of economic prosperity, and their former disadvantaged residents will be priced out to worse neighborhoods on the urban fringes. For example, Kotkin (2017) argues that urban density and walkability is a luxury that will harm the middle-class.

However, empirically, studies on the socioeconomic distribution of walkable neighborhoods in the United States have not painted a consistent picture. Whereas some scholars have found that walkable areas tended to be wealthier and whiter (Kim and Kim, 2020; Neckerman et al, 2009; Franzini et al, 2010), others have found the reverse (Thornton et al, 2016; King and Clarke, 2015). Conderino et al (2021) argue that the inconsistency comes from varying definitions of “walkability,” and highlight that studies which consider safety as part of walkability measures tended to find that minority neighborhoods were less accessible. Their own analysis, which looked at 500 US cities, found that white neighborhoods were less walkable on average.

We speculate another explanation for the inconsistent walkability-gentrification relationship, at least in the United States. White flight in the 1960s to 1980s created a demographic shift as white Americans moved into less walkable suburbs. Consequently, disadvantaged minorities that remained in cities began to make up a larger share of dense neighborhoods. Immediately following that period, we would expect walkability to be negatively correlated with wealth and whiteness. However, recent trends have seen a reentry of middle-class white professionals into American cities, displacing older and predominantly minority residents to the suburbs. (Kneebone and Garr, 2010). As such, depending on the timeframe of analysis, statistical studies may find dramatically different correlations between walkability and wealth. However, these findings are only capturing broader demographic trends rather than the causal effects of walkability on equality.

Rebuttal

While critics fear that 15-minute cities may exacerbate inequality, either by gentrifying neighborhoods or spatially segregating people by class and race, these are arguably criticisms of implementation, not theory. 15-minute cities can be designed as well-integrated neighborhood clusters and various policies can ensure residents are not displaced by urban development. Rather than fearing theoretical negatives and abandoning the concept, urbanists should work harder to build effective 15-minute cities.



However, even if we are pessimistic about implementation, inequitably distributed 15-minute cities are likely to still benefit both high-income and low-income residents more than the status quo. Concentrating economic opportunities in core walkable neighborhoods, even if it leads to high property prices, would make it easier for the poor to plan their commutes. This is because it allows urban planners to design transit networks that efficiently funnel workers into key hubs, and it agglomerates opportunities in a dense area as opposed to spreading them across an entire region. Such is the *raison d'être* for central business districts, and it fosters economic productivity and welfare gains. The alternative – 15-minute cities for nobody – would force the urban poor to incur high commuting costs as they scramble to various parts of a city. For example, Stromberg (2015) discusses how suburban sprawl reduces the economic resilience of those in poverty. Paris’ deputy mayor David Belliard goes further by highlighting the gender inequities of the status quo: “fifty percent of public space is occupied by private cars, which are used mostly by the richest, and mostly by men, because it’s mostly men who drive, and so in total, the richest men are using half the public space” (Grabar, 2023).

Lastly, some critics fear that low-income neighborhoods may be prematurely turned into 15-minute cities. Based on the works of Chetty et al (2016, 2022a, 2022b), which shows that the poor benefit from interacting with high-income social networks, they fear that 15-minute cities may limit interactions across the socioeconomic spectrum. That is, if the poor can access all their amenities within their own neighborhoods, they may not venture out to high-income areas. However, it is unclear how critical urbanists would translate this into policy. Should we avoid 15-minute cities by deliberately making low-income neighborhoods less convenient just so that their residents are motivated to venture into rich ones? This would be, as Bertaud phrased it, “a petty tyranny.”

1.3 Critique of Messaging

Criticism

Beyond substantive criticisms, some have argued that even if we accept that the core ideas of 15-minute cities are desirable, the term itself is an ineffective brand to market those ideas. For example, Yglesias (2023) argues that while living within 15-minutes of amenities would be a benefit, that is not the “goal” of good urbanism. Rather, the goal is to promote urban agglomeration, economic growth, and accessibility, whether that be by increasing amenity density in neighborhoods or improving urban transit. While 15-minute cities may, in practice, achieve these goals, the term itself does not directly highlight them. Yglesias also believes the term is unnecessarily polarizing, in which its allusion to geographical restrictions has contributed to the right-wing conspiracy backlash. This harms not just the “15-minute cities movement,” but the implementation of good urbanism more broadly. Others have instead cast the term as, at best, benign and vacuous. McCartney (2023) calls it “a pithy new slogan attached to an old concept,” while others characterize it as a mere marketing gimmick (Caulcutt, 2021).

Rebuttal

Contrary to the claims of its critics, the 15-minute cities slogan has been a surprisingly effective marketing approach

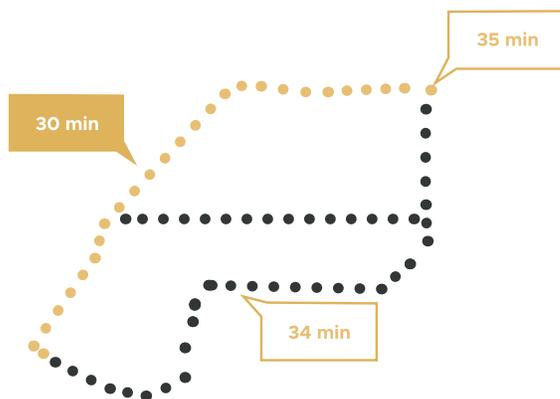
for bringing walkable urbanism to the front of the policy agenda. The term has been formally adopted by several mayors, and the current mayor of Paris built her 2020 campaign around implementing 15-minute cities (Gongadze and Maasen, 2023). World Economic Forum’s Lisa Chamberlain (2022) further highlights both the surprising stickiness of the slogan (still making headlines years after it was coined) and its power to motivate policy action.

While there is nothing conceptually new about what 15-minute cities promise, it reframes our urban priorities. Facing a range of urban problems in the West, urbanists have prescribed a basket of nebulous policies that includes buzzwords like “walkability,” “density,” “local accountability,” and “inclusivity.” On the other hand, the “15-minute cities” slogan evokes a concrete and immediate vision. As Chamberlain notes, “the 15-minute city went from a ‘nice-to-have’ to a rallying cry.” Likewise, while Yglesias worries about the conspiratorial backlash the 15-minute branding invites, that same political contention arguably speaks to the phrase’s effectiveness. The alternative would be buzzwords that fly under the radar without motivating action.

3. Case Studies

This section illustrates the effectiveness of 15-minute cities in reducing inequality by qualitatively reviewing cases of their success.

Specifically, it compares the experiences of present-day New York City and Washington, DC. We also briefly consider the general and historical experiences that American cities had with their own walkable neighborhoods.



Historically, it was the 15-minute cities of New York City (Harlem), Chicago (Bronzeville), and Washington, DC (Shaw) that gave birth to the Black Renaissance and brought newly freed slaves into the burgeoning black middle-class of the 1920s. Although the urban decay of the 1980s saw the death of the prosperous inner-city black neighborhood, minorities and low-income residents of contemporary American walkable communities still fare much better than their counterparts in sprawled neighborhoods. Suburban poverty, which is increasingly outpacing urban poverty, exists in a policy blind spot (Durana, 2018); spatial fragmentation makes it difficult for social services to target those most in need, leaving the suburban poor worse off. Of the 20 largest urban economies in America, the five most affordable cities for households below the poverty line are Philadelphia, Miami, New York City, Boston, and Baltimore (Citizens Budget Committee, 2020). These are some of the country’s most walkable cities. Even San Francisco, the emblem of American gentrification and excessive wealth, ranks as the 8th most affordable big city for the poor. The least affordable are San Jose, San Diego, Dallas, Houston, and Atlanta – some of America’s most car-dependent cities. Behind the long list of statistics is a corroborating intuition borne from experiencing America’s most effective urban neighborhoods firsthand. New York City is the densest

cluster of 15-minute cities in the Western Hemisphere. Whereas most American cities have at least one small 15-minute city called “downtown,” New York is a nearly continuous 300 square mile patchwork of 15-minute cities from its Manhattan core to the far-flung neighborhoods of Brighton Beach, Brooklyn and Flushing, Queens, as well as its edge cities like Hoboken, New Jersey.

Jackson Heights, Queens, sometimes known as the “most diverse neighborhood in the world” (Kimmelman, 2020), had a 2018 poverty rate of 25% (NYC Health, 2018c), more than double the 2018 national rate of 11.6% (Semega et al, 2018), and a high school attainment rate of just 30%. This relative deprivation, however, has not prevented the neighborhood from becoming a fully-fledged 15-minute city. Roosevelt Avenue, the main road crossing the neighborhood, is densely packed with restaurants, groceries, gyms, amenities, and street life. This story is repeated throughout New York City in neighborhoods like Flushing (25% Poverty Rate (NYC Health, 2018b)), Brighton Beach (24% poverty rate (NYC Health, 2018a)), and gentrifying Astoria (18% poverty rate (NYC Health, 2018d)). The most compelling part of New York City is that its outer boroughs are not distanced low-income bubbles. Rather, they are vibrant “cities” with amenities that draw in the high-income residents of Manhattan. Jackson Heights has a reputation as the best place for a

food crawl in the city. Flushing has surpassed Chinatown, Manhattan for hipster foodies chasing authenticity.

The economic diversity of these neighborhoods, which has high-earning Wall Street bankers coexist with immigrant taxi drivers, further keeps them resilient. Despite decades of headlines lamenting New York's gentrification, the city still manages to maintain deep-rooted working-class neighborhoods as other gentrifying cities like San Francisco and Washington, DC struggle to do so.

As a contrast, consider Washington, DC. In DC, social classes are divided along the Anacostia River. The 2015 poverty rate east of the river was a staggering 33% - three times the national rate - while the poverty rate west was only 12% (Zippel, 2016). The urban geography east of the river is also much less walkable. The roads are wider, the speed limits are looser, and the amenities are distanced. While DC has an overall Walkscore of 77, the low-income neighborhoods of Anacostia and Deanwood have scores under 60. Anacostia is a well-known food desert (Craven, 2021), where most residents are not within walking distance to a grocery store. This is in a city where 37% of households do not own a car (DC Health Matters, 2021), the highest in the nation outside of the NYC metro area. Most wealthy and middle-class Washingtonians have no reason to go east of the river, since there are no worthwhile amenities. When low-income neighborhoods are "15-minute cities," like Jackson Heights and Flushing, they attract the high-income social networks that Raj Chetty and Ed Glaeser say are integral to upward economic mobility for the poor. When they are sprawled like Anacostia and Deanwood, they remain in poverty.

In Washington, DC, the neighborhoods east of the Anacostia River have terribly low mobility. It takes residents of Deanwood the same amount of time to commute eight miles into downtown DC by public transit as it does for residents of Vienna, Virginia to commute 20 miles into the city. Glaeser may propose that we expand bus networks into Deanwood to increase urban mobility. While this would certainly benefit residents, it would not lead to the

substantial urban transformation hoped for by urbanists. Deanwood is still sprawling and dangerous for pedestrians. Connecting it to the wider city would not draw in productive high-income social networks in the same way Jackson Heights has been able to. Even if we can use better urban mobility to connect residents of Deanwood to high-value opportunities, they will likely leverage their upward mobility to move into safer neighborhoods.

To clarify, we are not arguing that dense neighborhoods will always do better than sprawled neighborhoods. Certainly, it may be better to be poor in a wealthy, sprawled suburb than a high-crime urban neighborhood. However, high-crime, walkable areas will almost always be doing better than their equivalent high-crime, unwalkable counterparts. Normatively turning these impoverished areas into 15-minute cities is the first step to revitalization, because 15-minute cities (even low-income and high-crime ones) are worth saving. Low-income sprawled neighborhoods, on the other hand, are places to escape.

4. Conclusion

The 15-minute cities framing is a refreshing reintroduction of old urbanist ideas. However, while 15-minute cities were intended to create inclusive and economically vibrant urban spaces, many urbanists have interpreted them as exclusionary and spatially fragmented. In this

paper, we argued that urbanist critics of 15-minute cities have misinterpreted the paradigm. Specifically, they have latched on to an excessively literal definition of 15-minute cities, which implies that people must live within a 15-minute radius and travel across a larger metropolitan region should be discouraged. This interpretation does not align with the framework's intent, as conceived by its founder Carlos Moreno and its adherents. A more reasonable interpretation perceives 15-minute cities as just another variation of dense, walkable neighborhoods. Consequentially, their implementation should create more inclusive and sustainable cities.

We argued that 15-minute cities, when interpreted as a flexible framework, can generate practical urban policy interventions. In fact, the underlying principles have already been successfully implemented in many settings under various other brandings. For instance, the superilles of Barcelona are just a form of 15-minute cities. We also argued that 15-minute cities can help reduce social inequality by bringing economic vibrancy to low-income neighborhoods. To illustrate this, we compared the relatively walkable and amenities-rich high-poverty neighborhoods of New York City with the relatively car-dependent impoverished neighborhoods of Washington, DC. The comparison revealed that 15-minute cities planning can make low-income neighborhoods more livable. Lastly, we argued that 15-minute cities have been an effective branding strategy despite political backlash.

However, our conclusions face two limitations. First, the contemporary 15-minute cities discourse remains relatively informal, with much of it taking place in blog posts, op-eds, and X. There is no substantial academic literature on the subject. As such, the critical perspectives surveyed here lack peer review and may suffer from media bias. Second, empirical strategies within the 15-minute cities debate tend to be relatively superficial, with much of it relying on personal impressions of a small sample. Our own analysis was a preliminary qualitative comparison of just two cities from the same region. While persuasive, the insights need to be better substantiated with deeper qualitative reviews

or more representative quantitative analyses. Moving forward, researchers should utilize more objective measures of city outcomes or quantitative investigations of a larger range of cities across different countries. Specifically, better attention needs to be paid to estimating the structural effects of 15-minute cities on social outcomes, rather than assuming that the currently observed outcomes reflect these structural relationships. While many existing 15-minute cities may face inequality, we cannot conclude that outcome is cause by 15-minute cities themselves instead of other correlated confounders.

REFERENCES

- Abbiasov, T., Heine, C., Glaeser, E. L., Ratti, C., Sabouri, S., Miranda, A. S., Sant, P. (2022). The 15-minute city quantified using mobility data. *NBER Working Paper*, #30752. <https://doi.org/10.3386/w30752>.
- Abdelfattah, L., Deponte, D., Fossa, G. (2022). The 15-minute city: Interpreting the model to bring out urban resiliencies. *Transportation Research Procedia*, 60, 330-337. <https://doi.org/10.1016/j.trpro.2021.12.043>.
- Barnard, B. (2023). Residents rally on both sides after delays in Montgomery County sidewalk project. *Fox 5 Washington, DC*. <https://www.fox5dc.com/news/residents-rally-on-both-sides-after-delays-in-montgomery-county-sidewalk-project>.
- Bertaud, A. (2018). *Order without design: How markets shape cities*. MIT Press.
- Bertaud, A. (2022). *The last utopia: The 15-minute city*. Urban Reform Institute.
- Capasso Da Silva, D., King, D. A., Lemar, S. (2020) "Accessibility in practice: 20-minute city as a sustainability planning goal." *Sustainability*, 12(1), 129. <https://doi.org/10.3390/su12010129>.
- Caulcutt, C. (2021). Anne Hidalgo's sack of Paris. *Politico*. <https://www.politico.eu/article/anne-hidalgo-paris-mayor-urban-revolution/>.
- Chamberlain, L. (2022). The surprising stickiness of the "15-minute city'." *World Economic Forum*. <https://www.weforum.org/agenda/2022/03/15-minute-city-stickiness/>.
- Chen, H. (2022). Are Japanese toddlers as independent as Netflix's *Old Enough* portrays them? *CNN*. <https://edition.cnn.com/2022/05/20/tv-shows/japan-youth-old-enough-netflix-intl-hnk/index.html>.
- Chetty, R., Nathaneil, H., Katz, L. P. (2016). The effects of exposure to better neighborhoods on children: New evidence from the Moving to Opportunity experiment. *American Economic Review*, 106(4), 855-902. <https://doi.org/10.1257/aer.20150572>.
- Chetty, R., Jackson, M., Kuchler, T., Stroebel, J. Hendren, N., Fluegge, R. B., Gong, S., Gonzalez, F., Grondin, A., Jacob, M., Johnston, D., Koenen, M., Laguna-Muggenburg, E., Mudekereza, F., Rutter, T., Thor, N., Townsend, W., Zhang, R., Bailey, M., Barberá, P., Bhole, M., Wernerfelt, N. (2022a). Social capital I: Measurement and associations with economic mobility." *Nature*, 608, 108-121. <https://doi.org/10.1038/s41586-022-04996-4>.
- Chetty, R., Jackson, M., Kuchler, T., Stroebel, J. Hendren, N., Fluegge, R. B., Gong, S., Gonzalez, F., Grondin, A., Jacob, M., Johnston, D., Koenen, M., Laguna-Muggenburg, E., Mudekereza, F., Rutter, T., Thor, N., Townsend, W., Zhang, R., Bailey, M., Barberá, P., Bhole, M., Wernerfelt, N. (2022b). Social capital II: determinants of economic connectedness. *Nature*, 608, 122-134. <https://doi.org/10.1038/s41586-022-04997-3>.
- Citizens Budget Committee (2020). *Rent and ride: Affordability is about both*. Citizens Budget Committee.
- Clark, W. (2003). Monocentric to policentric: New urban forms and old paradigms. In G. Bridge and S. Watson (Eds.), *A companion to the city*. Blackwell Publishers Ltd.
- Conderino, S., Feldman, J., Spoer, B., Gourevitch, M. N., Thorpe, L. E. (2021). Social and economic differences in neighborhood walkability across 500 U.S. cities. *American Journal of Preventative Medicine*, 51(3), 394-401. <https://doi.org/10.1016/j.amepre.2021.03.014>.
- Congress for the New Urbanism (1993). *The charter of the New Urbanism*. Congress for the New Urbanism.
- Craven, J. (2021). The miles to the grocery store got longer this year. *Slate*. <https://slate.com/business/2021/04/dc-food-desert-grocery-black-residents-car-apartheid.html>.

- Danzig, G., Saaty, T. (1973). *Compact city: A plan for a Liveable urban environment*. W.H. Freeman and Co.
- DC Health Matters (2021). Households without a vehicle. *DC Health Matters*. <https://www.dchealthmatters.org/indicators/index/view?indicatorId=281&localeId=130951>.
- Durana, A. (2018). The suburban mystique. *Slate*. <https://slate.com/human-interest/2018/03/the-suburbs-are-now-where-poverty-lives.html>.
- European Transport Safety Council (ETSC) (2022). *Ranking EU progress on road safety*. European Transport Safety Council.
- Fitzsimmons, E. (2020). A deadly year on N.Y.C. streets. *The New York Times*. <https://www.nytimes.com/2020/01/03/nyregion/nyc-bike-deaths.html>.
- Franzini, L., Taylor, W., Elliot, M. N., Cuccaro, P., Tortolero, S. R., Gilliland, M. J., Grunbaum, J., Schuster, M. A. (2010). Neighborhood characteristics favorable to outdoor physical activity: Disparities by socioeconomic and racial/ethnic composition. *Health & Place*, 16(2), 267-274. <https://doi.org/10.1016/j.healthplace.2009.10.009>.
- Fry, N. (2022). The gentle thrills of “Old Enough!,” a show about toddlers running errands. *The New Yorker*. <https://www.newyorker.com/culture/on-television/the-gentle-thrills-of-old-enough-a-show-about-toddlers-running-errands>.
- Glaeser, E. (2021). The 15-minute city is a dead end — cities must be places of opportunity for everyone. *LSE Blog*. <https://blogs.lse.ac.uk/covid19/2021/05/28/the-15-minute-city-is-a-dead-end-cities-must-be-places-of-opportunity-for-everyone/>.
- Gongadze, S., Maassen, A. (2023). Paris’ vision for a “15-minute city” sparks a global movement.” *World Resources Institute*. <https://www.wri.org/insights/paris-15-minute-city>.
- Grabar, H. (2023). How Paris kicked out the cars. *Slate*. <https://slate.com/business/2023/03/paris-car-ban-bikes-cycling-history-france.html>.
- Gratz, R. (2003). Authentic urbanism and the Jane Jacobs legacy. In P. Neal (Ed.), *Urban villages and the making of communities*. Spon Press.
- Jacobs, J. (1961). *The death and life of great American cities*. Random House.
- Khavarian-Garmsir, A. R., Sharifi, A., Abadi, M. H. H., Moradi, Z. (2023). From garden city to 15-minute city: A historical perspective and critical assessment. *Land*, 12(512), 512. <https://doi.org/10.3390/land12020512>.
- Kim, E. J., Kim, H. (2020). Neighborhood walkability and housing prices: A correlation study. *Sustainability* 12(2), 593. <https://doi.org/10.3390/su12020593>.
- Kimmelman, M. (2020). Jackson Heights, global town square. *The New York Times*. <https://www.nytimes.com/interactive/2020/08/27/arts/design/jackson-heights-queens-virtual-walk-tour.html>.
- King, K., Clarke, P. (2015). A disadvantaged advantage in walkability: Findings from socioeconomic and geographical analysis of national built environment data in the United States. *American Journal of Epidemiology*, 181(1), 17-25. <https://doi.org/10.1093/aje/kwu310>.
- Kneebone, Elizabeth. Garr, Emily (2010). *The Suburbanization of Poverty: Trends in Metropolitan America, 2000 to 2008*. Washington, DC: Brookings Institution.
- Kotkin, J. (2017). *The human city: Urbanism for the rest of us*. Agate B2.
- Lee, Timothy (2015). How NIMBYism is holding back Silicon Valley and the American economy. *Vox*.

<https://www.vox.com/2015/2/25/8109437/how-nimbyism-is-holding-back-silicon-valley-and-the-american-economy>.

Litman, T. (2016). Determining optimal urban expansion, population and vehicle density, and housing types for rapidly growing cities. *World Conference on Transport Research*. Shanghai. <https://www.semanticscholar.org/paper/Determining-Optimal-Urban-Expansion%2C-Population-and-Litman/b3d5ecfd185e815bbd4dbcf33b45b57eae54fac9>.

McCartney, M. (2013). The real problem with 15-minute cities. *CapX*. <https://capx.co/the-real-problem-with-15-minute-cities/>.

Mehaffy, M., Romice, O., Porta, S. (2014). The “neighborhood unit” on trial: A case study in the impacts of urban morphology.” *Journal of Urbanism International Research on Placemaking and Urban Sustainability*, 8(2), 199-217. <http://dx.doi.org/10.1080/17549175.2014.908786>.

Mishra, A. (2022). An adorable show about Japanese toddlers running errands, here’s why “Old Enough’ is a must-watch. *India Times*. <https://www.indiatimes.com/entertainment/why-old-enough-should-be-the-next-pick-on-your-watchlist-569474.html>.

Moreno, C., Allam, Z., Chabaud, D., Gall, C., Pratlong, F. (2021). Introducing the “15-minute city”: Sustainability, resilience and place identity in future post-pandemic cities. *Smart Cities*, 4(1), 93-111. <https://doi.org/10.3390/smartcities4010006>.

Mumford, L. (1954). The neighborhood and the neighborhood unit. *Town Planning Review*, 24(4), 256. <https://www.jstor.org/stable/40101548>.

Neckerman, K., Lovasi, G., Davies, S., Purciel, M., Quinn, J., Feder, E., Raghunath, N., Wasserman, B., Rundle, A. (2009). Disparities in urban neighborhood conditions: Evidence from GIS measures and field observation in New York City. *Journal of Public Health Policy*, 30 (Suppl. 1), S264-S285. <https://doi.org/10.1057/jphp.2008.47>.

NYC Health (2018a). *Community health profiles 2018: Coney Island*. NYC Health.

NYC Health (2018b). *Community health profiles 2018: Flushing and Whitestone*. NYC Health.

NYC Health (2018c). *Community health profiles 2018: Jackson Heights*. NYC Health.

NYC Health (2018d). *Community health profiles 2018: Long Island City and Astoria*. NYC Health.

O’Sullivan, F. (2021). Where the “15-minute city” falls short. *Bloomberg*. <https://www.bloomberg.com/news/articles/2021-03-02/the-downsides-of-a-15-minute-city>.

Perry, C. (1929). The neighborhood unit: A scheme of arrangement for the family life community. In *A regional plan for New York and its environs*, vii. Regional Plan Association.

Samuels, A. (2016). El Paso is learning that not everyone hates sprawl. *The Atlantic*. <https://www.theatlantic.com/business/archive/2016/01/el-paso-urban-walkable-americans/431661/>.

Semega, J., Kollar, M., Creamer, J., Mohanty, A. (2019). *Income and poverty in the United States: 2018*. US Census Bureau.

Shatu, F., Kamruzzaman, M. (2021). Determining optimum design density for 20-minute neighbourhoods. *Transport Findings*. <https://doi.org/10.32866/001c.27391>.

Stanford, C. (2023). The 15-minute city: Where urban planning meets conspiracy theories. *The New York Times*. <https://www.nytimes.com/2023/03/01/world/europe/15-minute-city-conspiracy.html>.

Stromberg, J. (2015). How suburban sprawl hurts the poor. *Vox*.

<https://www.vox.com/2015/5/22/8640425/commuting-poverty-public-transit>.

Su, H., Wei, H., Zhao, J. (2016). Density effect and optimum density of the urban population in China. *Urban Studies*, 54(17), 1760-1777. <https://www.jstor.org/stable/26151443>.

Thompson, R. (2020). Why the 9th Street bikeway became a debate over race, power, and space. *Greater Greater Washington*. <https://ggwash.org/view/76669/how-the-9th-street-bikeway-became-a-debate-over-religion-and-race>.

Thornton, C., Conway, T., Cain, K., (2016). "Disparities in Pedestrian Streetscape Environments by Income and Race/Ethnicity." *SSM – Population Health* 2: 206-216.

Urban Villages Group (1992). *Urban villages: A concept for creating mixed-use urban developments on a sustainable scale*. Urban Villages Group.

Wang, M., Ding, N., Li, J., Jin, X. Xiao, H., He, Z., Su, S. (2019). The 15-minute walkable neighborhoods: Measurement, social inequalities and implications for building healthy communities in urban China. *Journal of Transport & Health*, 13, 259-273. <https://doi.org/10.1016/j.jth.2019.05.005>.

Waygood, E. O. D. (2011). What Is the role of mothers in transit-oriented development? The case of Osaka–Kyoto–Kobe, Japan. *Women's Issues in Transportation: Summary of the 4th International Conference*, Volume 2, Technical Papers. Transportation Research Board.

Whittle, N. (2020). Welcome to the 15-minute city. *Financial Times*. <https://www.ft.com/content/c1a53744-90d5-4560-9e3f-17ce06aba69a>.

Xie, Linjun. Shao, Mengqi (2022). The rejuvenation of urban community in China under COVID-19. *Frontiers in Sustainable Cities* 4. <https://doi.org/10.3389/frsc.2022.960547>.

Yang, Z. (2020). Development of optimal city size theory: A critical view. *Journal of Resource and Ecology* 11(1): 100-110. <https://doi.org/10.5814/j.issn.1674-764x.2020.01.010>.

Zippel, C. (2016). DC's black residents increasingly live east of the Anacostia River. *DC Fiscal Policy Institute*. <https://www.dcfpi.org/all/dcs-black-residents-increasingly-live-east-of-the-anacostia-river/>.

Zipper, D. (2022). How Japan won Its "Traffic War." *Bloomberg*. <https://www.bloomberg.com/news/articles/2022-09-06/what-drove-japan-s-remarkable-traffic-safety-turnaround>.



CHARTERCITIESINSTITUTE.ORG

FOLLOW US

